



सत्यमेव जयते  
Government  
of Rajasthan

**GROW  
WITH US**



The Global Rajasthan Agritech Meet (GRAM) 2016, on one hand exposed our farming community to the technological advancements and global best practices and at the same time, showcased the vibrancy and energy of the farm sector in Rajasthan. With a wide range of agri-climatic zones and incredibly diverse farm produce, Rajasthan is replete with opportunities for partnerships and investment. GRAM 2016 had Israel as our partner country and encouraging participation from Australia, Iran, Japan, Kazakhstan, Netherlands and Nigeria.

Looking at the promise and vibrancy of the GRAM platform, we are now taking GRAM to the divisional level so that more farmers receive exposure and new market opportunities open up. GRAM, Kota, is the first of the divisional level events.

I invite all of you to be a part of GRAM and grow with us in this journey of delivering dreams and sharing prosperity.

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**Smt. Vasundhara Raje**  
Hon'ble Chief Minister, Rajasthan



Government of Rajasthan is dedicated to the welfare and development of its farmers. We want our farmers to adopt innovative farming techniques along with traditional methods.

With this objective, GRAM 2016 was organised to showcase the strengths of are farmers and for raising awareness about new technologies amongst them. We are now taking GRAM to the divisional level so that more and more farmers are benefitted.

I invite the investor community to partner with our farmers in the areas of innovative farming, value addition and agri-marketing.

**Prabhu Lal Saini**  
Minister of Agriculture  
Rajasthan



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# ADVANTAGE RAJASTHAN

- Rajasthan is the largest state in India in terms of area. Agriculture is the major driver for the state economy, with the same contributing to 26.32% (at current prices) of the state's GSDP in 2015-16
- The State has 14% of India's cultivable land, which accounts for 25.55 mn hectares. Endowed with 10 agro-climatic zones, Rajasthan leads in the production of a large variety of crops.
- Rajasthan is a leading State in the production of :

## Agriculture

- 1st in production of Carom-seeds, Coriander, Fenugreek and Mustard
- 2nd in production of Gram (Chickpea), Cumin seeds & all Coarse Cereals
- 3rd in production of Soybean, Pulses, Seed spices and Oilseeds

## Horticulture

- 1st in production of Henna, Isabgol and Guar
- 4th in production of Oranges & Garlic
- Pioneer in adoption of innovative techniques for Pomegranate, Olive, Date palm and Jojoba cultivation

## Animal Husbandry

- 1st in production of Wool
- 2nd in production of Milk
- 11% of India's total livestock population
- The state government aims to double farmer income by 2022, and has planned various interventions to attain this. It is in this context that the state successfully organised Global Rajasthan Agri-tech Meet (GRAM) in Jaipur from 9th to 11th of November, 2016
- GRAM 2016 was one of its kind event in the country. The event focused on farmers, agriculture and animal husbandry. It was conceptualised to improve sustainability and economic viability of agriculture and allied activities
- Looking at the success of GRAM 2016, multiple divisional level events are being planned at Kota, Udaipur and Jodhpur to facilitate grass-root level interventions and education of farmers in the latest agricultural technologies and available policy support and thereby enhance their livelihoods.

26%

Agriculture contributes to more than 26% of State's GDP

#1

in production of Carom-seeds, Coriander, Fenugreek, Mustard, Wool, Henna, Isabgol & Guar

#2

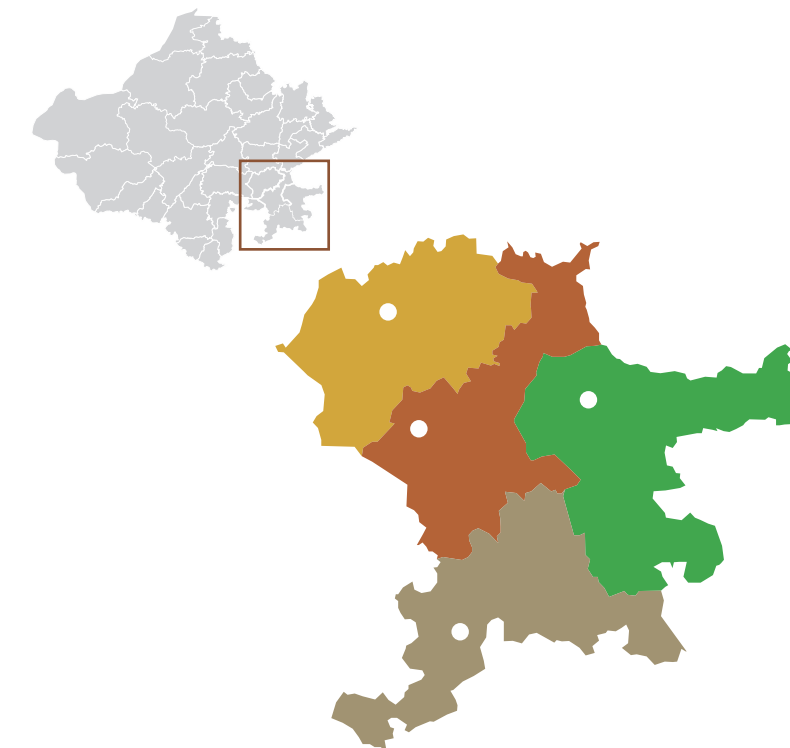
in production of Gram (Chickpea), Cumin seeds, all Coarse Cereals & Milk

#3

in production of Soybean, Pulses, Seed spices & Oilseeds

# KOTA AT A GLANCE

- Kota division comprises 4 districts namely Bundi, Baran, Kota and Jhalawar. It has a total land area of around 24,278.5 sq km (2.4 mn Hectares), 7% of the total land area of the State
- The division has a total population of 5.7 mn (as per 2011 census) that accounts for 8.3% of the total population of the state. The division also contributes 13% of agricultural laborers in the state
- The GSDP of the division grew at a CAGR of 16.57% between 2004-05 and 2011-12, at current prices, to reach INR 35,572 cr (or 9% of Rajasthan's GSDP).



## Agriculture contributed to 29% of the division's Domestic Product in 2011-12

BUNDI	KOTA	JHALAWAR	BARAN
Area (sq km) 5,776	Area (sq km) 5,217	Area (sq km) 6,219	Area (sq km) 6,992
Population (2011 Census) 1,110,906	Population (2011 Census) 1,951,014	Population (2011 Census) 1,411,129	Population (2011 Census) 1,222,755
Major Crops Wheat, Rice, Mustard, Soybean	Major Crops Wheat, Rice, Urad, Coriander, Garlic, Soybean, Mustard	Major Crops Wheat, Maize, Mustard, Soybean, Orange	Major Crops Wheat, Mustard, Soybean, Garlic
District Domestic Product (2011-12) (cr) INR 7,199	District Domestic Product (2011-12) (cr) INR 13,158	District Domestic Product (2011-12) (cr) INR 7,752	District Domestic Product (2011-12) (cr) INR 7,463



## ADVANTAGE KOTA

- Kota division is bestowed with a strong agricultural output and rich produce.
- It is an agro-dominant region with rich soil, ample water availability and strong farmer base.
- Kota division is the largest producer of paddy, soyabean, coriander, garlic and oranges in the state.
- It is also one of the biggest agricultural trading hubs of Rajasthan. The division accounted for 25% of the entire agriculture produce traded in the mandis of Rajasthan in 2015-16.
- The division is well positioned for investment in agri-processing as Kota district is a major part of the project influence area for Dedicated Freight Corridor (DFC) and has a strong highway and train connectivity.
- The division also has a well-established Food Park enabling State-of-the-art processing of the agricultural produce in the division itself.
- Given the strong agricultural base coupled with State-of-the-art infrastructure, Kota is positioned to become the next big chapter of Rajasthan's agricultural growth story.



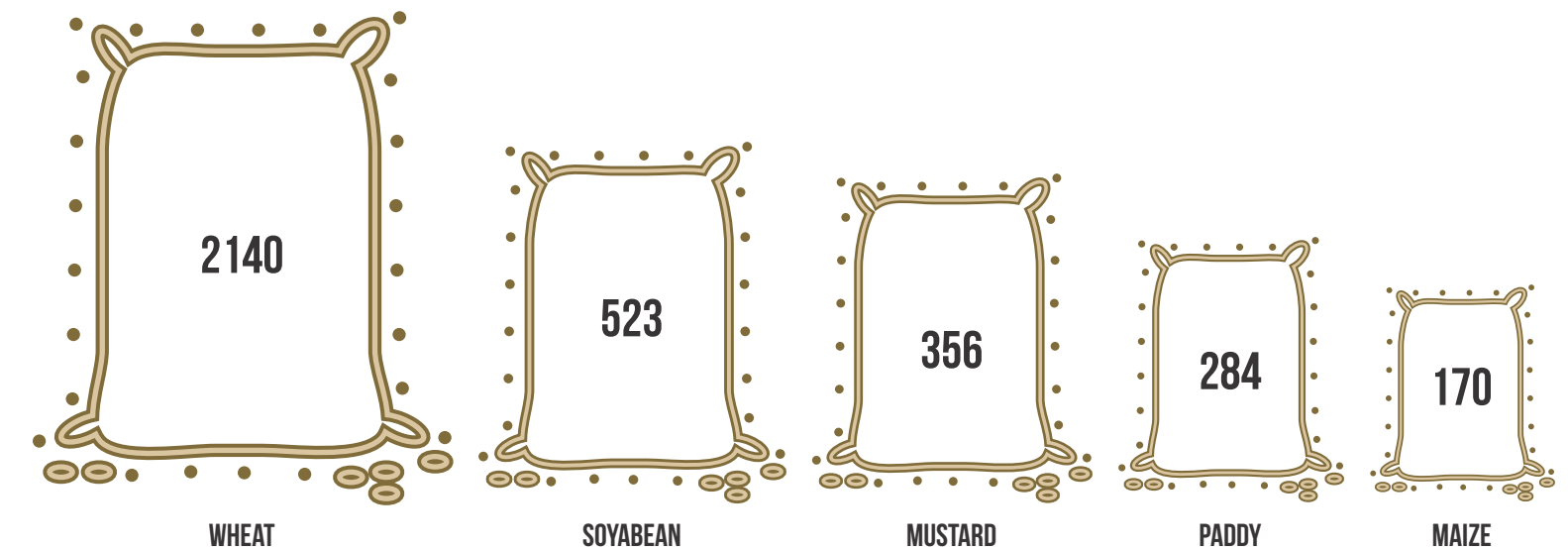
# SECTOR OVERVIEW

## Agriculture

- Kota division accounted for 12% of total agricultural production in the State in 2014-15
- Major crops:
  - Kharif – Soybean, Maize, Paddy
  - Rabi – Wheat, Mustard, Gram
- In terms of production statistics relative to the other divisions of the state (2014-15), Kota division was ranked
  - 1st in the state: Paddy, Urad, Pulses, Masur, Soybean
  - 2nd in the state: Sweet Potato, Oilseeds
  - 3rd in the state: Wheat, Maize
  - 4th in the state: Mustard & Rapeseed
- The division has the 2nd highest productivity in Cereals and Maize amongst all the divisions
- The major contributions to the state's crop production by the Kota division in 2015-16 were:
  - Soybean - 63%
  - Paddy - 51%
  - Wheat - 21%
  - Maize - 15%
  - Mustard - 11%

## PRODUCTION OF MAJOR AGRICULTURAL CROPS IN KOTA DIVISION (2015-16)

Production (in '000 MT)





## Horticulture

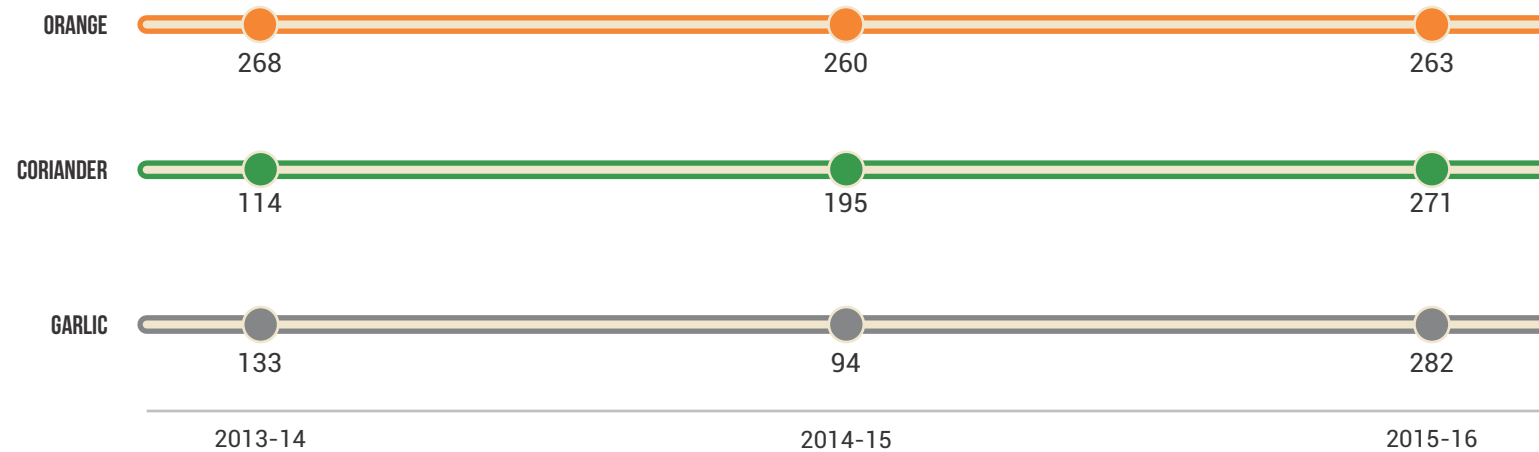
- The division is the leader in the State in the production of Coriander, Garlic and Orange. Some of the other horticultural crops grown in Kota Division include Guava, Lime and Papaya. Kota district had the largest number of horticulture nurseries amongst all districts in the state in 2014-15
- The major contributions to the state's horticulture crop production by the Kota division in 2015-16 were:
  - Orange - 98%
  - Coriander - 95%
  - Garlic - 75%
  - Guava - 24%

- In terms of production, the districts in Kota Division leads amongst all the districts in the state:

Baran	Watermelon, Bitter Gourd, Lime
Bundi	Okra, Collocasia, Guava, Green Chilies
Jhalawar	Coriander, Sweet Potato, Oranges
Kota	Garlic, Jamun, Cauliflower, Musk Melon

- Production levels of horticultural crops in Kota Division have been growing over recent years (as seen below in the diagram) indicating potential for increased processing units and value addition

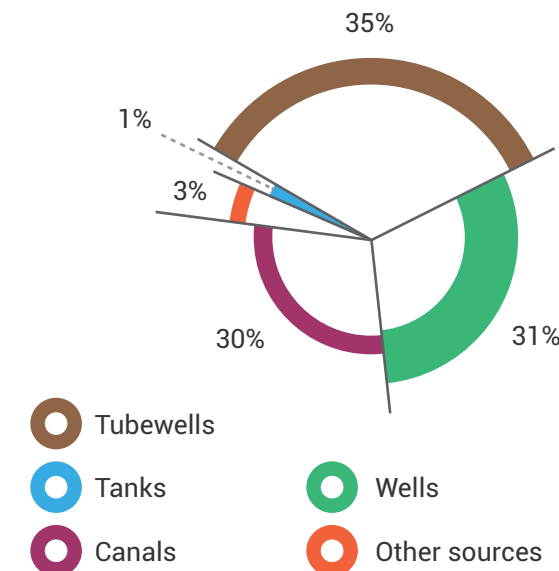
**PRODUCTION OF TOP HORTICULTURAL CROPS IN DIVISION**  
(in '000 MT)



## Irrigation

- The Kota division had a total gross irrigated area of 1.2 mn hectares in 2013-14 (3rd in all divisions). This accounted for nearly 13% of the total irrigated area in the State.
- It has the 2nd largest number of tubewells in the state. It also has the 3rd largest number of wells in the state. The usage of diesel pumpsets in the division ranks 3rd in the State.
- The division received an average annual rainfall of 874.2mm in 2014-15, which is almost twice that of the average rainfall received in the state, implying that water availability is not a major concern here in the region.

**IRRIGATION SOURCES IN KOTA DIVISION (2013-14)**



## Agro-Processing

- Agri-Export Zones**
  - The State government of Rajasthan has identified 10 Agri Export Zones with focus on spices, of which 5 are for coriander

- Out of the zones for coriander, 3 are at Kota, Baran, and Bundi

## Food Park

- Kota has 1 Agro Food Park at Ranpur, spread across total area of over 140 acres
- The food park is well connected by all modes of transport and is well furnished with water, power supply, social infrastructure, etc.

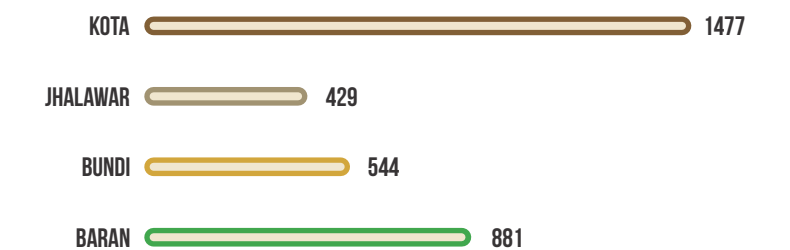
## Cold Chain

- Currently, there are around 8 MOFPI assisted cold chain projects being undertaken in Rajasthan. The key sectors pertaining to these projects include dairy, fruits and vegetables.
- Kota has 2 such cold chain projects and Bundi has 1 such project.

## Agri-Marketing/Agri-Warehousing

- The Kota division has 16 well developed mandis
- In 2015-16, around 25% of the entire volume of agricultural produce traded in the mandis of Rajasthan was in the Kota Division. Of this, the contributions to the state's mandi volumes by the division, were:
  - Spices – 59% (1st in all divisions)
  - Cereals – 35% (1st in all division)
  - Oilseeds – 27% (1st in all divisions)
- Wheat, Mustard, Soybean, Coriander, Maize, Paddy and Gram occupy a large share of the total warehousing capacity in the division.
- Currently, Rajasthan State Warehousing Corporation is

**MANDI ARRIVALS IN 2015-16**  
(in '000 MT)





operating 91 warehouses in 31 districts with a total capacity of 10.9 lakh MT during 2016-17 and utilisation levels of 85% (as on December 2016).

- Of these, 14 warehousing centers are in Kota Division with a total capacity of 1.5 lakh MT

### Animal Husbandry

- Kota division had 6% of total livestock in the State (2012 livestock census)
- The division has 508 animal husbandry institutions (Polyclinics, first grade veterinary hospitals, etc.), 8% of the State's total institutions

#### Dairy

- The division accounts for close to 10% of the State's cattle population and 10% of the State's buffalo population
- It had a total milk production of 1.13 mn mt or 6% of the total milk production in the State (2015-16)
- With 971 registered dairy societies in the division, the Rajasthan Cooperative Dairy Federation accumulated a net profit of INR 48 lakh in the 4 districts of Baran, Bundi, Jhalawar and Kota, in 2015-16

#### Fisheries

- In 2015-16, Kota division had a total fish production of 5,731 mt or 13% of the state's total fish production
- Fish production in the division has grown at a CAGR of 11% from 2011-12 to 2015-16
- The fish seed production in the division stood at 139 mn fry (16% of the state's fish seed production) in 2015-16, growing at a CAGR of 19% between 2011-12 and 2015-16

#### Beekeeping

- Currently the Kota division has close to 14,000 bee colony boxes (2015-16)
- This leads to a total production of around 400 mt of honey annually
- More than 400-450 farmers are involved in this bee-keeping activity





# INVESTMENT OPPORTUNITIES

## Agriculture

In addition to the existing agricultural crops like Wheat, Soyabean, Coriander and Garlic, Kota division has potential for production of exotic crops such as dragon fruit, strawberries and quinoa. With its strong position in the production of oranges, other varieties such as Valencia/Jaffa have a plenty of potential. Medicinal plants such as Aswagandha and Isabgol too hold potential for investment.

## Agri-Marketing

With the Kota division being one of the largest in this regard, there are multiple opportunities in the areas of:

- Agri produce procurement centres
- Warehouse/Mandi Automation solutions
- Packaging Facilities, Cold Storage and Warehousing
- Warehouse Receipt Financing
- Contract Farming
- Marketing of local produce

## Irrigation

Water availability is not a major concern for the division, it being well endowed with varied sources of irrigation. However, with continuously depleting water resources, the farmers of the division need to be made aware of water conservation techniques. There is a need to train them with sustainable modern irrigation techniques such as:

- Drip irrigation
- Pressure irrigation
- Recycling of waste water
- Renewable energy sources for irrigation (e.g. Solar Pumps)
- Furrow Irrigation – Canal Irrigation is prevalent in the division which can often lead to water shortage for farmers at the end of distribution system

There is a developing trend in micro irrigation in the state. The area covered under drip irrigation in the division has grown at a CAGR of 13% from 2011-12 to 2015-16. It

accounted for 28% of the State's total area under drip irrigation in 2015-16. Approximately, 7,835 ha of the division is covered under sprinkler irrigation. This indicates the growing potential for investing in alternative and more effective modes of irrigation

## Agri-Processing

- Kota division is a leading producer of cereals, grains and pulses (Soybean, Mustard, Urad), Spices (Coriander, Fenugreek, Nigella), Guava, Aonla, Ashwagandha, White Musali, Rose and Citrus Fruits.
- There is significant potential for agri-processing in the division. Some of the opportunities are:
  - Grading, processing, sorting facilities for several crops
  - Branding of spices is another area that may be explored as coriander produced in the division is mainly exported to the southern states
  - A spice facilitation board may also be established
  - Cultivation and processing of medicinal plants may be explored as the division is rich in the required soil and water resources
  - New and more versatile varieties of crops may be introduced e.g. newer varieties of coriander with more oil content may be explored for increased export opportunities outside India
- With the presence of an agri-food park in Kota, opportunities for firms involved in food processing, farm produce logistics and post-harvest management is significant

28%

of State's total area is accounted by drip irrigation



Opportunities in processing may be further detailed as follows:

### AGRICULTURE

PRODUCE	OPPORTUNITY	MAJOR MANDIS IN KOTA DIVISON
Wheat	Flour mills and other value-added product units	Kota, Baran, Bundi
Paddy	Harvesting, storage, milling, animal Feed	Kota, Bundi
Soybean	Soya based food processing for soya milk and soya-protein isolates	Kota, Baran, Jhalawar
Mustard	Oil extraction plant, refinery, mustard sauce, etc.	Kota, Baran
Sesame Seeds	De-hulling units	Kota

### HORTICULTURE

PRODUCE	OPPORTUNITY	MAJOR MANDIS IN KOTA DIVISON
Garlic	Garlic flakes /powder	Kota, Chhipa Barod (Chhabra)
Orange	Aseptic fruit juice, fruit concentrate, powder units	Bhawani Mandi, Jhalrapatan
Coriander	Cleaning, grading, powdering, packing and oleoresin units	Kota, Baran, Ramganj Mandi
Fenugreek	Grading, powdering, packing and oleoresin units	Kota
Guava	Processing guava for concentrate, pulp, puree, seeds, etc.	Bundi, Baran, Kota

### Animal-Husbandry

There are ample opportunities in the division for investment in and development of:

- **Dairy**
  - Dairy Value Addition and Processing
  - Higher Quality Feed
  - Large scale breeding programs
  - Artificial insemination centres
  - Milk Collection centres
  - Point of Sale outlets
- **Bee-keeping**
  - Marketing of Honey
  - Training of farmers

- Bee-keeping equipment
- Honey Processing
- **Fisheries**
  - Fish seed and feed production
  - Hatcheries
  - Processing

### Farm Mechanization:

- Rajasthan has seen a significant shift towards farm mechanisation across the value chain over the recent years with the installation of sprinklers, water pumps, usage of tractors, packaging automation, etc. There are opportunities for private players to engage in manufacture of small and large scale farm implements.

- The share of land holdings under the ownership of small and marginal farmers is around 53%, currently. This makes it difficult for them to employ large scale mechanization across the agricultural value chain.
- In this context Custom Hiring Centres become relevant by enabling rental of farming equipment on a reasonable basis. The Government too has been encouraging CHCs by encouraging private player participation.

### Agri-Tourism:

- Rajasthan has a vibrant tourism sector. The State hosted over 35 mn domestic and 1.5 mn international tourists in 2015-16.
- Kota division with its rich agriculture base, dense forest backdrop, orange orchards and presence of water bodies provides a conducive ecosystem for agri-tourism ventures.
- Opportunities across forest trails, orange orchard homestays, guided tours of dams and canals and hands-on experience of on-farm processing can be explored.





# ENABLING POLICY ENVIRONMENT

## PROVISIONS, SCHEMES & SUBSIDIES

Rajasthan has implemented several policies relevant to the agri and allied industries to enable support for business. Some of the relevant policies that offer many subsidies and incentives to facilitate investment are:

- Agro-Processing and Agri-Marketing Promotion Policy 2015
- Rajasthan Investment Promotion Scheme (RIPS) 2014
- State Agriculture Policy 2013
- MSME Policy 2015, Startup Policy 2015, Livestock Development Policy 2010, etc.



Scan to know more

With regards to the above stated policies, some of the enabling measures are:

- Exemptions related to electricity duty, stamp duty, land tax, mandi fees, agricultural land conversion charges, entry tax on plant & machinery, etc.
- Incentives on attaining specified goals of investment, employment generation, research & development, project development, patent/design registration, international quality certification, etc.
- Subsidies for engaging in manufacturing & processing of agriculture/horticulture/animal products, post-harvest crop activities, manufacturing of animal feed, export of fruits & vegetables, transport of produce, sending samples abroad for testing, etc.

The following are some of the recent measures planned in Rajasthan, in the agri and allied space, as part of the State Budget 2017-18:

### Agriculture

Minikits will be handed to 1 lakh farmers based on reports of soil health card in next year. Mukhaya Mantri Beej Swavlamban Yojna will be implemented in Kota, Bhilwara and Udaipur Divisions. There will be 5% increase in subsidy for sprinkler equipment. In addition to these, geo-tagging will be undertaken for verification of the schemes of Horticultural Department.

### Cooperative

EMV-Rupay-Kisan Debit Cards will be issued to farmers by co-operative banks. The current subsidy of 2% and Sahkar Kisan Kalyan Yojna will be continued. There is provision of INR 10 crore for 5% interest subsidy on long term co-operative agriculture loan distributed by SLDB and PLDC and INR 3.50 crore for construction of cold storage of Jhalrapatan Kraya Vikray Cooperative Society.

### Animal Husbandry, Fisheries and Dairy Development

New veterinary sub-centres will be established in 4160 village panchayats in a phased manner. Colour Doppler machine and other equipment will be brought in at multi-purpose veterinary hospitals of Jaipur, Kota, Jodhpur and Udaipur. Constitution of 1000 new women milk cooperative societies will be undertaken. There is a provision of INR 822 cr in Animal Husbandry, Fisheries and Dairy Development Department, which is 17.47% higher than in 2016-17.



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The State government has recognized the enormous potential of Kota (Hadoti region) in terms of availability of water, production of cereals, oilseeds, spices, medicinal crops, citrus fruits and the prospect of delivering rich dividends to farmers through value addition. It is in this stead that GRAM Kota 2017 was organized from 24th to 26th May 2017. The key objective of the event was to expose the farmers of Kota Division to the latest agriculture practices and state policies. This event brought together all stakeholders, academicians, technologists, agribusiness companies, policy makers and farmers from in and around Kota and the three adjoining districts of Bundi, Baran and Jhalawar.

Event Partner



Knowledge Partner

**Deloitte.**

## EVENT COMPONENTS

- a. **Seminars** - A series of seminars featuring varied themes pertinent to the agri and allied ecosystem in Kota.
- b. **Jajam Baithaks** - Set up at the venue, these Baithaks provided farmers an opportunity to interact with Agri-scientists and experts on crop-specific matters, best agrarian practices and better utilisation of technology.
- c. **Smart Farm** - Live walk-through with models, showcasing the best of modern technologies in the agriculture value chain from pre/post-harvest to modern agricultural practices, allied activities and agri-marketing opportunities.
- d. **Exhibition** - A separate area, with various exhibition stalls for the participating vendors, firms and companies for exhibiting their products and services.



कृषि  
विभाग  
राजस्थान **DOA**

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