JETIR.ORG

ISSN: 2349-5162 | ESTD Year: 2014 | Monthly Issue



## **JOURNAL OF EMERGING TECHNOLOGIES AND** INNOVATIVE RESEARCH (JETIR)

An International Scholarly Open Access, Peer-reviewed, Refereed Journal

# **Infrastructural Development of Regulated Market** Committee for the Enhancement of Agricultural **Product Marketing Commodities of Orissa: An** Empirical Study using Artificial Intelligence.

\* Prabodha Kumar Rout 1

\*\* Dr. Dasarathi Sahu <sup>2</sup>

#### **ABSTRACT**

The impact of infrastructural development of the Regulated Market Committee (RMC) on the enhancement of agricultural product marketing commodities in Odisha can be analyzed through an empirical study using artificial intelligence (AI). Al can provide valuable insights by analyzing large amounts of quantative and textual agricultural, farming data and identifying patterns and trends. It's important to note that this is a high-level overview, and conducting a comprehensive empirical study would require significant time, resources, and expertise. However, Al can play a crucial role in analyzing and interpreting the data collected, thereby providing valuable insights into the impact of infrastructural development on agricultural product marketing commodities in Odisha.

Key Words: Artificial intelligence (AI), Regulated Market Committee (RMC), Internet of Things (IoT), Natural Language Processing (NLP), Machine Learning Algorithms (MLA), ARIMA (Autoregressive Integrated Moving Average).

#### Introduction

Artificial intelligence (AI) has the potential to revolutionize agricultural marketing in Odisha, India. Here are some key areas where AI can be applied in agricultural commodity marketing in Odisha:

Artificial intelligence (AI) refers to the development and implementation of computer systems that can perform tasks that typically require human intelligence. It is a branch of computer science that aims to create intelligent machines capable of perceiving, reasoning, learning, and making decisions for high vielding farm produce.

All systems are designed to analyze and interpret vast amounts of RMC's textual and quantitative data, recognize patterns, and make predictions or decisions based on that information. They can automate repetitive tasks, solve complex problems, and adapt and improve their performance over time through machine learning algorithms.

Al has numerous applications across various industries, including agriculture, healthcare, finance, manufacturing, transportation, and entertainment. It has the potential to revolutionize many aspects of society, offering opportunities for automation, increased marketing efficiency, and new possibilities for innovation farm machinery tools and equipments. However, ethical considerations, transparency, and the responsible development and deployment of AI technologies are important aspects to agricultural product marketing commodities as the field continues to advance.[1]

#### Relevance of the Study

Al can analyze historical data, weather patterns, market trends, and other relevant factors to forecast demand for agricultural products accurately. This information can help farmers and marketers make informed decisions regarding crop selection, production planning, and pricing strategies. Al-powered tools can gather data from various sources such as social media, news articles, and market reports to provide real-time market intelligence.

This information can assist farmers and marketers in identifying market opportunities, understanding consumer preferences, and making data-driven decisions. [2]

- a) Al algorithms can analyze supply and demand dynamics, pricing trends, and production costs to optimize pricing strategies. This can help farmers and marketers maximize profits while ensuring fair prices for consumers.
- b) Al can enhance supply chain efficiency by optimizing inventory management, predicting transportation requirements, and identifying bottlenecks in the distribution process. This can lead to reduced waste, improved logistics, and better coordination among stakeholders.
- c) Al-powered technologies such as remote sensing, drones, and Internet of Things (IoT) devices can gather data on crop health, soil conditions, and weather patterns. This data can be used to optimize inputs, such as fertilizers and irrigation, and improve overall farm productivity.
- d) All can enable personalized marketing campaigns by analyzing customer data, preferences, and behaviour patterns. This can help farmers and marketers tailor their products and messages to specific target markets, increasing customer engagement and satisfaction.
- e) Al-based farm management systems can integrate data from various sources, such as weather forecasts, soil sensors, and crop growth models, to provide real-time insights and recommendations for farmers. These systems can assist farmers in optimizing resource allocation, monitoring crop health, and managing farm operations efficiently.

It's important to note that the successful implementation of AI in agricultural marketing in Odisha would require the availability of relevant data, technology infrastructure, and appropriate training for farmers and marketers. Collaboration among government agencies, agricultural institutions, and technology providers would be essential to leverage the full potential of AI in this sector [3].

#### Objectives of this Study

The research study is proposed to be undertaken keeping in view the following objectives.

- 1. To study the agricultural commodities marketing in the development of the rural economy considering the factors such as price discovery, income generation, employment creation, market access, technology adoption, infrastructure development, and value addition based on artificial intelligence analysis.
- 2. To establish the empirically analyse based on artificial intelligence analysis of . Market Performance, Transportation and Storage, Price Analysis, Market Integration, Market Market linkages, Employment generation, Quality control and standardization, Technology adoption, Knowledge sharing and capacity building, Market promotion, Capacity building, Market integration, Market hygiene and sanitation, Post-harvest management, Waste management, Supply chain efficiency, Convenience for buyers, Market regulation, Refrigeration and storage, Market promotion and branding, Fire prevention and safety, Biometric systems.

#### Scope of the Study

The proposed study as purely analytical and the targeted area is confined to all districts i.e Angul, Balangir, Balasore, Bargarh, Bhadrak Boudh, Cuttack, Deogarh, Dhenkanal, Gajapati, Ganjam, Jagatsinghpur, Jajpur, Jharsuguda, kalahandi, Kendrapara, Kendujhar, Khordha, Koraput, Malkangiri, Mayurbhani, Nabarangpur, Nayagarh, Nuapada, Puri, Rayagada, Sambalpur, Sonepur, Sundergarh districts of Odisha which are covered under the study to explain the standard of living situation of the farmers residing in these areas. The study is focused on impact of infrastructural development of RMCs in enhancement of agricultural commodity marketing of Orissa an empirical analysis based on Artificial Intelligence (AI).

#### Nature and Source of Data

The artificial intelligence analysis is based on the data collected from secondary sources collected from district RMCs using Ms-Excel format, district statistical abstract (A Govt. of Odisha Publication), Economic Review and also from the producer farmers, consumers and officials associated with the agricultural commodity marketing activities.

Apart from this, relevant information has been collected from the published and unpublished sources of certain government and non-government organisations. Basically, the secondary data were collected from the official records and publication of Director of Agriculture, Department of Economics and Statistics, Orissa Agricultural Statistics, other publications and websites.

In dealing with the issues relating to the problems, prospects and impact of agricultural commodity marketing in Orissa and the economic development of all the districts an extensive survey is made upon a few selected rural markets of the all the districts of Odisha.

- a) Data Collection: To conduct an empirical study, relevant data on the infrastructural development of RMC and the agricultural product marketing commodities in Odisha are collected. This data includes the information on the establishment of RMCs, infrastructure development initiatives, investment in transportation and storage facilities, market performance indicators, commodity prices, production volumes, and other relevant factors.
- b) Data collection and integration: Gather relevant data from various sources such as farmers. markets, weather stations, and satellite imagery. This data should include information on crop yields, market prices, transportation infrastructure, storage facilities, and other relevant factors.
- c) Data preprocessing: Clean and preprocess the collected data to ensure consistency and remove any outliers or errors. This step may involve data normalization, handling missing values, and transforming the data into a suitable format for Al algorithms.
- d) Data-driven decision-making: Al algorithms can analyze large amounts of agricultural data, such as weather patterns, market prices, and customer preferences, to provide valuable insights for decision-making in marketing strategies.

#### Research Methodology

Artificial intelligence (AI) algorithms are increasingly being utilized for agricultural marketing analysis. Here the five commonly used Al algorithms in this context:

1. Machine Learning Algorithms:

Decision Trees: Used for classification and prediction tasks, such as segmenting types of farmers(Agriculture, fish, Animal etc.) or predicting agricultural market trends.

2. Natural Language Processing (NLP) Algorithms:

Text Classification: NLP algorithms can classify infrastructural development text data, such as customer reviews or social media posts, to extract insights about customer sentiments, preferences, and trends.

Named Entity Recognition (NER): Helps identify and extract specific information from text, such as identifying key agricultural products or market trends from news articles.

3. Recommendation Systems:

Content-Based Filtering: Recommends products or services to farmers based on the characteristics or features of the farm products they have cultivated.

#### 4. Time Series Analysis:

ARIMA (Autoregressive Integrated Moving Average): A statistical technique for analyzing and forecasting time series data, which can be applied to agricultural market trends, pricing, or demand forecasting.

#### 5. Genetic Algorithms:

Used in optimization problems, genetic algorithms mimic natural selection to find the best solutions for tasks such as optimizing agricultural marketing strategies or resource allocation.

These are all Al algorithms commonly embedded in artificial intelligence tools used for agricultural marketing analysis for specific task, available data, and desired outcomes. [4]

The data analysis and interpretation is undertaken mostly with the help of computer based mathematical functions using MS-Excel & Artificial Intelligence empirical analysis to examine the result Chatbots and ChatGPT: Al-driven tools are used to provide real-time support and information to farmers, distributors, and customers. These AI systems can answer queries, provide guidance on farming techniques, offer market insights, and facilitate online transactions, enhancing customer engagement and satisfaction. [5]

Once the data is collected, AI techniques have been be used to analyze the data and identify correlations, patterns, and insights. Here are some areas where AI analysis could be applied:

- a) Market Performance: Al algorithms can analyze historical data to identify the impact of infrastructural development on market performance indicators such as price stability, market efficiency, and trade volumes.
  - This analysis can help determine if infrastructural improvements have led to enhanced marketing opportunities for agricultural commodities. [6]
- b) Transportation and Storage: Al can be used to assess the impact of improved transportation and storage facilities on the quality and availability of agricultural products. It can analyze data on transportation networks, logistics, and storage capacities to evaluate how these improvements have affected product quality, post-harvest losses, and market accessibility. [7]
- c) Price Analysis: Al algorithms can examine historical price data to identify trends, price fluctuations, and price differentials across various markets. By comparing data before and after infrastructural development, Al can help determine if there have been any significant changes in price patterns and whether farmers have benefited from improved market access and pricing transparency.
- d) Market Integration: Al analysis can assess the level of integration between different agricultural markets within Odisha. It can evaluate whether infrastructural development has led to increased connectivity, reduced market fragmentation, and improved access to a wider customer base. [8]
- e) Stakeholder Surveys and Feedback: To complement the AI analysis, it is essential to gather qualitative data from stakeholders such as farmers, traders, and consumers. Surveys and interviews can help understand their experiences, perceptions, and opinions regarding the impact of infrastructural development on agricultural marketing. Al techniques like natural language processing (NLP) can assist in analyzing the textual data from these surveys to extract valuable insights.
- Recommendations and Policy Implications: Based on the AI analysis and stakeholder feedback, the empirical study can provide recommendations and policy implications for further enhancing agricultural product marketing in Odisha. These recommendations may include targeted investments in infrastructure, policy reforms, and capacity building initiatives to address any identified gaps and challenges. [9-10]

Artifical Intelligence (AI) analysis for the impact of infrastructural development on Agricultural Commodity Marketing System in Odisha:

Artificial intelligence (AI) can be applied in various ways to enhance agricultural marketing strategies. Here are some methodologies of AI that can be adapted in agricultural marketing:

- a) Dynamic pricing: Al algorithms can analyze market conditions, supply and demand patterns, and competitor pricing to determine optimal pricing strategies for agricultural products. This helps in maximizing profitability and competitiveness.
- b) Market segmentation: Al algorithms can segment the agricultural market based on various criteria, such as geographic location, crop type, or customer preferences. This enables targeted marketing campaigns tailored to specific customer segments.
- c) Smart marketing automation: Al can automate various marketing tasks, such as email campaigns, social media scheduling, and content creation, freeing up time for marketers to focus on strategic planning and analysis.
- d) Recommendation Systems: Al-powered recommendation systems can provide personalized product recommendations to farmers, distributors, and retailers based on their specific needs and preferences. By analyzing data such as soil conditions, weather forecasts, and market trends, Al can suggest the most suitable seeds, fertilizers, pesticides, and other agricultural inputs.
- e) Image Recognition: Al algorithms can analyze images or drone footage of crops to assess their health, identify diseases or pests, and monitor growth stages. This enables early detection of problems, allowing agricultural marketers to provide targeted interventions and advice to farmers, thus improving crop quality and yield.
- f) Precision Agriculture: Al technologies like machine learning and data analytics can be applied to precision agriculture, which involves using sensors, drones, and other IoT devices to collect data on soil conditions, moisture levels, and crop health. Al algorithms can then analyze this data to optimize irrigation schedules, identify areas requiring additional nutrients, and determine the best time for harvesting and marketing produce.
- g) Price Optimization: Al algorithms can analyze market data, supply and demand trends, and pricing history to optimize pricing strategies for agricultural products. By considering various factors such as production costs, transportation expenses, and market competition, Al can suggest optimal pricing points to maximize profitability.
- h) Social Media Analysis: Al techniques can be employed to analyze social media conversations, reviews, and sentiment analysis related to agricultural products. This enables marketers to understand customer preferences, identify emerging trends, and adapt marketing campaigns accordingly.
- i) Supply Chain Optimization: Al can improve the efficiency of agricultural supply chains by optimizing logistics, inventory management, and distribution. Machine learning algorithms can analyze historical data and real-time information to predict demand fluctuations, optimize transportation routes, and reduce wastage.
- j) Predictive analytics: Utilize AI techniques such as machine learning algorithms to analyze the preprocessed data and generate predictive models. These models can forecast crop yields, market demands, and price fluctuations based on historical and real-time data. They can also identify patterns and correlations between different variables.
- k) Infrastructure optimization: Apply AI optimization algorithms to identify the most efficient allocation and utilization of agricultural infrastructure. For example, AI can help optimize transportation routes, determine the optimal locations for storage facilities, and recommend improvements to existing infrastructure.
- I) Decision support systems: Develop Al-powered decision support systems that provide real-time insights and recommendations to farmers, market intermediaries, and policymakers. These

systems can help stakeholders make informed decisions about crop planning, pricing, storage, and distribution, leading to more efficient agricultural marketing.

- m) Market analysis and customer segmentation: Utilize AI-based tools to analyze market trends, consumer preferences, and behavior patterns.
  - This information can help identify target markets, segment customers, and develop personalized marketing strategies.
- n) Automation and robotics: Explore the use of Al-powered automation and robotics in agricultural marketing infrastructure. Al enable autonomous vehicles are employed for transportation, drones can assist in crop monitoring and surveillance, and robotic systems can aid in sorting, grading, and packaging agricultural products.
- o) Collaboration and stakeholder engagement: Foster collaboration among farmers, market actors, technology providers, and policymakers to ensure the successful implementation and adoption of Al-driven infrastructural development in agricultural marketing. Engage stakeholders throughout the process to gather insights, address concerns, and create a supportive ecosystem.

It's important to note that while AI can greatly enhance agricultural marketing infrastructure, it should be implemented alongside domain expertise and human decision-making to ensure responsible and ethical practices. [11-13]

#### Impact of Infrastructural development on Agricultural Marketing:

Market infrastructure development in the Regulated Market Committee (RMC) of different districts in Odisha can have several positive impacts on agricultural marketing. Here are some potential benefits:

- a) Enhanced Market Efficiency: Improved market infrastructure such as well-designed auction platforms, storage facilities, and grading systems can enhance the efficiency of agricultural markets. It enables farmers to access a wider range of buyers, leading to increased competition and better price discovery for their produce. [14-16]
- b) Reduced Post-Harvest Losses: Proper storage facilities, including warehouses and cold storage units, can help reduce post-harvest losses. Farmers can store their produce for longer durations, waiting for favorable market conditions or higher prices. This reduces wastage and improves farmers' income.
- c) Standardization and Quality Control: Market infrastructure development allows for better quality control mechanisms. Grading and sorting facilities enable farmers to standardize their produce according to quality parameters, making it more attractive to buyers. This ensures consistent quality and increases market acceptance.
- d) Access to Information: Market infrastructure development can facilitate the dissemination of market information to farmers. RMCs can establish market information systems that provide real-time data on prices, demand, and market trends. Farmers can make informed decisions about when, where, and how to sell their produce, leading to better market outcomes.
- e) Improved Market Access: Upgraded market infrastructure can attract more buyers, including wholesalers, processors, and exporters, to the RMCs. This expands market access for farmers and creates opportunities for value addition and market diversification.
- Increased Farmer's Income: The combination of improved market efficiency, reduced postharvest losses, standardized quality, and access to market information can lead to higher returns for farmers. They can negotiate better prices for their produce, minimize losses, and take advantage of favorable market conditions, ultimately improving their income and
- g) Employment Generation: Market infrastructure development often involves the construction and maintenance of various facilities, which can generate employment opportunities in the local economy. Additionally, as agricultural marketing improves, there can be a ripple effect on related sectors such as transportation, packaging, and logistics, creating additional jobs.

h) Farmer Empowerment: By strengthening market infrastructure and promoting fair trade practices, RMCs can empower farmers and enhance their bargaining power. Transparent and regulated market operations protect farmers from exploitation and unfair practices, ensuring a more equitable agricultural marketing system.

#### INFORMATION ON CREATED INFRASTRUCTURE OF DIFFERENT RMC IN THE STATE ODISHA Table-1

0.1		1	I able- i	TD / 1	
Sl. No	District	Sl. No	Name of the RMC	Total Project	Total Amount
	ANGUL	1	Angul	72	3,71,50,000.00
		2	Atthamalick	9	1,00,50,000.00
1		3	Pallahara	7	21,50,000.00
		4	Talcher	34	2,34,00,000.00
		5	Balasore	83	7,02,70,000.00
2	BALASORE	6	Jaleswar	57	5,13,10,000.00
		7	Nilagiri	5	71,00,000.00
		8	Attabira	359	26,63,90,000.00
3	BARGARH	9	Bargarh	241	18,90,80,000.00
		10	Padampur	114	10,31,60,000.00
_	DHADDAW	11	Bhadrak	22	2,07,20,000.00
4	BHADRAK	12	Chandbali	20	2,03,00,000.00
		13	Bolangir	41	3,75,30,000.00
5	BOLANGIR	14	Kantabanji	43	4,01,50,000.00
		15	Patnagarh	19	1,68,20,000.00
6	BOUDH	16	Boudh	99	7,67,00,000.00
		17	Banki	43	3,17,00,000.00
7	CUTTACK	18	Kendupatna	38	2,93,70,000.00
		19	Narasinghpur	7	1,11,50,000.00
		20	Dhenkanal	79	4,09,50,000.00
8	DHENKANAL	21	Hindol	12	94,00,000.00
		22	Kamakhyanagar	34	2,91,60,000.00
9	DEOGARH	23	Deogarh	25	1,46,60,000.00
		24	Bhanjanagar	89	8,20,10,000.00
10	GANJAM	25	Digapahandi	46	5,69,10,000.00
		26	Hinjilicut	68	7,63,20,000.00
11	GAJAPATI	27	Paralakhemundi	60	6,06,90,000.00
12	JAJPUR	28	Jajpur	70	6,50,60,000.00
13	JAGATSINGHPUR	29	Jagatsinghpur	68	5,89,60,000.00
13	JAGATSINGHFUR	30	Rahama	65	4,95,00,000.00
14	JHARSUGUDA	31	Jharsuguda	34	2,34,20,000.00
		32	Bhawanipatna	62	5,19,70,000.00
15	KALAHANDI	33	Junagarh	97	5,23,70,000.00
		34	Kesinga	8	38,10,000.00

Sl.	District	Sl. No	Name of the RMC	Total Project	Total Amount
	************	35	Kandhamal	15	1,81,00,000.00
16	KANDHAMAL	36	Tikabali	48	4,56,00,000.00
17	KENDRAPARA	37	Kendrapara	58	6,13,00,000.00
		38	Anandapur	93	7,44,10,000.00
18	KEONJHAR	39	Champua	45	2,58,00,000.00
		40	Keonjhar	185	12,67,00,000.00
10	KIHIDDA	41	Balugaon	14	1,30,50,000.00
19	KHURDA	42	Jatni	21	1,32,10,000.00
20	VOD A DI IT	43	Jeypore	75	5,00,10,000.00
20	KORAPUT	44	Koraput	155	7,52,20,000.00
21	MALKANGIRI	45	Malkangiri	173	11,10,90,000.00
		46	Udala	61	4,19,00,000.00
22	MAYURBHANJ	47	Baripada	37	3,06,00,000.00
22	MATURBHANJ	48	Karanjia	11	98,00,000.00
		49	Rairangpur	1	1,50,000.00
23	NABARANGPUR	50	Nabarangpur	111	9,77,60,000.00
24	NAYAGARH	-51	Bahadajhola	35	2,97,10,000.00
25	NUAPADA	52	Khariar Road	34	3,07,30,000.00
26	PURI	53	N <mark>imapara</mark>	41	3,97,00,000.00
20	FURI	54	Sakhigopal Sakhigopal	44	3,66,70,000.00
27	RAYAGADA	55	<b>G</b> unupur	90	7,72,00,000.00
21	KATAGADA	56	Rayagada	44	3,94,80,000.00
		57	Kuchinda	124	9,90,20,000.00
28	SAMBALPUR	58	Hirakuda	12	18,00,000.00
20	SAMBALFUR	59	Rairakhol	59	4,78,50,000.00
		60	Sambalpur	166	16,13,30,000.00
29	SONEPUR	61	Biramaharajpur	38	3,94,30,000.00
	SOMEFUR	62	Dunguripalli	111	7,73,00,000.00
		63	Bonei	17	2,20,70,000.00
30	SUNDARGARH	64	Panposh	32	2,16,60,000.00
		65	Saragipalli	62	3,83,70,000.00
	To	4142	3,27,67,10,000.00		

Table-2

		Total	Total
		Projects	Amount of
SI.No	Name of the District	Undertaken	Infrastructure
1	ANGUL	122	72750000
2	BALASORE	145	128680000
3	BARGARH	714	558630000
4	BHADRAK	42	41020000

	<b>Grand Total</b>	4142	3276710000
30	SUNDARGARH	111	82100000
29	SONEPUR	149	116730000
28	SAMBALPUR	361	310000000
27	RAYAGADA	134	116680000
26	PURI	85	76370000
25	NUAPADA	34	30730000
24	NAYAGARH	35	29710000
23	NABARANGPUR	111	97760000
22	MAYURBHANJ	110	82450000
21	MALKANGIRI	173	111090000
20	KORAPUT	230	125230000
19	KHURDA	35	26260000
18	KEONJHAR	323	226910000
17	KENDRAPARA	58	61300000
16	KANDHAMAL	63	63700000
15	KALAHANDI	167	108150000
14	JHARSUGUDA	34	23420000
13	JAJPUR	70	65060000
12	JAGATSINGHPUR	133	108460000
11	GANJAM	203	215240000
10	GAJAPATI	60	60690000
9	DHENKANAL	125	79510000
8	DEOGARH	25	14660000
7	CUTTACK	88	72220000
6	BOUDH	99	76700000
5	BOLANGIR	103	94500000

It is important to note that the successful implementation of market infrastructure development requires effective governance, stakeholder coordination, and regular monitoring and evaluation. Collaboration between government agencies, RMCs, farmer organizations, and private sector entities is crucial to realize the full potential of such initiatives. [14-16]

Here is a list of 30 different districts in Odisha along with the amount invested for infrastructure development in the regulated market committee (RMC) in each district. [Table-1]

1. Amount Invested for Infrastructure Developement in Different RMC in Odisha

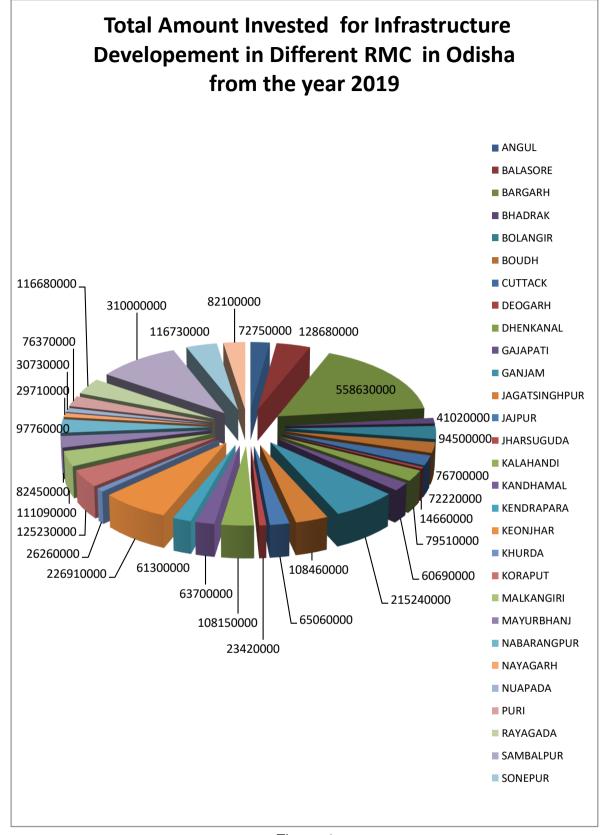


Figure-1

2. No of RMC Projects done in different district of Odisha [Table-2]

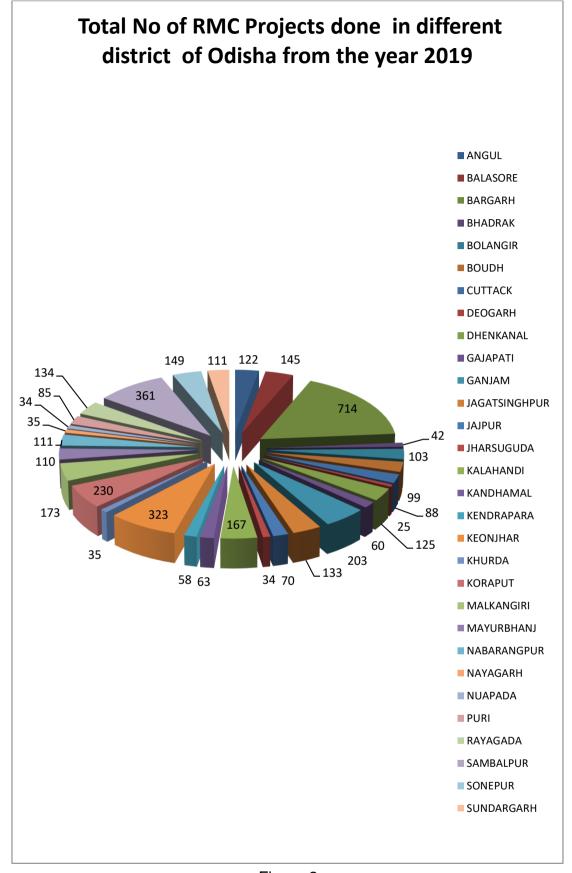


Figure-2

Here is a list of 30 districts in Odisha along with the number of regulated market committee (RMC) projects done in each district.

#### Primary Key Factors used in Al for Infrastructural Development Analysis [Annexure-A]

#### **Market Yards:**

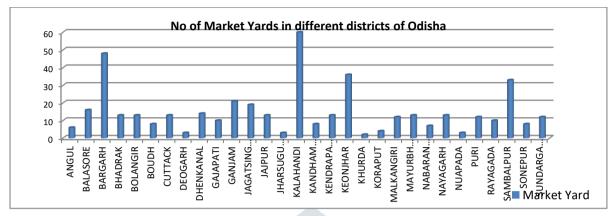


Figure-3

It is observed that Kalahandi has the highest no of market yards i.e 60, Baragarh 48, Keonjhar 36 and in Sambalpur 33 nos.

Market yards, also known as regulated market committees (RMCs), play a crucial role in the economic development of different districts in Odisha in several ways:

- i. Facilitating trade: Market yards provide a centralized location for farmers, traders, and buyers to engage in agricultural trade, promoting market efficiency and reducing transaction costs.
- Price discovery: Market yards serve as platforms for price discovery, where supply and demand ii. dynamics determine fair prices for agricultural commodities, ensuring transparency and preventing exploitation.
- Market linkages: Market yards create linkages between farmers and consumers, enabling iii. farmers to access wider markets, diversify their customer base, and sell their produce at competitive prices.
- Access to information: Market yards provide valuable market information to farmers, such as ίV. prevailing prices, demand patterns, and market trends, enabling them to make informed decisions and optimize their production and marketing strategies.
- Infrastructure development: Market yards require infrastructure such as storage facilities, cold ٧. storages, grading and sorting units, and auction platforms. The development of such infrastructure enhances the overall agricultural value chain, ensuring better storage, preservation, and quality maintenance of agricultural produce.
- Employment generation: Market yards create direct and indirect employment opportunities in vi. the form of market administrators, laborers, transporters, and service providers, thereby contributing to local economic growth and livelihood enhancement.
- Ancillary services: Market yards often attract ancillary services like packaging, transportation, vii. finance, and warehousing, further boosting local economic activities and providing additional employment opportunities.
- viii. Quality control and standardization: Market yards enforce quality control measures and facilitate standardization of agricultural produce, ensuring that buyers receive products that meet specified quality standards, thereby enhancing market credibility and consumer trust.
- ix. Value addition and processing: Market yards can encourage value addition and processing activities by promoting linkages with food processing units, leading to increased value realization for farmers and fostering agro-industrial development in the region.

- x. Technology adoption: Market yards can serve as hubs for technology dissemination, encouraging farmers to adopt modern farming practices, post-harvest technologies, and digital platforms for improved productivity, efficiency, and market access.
- xi. Rural development: Market yards contribute to overall rural development by providing necessary infrastructure and services, promoting income generation, and reducing rural-urban migration.
- xii. Financial inclusion: Market yards can facilitate access to credit and financial services for farmers, helping them invest in agricultural inputs, adopt new technologies, and manage risks, thereby promoting financial inclusion and rural prosperity.
- xiii. Knowledge sharing and capacity building: Market yards often organize training programs, workshops, and seminars to enhance farmers' knowledge and skills, empowering them to make informed decisions, adopt best practices, and improve their competitiveness.
- xiv. Socio-economic empowerment: Through fair trade practices and improved market access, market yards empower farmers economically, reducing income disparities and contributing to social and gender equality.
- xv. Tax revenue generation: Market yards generate revenue for the government through various fees, taxes, and levies, which can be utilized for further infrastructure development and public welfare programs.
- xvi. Agricultural diversification: Market yards encourage diversification of crops by facilitating access to information, market demand, and price incentives, promoting a more resilient and sustainable agricultural sector.
- xvii. Regional development: Well-developed market yards in different districts ensure equitable distribution of economic activities and infrastructure, fostering balanced regional development and reducing regional disparities.
- xviii. Food security: Market yards contribute to food security by ensuring a smooth flow of agricultural produce from surplus regions to deficit regions, minimizing food wastage, and maintaining a stable supply of essential commodities.
- xix. Entrepreneurship promotion: Market yards can inspire and support entrepreneurship in the agricultural sector, enabling farmers and local communities to explore value chain opportunities, establish agribusinesses, and create additional employment.
- xx. Overall economic growth: The collective impact of well-functioning market yards in different districts of Odisha leads to increased agricultural productivity, income growth, employment generation, and improved living standards, contributing to the overall economic development of the state.

#### Boundary Structure:

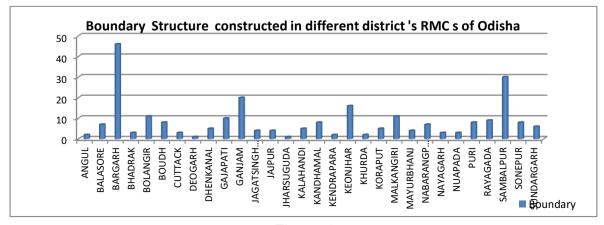


Figure-4

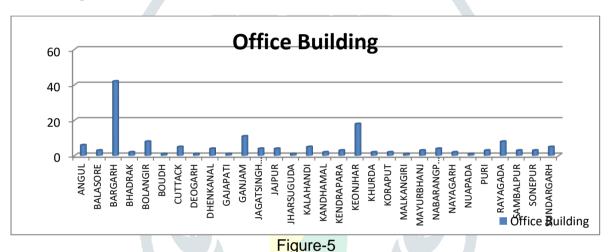
So, it is evident from the figure that in the district of Baragarh has the highest no of boundary walls i.e 46, Sambalpur 30, Ganjam 20 and keonjhar 16.

The construction of boundary structures in different district regulated market committees (RMCs) in Odisha provides several benefits for better agricultural marketing:

- Security and control: Boundary structures create a defined and secured area for agricultural i. trading activities, ensuring better control over entry and exit points, reducing the risk of unauthorized access and theft.
- Orderly operations: The presence of boundary structures helps in maintaining order and ii. discipline within the market yard, ensuring that agricultural marketing activities are conducted in a systematic and organized manner.
- Access regulation: Boundary structures enable effective regulation of access to the market iii. yard, allowing only authorized personnel, traders, and stakeholders to enter, thereby minimizing congestion and facilitating smooth operations.
- Streamlined flow of goods: With clear boundaries, the movement of agricultural produce within i۷. the market yard can be streamlined, preventing mixing or contamination of different commodities and facilitating efficient loading and unloading operations.
- Enhanced market infrastructure: The construction of boundary structures often accompanies ٧. the development of other essential market infrastructure such as warehouses, storage facilities, auction platforms, and administrative buildings, providing a conducive environment for better agricultural marketing.
- Identification and branding: Boundary structures can be designed to include signage and vi. branding elements, visually identifying the market yard and creating a recognizable brand presence, which can attract more buyers and enhance market visibility.
- vii. Improved market organization: The physical demarcation provided by boundary structures helps in organizing different sections within the market yard, such as auction areas, storage zones, and administrative offices, ensuring smooth coordination and efficient functioning.
- Preventing encroachment: Boundary structures act as a deterrent to encroachment and viii. unauthorized occupation of market yard premises, preserving the designated space for agricultural marketing activities and preventing disruptions.
- Safety and sanitation: Boundary structures contribute to ensuring a safe and hygienic ix. environment within the market yard, segregating it from external factors and promoting cleanliness, sanitation, and waste management practices.
- Market discipline: Clear boundaries instill a sense of discipline among market participants, Χ. encouraging adherence to rules, regulations, and market protocols, thereby fostering fair trade practices and reducing malpractices.
- xi. Market image and reputation: Well-constructed boundary structures enhance the overall aesthetic appeal of the market yard, creating a positive impression on buyers, traders, and stakeholders, and bolstering the market's image and reputation.
- xii. Market identity: The presence of boundary structures gives the market yard a distinct identity, making it easily recognizable and establishing it as a reliable and credible destination for agricultural marketing.
- xiii. Market monitoring and control: Boundary structures facilitate effective monitoring and control of activities within the market yard, allowing market administrators and regulatory authorities to enforce compliance with quality standards, pricing regulations, and other market guidelines.
- Market segregation: Boundaries assist in segregating different market activities, such as xiv. wholesale and retail sections, facilitating targeted marketing strategies and catering to the specific needs of different types of buyers.
- Market branding and promotion: Boundary structures can be utilized as advertising spaces to XV. display market-related information, promotional messages, or branding materials, attracting more buyers and creating awareness about the market yard's offerings.

- xvi. Market transparency: Well-defined boundaries contribute to transparent market operations, ensuring that all transactions are visible and traceable, promoting trust and confidence among buyers and sellers.
- xvii. Market development and expansion: Boundary structures provide a foundation for future market development and expansion plans, enabling the market yard to accommodate growing trade volumes, diversify product offerings, and introduce new services.
- xviii. Market segregation: Clear boundaries help in segregating different market sections, such as dedicated areas for different commodities or specific market participants, facilitating efficient operations and specialized marketing strategies.
- xix. Market accessibility: The presence of boundary structures enables better accessibility for vehicles, ensuring smoother movement of trucks, loaders, and other transport vehicles within the market yard, reducing congestion and improving logistical efficiency.
- xx. Market branding and differentiation: Well-designed boundary structures can contribute to the branding and differentiation of the market yard, creating a unique identity that sets it apart from other agricultural markets, attracting more buyers and fostering loyalty among traders.

#### RMC Office Buildings



So, it is observed from the figure that the highes<mark>t no of office buildings lies in Bargarh 42, Keonjhar 18 and Ganjam 11 nos.</mark>

Setting up office buildings in different district regulated market committees (RMCs) in Odisha provides several benefits for better agricultural marketing:

- Administrative efficiency: Office buildings serve as dedicated spaces for market administrators and staff to carry out administrative tasks efficiently, ensuring smooth coordination and effective management of market operations.
- ii. Improved communication: Having a centralized office building facilitates better communication among market committee members, staff, traders, and other stakeholders, enabling timely dissemination of information and effective resolution of issues.
- iii. Enhanced market governance: Office buildings provide a physical space for market committee meetings, allowing members to convene and make decisions regarding market policies, regulations, and developmental initiatives, ensuring effective governance.
- iv. Stakeholder engagement: The presence of office buildings encourages active participation of market stakeholders, enabling them to voice their concerns, provide feedback, and collaborate with market authorities for the betterment of agricultural marketing practices.
- v. Dispute resolution: Office buildings offer a designated space for dispute resolution mechanisms, such as grievance redressal cells or arbitration facilities, promoting fair and timely resolution of conflicts among market participants.
- vi. Market information dissemination: Office buildings serve as information centers, facilitating the dissemination of market-related information, including commodity prices, market trends,

- government policies, and market intelligence, empowering stakeholders to make informed decisions.
- vii. Licensing and registration: Office buildings provide a convenient location for traders and market participants to obtain necessary licenses, permits, and registrations, streamlining regulatory processes and ensuring compliance with market regulations.
- Market documentation: Office buildings house important market documents, records, and viii. archives, ensuring the preservation and accessibility of historical data, transaction records, and market statistics, which can be used for analysis, research, and policy-making.
- Market promotion: Well-equipped office buildings can be utilized for marketing activities. ix. including hosting promotional events, conferences, and workshops, attracting more traders, buyers, and investors to the market yard.
- Market intelligence and research: Office buildings can accommodate research and Χ. development units or market intelligence cells, facilitating data collection, analysis, and research activities to identify market trends, emerging opportunities, and customer preferences.
- Technology integration: Office buildings provide the infrastructure needed to integrate xi. technology solutions for agricultural marketing, such as digital platforms, online trading systems, e-auctions, and market information portals, enabling efficient and transparent transactions.
- Capacity building: Office buildings can be used as training centers to conduct capacity-building xii. programs, workshops, and skill development initiatives for market committee staff, traders, and farmers, enhancing their knowledge and skills in agricultural marketing practices.
- Business services: Office buildings can house service providers such as financial institutions. xiii. insurance agencies, logistics companies, and consultancy firms, offering convenient access to essential services for market participants.
- xiv. Market branding and identity: Well-designed office buildings contribute to the branding and identity of the market yard, creating a professional and trustworthy image that attracts stakeholders and instills confidence in the market's operations.
- Market coordination: Office buildings serve as a hub for coordinating various activities within the XV. market yard, facilitating collaboration among different departments, agencies, and stakeholders involved in agricultural marketing.
- Information exchange: Office buildings provide spaces for information exchange, networking, xvi. and collaboration among market participants, fostering knowledge sharing, partnerships, and business opportunities.
- xvii. Market research and analysis: Office buildings can house dedicated teams for market research and analysis, conducting studies on market dynamics, consumer preferences, and demandsupply trends, providing valuable insights for market development strategies.
- Market promotion and outreach: Office buildings can be utilized to conduct awareness xviii. campaigns, training programs, and promotional activities targeting farmers, traders, and consumers, creating awareness about the benefits of the market yard and encouraging participation.
- Market coordination: Having an office building facilitates effective coordination with government xix. departments, regulatory bodies, and other agencies involved in agricultural marketing, ensuring compliance with legal and regulatory requirements.
- Professional image: The presence of a well-maintained office building projects a professional XX. image for the market yard, instilling trust among stakeholders, attracting quality traders, and fostering a conducive environment for better agricultural marketing practices.

#### Godowns in RMC

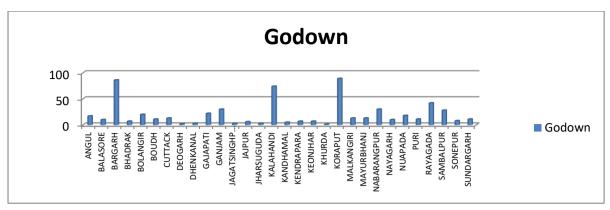


Figure-6

So, it is observed from the figure that the highest no of godowns build Koraput 89, Baragarh 86 and in Kalahandi 74.

Setting up godowns (storage facilities) in different district regulated market committees (RMCs) in Odisha provides several benefits for better agricultural marketing:

- Post-harvest management: Godowns allow for proper storage of agricultural produce, preserving its quality and reducing post-harvest losses, ensuring that farmers can sell their produce at optimal prices.
- Storage capacity: Godowns provide sufficient storage capacity to accommodate surplus ii. produce during peak seasons, preventing spoilage and wastage and maintaining a steady supply in the market.
- Market stability: With godowns in place, market yards can maintain a consistent supply of iii. agricultural commodities throughout the year, reducing price fluctuations and ensuring stability in the market.
- Price stabilization: Godowns enable market committees to release stored produce strategically ίV. during periods of low supply, helping stabilize prices and ensuring fair returns for farmers.
- Market efficiency: With on-site godowns, traders and buyers can easily access stored produce, ٧. streamlining the buying process and improving overall market efficiency.
- vi. Quality control: Godowns provide controlled environments for storage, allowing for temperature and humidity regulation, which helps maintain the quality and freshness of agricultural commodities.
- vii. Grading and sorting: Godowns often have facilities for grading and sorting produce, ensuring standardized quality and facilitating better market access for farmers.
- viii. Value addition: Godowns equipped with processing facilities enable value addition activities such as sorting, cleaning, packaging, and even basic processing, increasing the market value of agricultural commodities.
- Market diversification: With godowns, market committees can handle a wider range of ix. agricultural commodities, encouraging farmers to diversify their crops and cater to diverse market demands.
- Market expansion: The availability of godowns attracts traders and buyers from a wider Χ. geographical area, expanding the market reach and attracting more investment to the market yard.
- Reduced market risks: Godowns provide a buffer against market risks, allowing farmers to store χi. their produce until favorable market conditions or higher prices emerge.
- Timely market interventions: Godowns enable market committees to intervene during times of xii. surplus or scarcity, balancing the market and addressing supply-demand imbalances through strategic releases or procurement.

- Market intelligence: The availability of godowns allows for better data collection and market xiii. intelligence, enabling market committees to analyze storage patterns, market trends, and consumer preferences, leading to informed decision-making.
- Access to credit: With godowns as collateral, farmers and traders can secure loans and credit xiv. facilities from financial institutions, enhancing their financial stability and investment potential.
- Reduced transportation costs: Godowns located within market yards reduce the need for long-XV. distance transportation and associated costs, benefiting both farmers and traders.
- xvi. Risk management: Godowns offer protection against unpredictable weather events and natural disasters, safeguarding agricultural produce from damage and ensuring food security.
- Market credibility: The presence of well-maintained godowns enhances the credibility of the xvii. market yard, attracting more buyers, traders, and investors who value the availability of proper storage facilities.
- Market integration: Godowns facilitate integration with other value chain players, such as xviii. processing units, exporters, and retailers, promoting stronger linkages and supporting a more integrated agricultural marketing system.
- xix. Improved logistics: Godowns within market yards simplify logistics management by providing storage options closer to trading areas, reducing the time and effort required for transportation and handling.
- Infrastructure development: Constructing godowns in market yards contributes to overall XX. infrastructure development, creating a conducive ecosystem for agricultural marketing and supporting the economic growth of the region.

#### RMC's Capacity

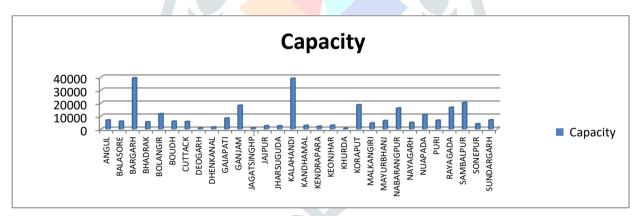


Figure-7

So, it is found from the figure that the capacity is highest in the district i.e Baragarh 39300, Kalahandi 38950 and in Sambalpur 20300.

The availability of capacity in different district regulated market committees (RMCs) in Odisha plays a crucial role in facilitating better agricultural marketing:

- Increased storage capacity: Ample capacity in RMCs allows for the storage of larger quantities i. of agricultural produce, ensuring farmers have a reliable market to sell their surplus harvests.
- ii. Reduced post-harvest losses: Sufficient storage capacity helps minimize post-harvest losses by providing adequate space to store perishable commodities, protecting them from spoilage, pests, and adverse weather conditions.
- Market stabilization: With higher storage capacity, RMCs can regulate the flow of agricultural iii. commodities in the market, helping stabilize prices and maintain a steady supply throughout the year.

- Market integration: Increased capacity enables RMCs to handle a diverse range of agricultural iv. commodities, encouraging farmers to diversify their production and cater to evolving market demands.
- Flexibility in trading: Having sufficient capacity allows for greater flexibility in trading. ٧. accommodating varying volumes of produce during different seasons and ensuring a smooth buying and selling process.
- vi. Timely market interventions: RMCs with ample capacity can intervene in the market during times of surplus or scarcity, strategically releasing or procuring agricultural commodities to balance supply and demand.
- Market expansion: Enhanced capacity attracts traders and buyers from a wider geographic vii. area, expanding the market reach and creating more opportunities for farmers to sell their produce at competitive prices.
- viii. Quality preservation: Sufficient capacity allows for proper segregation and storage of different grades and varieties of agricultural commodities, ensuring their quality is maintained and preserving their market value.
- ix. Value addition opportunities: With increased capacity, RMCs can offer value addition services such as grading, sorting, packaging, and processing, enhancing the marketability and value of agricultural commodities.
- Market competitiveness: Adequate capacity makes RMCs more competitive by providing х. traders and buyers with a wide range of options and ensuring a consistent supply of commodities throughout the year.
- Market intelligence: Having larger storage capacity enables RMCs to collect and analyze data χi. on storage patterns, market trends, and consumer preferences, leading to informed decisionmaking and better market strategies.
- xii. Infrastructure development: The establishment of capacity in RMCs contributes to overall infrastructure development, attracting investment and creating a robust ecosystem for agricultural marketing.
- Risk management: Sufficient storage capacity helps mitigate risks associated with fluctuating xiii. market conditions, allowing farmers to store their produce until more favorable prices or market conditions emerge.
- Enhanced bargaining power: RMCs with ample capacity have stronger bargaining power in XİV. negotiating prices with buyers, ensuring fair returns for farmers and supporting their livelihoods.
- XV. Market credibility: RMCs with adequate capacity gain credibility among market participants, attracting more traders, buyers, and investors who value the reliability and efficiency of storage facilities.
- xvi. Market integration: Increased capacity fosters stronger linkages with other market players, such as processors, exporters, and retailers, facilitating a more integrated and efficient agricultural marketing system.
- xvii. Infrastructure utilization: Utilizing capacity optimally ensures that the infrastructure investments made in RMCs are maximized, leading to cost-effectiveness and better returns on investment.
- xviii. Market resilience: Having sufficient capacity allows RMCs to withstand market fluctuations and shocks, ensuring a resilient and sustainable agricultural marketing ecosystem.
- xix. Improved farmer income: Ample capacity in RMCs enables farmers to store their produce when prices are low and sell when prices are more favorable, leading to improved income and financial stability.
- Market efficiency: Enhanced capacity contributes to overall market efficiency by reducing XX. bottlenecks, congestion, and delays in the buying and selling process, streamlining operations, and improving logistical coordination.

#### Internal Approach Road Facilities in RMCs

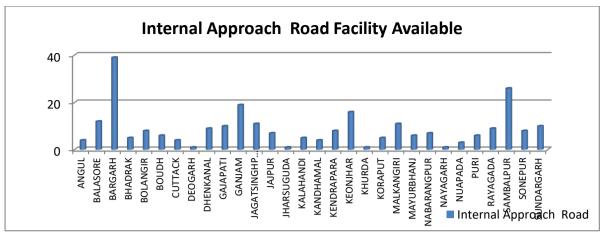


Figure-8

So, it is evident from the figure that the no of internal approach road facility to the RMCs are better in the district of Baragarh 39, Sambalpur 26, Ganjam 19 and in Keonjhar 16.

The construction of internal approach road facilities in different district regulated market committees (RMCs) in Odisha contributes to better agricultural marketing in the following ways:

- i. Improved accessibility: Internal approach roads provide better access to the market yard, making it easier for farmers, traders, and buyers to transport their agricultural produce to and from the market.
- Efficient transportation: Well-constructed internal roads ensure smooth and efficient movement ii. of vehicles, reducing transportation costs and time, and enabling timely delivery of agricultural commodities.
- Reduced post-harvest losses: Quick and efficient transportation on internal roads minimizes iii. delays, preventing spoilage and post-harvest losses, ensuring that fresh produce reaches the market promptly.
- Enhanced market participation: Accessible internal roads attract a larger number of farmers, iv. traders, and buyers to the market yard, promoting increased market participation and competition.
- Market connectivity: Internal roads connect the market yard with nearby villages, towns, and ٧. transportation hubs, improving market connectivity and facilitating trade linkages with broader regional markets.
- Expanded market catchment area: Well-connected internal roads enable RMCs to serve a vi. larger catchment area, attracting farmers from remote locations and expanding market opportunities for agricultural producers.
- vii. Trade facilitation: Internal roads simplify the movement of goods, enabling traders to efficiently transport agricultural commodities within the market yard, facilitating trade and transactional activities.
- viii. Market infrastructure utilization: Improved internal road infrastructure encourages efficient utilization of market facilities by ensuring easy access for vehicles, enhancing the overall functionality of the market yard.
- Logistics efficiency: Well-planned internal roads streamline logistical operations within the ix. market yard, allowing for organized movement of vehicles, loading and unloading of produce, and efficient management of traffic flow.
- Market safety and security: Internal roads facilitate better monitoring and surveillance within the Х. market yard, enhancing safety and security measures for agricultural produce, traders, and buyers.

- xi. Market aesthetics: Well-maintained internal roads contribute to the overall aesthetics and cleanliness of the market yard, creating a favorable impression among stakeholders and promoting a professional environment for agricultural marketing.
- xii. Market promotion: Internal roads within the market yard can be utilized for promotional activities such as displaying banners, signage, and advertisements, attracting more attention from potential buyers and increasing market visibility.
- xiii. Market organization: Internal road systems assist in organizing the market yard layout effectively, ensuring proper segregation of different commodity sections, parking areas, and designated spaces for various activities.
- xiv. Ease of infrastructure maintenance: Well-constructed internal roads facilitate maintenance and repair work within the market yard, allowing for easier access to different areas, infrastructure, and utilities.
- xv. Market information dissemination: Internal roads can be used to display market-related information, including commodity prices, market rules, and announcements, providing valuable information to traders, farmers, and buyers.
- xvi. Emergency response: Accessible internal roads enable swift emergency response services within the market yard, ensuring timely assistance in case of accidents, medical emergencies, or other unforeseen circumstances.
- xvii. Market coordination: Internal roads aid in coordinating activities within the market yard by providing designated routes for different vehicles, facilitating smoother coordination between various stakeholders and departments.
- xviii. Market hygiene and sanitation: Well-designed internal roads promote proper waste management and sanitation practices within the market yard, ensuring a clean and hygienic environment for all market participants.
- xix. Infrastructure development: The construction of internal roads contributes to the overall development of market infrastructure, enhancing the market's capacity and attractiveness to traders, buyers, and investors.
- xx. Socio-economic benefits: Improved internal road facilities in RMCs stimulate economic activities, create employment opportunities, and contribute to the overall socio-economic development of the region surrounding the market yard.

#### Farmer's Information Centers

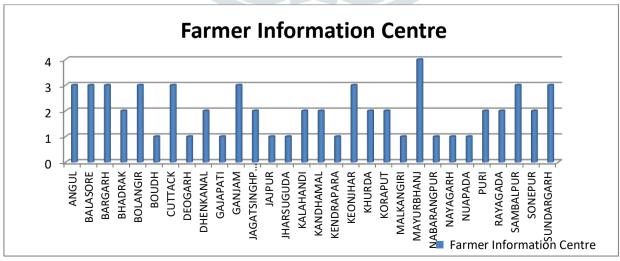


Figure-9

So, it is observed from the figure that in the district of Mayurbhanj has the highest no of farmer's information centers i.e 4 and Anugul, Sambalpur, Bolangir, sundergarh, Keonjhar, Ganjam, Balasore 3 nos.

The construction of farmer's information centers in different district regulated market committees (RMCs) in Odisha offers several benefits for better agricultural marketing:

- Access to market information: Farmer's information centers provide farmers with timely and accurate market information, including commodity prices, market trends, and demand-supply dynamics, enabling informed decision-making in selling their produce.
- ii. Price transparency: Farmers can access real-time price information through these centers. ensuring transparency in the pricing of agricultural commodities and empowering them to negotiate fair prices with buyers.
- Market intelligence: Farmer's information centers collect and analyze data on market trends, iii. consumer preferences, and emerging opportunities, enabling farmers to align their production with market demands and capitalize on profitable ventures.
- Market linkage: These centers facilitate direct connections between farmers and potential iv. buyers, traders, processors, and exporters, enhancing market linkages and eliminating intermediaries, thus maximizing returns for farmers.
- Market diversification: Farmers can explore new markets and identify emerging market niches ٧. through the information provided at these centers, encouraging crop diversification and reducing dependency on a single market.
- vi. Value-added services: Farmer's information centers can offer value-added services such as advisory support, training programs, and access to technology, helping farmers improve their productivity, quality, and post-harvest practices.
- Knowledge sharing: These centers serve as platforms for farmers to share their experiences, vii. exchange knowledge, and learn from each other, fostering a sense of community and collective learning.
- viii. Market access for small farmers: Farmer's information centers enable small-scale farmers, who may have limited resources and market access, to benefit from market information and reach a wider customer base.
- ix. Market timing: Farmers can make informed decisions about the timing of their sales based on market information, ensuring that their produce is sold at optimal prices and reducing the risk of losses due to market fluctuations.
- Market regulations: Farmer's information centers educate farmers about market regulations. X. quality standards, grading, and packaging requirements, enabling them to comply with market standards and access higher-value markets.
- Risk management: Access to market information helps farmers anticipate market risks and xi. make proactive decisions, such as diversifying crops, adopting risk mitigation strategies, or accessing crop insurance schemes.
- xii. Improved bargaining power: Equipped with market information, farmers can negotiate better prices and terms with buyers, enhancing their bargaining power and economic sustainability.
- Input planning: Farmer's information centers provide insights into input availability, prices, and xiii. recommended practices, assisting farmers in planning their input procurement and optimizing their farming operations.
- Market demand forecasting: Through data analysis and market research, farmer's information XİV. centers can provide forecasts on future market demand, enabling farmers to align their production accordingly and avoid oversupply or undersupply situations.
- Market feedback: Farmers can receive feedback on the quality, presentation, and market XV. acceptance of their produce through these centers, helping them improve their farming practices and meet market requirements.
- Technology adoption: Farmer's information centers can disseminate information about modern xvi. farming techniques, innovative technologies, and best practices, encouraging farmers to adopt efficient and sustainable agricultural practices.

- Financial access: These centers can provide information on financial institutions, government xvii. schemes, and subsidies available for agricultural development, facilitating access to credit and financial support for farmers.
- xviii. Market awareness: Farmer's information centers increase farmers' awareness of market dynamics, market opportunities, and value-added products, stimulating entrepreneurship and encouraging farmers to explore new avenues for income generation.
- Empowerment and capacity building: These centers empower farmers by providing them with xix. knowledge, skills, and information to make informed decisions, enhancing their capacity to succeed in the competitive agricultural market.
- Overall agricultural development: Farmer's information centers contribute to the overall XX. development of the agricultural sector by promoting efficiency, innovation, and market-oriented farming practices.

#### Weighbridge

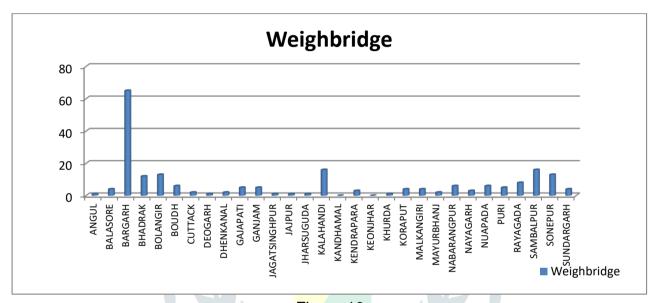


Figure-10

So, it is observed from the figure that in the district of Baragarh has the highest no of weighbridges i.e 65 and Sambalpur, Kalahandi 16 nos and Sonepur, Bolangir 13 nos.

The construction of weighbridge facilities in different district regulated market committees (RMCs) in Odisha contributes to better agricultural marketing in the following ways:

- i. Accurate weighing: Weighbridge facilities ensure accurate measurement of agricultural produce, providing transparency and fairness in the buying and selling process.
- Trust and credibility: Weighbridge facilities establish trust and credibility among farmers, ii. traders, and buyers by ensuring that the weight of the produce is accurately determined, reducing disputes and promoting fair trade practices.
- iii. Price determination: Accurate weighing helps in determining the fair price of agricultural commodities based on their weight, ensuring that farmers receive proper compensation for their produce.
- Standardization: Weighbridge facilities enforce standard weighing practices, enabling uniformity ίV. in measurement and avoiding discrepancies in weight calculations across different transactions.
- Quality control: Weighbridge facilities can be utilized to monitor the weight of different grades and varieties of agricultural produce, ensuring compliance with quality standards and preventing fraudulent practices.

- Efficient logistics: Weighing agricultural produce at the RMCs' weighbridge facilities streamlines vi. logistics by providing a centralized location for weight verification, reducing the need for multiple weighings at different locations.
- vii. Improved market efficiency: Weighbridge facilities expedite the process of weighing and reduce waiting times, leading to increased efficiency in the overall agricultural marketing system.
- Reduced transaction costs: Weighbridge facilities eliminate the need for farmers to transport viii. their produce to separate weighing facilities, reducing transportation costs and saving time for both farmers and traders.
- ix. Dispute resolution: Weighbridge facilities provide an objective and reliable method for resolving disputes related to the weight of agricultural commodities, ensuring fair settlements and maintaining trust in the market.
- Market integration: Weighbridge facilities promote market integration by providing a Χ. standardized weighing process, making it easier for farmers to participate in different markets and facilitating intermarket trade.
- Quality assurance: Weighbridge facilities can be equipped with additional technologies such as xi. moisture meters and grading systems, ensuring that the quality of agricultural produce meets the specified standards.
- Compliance with regulations: Weighbridge facilities help RMCs comply with government xii. regulations and legal metrology requirements related to weighing and measurement in agricultural marketing.
- xiii. Market transparency: Weighbridge facilities contribute to market transparency by recording the weight of each transaction, creating a database of historical data that can be used for analysis and market research.
- Market data collection: Weighbridge facilities can be integrated with information systems to xiv. collect data on the quantity and weight of agricultural commodities traded, providing valuable insights for market analysis and planning.
- Efficient inventory management: Weighbridge facilities assist in inventory management by XV. accurately tracking the quantity of agricultural produce entering and leaving the market. facilitating better stock management and reducing wastage.
- Compliance with quality certifications: Weighbridge facilities enable RMCs to comply with xvi. quality certifications and standards, enhancing the marketability of agricultural produce and enabling access to premium markets.
- Traceability and food safety: Weighbridge facilities contribute to traceability systems by xvii. recording the weight of each batch of agricultural produce, supporting food safety measures and recall procedures if required.
- xviii. Market competitiveness: Well-equipped weighbridge facilities enhance the competitiveness of RMCs by providing reliable weighing services, attracting traders, buyers, and investors to the market yard.
- Enhanced farmer confidence: Weighbridge facilities instill confidence in farmers by ensuring xix. that their produce is accurately weighed, leading to increased trust in the market and encouraging their active participation.
- Infrastructure development: The construction of weighbridge facilities contributes to overall XX. infrastructure development in RMCs, creating a modern and efficient market environment that attracts stakeholders and promotes agricultural marketing.

#### Water Facilities in RMC Area

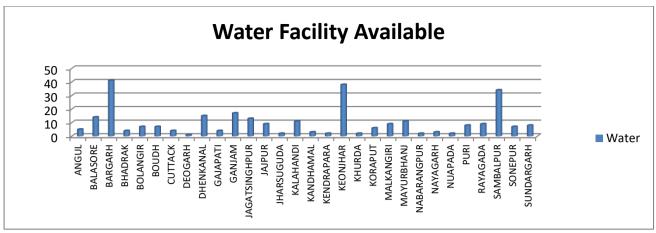


Figure-11 So, it is observed from the figure that in the district of Baragarh has the highest no of water facility in all respect , Keonjhar 38 and Sambalpur 34.

The availability of water facilities in different district regulated market committees (RMCs) in Odisha contributes to better agricultural marketing in the following ways:

- Hydration for agricultural produce: Water facilities ensure that agricultural produce remains fresh and hydrated, preserving its quality and extending its shelf life in the market.
- ii. Cleaning and washing: Water facilities enable farmers, traders, and buyers to clean and wash agricultural commodities, removing dirt, debris, and impurities before they are sold, enhancing their marketability.
- Post-harvest management: Water facilities support post-harvest management practices such as iii. washing, sorting, and grading of agricultural produce, improving its appearance and increasing its value in the market.
- Dust suppression: Water facilities help in dust suppression within the market yard, creating a iv. cleaner and more pleasant environment for market participants and reducing respiratory health risks.
- Irrigation support: Water facilities can be used for irrigation purposes within the market yard, ٧. allowing for the maintenance of green spaces, gardens, and ornamental plants, enhancing the aesthetics of the market and creating a pleasant ambiance.
- vi. Livestock management: Water facilities cater to the water needs of livestock present in the market yard, ensuring their welfare and maintaining a suitable environment for animal trade and activities.
- vii. Sanitation and hygiene: Water facilities enable the maintenance of proper sanitation and hygiene standards within the market premises, ensuring cleanliness and reducing the risk of contamination.
- viii. Food safety measures: Water facilities support food safety measures such as washing hands, utensils, and equipment used in food preparation and processing within the market, preventing the spread of foodborne illnesses.
- Emergency response: Water facilities assist in emergency situations by providing a water ix. source for firefighting purposes, helping to control and mitigate fire incidents within the market vard.
- Cooling and temperature control: Water facilities allow for the implementation of cooling Х. measures, such as misting or sprinkler systems, to maintain optimal temperature and humidity conditions for certain types of agricultural produce.

- Waste management: Water facilities aid in waste management practices by providing water for xi. cleaning waste disposal areas, ensuring proper disposal of organic waste and reducing odors and health hazards.
- xii. Market infrastructure maintenance: Water facilities support the maintenance and cleaning of various market infrastructure components such as floors, drains, and storage areas, ensuring their longevity and functionality.
- Improved market aesthetics: Water facilities contribute to the overall aesthetics of the market xiii. yard by allowing for the creation of attractive water features, fountains, or landscaping elements, enhancing the visual appeal and ambiance of the market.
- Market events and festivals: Water facilities enable the organization of market events, festivals, xiv. and promotional activities that may involve water-based displays or demonstrations, attracting visitors and boosting market visibility.
- Irrigation demonstrations: Water facilities can be utilized for irrigation demonstrations and XV. training sessions, showcasing efficient irrigation techniques and encouraging farmers to adopt sustainable water management practices.
- xvi. Community engagement: Water facilities provide a gathering place for farmers, traders, and buyers, fostering community engagement, networking, and knowledge sharing among market participants.
- Livelihood support: Water facilities can support small-scale vendors and businesses within the xvii. market yard, such as water vending units or water-related services, providing additional livelihood opportunities.
- xviii. Market expansion: Availability of water facilities attracts more farmers, traders, and buyers to the market yard, expanding its reach and increasing market competitiveness, resulting in better agricultural marketing opportunities.
- xix. Value-added services: Water facilities can be integrated with additional services such as cold storage or processing units, enabling value addition to agricultural produce and creating new market avenues.
- Environmental sustainability: Water facilities can be designed to promote water conservation XX. and efficient water usage, encouraging sustainable practices and contributing to environmental preservation in the market yard.

#### Paddy Procurement Centers

The availability of paddy procurement centers in different district regulated market committees (RMCs) in Odisha contributes to better agricultural marketing in the following ways:

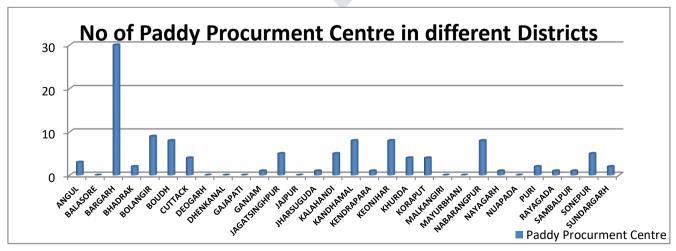


Figure-12

So, it is observed from the figure that in the district of Baragarh has the highest no of paddy procurement centres i.e 30, Bolangir 9 and Keonjhar, Boudh, Kandhamal 8 nos.

- Direct market access: Paddy procurement centers provide farmers with direct access to markets, eliminating the need for intermediaries and enabling them to sell their paddy directly to government agencies or designated buyers.
- Fair and transparent pricing: Procurement centers ensure fair and transparent pricing for farmers' paddy, as government agencies typically establish minimum support prices (MSPs) or provide price guarantees, protecting farmers from price fluctuations and exploitation.
- Timely payments: Paddy procurement centers ensure timely payments to farmers for their iii. produce, improving cash flow and reducing financial constraints, enabling farmers to reinvest in their farming activities and meet their livelihood needs.
- Reduced market risks: Paddy procurement centers reduce market risks for farmers by providing iv. a quaranteed market for their produce. Farmers no longer need to worry about finding buyers or dealing with price volatility in the open market.
- Quality assurance: Procurement centers often have quality testing facilities to assess the quality ٧. and grade of the paddy. This ensures that farmers are paid based on the quality of their produce, incentivizing them to produce better-quality paddy.
- vi. Storage and preservation: Paddy procurement centers typically have storage facilities to store the procured paddy. This helps in preserving the quality of the paddy and prevents post-harvest losses, ensuring better marketable quality when it is eventually sold.
- vii. Market intelligence: Paddy procurement centers collect data on paddy production, market trends, and demand-supply dynamics. This information helps in market analysis and planning, enabling farmers to make informed decisions about their production and marketing strategies.
- viii. Access to credit: Paddy procurement centers often collaborate with financial institutions to provide credit facilities to farmers. This enables farmers to access credit for inputs, equipment, and other farming needs, improving their productivity and marketing capabilities.
- ix. Price discovery: Paddy procurement centers serve as price discovery platforms, providing farmers with information on prevailing prices for paddy in the market. This helps farmers in negotiating better prices with other buyers or making decisions on when to sell their produce.
- Market linkages: Paddy procurement centers facilitate market linkages between farmers, X. government agencies, and buyers. This encourages collaboration and strengthens the market ecosystem, fostering long-term relationships and ensuring a consistent demand for farmers' produce.
- Market infrastructure development: The presence of paddy procurement centers leads to the xi. development of market infrastructure in RMCs, including storage facilities, grading facilities, transportation networks, and other supporting infrastructure, which improves the overall marketing environment.
- Market diversification: Paddy procurement centers can support farmers in diversifying their xii. crops by encouraging the cultivation of alternative crops or value-added products. This promotes crop diversification and reduces dependency on a single crop, mitigating market risks.
- Value addition opportunities: Paddy procurement centers can facilitate value addition activities xiii. such as processing, milling, and packaging of paddy. This enhances the marketability of the produce and opens up opportunities for farmers to access higher-value markets.
- Input distribution: Paddy procurement centers can also serve as centers for distributing xiv. agricultural inputs such as seeds, fertilizers, and pesticides. This ensures that farmers have access to quality inputs, improving their productivity and the marketability of their produce.
- Market regulation and compliance: Paddy procurement centers ensure compliance with XV. government regulations and quality standards for paddy procurement. This promotes fair trade practices, quality control, and adherence to food safety standards, enhancing the market reputation of farmers' produce.

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- xvi. Risk management: Paddy procurement centers provide a safety net for farmers by mitigating risks associated with market volatility and price fluctuations. This stability in the market encourages farmers to invest in paddy production and expand their agricultural activities.
- xvii. Farmer empowerment: Paddy procurement centers empower farmers by providing them with a platform to negotiate and engage in collective bargaining. This strengthens their position in the market and improves their bargaining power with buyers and intermediaries.
- xviii. Skill development and training: Paddy procurement centers often conduct training and capacitybuilding programs for farmers, enhancing their knowledge and skills in various aspects of paddy production, post-harvest handling, and marketing techniques.
- xix. Market awareness and education: Paddy procurement centers raise awareness among farmers about market dynamics, market requirements, and quality standards. This empowers farmers to produce market-oriented paddy, improving their competitiveness and market access.
- xx. Socioeconomic development: Paddy procurement centers contribute to the overall socioeconomic development of farming communities by providing employment opportunities, improving income levels, and fostering rural development through better agricultural marketing practices.

#### Grading Laboratory Facilities in RMCs

In grading district Ganjam has the highest i.e 6 and Cuttack, Rayagada Bolangir scores 2.

The availability of grading laboratory facilities in different district regulated market committees (RMCs) in Odisha contributes to better agricultural marketing in the following ways:

- i. Quality assessment: Grading laboratories assess the quality of agricultural produce based on specific parameters such as size, shape, color, texture, and maturity. This ensures standardized grading and quality control, enhancing the marketability of the produce.
- ii. Market differentiation: Grading laboratories enable the differentiation of agricultural commodities based on quality grades. This allows farmers to command higher prices for superior quality produce and target specific market segments, enhancing their profitability.
- iii. Fair pricing: Grading laboratories provide an objective basis for pricing agricultural commodities. Buyers can confidently determine the value of the produce based on its grade, ensuring fair and transparent transactions for both farmers and buyers.
- iv. Market access: Grading laboratories facilitate access to higher-value markets, such as export markets, where specific quality standards must be met. Farmers can utilize the grading report to demonstrate compliance with international quality requirements, expanding their market reach.
- v. Consumer confidence: Grading laboratories assure consumers about the quality and safety of agricultural produce. Proper grading and certification build consumer trust, leading to increased demand and better market opportunities for farmers.
- vi. Branding and marketing: Grading laboratory reports enable farmers to create and promote their brand based on the quality of their produce. This facilitates targeted marketing strategies, differentiation from competitors, and the development of a reputation for high-quality products.
- vii. Quality improvement: Grading laboratories provide feedback to farmers on the quality attributes of their produce. This helps farmers identify areas for improvement, make informed decisions on crop management practices, and enhance the overall quality of their agricultural output.
- viii. Export facilitation: Grading laboratories play a crucial role in meeting the quality requirements for export markets. The availability of reliable grading reports expedites export procedures, ensuring compliance with international standards and boosting export opportunities for farmers.
- ix. Standardization: Grading laboratories promote standardization across the agricultural market by establishing uniform grading criteria. This harmonizes the quality assessment process and facilitates trade, making it easier for buyers to compare and select agricultural produce.

- Supply chain efficiency: Grading laboratories contribute to supply chain efficiency by providing х. standardized quality information. This helps in matching the right products with the right buyers, reducing transaction costs, and ensuring a smoother flow of agricultural commodities.
- Price discovery: Grading laboratories facilitate price discovery by providing information on the χi. quality attributes of agricultural commodities. This enables farmers to set realistic price expectations and negotiate better prices based on the actual quality of their produce.
- Risk management: Grading laboratories assist in risk management by identifying potential xii. quality issues or defects in agricultural produce. Farmers can take corrective measures and prevent the marketing of substandard produce, reducing the risk of rejections and financial losses.
- Market intelligence: Grading laboratory data contributes to market intelligence by providing xiii. insights into quality trends, consumer preferences, and market demands. Farmers can align their production strategies to cater to specific market requirements, improving their market competitiveness.
- Improved market reputation: Grading laboratories enhance the overall market reputation of xiv. agricultural commodities from the region. Consistent delivery of high-quality produce establishes a positive perception among buyers and strengthens the market position of farmers.
- Export competitiveness: Grading laboratory facilities support the export competitiveness of XV. agricultural commodities. By ensuring compliance with international quality standards, farmers gain a competitive edge in global markets and increase their export potential.
- xvi. Quality certifications: Grading laboratory reports serve as a basis for obtaining quality certifications such as Good Agricultural Practices (GAP) or organic certifications. These certifications add value to the produce and open doors to premium markets with higher price premiums.
- xvii. Dispute resolution: Grading laboratory reports act as objective evidence in resolving disputes related to the quality of agricultural commodities. In case of disagreements between farmers and buyers, the grading report serves as a reference point for resolving conflicts.
- Research and development: Grading laboratories contribute to research and development XVIII. efforts in agriculture by collecting data on quality parameters, market trends, and consumer preferences. This data can be analyzed to identify areas for innovation and improvement in agricultural marketing practices.
- Producer empowerment: Grading laboratory facilities empower farmers by providing them with xix. concrete evidence of the quality of their produce. This empowers them to negotiate better prices, assert their rights, and make informed decisions in the marketing of their agricultural commodities.
- XX. Continuous improvement: Grading laboratories foster a culture of continuous improvement in agricultural marketing practices. Feedback from grading reports encourages farmers to adopt best practices, invest in quality enhancement, and stay updated with market requirements.

#### Shop Room Facilities in RMCs

The maximum no of shop room facility available in the district RMC i.e Jagatsinghpur 358, Keonjhar 345, Kendrapada 256, Puri 116 and in Jajpur 102 nos.

The availability of shop room facilities in different district regulated market committees (RMCs) in Odisha helps in better agricultural marketing in the following ways:

i. Infrastructure for trading: Shop rooms provide dedicated spaces for farmers, traders, and buyers to conduct agricultural trade activities, creating a centralized marketplace for efficient buying and selling.

- Market organization: Shop rooms help in organizing the market by providing designated spaces for different categories of agricultural commodities. This facilitates easy navigation for buyers and streamlines the marketing process.
- iii. Product display and visibility: Shop rooms offer display areas where farmers can showcase their agricultural produce. This enhances the visibility of their products and attracts potential buyers, leading to better marketing opportunities.
- Market integration: Shop rooms enable the integration of various market participants, including ίV. farmers, traders, wholesalers, and retailers, fostering a dynamic market ecosystem that facilitates better agricultural marketing and trade.
- Storage and preservation: Shop rooms often have storage facilities where farmers can ٧. temporarily store their produce before selling. This ensures the freshness and quality of the agricultural commodities, improving their marketability.
- Convenience for buyers: Shop rooms provide a convenient and accessible location for buyers vi. to explore and compare different agricultural products. This saves time and effort for buyers, resulting in increased participation and better market transactions.
- vii. Market information: Shop rooms serve as information centers where farmers and buyers can gather information on prevailing market prices, demand-supply dynamics, and market trends. This enables informed decision-making and better negotiation strategies.
- viii. Market regulation: Shop rooms help in maintaining market discipline by enforcing rules and regulations regarding trading practices, weights and measures, and quality standards. This ensures fair and transparent transactions, enhancing trust in the market.
- Market support services: Shop rooms often provide support services such as weighing scales, ix. packaging materials, and logistics assistance. These services streamline the marketing process and provide convenience to farmers and buyers.
- Market diversification: Shop rooms accommodate a wide range of agricultural commodities, Χ. allowing farmers to diversify their products and tap into different market segments. This promotes market diversification and expands marketing opportunities for farmers.

#### Electrification Facilities in RMCs

The no of electrification facilities in RMCs are better in the districts of Bargarh i.e 27, Ganjam 16 and in Keonjhar 12.

The availability of electrification facilities in different district regulated market committees (RMCs) in Odisha helps in better agricultural marketing in the following ways:

- i. Lighting and visibility: Electrification ensures proper lighting in the market area, enhancing visibility during early morning or late evening trading hours. This improves safety and facilitates smooth market operations.
- Extended trading hours: With electrification, market activities can extend beyond daylight hours, ii. allowing farmers and traders to engage in transactions during evenings or nights. This increases market accessibility and convenience for participants.
- iii. Refrigeration and storage: Electrification enables the use of refrigeration facilities for storing perishable agricultural commodities. This helps in preserving the freshness and quality of produce, expanding the range of products that can be traded and improving marketability.
- Processing and value addition: Electrification facilitates the establishment of processing units ίV. and value-added facilities within the market premises. This enables farmers to process, package, and add value to their agricultural products, opening up new marketing avenues.

- v. Machinery and equipment: Electrification supports the use of machinery and equipment for grading, sorting, cleaning, and packaging agricultural produce. This improves efficiency, productivity, and the overall quality of products in the market.
- vi. Communication and information sharing: Electrification enables the use of communication devices such as phones, computers, and internet connectivity. This enhances communication among market participants, enabling timely information sharing on prices, demands, and market trends.
- vii. Market infrastructure development: Electrification serves as a catalyst for overall market infrastructure development. It paves the way for the installation of electric poles, wiring, and power distribution systems, facilitating the establishment of other essential market facilities.
- viii. Value chain integration: Electrification facilitates the integration of various actors in the agricultural value chain, including farmers, traders, processors, and retailers. This promotes coordination, collaboration, and better integration of market activities, leading to improved agricultural marketing outcomes.
- ix. Market promotion and branding: Electrification enables the use of electronic display boards, signage, and promotional materials within the market premises. This enhances market visibility, promotes branding initiatives, and attracts more buyers and customers.
- x. Technological advancements: Electrification supports the adoption of modern technologies and innovations in agricultural marketing. It provides the necessary power supply for electronic weighing machines, barcode scanners, digital payment systems, and other technological solutions that enhance efficiency and transparency in the market.

#### Auction Hall facilities in RMCs:

The no of auction hall facility in the RMC's of Baragarh is the highest i.e 28, Nabarangpur 23, Keonjhar 13 and in Rayagada, Sambalpur 10 respectively.

The availability of auction hall facilities in different district regulated market committees (RMCs) in Odisha helps in better agricultural marketing in the following ways:

- i. Transparent price discovery: Auction halls provide a transparent platform for buyers to bid and compete for agricultural commodities. This ensures fair price discovery and prevents exploitation of farmers, leading to better market prices.
- ii. Competitive market environment: The auction system in the halls creates a competitive market environment where buyers actively participate and bid for agricultural produce. This encourages better market dynamics and ensures efficient allocation of resources.
- iii. Increased market accessibility: Auction halls attract a larger number of buyers from different regions, creating a more diverse and competitive market. This enhances market accessibility for farmers, allowing them to reach a wider range of potential buyers.
- iv. Efficient marketing process: Auction halls streamline the marketing process by providing a centralized location for trading activities. Farmers can bring their produce to the auction hall, where it is displayed, evaluated, and auctioned, saving time and effort in marketing.
- v. Price transparency: The auction system in the halls ensures transparency in price determination. Farmers can witness the bidding process and observe the prices offered by buyers, empowering them with knowledge about prevailing market rates.
- vi. Reduction in transaction costs: Auction halls eliminate the need for individual negotiations between farmers and buyers, reducing transaction costs and minimizing the time spent on price negotiations. This improves efficiency in agricultural marketing.
- vii. Quality assessment: Auction halls often have facilities for quality assessment and grading of agricultural produce. This ensures that only quality products are presented for auction, enhancing buyer confidence and facilitating better marketing outcomes.

- viii. Market information: Auction halls serve as information hubs where farmers can gather market intelligence on prices, demand, and trends. This information helps farmers make informed decisions regarding timing and pricing of their agricultural produce.
  - ix. Market integration: Auction halls facilitate the integration of different market players, including farmers, traders, wholesalers, and retailers. This promotes a more cohesive and interconnected market ecosystem, enhancing market efficiency and opportunities.
  - x. Market promotion: Auction halls act as promotional platforms for agricultural commodities. The presence of buyers, traders, and other stakeholders attracts attention and promotes the visibility of the market, creating marketing opportunities for farmers.

#### Farmer's Rest Shed Facilities in RMCs

The total no of farmer's rest shed facility in RMCs is highest in the district Baragarh i.e 38, Ganjam 17 and in Jagatsinghpur 11.

The availability of farmer's rest shed facilities in different district regulated market committees (RMCs) in Odisha helps in better agricultural marketing in the following ways:

- i. Rest and relaxation: Farmer's rest sheds provide a dedicated space for farmers to rest and relax during market hours, offering them a comfortable environment to rejuvenate and recharge.
- ii. Convenience for farmers: The rest sheds offer a convenient resting place for farmers who travel long distances to reach the market. It provides them with a designated area to take breaks and refresh themselves before engaging in marketing activities.
- iii. Weather protection: Farmer's rest sheds provide shelter from adverse weather conditions such as extreme heat, rain, or cold. This ensures that farmers can take refuge and protect themselves from the elements while waiting for market transactions.
- iv. Networking and knowledge sharing: The rest shed serves as a common meeting point for farmers, allowing them to interact, exchange experiences, and share knowledge. This promotes networking among farmers and facilitates the exchange of information on farming practices and market trends.
- v. Improved well-being: Access to rest sheds promotes the well-being of farmers by providing them with a space to rest, hydrate, and attend to personal needs. This contributes to their overall physical and mental well-being, enabling them to engage in better agricultural marketing activities.

#### Open Platform facilities in RMCs

The highest no of availability of open platform facilities in different district regulated market committees (RMCs) in Odisha i. e in Baragarh 178, Koraput 90, Malkanagir 72 and in Keonjhar 68 helps in better agricultural marketing in the following ways:

- i. Transparent price discovery: Open platforms provide a transparent marketplace where prices are determined through open bidding or negotiation processes. This ensures fair price discovery and reduces information asymmetry.
- ii. Direct farmer-buyer interaction: Open platforms facilitate direct interaction between farmers and buyers, eliminating intermediaries and enabling farmers to negotiate better prices and establish direct market linkages.
- iii. Market accessibility: Open platforms attract a wide range of buyers, including wholesalers, retailers, processors, and exporters, creating more opportunities for farmers to sell their produce and reach diverse market segments.
- iv. Market competition: The open nature of the platform encourages competition among buyers, leading to better prices for farmers. Buyers strive to offer competitive bids and differentiate

- themselves based on quality and service, benefiting farmers with improved marketing opportunities.
- Market information: Open platforms serve as information hubs, providing real-time market ٧. updates, prevailing prices, and demand-supply trends. This empowers farmers with market intelligence to make informed decisions about timing, pricing, and marketing strategies.
- vi. Market diversification: Open platforms enable farmers to explore new markets and diversify their customer base. They can connect with buyers from different regions or even international markets, expanding their market reach and reducing dependence on a single market.
- vii. Market efficiency: Open platforms enhance market efficiency by reducing transaction costs, minimizing market distortions, and improving the speed and ease of trade. This leads to smoother and more efficient agricultural marketing operations.
- viii. Quality assurance: Open platforms often have quality control mechanisms in place, ensuring that agricultural produce meets the required standards. This boosts buyer confidence and promotes the sale of high-quality produce, resulting in better marketing outcomes.
- Price benchmarking: Open platforms provide a benchmark for prices, allowing farmers to ix. compare and evaluate offers from different buyers. This enables them to make informed decisions and negotiate better terms, ensuring fair remuneration for their produce.
- Market innovation and entrepreneurship: Open platforms encourage market innovation and X. entrepreneurial activities by creating an environment conducive to new market models, technology adoption, and value-added services. This fosters creativity and drives agricultural marketing growth.

#### Cover Platform facilities in RMCs

The highest no of availability of cover platform facilities in different district regulated market committees (RMCs) in Odisha i. e Sambalpur 135, Keonjhar 84, Koraput 65 helps in better agricultural marketing in the following ways:

- Protection from weather elements: Cover platforms provide shelter from adverse weather conditions such as rain, sunlight, and extreme temperatures. This ensures that farmers and their agricultural produce are protected, allowing for uninterrupted marketing activities.
- ii. Preservation of product quality: Cover platforms help in maintaining the quality of agricultural produce by shielding it from direct sunlight, rain, and dust. This prevents spoilage, deterioration, and damage, preserving the freshness and market value of the commodities.
- iii. Enhanced presentation of products: Cover platforms offer a clean and presentable space for farmers to display their agricultural produce. This improves the visual appeal of the products and attracts potential buyers, leading to better marketing opportunities.
- Extended marketing hours: With cover platforms, agricultural marketing activities can continue iv. even during inclement weather conditions. This extends the trading hours, providing farmers with more time to sell their produce and increasing market accessibility.
- Improved working conditions: Cover platforms create a more comfortable working environment ٧. for farmers, traders, and buyers. They offer shade and protection, reducing fatigue and discomfort during the marketing process, resulting in better engagement and productivity.
- vi. Reduced product damage: Cover platforms minimize the risk of product damage during transportation and storage. The covered space provides a secure area where agricultural commodities are less prone to physical impact or exposure to external hazards.
- vii. Market organization: Cover platforms help in organizing the market by providing designated spaces for different commodities or categories of products. This facilitates systematic arrangement, easy navigation, and efficient marketing operations.

- viii. Marketing continuity: Cover platforms ensure marketing continuity even during unfavorable weather conditions. They enable farmers to continue selling their produce without disruptions, preventing losses and ensuring a steady flow of agricultural commodities to the market.
  - Consumer comfort: Cover platforms provide a comfortable shopping experience for buyers by ix. protecting them from harsh weather elements. This encourages more buyers to visit the market, leading to increased footfall and better sales opportunities for farmers.
  - Market attractiveness: The presence of cover platforms enhances the overall appearance and Х. attractiveness of the market. This creates a positive impression on buyers, promotes a professional market environment, and contributes to better agricultural marketing outcomes.

#### Fire-Fighting Facilities in RMCs

The availability of fire-fighting facilities in different district regulated market committees (RMCs) in Odisha i. e in helps in better agricultural marketing in the following ways:

- i. Fire prevention and safety: Fire-fighting facilities ensure that adequate measures are in place to prevent and control fire incidents within the market premises. This helps in safeguarding the lives of farmers, traders, and visitors, as well as protecting agricultural produce and market infrastructure.
- ii. Risk mitigation: Fire-fighting facilities reduce the risk of fire-related losses and damage to agricultural commodities, buildings, and equipment. This instills confidence among market participants and mitigates potential financial losses.
- iii. Timely response to fire incidents: With fire-fighting facilities readily available, RMCs can respond quickly to any fire emergencies that may occur. This minimizes the spread of fire and reduces the extent of damage, ensuring business continuity and preserving market functionality.
- Preservation of agricultural produce: Fire-fighting facilities help in containing and extinguishing iv. fires, thereby preventing the loss or destruction of agricultural produce. This ensures that farmers' efforts in producing the commodities are not wasted, leading to better marketing outcomes.
- Protection of market infrastructure: Fire incidents can cause significant damage to market ٧. infrastructure, including buildings, storage facilities, and market yards. Fire-fighting facilities help in protecting these valuable assets, ensuring the continuity of market operations and promoting better agricultural marketing.
- vi. Enhanced market reputation: The presence of fire-fighting facilities in RMCs enhances the market's reputation as a safe and secure trading hub. This attracts more farmers, traders, and buyers to the market, fostering a positive image and facilitating better marketing opportunities.
- Compliance with safety regulations: Fire-fighting facilities ensure compliance with safety vii. regulations and standards set by authorities. This demonstrates the commitment of RMCs towards providing a secure and well-managed market environment, boosting confidence among market participants.
- Collaboration with emergency services: Fire-fighting facilities in RMCs facilitate collaboration viii. with local fire departments and emergency services. This coordination ensures swift response and effective fire-fighting measures, minimizing potential damage and promoting better agricultural marketing practices.
- Insurance coverage: The availability of fire-fighting facilities can positively impact insurance ix. coverage for the market and its stakeholders. Adequate fire safety measures can lead to lower insurance premiums, reducing financial burdens and improving the overall resilience of the market.
- Peace of mind: Fire-fighting facilities provide peace of mind to farmers, traders, and buyers who engage in agricultural marketing activities. Knowing that appropriate measures are in place to

tackle fire incidents fosters a sense of security and confidence, leading to better participation and engagement in the market.

#### Cold Storage facilities in RMCs

The availability of cold storage facilities in different district regulated market committees (RMCs) in Odisha helps in better agricultural marketing in the following ways:

- Extended shelf life: Cold storage facilities enable the storage of agricultural produce at controlled temperatures, extending its shelf life and preserving its freshness. This allows farmers to store their perishable produce for longer periods and market them at the most opportune time.
- ii. Market timing: Cold storage facilities help farmers in timing their market interventions strategically. They can store their produce when the market prices are low and release it when prices are higher, maximizing their profitability and reducing post-harvest losses.
- iii. Market stabilization: Cold storage facilities contribute to market stabilization by regulating the supply of agricultural commodities. They help in balancing the demand and supply dynamics, preventing gluts or shortages in the market and ensuring more stable and consistent prices.
- Value addition: Cold storage facilities enable value addition activities such as sorting, grading, ίV. and packaging of agricultural produce. This enhances the quality and marketability of the commodities, allowing farmers to fetch better prices and access higher-value markets.
- Market diversification: With cold storage facilities, farmers can explore new markets and expand ٧. their customer base beyond the local region. They can transport their produce to distant markets without compromising quality, opening up opportunities for better market access and higher profits.
- Reduction of post-harvest losses: Cold storage facilities significantly reduce post-harvest losses vi. by preventing spoilage, decay, and insect infestation. This ensures that a larger quantity of the agricultural produce reaches the market in a fresh and marketable condition, minimizing losses for farmers.
- Seasonal produce availability: Cold storage facilities enable the availability of seasonal produce vii. throughout the year. Farmers can store their produce during peak seasons and supply it during off-seasons, meeting consumer demands and capturing premium prices.
- Export facilitation: Cold storage facilities play a crucial role in facilitating agricultural exports. viii. They enable farmers to meet the quality and storage requirements of international markets, allowing them to tap into export opportunities and earn foreign exchange.
- Market integration: Cold storage facilities promote market integration by linking farmers to larger ix. markets and value chains. They enable farmers to store their produce closer to consumption centers, reducing transportation costs and facilitating direct access to wholesalers, retailers, and processors.
- Food security: Cold storage facilities contribute to food security by preserving surplus х. agricultural produce for future consumption. They act as a buffer during times of scarcity and help in maintaining a steady supply of nutritious food, supporting better agricultural marketing and overall food systems.

#### CCTV video footage security facilities in RMCs

The availability of CCTV video footage security facilities in different district regulated market committees (RMCs) in Odisha helps in better agricultural marketing in the following ways:

i. Prevention of theft and vandalism: CCTV cameras act as a deterrent to potential thieves and vandals, reducing the risk of theft and damage to agricultural produce and market infrastructure.

- ii. Enhanced security: CCTV video footage provides enhanced security by monitoring and recording activities within the market premises. This helps in identifying and apprehending individuals involved in any unauthorized or illegal activities.
- iii. Safety of market participants: CCTV cameras contribute to the safety of farmers, traders, and buyers by monitoring public areas and alerting security personnel to any potential threats or incidents.
- iv. Evidence collection: CCTV video footage serves as valuable evidence in case of any disputes, thefts, or other incidents within the market. It can be used to identify culprits, support investigations, and ensure justice.
- v. Market monitoring: CCTV cameras enable market authorities to monitor the overall functioning of the market, ensuring compliance with regulations, maintaining discipline, and addressing any issues promptly.
- vi. Market transparency: The presence of CCTV cameras fosters transparency in market operations. It provides a visual record of activities, ensuring fair practices, and building trust among market participants.
- vii. Customer confidence: CCTV video footage security facilities create a sense of security and confidence among buyers. It reassures them that their transactions and interactions within the market are being monitored, promoting a safer and more trustworthy market environment.
- viii. Market reputation: RMCs equipped with CCTV security systems build a reputation for being well-managed and secure markets. This attracts more buyers and traders, enhancing market competitiveness and contributing to better agricultural marketing outcomes.
- ix. Identification of market trends: CCTV footage can be analyzed to identify market trends, customer preferences, and purchasing patterns. This valuable information helps in making informed decisions regarding product assortment, pricing, and marketing strategies.
- x. Emergency response: CCTV cameras assist in emergency response situations by providing real-time monitoring and alerting authorities to any unusual or emergency situations. This enables timely intervention and minimizes potential risks or damages within the market.

#### Cooling Chamber facilities in RMCs

The availability of cooling chamber facilities in different district regulated market committees (RMCs) in Odisha helps in better agricultural marketing in the following ways:

- Preservation of perishable produce: Cooling chambers provide a controlled environment with low temperatures, preserving the quality and freshness of perishable agricultural produce such as fruits, vegetables, and flowers. This extends their shelf life and allows for better marketing opportunities.
- ii. Minimization of post-harvest losses: Cooling chambers help in reducing post-harvest losses by slowing down the natural processes of decay and spoilage. By maintaining optimal temperature and humidity levels, they ensure that the produce remains in a marketable condition for a longer duration.
- iii. Market timing optimization: Cooling chambers enable farmers to store their produce until the market conditions are favorable. They can wait for increased demand or higher prices before bringing their agricultural commodities to the market, leading to better marketing outcomes.
- iv. Market diversification: With cooling chamber facilities, farmers can explore new markets beyond the local region. They can transport their perishable produce to distant markets without quality deterioration, expanding their customer base and accessing higher-value markets.
- v. Value addition: Cooling chambers facilitate value addition activities such as grading, sorting, and packaging of agricultural produce. This enhances the quality and marketability of the commodities, allowing farmers to command better prices and meet the requirements of different market segments.

- vi. Reduced transportation costs: Cooling chambers enable farmers to store their produce at or near the point of production, reducing the need for immediate transportation. This helps in optimizing transportation logistics, lowering costs, and ensuring that the produce reaches the market in a fresh and desirable state.
- vii. Improved product quality: Cooling chambers help in maintaining the texture, flavor, and nutritional value of agricultural produce. This ensures that consumers receive high-quality and nutritious products, enhancing customer satisfaction and promoting repeat purchases.
- viii. Enhanced market competitiveness: The availability of cooling chambers in RMCs improves the overall competitiveness of the market. It attracts more farmers, traders, and buyers who seek reliable storage facilities, creating a dynamic and vibrant marketplace.
- ix. Market stabilization: Cooling chambers contribute to market stabilization by enabling the storage of surplus agricultural produce during times of high supply. This helps in balancing the demand and supply dynamics, ensuring a more stable market and minimizing price fluctuations.
- x. Facilitation of export opportunities: Cooling chambers play a crucial role in facilitating agricultural exports by maintaining the freshness and quality of produce during transportation and storage. They meet the requirements of international markets, enabling farmers to tap into export opportunities and expand their market reach.

#### Fish Vending Zone facilities in RMCs

The availability of fish vending zone facilities in different district regulated market committees (RMCs) in Odisha helps in better agricultural marketing in the following ways:

- Centralized fish trading: Fish vending zones provide a centralized location for fish traders and buyers to conduct business, creating a hub for fish marketing activities and promoting better market efficiency.
- ii. Improved hygiene and sanitation: Fish vending zones are designed with proper infrastructure and facilities to maintain hygiene and sanitation standards. This ensures the freshness and quality of fish products, instilling confidence in buyers and promoting better marketing practices.
- iii. Market organization and regulation: Fish vending zones help in organizing and regulating fish marketing activities, ensuring compliance with safety, quality, and legal standards. This contributes to the overall development and professionalism of the fish market.
- iv. Value addition and processing: Fish vending zones often provide facilities for value addition and processing activities such as cleaning, cutting, and packaging. This enhances the marketability of fish products, allowing for higher-value sales and better marketing outcomes.
- v. Market integration and access: Fish vending zones facilitate the integration of fish farmers, fishermen, and traders into larger markets and value chains. They create opportunities for direct interaction with wholesalers, retailers, and processors, promoting better market access and higher profitability.
- vi. Quality control and traceability: Fish vending zones implement quality control measures, including proper storage and handling practices. This ensures that fish products meet safety and quality standards, enabling traceability and enhancing consumer trust.
- vii. Market information dissemination: Fish vending zones serve as information dissemination hubs, providing market participants with up-to-date information on prices, demand, and market trends. This helps farmers and traders make informed decisions and adapt their marketing strategies accordingly.
- viii. Infrastructure development: Fish vending zones contribute to the development of market infrastructure, including cold storage facilities, auction halls, and processing units. This supports the growth of the fish market, attracts more participants, and fosters better marketing practices.
- ix. Streamlined supply chain: Fish vending zones help in streamlining the fish supply chain by bringing together producers, traders, and buyers in one location. This reduces transaction

- costs, improves logistics, and ensures a more efficient flow of fish products from the source to the market.
- Branding and promotion: Fish vending zones provide a platform for branding and promoting Х. locally produced fish products. They showcase the diversity and quality of fish available in the region, attracting consumers and tourists, and enhancing the overall image and marketability of Odisha's fish products.

#### Biometric Facilities in RMCs

The availability of biometric facilities in different district regulated market committees (RMCs) in Odisha helps in better agricultural marketing in the following ways:

- i. Enhanced identity verification: Biometric systems, such as fingerprint or iris scanning, provide secure and accurate identification of farmers, traders, and buyers. This helps in preventing identity fraud and ensuring transparency in agricultural transactions.
- ii. Efficient attendance tracking: Biometric systems enable quick and accurate attendance tracking of market participants, including farmers, traders, and RMC staff. This improves administrative efficiency, ensures accountability, and facilitates better management of market activities.
- iii. Improved payment systems: Biometric authentication can be integrated into digital payment systems, enabling secure and convenient transactions. This reduces the reliance on cash transactions, promotes transparency, and provides a reliable record of financial transactions in the agricultural market.
- Access control and security: Biometric systems help in controlling access to restricted areas iv. within the market premises, ensuring the safety and security of valuable assets, including agricultural produce and market infrastructure.
- Reduction of impersonation and duplication: Biometric authentication eliminates the risk of ٧. impersonation and duplication, as each individual's unique biometric characteristics are used for identification. This prevents unauthorized individuals from participating in agricultural marketing activities.
- Streamlined record-keeping: Biometric systems provide accurate and automated recordvi. keeping of market participants, including their personal information, transaction history, and market interactions. This facilitates efficient data management and analysis for market planning and decision-making.
- Fair distribution of subsidies and benefits: Biometric systems help in ensuring the fair vii. distribution of agricultural subsidies, incentives, and welfare benefits to eligible farmers. This minimizes the chances of fraudulent claims and ensures that support reaches the intended beneficiaries.
- viii. Monitoring and evaluation: Biometric data collected through the system can be utilized for monitoring and evaluating the effectiveness of various agricultural marketing programs and initiatives. This enables policymakers to make data-driven decisions and implement targeted interventions for better outcomes.
- Market analytics and insights: Biometric data, when combined with other market data, can ix. provide valuable analytics and insights into the behavior and preferences of market participants. This helps in understanding market trends, demand patterns, and consumer preferences, leading to better marketing strategies.
- Transparency and trust-building: Biometric systems promote transparency and trust in Х. agricultural marketing transactions. The use of biometrics ensures the accuracy and integrity of participant information, fostering confidence among stakeholders and enhancing the overall credibility of the market.

#### Sundry Shop Room facilities in RMCs

The availability of sundry shop room facilities in different district regulated market committees (RMCs) in Odisha helps in better agricultural marketing in the following ways:

- i. Convenience for market participants: Sundry shop rooms provide a convenient space within the RMC premises for market participants to access essential supplies, tools, and equipment needed for their agricultural activities.
- ii. Easy availability of agricultural inputs: Sundry shop rooms offer a range of agricultural inputs such as seeds, fertilizers, pesticides, and farm machinery. This ensures that farmers have easy access to quality inputs, promoting better agricultural practices and productivity.
- iii. Reduction in transaction costs: Having sundry shop rooms within the RMC premises reduces the need for market participants to travel to distant locations to purchase agricultural supplies. This helps in minimizing transportation costs and time, making the procurement process more cost-effective.
- iv. Support for small-scale farmers: Sundry shop rooms often cater to the needs of small-scale farmers who may have limited access to inputs and resources. By providing a centralized and affordable source for agricultural supplies, these facilities level the playing field and support the inclusion of small farmers in the market.
- v. Availability of genuine products: Sundry shop rooms in RMCs ensure the availability of genuine and certified agricultural inputs. This helps farmers in obtaining reliable and quality products, reducing the risk of using counterfeit or substandard inputs that could harm their crops or livestock.
- vi. Information dissemination: Sundry shop rooms serve as information centers, providing market participants with valuable knowledge on new technologies, farming practices, and product recommendations. This empowers farmers with the necessary information to make informed decisions and improve their agricultural marketing strategies.
- vii. Promoting diversified farming practices: Sundry shop rooms may offer a range of agricultural products and tools that encourage diversification in farming practices. Farmers can explore alternative crops, organic farming, or innovative techniques with the support of diverse supplies available in the shop rooms.
- viii. Facilitating value addition: Sundry shop rooms may also provide facilities and supplies for value addition activities such as packaging, labeling, and processing of agricultural products. This enables farmers to add value to their produce, making it more marketable and commanding higher prices.
- ix. Strengthening market infrastructure: The presence of sundry shop rooms contributes to the overall development and strengthening of market infrastructure in RMCs. It adds to the convenience and functionality of the market, attracting more participants and promoting better agricultural marketing practices.
- x. Promoting local entrepreneurship: Sundry shop rooms often provide opportunities for local entrepreneurs to set up and operate their businesses. This supports the local economy, creates employment opportunities, and encourages entrepreneurship in the agricultural sector.
- xi. Availability of genuine products: Sundry shop rooms in RMCs ensure the availability of genuine and certified agricultural inputs. This helps farmers in obtaining reliable and quality products, reducing the risk of using counterfeit or substandard inputs that could harm their crops or livestock.
- xii. Information dissemination: Sundry shop rooms serve as information centers, providing market participants with valuable knowledge on new technologies, farming practices, and product recommendations. This empowers farmers with the necessary information to make informed decisions and improve their agricultural marketing strategies.

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- Promoting diversified farming practices: Sundry shop rooms may offer a range of agricultural xiii. products and tools that encourage diversification in farming practices. Farmers can explore alternative crops, organic farming, or innovative techniques with the support of diverse supplies available in the shop rooms.
- xiv. Facilitating value addition: Sundry shop rooms may also provide facilities and supplies for value addition activities such as packaging, labeling, and processing of agricultural products. This enables farmers to add value to their produce, making it more marketable and commanding higher prices.
- Strengthening market infrastructure: The presence of sundry shop rooms contributes to the XV. overall development and strengthening of market infrastructure in RMCs. It adds to the convenience and functionality of the market, attracting more participants and promoting better agricultural marketing practices.
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#### Summary and Conclusion:

Market infrastructure development in the Regulated Market Committee (RMC) of different districts in Odisha can have a significant impact on agricultural marketing.

In overall 30 districts of Odisha, the infrastructural development is better in Baragarh, Sambalpur, Keonjhar, Ganjam, Jagatsinghpur, Balasore, Mayurbhanj, Rayagada, ,Cuttack and in Bolangir which plays significant role in enhancement of agricultural product marketing commodities.

The major highlighting the potential benefits due to infrastructural developments are as follows:

- Upgraded market infrastructure enhances the efficiency and effectiveness of agricultural i. marketing in Odisha.
- Improved auction platforms facilitate fair price discovery, benefiting farmers. ii.
- Modern storage facilities help reduce post-harvest losses and wastage of agricultural produce. iii.
- ίV. Cold storage units enable farmers to store perishable goods, leading to better market timing and higher profits.
- Well-designed warehouses provide a safe and secure environment for storing agricultural ٧. commodities.
- Grading systems ensure standardized quality and enable farmers to access premium markets. vi.
- Efficient logistics and transportation facilities connect farmers to distant markets, expanding vii. their reach.
- viii. Market infrastructure development enables farmers to access a wide range of buyers, fostering competition.
- Increased competition in the market leads to better prices and improved income for farmers. ix.
- Availability of market information helps farmers make informed decisions about selling their Χ. produce.
- xi. Real-time price information empowers farmers to negotiate better deals and maximize profits.
- Transparent market operations protect farmers from unfair trade practices. xii.
- Market infrastructure development attracts more buyers, including wholesalers, processors, and xiii. exporters.
- xiv. Enhanced market access opens up new avenues for farmers to sell their produce and explore value addition opportunities.
- Improved market connectivity encourages farmers to adopt high-value and niche agricultural XV. practices.

- Market infrastructure development stimulates economic growth and generates employment xvi. opportunities.
- Construction and maintenance of market infrastructure create jobs in the local economy. xvii.
- Strengthened agricultural marketing system boosts the overall rural economy of Odisha. xviii.
- Reduced post-harvest losses contribute to food security and availability. xix.
- Standardized quality leads to increased consumer confidence in Odisha's agricultural products. XX.
- Market infrastructure development fosters trust between buyers and sellers, facilitating longxxi. term relationships.
- Access to better market facilities encourages farmers to invest in quality inputs and modern xxii. farming practices.
- xxiii. Improved market infrastructure attracts private investment in the agricultural sector.
- RMCs act as platforms for knowledge exchange and capacity building among farmers. xxiv.
- Market infrastructure development promotes inclusive growth by empowering smallholder XXV. farmers.
- Farmers' income and livelihoods improve as they receive fair prices for their produce. xxvi.
- Efficient market operations reduce transaction costs for farmers and buyers. xxvii.

Market infrastructure development aligns with Odisha's agricultural development goals.

It enhances the competitiveness of the state's agricultural sector in domestic and international markets.

Overall, market infrastructure development in RMCs of different districts in Odisha positively transforms agricultural marketing, benefiting farmers, the economy, and the state as a whole.

#### Annexure-A

L	INFORMATION ON CREATED INFRASTRUCTURE OF DIFFERENT RING IN THE STATE																									
61			N	Market Yard	Boundary	Office	Godow with	1	Open	Cover	Accessor TT-T	Farmer	Farmer	W	Watchman	Counter	Water	Sanitation		Pave	Grading	Electrification	Other Infrastructure	Paddy	Shop	Secretary
SI No	District	Sl No	Name of the RMC	& Sub-Market Yards	Wall	Building	with capacit		Platform	Platform	Auction Hall	Rest Shed	Information Centre	Weighbridge	Shed	Room	Supply Arrangement	Tollet Block	Approach Road	Yard	Laboratory	Electrocation	Intrastructure Available	Procurment Centre	Room	Staff Quarter
INO		INO	IONIC	MY.	B.W.	0.B.	G.W.C.	Nos	O.P.	C.P.	AH	F.R.S.	FIC.	W.B.	W.S.	CR	W.S.A.	S.T.B.	IAR	P.Y.	G.L.	Elect	OIA	P.P.C.	S.R.	S.S.Q.
		$\vdash$		26.1.	D.W.	V.B.	U.W.C.	1105	U.F.	C.F.	All	P.E.J.	FIC.	W.D.	W.J.	U.K.	W.J.A.	J.1.D.	IAK	F.1.	U.L.	LEC	Cattle Shed - 6 nos	P.P.C.	3.20	3.3.Q.
		1	Angul		1	2	200	6	37		8						1	3	1	2			Guist House - 1 no		44	8
	AMCUI.		-																				Drain - 2			
1	ANGUL	2	Atthamalick	2	-1	2	500 MT	1	1	2	Nil	Nil	1	Ni	Nil	Nil	Ni	Ni	Ni	Ni	1	All	Nil	Nil		
		3	Pallahara	1	Ni	Ni	Nil		4	2	Nil	Nil	Ni	Ni	Nil	Nil	1	Ni	Nil	Ni	Ni	Ni	Nil	Nil	Ni	Nil
		4	Talcher	3	Ni	2	Nil		14	2	Nil	1	1	Ni	1	Nil	3	1	3	4	Nil	2	Ni	3	Nil	Ni
		5	Balasore	6	4	1	500	3	9	26	4	3	1	2	4	1	5	3	5	7	Ni	2	Pond - 1	Nil	22	5
																							CYCLE STAND     Drain with Internal CC			
2	BALASORE	6	Jaleswar	9	2	1	1000	2	6	14	Ni	1	Nil	1	1	1	8	3	6	7	Ni	1	Flooring 2 nos	Ni	51	
		`						-				_		-			_	_					3. Internal CC Flooring 2			
																							N05			
Ц		7	Nilagiri	1	1	1	200	1	Nil	Ni	Ni	Ni	Nil	Ni	Nil	Nil	1	1	1	Ni	Ni	Ni	Nil		Nil	
		8	Attabira	19	19	19			95	38	18	16	16	19	9	19	19	19	19	16	Ni	17	Entrance / Exit Gate	19	Nil	Ni
3	BARGARH	9	Bargarh	18	18	16 7	3625	10	60 23	14 8	5	17	17	18	17	3	17	17	13	8	Ni	All 10	\	Nil		Ni
Н		10	Padampur	11	9	•			23	8	5	5	Nil	11	4	2	5	8	7	10	Nil	10	Ni	11	Nil	N1
	BHADRAK	11	Bhadrak	10	1	1	250	1	Ni	4	Nil	Ni	Nil	2	Nil	2	2	2	2	2	Ni	2		2	72	2
4	BHADRAK	12	Chandbali	3	2	1	1000	1	Nil	5	Nil	Ni	Ni	Nil	3	Nil	2	Ni	3	Nil	1	2	Fish vending zone	Nil		
		13	Bolangir	6	4	3	500	4	5	2	lno (WIP.)	Ni	2	3	2	1	4	4	4	1	1	4	Ni	2		
5	BOLANGIR	14	Kantabanji	5	5	4	1000	2	5	4	NIL	2	3	5	2	1	2	2	2	Ni	1	5	Ni	5		
		15	Patnagarh	2	2	1	1000	2	3	2	Nil	Ni	2	2	1	Nil	1	2	2	Ni	Nil	1	Ni	2		
6	BOUDH	16	Boudh	8	8	1	100	1	10	12	2	7	7	5	8	8	7	7	6	2	1	8		8		
		17	Banki	2	2	2	250	5	12	11	1	1	1	Ni	2	Nil	2	2	2	2	1	2		2 mos (Society)		
7	CUTTACK	18	Kendupatna	5	1	3	250	13	10	4	1	1	Nil	2	2	Nil	2	1	2	3	1	3	2 mos Cattle Shed	2 nos Society	Shop rooms	
		19	Narasinghpur	6	Nil	Ni	250	3	Nil	1	Ni	Nil	Nil	Ni	Nil	Nil	Nil	1	Nil	5	Nil	Ni		Nil		
		20	Dhenkanal	9	2	2	500	1	36	12	1	2				1	11	2	6	1		3				
8	DHENKANAL	21	Hindol	2	1	Ni	Nil	Ni	2	2	Ni	Nil	Nil	Ni	Nil	2	1	3	Nil	1	Nil	Ni	Ni	Nil	10	
		22	Kamakhyanagar	3	2	2	500	2	9	5	Ni	Nil	Ni	1	2	Nil	3	2	3	3	Nil	2	Ni	Ni	Nil	Ni
9	DEOGARH	23	Deogarh	3	1	1	500	1	13	3	1	Nil	Nil	1	1	Nil	1	Nil	1	1	Nil	1	Ni	Ni	Nil	Nil
		24	Bhanjanagar	6	6	1	5250	9	9	10	2	6	1	1	6	6	6	6	6	12	6	5	C.C Camera Bio metric &			
10	GANJAM	25	Digapahandi	8	7	3	1000	5	4	2	2	3	1	1	3	Nil	4	3	6	1	Nil	4	Cold Store (2 nos)	1		
		26	Hinjilicut	7	7	7	500	11	2	2	3	8	1	2	1	Nil	7	7	7	7	Nil	7	Paris Visit 1			
11	GAJAPATI	27	Paralakhemundi	10	10	1	1000	2	17	Nil	2	1	1	4	2	Nil	4	4	10	1	1	Ni	Drying Yard - 1 no Stacking Yard - 1 no A. Sundary Shop Rooms	Nil	58	Nil
12	JAJPUR	28	Jajpur	13	4	4	1000	2	8	17		1	Nil	1	1	3	9	3	7	4	Nil	6	B. Cooling Chamber	Ni	102	
13	JAGATSINGHPUR :	$\vdash$	Jagatsinghpur	13	3	2	250	3	2	16	1	7	1	1	1	Nil	9	7	5	7	Nil	6	Ni	1	167	
		30	Rahama	6	1	2	Nil		5	36	Ni	4	3	Ni	Nil	Nil	4	1	6	1	Nil	2	Ni	4	191	NI

SI No	District	SI No	Name of the RMC	Market Yard & Sub-Market Yards	Boundary Wall	Office Building	Godown with capacity		Open Platform	Cover Platform	Auction Hall	Shed	Farmer Information Centre	Weighbridge	Watchman Shed	Counter Room	Water Supply Arrangement	Samitation Toilet Block	Approach Road	Pave Yard	Grading Laboratory	Electrification	Other Infrastructure Available	Paddy Procument Centre	Shop Room	Secretary Staff Quarter
				M.Y.	B.W.	0.B.		Nos	O.P.	C.P.	AH	F.R.S.	FI.C.	W.B.	W.S.	C.R.	W.S.A.	S.T.B.	IAR	P.Y.	G.L.	Elect	O.I.A.	P.P.C.	S.R.	S.S.Q.
14	JHARSUGUDA		Jharsuguda	3	1	1	1000	2	8	10	Ni	1	2	2	2	Nil	2	Nil	1	2	Nil	2	Nil	1		
			Bhawanipatna	5	5	3	3000	3	12	10	1	2	2	2	2	2	5	4	5	2	1	4	Nil	5		
15	KALAHANDI	33	Junagarh	51	Nil	2	1000	9	22	38	4	2	2	7	3	Nil	5	Nil	Ni	Nil	Nil	Ni	Cattle Shed - 2 nos Drying Yard	Nil	77	10
		34	Kesinga	4			1000	2			4	1		1			1			Ш			Weighing Stand			
Ц		35	Mukhiguda																	Щ						
16	KANDHAMAL	36	Kandhamal	2	2	1	500	1	Nil	2	Nil	1	1	Nil	1	1	1	1	1	2	Ni	1		2		
Ш		37	Tikabali	6	6	1	250	2	3	10	1	3	3	Nil	4	4	2	1	3	1	1	5		6		
17	KENDRAPARA	38	Kendrapara	13	2	3	500	2	6	20	1	Ni	Nil	Nil	1	Nil	2	2	8	9	1	2	Thresing floor	1	256	
Ш		39	Anandapur	11	5	4	500	3	7	29	1	3	3	1	2	Nil	11	11	6	3	1	6		8	182	
18	KEONJHAR	40	Champua	11	2	1	Sual Godown		14 (5 nos	17	Nil	Ni	Nil	Ni	1	1	8	Nil	1	Nil	Nil	Ni	A 12010021 A00102	(Demolished by	163	
		41	Keonjhar	14	9	13		26	61	38	12	3	2	Nil	1	3	19	4	9	3	Nil	6	B. Sundary Shop Room	Nil		
19	KHURDA	42	Balugaon	1	1	1	250	6	1	1	1	1	1	Ni	1	1	1	1	1	1	Nil	1		lnos (Society)		
19	KHURDA	43	Jatni	1	1	1	3000	4	6	6	1	1	1	1	1	Nil	1	Nil	Ni	Nil	Ni	1	Nil	Ni	14	Nil
20	KORAPUT	44	Jeypore	4	4	1	1000	4	26	9	8	1	1	1	4	Nil	4	1	3	4	Nil	4	Thresing floor (4 nos)	4		
20	KUKAPUT	45	Koraput		1	1	172		64	56	Nil	1	1	2	3	Nil	2	16	2	3	1	2	Nil	NI	Ni	NI
21	MALKANGIRI	46	Malkangiri	12	11	1		11	72	29	2	Ni	8	4	3	3	9	10	11	5	1	4		Ni	57	
П		47	Udala	5	1	1	500	4	11	20	Ni	1	1	Ni	Nil	2	4	11	2	5	Nil	1	Internal C.C. Flooring	NI	40	
		48	Baripada	4	2	1	1000	1	7	3	4	1	1	Nil	Nil	3	5	2	3	4	Nil	1	Nil	Ni		
22	MAYURBHANJ	49	Betanoti																	П						
		50	Karanjia	4	1	1		3	2	2	Ni	1	Nil	Ni	Nil	Nil	1	1	1	Nil	Nil	1	Nil	NII		
		51	Rairangpur	Nil	Ni	Nil	Nil	Ni	Nil	Nil	Ni	Ni	Nil	Ni	Nil	Nil	1	Nil	Ni	Nil	Nil	Nil	Nil	Nil	Nil	Nil
23	NABARANGPUR	52	Nabarangpur	7	7	4	1000	8	7	23	23	3	5	6	4	2	2	3	7	7	1	7		8		
24	NAYAGARH	53	Bahadajhola	13	3	2	500	5	4	4	2	4	4	1	1		3	2	1	2	1		Threshing Floor		8	
25	NUAPADA	54	Khariar Road	3	3	1	500	8	3	3	2	1	Nil	3	Nil	3	2	6	3	2	Nil	2	Nil	Ni		
		55	Nimapara	6	5	1	3000	4	4	6	2	1	3	Ni	3	Nil	4	4	3	3	Nil	1	INTERNAL CC FLOORING	Nil	46	
26	PURI	56	Sakhigopal	6	3	2	250	1	5	6	4	2	Nil	2	3	3	4	2	3	2	1	2		2	70	
27	RAYAGADA	57	Gunupur	6	6	5	1000	52	12	7	7	5	3	5	8	-1	6	6	6	6	1	6	Nil	1	18	Ni
21	RATAGADA	58	Rayagada	4	3	3	500	7	5	5	3	2	3	3	2	Nil	3	2	3	3	1	3	Nil	Ni	Nil	Nil
П		59	Kuchinda	9	6	1	500	5	12	65	2	5	1	2	3	Nil	11	11	9	2	1	5	Nil	Nil		
28	SAMBALPUR	60	Rairakhol	5	5	Nil	500	1	7	27	2	2	3	Nil	Nil	Nil	4	4	3	1	Nil	1	1 Slaughter House	Nil		
		61	Sambalpur	19	19	2	1000	10	6	43	6	1	13	8	8	Nil	19	14	14	10	Ni	3	Nil	1	78	
		62	Biramaharajpur	3	3	1	500	3	1	3 nos avaliable (5 nos W.I.P)	1 (W.I.P.)	Ni	3	3	3	Nil	3	3	3	6	l(WIP.)	3	CC TV Available     Fire Fighting Available	Nil		
29	SONEPUR	63	Dunguripalli	5	5	2	500	6	25	27	4	5	5	5 (Idamage)	5	5	4	5	5	4	1	4	- C - Game, Territative	5		
П		64	Bonei	3	2	1	500	3	Nil	Nil	Ni	Ni	Ni	2	2	Nil	1	Nil	3	3	Nil	3	Nil	1		
30	SUNDARGARH	65	Panposh	4	Nil	1	500	6	10	7	Nil	1	1	1	1	Nil	2	Nil	4	2	Nil	2		Ni	20	
		66	Saragipalli	5	4	3	500	1	30	3	2	1	1	2	1	1	5	Ni	3	1	Ni	5	Nil	1		
Г	То	tal	•	446	252	158	45547	294	840	782	155	142	133	141	146	85	298	241	262	206	27	183		104	1746	25

### Annexure-B

Market Yard	M.Y.
Sub-Market Yards	S.M.Y.
Boundary Wall	B.W.
Office Bu <mark>liding</mark>	O.B.
Godown with ca <mark>pacit</mark> y	G. (W.C.)
Open Platform	O.P.
Cover Platform	C.P.
Auction Hall	A.H.
Farmer Rest Shed	F.R.S.
Farmer Information Centre	F.I.C.
Weighbridge	W.B.
Watchman Shed	W.S.
Counter Room	C.R.
Water Supply Arrangement	W.S.A.
Sanitation Toilet Block	S.T.B.
Internal Approach Road	I.A.R.
Pave Yard	P.Y.
Grading Laboratory	G.L.
Electrification	Elect
Other Infrastructure Available	O.I.A.
Paddy Procurment Centre	P.P.C.
Shop Room	S.R.
Secretary Staff Quarter	S.S.Q.
Secretary Staff Quarter	S.S.Q.

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#### Authors:

Prabodha Kumar Rout , Research Scholar, P.G.Dept. of Business Administration, Utkal University, Bhubaneswar, Orissa, Email: prabodhresearchscholar23@gmail.com, working as Senior Odisha Administrative Officer of OCAC (Technical Directorate of E&IT Department, Govt of Odisha). He is an author of 10 literature books, one international journal published. He has worked in Agricultural marketing sector with 7 years experience and awarded excellency in Public Service award by Odisha State Agricultural board during 2006.

Dr.Dasarathi Sahu Ph.D, Reader in P.G. Dept. of Business Administration, Utkal University, VaniVihar, Bhubaneswar ,Email: dasarathisahu96@gmail.com, has published more than 27 papers in International and National Journals in the field of General Management, Corporate Social Responsibility and Information Technology, Two books articles (Authored /Edited), guided Ph.D students and conducted many seminar, conference, symposia successfully.