



Government of Karnataka

AGRI-BUSINESS & FOOD PROCESSING



**INVEST
KARNATAKA
2016**

GLOBAL INVESTORS MEET

February 3-5, 2016
Bangalore Palace, Bengaluru



FOREWORD



Shri. Siddaramaiah
Hon'ble Chief Minister of Karnataka

“

Karnataka is known for its leadership in IT, BT, Engineering, R&D and many other technological sectors. However, Agriculture is one of the mainstays of the economy with more than 60% of state population employed directly and indirectly by farming and agri-business. A significant segment of the population in the State is rural and is dependent on agriculture which makes it an undoubted choice of a focus sector for a Government like ours which strives for wholesome and inclusive growth.

Karnataka is the 7th largest State in the Country with a geographical area of 19.10 million hectares, of which 65% (12.40 mn Ha) area is under cultivation; the State has country's 2nd largest arid zone in the country. Despite this adversity, the State has one of the most thriving agri-business and food processing industry in the country. The State's output in the sector grew at 20% in 2009-13, outpacing the national growth rate of 16%.

The Government is committed towards increasing profitability of Agriculture and Allied activities. It is essential for us to attract farmers to take up new technology and modern equipment. It is also equally important to add value to our agricultural produce. Food processing sector with high level of value addition helps in the reduction of wastage, promotes crop diversification, ensures better return to the farmers, and promotes employment generation.

I heartily invite the investors to come and invest in the opportunities offered by the State and join us in the march towards brighter future.

”

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Highlights



1

Karnataka's Unique Advantages

Karnataka is the favoured destination for Agri-business and Food Processing industry with abundant raw material base, skilled workforce, strong supporting ecosystem, and an industry friendly policy environment.

- **Food processing sector in Karnataka has delivered 20% CAGR from 2009-2013, outperforming the national average of 16%**
- **Exports of USD 2 billion in 2014-2015, growing at CAGR of 22%**

Karnataka is home to 10 Agro-climatic zones on the basis of soil structure, topography, vegetation, elevation, and rainfall which supports a wide variety of crops

Karnataka is leading the national rankings in production of various raw materials

Rank #1

Coffee, Gherkins, Rose Onion, Silk, Capsicum, Green Chilli, Tamarind, and Sunflower

Rank #2

Pomegranate, Maize, Cut Flowers, Cloves, Tomato, Grapes, Pepper

Rank #3

Sugarcane, Mango, Onion, Dry Chillies, Cardamom, Coconut, Cinnamon, Cocoa

Other Notable Products

Papaya, Cashewnut, Turmeric, Banana, Lime / Lemon, Orange, Soyabean, Groundnut, Bengal Gram, Carrot, Eggs, Guava, Ginger, Sweet Potato, Garlic

Karnataka's Specialties

- Karnataka is the largest producer of coffee in the country, contributing 70% to national production
- Karnataka is famous for Byadgi chilli known for its deep red colour and low pungency. Oleoresin extracted from Byadgi chilli is used in preparation of nail polish and lipstick
- Karnataka is the only producer of Rose Onions in the country, which are exported to Malaysia, Singapore, Indonesia, Brunei, Bahrain, and UAE
- Karnataka is the leading exporter of gherkins and cut flowers in the country
- The State is notable for Bal Copra (dried coconut kernel) production which is used in extraction of Virgin Coconut oil
- Karnataka is among the top producers of pomegranate, grapes, mango, lime/lemon and orange creating opportunities for manufacturing products like juice, pulp, squash and jams
- Surplus supply of milk in the State, creating opportunities for production of cheese, butter, ghee, yogurt and a large varieties of value added products
- Karnataka is home to many award winning (Decanter World Wine Awards) and enticing wines like KRSMA and Grover Zampa
- Fisheries in Karnataka is a high growth sector with production and export growing at 24% and 30% CAGR respectively, in 2010-15
- The State offers varieties like Oil Sardines, Indian Mackerel, Threadfin Breems, and Squids



Holistic and Well developed ecosystem

Excellent Supporting Infrastructure & Skilled Workforce

- 6 Food Parks with 4 already operational and 2 under development, and 1 Mega Food Park
- 2 million MT installed warehousing capacity and 3,00,000 MT of cold storage capacity in operation
- Karnataka is the R&D hub of the country with presence of 5 national level R&D institutes in Agriculture and Horticulture
- Over 4000 graduates being added to the talent pool annually with specialized training in agriculture, horticulture and veterinary sciences

Established Markets and Trade-Links

- The State has the country's first and only international flower auction center and is also the leading exporter of flowers
- Karnataka is the leading exporter of Gherkins, Rose Onions and cut flowers in the country

Land Bank Availability

- Cumulative land bank of around 380 acres in 6 Food Parks
- Land bank of more than 5,000 acres available with KIADB for immediate allotment



Government Initiatives and Policy Support

Investor friendly, proactive, and well defined sector-specific policies

Investor Friendly 'Karnataka Agribusiness and Food Processing Policy 2015'

- Entire State defined as single zone for availing incentives
- Investment promotion subsidy @ 35% of fixed assets for MSME (capped at INR 65 lakh)
- 75% of net VAT will be reimbursed, capped at 100% of Fixed Assets for MSME and 60%, 70% and 80% respectively for category A, B and C enterprises for a period of 5 years
- One time capital subsidy for ETPs subject to 75% of the cost and a ceiling of INR 50 lakh for MSME, INR 100 lakh for category A,B,C and INR 200 lakh for common ETP
- Interest subsidy to micro enterprises @ 6% per annum for 7 years
- Subsidy for technology adoption from recognized national labs, 50% of the cost (max INR 1 lakh)
- Other incentives like exemption from Stamp duty, Entry tax, Electricity Tax, and reimbursement of Land Conversion Fee upto 100%

Path breaking market reforms and integrated policy framework creating a favourable investment environment

- First State to establish an unified, e-trading platform — Rashtriya e-Market Services Limited (ReMS) in 2014
- First State to introduce a Multi-Sector Startup Policy in 2015 which supports new product development in Agri-business and Food Processing
- 'Karnataka Wine Board' and 'Grape Processing and Wine Policy 2007' are the first of its kind in the country
- First State in the country to have unveiled its own Agriculture Policy as early as 1995
- Dedicated State Policy on Organic Farming
- Karnataka Industrial Policy 2014-19 for supporting Medium and Large Production units

Investment Opportunities

PPP projects in Logistics Infrastructure

- Operation & Management of 1 million MT installed capacity of State warehouses
- PPP for combined 150 MW capacity for solar roof tops at warehouses
- PPP for Integrated Horticulture Development (PPP-IHD) along with Farmer Producer Organizations
- Establishment of modern abattoirs in 9 locations across the State with total investment of INR 56 Crore
- Development of modern abattoirs for sheep & goat in Tumkur district, on 20 acre land
- Development of agri-logistics hub with total investment requirement of INR 712 Crore

Development of dedicated Product Food Parks

- Sea Food Park near Mangaluru is in the conceptualization stage
- Rice Technology Park at Karatagi in Koppal district, over 315 acre land
- Maize Technology Park in Haveri district, over 60 acre land
- Spice Technology Park in Haveri district, over 100 acre land

Multiple Project Opportunities in Dairy Sector

- INR 1,880 Crore dairy projects in various districts under KMF and other Cooperatives
- Many projects in the pipeline including fully automatic liquid milk plants, automated milk conversion plants, fully automated UHT Plant, UHT in flexi pack facility

Development and Marketing of Processed Food products

- Startup policy supports use of food processing technology and abundant raw material base in the State for development of processed food products for domestic and global markets
- Potential in production and marketing of organic rice, jowar, ragi, minor millets, tur, bengal gram, green gram, groundnut, spices, sugarcane, cotton, coffee, mango, coconut and vegetables

Investment opportunity in Karnataka's Specialties

- Investment in specialties of the State like Medicinal plants, Bal Copra (dried coconut kernel) and Byadgi Chilli for exports and domestic marketing
- Dedicated Policy for Wine Processing to encourage investment in wine processing

Other Investment opportunities in Infrastructure and Technology Adoption

- Production and marketing of farm productivity improvement machinery, grain and stock handling equipment
- Investment in Food Processing machinery development, Food Engineering, and Food Technology facilities
- Production and marketing of innovative farm technology including solar powered pumps, and drip irrigation systems
- R&D collaboration for new variety of products to meet the changing consumer demand and vast export market
- Technology collaboration in the areas of Organic Farming
- Development of Cold Chains including Storage and Reefer Trucks





Sector Snapshot

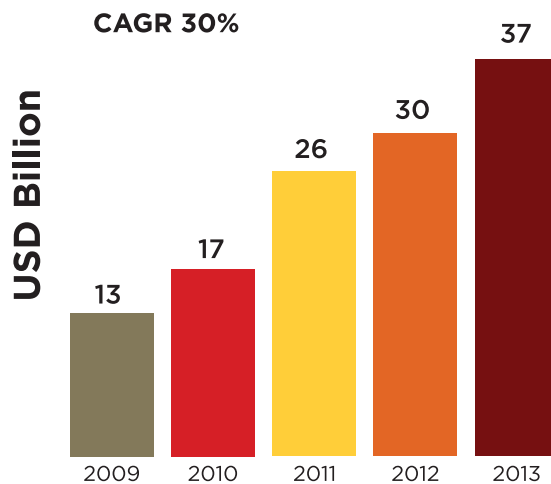


2

Global Agri-Business & Food Processing market presents a large opportunity for an export led growth, through development of high value-added products

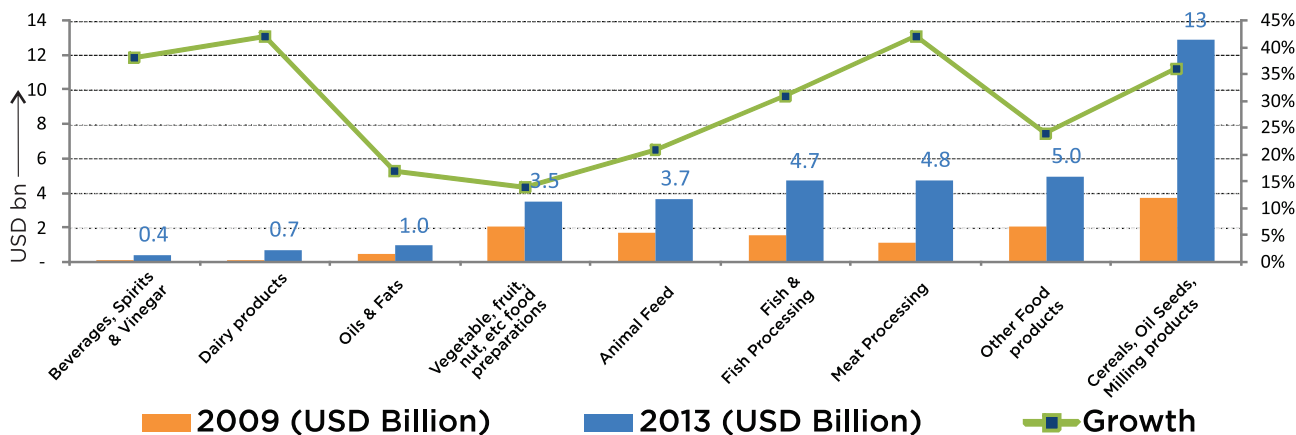


India's total exports have grown from USD 13 bn in 2009 to USD 37 bn in 2013



Source: Trade Statistics for International Business Development

Each of the sub-sectors have witnessed high growth and success in export markets

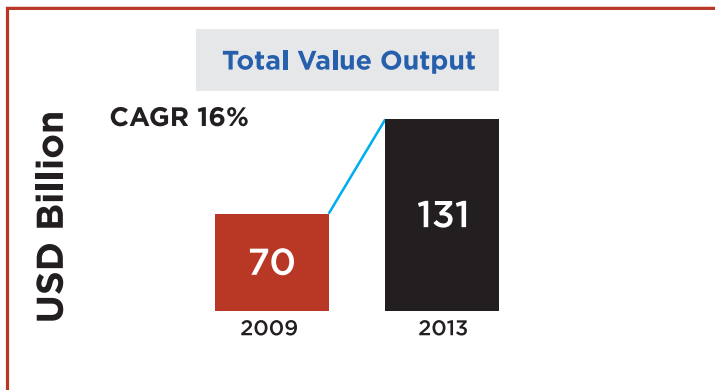


Sources: International Trade Centre, intracen.org, PwC Analysis

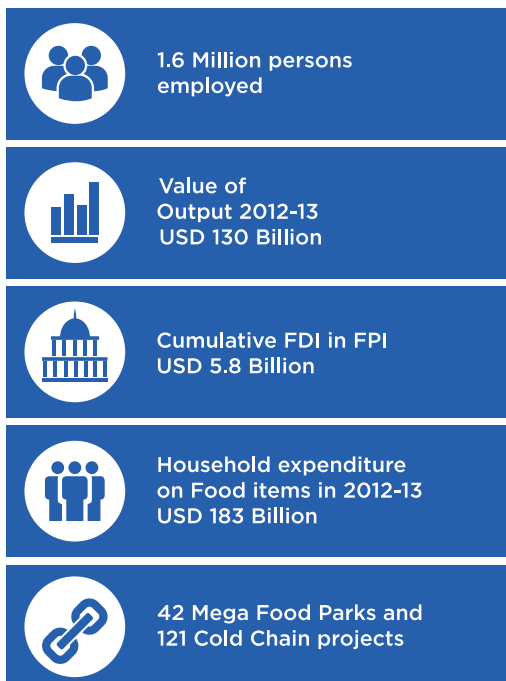
Domestic Agri Business & Food Processing is on the cusp of explosive growth fueled by changing food habits and consumption



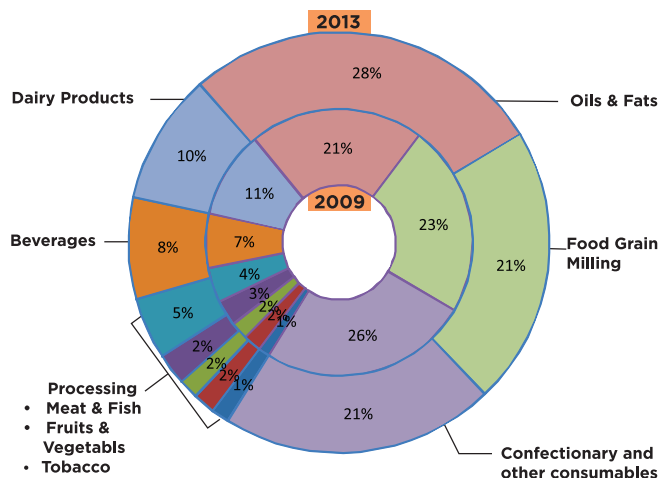
Increasing disposable income, and changing socio-economic structure of family are expected to be the growth driver of food processing industry



Source: Annual Survey of Industries



Share of major segments of Agri-Business & Food Processing industry in total output - 2009 & 2013



Source: Annual Survey of Industries

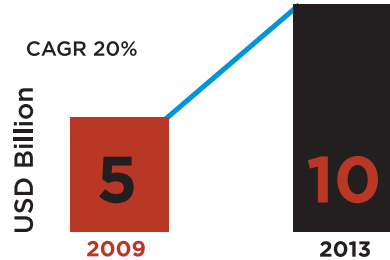
Karnataka's Agri-Business & Food Processing sector is growing at 20% CAGR, outperforming the national average growth rate

USD 10 bn
Food Processing Industries value of output in 2012-13

120 lakh hectare
Total Cropped Area. Net Sown area is 98 Lakh Hectare. 120% Cropping Intensity

16%
Contribution of Agricultural and Allied sector to the GSDP (at current prices)

Total Value Output in Karnataka

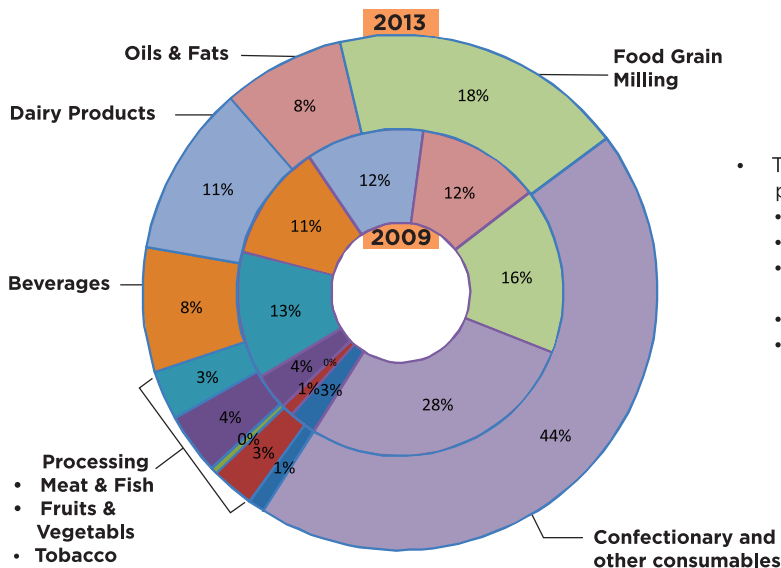


54,905 registered units in the State

3,24,148 persons employed in registered units

Source: Annual Survey of Industries and Industries Department, GoK

Share of major segments of Agri-Business & Food Processing industry in total output - 2009 & 2013

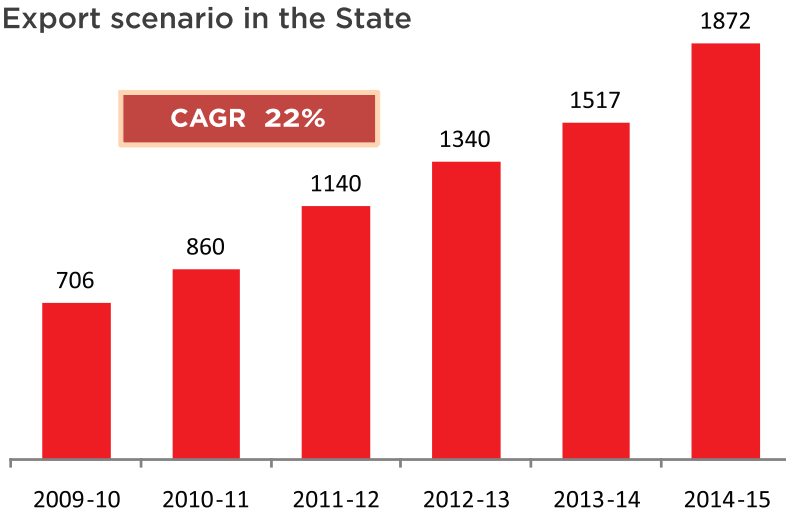


- The segment NIC classified as 'Other food products' includes
 - Bakery Products
 - Manufacture of Sugar
 - Manufacture of Cocoa, Chocolate, and Sugar
 - Manufacture of prepared meals
 - Manufacture of Macaroni, noodles etc

Source: Annual Survey of Industries

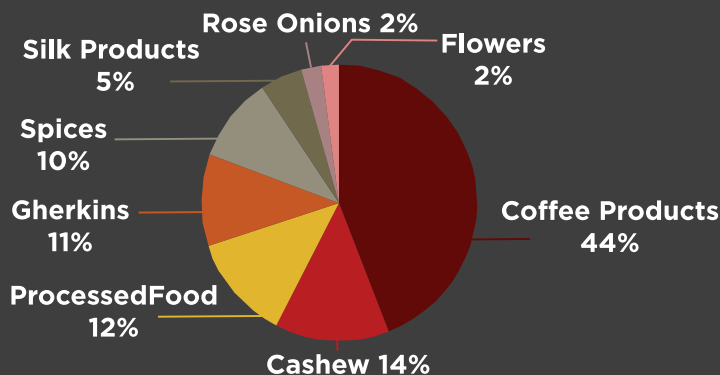
Exports from the State have been growing at 22% CAGR, supported by forward looking policies and supporting infrastructure

Export scenario in the State



Coffee, Cashew, Gherkins and processed fruits and vegetables contribute to over 80% of exports by value

Commodity wise Exports in 2014-15



Source: KAPPEC

Sub-Sector Snapshot

Agriculture



Horticulture & Floriculture



Animal Husbandry & Dairy



Fisheries



Warehousing & Logistics



Other specialities





Shri. Krishna Byregowda
Hon'ble Minister of State for Agriculture & Food Processing

“

Karnataka is the favoured destination for Food Processing industry with abundant access to raw material, skilled workforce, strong supporting ecosystem, industry friendly policy environment.

The Government is now working to position Karnataka on a sustained growth path in the agriculture and allied sectors through introduction of a policy framework which enables farmers to generate higher income. The new “Karnataka Agri-business and Food Processing Policy, 2015” will give the industry a head start towards sustained growth. We want state-of-the-art infrastructure, tools, and technologies to drive efficiency gains in farm produce and processing industry.

I extend a warm welcome to the investors to leverage the potential of the State in the field of Agriculture.”

Food Grain & Oil Seeds production has traditionally been the strength of Karnataka

Strengths in Food Grains & Oils Seeds



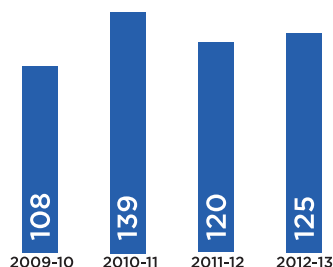
Karnataka is amongst the highest food grain producing States. The State is recognized under the Group 1 States in the 'Krishi Karman Awards'



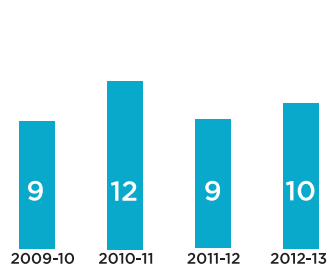
Karnataka is the recipient of many domestic and international awards for Productivity, Quality and Excellence in Oil Seed production

Karnataka is amongst the top Food Grain and Oil Seed producing States contributing to approximately 5% of country's production

Food Grains production
(Lakh Tonnes)



Oil Grains production
(Lakh Tonnes)



Sl. No.	Crop	Area (Ha)	Production (2013-14) Tonne	Districts	Processing Opportunities
1	Sunflower	4,16,000	2,53,000	Vijayapura, Gadag, Koppal, Raichur, Kalaburagi	Oil, De-oiled Cake
2	Maize	1,37,700	43,56,000	Davangere, Haveri, Belagavi, Ballari, Chitradurga	Corn Flour, Corn Grit, Protein Feed, Glucose, Rava, Starch, Corn Oil, Corn Flakes etc
3	Tur	8,20,000	7,57,000	Kalaburagi, Vijayapura, Bidar, Raichur, Yadgir	Dal, Tur Milling
4	Foxtail Millet (Navane)	7,454	2,703	Ballari, Chitradurga, Koppal, Belagavi	De-husking of Millet into Rice, Rava, Flour
5	Little Millet(Sawe)	15,829	9,812	Chitradurga, Haveri, Tumakuru, Belagavi, Chikkamagaluru	Fortified Atta
6	Finger Millet(Ragi)	6,72,031	12,59,067	Tumakuru, Hassan, Ramanagar, Mandya, Kolar,	Hurihittu, Malt, Vermicelli, Dosa / Idli Flour, Bakery products, Beverages
7	Bajra(Sajje)	2,79,609	3,30,074	Vijayapura, Raichur, Kalaburagi	Flour



Source: Government of Karnataka (Various sites)

Organic Farming

- Karnataka is pioneer in Organic Agriculture
- Karnataka is the first State in the Country to bring out separate policy on Organic Farming
- All the State Agriculture Universities have separate Organic Farming Research Institutes
- Programme on Organic Farming "Savayava Bhagya Yojane" under which an area 63,677 ha has been brought under certified organic cultivation benefitting 53,829 farmers in 566 hoblis
- More than 100 plus exclusive organic outlets; more than 10 organic restaurants
- Government is setting up Federation of Organic Farmers Association to facilitate organic produce marketing
- Federation is proposed to take up collection, grading, value addition, processing, packing, marketing of organic produce apart from consumer awareness programme and other activities
- Potential in production and marketing of organic rice, jowar, ragi, bengal gram, green gram, groundnut, spices, sugarcane, cotton, coffee, mango, coconut, vegetables, etc.



Investment Opportunities in Agri-Logistics Hub

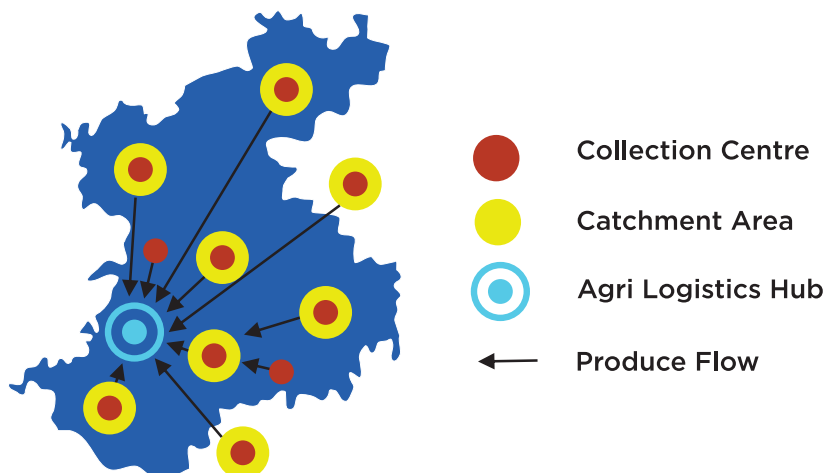
Model for Agri-Logistics Hub development

Concept of an Agri-Logistics cum Terminal Market Centre is essentially a strategically located multi-modal logistics platform, allowing efficient hinterland operations by incorporating truck-stop facilities, container cranes and gantries, terminal stacking, warehousing facilities, high end food processing facilities, and other value added services

Project Cost

Components	Description	Amount (INR Crore)	Amount (USD Million)
Hub/ Processing Units	Agri Logistics Hub, Grapes Processing Unit, Wine Processing Unit, Cold Storage for Spices, Maize Processing Unit	367	61
Collection Centers	Farm level collection centers, Taluka level collection centers	170	28
Logistics	Logistics-Reefer vans, Transport trucks	75	13
Other Cost	Contingency, Interest during construction, preliminary cost	100	17
Total Project cost		712	119

BELAGAVI
(Karnataka)



Horticulture & Floriculture



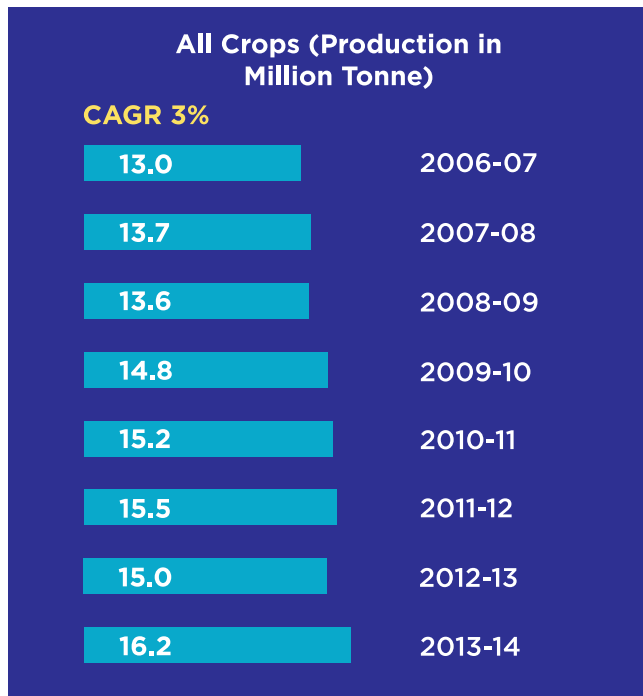
Shri. Shamanuru Shivashankarappa
Hon'ble Minister for Horticulture and Agriculture Marketing

“

Karnataka is one of the leading States in Horticulture production and exports in the country. In an effort to build upon the attractive growth prospects in the State, and to showcase the potential opportunities available, we have chosen Agri-Business and Food Processing as one of the focus sectors for Invest Karnataka 2016. There is a vast potential to be unlocked in the sector through investment in value added products.

Karnataka is also a pioneer in introducing market reforms; being the first State in the country to establish a unified e-trading platform provided by Rashtriya e-Market Services Limited (ReMS). The Government is committed towards positioning Karnataka on a sustained growth path through technology, collaboration, and innovation. To this end, I invite all the investors to make use of the potential existing in the State.”

Karnataka is a leading state in Horticulture production and exports



1st Separate Horticulture Department in the country

#1 Exporter of Gherkins and Flowers

7% Horticulture output of India

USD 6 bn Value of Horticulture crops in 2013-14

Source: Department of Horticulture, GoK



Cluster mapping & product development opportunities

SNo	Crop	Area (Ha)	Production (2013-14) MT	Districts	Processing Opportunities
1	Pomegranate	18,480	1,99,000	Vijayapura, Chitradurga, Ballari, Tumakuru, Bagalkot, Koppal	Juice, Jelly, Jam, Syrup, Aril, Wine, Juice Concentrate, Flavours
2	Grapes	20,350	3,91,000	Vijayapura, Chikkaballapura, Bengaluru Rural, Belagavi, Bagalkot	Grape Juice, Concentrate, Raisins, Wine
3	Mango	1,73,080	16,41,000	Mandya, Kolar, Ramanagara, Chikkaballapura, Dharwad, Belagavi	Mango Pulp, Juice, Squash, Jam, Pickles, Dehydrated Fruits, Powder, Jelly, Flavours, IQF
4	Aromatic & Medicinal Plants	3,493	25,633	Ballari, Vijayapura, Gadag, Chikkaballapura, Tumakuru, Uttara Kannada, Kalaburagi, Koppal, Shivamogga, Kolar	Aromatic plants- Extraction of essential oil; Medicinal plant- Crude extraction, phytochemicals
5	Commercial Flowers	30,058	2,14,396	Haveri, Ballari, Tumakuru, Chikkaballapur, Kolar, Chitradurga, Mandya	Dry flower technology, extractions of dye, colours & essential oils, Cut flowers & Garlands
6	Coconut	8,55,525	4,85,000	Tumakuru, DakshinaKannada, Chitradurga, Chikkamagaluru, Hassan, Shivamogga, Uttara Kannada, Davangere	Packed Coconut water, Coconut milk, Dehydrated copra flake, Coconut milk powder
7	Spices	2,00,191	6,55,706	Dharwad, Kodagu, Hassan, Ballari, Chikkamagaluru, Haveri, Mysuru, Shivamogga	Powder, Paste, pickles, dehydrated flakes
8	Coffee	2,30,333	2,11,100	Chikkamagaluru, Coorg, Hassan	Coffee Powder, Chocolate
9	Tomato	62,000	19,49,190	Kolar, Mandya, Belagavi, Haveri, Davangere, Chikkaballapura, Bengaluru Rural	Tomato Squash, Puree, Ketchup, Sauce, Pickles, Dehydrated / Sun Dried etc.
10	Onion	1,60,020	29,00,380	Gadag, Dharwad, Chitradurga, Vijayapura, Bagalkot, Haveri	Onion dehydrated flakes, powder, paste etc

Source: Department of Horticulture, GoK

Investment Opportunities – Integrated Horticulture Development



Farmers

- Work in peer groups at specific location for specific crops
- Co-operative response to new technologies



Corporate

- To prepare crop calendar procurement plan
- To enter into MoU with growers, and FPO for procurement
- To supply necessary inputs if required



Farmer Producer Organization

- FPO shall create collection centre, cold storage facility, refrigerated transport facility, processing and value addition centres
- To take the responsibility of developing MoU between corporate and growers



Department of Horticulture, GoK

- Provide technical support to the growers in collaboration with suitable technical organizations
- Extend available subsidy linkage to farmers through FPO

Project: Public Private Partnership For Integrated Horticulture Development under Rashtriya Krishi Vikas Yojana (RKVY)

Project Cost: INR 10 Crore (2015-16)

Project Progress: 14 FPOs already registered and 68 in process of registration

Cost sharing:

50% of project cost will be shared by Farmer / FPO

50% will be shared by Government (DoH) and Corporates

However, the Govt. and Corporates can share more than 50% also for specific projects

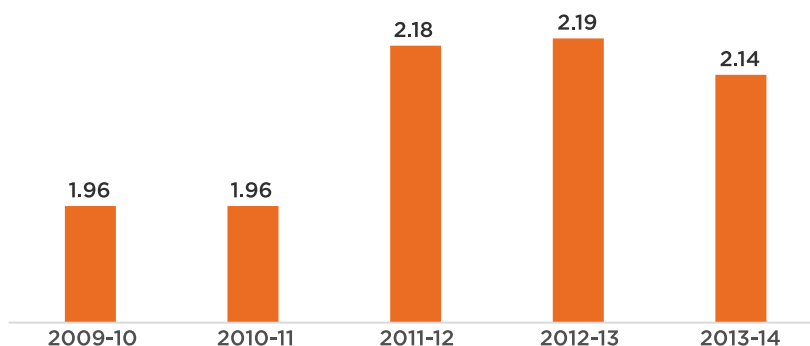
Karnataka is the second highest producer of flowers in the country



The country's first and only flower auction center is located in Karnataka

International Flower Auction Bangalore (IFAB) Limited is a joint venture company of public and private shareholders. It is the first International Flower Auction Company in Asia. At present daily average volume of flowers auctioned in IFAB has gone up from 20,000 to 1,00,000

Flower Production in Karnataka (in lakh MT)



- There are about 30,000 Ha under floriculture cultivation
- Karnataka is the leading exporter of flowers from India, with exports worth USD 36 million (INR 216 Crore) in 2014-15
- Infrastructure facility like international air cargo services and cold storage at Kempegowda International Airport, Bengaluru has resulted in boosting of the floriculture sector from the State

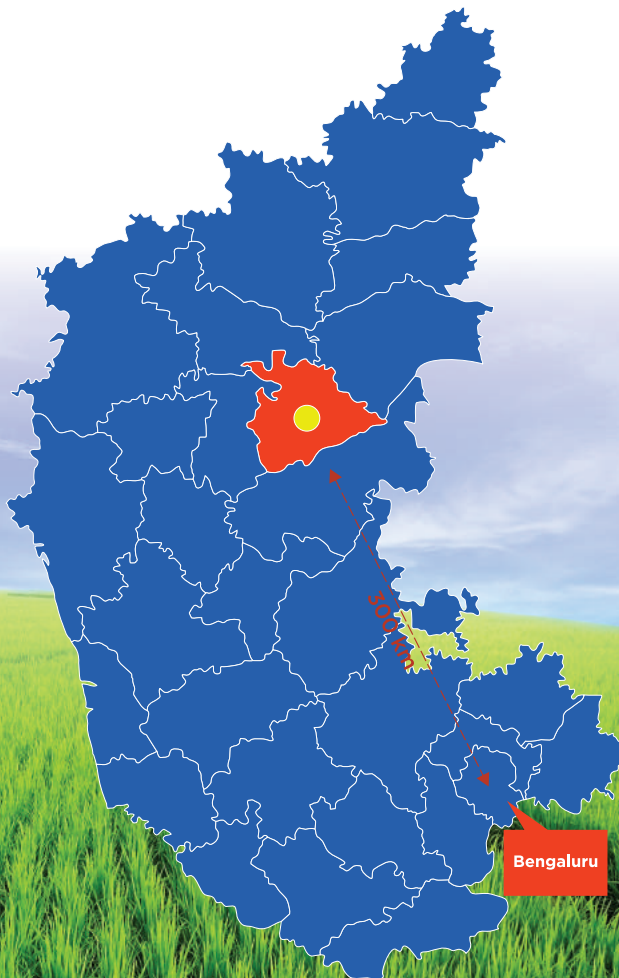
Opportunities to invest in Rice Technology Park

Rice Technology Park

Parameter	Details
Project Cost	INR 128 Crore
Land	315 Acre
Location	Karatagi, Koppal

Project Details

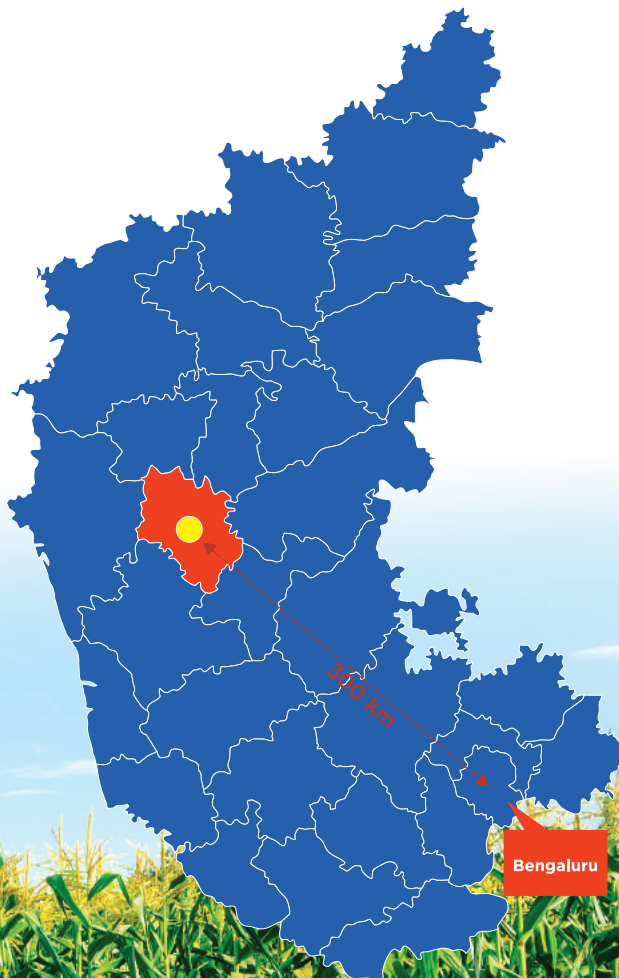
- 75 Acre : Roads, drainage & open space
- 85 Acre : Rice Milling Zone
- 45 Acre : By-product zone
- 50 Acre : Allotment to trades
- 45 Acre : Office complex, warehousing, packing, transportation, auction centre, quality control lab & knowledge resource centre



Investment Opportunities in Maize Technology Park

Maize Technology Park

Parameter	Details
Project Cost	INR 111 Crore
Land	60 acre
Location	Ranebennur, Haveri District
Project Status	Project is in development stage
Contact	Director, Department of Agricultural Marketing, No.16, First Floor, II Rajbhavan Road, Bengaluru 560001 Phone : +91 80 22867192 Email : bngdam@kar.nic.in Web: www.krishimaratavahini.kar.nic.in





Animal Husbandry & Dairy



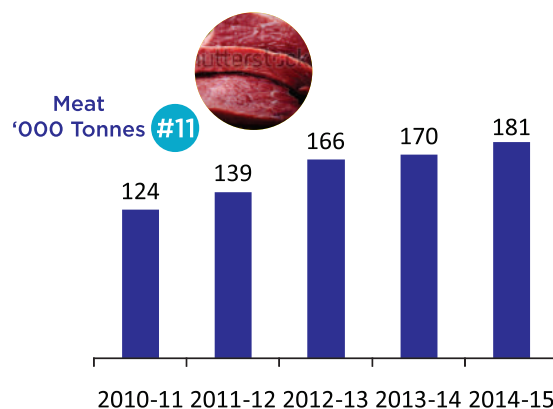
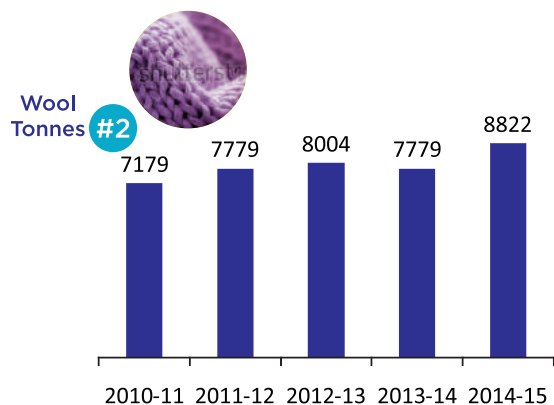
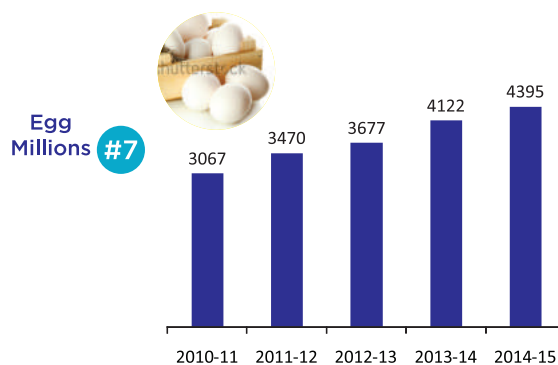
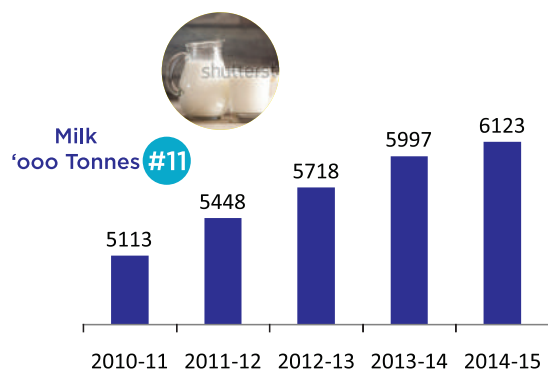
Sri A Manju
Hon'ble Minister for Animal Husbandry & Sericulture

“

Karnataka offers excellent processing and value addition opportunities in the Animal Husbandry sector with a large market and abundant supply of Dairy, Meat, Wool, and Eggs. Karnataka is one of the few states in the country which has, by design, adopted innovation for its growth. Karnataka Milk Federation (KMF), the largest Cooperative Federation in South India, has led with vigor the White Revolution in the State. During the last four decades of Cooperative Dairy Development by KMF, the dairy industry in Karnataka has progressed from a situation of milk-scarcity to that of milk-surplus.

Given the proactive governance provided by the Government of Karnataka and the conducive business environment in the State there is scope for investments in the State. I cordially invite one and all to invest in the sector and reap the benefits.”

Karnataka has well established Animal Husbandry industry with surplus milk production



Cluster mapping & product development opportunities

Sl.No.	Crop	(2014-15)	Districts	Processing Opportunities
1	Milk	61 lakh MT	Belagavi, Hassan, Mandya, Tumakuru, Mysuru	Milk Powder, Ghee, Butter, Sweets, Paneer, Beverages, Curd, Ice cream, Frozen Dessert, Chocolate etc
2	Egg	43948 lakh Nos.	Koppal, Davangere, Mysuru, Ballari, Mandya	Egg Powder, Instant Baby Foods, Pasteurised Frozen Egg & Egg Yolk, Pasteurised Egg Albumen
3	Meat	1.8 lakh MT	Bengaluru Urban, Haveri, Bengaluru Rural, Mandya, Kolar	Fresh, Frozen Boneless Halal Meat, Chilled Boneless Meat, Canned Corned Meat
4	Fish	6.13 lakh MT	Mangaluru, Karwar, Udupi	Fish Oil, Frozen Fish, Pharmaceuticals

Source: Annual Report 2014-15, Department of Animal Husbandry and Veterinary Sciences

Karnataka is a Milk surplus state supported by the largest Milk Federation in South India (KMF)

Milk Produced in 2014-15

6.1 Million Tonnes

No. engaged in dairy farming

2.3 Million farmers

No of Dairy Cooperatives

13,082

No of Dairy Plants

22

Per capita milk availability

244 gm/day

No of milch bovine

69,61,000



KMF's role and achievements

- Karnataka Milk Federation (KMF) is the largest cooperative federation in South India
- KMF also has the distinction of being first-ever World Bank funded Dairy Development Program in the country
- KMF and the Dairy Cooperatives have led with vigor the White Revolution in the State
- During the last four decades of Cooperative Dairy Development by KMF, the dairy industry in Karnataka has progressed from a situation of milk-scarcity to that of milk-surplus
- The dairy industry stands at the crossroads of change with an increasing emphasis on the nutritional value of dairy products
- Great opportunities exist in the sector and the consolidated list of projects is detailed in the subsequent sections

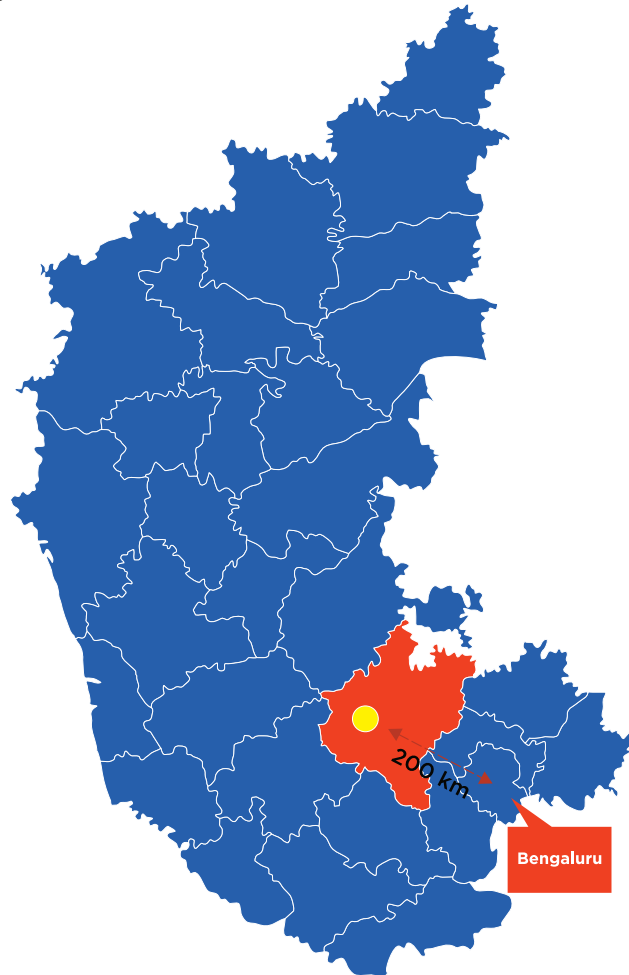
Investment Opportunities in Dairy

Sl.No.	Name of the Project	Location	Estimated Project out-lay
1	Two state of art automated milk conversion plants each of 100 MT capacity which shall include processing facility for manufacturing of S.M.P, W.M.P, Dairy Whitener etc.,with retail packing of products, with an investment outlay of INR 325 Crore for each plant	1) Doddaballapur/Dabaspete - in 1 st Phase (About 50 km, north of Bengaluru) 2) Dharawad, Dharawad District -in 2 nd Phase (About 400 km north of Bengaluru)	INR 650 Crore
2	Three fully automated Mega Cattle Feed Manufacturing Plants of capacity 500 MT per day per plant	1) Vijayapura-North Karnataka 2) Davanagere- Central West Karnataka 3) Chikkaballapur/Mandya - East Karnataka	INR 600 Crore
3	State of art Blown Film Plants for manufacture of films used in packing of milk in poly pouches and Flexi pouches etc., of capacity 500 MT per month for each plant in a phased manner. (2 Plants)	Bidadi, Ramanagara District	INR 120 Crore
4	Establishment of State of art automated Corrugated Boxes making plant, capacity of 1500 MT per month	Bidadi, Ramanagara District	INR 50 Crore
5	Creating Cold Chain Facility of 2000 MT storage, at 4 degree & at minus 25 degree including mobile cold chain facilities like trucks, vans etc	1) Hesarghatta, Bengaluru 1 st Phase 2) Mandya /Chikkaballapur 2 nd Phase	INR 300 Crore
6	Modern state of the art automated plant to undertake manufacture of Health drinks, functional and ready to eat foods, flavoured milk, milk shakes, etc., of capacity 30,000 bottles per hour	Mandya	INR 160 Crore
		TOTAL	INR 1,880 Crore

Investment Opportunities in Development Of Modern Abattoirs For Sheep and Goat

Abattoirs For Sheep and Goat

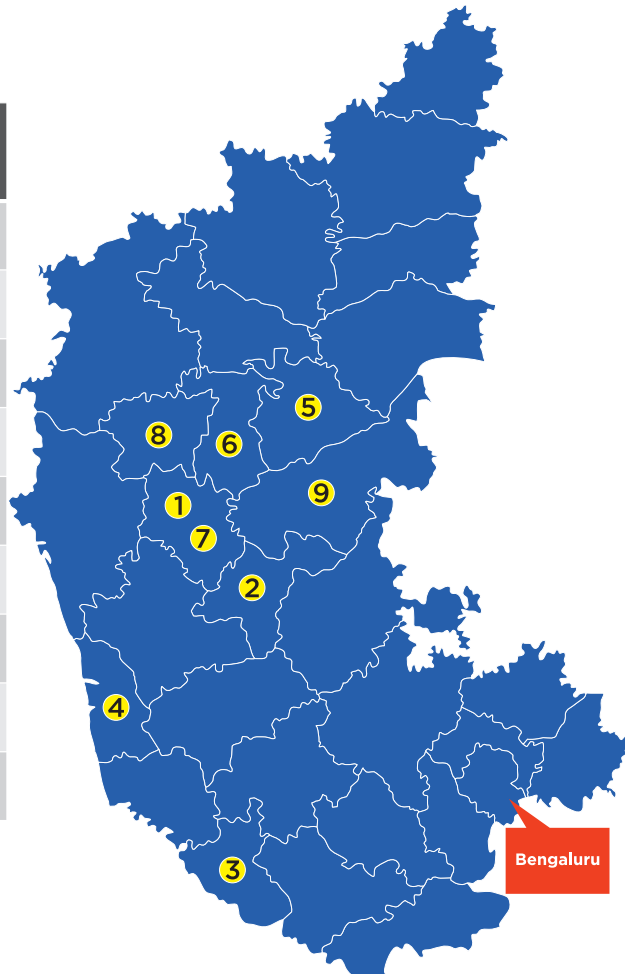
Parameter	Details
Project Cost	INR 26 Crore
Land	20 acre
Location	Cheelanahalli, Tumakuru District
Project Status	Project is in development stage
Contact	Managing Director Karnataka Sheep & Wool Development Corporation Limited Kuri Bhavan, UAS Campus, Hebbal, Bengaluru- 560 024 Phone : +91 80 23413294/95 Email : kswdcl@gmail.com Web : www.dahd.nic.in



Investment opportunities in establishment Of Modern Abattoirs in Urban Local Bodies

Directorate of Municipal Administration, Government of Karnataka has proposed the following projects for establishment of modern abattoirs

S. No	Location	Project Cost (in INR Crore)	Project Status
1	Haveri	7	DPR completed
2	Davangere	4	DPR under preparation
3	Madikeri	9	DPR under preparation
4	Udupi	3	DPR under preparation
5	Koppal	6	DPR under preparation
6	Gadag	6	DPR under preparation
7	Ranebennur	5	DPR under preparation
8	Hubballi-Dharwad	5	DPR under preparation
9	Ballari	10	DPR under preparation
Total		56	



Fisheries



Shri. Abhayachandra

Hon'ble Minister of State for Youth Affairs and Fisheries

“

Karnataka State, with 320 km long coast line and 27,000 km² of continental shelf area, has an annual fish production of about 6.13 lakh metric tones. This includes shrimp, high value fish like seer, pomfret, and crabs, lobsters, squids, cuttlefish, etc. which have high export value. Further through scientific brackish water farming, sizeable quantity of shrimp and fish are harvested in the State.

Karnataka State is one of the pioneers to facilitate the introduction of mechanized fishing boats, to construct all season fishing harbours, and to assist establishment of ice plants and cold storages leading to organized, hygienic fishing, and fish handling from the sea.

Karnataka offers to the investors, a balanced combination of valuable resources, highly skilled workforce, technical expertise, and continued support from Government. I invite investors to collaborate with us and explore the opportunities in fisheries sector.”

Fisheies is a high growth sector with production and export growing at 24% and 30% CAGR respectively

- Karnataka's coast is popularly known as 'Mackerel Coast'
- Karnataka contributes to 6% of the national fish production
- Karnataka is in 6th position in marine fish production and 9th position in inland fish production in the country

Strengths in Fisheries

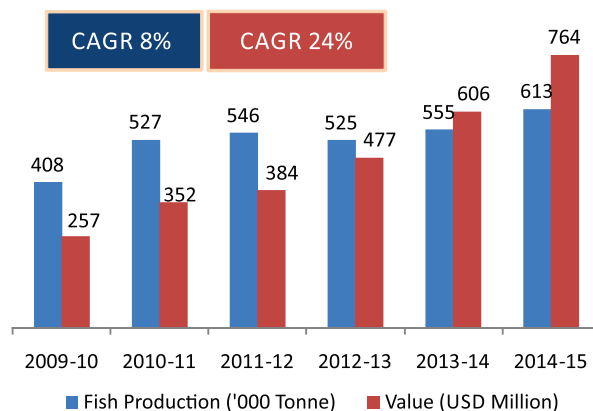
Length of Coastline	320 Km
Continental Shelf Area	27000 Sq. Km
Brackish Water Area	8000 Hectare
Fresh Water Resource	0.56 Million Ha.
Fish Production in 2014-15	0.61 Million Tonne

Major Varieties

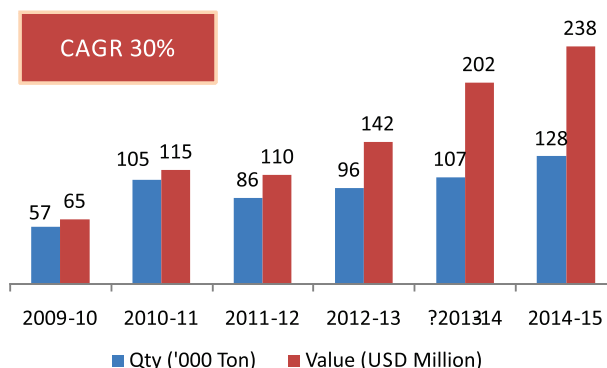
Marine Fish

Oil Sardine, Indian Mackerel, Threadfin breams, Squids, Ribbon fishes, Scads – Decapterids, Other Sardines

Fish Production



Export of Marine Fish



Source: Department of Fisheries

Investment Opportunities in Sea Food Park

High value fishes like pomfrets, seer fish, mackerel, ribbon fish, shrimp, squids, cuttlefish and crab are landed in large quantities



Potential for processing and marketing of fish, both in domestic and international markets

Common Facilities and Developed Plots for establishment of following	Advisory, Incubation and R&D Centre
<ul style="list-style-type: none">• Pre-processing units• Processing units of international standard• Ice plants and cold storages• Frozen storage• Value added fish product processing units• Fish based health product processing units• Packaging units	<ul style="list-style-type: none">• Technical and business support to “Fish-‘O’-preneurs”• Certified Processing & pre-processing facility• Certified Testing facility• Awareness centre• Infrastructure Facilities• Assistance in Project Report• Assistance in Legal matters• Technical Advisory





Warehousing & Logistics



Shri. Mahadev Prasad

Hon'ble Minister of State for Co-operation and Sugar

“

Karnataka is one of the fastest growing states in Agri-Business and Food Processing sector in the country. As hygiene and proper handling of raw material is essential for high quality end product, warehousing and logistics infrastructure becomes an essential part of the ecosystem.

The State, with more than 2 million MT warehousing and more than 3,00,000 MT cold storage capacity, offers quality infrastructure for warehousing requirements of farmers.

There have been opportunities identified in operations and management of State Warehouses, agri-logistics hub and solar rooftops on State Warehouses. I cordially invite one and all to invest in the enormous potential the State has to offer.

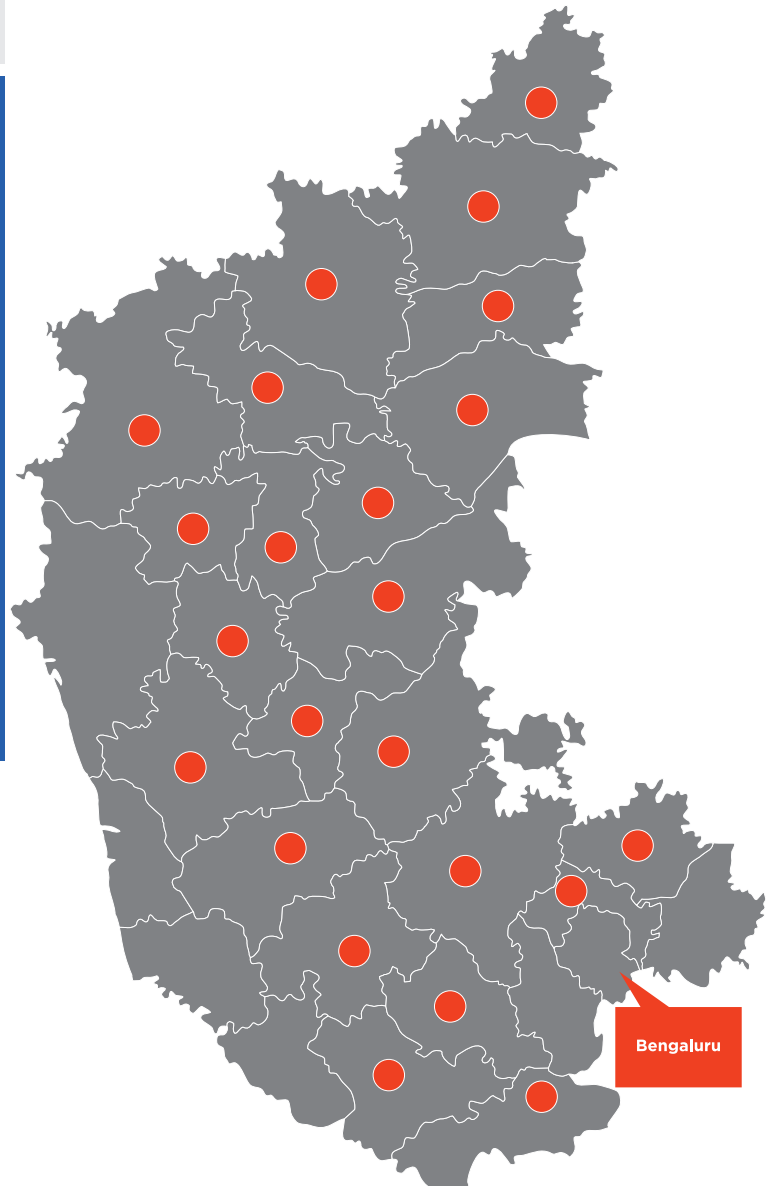
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Supporting Infrastructure being integrated with food parks and production clusters to provide an integrated supply chain

Cold Storage & Warehousing Facilities

Agency	Total Units Capacity in MT
Central Warehousing Corporation	4,81,111
Karnataka State Warehousing Corporation	10,41,204
KAPPEC	6,300
Food Corporation of India	1,313
Others	898
Cold Storage	3,00,319
Additional warehouse capacity	5,24,601

With 56 years of experience backing it, the KSWC is a stalwart when it comes to technical expertise, professional competence, well networked & scientific warehouses, and the best air, rail and road connectivity. This spells nothing but excellence, making KSWC an apt organization to enter into Joint Ventures with investors.



Major regions with warehouse capacity

Source: Karnataka State Warehouse Corporation

Investment Opportunities in Warehousing & Solar Roof Top

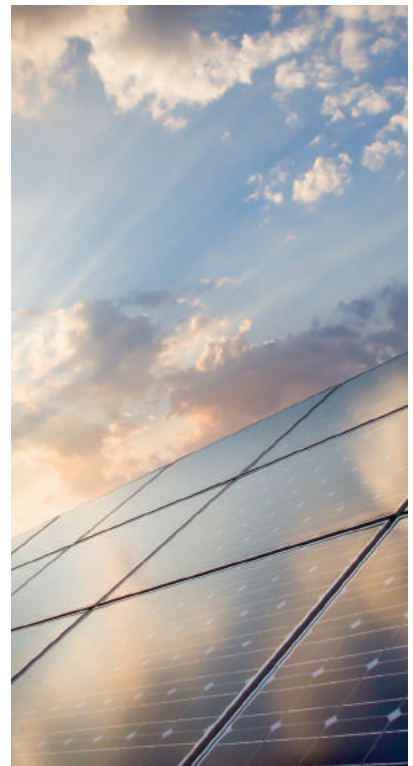
PPP projects for Operation and Management (O&M) of State Warehouse

- Services will include value added services like grading, labeling, cleaning, and trading platform
- The project will be awarded for a period of 10 years through bidding



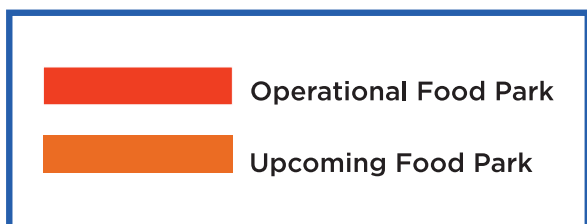
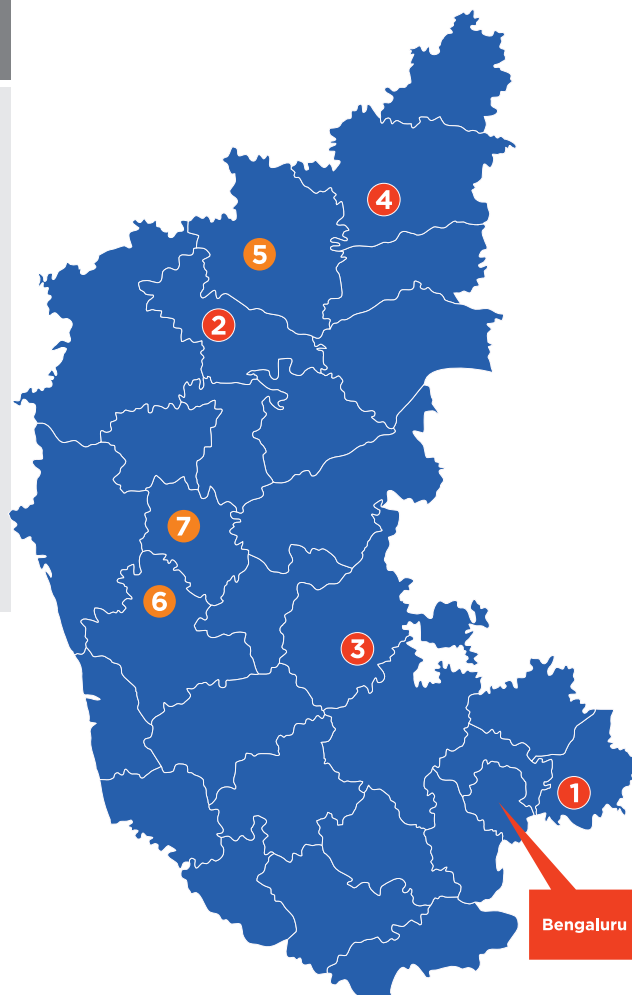
150 MW PPP Solar roof tops on State warehouses

Region	Roof top area (Sq ft)	Estimated power (MW)
Hubballi	25,40,825	21
Davanagere	51,86,025	43
Bengaluru	27,61,911	23
Shivamogga	12,05,666	10
Mysuru	27,27,020	22
Raichur	32,16,124	26
Kalaburagi	29,78,975	24



Investment opportunities in Food Parks

Food Parks			
S.No.	Types	Location	Extent of area (acres)
1	Food Park (operational)	Malur (Kolar)	44
2	Food Park (operational)	Navanagar (Bagalkot)	52
3	Food Park (operational)	Hiriyur (Chitradurga)	61
4	Food Park (operational)	Jewargi (Kalaburagi)	59
5	Food Park	Vijayapura	75
6	Food Park	Shivammoga	97
7	Spice Park	Haveri	50



Coffee



Sericulture






Wines


Other Unique Specialities



Karnataka Wine Board & Wine Policy is first of its kind in the country

**INDIA AT
DECANTER WORLD WINE AWARDS**

 <p>2015 Decanter WORLD WINE AWARDS SILVER</p>	 <p>2015 Decanter WORLD WINE AWARDS BRONZE</p>	 <p>2015 Decanter WORLD WINE AWARDS COMMENDED</p>
<p>KRSMA Sauvignon Blanc 2014 Karnataka</p>	<p>GROVER La Réserve Viognier 2014 Karnataka</p>	<p>GROVER Vijay Amritraj Reserve Viognier 2013 Karnataka</p>
<p>REGION Karnataka - 4 Maharashtra - 1</p>	<p>TYPE White - 4 Red - 1</p>	<p>ZAMPA Chêne Grand Réserve 2013, Nashik</p>
<p>PRICE Below Rs. 999 - 2 Above Rs. 999 - 3</p>	<p>GRAPE Sauvignon Blanc - 2 Viognier - 2 Shiraz + Tempranillo - 1</p>	<p>GROVER ZAMPA Art Collection Sauvignon Blanc 2014, Karnataka</p>



Wine Processing

Although relatively young, Karnataka wine industry is already leaving a mark in the wine industry. Despite having a subtropical climate, winemakers have explored Karnataka's region with subtle differences offered by its landscape to craft exhilarating flavours in many different wine styles.

Wine Tourism

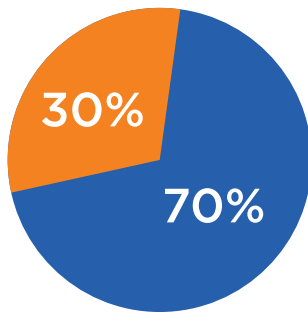
State of Karnataka is indisputably blessed with spectacular landscape, awe-inspiring hills, valleys and splendid rivers along with richness of antiquity and culture. With new wineries opening their cellar doors for wine tastings and tours, Karnataka has emerged as a picture-perfect destination for wine tourism.

Nandi Valley, Krishna Valley, Cauvery Valley and Hampi Hills offer the experience of tasting world class wines with breathtaking nature scenery.

Source: Karnataka Wine Board

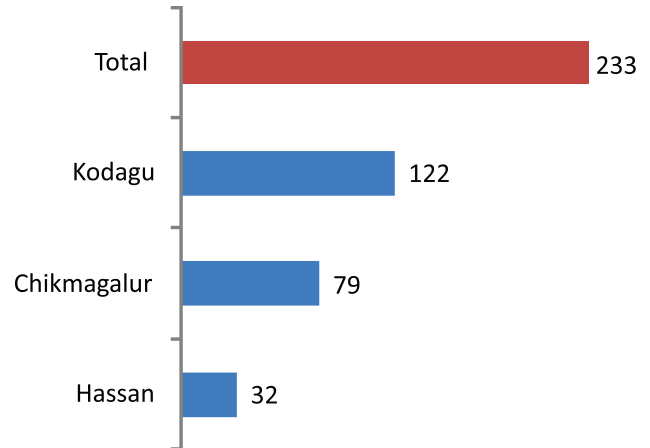
Karnataka is the leading Coffee producer and offers marketing and branding opportunity for distributors and marketers

Share in India's Coffee Production ('000 MT)



■ Karnataka ■ Rest of India

Cluster wise Production in 2014-15 ('000 MT)



The State is the cradle of Indian coffee, and is home to variety of high-quality coffee



Source: Coffee Board of India and various sites

Leading Silk producer in the country



10,000 MT

Production of silk in
the year 2014-15, up 12.5%
from 2013-14

Vibrant Sericulture Industry in the State

- India is the second largest producer of Silk in the World, with an output of 28,708 MT
- Karnataka is the largest producer of Silk in the country accounting for 35% of the Silk production in the country
- 49 Silk Farms and 92 Silk co-operatives
- Open e-auction of cocoons

Source: Annual Report 2014-15, Department of Sericulture

Other specialities from Karnataka



Byadgi Chilli

Byadgi chilli is a famous variety of chilli grown only in Karnataka, known for its unique low pungency and deep red colour. Byadgi chillies are primarily sold at the Byadgi chilli market which attracts traders from all over Karnataka and from neighboring States



Bal Copra (dried coconut kernel)

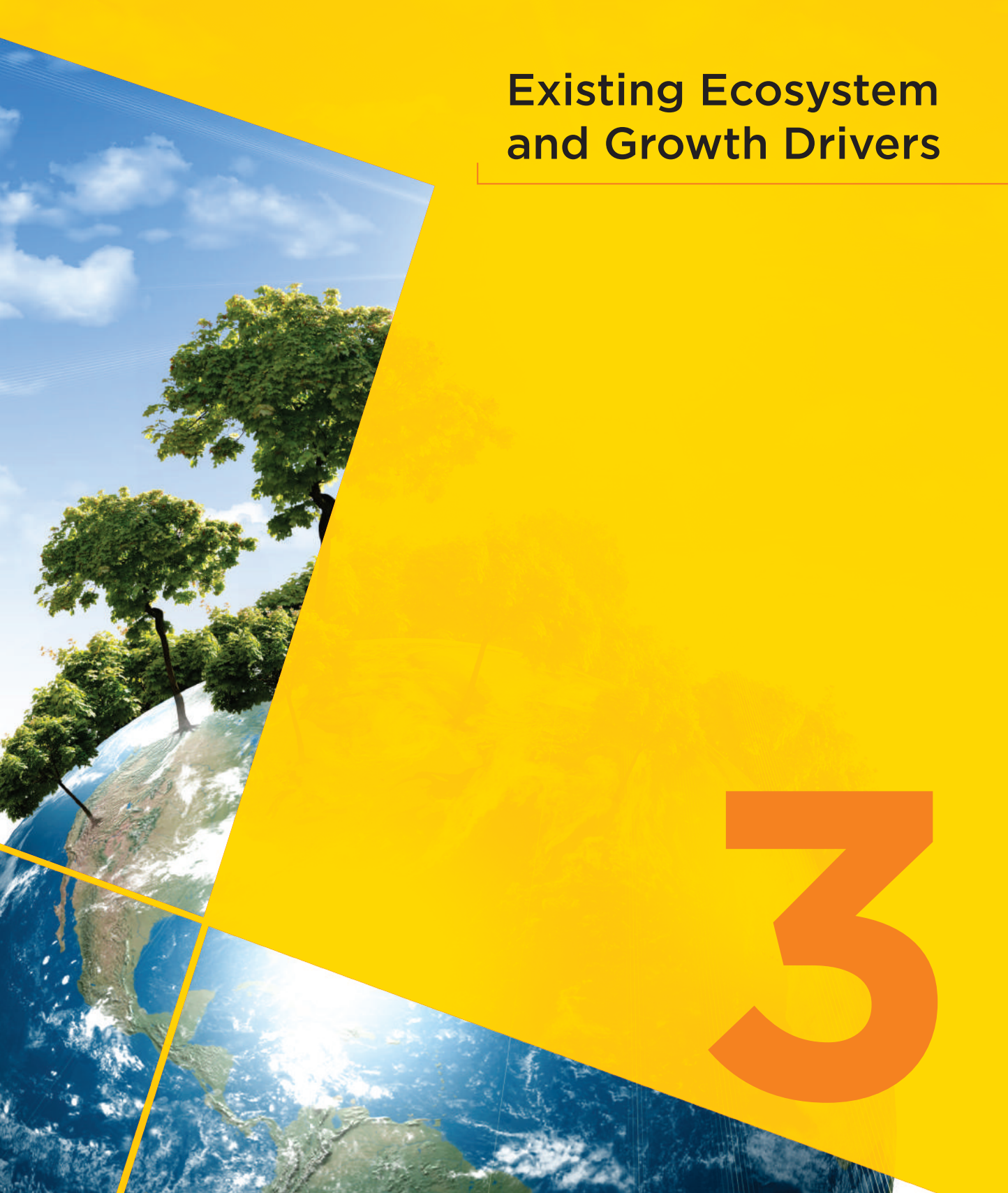
Tumkur district is notable for its copra (dried coconut kernel) which is used to extract Virgin Coconut Oil. Copra produced here are naturally dried under shade for nine to twelve months



Cut Flower

International Flower Auction Bangalore (IFAB) Limited is a joint venture company of public and private shareholders. It is the first International Flower Auction Company in Asia. At present daily average volume of flowers auctioned in IFAB has gone up from 20,000 to one lakh

Existing Ecosystem and Growth Drivers

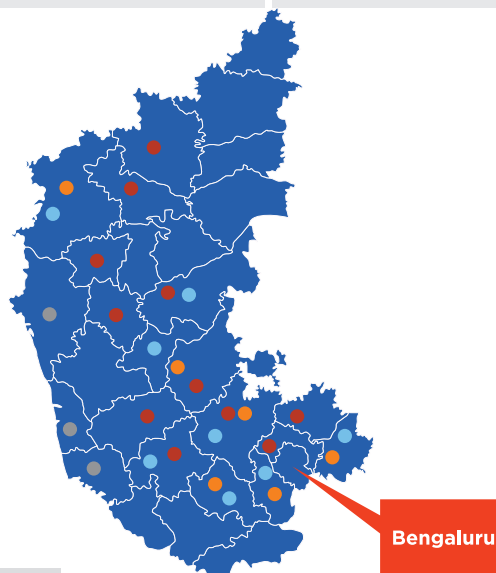


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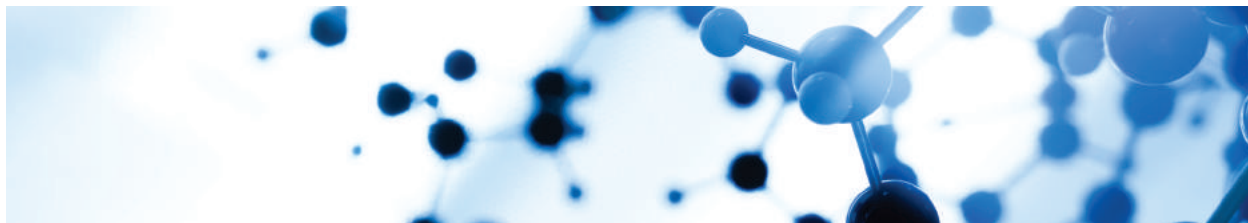
Integrated Supporting Ecosystem with clusters of raw materials base in Karnataka

Diverse Food Processing potential

Fruits & Vegetables	Floriculture	Grains, Pulses & Oil Seeds	Animal Husbandry	Fish
Juice, Jelly, Syrup	Aromatic plants – Extraction of Essential oil	Oil, De-oiled Cake	Milk Powder, Ghee, Butter, Sweets	Fish Oil
Pulp, Squash, Jam	Dry flower technology	Corn Flour, Corn Grit, Protein Feed, Glucose	Paneer, Beverages, Curd	Pharmaceuticals
Coffee Powder, Chocolate	Cut flowers & Garlands	Dal, Tur Milling	Ice cream Chocolate	Chilled Boneless Meat
Pickles, Dehydrated Fruits	Extractions of dye	De-husking of Millet into Rice, Flour	Frozen Boneless Halal Meat	Frozen Fish
Powder	Medicinal plant- Crude extraction,	Fortified Atta	Frozen Dessert	Canned Corned Meat
Packed coconut water, Coconut milk	Medicinal plant - Phytochemicals	Malt, Vermicelli, Bakery products, Beverages	Egg Powder, Instant Baby Foods	-
Copra Flake, coconut milk powder	-	Idli Mix	Pasteurized Egg Albumen	-
Concentrate, Flavors	-	Flour, Corn Oil, Corn Flakes	Pasteurized Frozen Egg & Egg Yolk	-



Home to Premier Agri and Food Products R&D institutions



Research & Development Institutes



Prominent institutions providing wide range of courses in agricultural and veterinary sciences, farm machinery, food engineering and various other lines

Institutes	Location	Area of Research
Central Food Technological Research Institute (CFTRI)	Mysuru	Food Science and Technology
National Dairy Research Institute (NDRI)	Bengaluru	Dairy Microbiology ,Dairy Chemistry, Dairy Technology Dairy Engineering, Animal Biochemistry Animal Biotechnology, Animal Genetics & Breeding, Livestock Production & Management Animal Nutrition, Animal Physiology, Dairy Economics
Defence Food Research Laboratory (DFRL)	Mysuru	Food R&D
Indian Veterinary Research Institute (IVRI)	Bengaluru	Large scale production of FMD virus vaccine and conducts basic and applied research on FMD
Indian Institute of Horticulture Research (IIHR)	Bengaluru	Hi-tech horticulture, precision farming, information technology, biotechnological interventions to increase yields, protect crops from insect. Developing strategies to enhance productivity and utilization of tropical and sub tropical horticulture crops viz., fruits, vegetables, ornamentals, medicinal and aromatic plants and mushrooms

Home to Premier Agri and Veterinary sciences institutions



Prominent institutions providing wide range of courses in agricultural and veterinary sciences, farm machinery, food engineering and various other disciplines.

Institutes	Location	Area of Research
University of Agricultural Sciences	Bengaluru, Shivamogga, Raichur, Dharwad	All aspects of agricultural sciences, non diploma courses in baking and other training courses in mushroom cultivation, nursery management
Indian Institute of Science	Bengaluru	Bachelor's or Master's degree in an in Agriculture & Veterinary Sciences, Centre For Reproductive Biology
College of Agricultural Engineering	Raichur	M. Tech (Ag. Engg) programs with specialization in Soil and Water Engineering, Farm Power & Machinery and Agri-Processing & Food Engineering
University of Horticultural Sciences	Bagalkot	Development of new crop varieties, cultivation packages and crop protection methods
The Karnataka Veterinary, Animal and Fisheries Sciences University (KVAFSU)	Bidar	Veterinary and animal sciences, dairy sciences, fisheries and other allied sciences



Government Initiatives and Policy Support

A large, bold, light blue number '4' is positioned in the lower right quadrant of the page. The background features a photograph of a lush green rice paddy field in the foreground, with a dirt path leading through it. In the distance, there are rolling green hills and mountains under a clear blue sky with a few wispy clouds. The entire image is partially covered by a dark blue geometric overlay that shapes the text and the number.

4

Karnataka has created a forward looking vision focussed towards sustainable development for entire value chain of Agri-business and Food Processing Sector



Vision

To position Karnataka on a sustained growth path in Agri-business & Food Processing sectors **through use of global technologies and innovative mechanisms, enabling frameworks, and state of the art infrastructure facilities**, thereby generating higher returns to farming communities

Objective

- To reduce wastage and increase industry value-add, there by generating higher returns for the farmer
- To maximize direct and indirect employment generation opportunities
- To create the necessary supply chain and infrastructure along entire value chain from rural areas to industrial zones including transport infrastructure, warehouses, and cold storage facilities for promotion of food-processing sector
- To increase the flow of investments across the supply chain from farm to market

Karnataka Agri-Business & Food Processing Policy 2015

Investor friendly policy - Karnataka Agri-business and Food Processing Policy 2015

Sl. No.	Particulars	Incentives	Applicable Categories
1	Investment Promotion Subsidy	Investment promotion subsidy @ 35% of fixed assets (VFA) up to a maximum of INR 65 lakhs for MSME	All
2	Exemption from Stamp Duty for MSME and Category 'A', 'B', & 'C' enterprises	Shall be exempted @ 100%	All
3	Concessional Registration Charges	concessional rate @ INR0.50 per INR 1,000	All
4	Reimbursement of land conversion fee	Reimbursable @ 100%	All
5	Exemption from Entry Tax for plant and machinery and capital goods	100% exemption for 3 years for MSMEs	3 years for Category 'A' and 'B' and 5 years for Category 'C'
6	Exemption from Entry Tax for raw materials, inputs and component parts and consumables excluding petroleum products	100% exemption for 6 years for MSMEs	5 years for category 'A', 'B' & 'C' and additional 1 yr and 2 years will be allowed for 'B' & 'C' respectively for operational period
7	Subsidy for setting up Effluent Treatment Plant (ETP)	One time capital subsidy for ETPs subject to 75% of the cost and a ceiling for INR 50 Lakhs for MSME, INR 100 Lakhs for category A,B,C and INR 200 Lakhs for common ETP	Category 'A', 'B' & 'C'-One time Capital subsidy upto 50% for the cost of ETPs subject to ceiling of INR1 Cr
8	Interest Subsidy for micro enterprises	Interest subsidy of 6% per annum for 7 years	All
9	Exemption from tax on Electricity tariff	100% exemption of tax on electricity tariff for 8 years	All
10	Subsidy for technology adoption from recognized national labs	50% of the cost (max INR 1 Lakh) for MSME irrespective of promoter classification	All
11	Reimbursement of VAT	75% of net VAT will be reimbursed for a period of 5 years subject to a maximum of 100% of the Value of Fixed Assets for MSMEs	An extent of 60%, 70% & 80% for a period of 5 years subject to a maximum of 100% of the Value of Fixed Assets for Category 'A', 'B' & 'C' respectively

Pioneering Market Reforms - Introduction of unified e-trading platform

Deposits needed for direct purchase **reduced from INR 50 Lakhs to INR 5 Lakhs**

Free to establish market under private sector by removing zonal restrictions

Exemption of market fee for new agricultural produce processing industries for a period of 10 years

Private markets will also be considered as procurement centers for MSP operations on case to case basis by issuing an executive order

Rebate in the payment of market fee (70%) by the licensee operating the direct purchase centre for food grains, fibers, pulses, spices, etc

Levy of market fee on perishables abolished

Site allotment in the market yard for setting up of cold storages, a rebate of 50% in sital value is given

Agri produce exported/caused to be exported by any person either on his own or as an agent for another person from the market area to outside the country is **exempted from the payment of market fee for a period of 10 years**

Integrated Policy Framework providing incentives and support to entire value chains and niche sectors

Karnataka Grape Processing and Wine Policy, 2007



- Declaration of wineries as “Horticulture & Food Processing Industries”
- Capital Subsidy for Grape processing
- Incentives for marketing and distribution of wines & wine park

Karnataka State Policy on Organic Farming, 2004



- Integrated and sustainable management of natural resources for achieving food, nutritional, environmental, and livelihood security
- Improvement in soil fertility and productivity through safe farming
- Efficient and sustainable crop production and protection technologies

Karnataka State Infrastructure Policy, 2007



- Fair and transparent policy framework to help facilitate and encourage Public-Private Partnership (PPP)
- Single Window Agency (SWA) at the State Level under the Chairmanship of the Chief Secretary to approve projects under PPP upto INR 50 Crore

Karnataka Industrial Policy 2014-19



- Attract investments worth INR 5 lakh Crore in the five years
- Create an environment to enhance ease of doing business in the State
- Enhance the contribution of manufacturing sector to State GDP from present level of 16.87% to 20% by end of policy period

GoK 'Startup' policy supports entrepreneurs in food processing sector to create new product lines for export markets



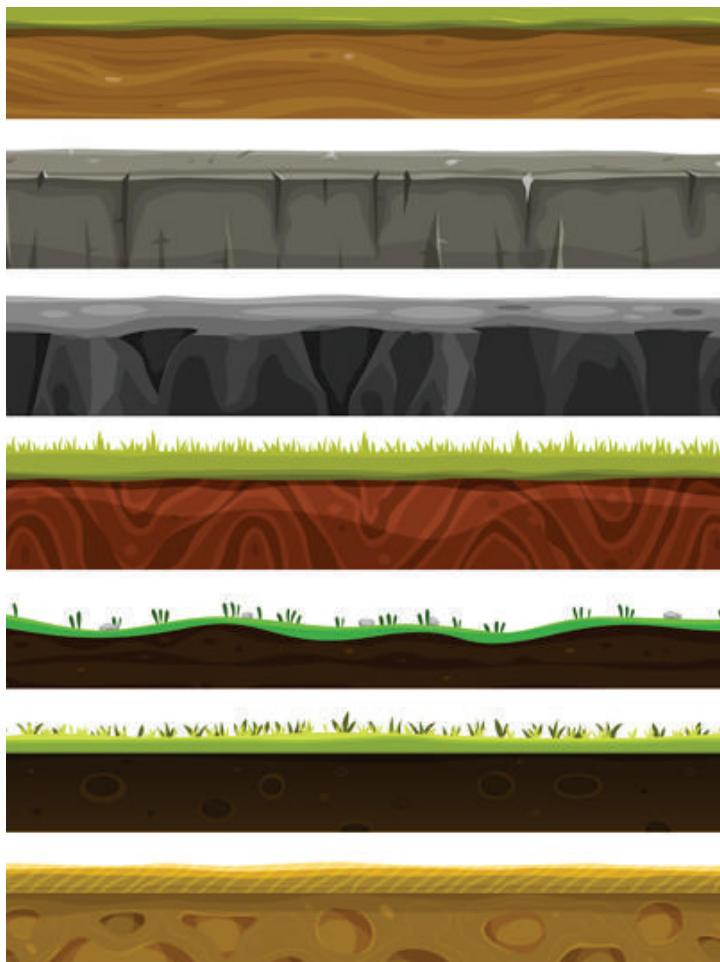
Support from the **Startup policy** to be leveraged to develop new product lines for export market. Government support/incentives as per the 'Startup Policy' are

- a** New Age Incubation Network (NAIN) with grants and financial support
- b** Technology Business Incubators (TBIs) in agriculture and allied fields
- c** Idea2PoC (Proof of Concept) Funding providing early stage support
- d** R&D labs
- e** Marketing Incentives

Additionally all applicable benefits as per the (*Industrial Policy 2014-19*) can be availed

Food Processing Industry has the unique opportunity to develop multiple products from the same raw material base offering access to multiple growth markets

Government's soil revitalisation scheme has increased the yield from 20% to 60%



The Bhoochetana programme launched by the State Government in partnership with the International Crops Research Institute for Semi-Arid Tropics (ICRISAT) has helped farmers adopt better soil and farm management techniques to end stagnation and achieve 5 percent annual growth in agricultural production since 2009, which was earlier stuck at 1 per cent between 2001 and 2008

Drivers of Success

Major driver of success in Bhoochetana was the scaling-up initiative, which reached more than 4 million farmers over the last four to five years and increased crop yields by 20 percent to 60 percent

“What Karnataka is witnessing is a miracle brought about by the dynamism of farmers and the Government. This revolution is touching the smallest of farmers.” -
National Academy for Agricultural Sciences



Investment Opportunities in Technology



5

Investment Opportunities in Technology

**Farm Productivity
Improvement Machinery**

Fermentation Technology

Food Microbiology

Food Engineering

**Food Technology
(Solar powered pumps,
drip and sprinkler
irrigation)**

Market Intelligence

**Food Processing
Machinery**

**Production Systems for
the Dairy & Juice Industry**

Grain Handling

**Stock Handling
Equipments**

Refrigeration Units

Mobile Freezers

**Technology Upgradation, Quality Certification, and Patent
Registration incentives is applicable as per the
Karnataka Industrial Policy 2014-19**



Government of Karnataka

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**Commissioner for Industrial Development,
Director of Industries and Commerce**
Email: commissioner@karnatakaindustry.gov.in
Phone: 91-80-22386796



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