

Mapping of Rice Production Clusters In Nigeria

April 2017



GEMS4
Wholesale & Retail



Department
for International
Development

coffey 
A TETRA TECH COMPANY



Introduction

Rice has become one of Nigeria's leading food staples; consumption has almost been double local production in recent years. This is not a new problem and the government has tried to restrict imports and encourage local production for decades. However, the volumes of imports have increased in recent years and are now a significant drain on the balance of payments with Nigeria being the second largest importer of rice globally.

Reducing import dependence is now a major goal of Nigerian policymakers. Recently interventions and new initiatives have been introduced to promote rice production in the country. These measures are meeting with some success but a vital link which needs improvement is the information on actual production capacity available in the country, and accompanying issues.

To this end, Growth and Employment in States (GEMS4), funded by the United Kingdom Department for International Development (DFID), embarked on a mapping exercise of rice producing clusters in Nigeria. A primary objective was to provide a more comprehensive information on paddy production in Nigeria which will support the development of supply chains from proximate rice clusters around existing commercial rice mills or proposed new plants in the country. However, this information will have far-reaching value to many more sectors of the rice economy.

The mapping was implemented through researchers and enumerators' visits to rice producing locations in eighteen states in Nigeria. Key Informant interviews were held at state and cluster level to identify rice producing cluster and sub clusters. Focus group discussions were held with farmers, which was followed by verification surveys. Yield estimation was done according to recall methodology proposed by Sakpota et.al (2014). Farmers based their yield figures on previous experiences by comparing previous and current performances.

For the purpose of this study, a cluster is defined as an agglomeration of various rice production communities or sub-clusters, located around a specific geographic production continuum, sharing some natural resources such as water and flood plains. A major or well-known rice producing community was used to name a cluster.

For more information please visit: <http://gems4.coffeycloud.com>

Objectives



Identify and characterize the existing clusters of rice production in eighteen selected rice-producing states



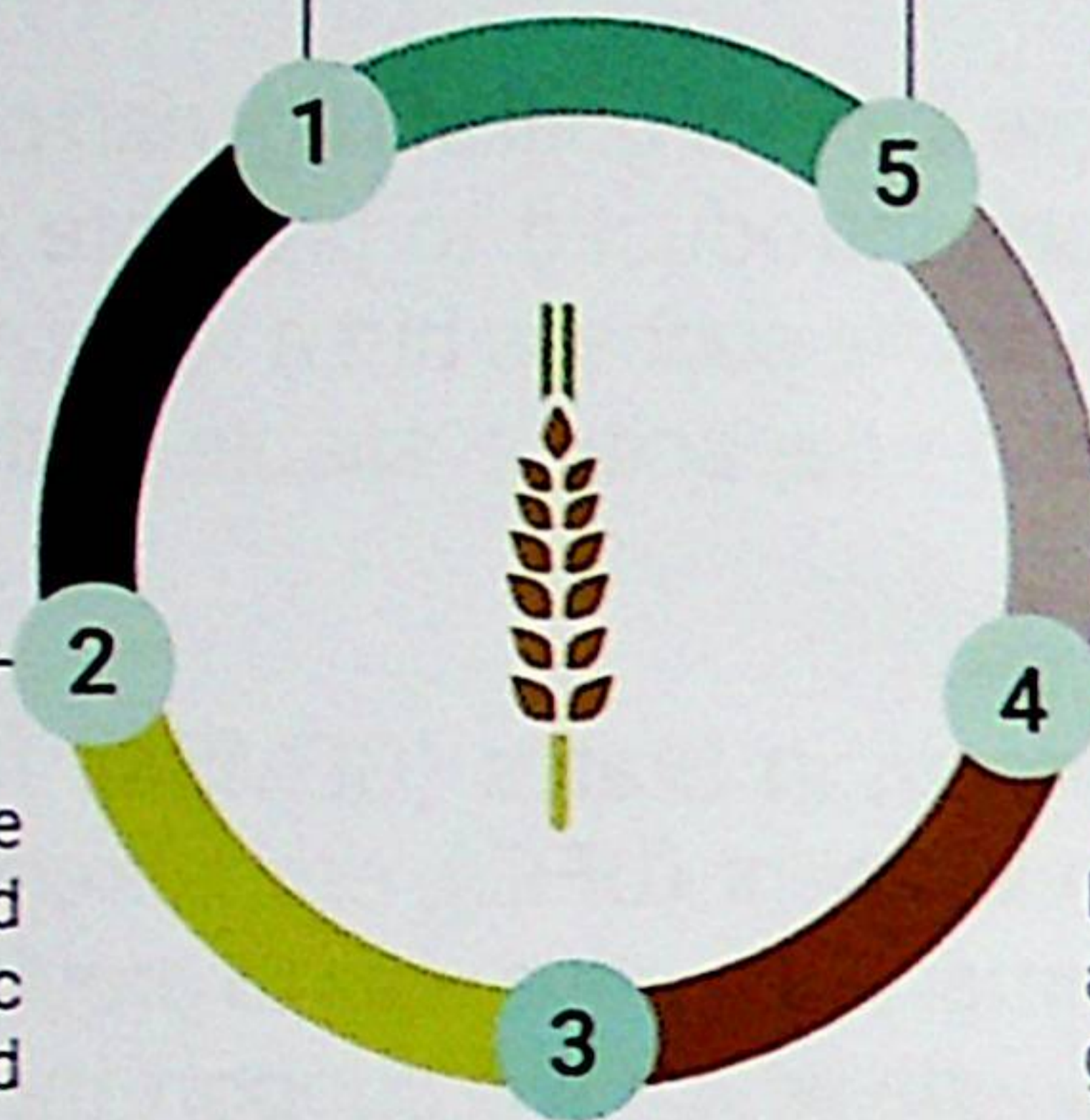
Identify key issues affecting rice production and farmers in the states/clusters surveyed.



Identify production location using the global positioning system (GPS) and describe the social and demographic features of producers within identified clusters



Determine the rice farmers access and adoption of modern inputs and technologies in rice production

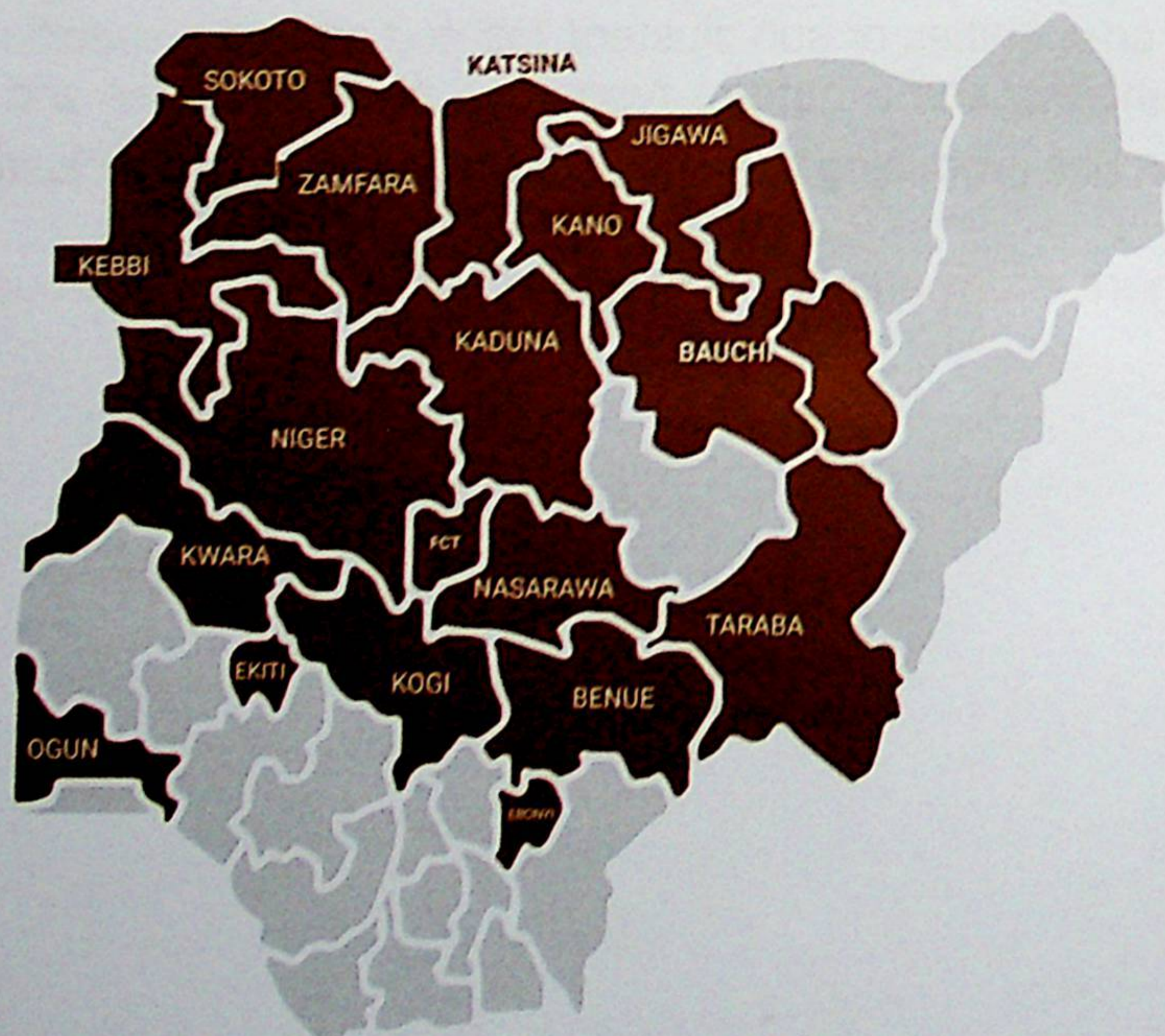


Estimate farm area cultivated, yield, total output and number of farmers per cluster per state

Selected States

18 

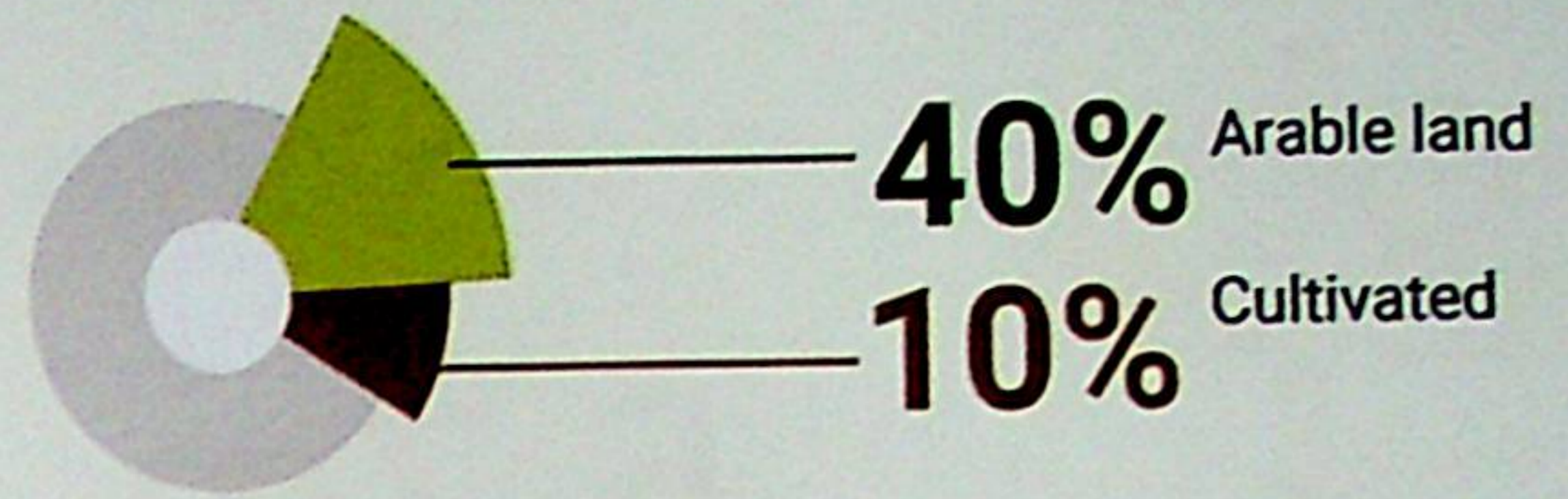
18 states were selected based on their contribution to national production, as per the 2015 Agricultural Production Survey (APS)



Brief Assessment of Rice Production in Nigeria

923,770km²

is the total land mass of Nigeria

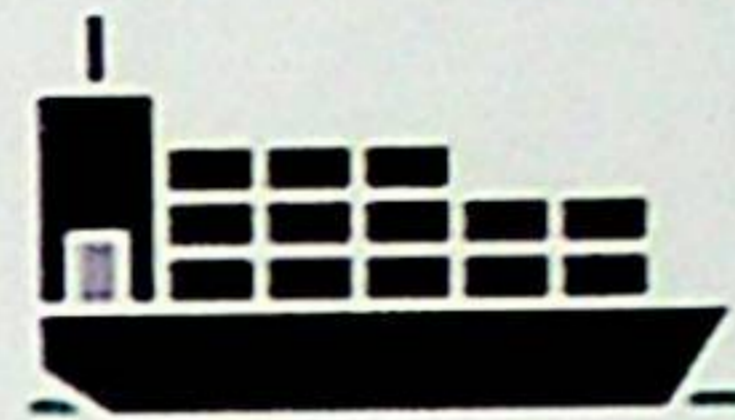


Nigeria is made up of 84million hectares of arable land, only 40% is cultivated, of which rice production covers only 10%.

Nigeria is the **LARGEST** producer of rice in West Africa



but is also the **second largest** importer of rice in the world



12.4%

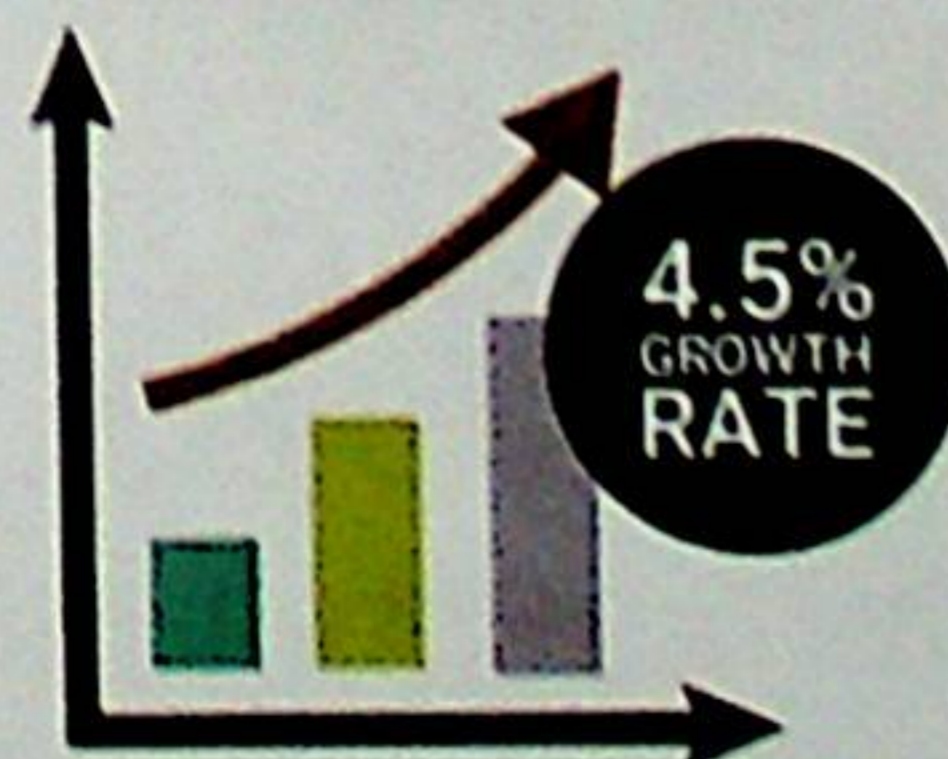
of rice produced is wasted due to post harvest losses



Africa and Nigeria in particular, is suggested as the next region for expansion of rice production world-wide because of the limited land available for further expansion of rice growing in the far East.



RICE IS CULTIVATED in virtually all the agro-ecological zones, from the mangrove and swampy ecologies of the Niger Delta to the dry zones of the Sahel in the North. The crop is predominantly produced by small-holder farmers on 2.5ha or less.



Consumption is put at 34kg per capita and expected to grow at a rate of 4.5% P.A.

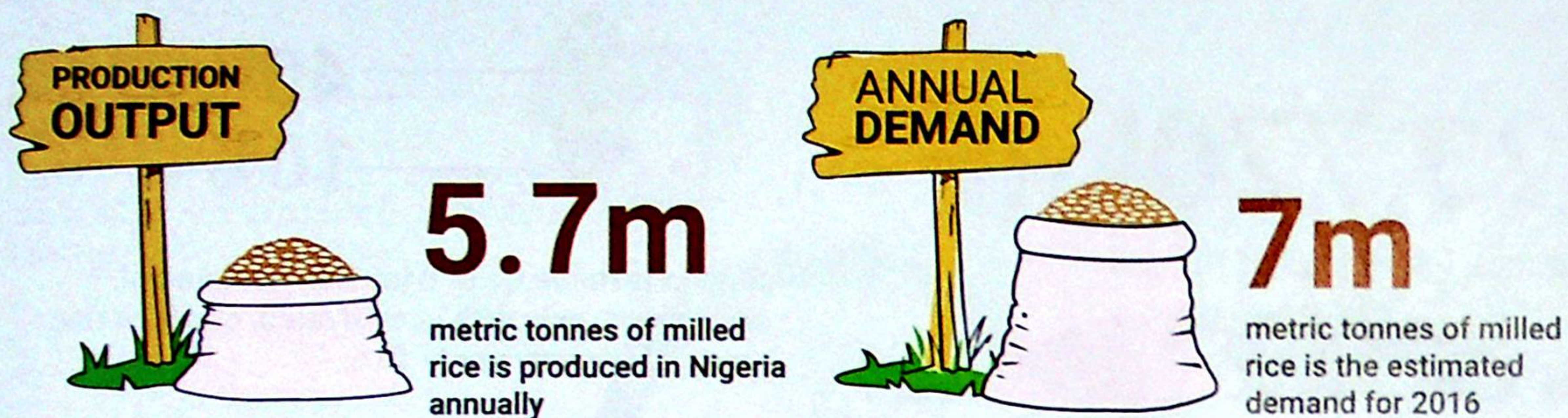


Consumption has been **DOUBLE** production over the last 10 years

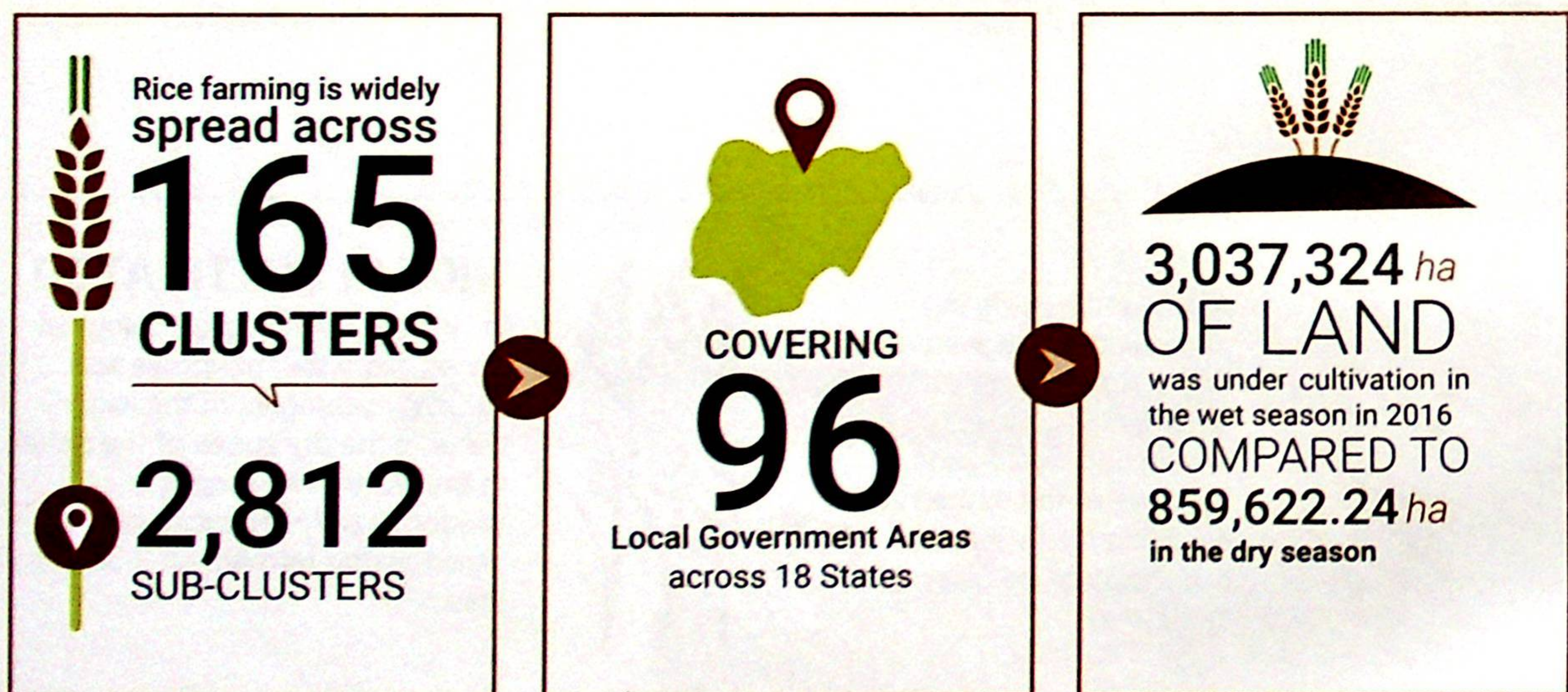


Nigeria incurs a daily importation bill of N1billion daily as at 2014

Major Findings



The 2016 total paddy production estimate is put at 17.5million tons with a marketing surplus (after post-harvest losses and domestic use) of 11.4 million tons (equivalent to 5.7 million tons milled equivalent), just below the total national demand for rice which was projected to reach 7m tons in 2016. This implies that the country is progressing towards its goal of rice self-sufficiency.



This represents
17.7%
of farming families in the wet season in Nigeria

In the dry season, the estimated total number of farmers was 410,210 representing only 5.1 % of the total farming families.

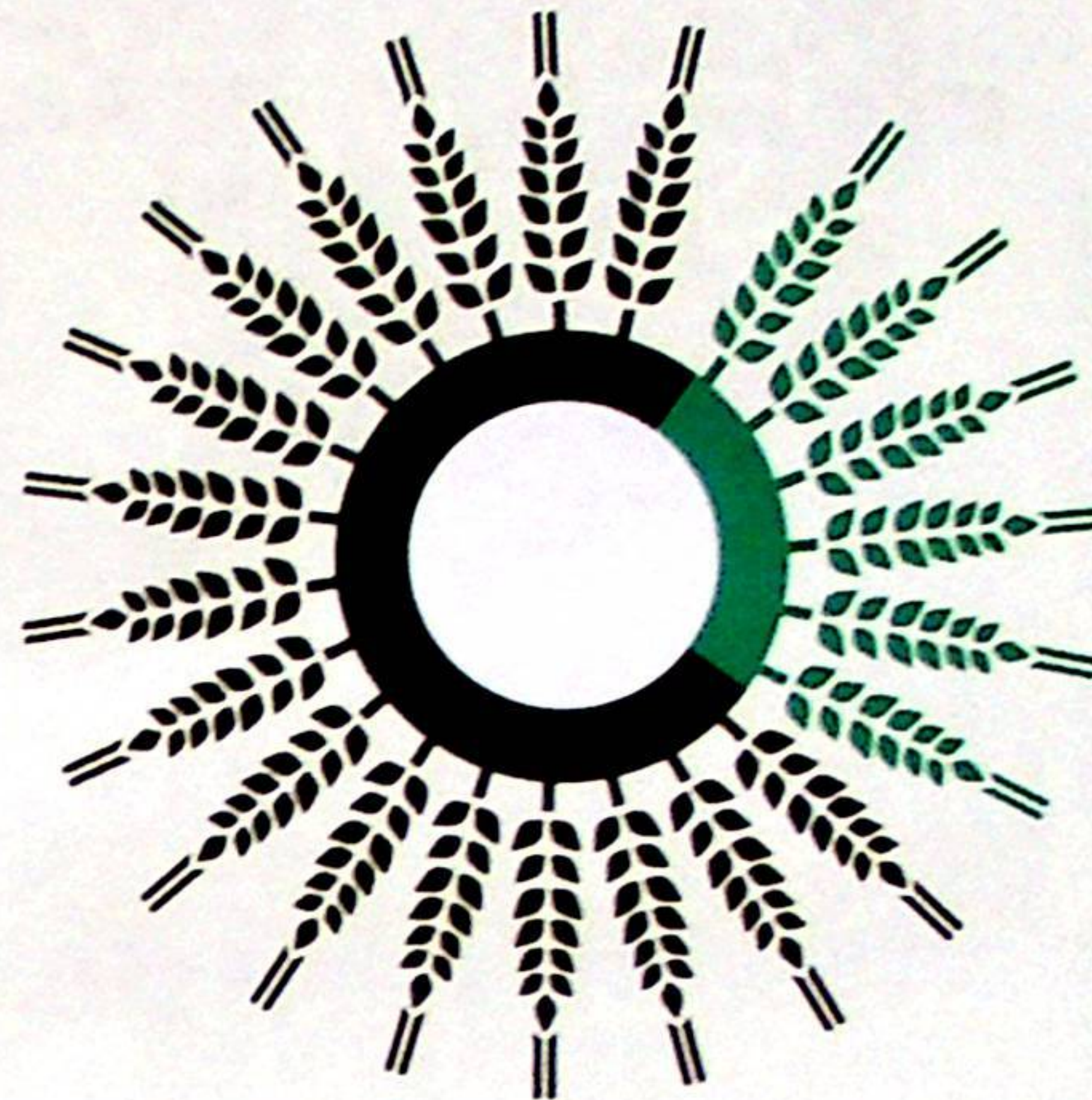
Major Findings

Rice Production by season



75%

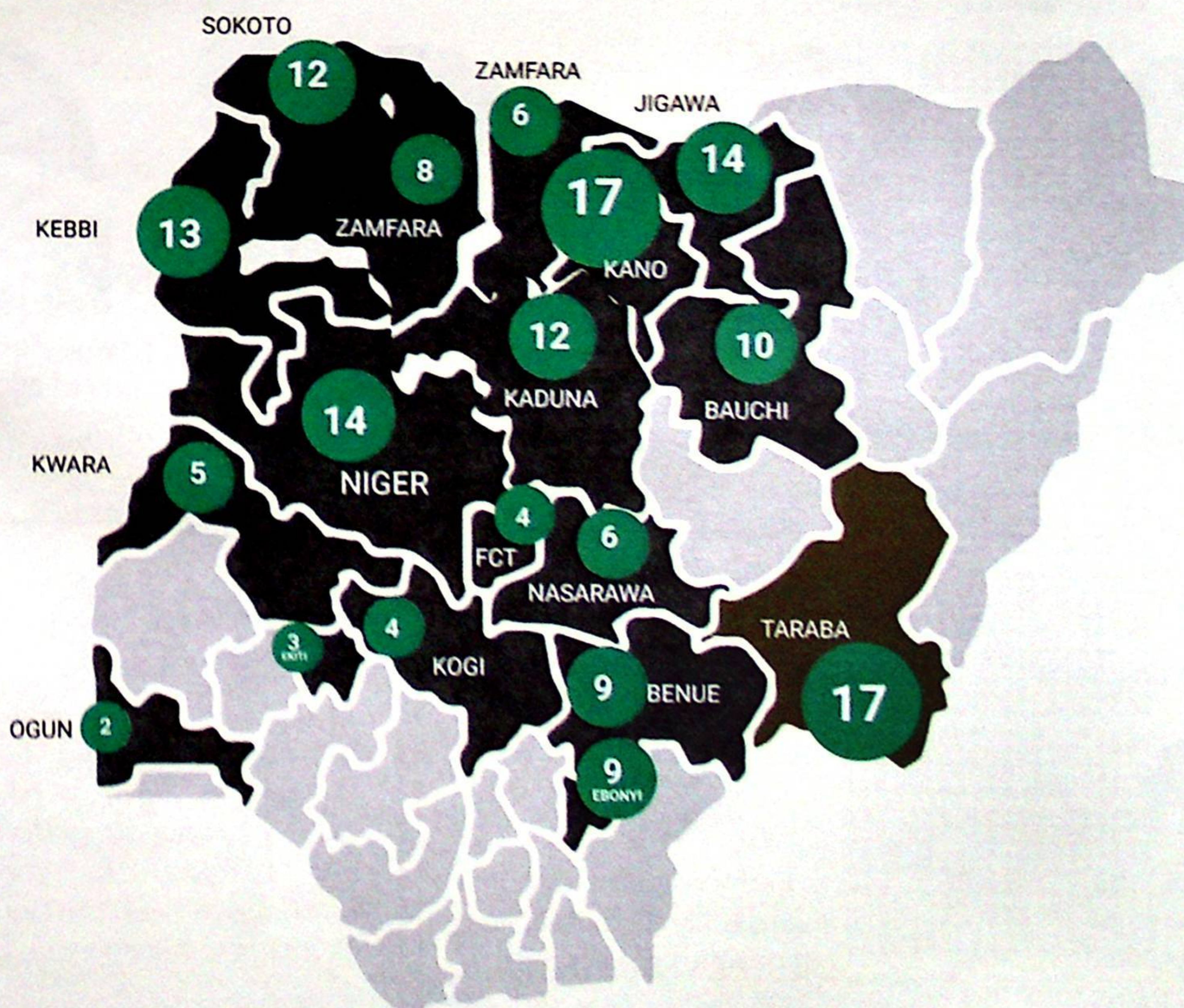
of paddy rice is produced in the **WET SEASON** representing 12,662,541 tonnes



25%

of paddy rice is produced in the **DRY SEASON** representing 4,262,613 tonnes

Rice Clusters Across Major Rice Producing States



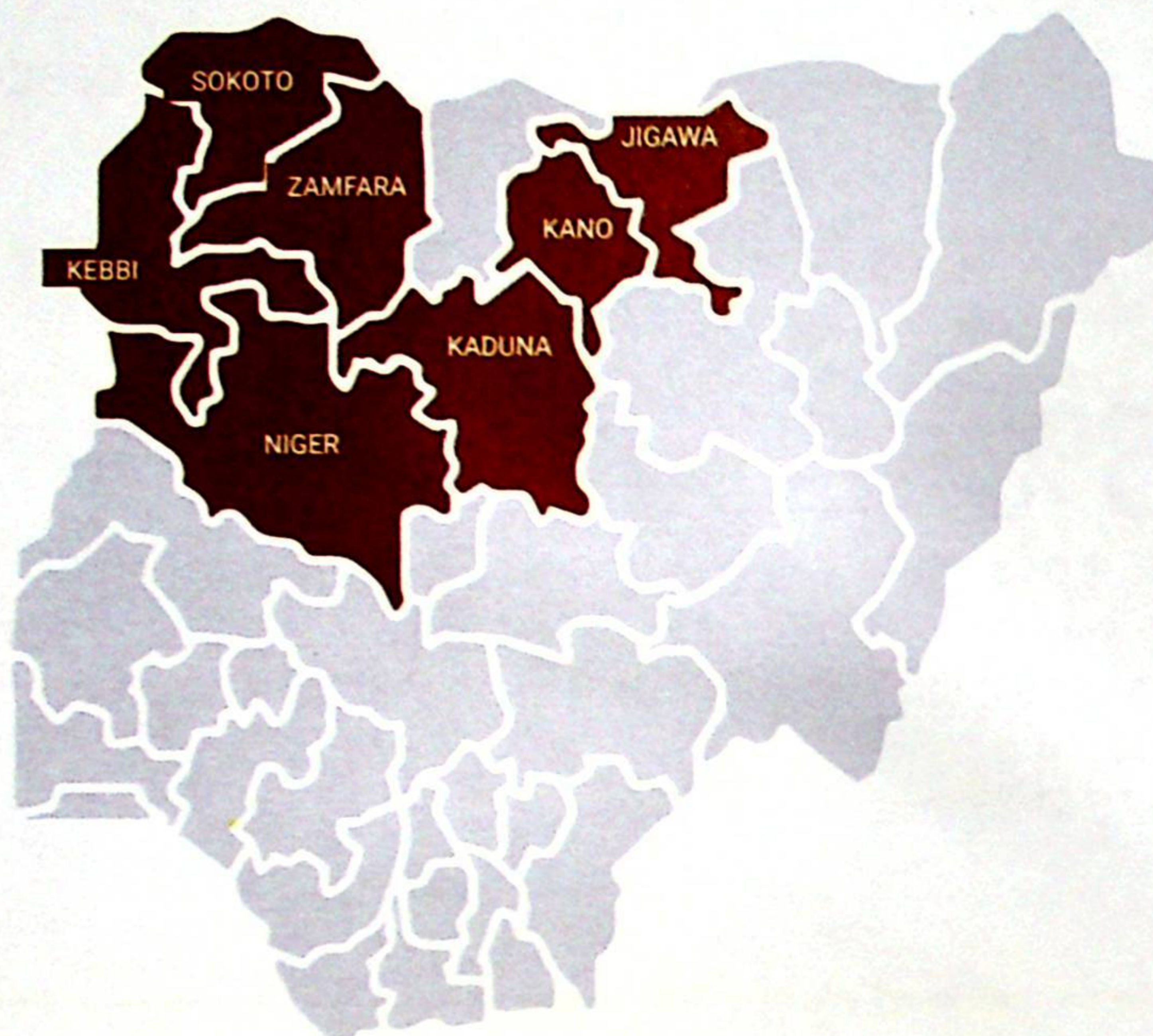


Major Findings

2017-2018

72%

of rice is produced in 7 States in the North West Nigeria



Potential for Increasing Productivity



13%

of farmers reported using high yielding planting method (transplanting seedlings)



32%

use irrigation



OVER 60%

only produce in just one cycle



56%

have access to at least 1 ha of additional land

Factors Influencing the Choice of Rice Production

Farming Conditions



Climatic & soil conditions was the major determinant of the choice rice production; profit and income came after this

Government Support



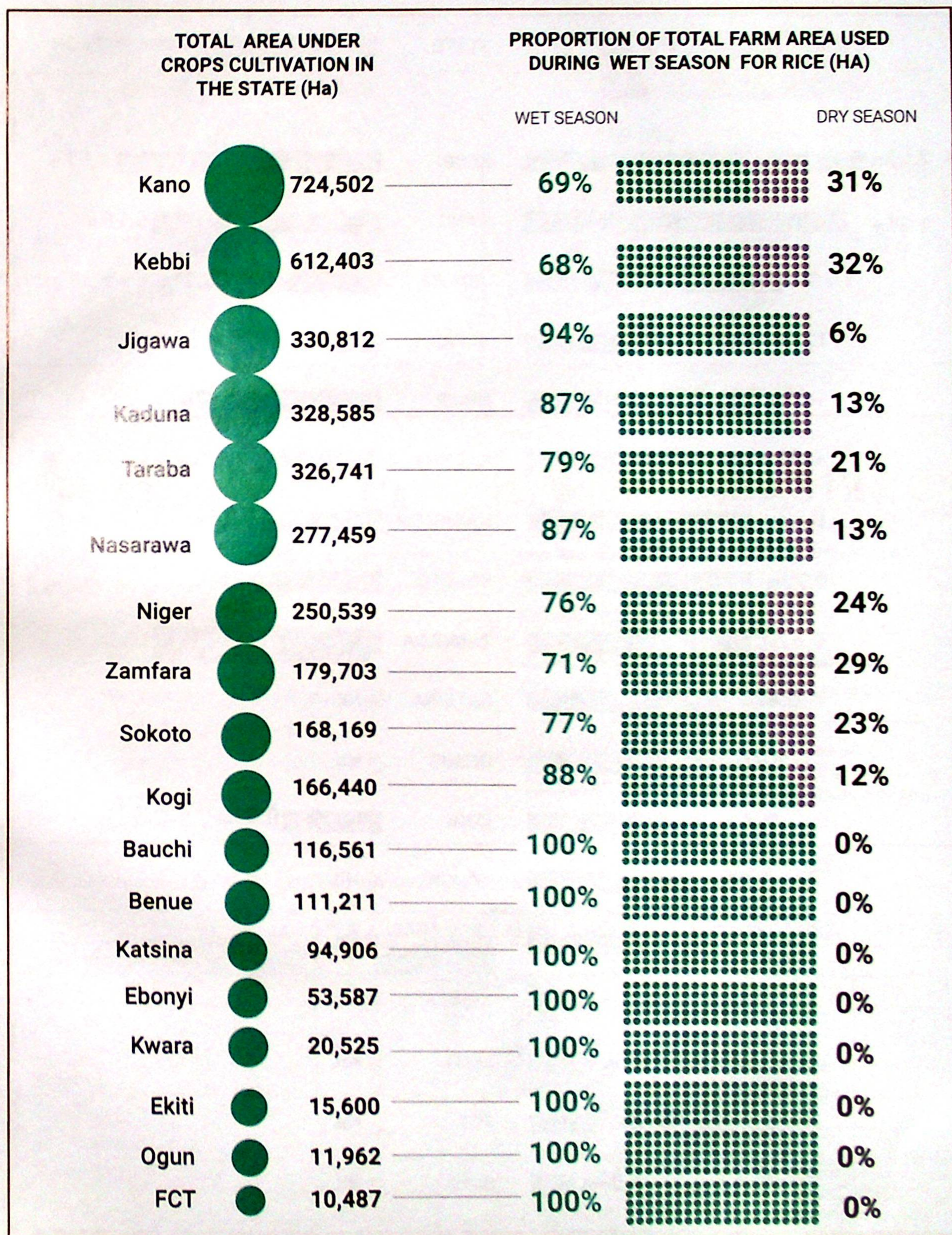
Farmers were least influenced by the availability of government support

94%



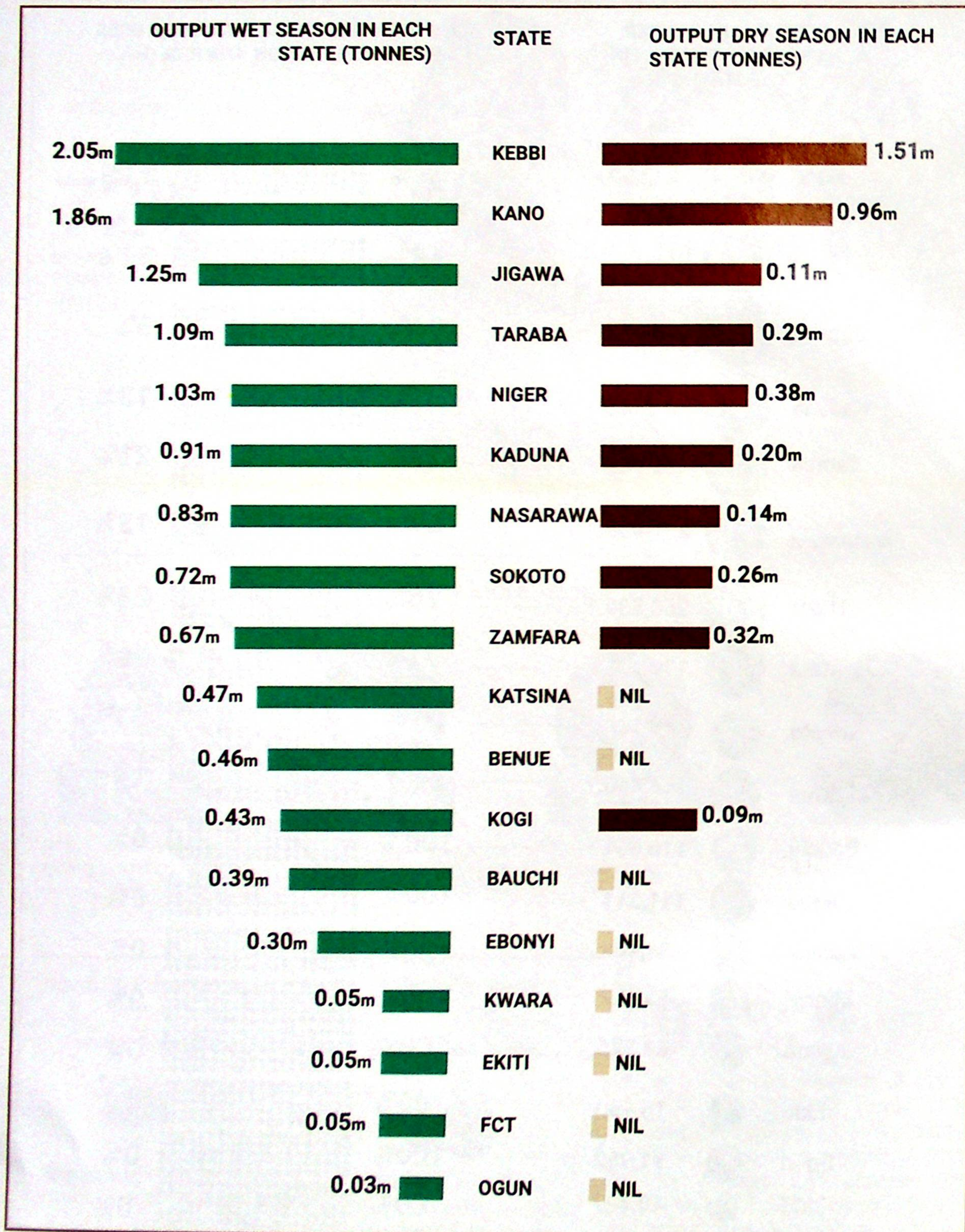
of rice farmers are male, of which 90% are household heads with majority having 6-10 family members. Increase in performance of rice farmers can improve the livelihood of over 8 million people – all things remaining equal

Major Findings



Major Findings

Report on the ...





Katsina State

Farm Area Cultivated for Rice Farming



Wet Season **116,561** ha

Dry Season **NO CULTIVATION**

Total Area **116,561** ha

Rice Output

469,312
tonnes



NO CULTIVATION

Wet Season

Dry Season



Katsina has **63,249** rice farmers in the wet season and no farmer in dry season



6

RICE PRODUCTION CLUSTERS exist in the State



469,312 tonnes of rice is produced by farmers in this state

Average Yield (FGD)

Wet Season



4.03
tonnes/ha

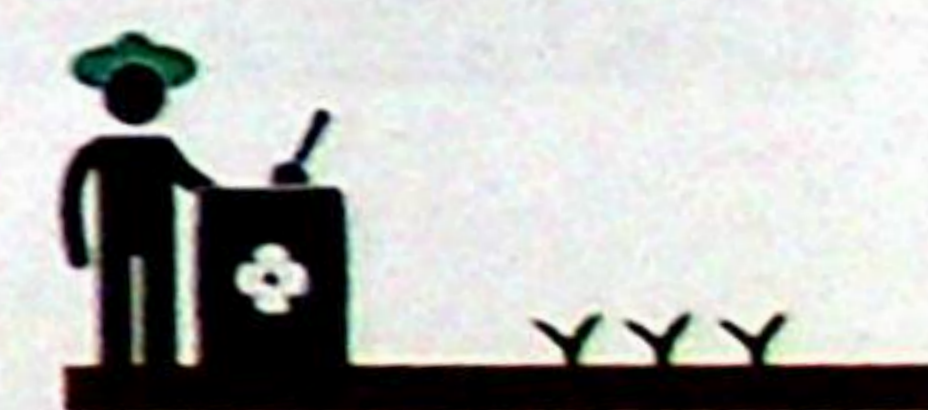
Dry Season

NO VALUE

Katsina state has

23,699

Farmers outside Rice farming groups



This represents **37.47%** of Rice farmers in the State

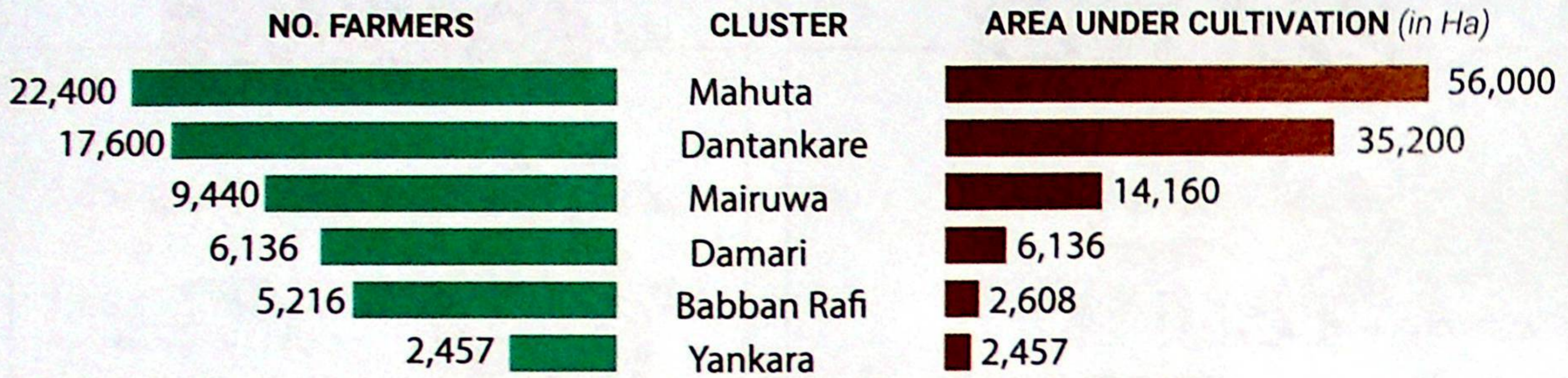
Katsina State Calendar of Rice Production and Post-Harvest Activities

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Land Preparation			█	█								
Tiling				█	█							
Planting				█	█							
Fertilizer application					█	█						
Spraying					█	█						
Weeding						█	█					
Harvesting								█	█			
Threshing									█	█		
Drying										█		
Bagging											█	

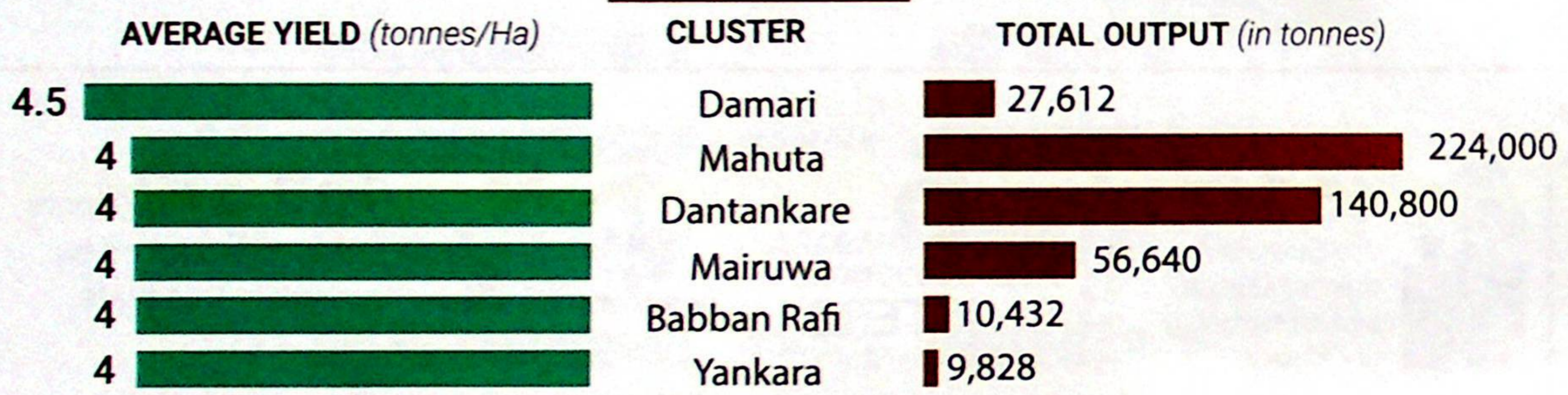


Katsina State

WET SEASON



WET SEASON



Note: Rice production only happens in the wet season



Bauchi State

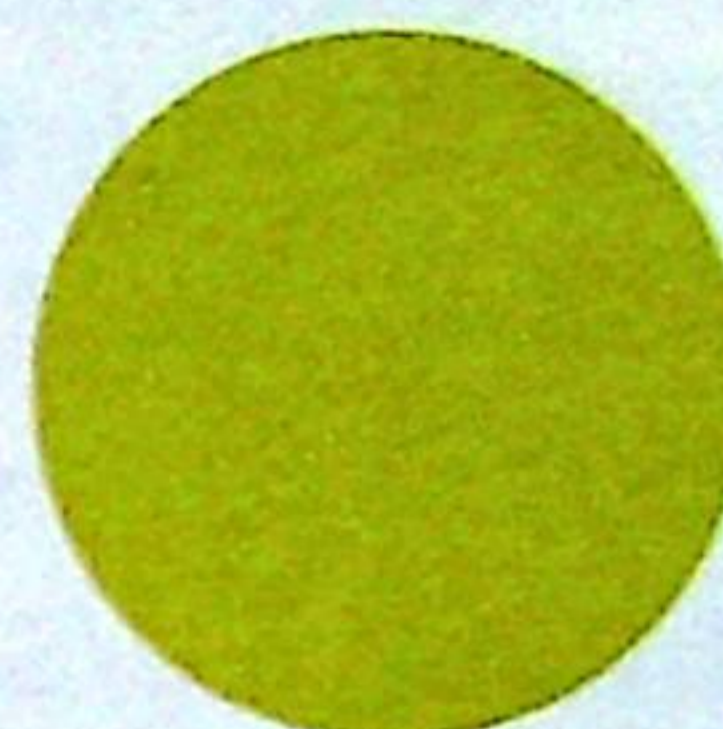
Farm Area Cultivated for Rice Farming



Wet Season **111,211** ha
 Dry Season **NO CULTIVATION**
 Total Area **111,211** ha

Rice Output

391,927.5
tonnes



NO CULTIVATION

Wet Season Dry Season



Bauchi has **48,610** rice farmers in the wet season and no farmer in dry season



10 RICE PRODUCTION CLUSTERS exist in the State

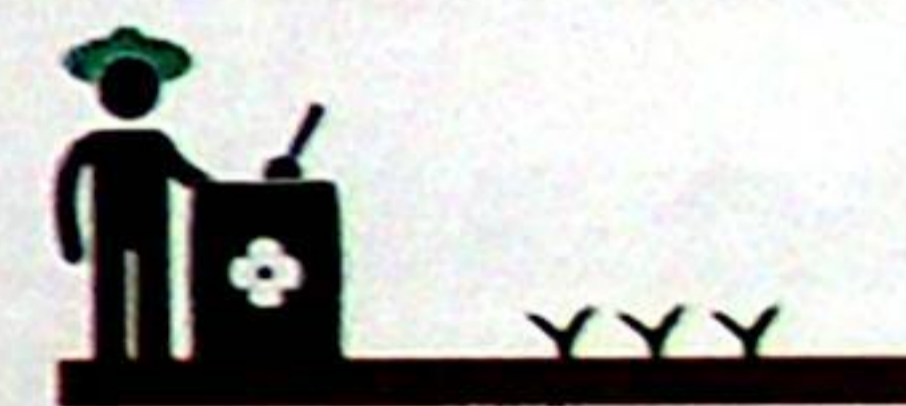


391,927 tonnes of rice is produced by farmers in this state

Bauchi State has

40,600

Farmers outside Rice farming groups



Average Yield (FGD)

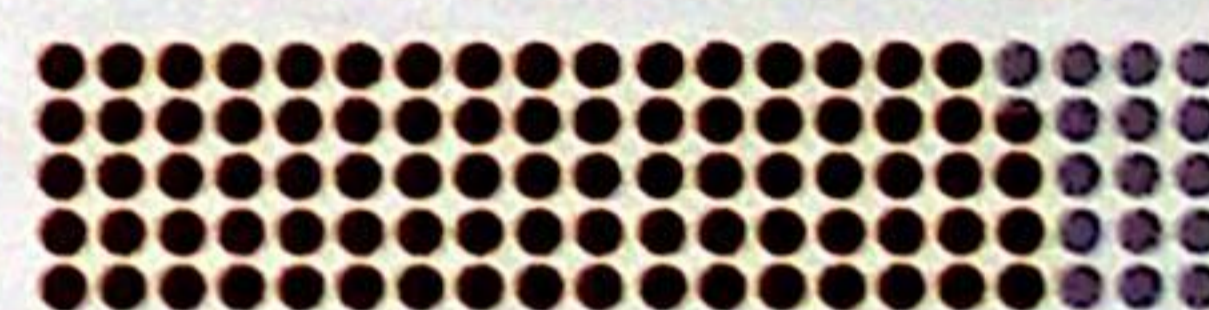
Wet Season



3.52
tonnes/ha

Dry Season

NO VALUE



This represents **83.52%** of Rice farmers in the State

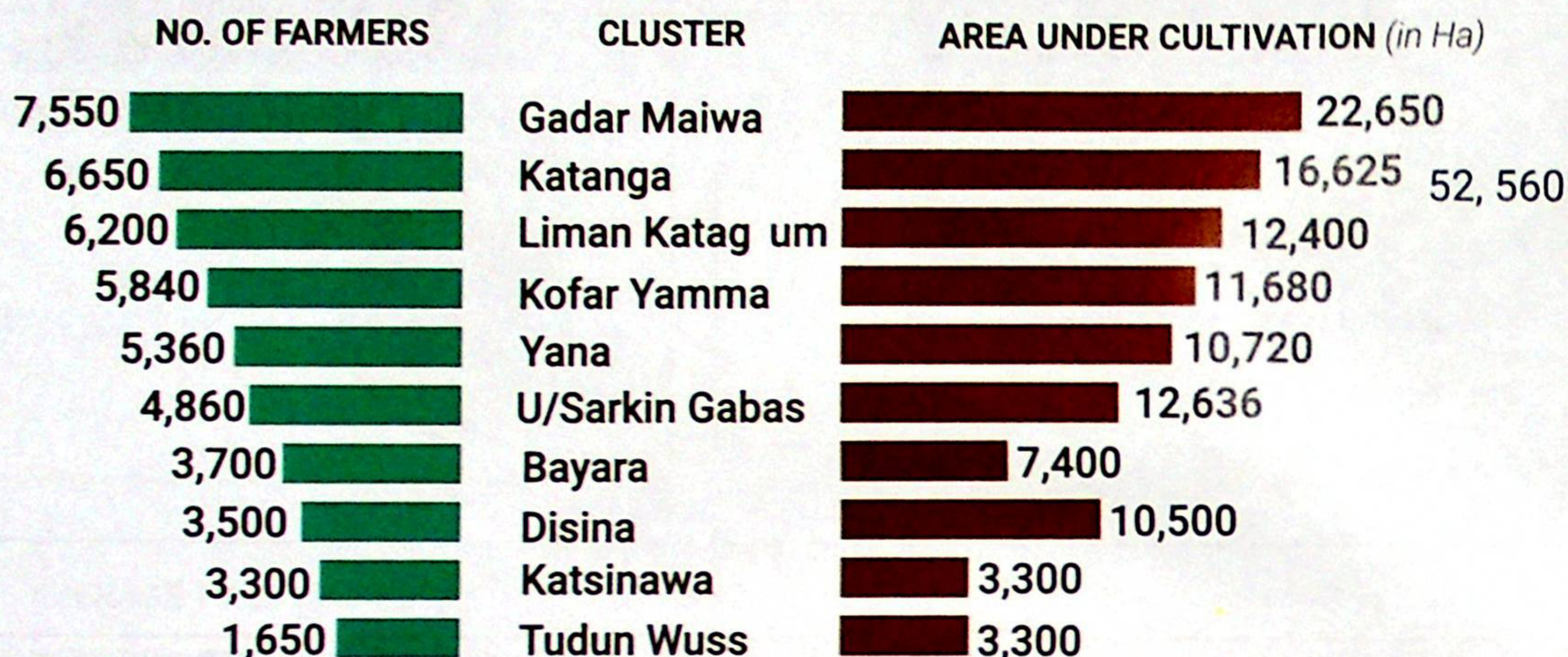
Bauchi State Calendar of Rice Production and Post-Harvest Activities

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Land Preparation												
Tiling												
Planting												
Fertilizer application												
Spraying												
Weeding												
Harvesting												
Threshing												
Drying												
Bagging												

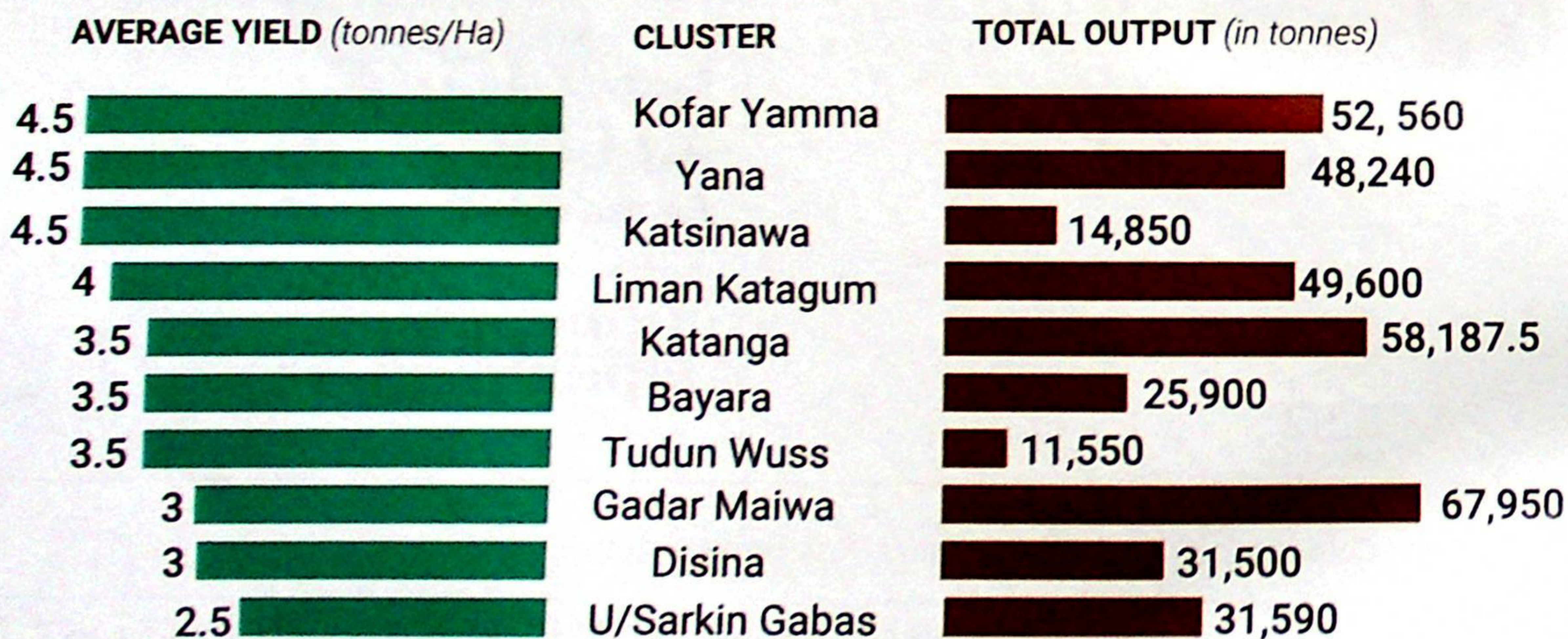


Bauchi State

WET SEASON



WET SEASON



Note: Rice production only happens in the wet season



Benue State

Farm Area Cultivated for Rice Farming



Wet Season **94,906** ha

Dry Season **NO CULTIVATION**

Total Area **94,906** ha

Rice Output

467,640
tonnes

NO CULTIVATION

Wet Season

Dry Season



Benue has **11,456** rice farmers in the wet season and no farmer in dry season



9 RICE PRODUCTION CLUSTERS exist in the State



467,640 tonnes of rice is produced by farmers in this state

Average Yield (FGD)

Wet Season

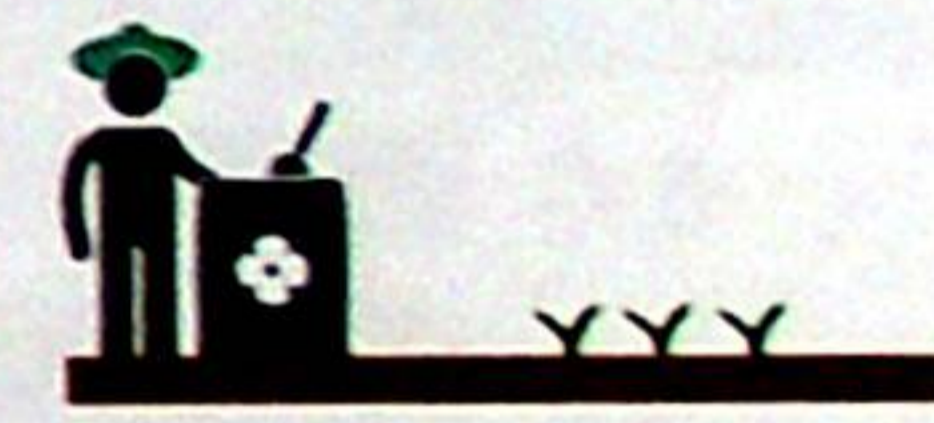
Dry Season



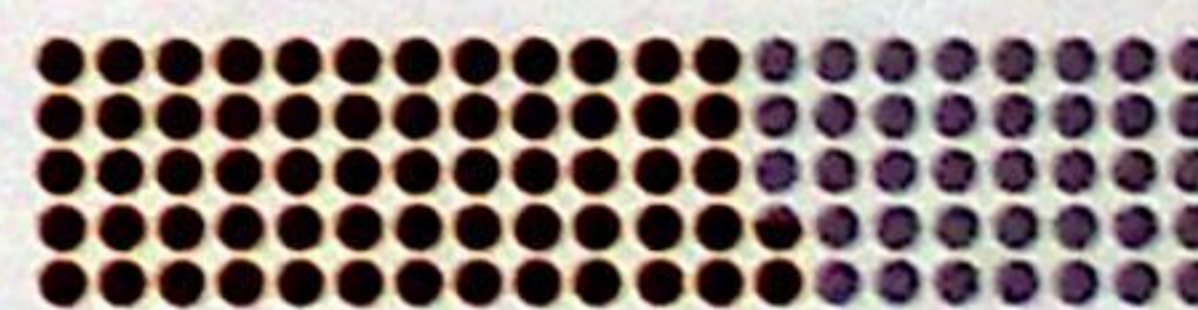
4.93
tonnes/ha

NO VALUE

Benue State has **12,311**



Farmers outside Rice farming groups



This represents **61.27%** of Rice farmers in the State

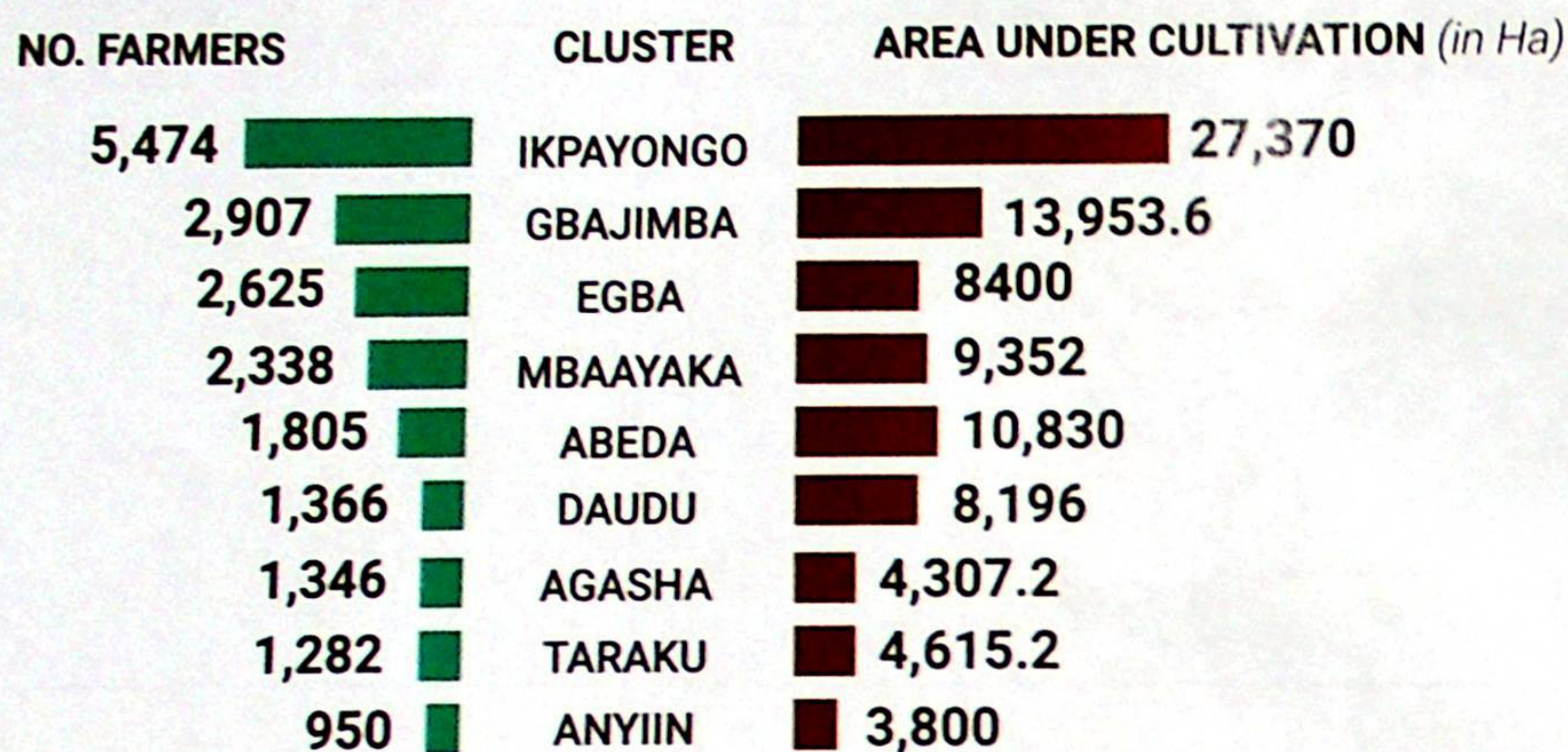
Benue State Calendar of Rice Production and Post-Harvest Activities

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Land Preparation												
Tiling												
Planting												
Fertilizer application												
Spraying												
Weeding												
Harvesting												
Threshing												
Drying												
Bagging												

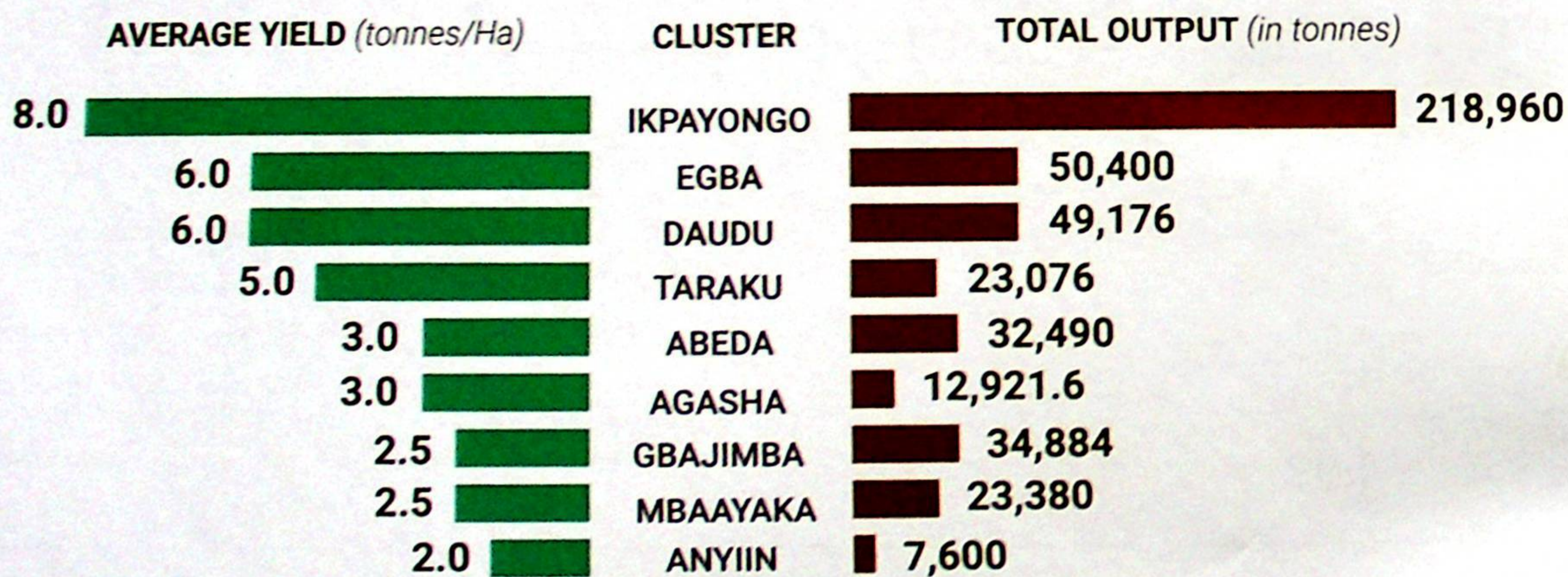


Benue State

WET SEASON



WET SEASON



Note: Rice production only happens in the wet season



Ebonyi State

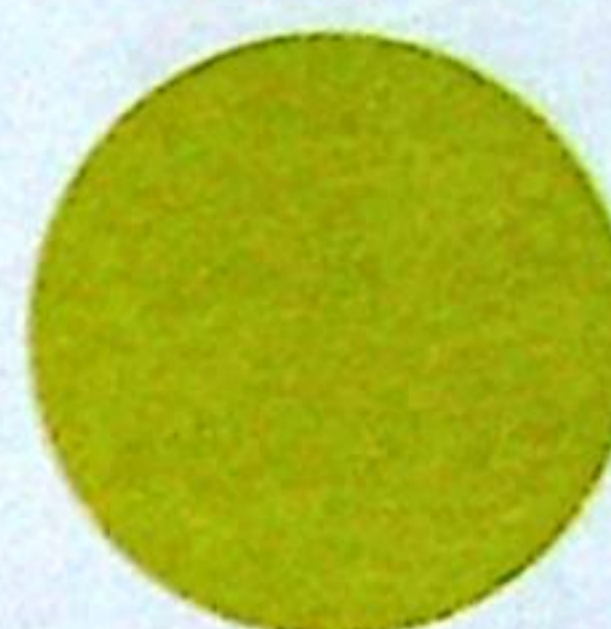
Farm Area Cultivated for Rice Farming



Wet Season **53,587** ha
 Dry Season **NO CULTIVATION**
 Total Area **53,587** ha

Rice Output

297,897
tonnes



NO CULTIVATION

Wet Season Dry Season



Ebonyi has **9,247** rice farmers in the wet season and no farmer in dry season



9 RICE PRODUCTION CLUSTERS exist in the State



927,897 tonnes of rice is produced by farmers in this state

Average Yield (FGD)

Wet Season

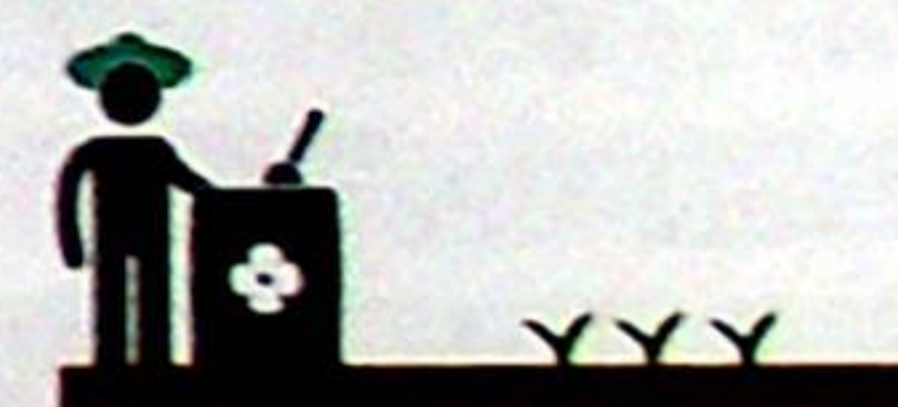


5.56
tonnes/ha

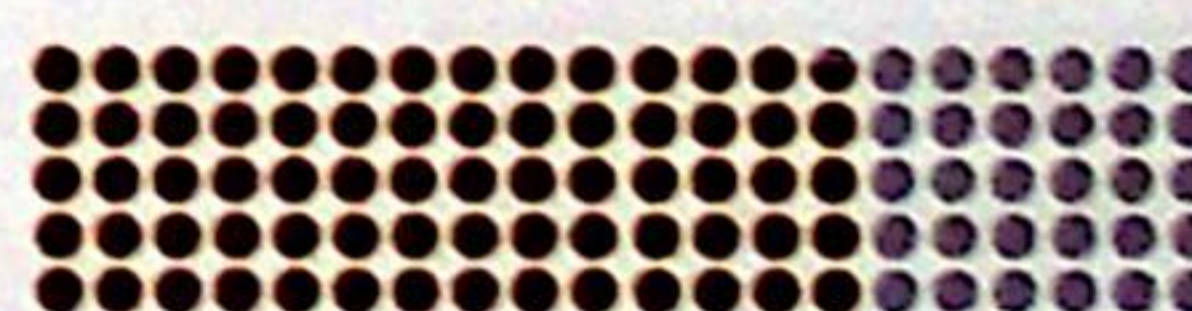
Dry Season

NO VALUE

Ebonyi State has **9,337**



Farmers outside Rice farming groups



This represents **64.79%** of Rice farmers in the State

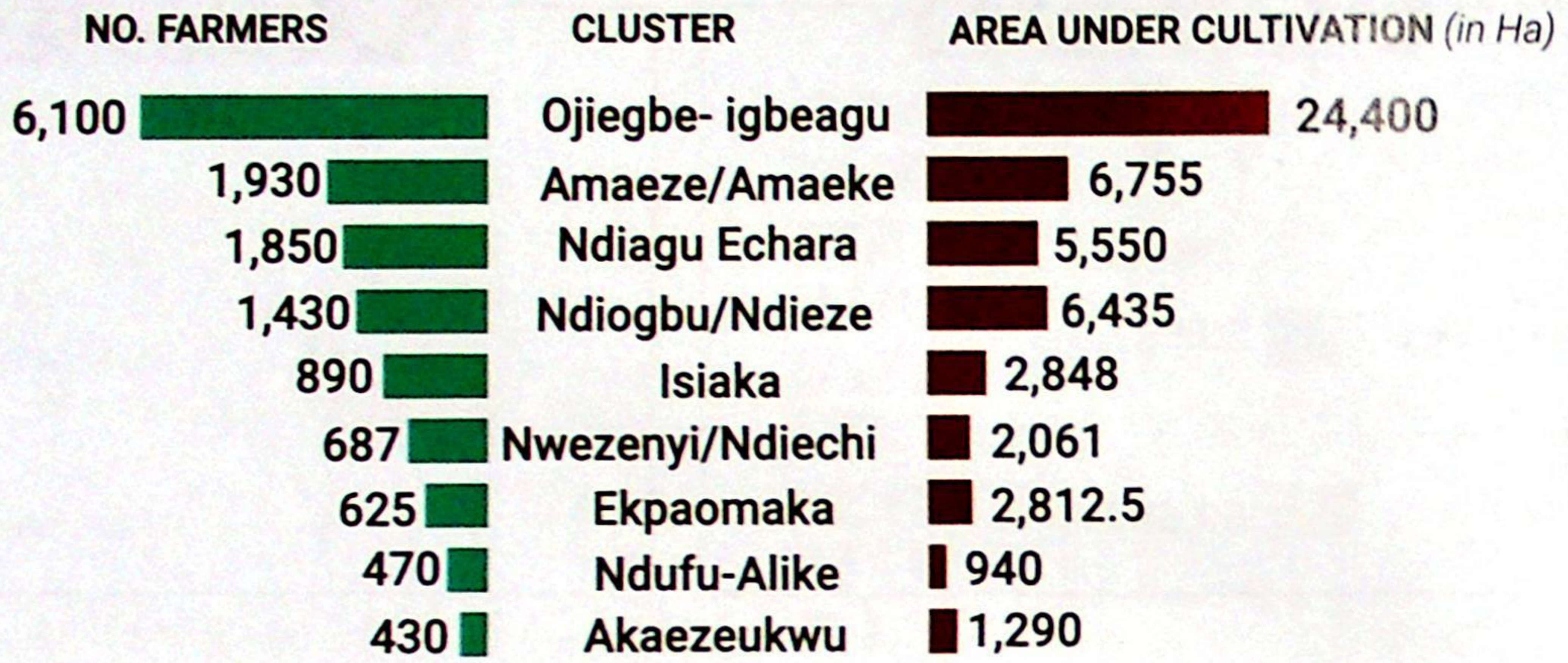
Ebonyi State Calendar of Rice Production and Post-Harvest Activities

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Land Preparation												
Tiling												
Planting												
Fertilizer application												
Spraying												
Weeding												
Harvesting												
Threshing												
Drying												
Bagging												

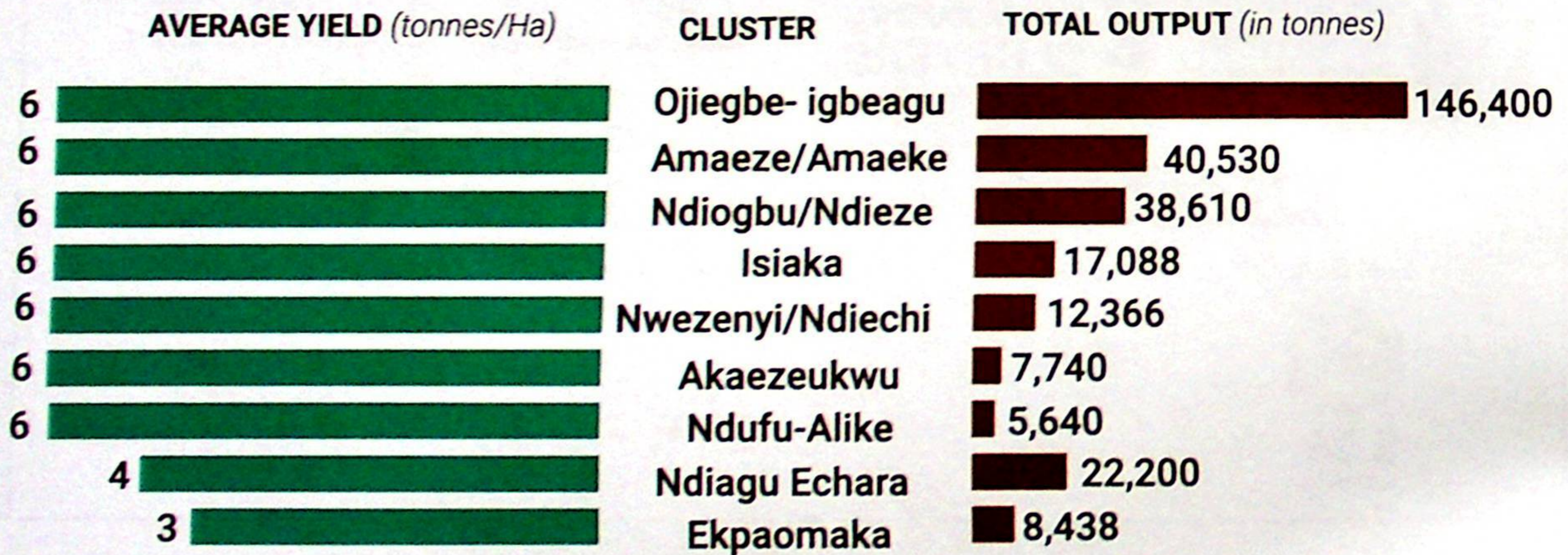


Ebonyi State

WET SEASON



WET SEASON

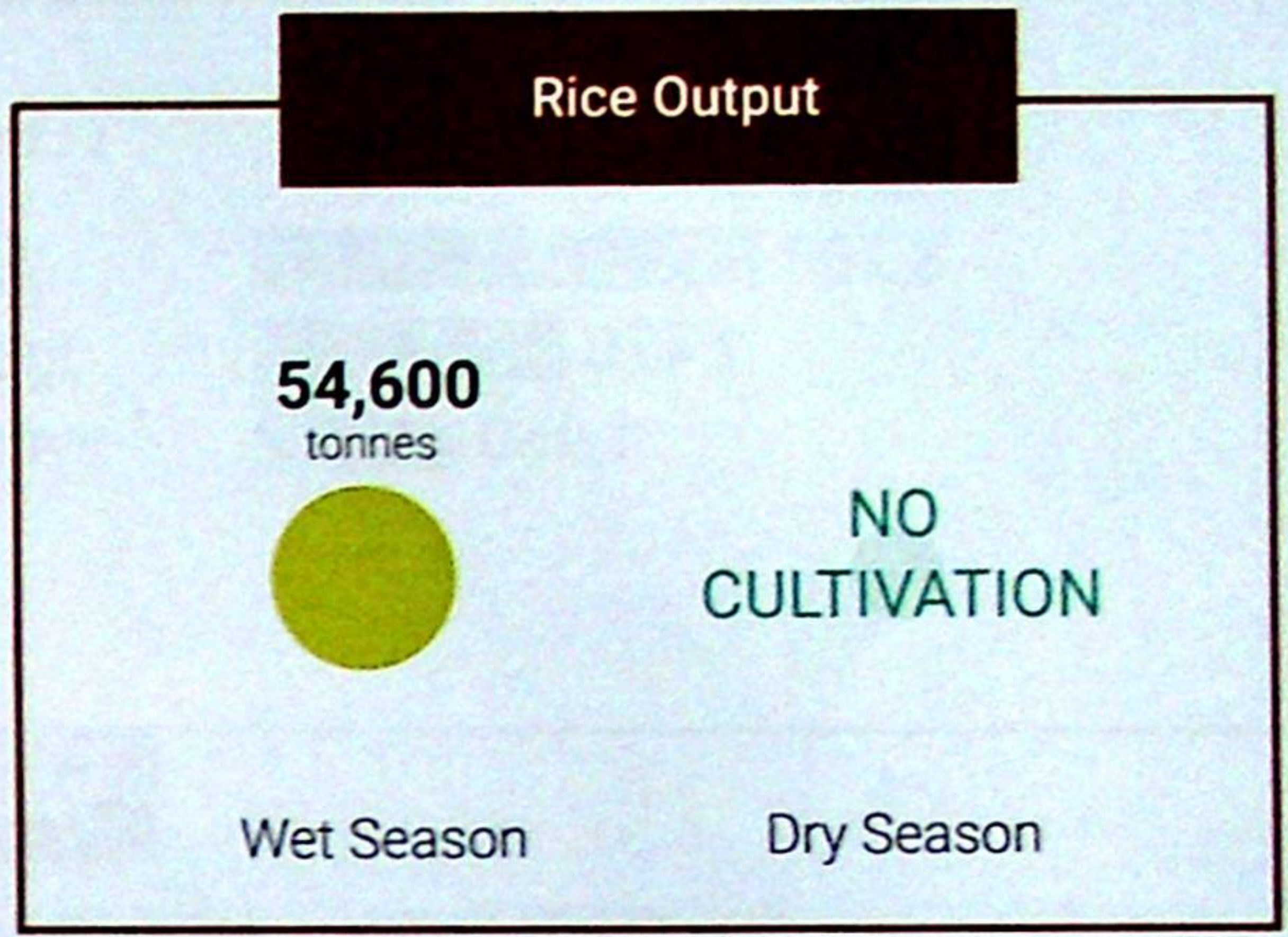
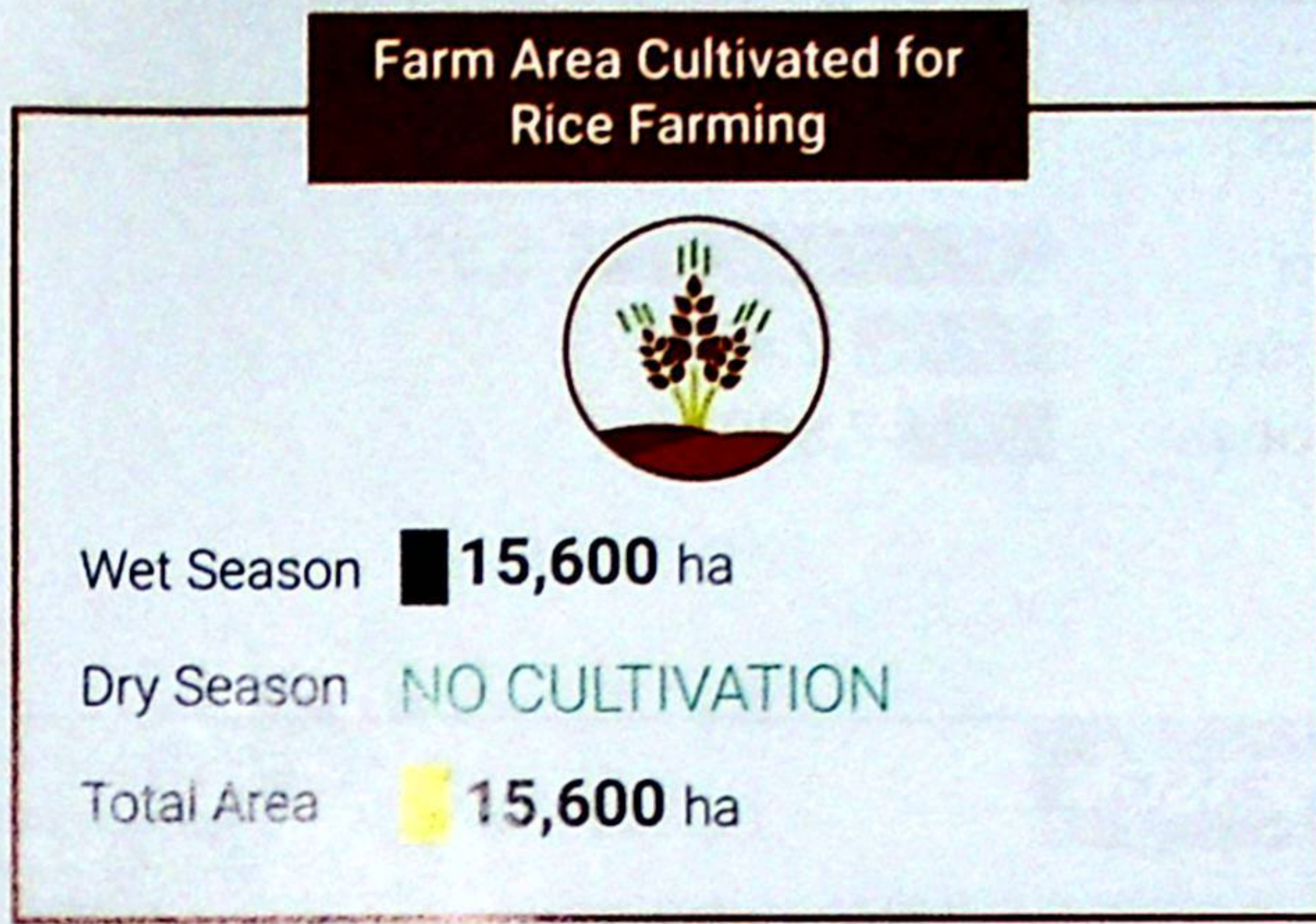



Note: Rice production only happens in the wet season




Ekiti State

91612 0025





Ekiti has **9,300** rice farmers in the wet season and no farmer in dry season




3 RICE PRODUCTION CLUSTERS exist in the State

Average Yield (FGD)

Wet Season **3.50** tonnes/ha

Dry Season **NO VALUE**



54,600 tonnes of rice is produced by farmers in this state

Ekiti State has **4,820** Farmers outside Rice farming groups

This represents **59.36%** of Rice farmers in the State

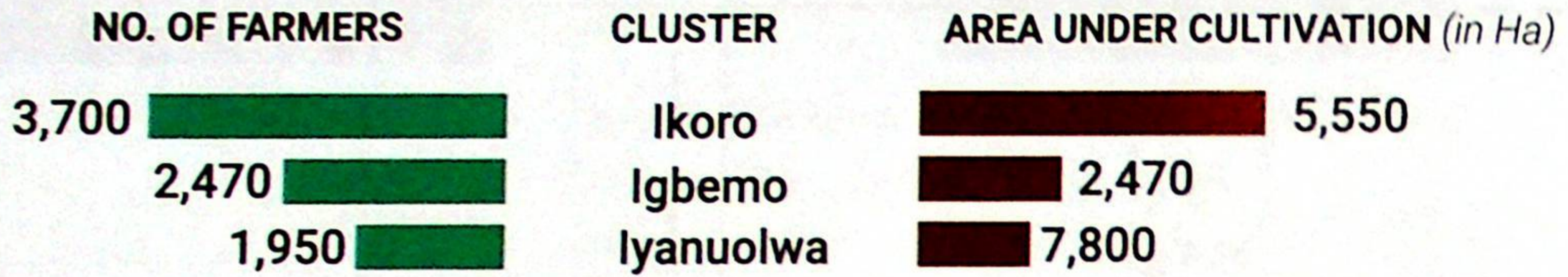
Ekiti State Calendar of Rice Production and Post-Harvest Activities

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Land Preparation												
Tilling												
Planting												
Fertilizer application												
Spraying												
Weeding												
Harvesting												
Threshing												
Drying												
Bagging												



Ekiti State

WET SEASON



WET SEASON



Note: Rice production only happens in the wet season



FCT

Farm Area Cultivated for Rice Farming



Wet Season **10,487.5** ha

Dry Season **NO CULTIVATION**

Total Area **10,487.5** ha

Rice Output

52,133.4
tonnes

NO CULTIVATION

Wet Season

Dry Season



FCT has **9,153** rice farmers in the wet season and no farmer in dry season



4 RICE PRODUCTION CLUSTERS exist in the State



52,133 tonnes of rice is produced by farmers in this state

Average Yield (FGD)

Wet Season

Dry Season



4.97
tonnes/ha

NO VALUE

FCT has **3,893**



Farmers outside Rice farming groups



This represents **42.53%** of Rice farmers in the State

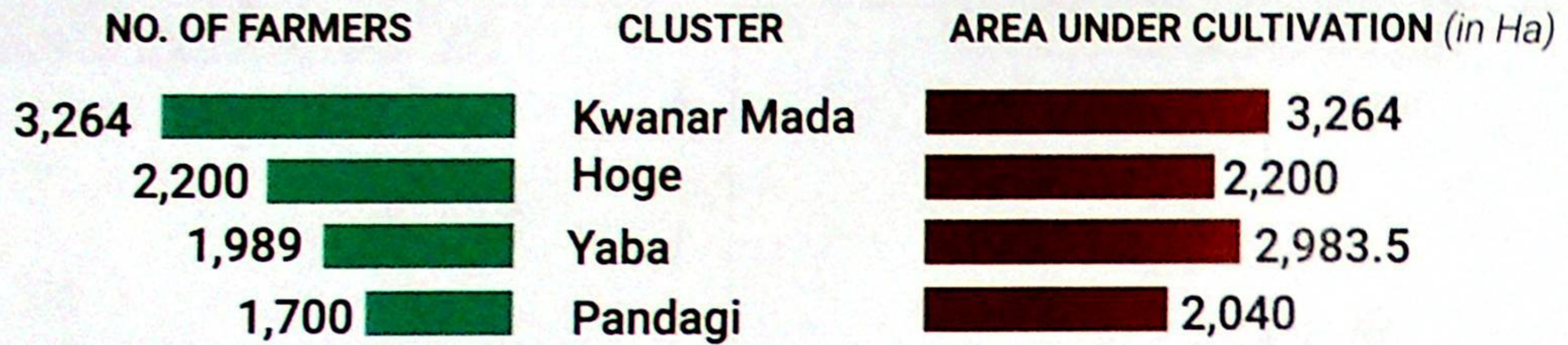
FCT Calendar of Rice Production and Post-Harvest Activities

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Land Preparation												
Tiling												
Planting												
Fertilizer application												
Spraying												
Weeding												
Harvesting												
Threshing												
Drying												
Bagging												

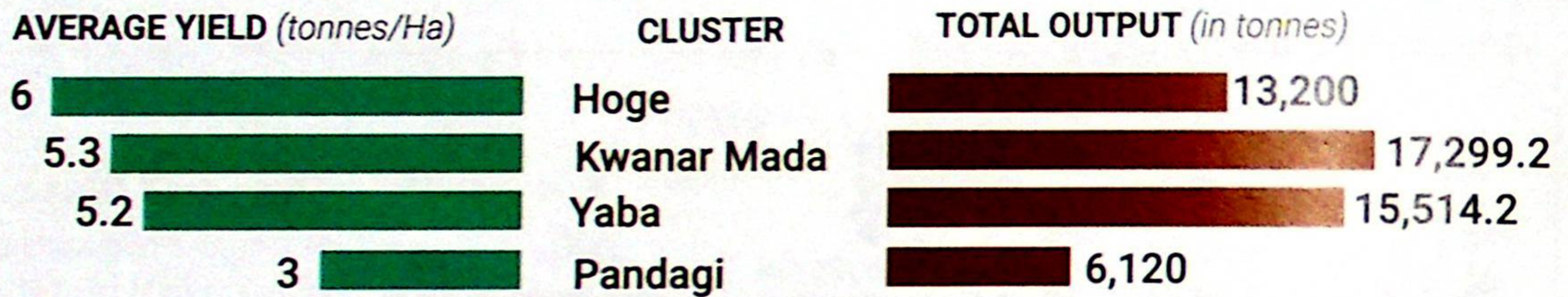


FCT State

WET SEASON



WET SEASON

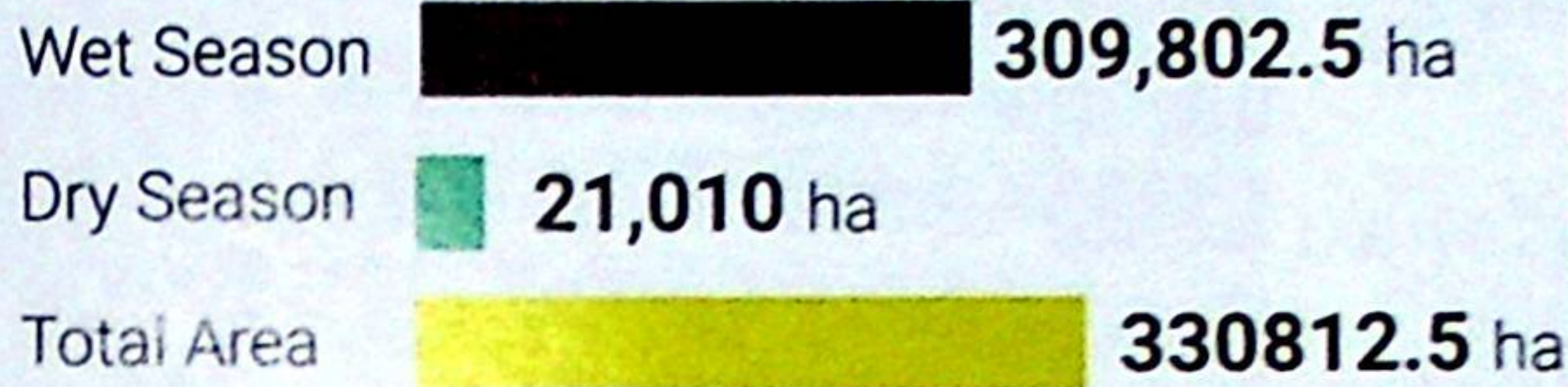


Note: Rice production only happens in the wet season

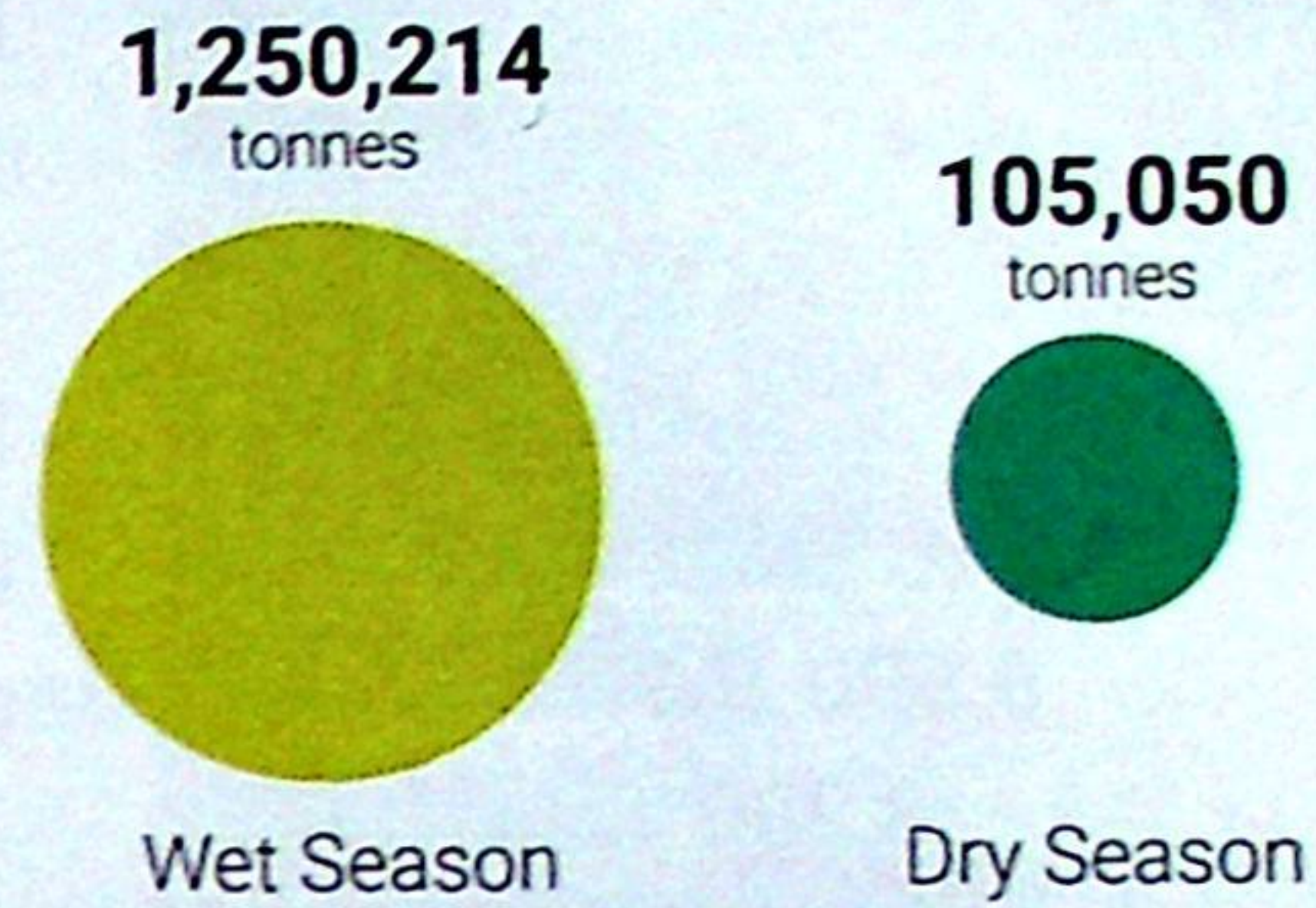


Jigawa State

Farm Area Cultivated for Rice Farming



Rice Output

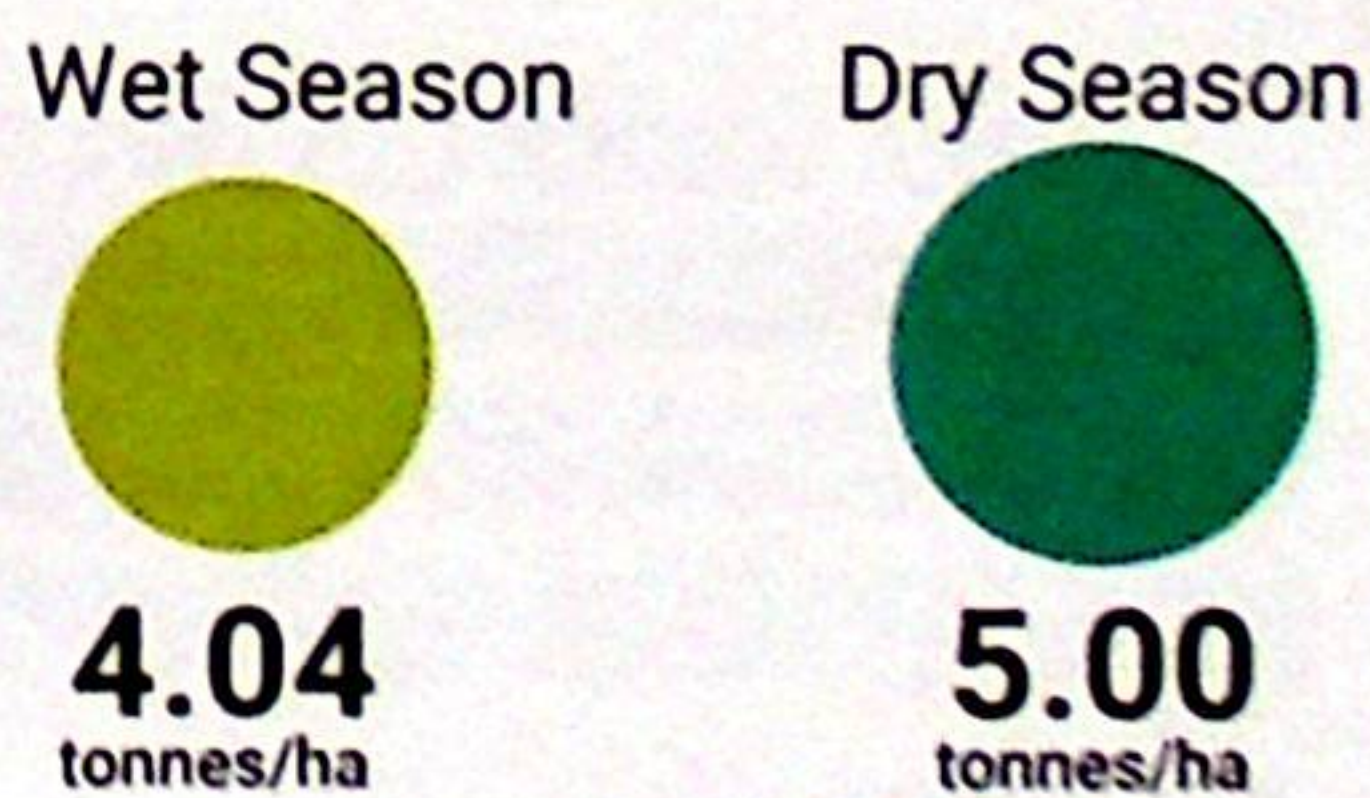


Jigawa has **143,485** rice farmers in the wet season and 10,902 farmers in dry season

14 RICE PRODUCTION CLUSTERS exist in the State

1,355,264 tonnes of rice is produced by farmers in this state

Average Yield (FGD)



Jigawa State has **121,900** Farmers outside Rice farming groups

This represents **85.96%** of Rice farmers in the State

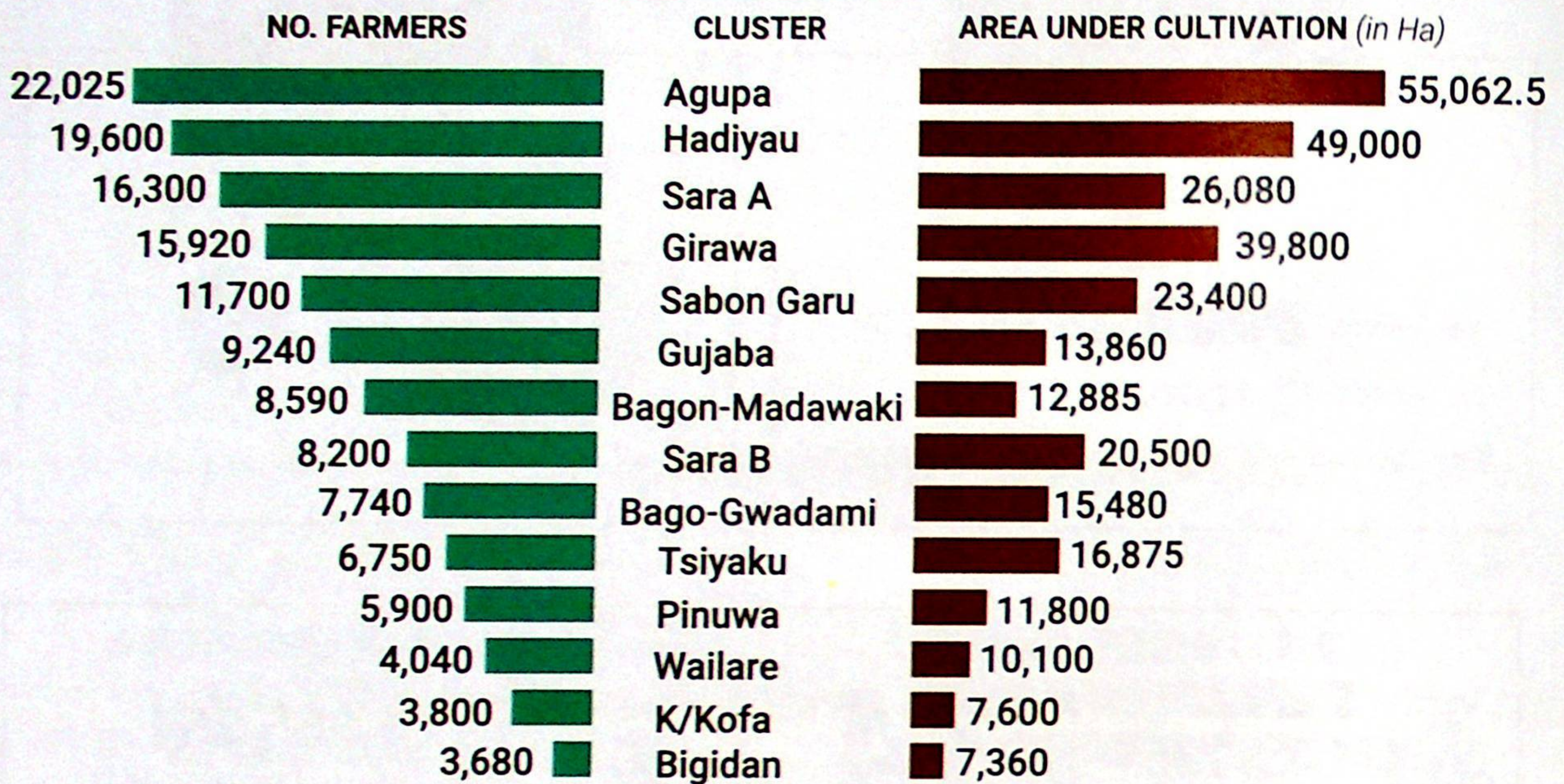
Jigawa State Calendar of Rice Production and Post-Harvest Activities

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Land Preparation												
Tiling												
Planting												
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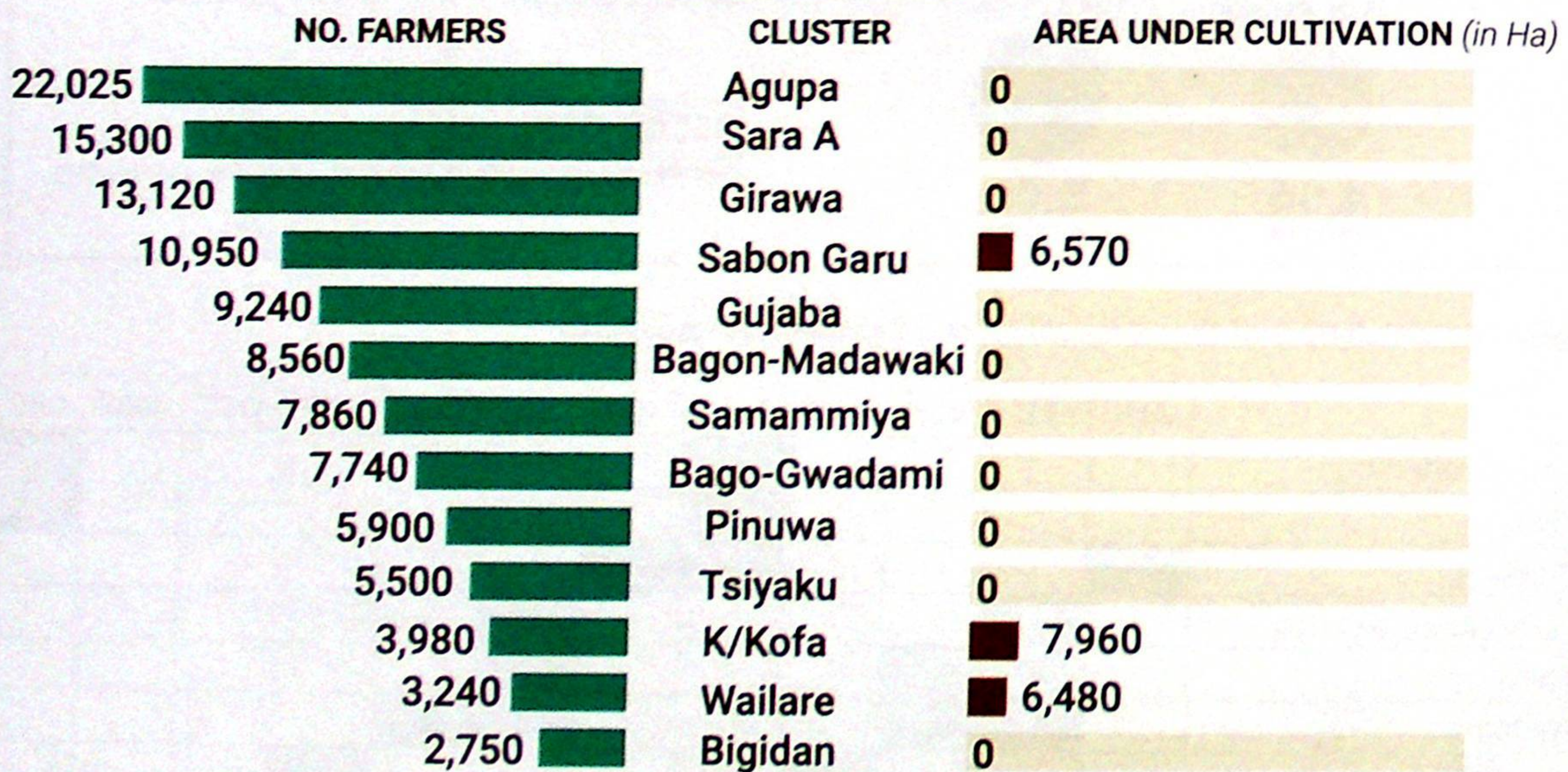


Jigawa State

WET SEASON



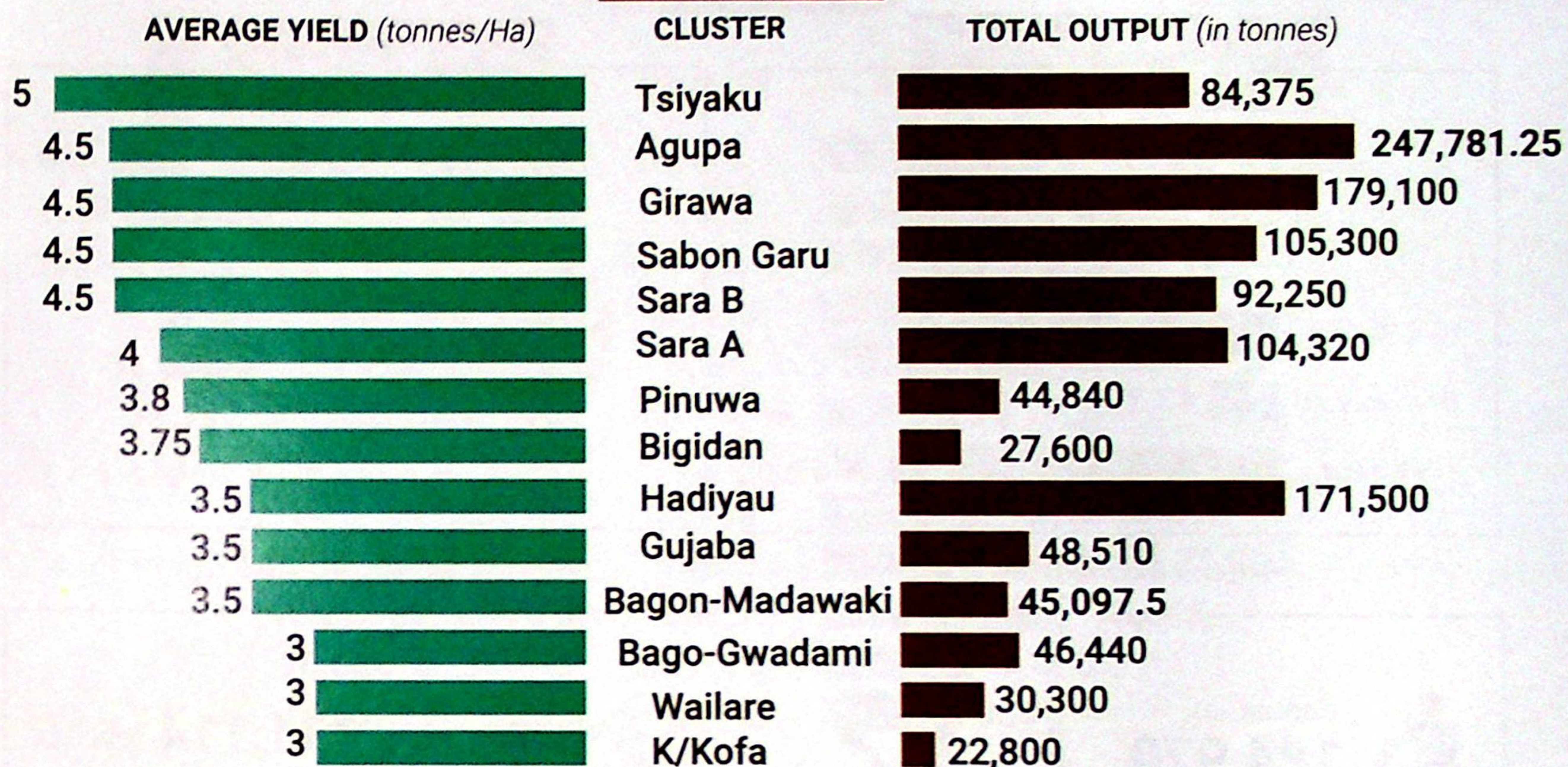
DRY SEASON



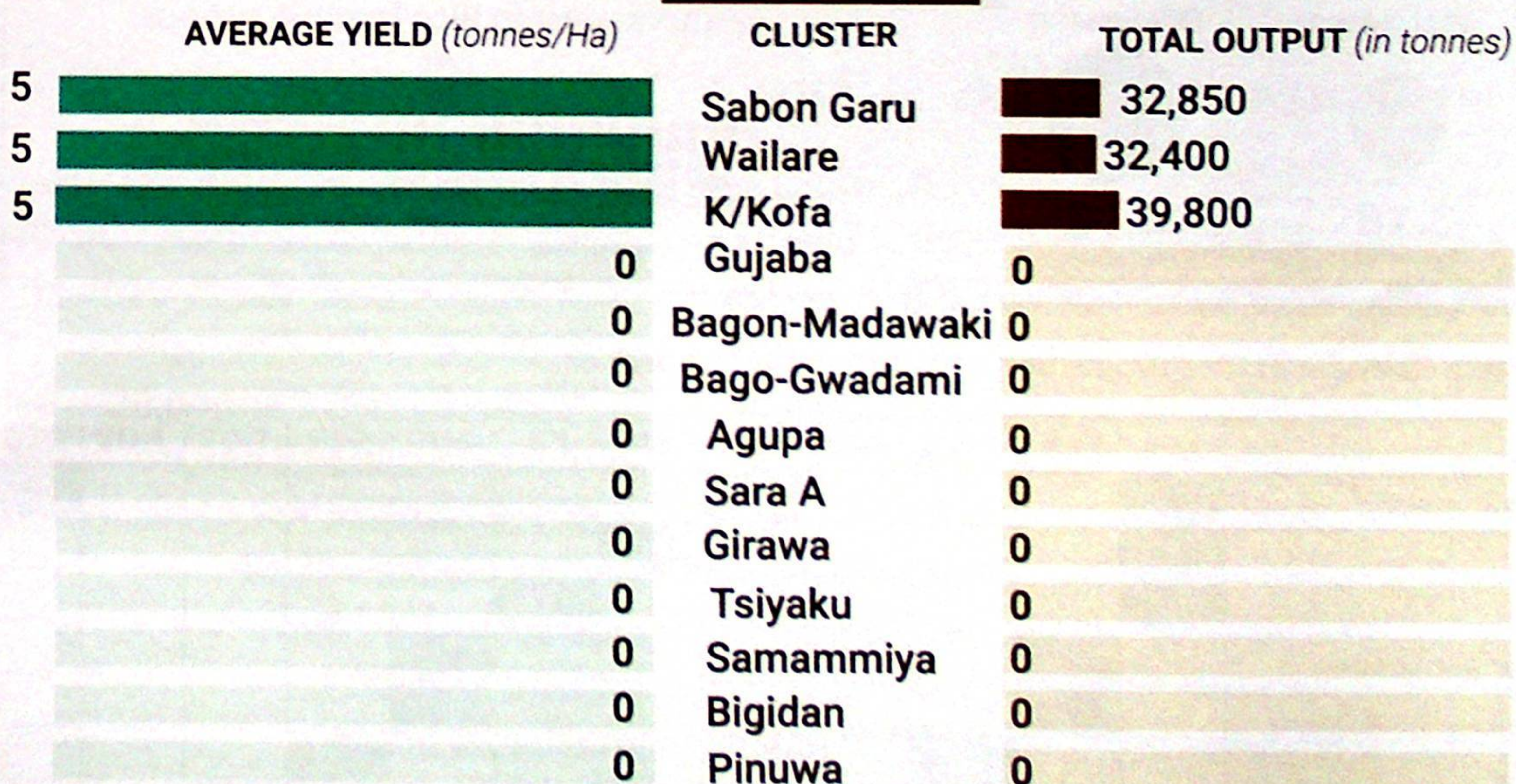


Jigawa State

WET SEASON



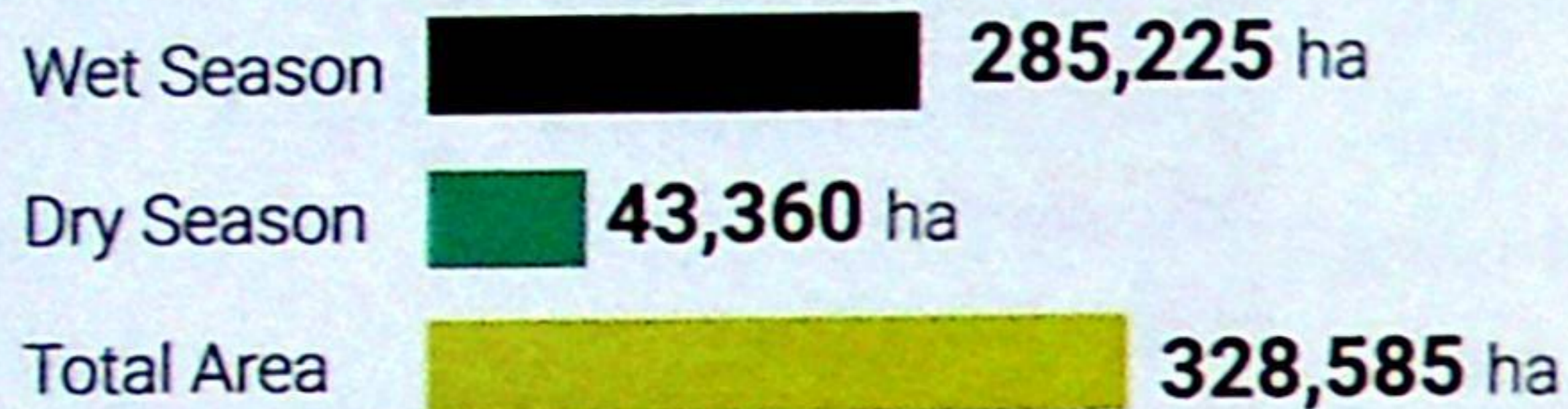
DRY SEASON





Kaduna State

Farm Area Cultivated for Rice Farming



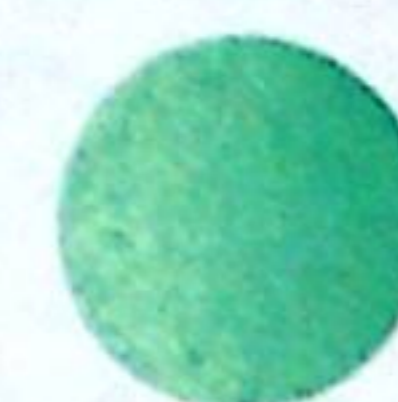
Rice Output

906,127 tonnes



Wet Season

204,986.7 tonnes



Dry Season



Kaduna has **184,970** rice farmers in the wet season and **12,490** farmers in dry season

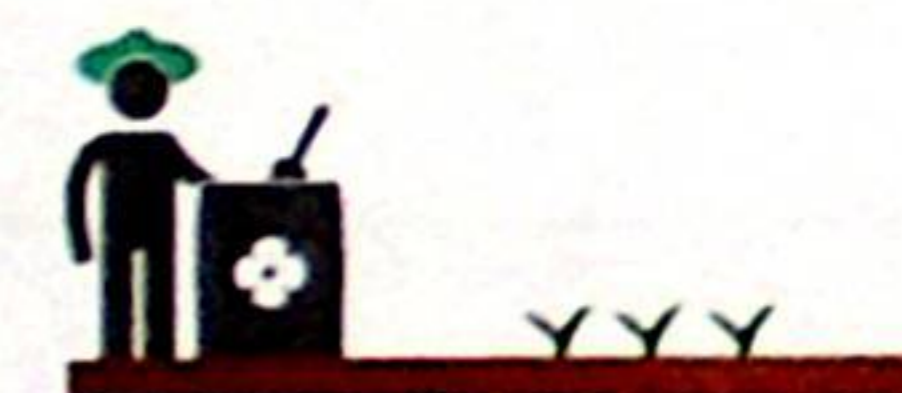


12 RICE PRODUCTION CLUSTERS exist in the State



1,111,114 tonnes of rice is produced by farmers in this state

Kaduna state has **173,385**



Farmers outside Rice farming groups

Average Yield (FGD)

Wet Season

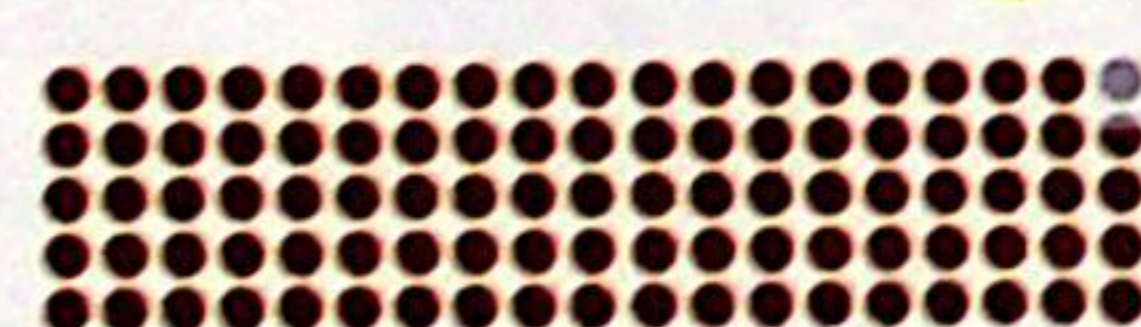


3.18 tonnes/ha

Dry Season



4.73 tonnes/ha



This represents **93.74%** of Rice farmers in the State

Kaduna State Calendar of Rice Production and Post-Harvest Activities

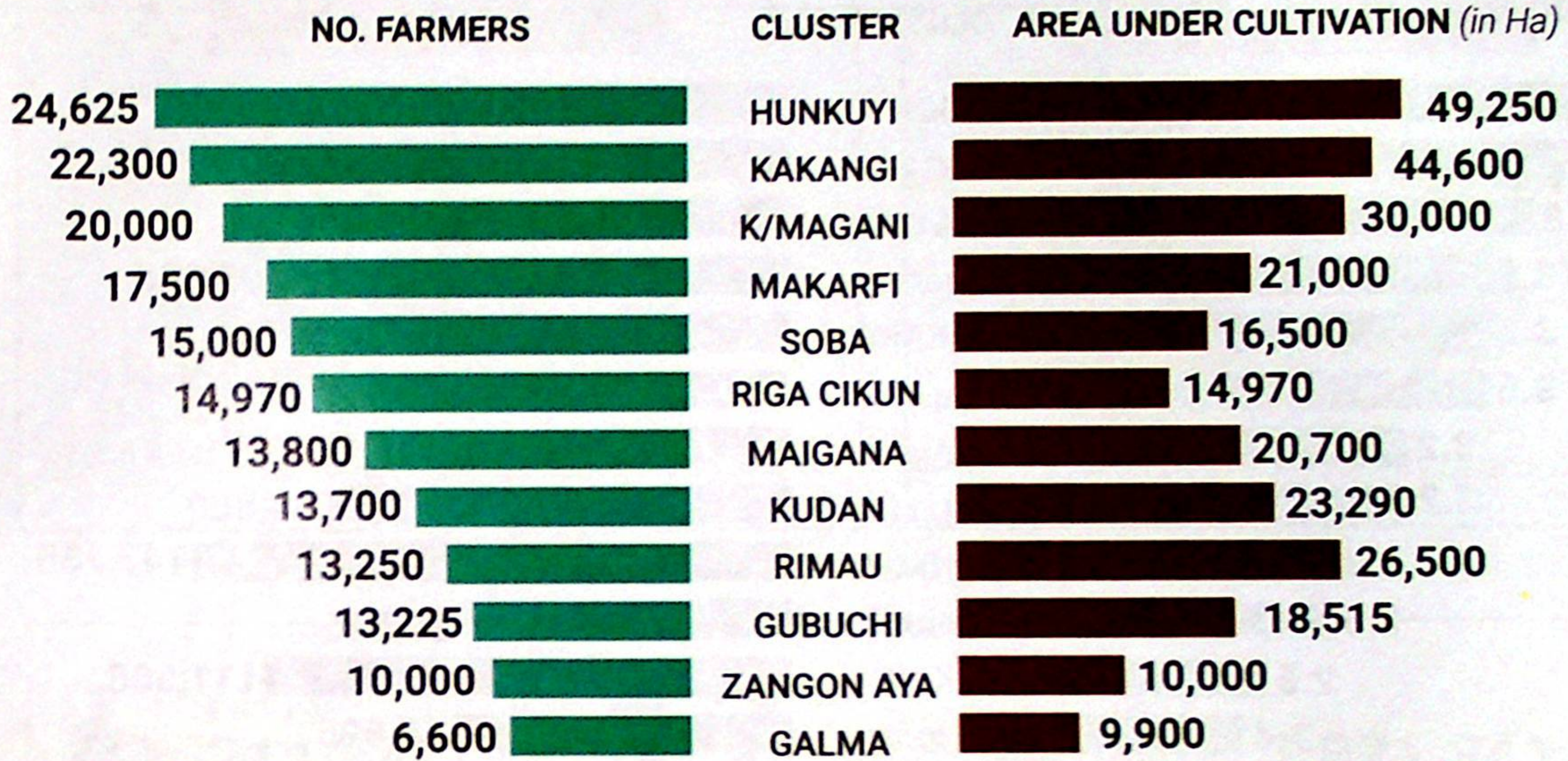
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Land Preparation												
Tiling												
Planting												
Fertilizer application												
Spraying												
Weeding												
Harvesting												
Threshing												
Drying												
Bagging												



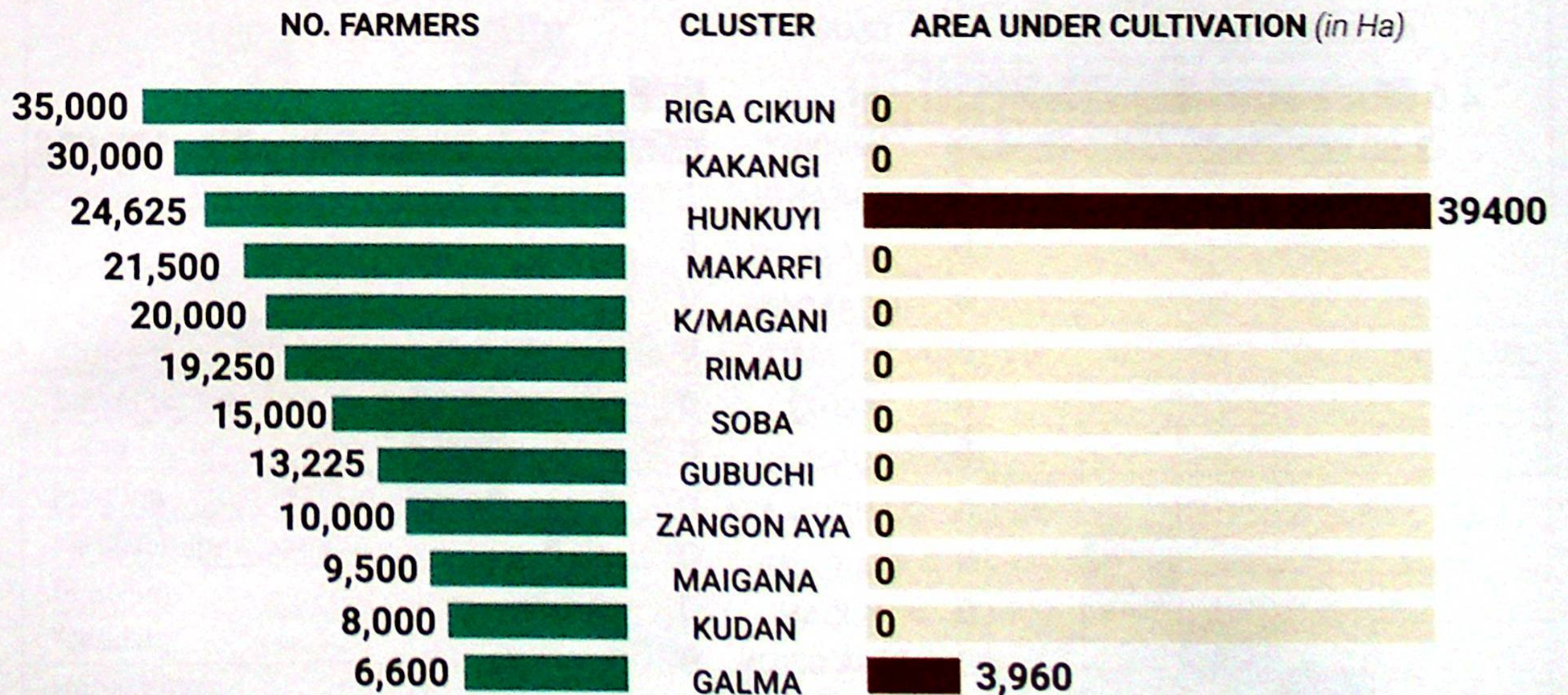
Kaduna State

Kaduna State

WET SEASON



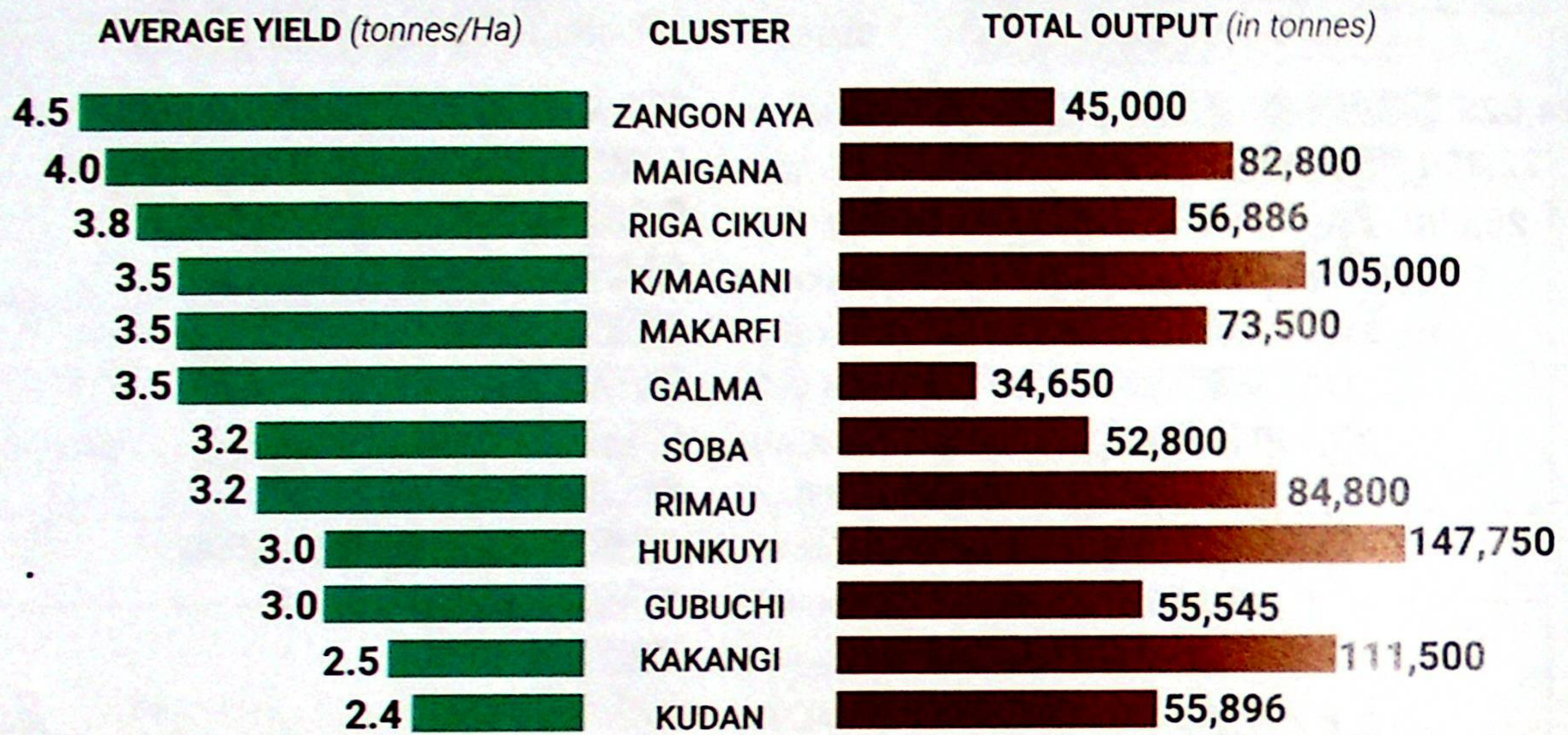
DRY SEASON



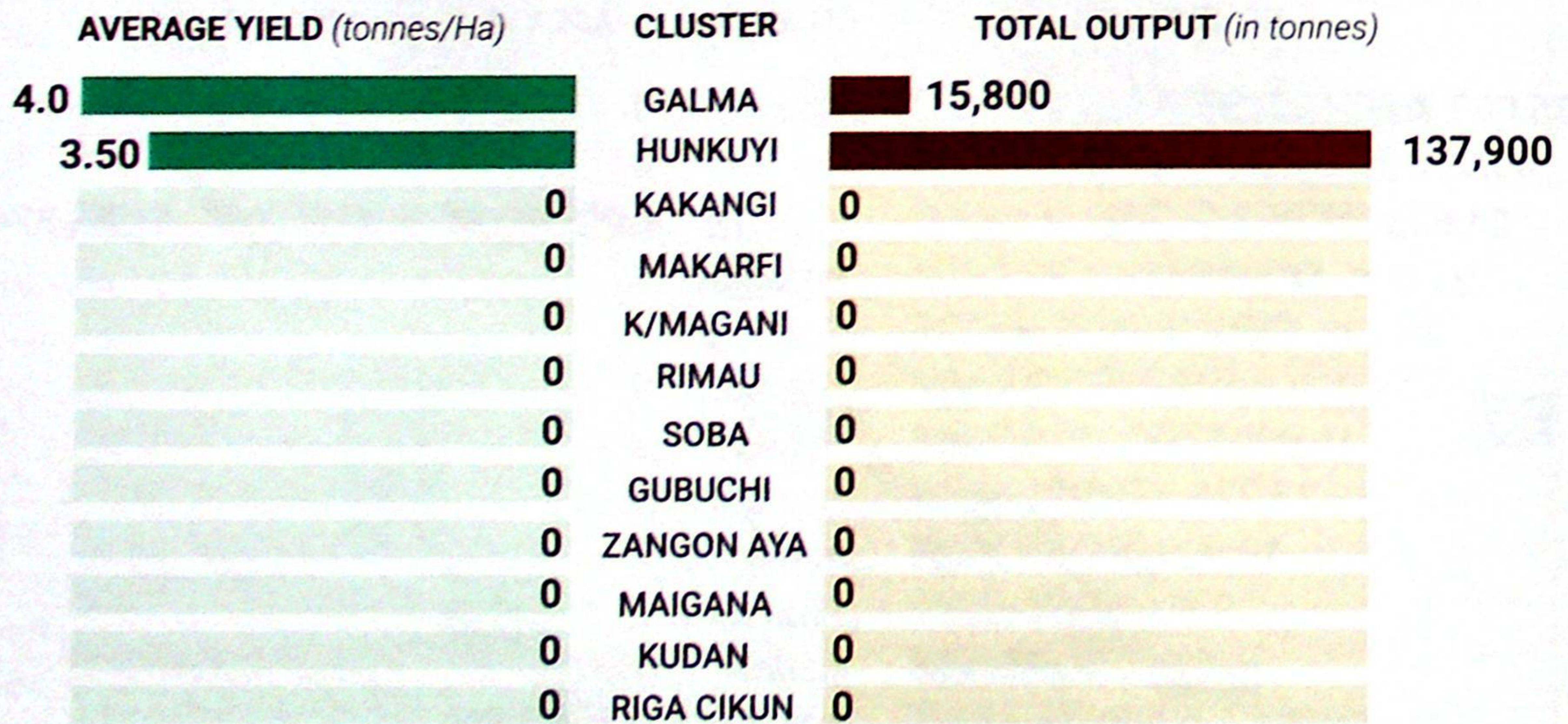


Kaduna State

WET SEASON



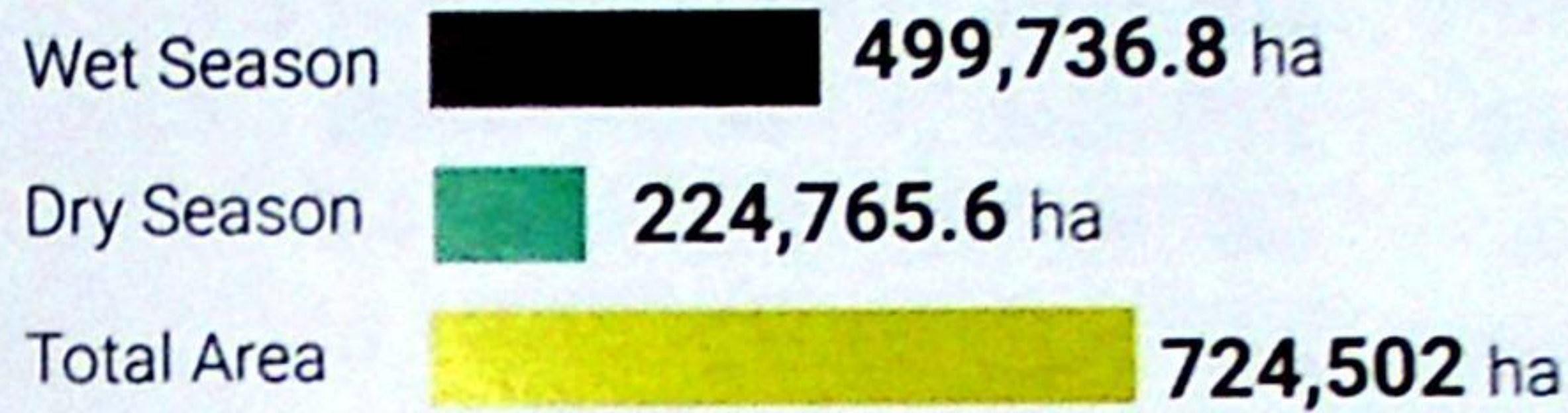
DRY SEASON



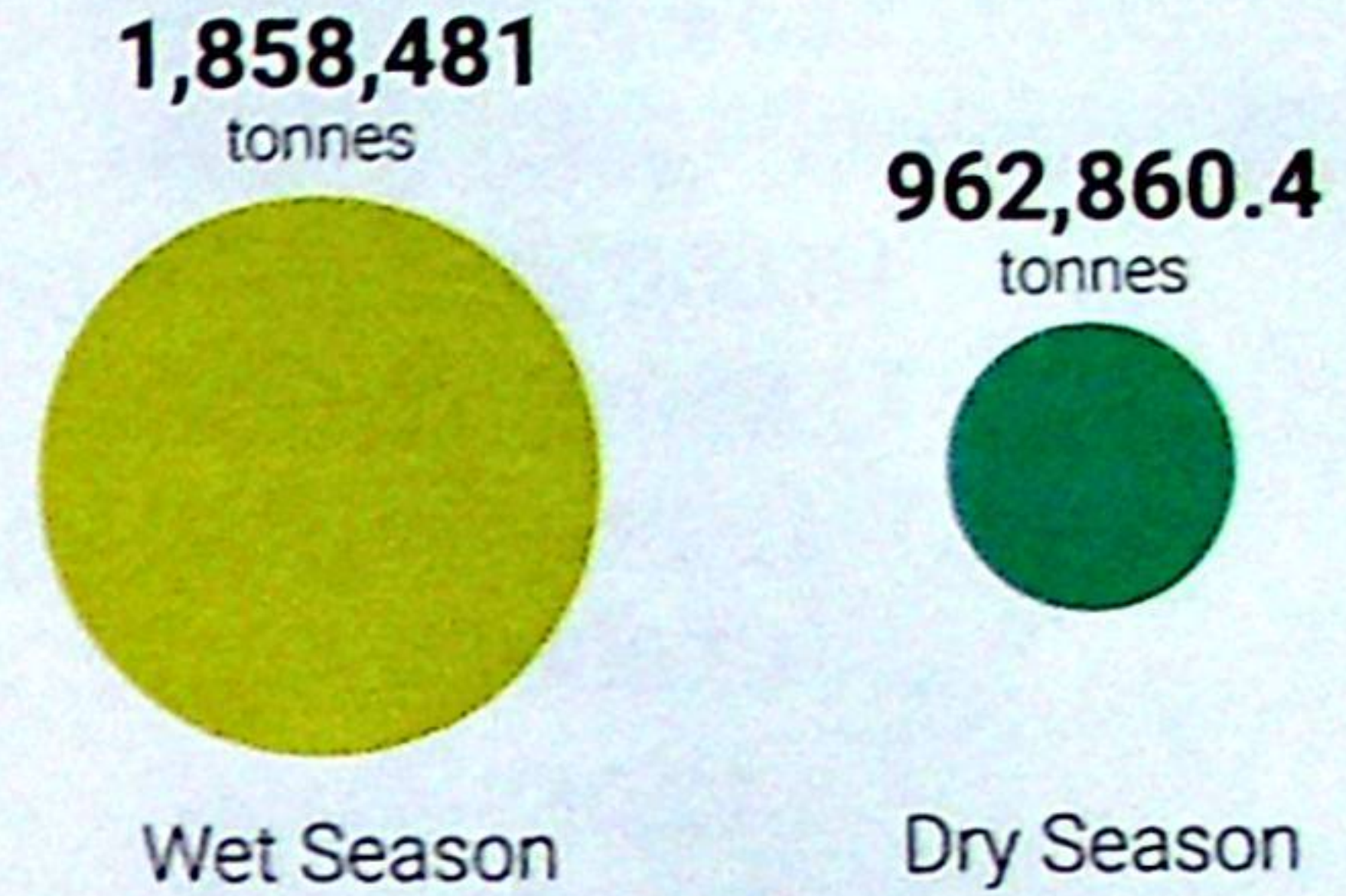


Kano State

Farm Area Cultivated for Rice Farming



Rice Output



Kano has **214,332** rice farmers in the wet season and **143,768** farmers in dry season

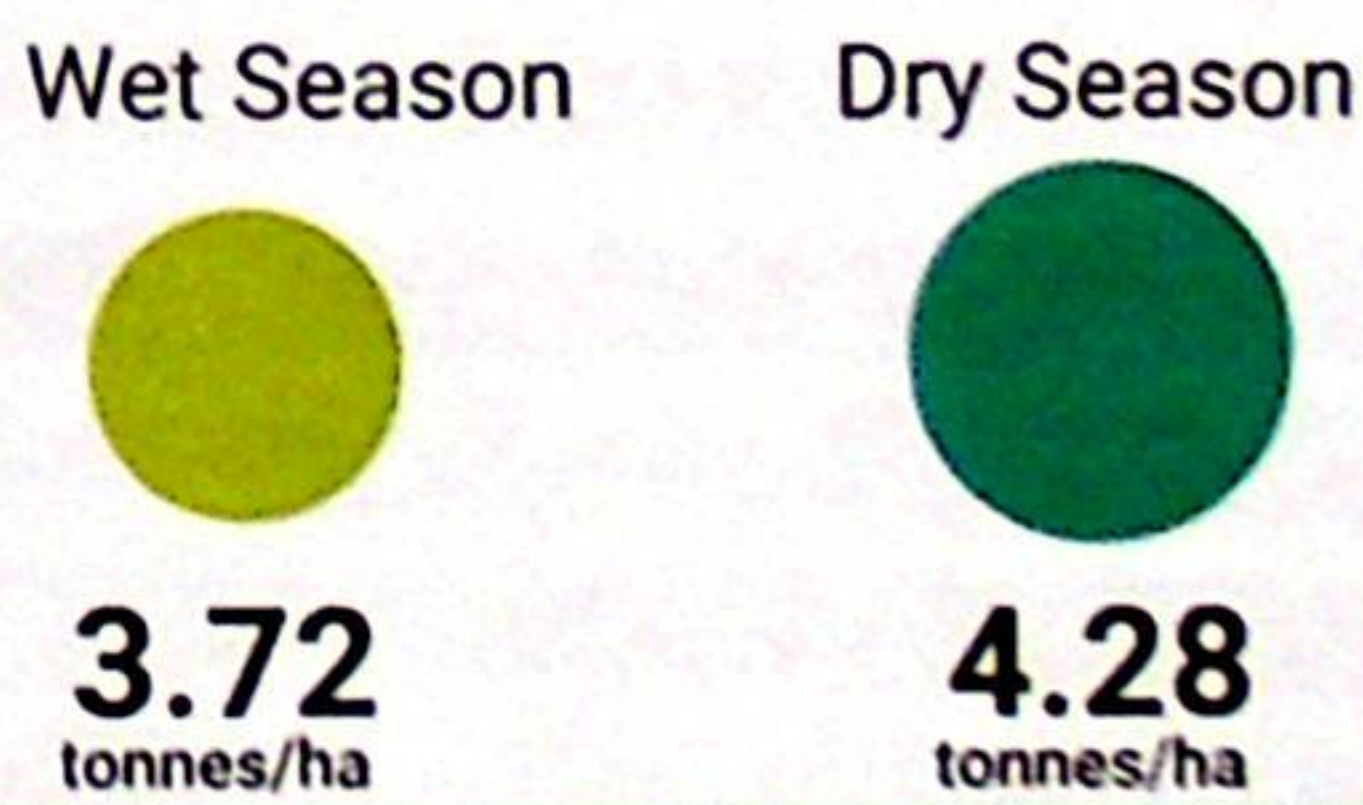


17 RICE PRODUCTION CLUSTERS exist in the State

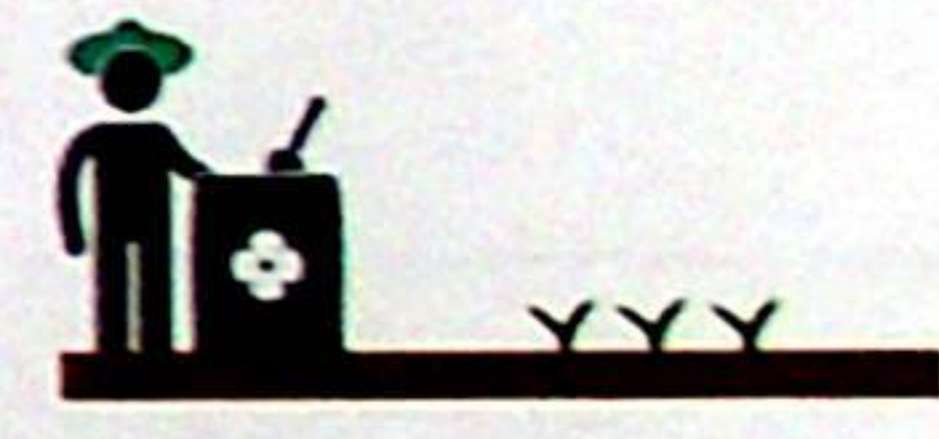


2,821,341 tonnes of rice is produced by farmers in this state

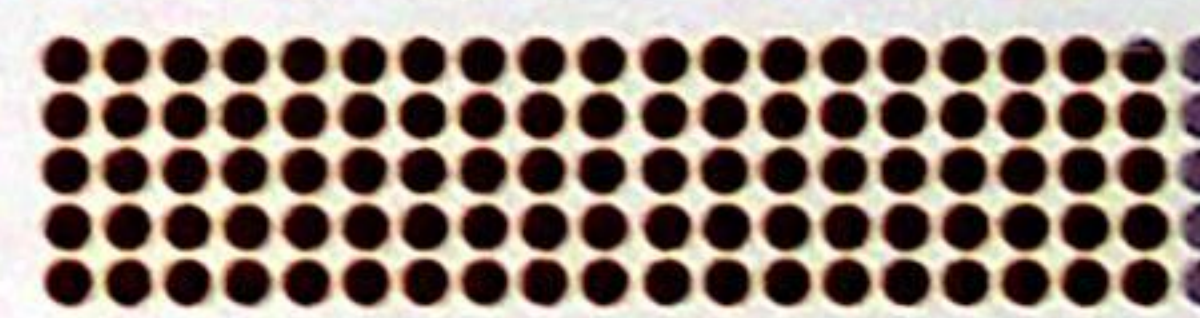
Average Yield (FGD)



Kano State has **201,906**



Farmers outside Rice farming groups



This represents **94.20%** of Rice farmers in the State

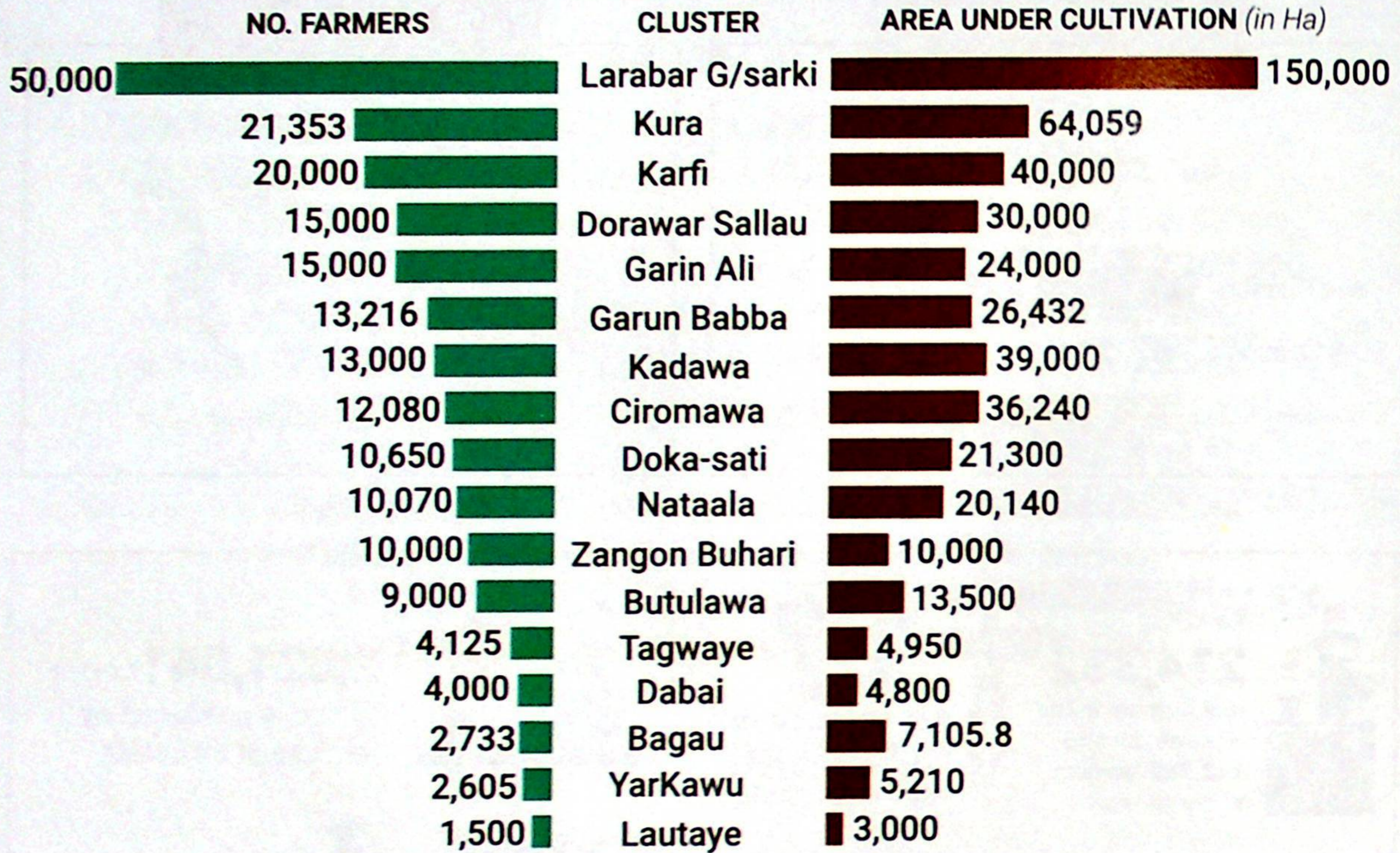
Kano State Calendar of Rice Production and Post-Harvest Activities

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Land Preparation												
Tiling												
Planting												
Fertilizer application												
Spraying												
Weeding												
Harvesting												
Threshing												
Drying												
Bagging												

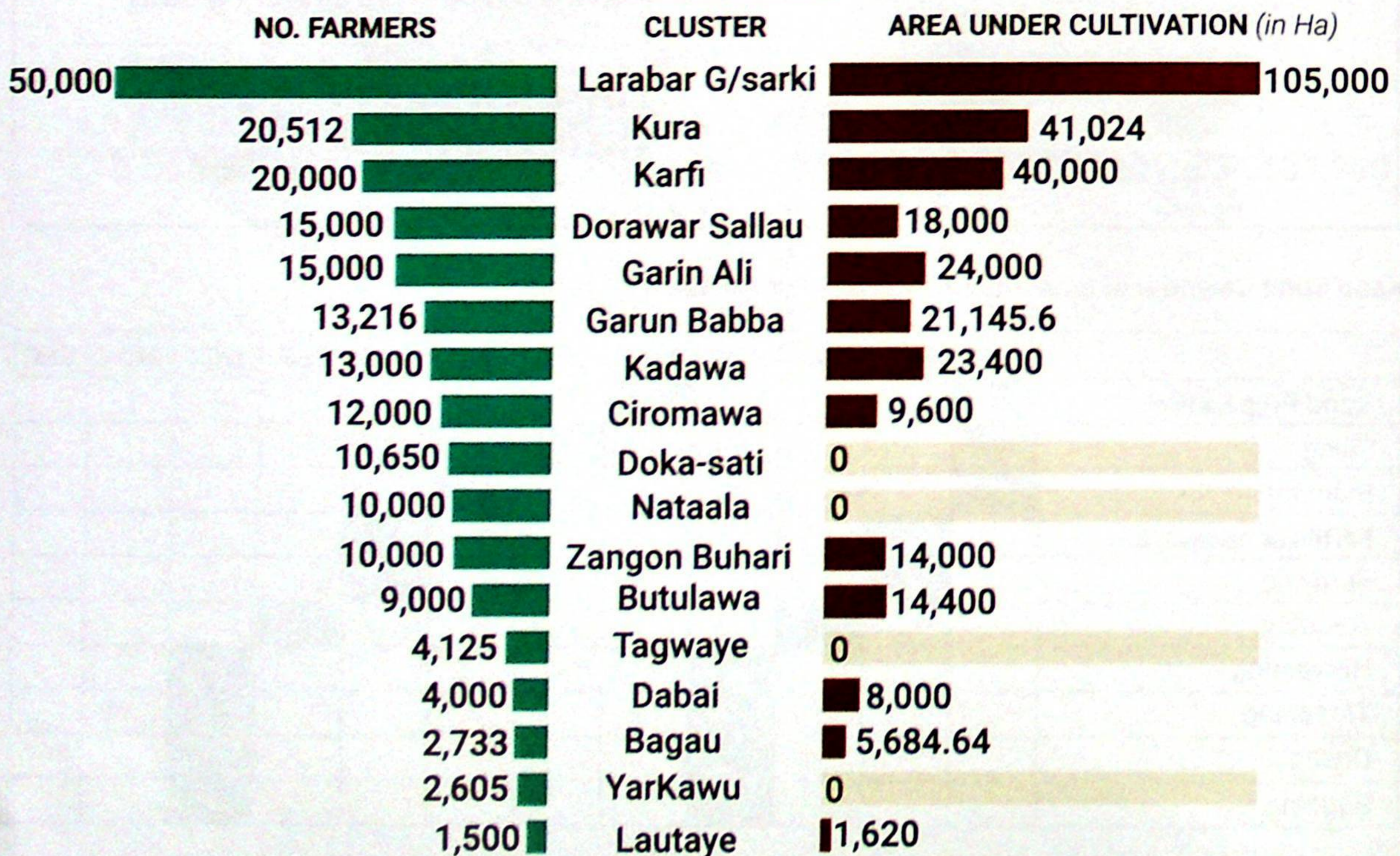


Kano State

WET SEASON



DRY SEASON





Kano State

WET SEASON

AVERAGE YIELD (tonnes/Ha)	CLUSTER	TOTAL OUTPUT (in tonnes)
4.7	Kura	301,077.3
4.7	Kadawa	183,300
4.5	Larabar G/sarki	675,000
4.5	Butulawa	60,750
4.3	Ciromawa	155,832
4.3	Nataala	86,602
3.8	Zangon Buhari	38,000
3.75	Bagau	26,646.75
3.7	Garun Babba	97,798.4
3.7	Lautaye	11,100
3.6	Dorawar Sallau	108,000
3.6	YarKawu	18,756
3.5	Doka-sati	74,550
3.4	Dabai	16,320
3.2	Garin Ali	76,800
3.1	Tagwaye	15,345
2.6	Karfi	104,000

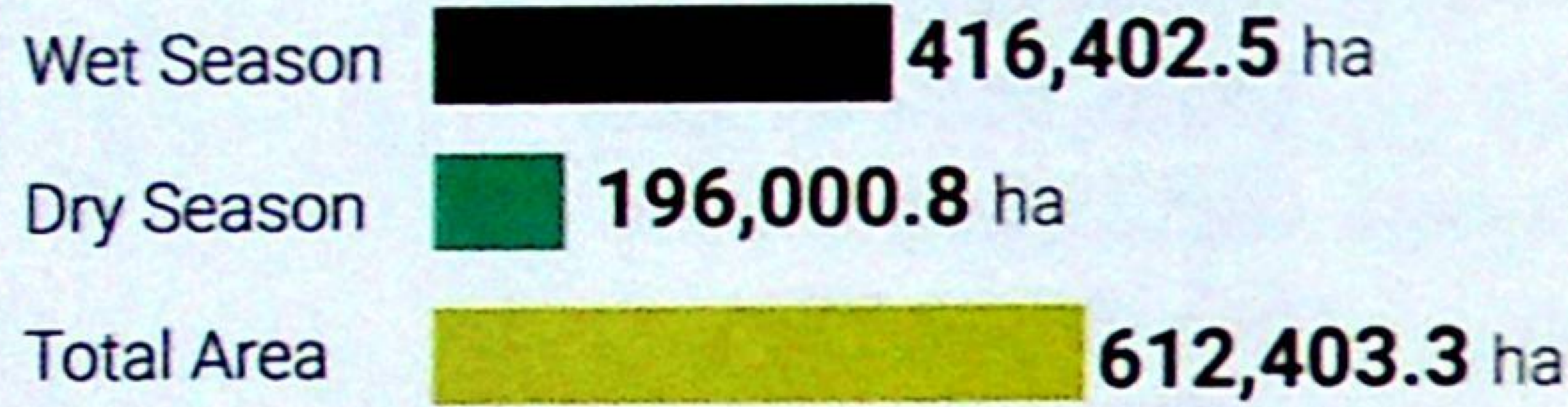
DRY SEASON

AVERAGE YIELD (tonnes/Ha)	CLUSTER	TOTAL OUTPUT (in tonnes)
4.7	Kura	192,812.8
4.7	Kadawa	109,980
4.5	Larabar G/sarki	472,500
4.5	Zangon Buhari	63,000
4.5	Butulawa	64,800
4.3	Ciromawa	41,280
4.2	Dorawar Sallau	75,600
4.1	Dabai	32,800
4	Garun Babba	84,582.4
3.9	Karfi	156,000
3.9	Lautaye	6,318
3.75	Bagau	21,317.4
3.2	Garin Ali	76,800
0	Doka-sati	0
0	Nataala	0
0	Tagwaye	0
0	YarKawu	0

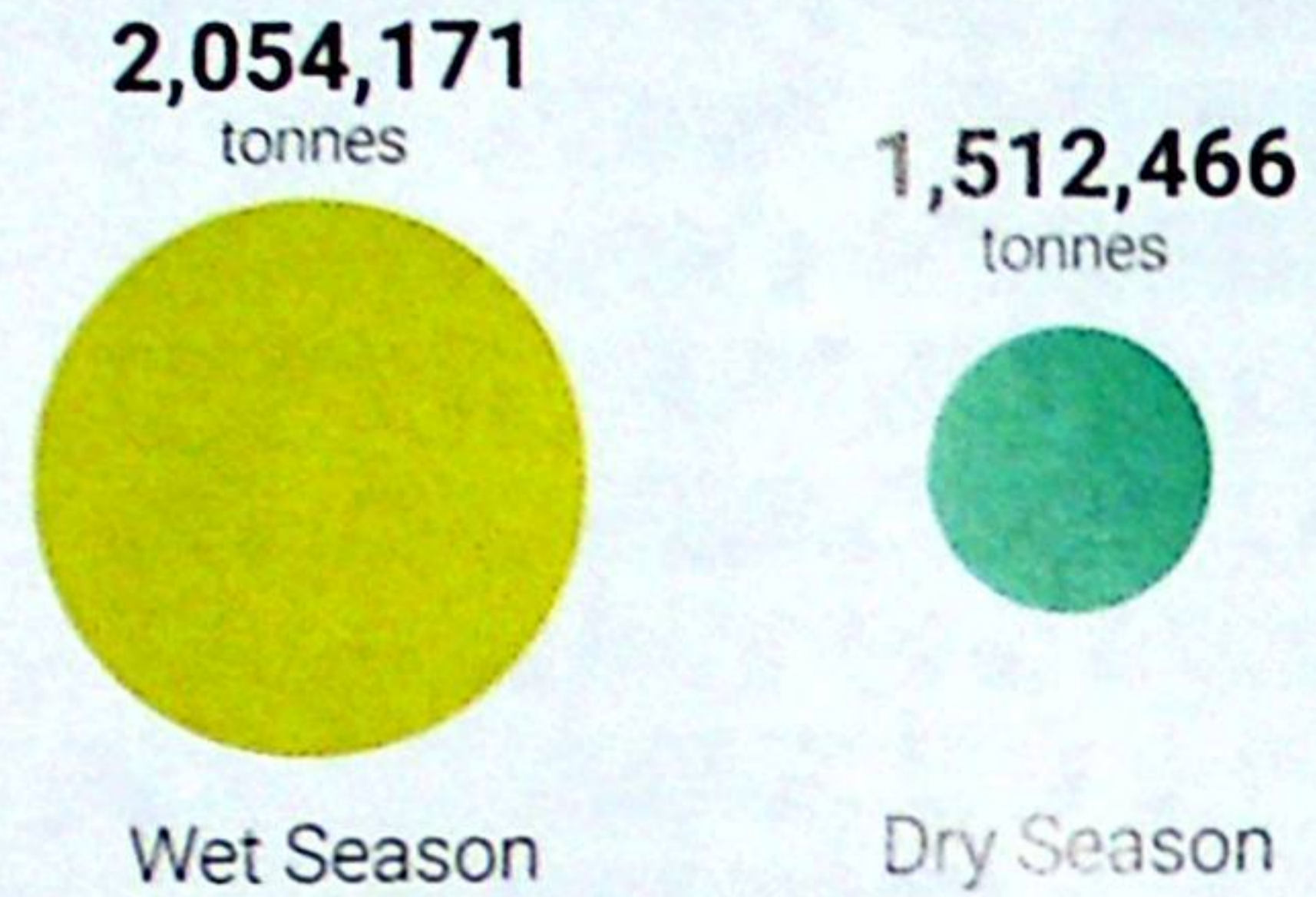


Kebbi State

Farm Area Cultivated for Rice Farming



Rice Output



Kebbi has **221,175** rice farmers in the wet season and **134,604** farmers in dry season

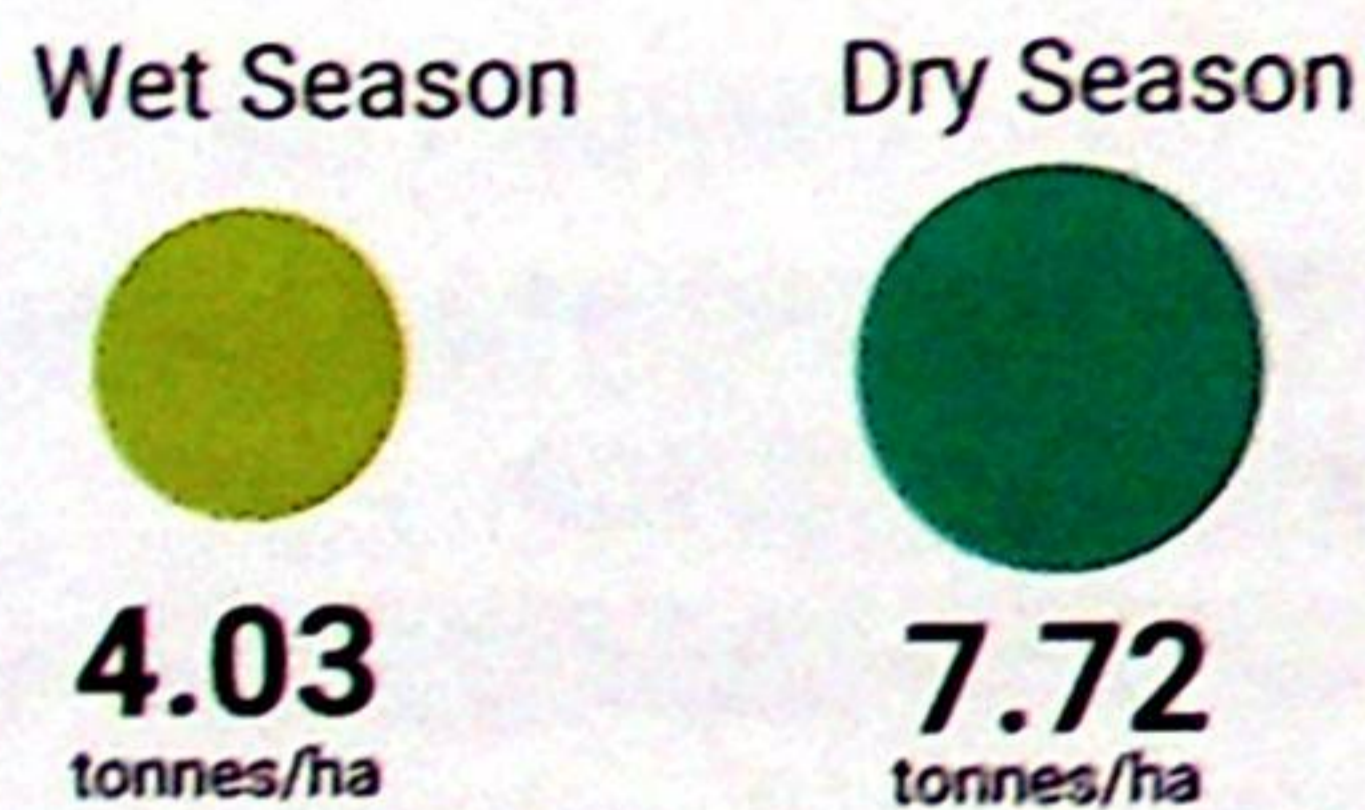


13 RICE PRODUCTION CLUSTERS exist in the State

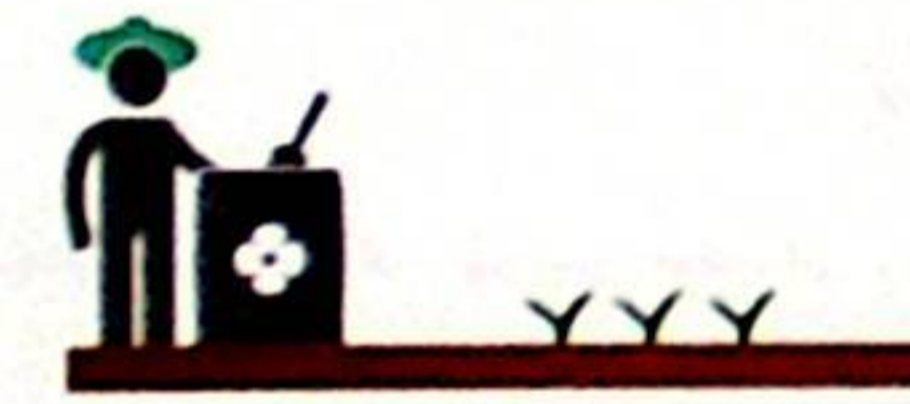


3,566,638 tonnes of rice is produced by farmers in this state

Average Yield (FGD)



Kebbi State has **129,800** Farmers outside Rice farming groups



This represents **58.69%** of Rice farmers in the State

Kebbi State Calendar of Rice Production and Post-Harvest Activities

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Land Preparation												
Tiling												
Planting												
Fertilizer application												
Spraying												
Weeding												
Harvesting												
Threshing												
Drying												
Bagging												

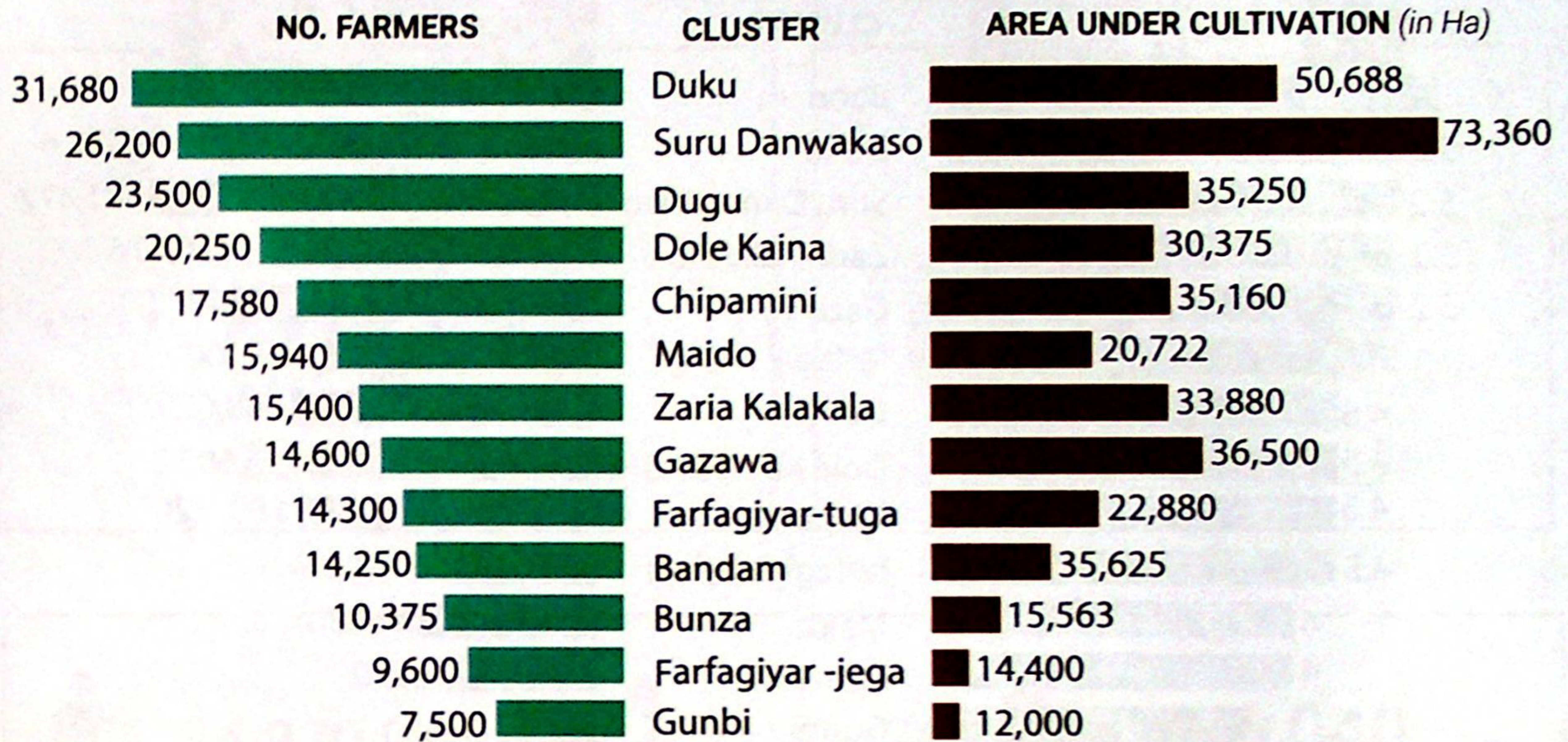


Kebbi State

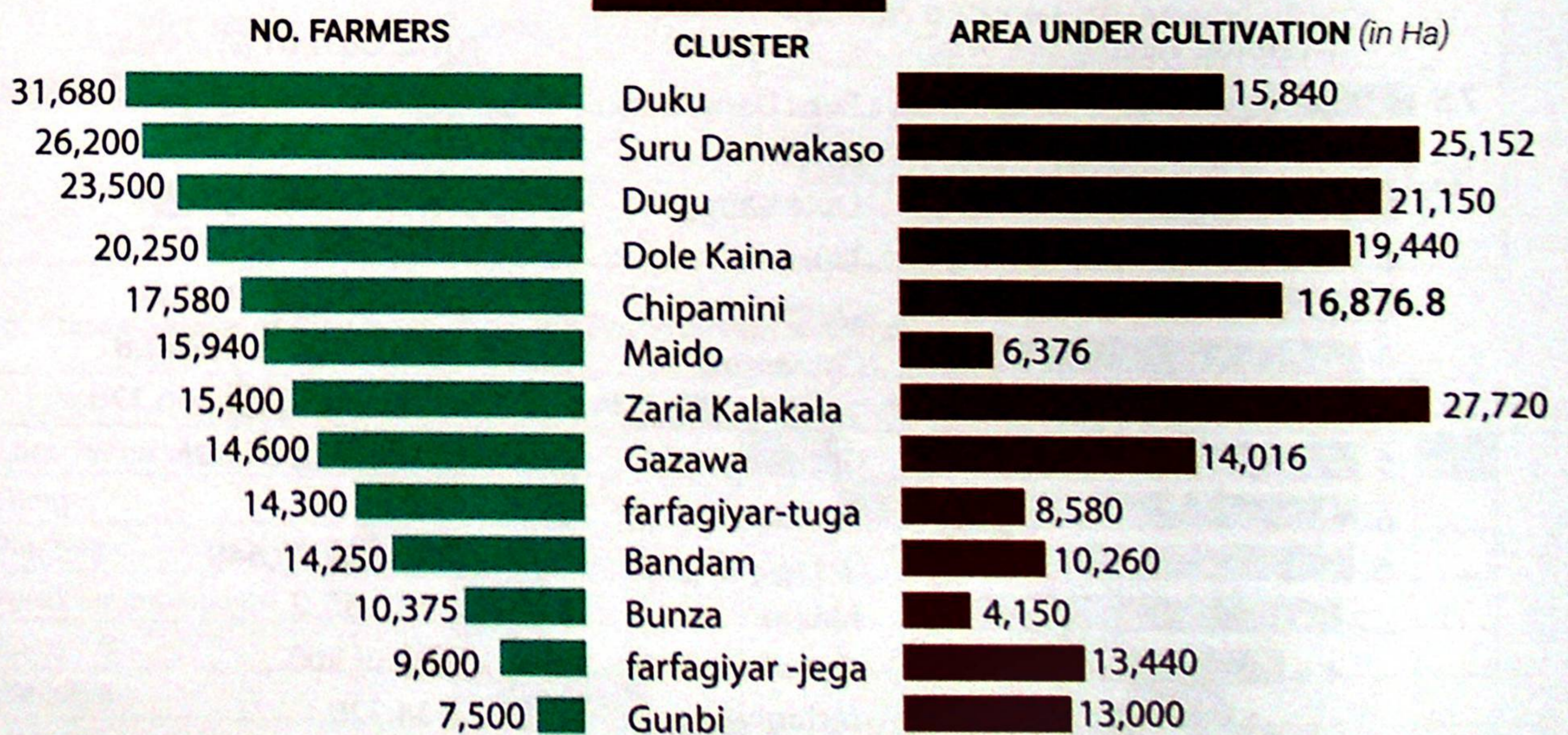
Ministry of Agriculture, Food and Fisheries

2022

WET SEASON



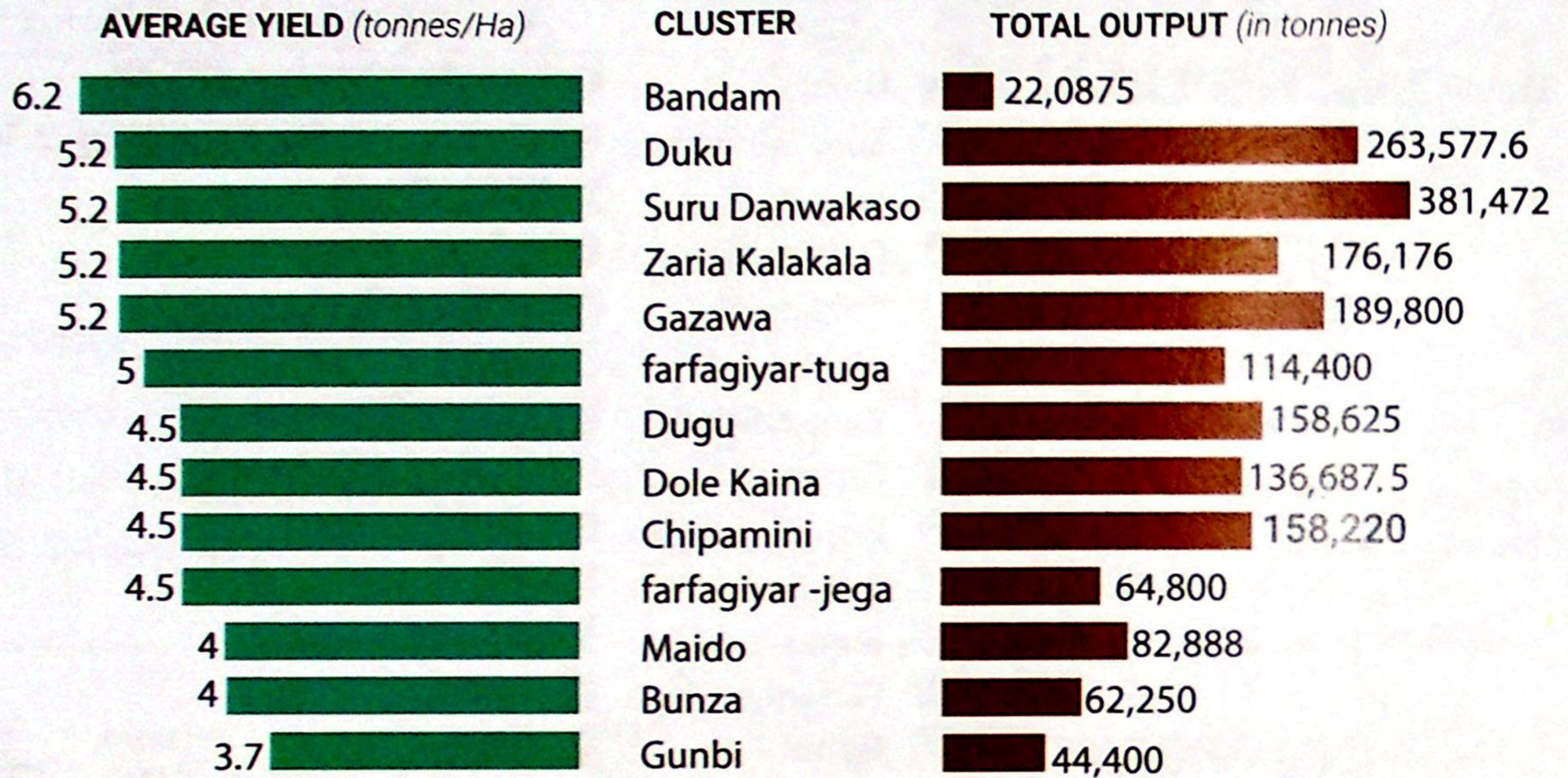
DRY SEASON



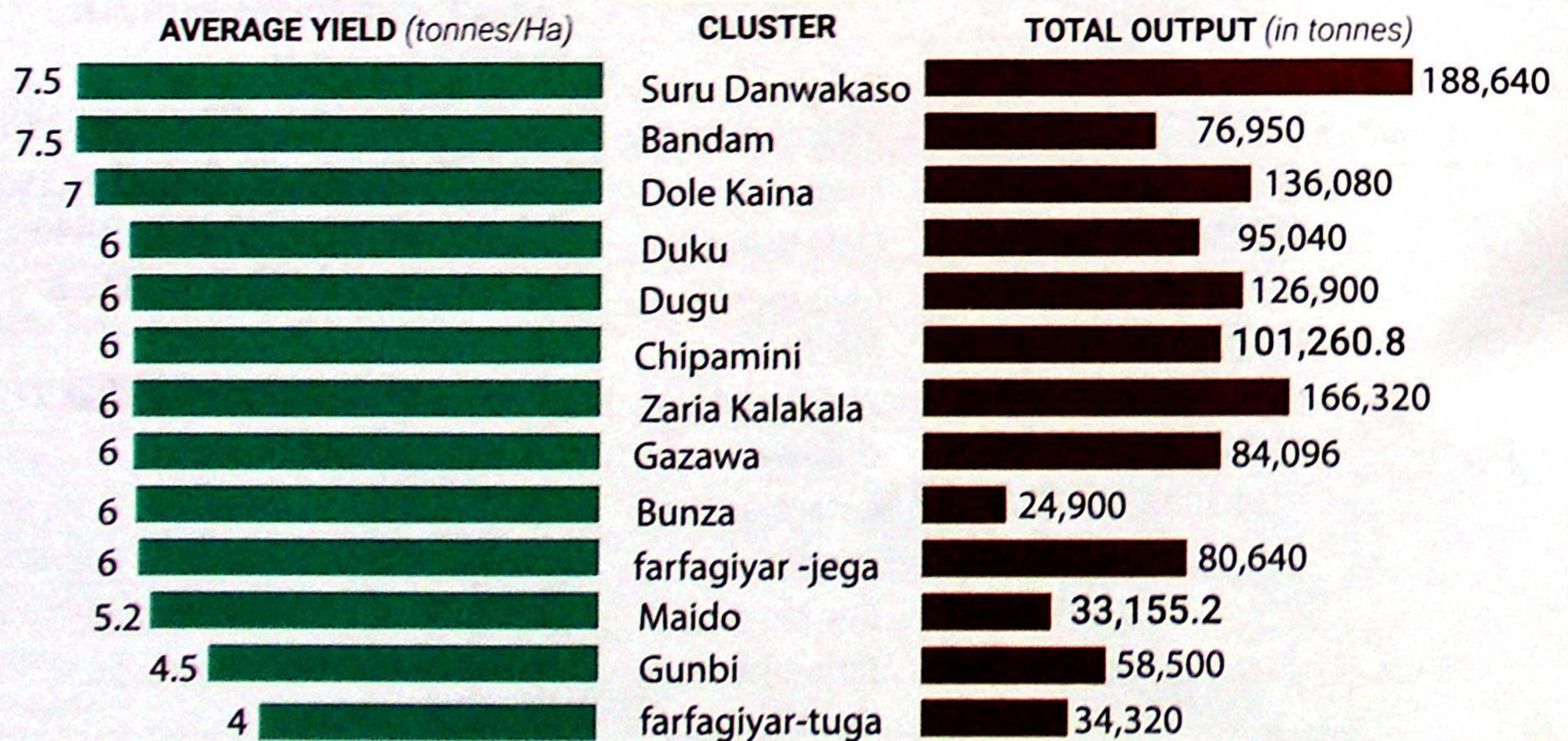


Kebbi State

WET SEASON



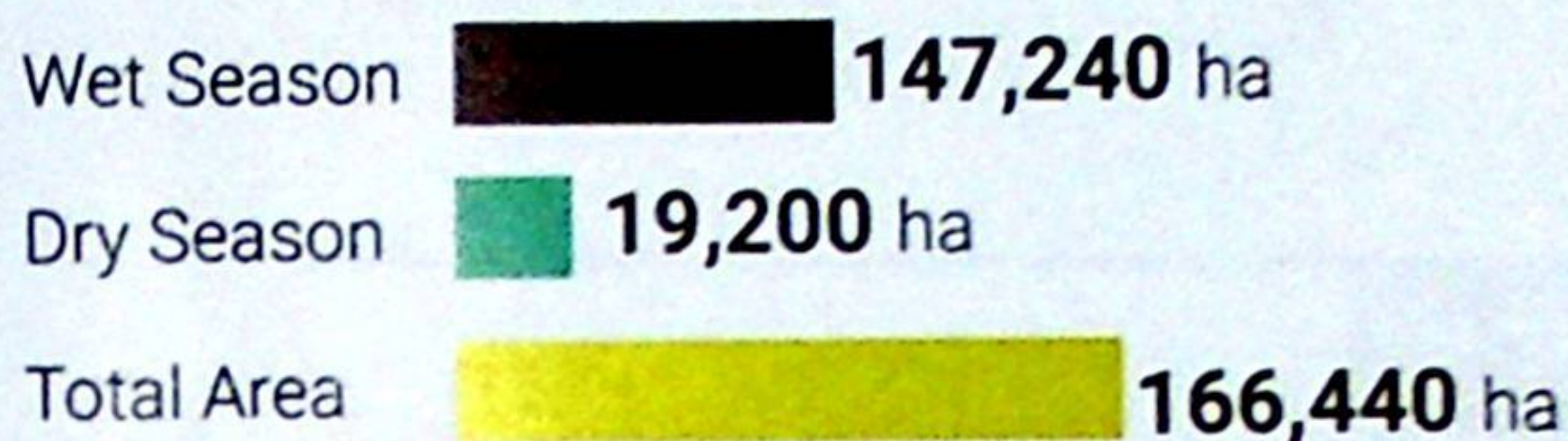
DRY SEASON



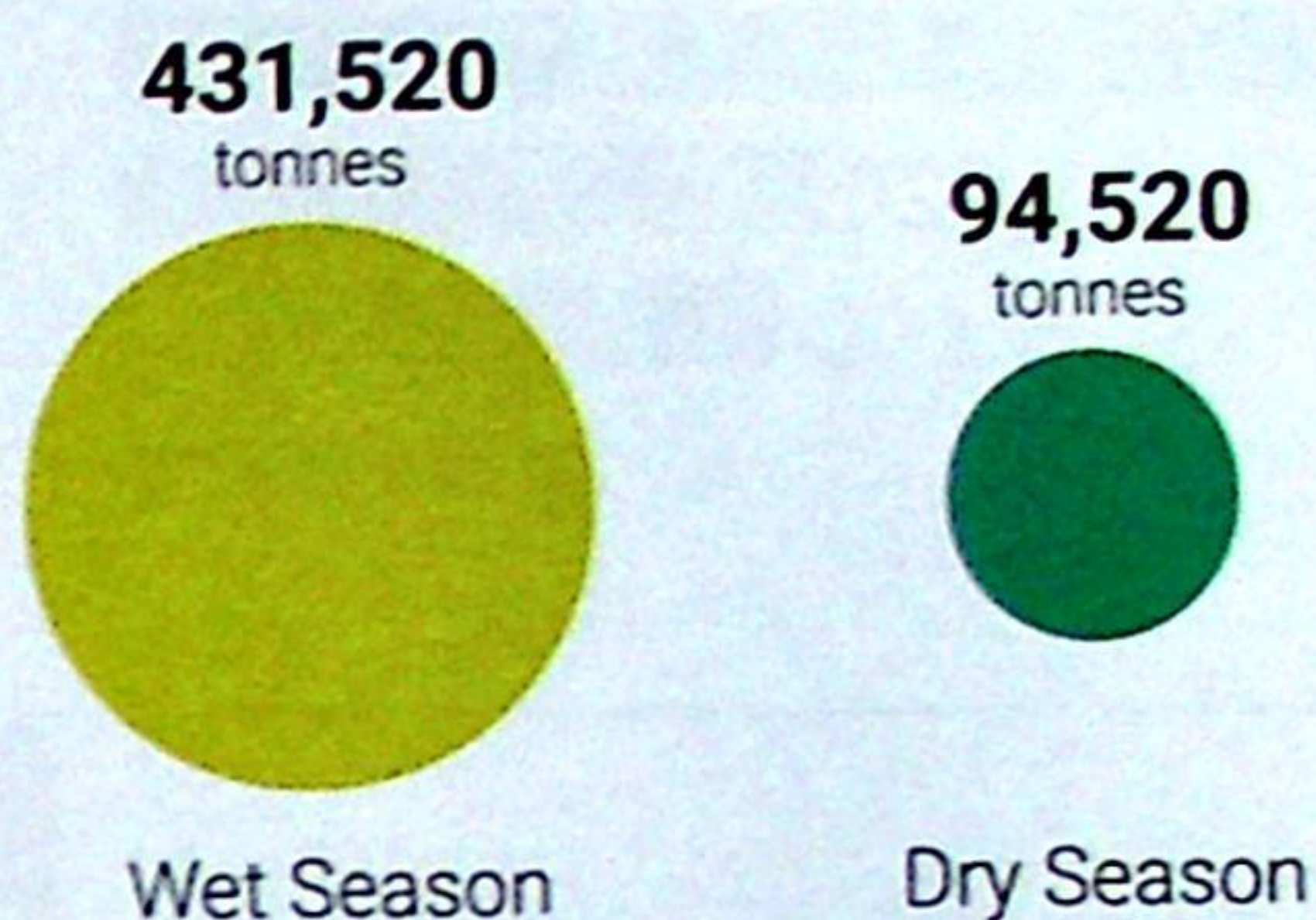


Kogi State

Farm Area Cultivated for Rice Farming



Rice Output



Kogi has **34,920** rice farmers in the wet season and **5,940** farmers in dry season

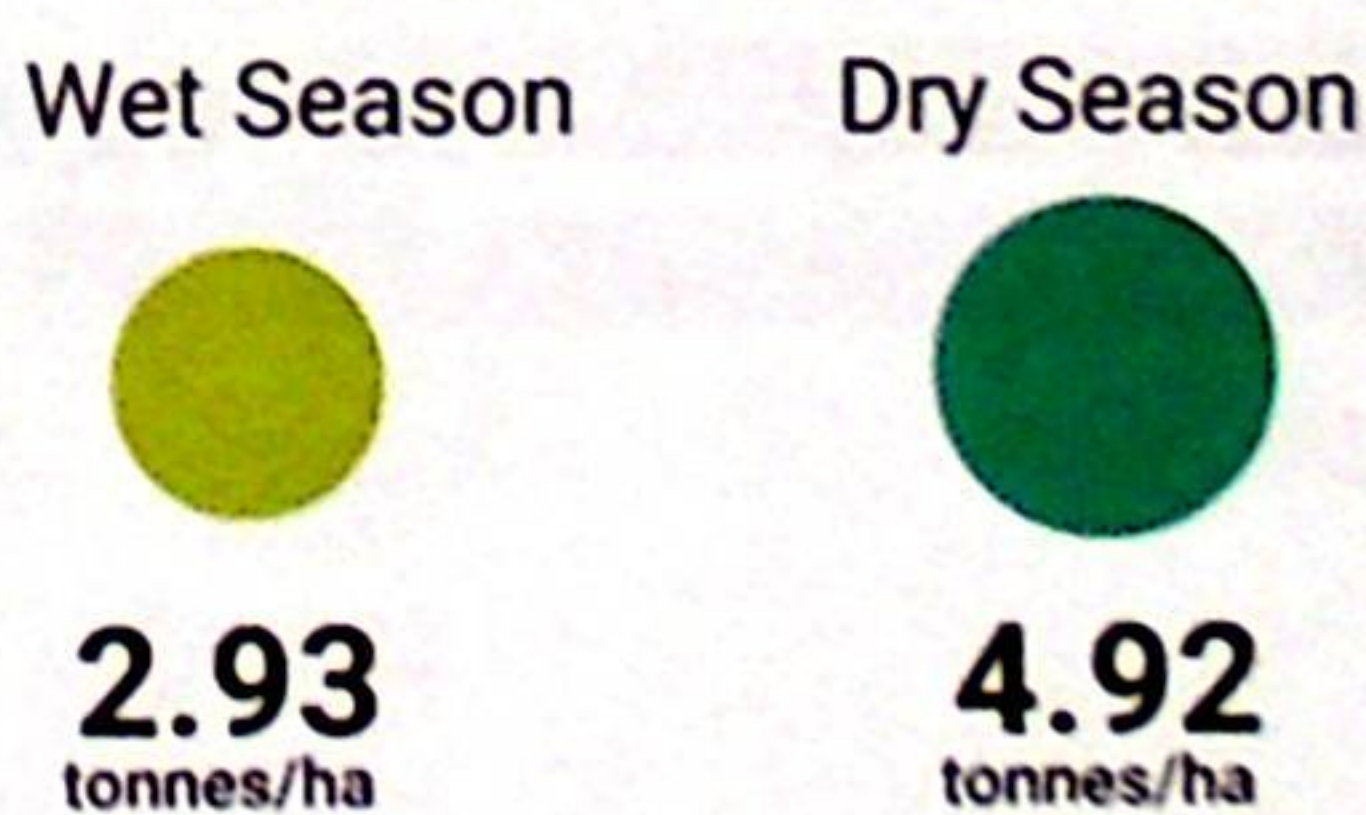


4 RICE PRODUCTION CLUSTERS exist in the State

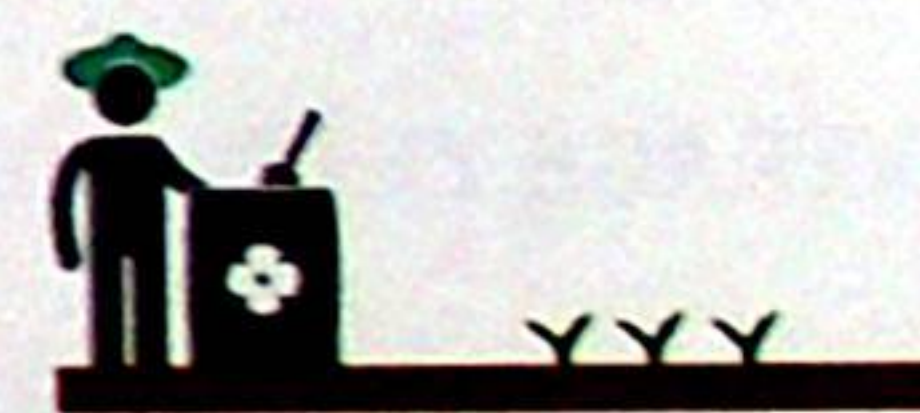


526,040 tonnes of rice is produced by farmers in this state

Average Yield (FGD)



Kogi State has **5,100** Farmers outside Rice farming groups



This represents **14.60%** of Rice farmers in the State

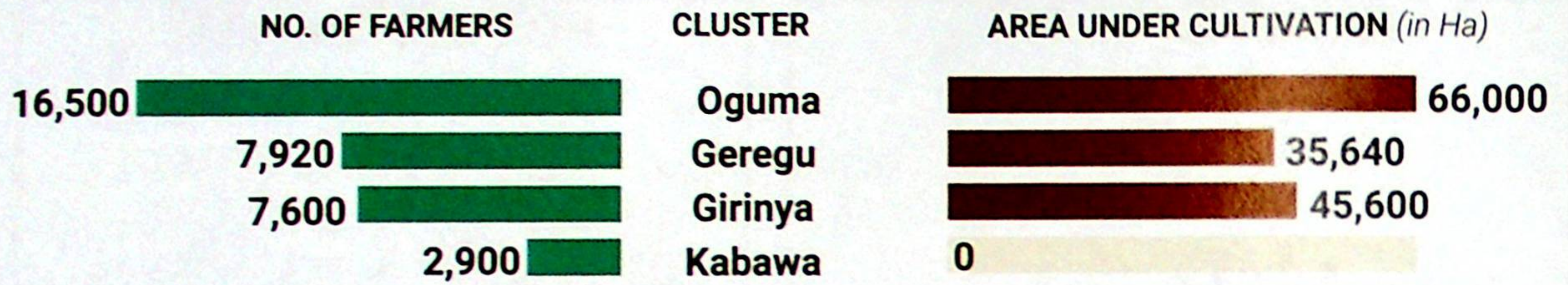
Kogi State Calendar of Rice Production and Post-Harvest Activities

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Land Preparation												
Tiling												
Planting												
Fertilizer application												
Spraying												
Weeding												
Harvesting												
Threshing												
Drying												
Bagging												

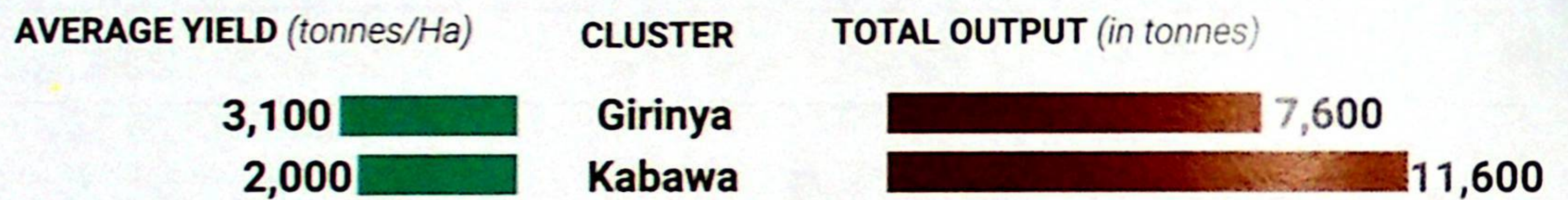


Kogi State

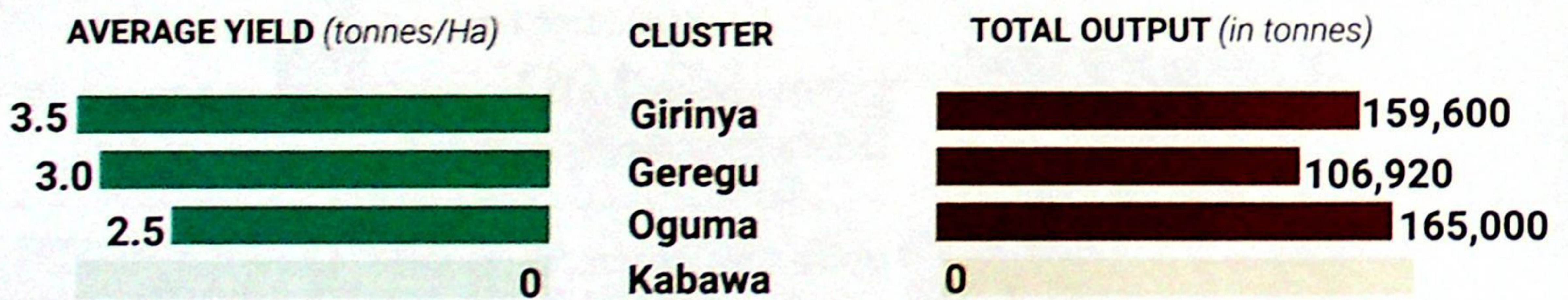
WET SEASON



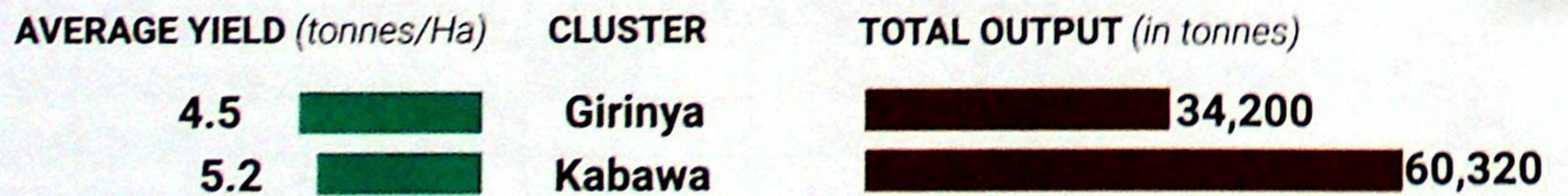
DRY SEASON



WET SEASON



DRY SEASON





Kwara State

Wet Season (Wet Season)

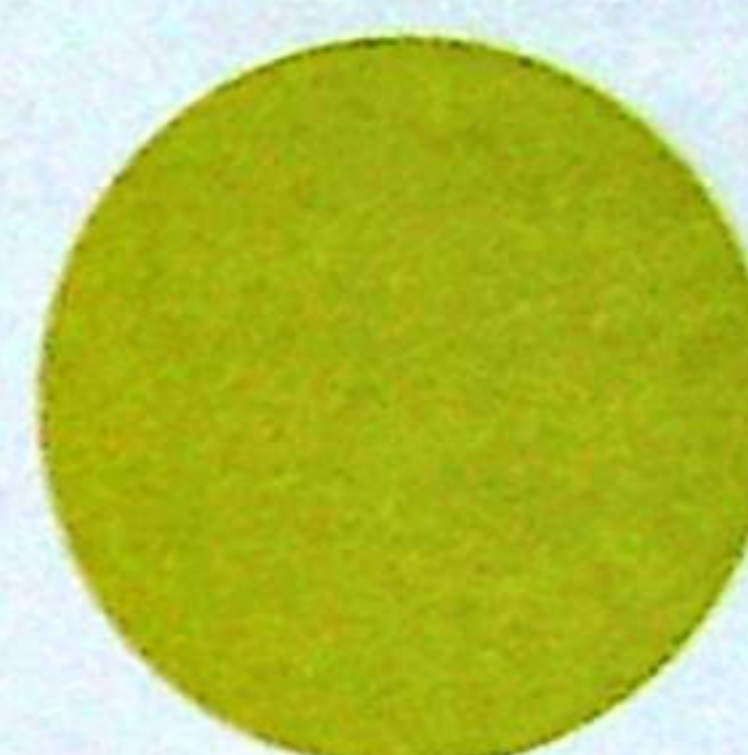
Farm Area Cultivated for Rice Farming



Wet Season **20,525** ha
 Dry Season **NO CULTIVATION**
 Total Area **20,525** ha

Rice Output

54,992.5
tonnes



NO CULTIVATION

Wet Season

Dry Season



Kwara has **9,650** rice farmers in the wet season and no farmer in dry season



5 RICE PRODUCTION CLUSTERS exist in the State



54,992.5 tonnes of rice is produced by farmers in this state

Average Yield (FGD)

Wet Season



2.68
tonnes/ha

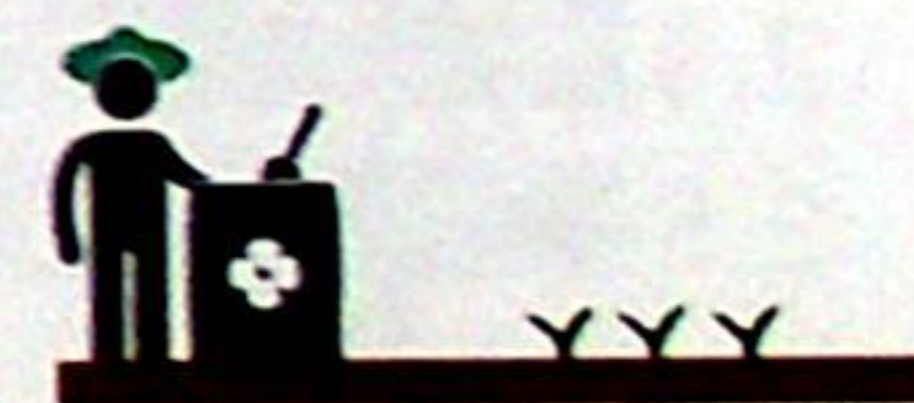
Dry Season

NO YIELD

Kwara State has

6,050

Farmers outside Rice farming groups



This represents **62.69%** of Rice farmers in the State

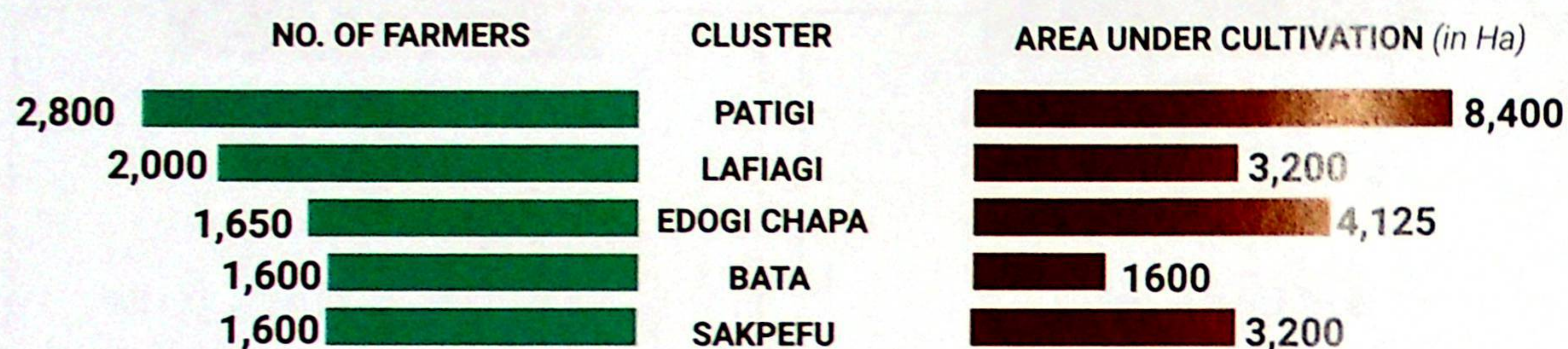
Kwara State Calendar of Rice Production and Post-Harvest Activities

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Land Preparation		█	█									
Tiling				█								
Planting				█	█							
Fertilizer application					█							
Spraying					█	█						
Weeding						█	█					
Harvesting								█	█			
Threshing									█	█		
Drying									█	█		
Bagging									█	█		

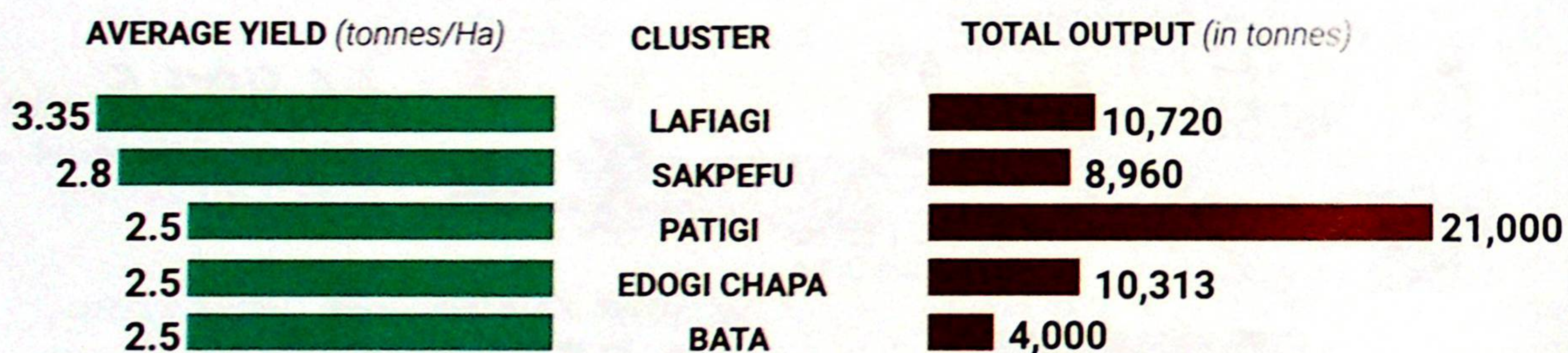


Kwara State

WET SEASON



WET SEASON

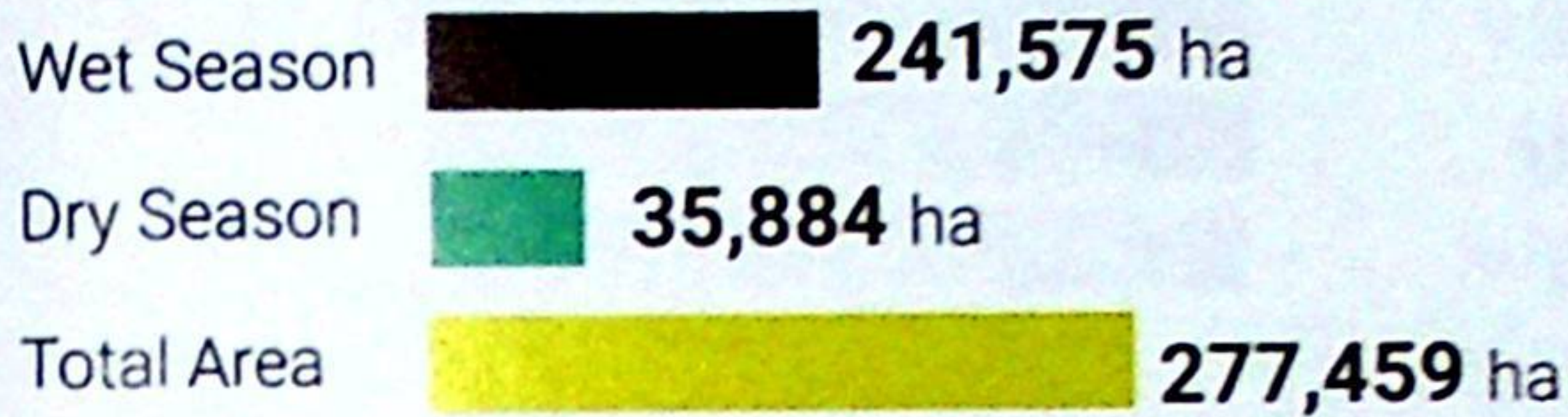


Note: Rice production only happens in the wet season



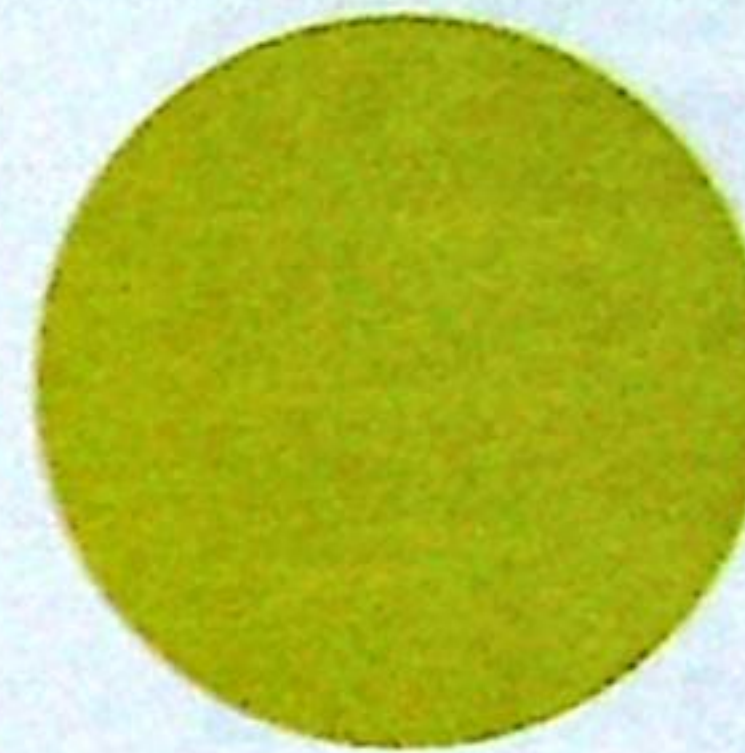
Nasarawa State

Farm Area Cultivated for Rice Farming



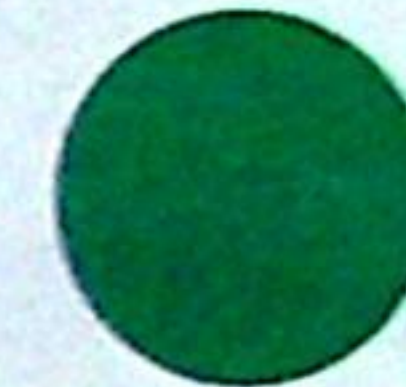
Rice Output

829,013.5 tonnes



Wet Season

137,164 tonnes



Dry Season



Nasarawa has **91,290** rice farmers in the wet season and **7,280** farmers in dry season

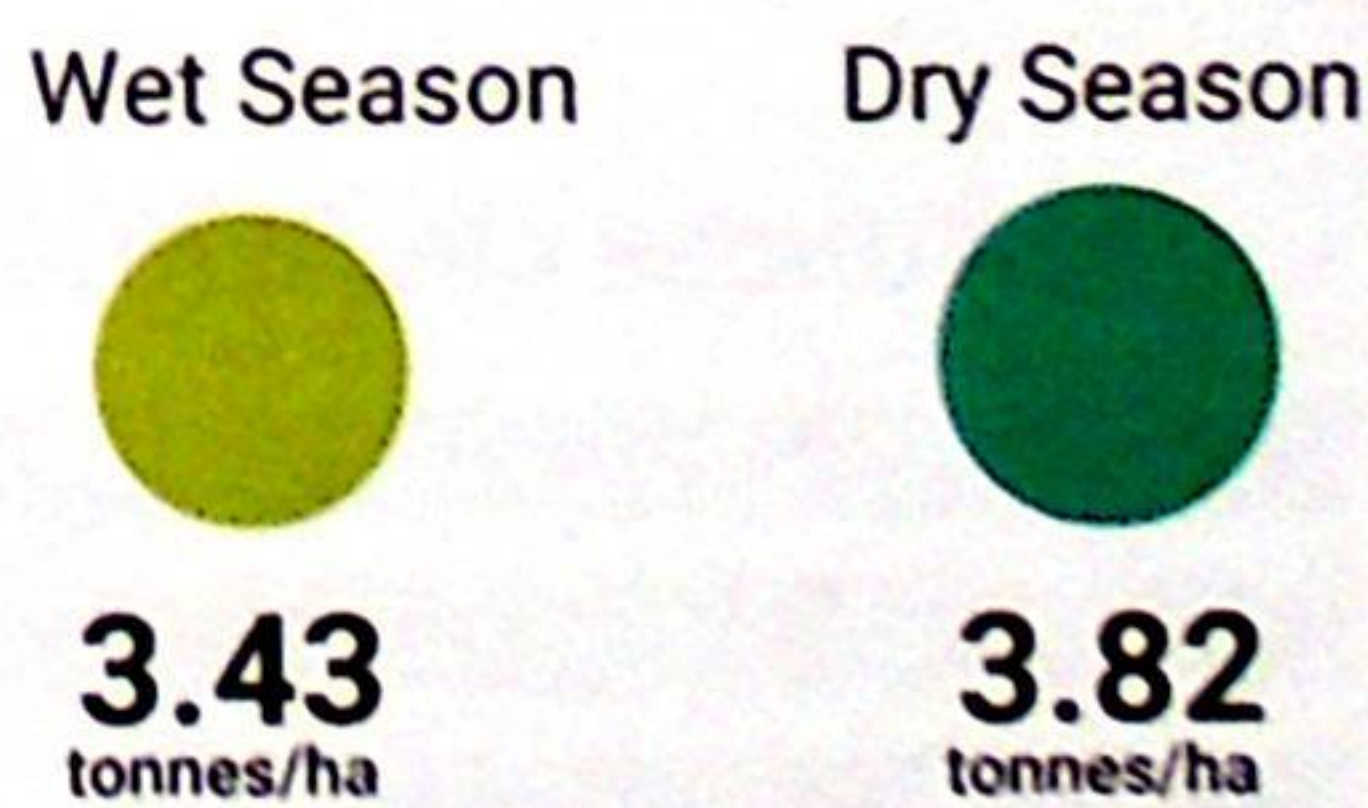


6 RICE PRODUCTION CLUSTERS exist in the State



966,177.5 tonnes of rice is produced by farmers in this state

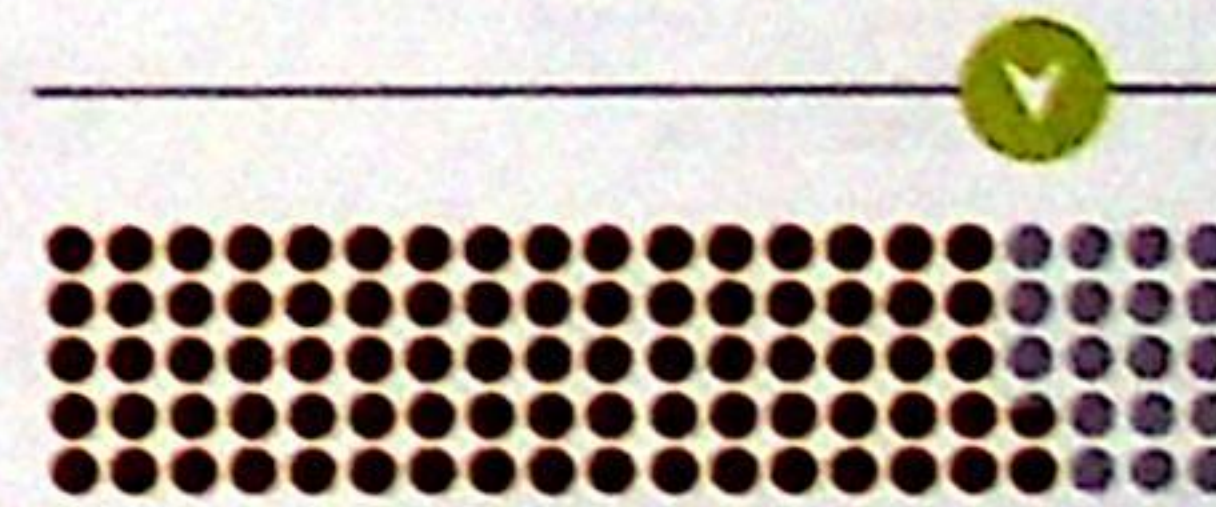
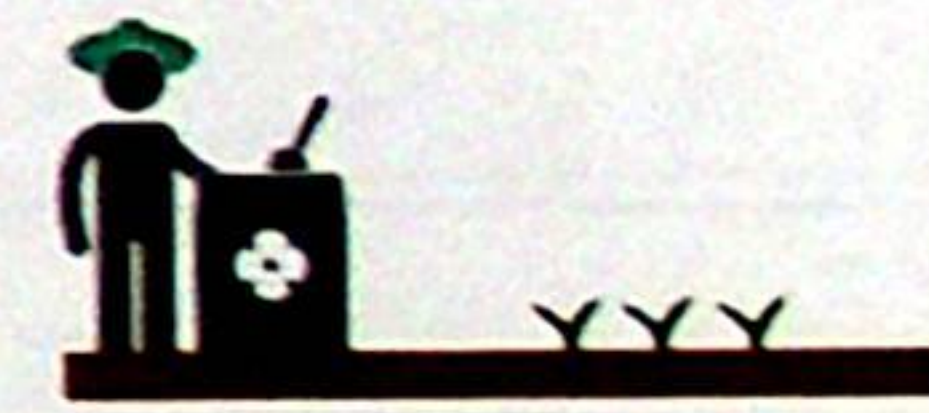
Average Yield (FGD)



Nasarawa State has

74,500

Farmers outside Rice farming groups



This represents **81.61%** of Rice farmers in the State

Nasarawa State Calendar of Rice Production and Post-Harvest Activities

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Land Preparation												
Tiling												
Planting												
Fertilizer application												
Spraying												
Weeding												
Harvesting												
Threshing												
Drying												
Bagging												

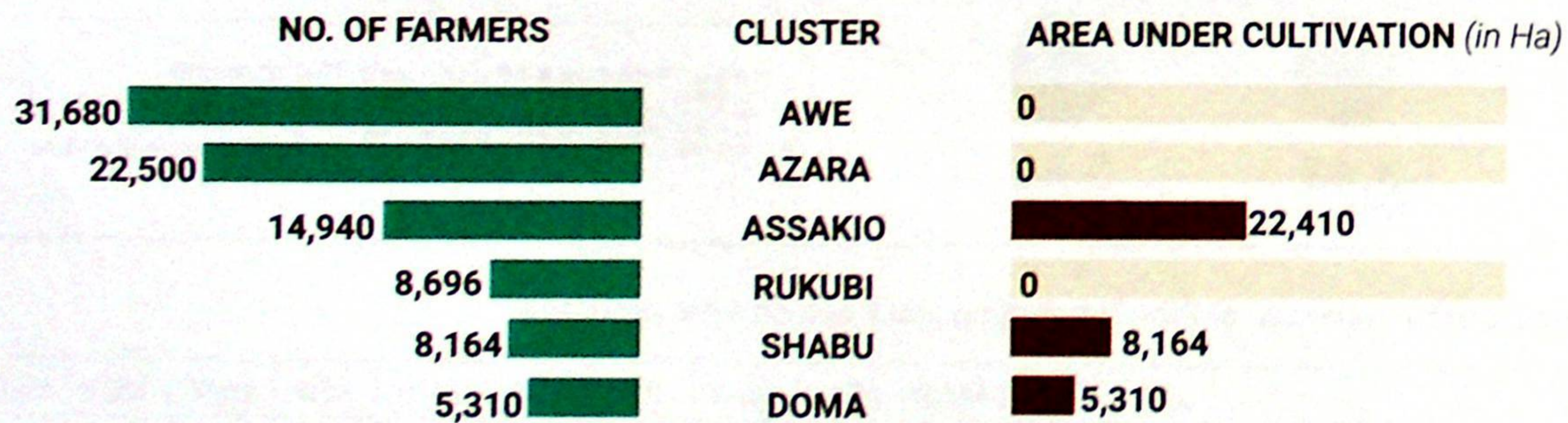


Nasarawa State

WET SEASON



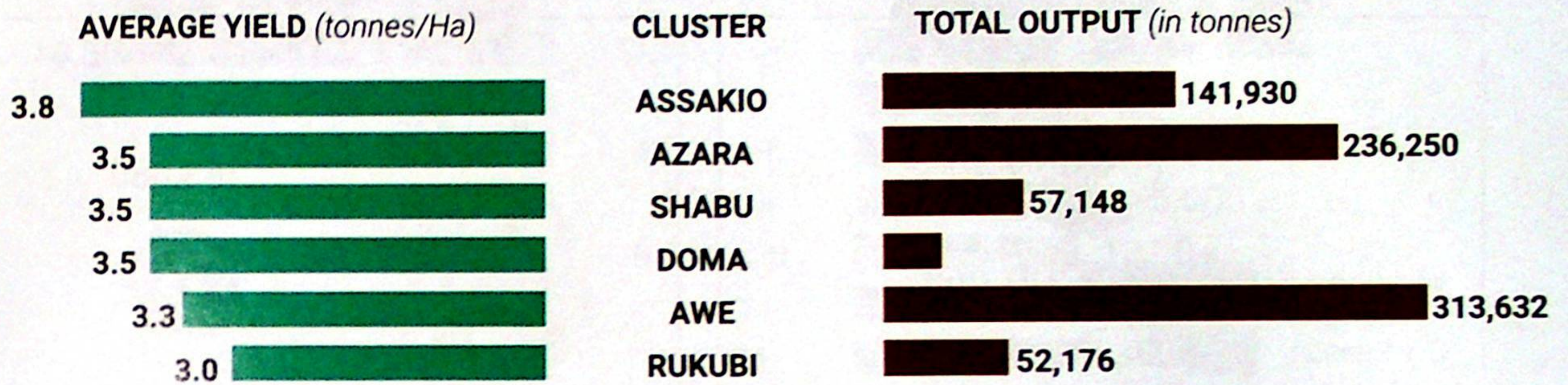
DRY SEASON





Nasarawa State

WET SEASON

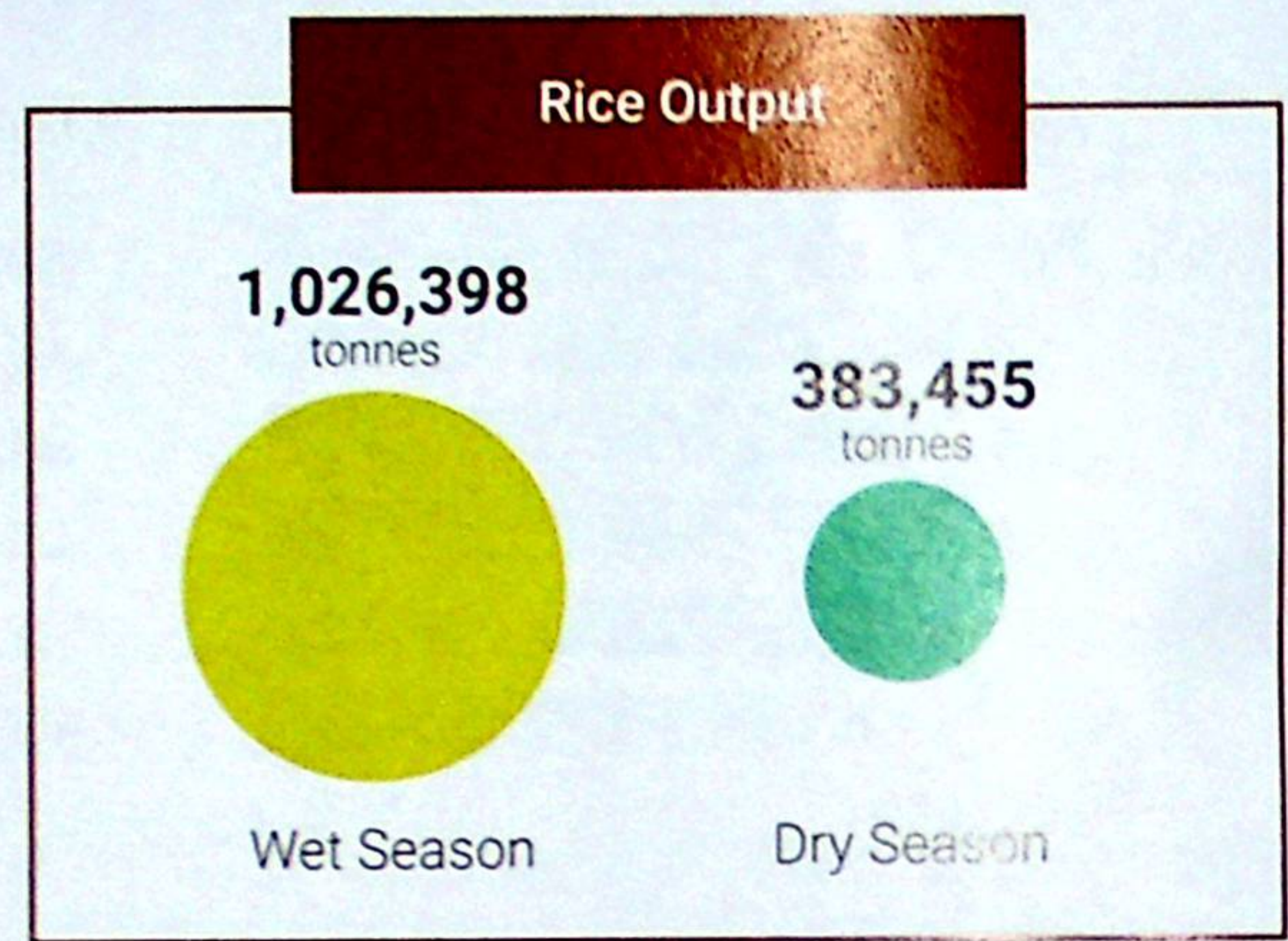
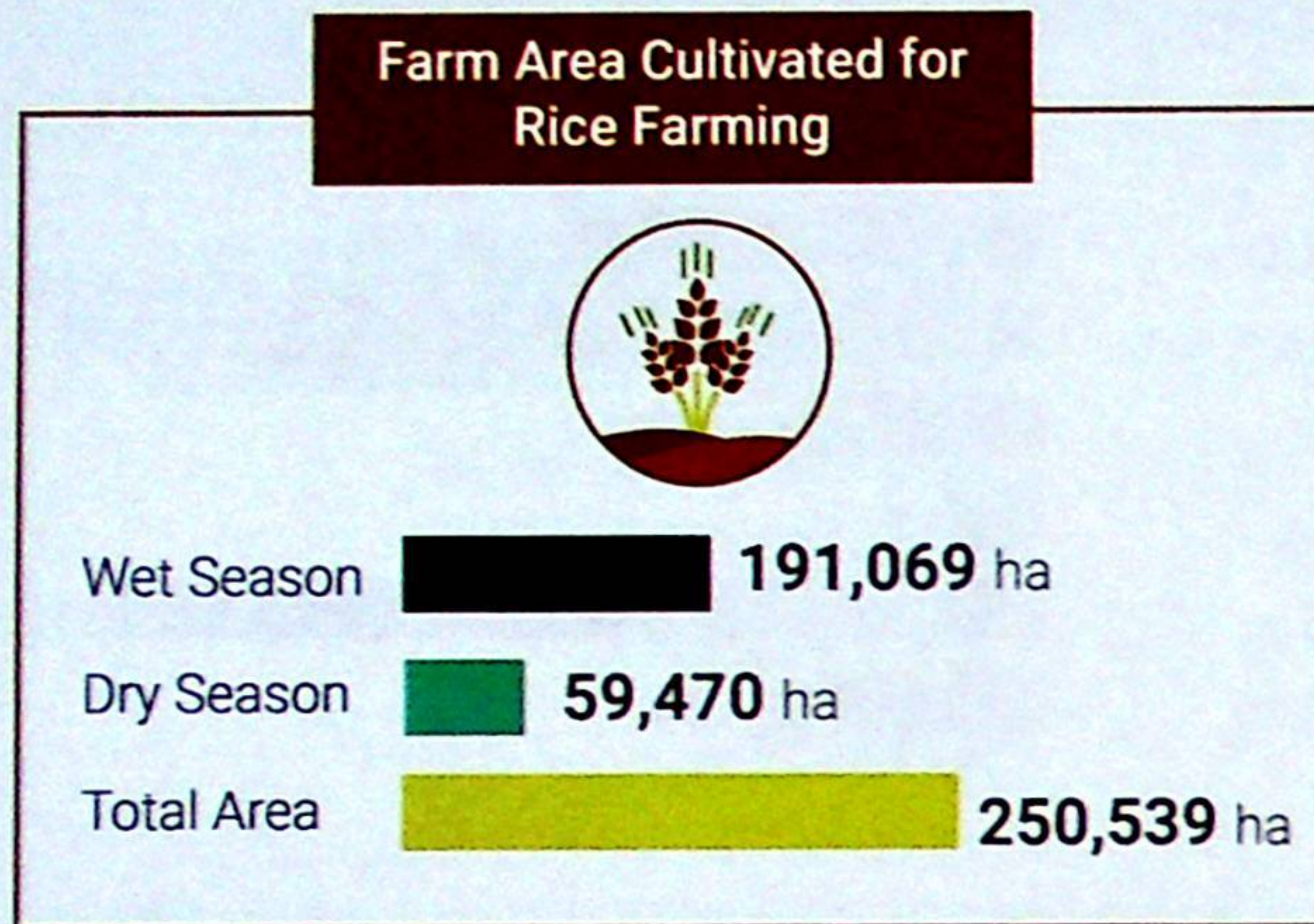


DRY SEASON





Niger State



Niger has **75,725** rice farmers in the wet season and no farmer in dry season

14 RICE PRODUCTION CLUSTERS exist in the State

Average Yield (FGD)

Wet Season	5.37 tonnes/ha
Dry Season	6.45 tonnes/ha

Niger State has **1,409,853** tonnes of rice is produced by farmers in this state

Niger State has **35,100** Farmers outside Rice farming groups

46.35% of Rice farmers in the State

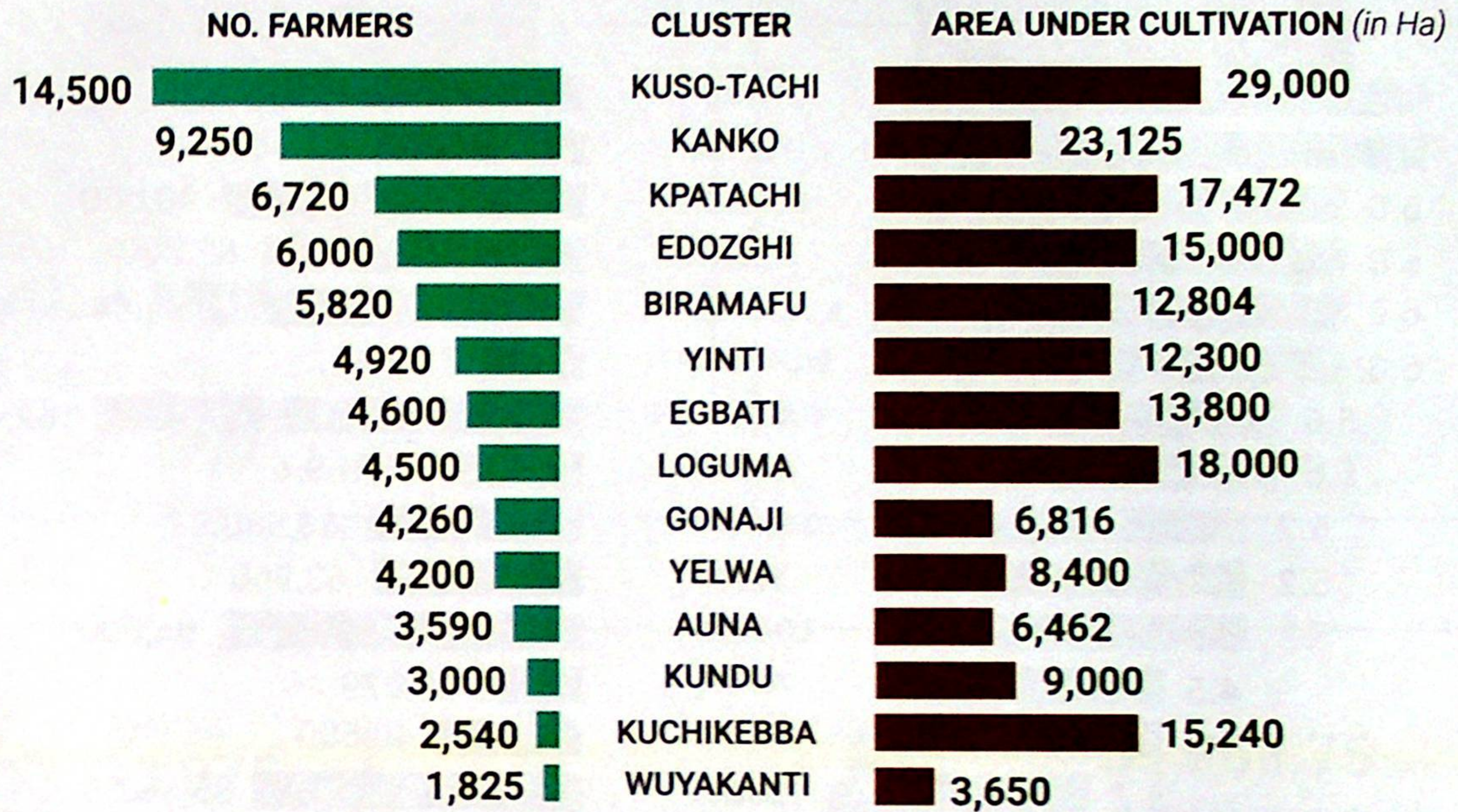
Niger State Calendar of Rice Production and Post-Harvest Activities

	Dry Season					Wet Season						
	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV
Land Preparation	█					█						
Tiling		█					█					
Planting								█				
Fertilizer application			█						█			
Spraying			█						█			
Weeding			█	█						█		
Harvesting					█						█	
Threshing					█	█					█	
Drying					█	█					█	
Bagging					█	█					█	

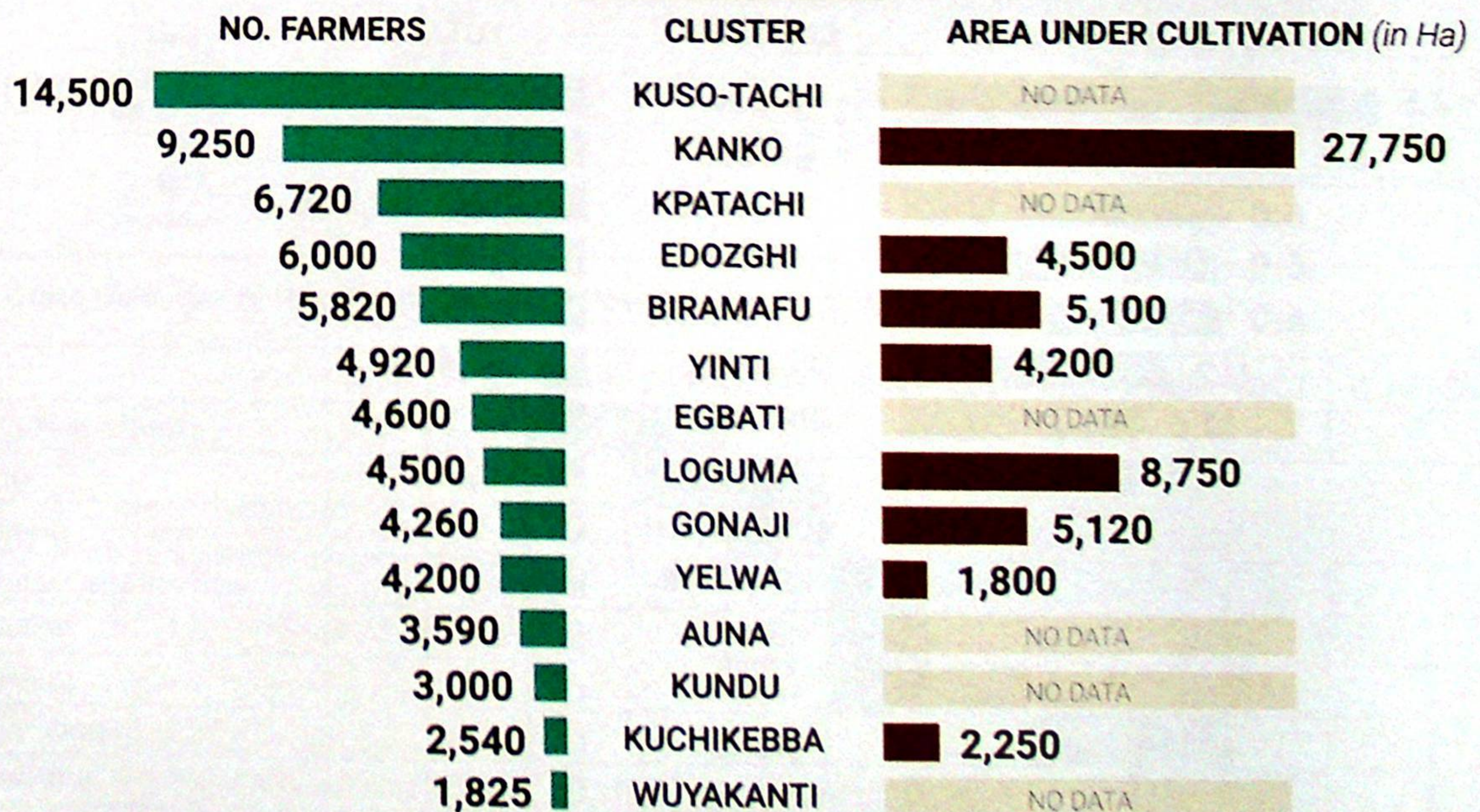


Niger State

WET SEASON



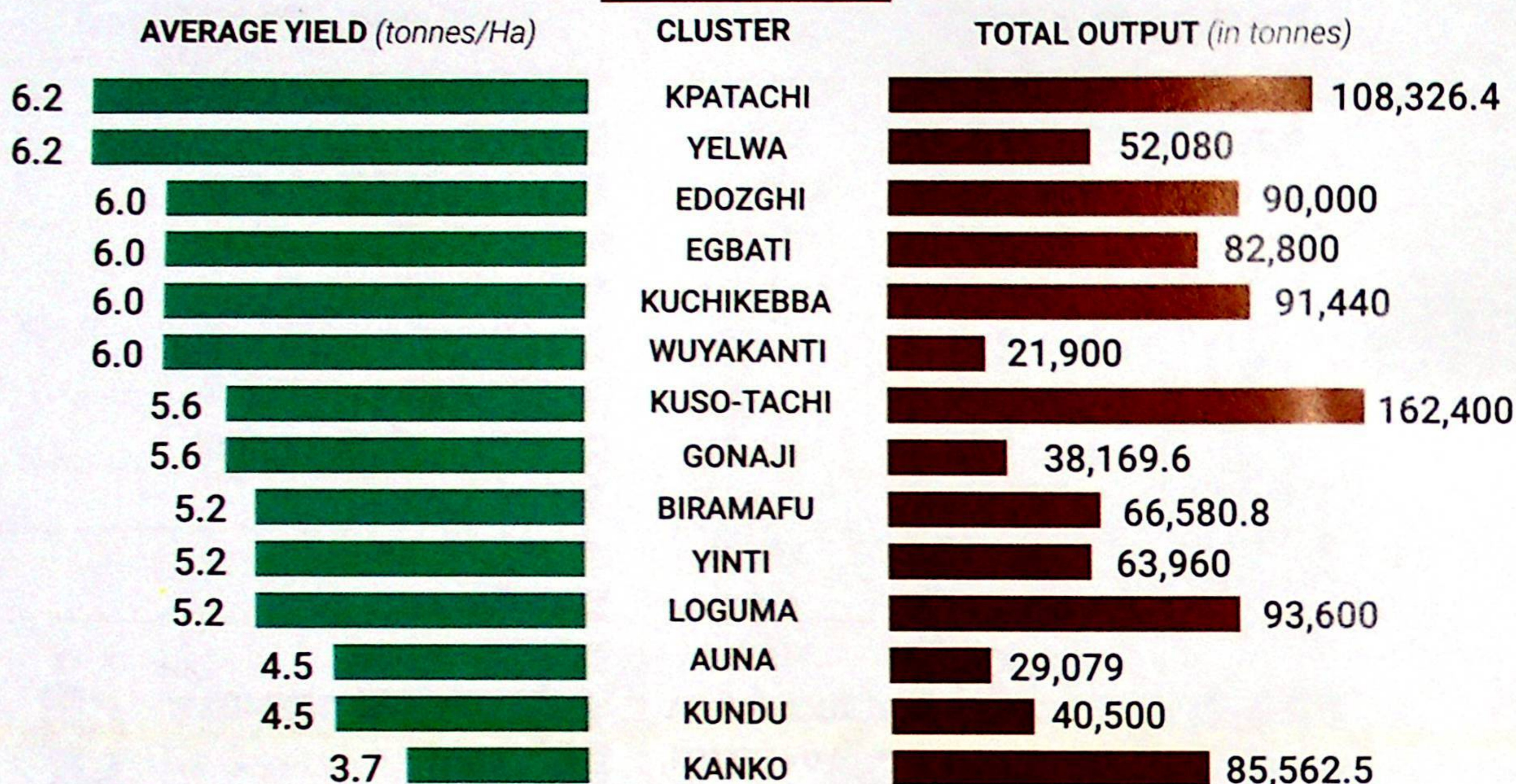
DRY SEASON



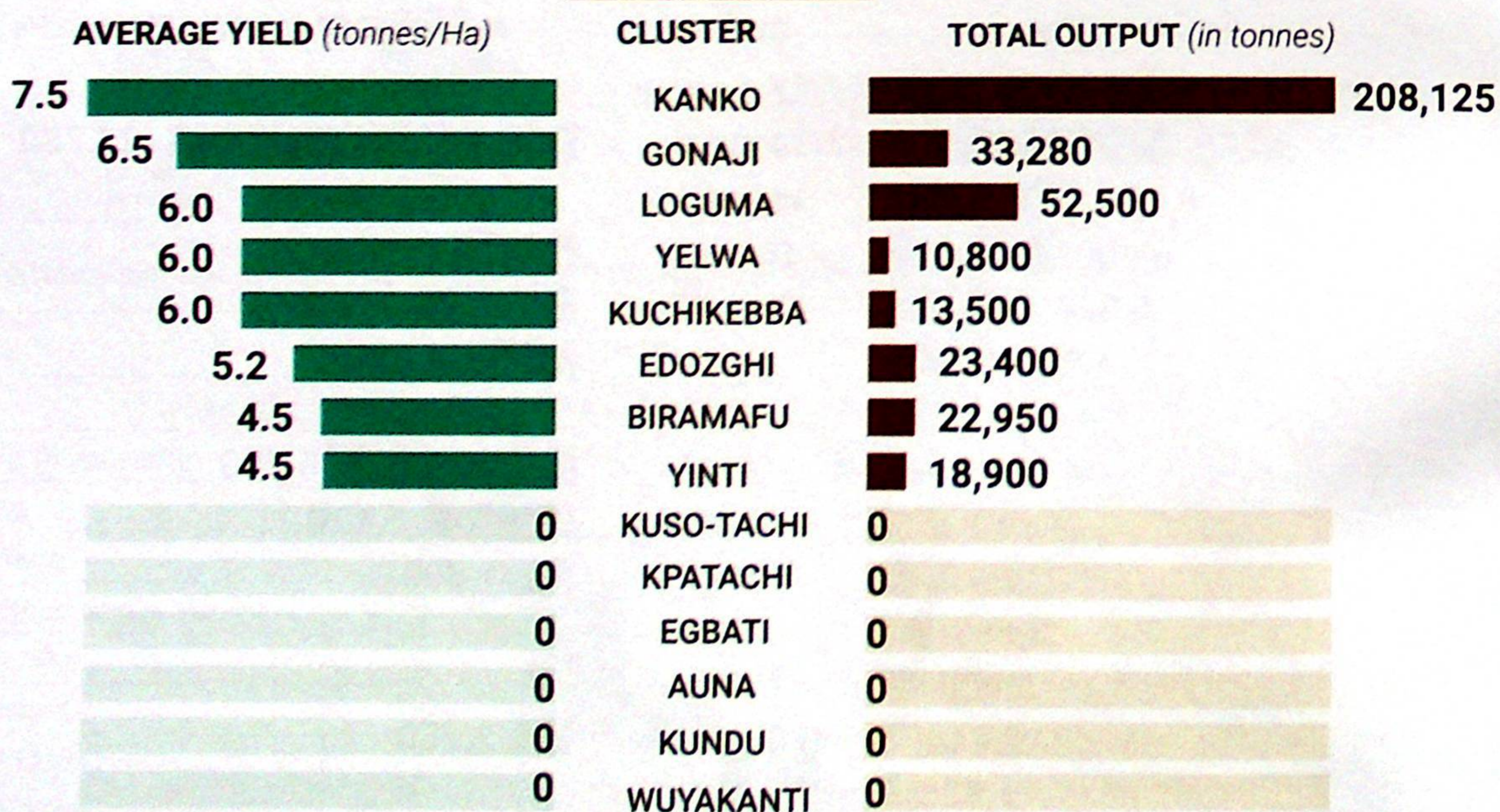


Niger State

WET SEASON



DRY SEASON





Ogun State

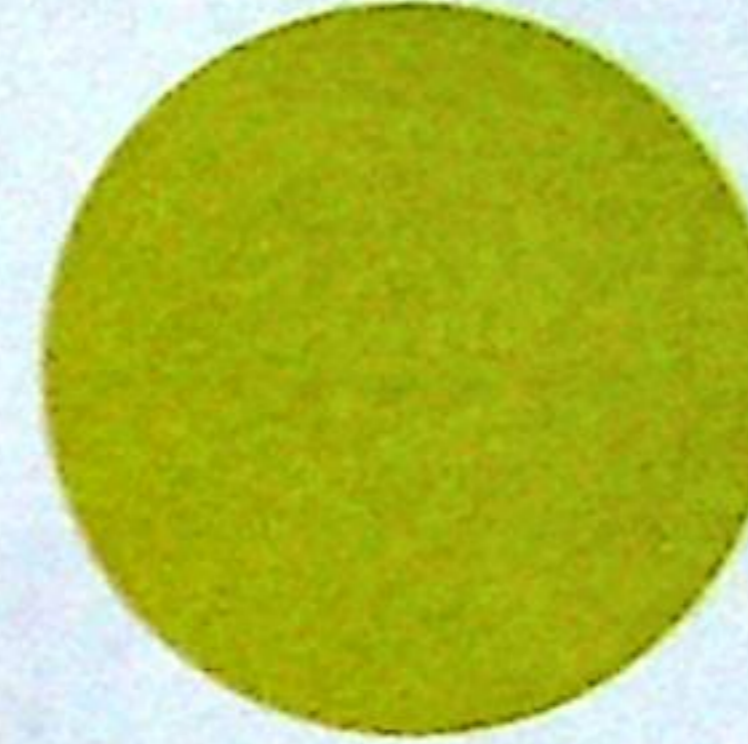
Farm Area Cultivated for Rice Farming



Wet Season **10,975** ha
 Dry Season **NO CULTIVATION**
 Total Area **10,975** ha

Rice Output

35,568.75
tonnes



NO CULTIVATION

Wet Season

Dry Season



Ogun has **10,975** rice farmers in the wet season and no farmer in dry season



2 RICE PRODUCTION CLUSTERS exist in the State



35,568.75 tonnes of rice is produced by farmers in this state

Average Yield (FGD)

Wet Season



2.97
tonnes/ha

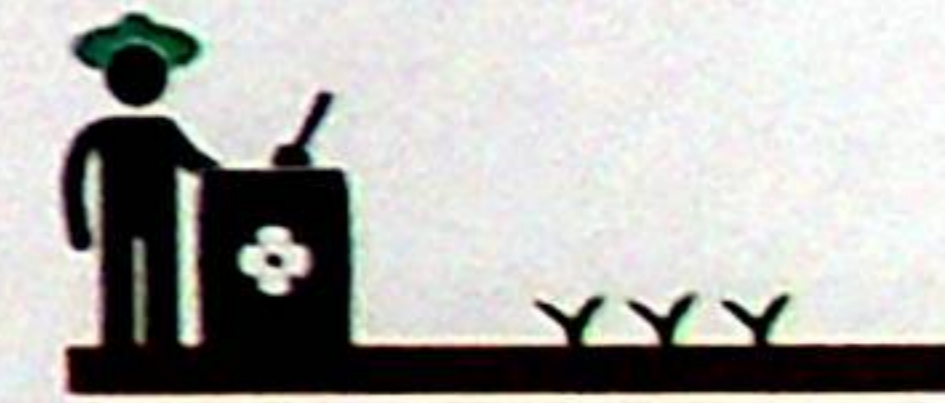
Dry Season

NO YIELD

Ogun State has

2,500

Farmers outside Rice farming groups



This represents **22.78%** of Rice farmers in the State

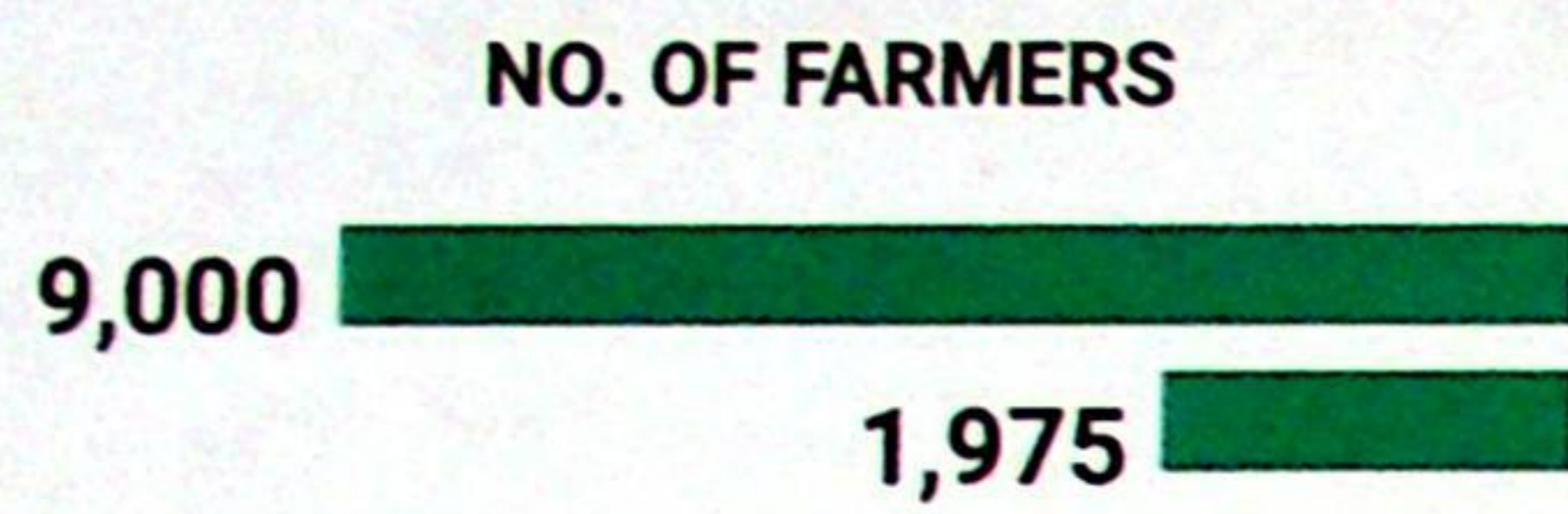
Ogun State Calendar of Rice Production and Post-Harvest Activities

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Land Preparation												
Tiling												
Planting												
Fertilizer application												
Spraying												
Weeding												
Harvesting												
Threshing												
Drying												
Bagging												

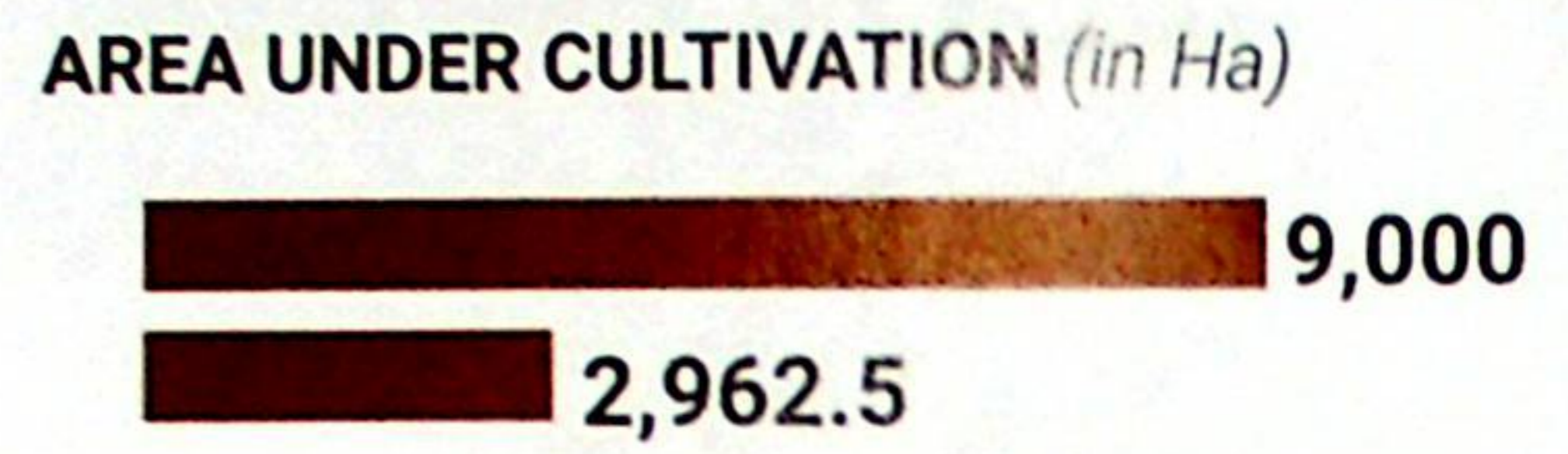


Ogun State

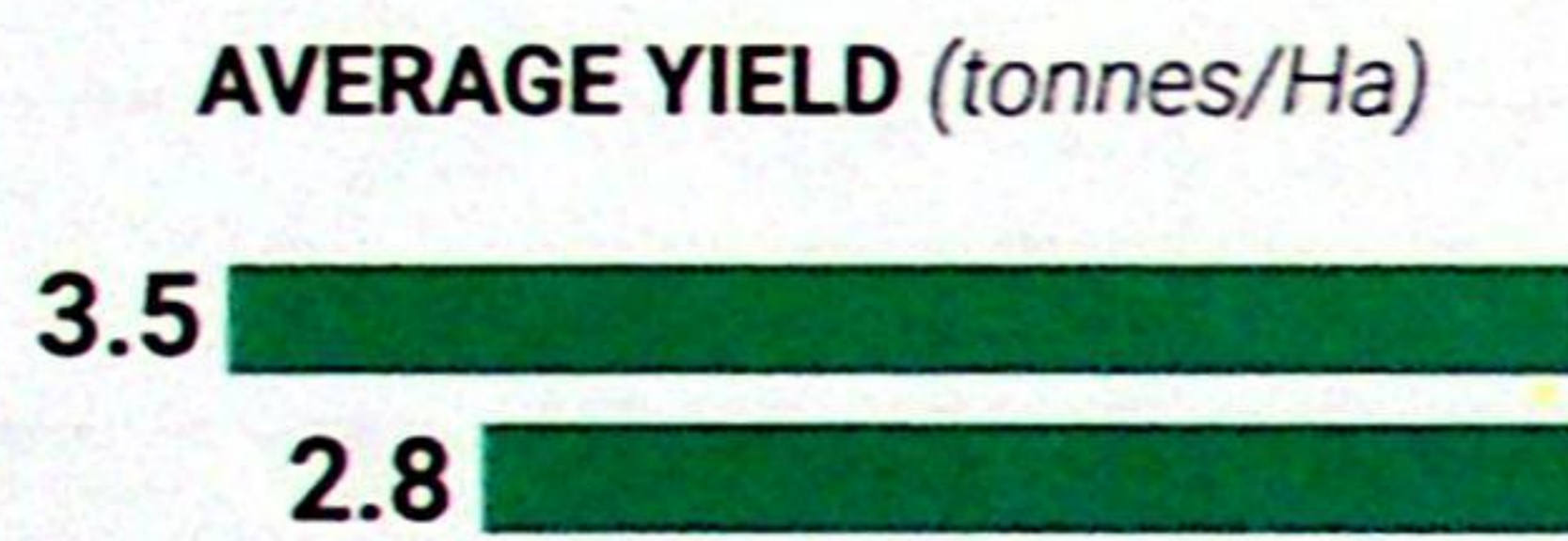
WET SEASON



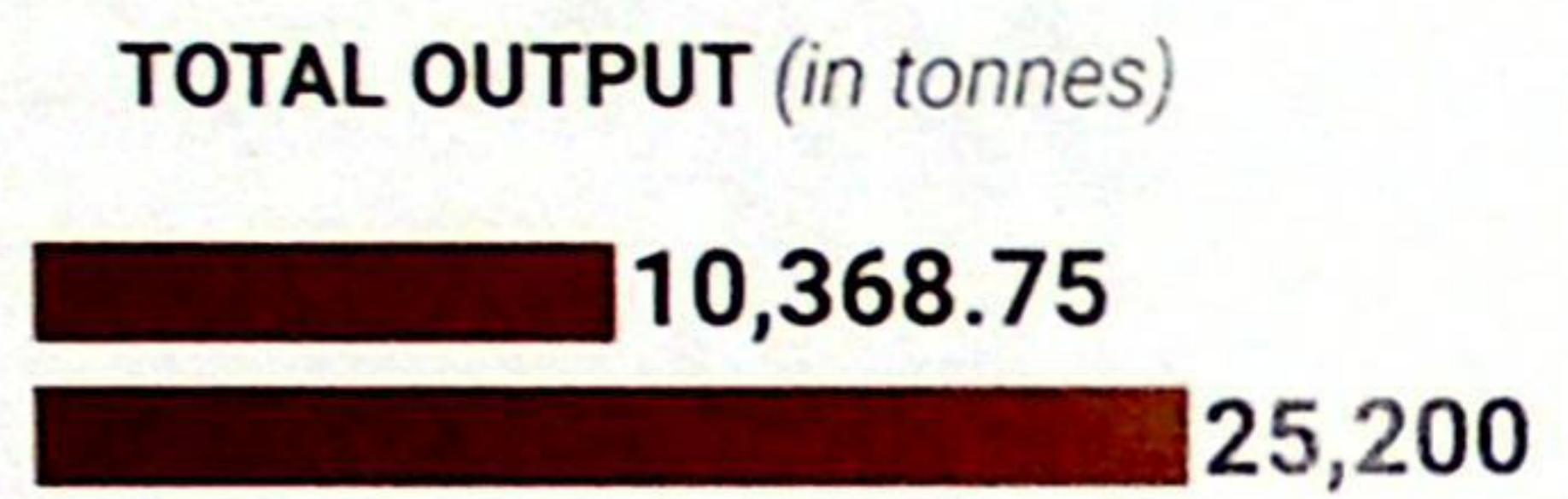
CLUSTER
SOWUNMI
EGBADO



WET SEASON



CLUSTER
EGBADO
SOWUNMI



Note: Rice production only happens in the wet season



Sokoto State

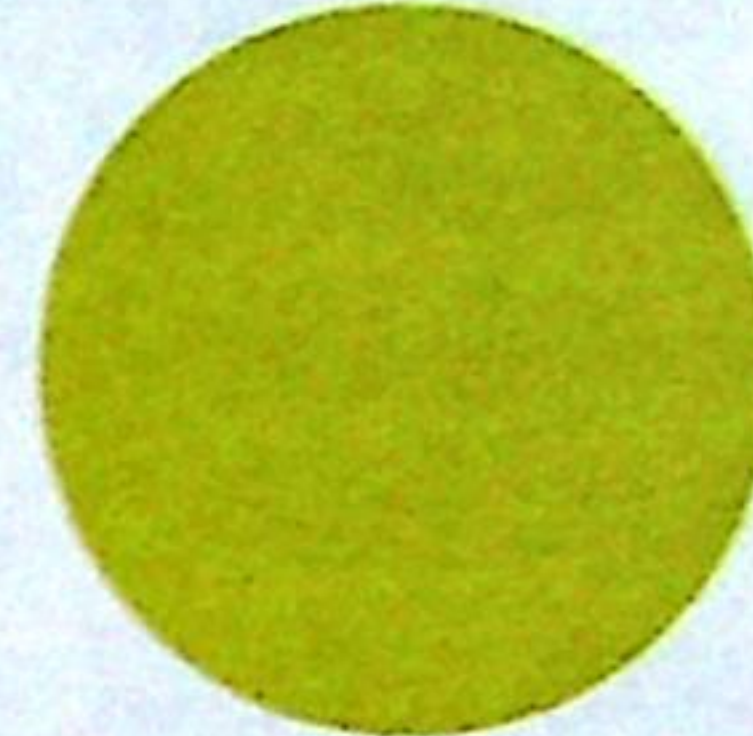
Farm Area Cultivated for Rice Farming



Wet Season **128,690** ha
 Dry Season **39,479.7** ha
 Total Area **168,169.7** ha

Rice Output

719,131.9
tonnes



Wet Season

259,018.1
tonnes



Dry Season



Sokoto has **50,610** rice farmers in the wet season and **33,638** farmers in dry season



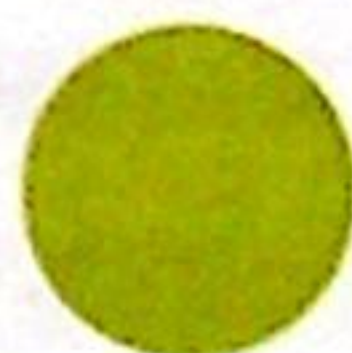
12 RICE PRODUCTION CLUSTERS exist in the State



978,149.9 tonnes of rice is produced by farmers in this state

Average Yield (FGD)

Wet Season



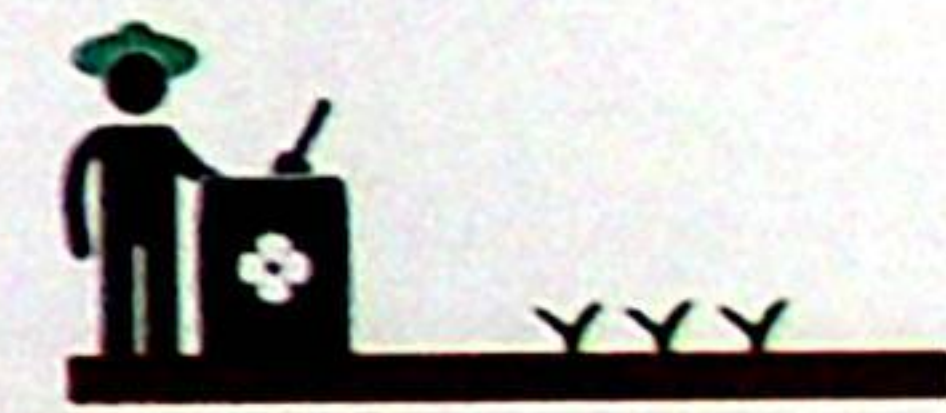
5.59
tonnes/ha

Dry Season

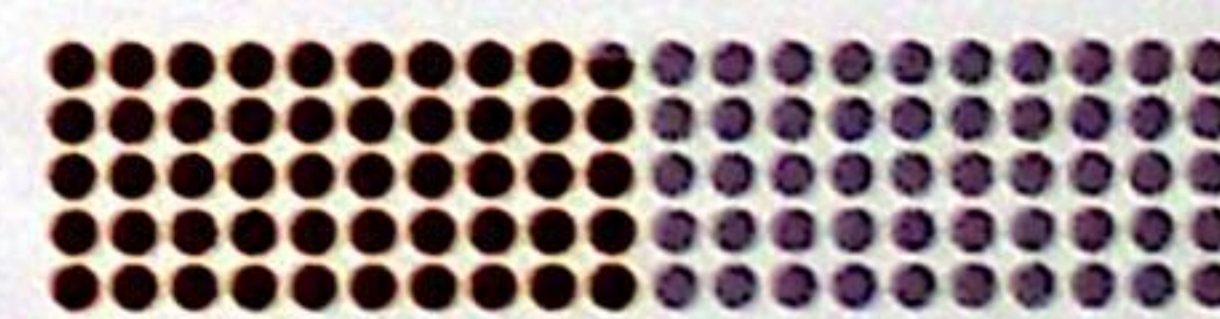


6.56
tonnes/ha

Sokoto State has **24,888**



Farmers outside Rice farming groups



This represents **49.18%** of Rice farmers in the State

Sokoto State Calendar of Rice Production and Post-Harvest Activities

	Dry Season					Wet Season						
	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV
Land Preparation	█	█			█	█						
Tiling		█					█					
Planting		█					█	█				
Fertilizer application			█						█			
Spraying			█						█			
Weeding				█						█	█	
Harvesting					█	█					█	
Threshing					█	█					█	
Drying					█	█					█	
Bagging					█	█					█	



Sokoto State

WET SEASON

NO. FARMERS	CLUSTER	AREA UNDER CULTIVATION (in Ha)
7,290	Katame	21,870
5,455	Margai	10,910
5,317	Romon Liman	18,609.5
5,257	Mai Iyali	18,399.5
4,985	Kebbe	9,970
3,535	Wurno	10,605
3,510	Kiyasa	10,530
3,309	Girabshi	6,618
3,300	Takakume	6,600
3,200	Lokobi Kawawo	6,400
3,120	Lugu	4,680
2,332	Kware	3,498

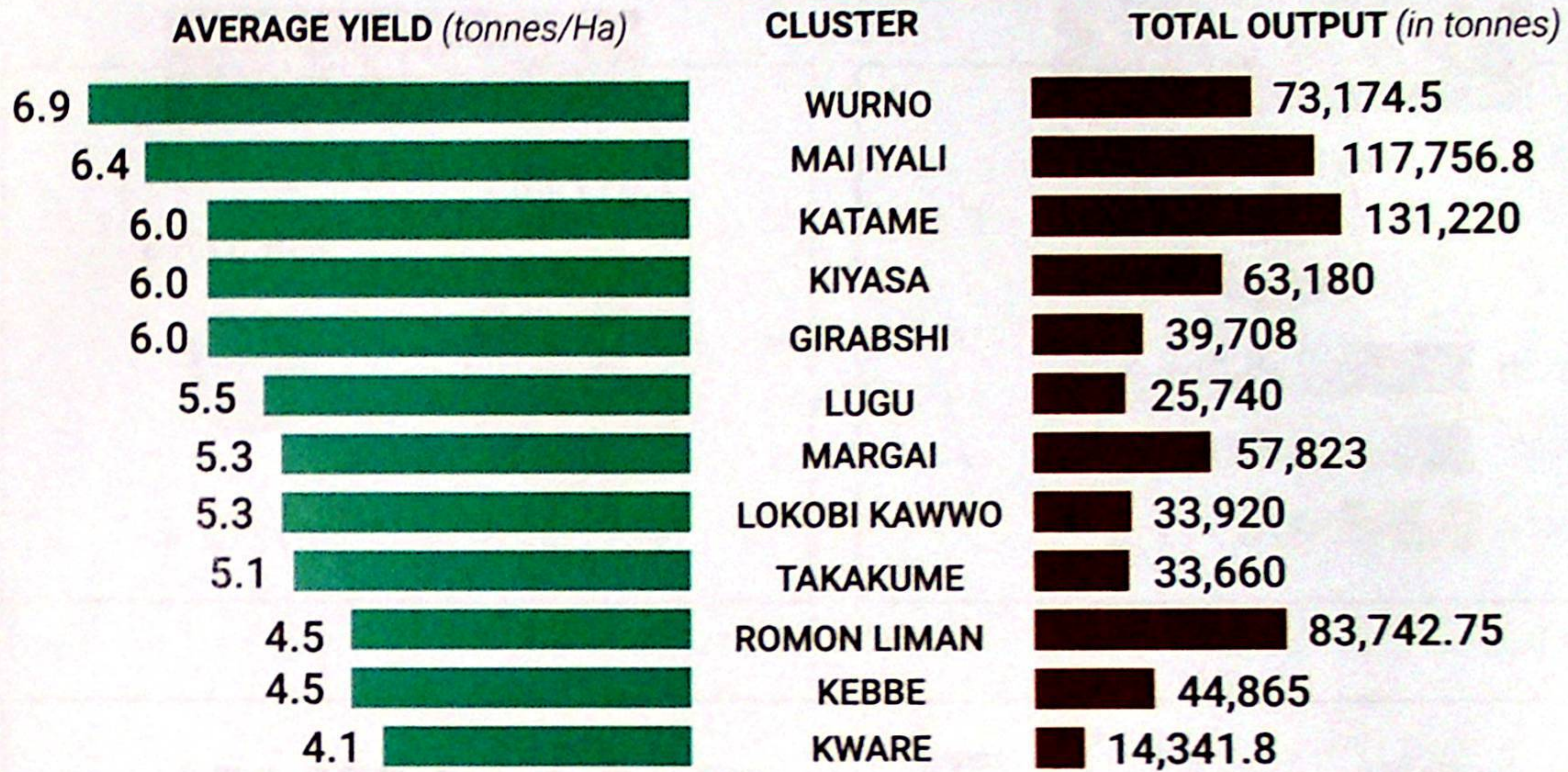
DRY SEASON

NO. FARMERS	CLUSTER	AREA UNDER CULTIVATION (in Ha)
7,290	KATAME	8,748
5,455	MARGAI	4,909.5
5,317	ROMON LIMAN	6,380.4
5,257	MAI IYALI	3,154.2
4,985	KEBBE	4,735.75
3,535	WURNO	1,166.55
3,510	KIYASA	2,632.5
3,309	GIRABSHI	1,985.4
3,300	TAKAKUME	1,485
3,200	LOKOBI KAWWO	2,880
3,120	LUGU	936
2,332	KWARE	466.4

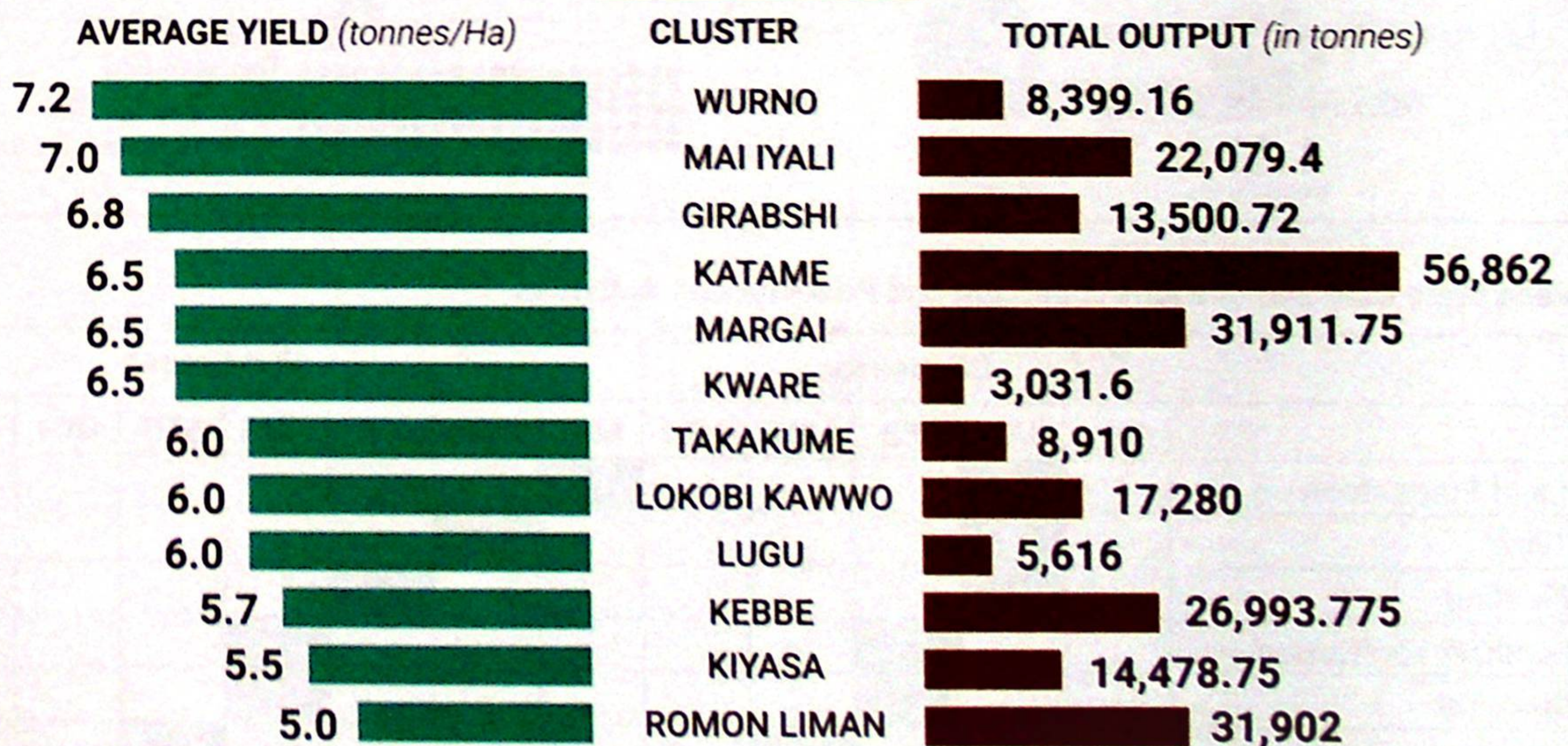


Sokoto State

WET SEASON



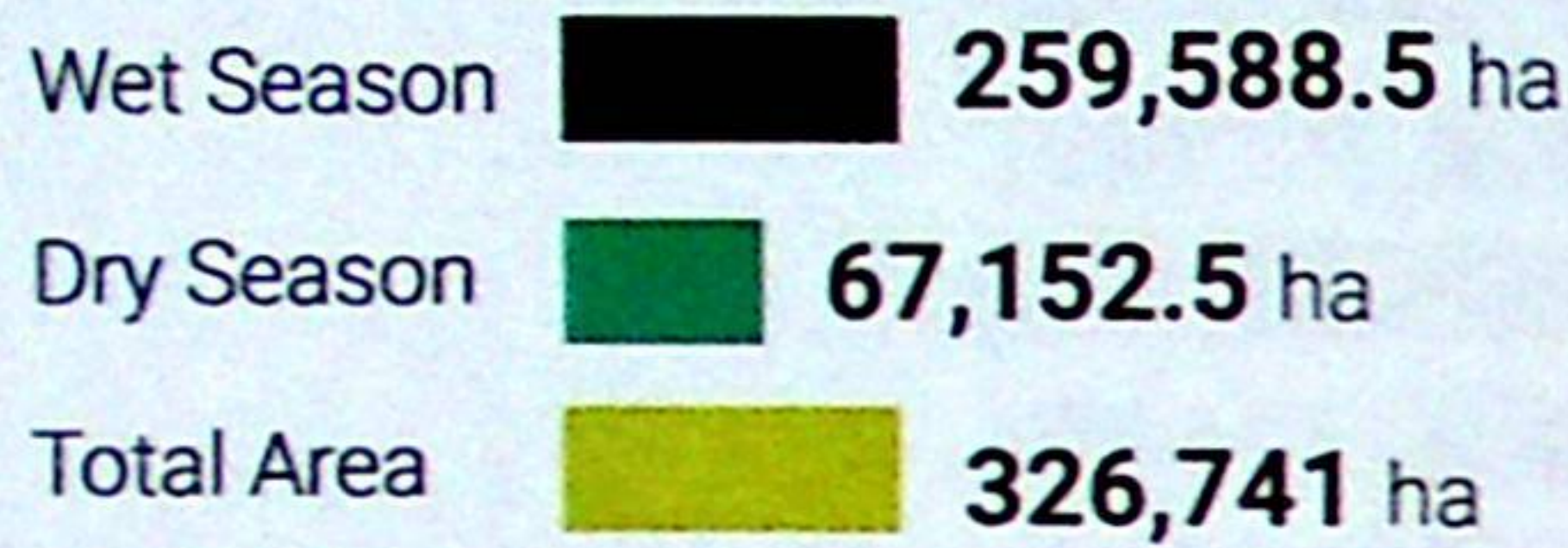
DRY SEASON



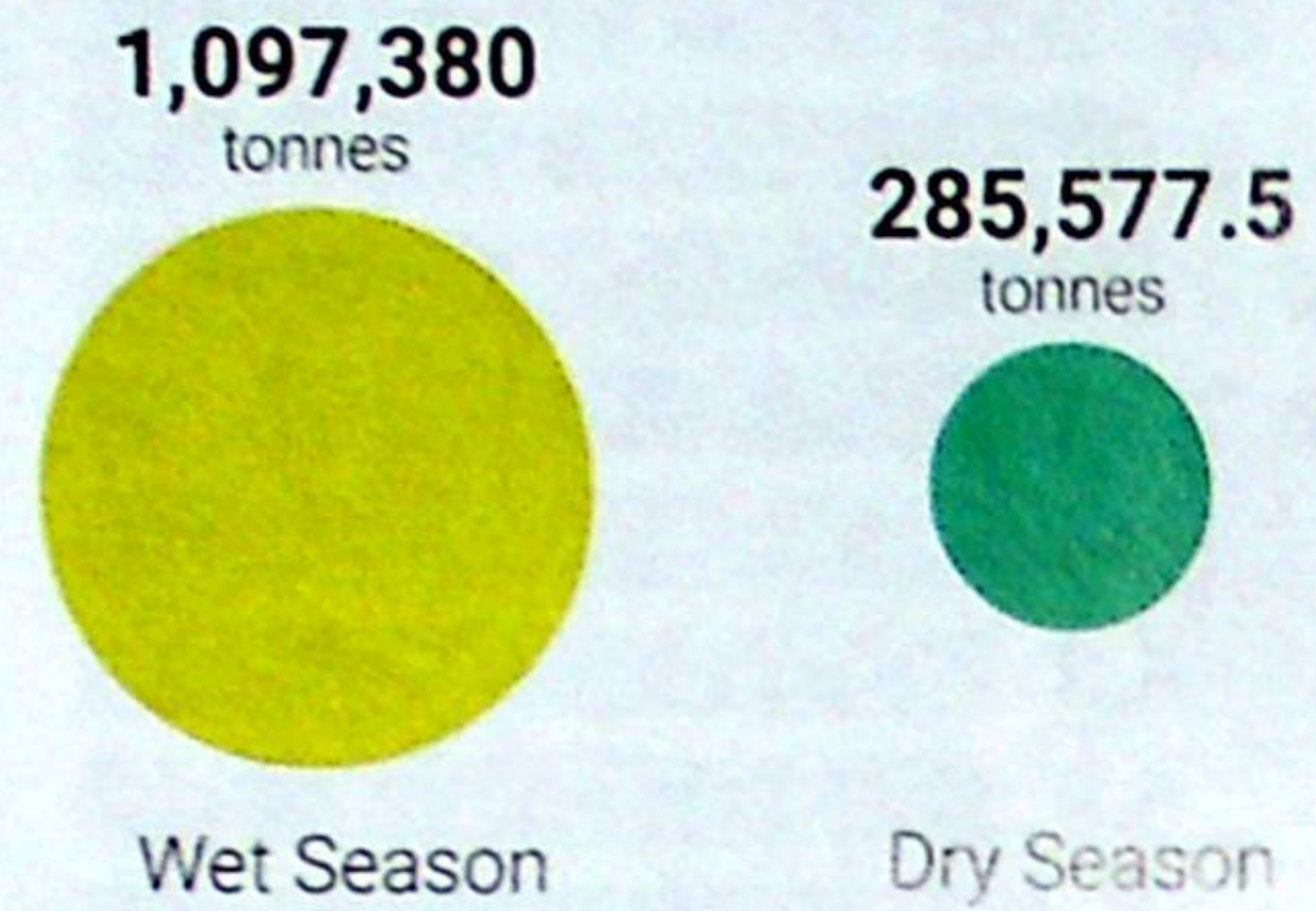


Taraba State

Farm Area Cultivated for Rice Farming



Rice Output



Taraba has **119,503** rice farmers in the wet season and 7,478 farmers in dry season

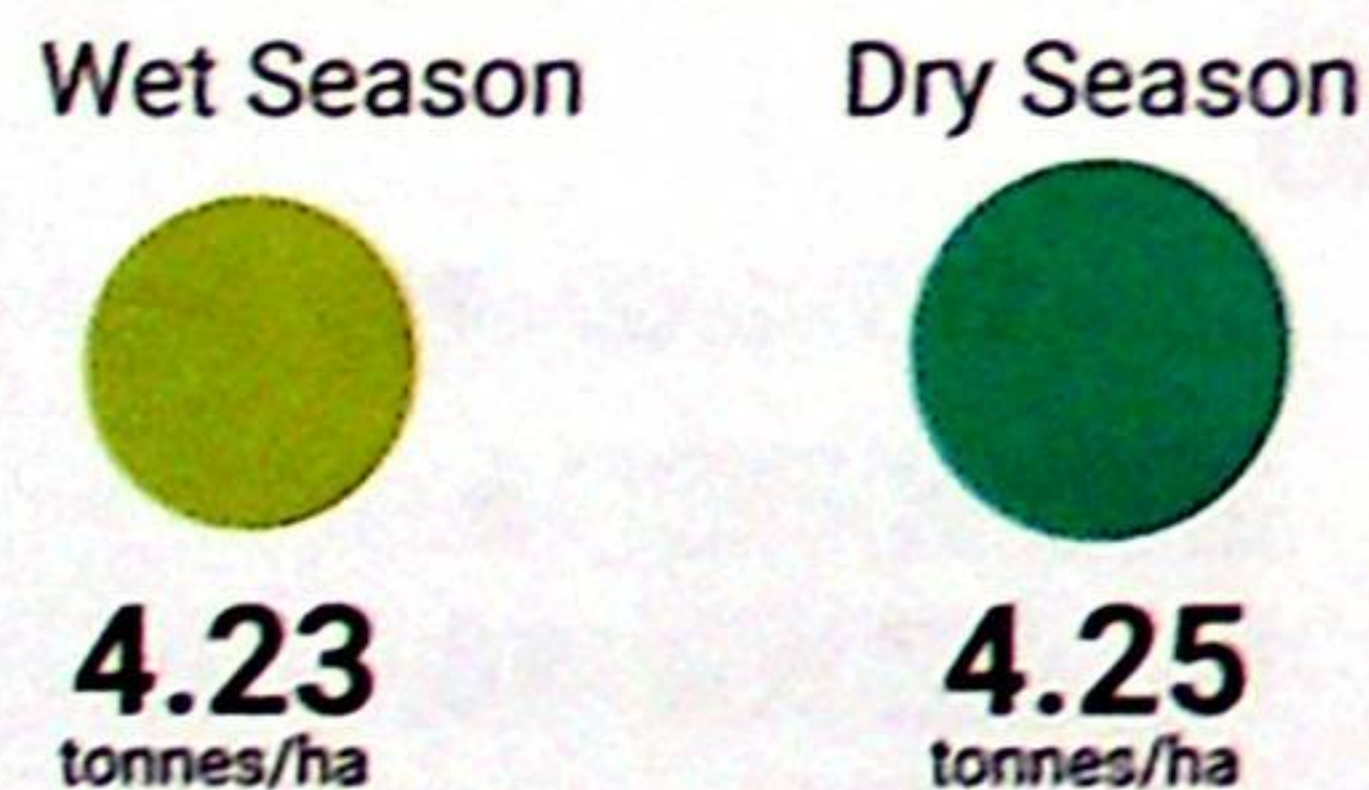


17 RICE PRODUCTION CLUSTERS exist in the State

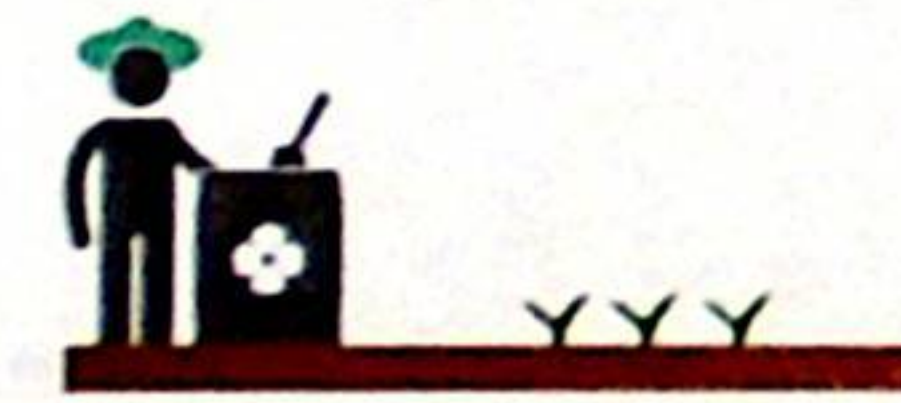


1,382,958 tonnes of rice is produced by farmers in this state

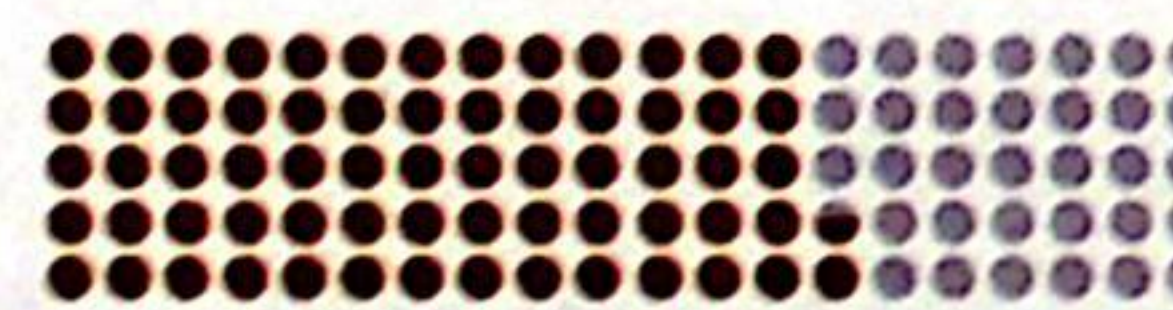
Average Yield (FGD)



Taraba State has **79,035**



Farmers outside Rice farming groups



This represents **66.14%** of Rice farmers in the State

Taraba State Calendar of Rice Production and Post-Harvest Activities

	Dry Season					Wet Season						
	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV
Land Preparation												
Tiling												
Planting												
Fertilizer application												
Spraying												
Weeding												
Harvesting												
Threshing												
Drying												
Bagging												



Taraba State

WET SEASON

NO. FARMERS	CLUSTER	AREA UNDER CULTIVATION (in Ha)
23,000	DONGA	59,800
15,380	WUKARI	33,836
12,576	CHANCHANJI	25,152
12,354	TALLA	24,708
7,640	MUTUM BIYU	16,808
6,998	GARIN DOGO	20,994
5,560	RAFIN KADA	11,120
4,570	TAKUM	11,425
4,325	AKATE	9,515
4,272	LAU	8,544
3,915	KOPPI	9,787.5
3,590	LISSAN	3,590
3,568	KONA	3,568
3,550	JALINGO	3,550
3,296	SUNKANI	6,592
2,845	KWESATI	8,535
2,064	KOFAI	2,064

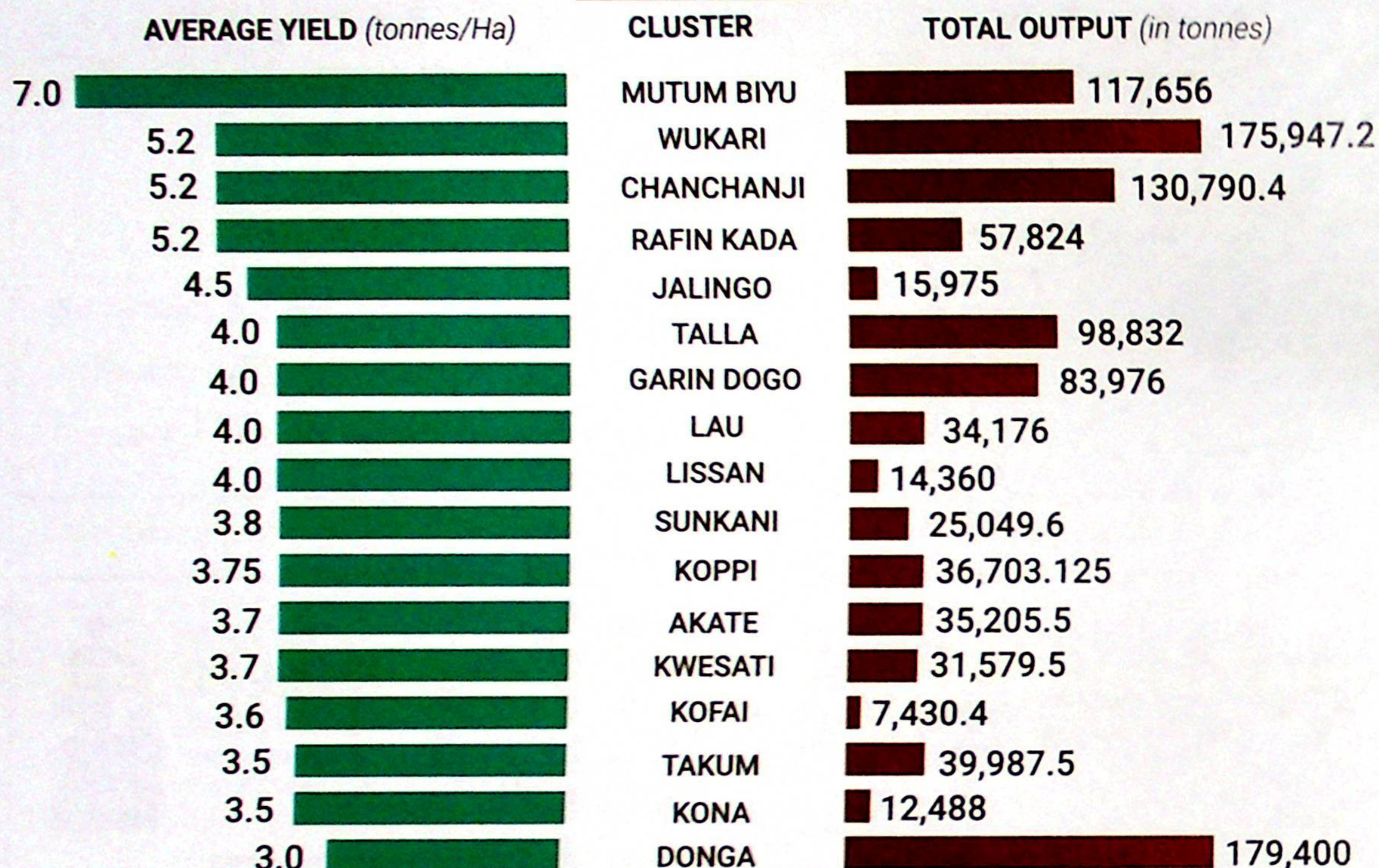
DRY SEASON

NO. FARMERS	CLUSTER	AREA UNDER CULTIVATION (in Ha)
23,000	DONGA	46,000
15,380	WUKARI	0
12,576	CHANCHANJI	0
12,354	TALLA	0
7,640	MUTUM BIYU	15,280
6,998	GARIN DOGO	0
5,560	RAFIN KADA	0
4,570	TAKUM	0
4,325	AKATE	0
4,272	LAU	0
3,915	KOPPI	5,872.5
3,590	LISSAN	0
3,568	KONA	0
3,550	JALINGO	0
3,296	SUNKANI	0
2,845	KWESATI	0
2,064	KOFAI	0

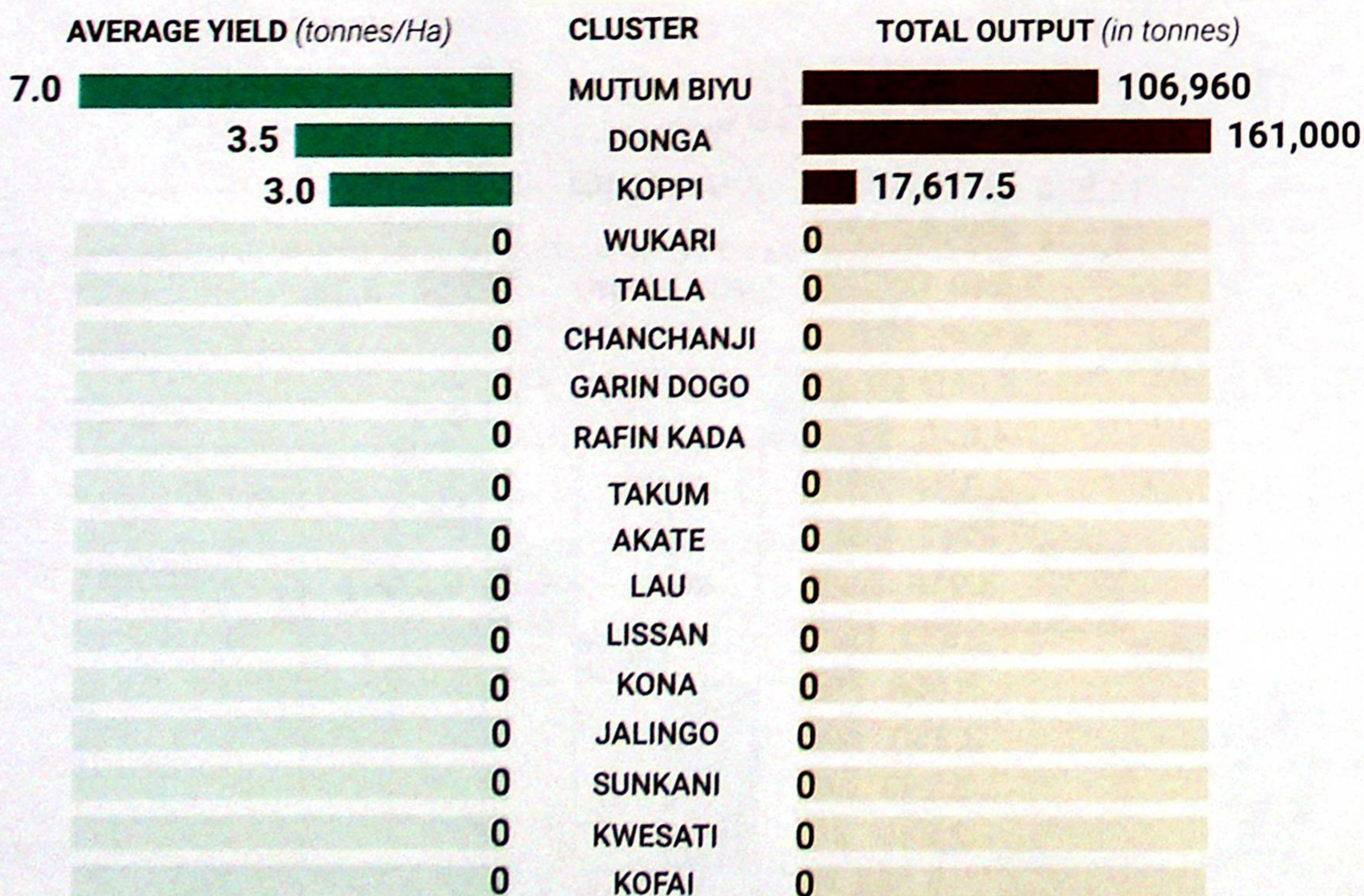


Taraba State

WET SEASON



DRY SEASON





Zamfara State

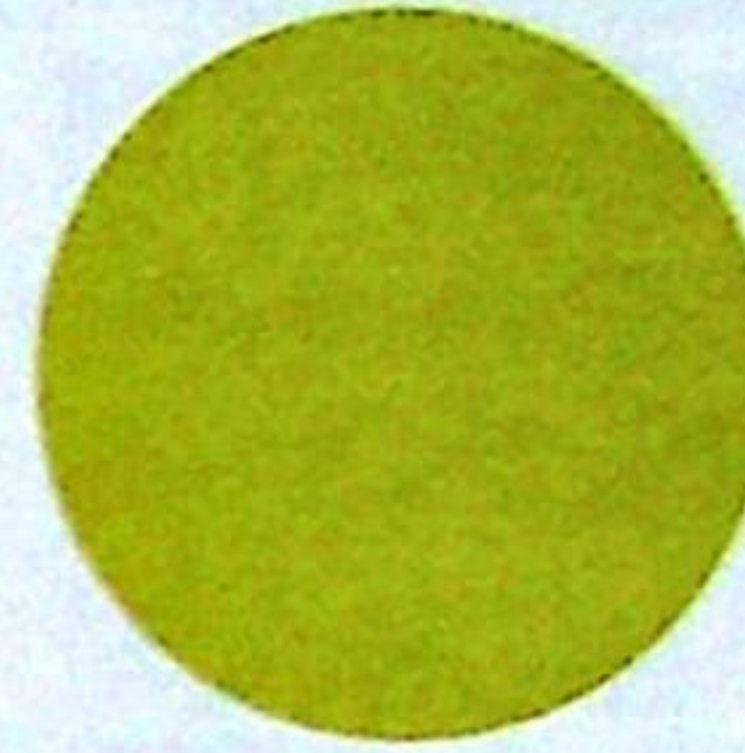
Farm Area Cultivated for Rice Farming



Wet Season **127,512.5 ha**
 Dry Season **52,191 ha**
 Total Area **179,703.5 ha**

Rice Output

666,033.8
tonnes



Wet Season

317,515
tonnes



Dry Season



Zamfara has **118,855** rice farmers in the wet season and **24,159** farmers in dry season



8 RICE PRODUCTION CLUSTERS exist in the State



983,548.8 tonnes of rice is produced by farmers in this state

Average Yield (FGD)

Wet Season



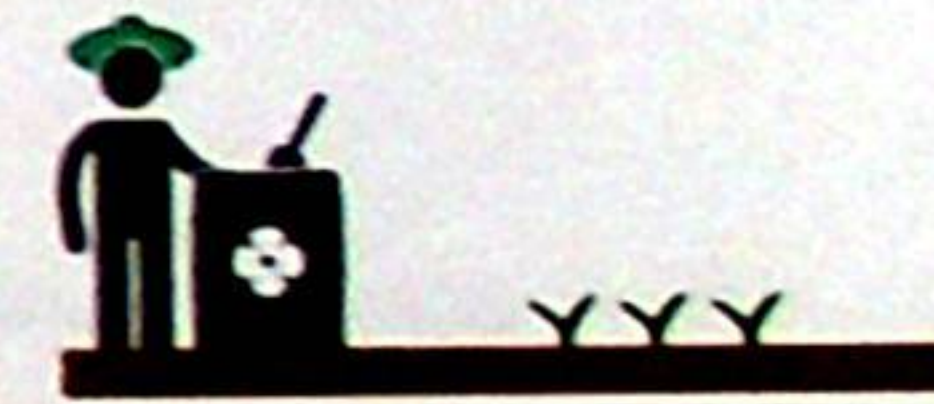
5.22
tonnes/ha

Dry Season

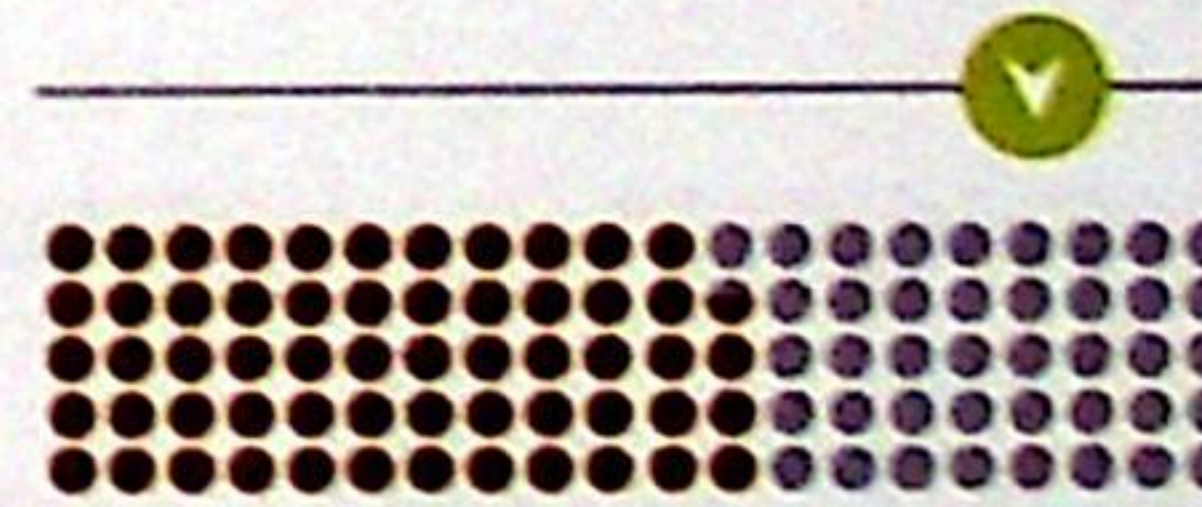


6.08
tonnes/ha

Zamfara State has **69,750**



Farmers outside Rice farming groups



This represents **58.68%** of Rice farmers in the State

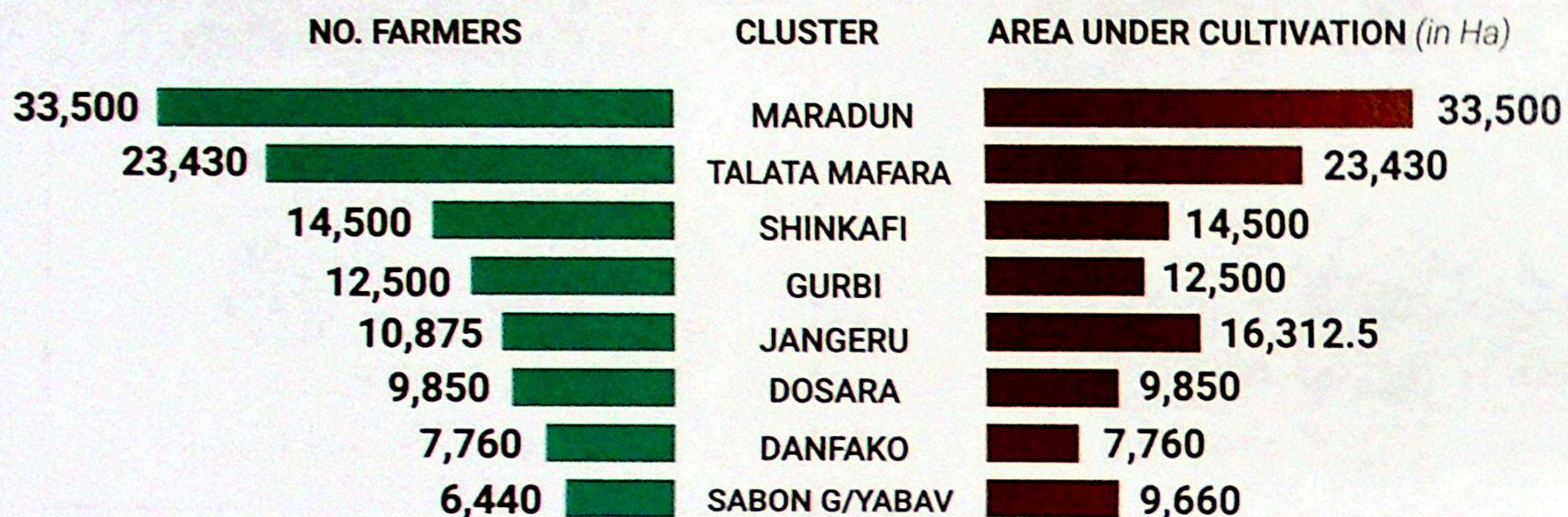
Zamfara State Calendar of Rice Production and Post-Harvest Activities

	Dry Season					Wet Season						
	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV
Land Preparation												
Tiling												
Planting												
Fertilizer application												
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Harvesting												
Threshing												
Drying												
Bagging												

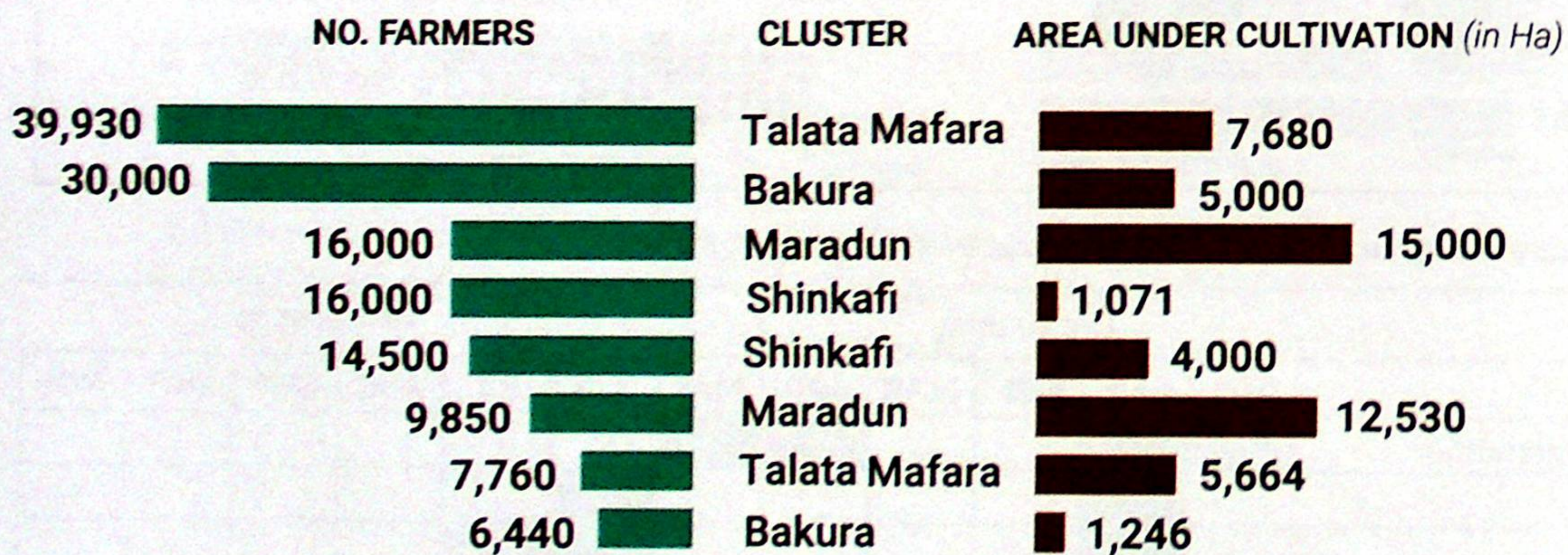


Zamfara State

WET SEASON



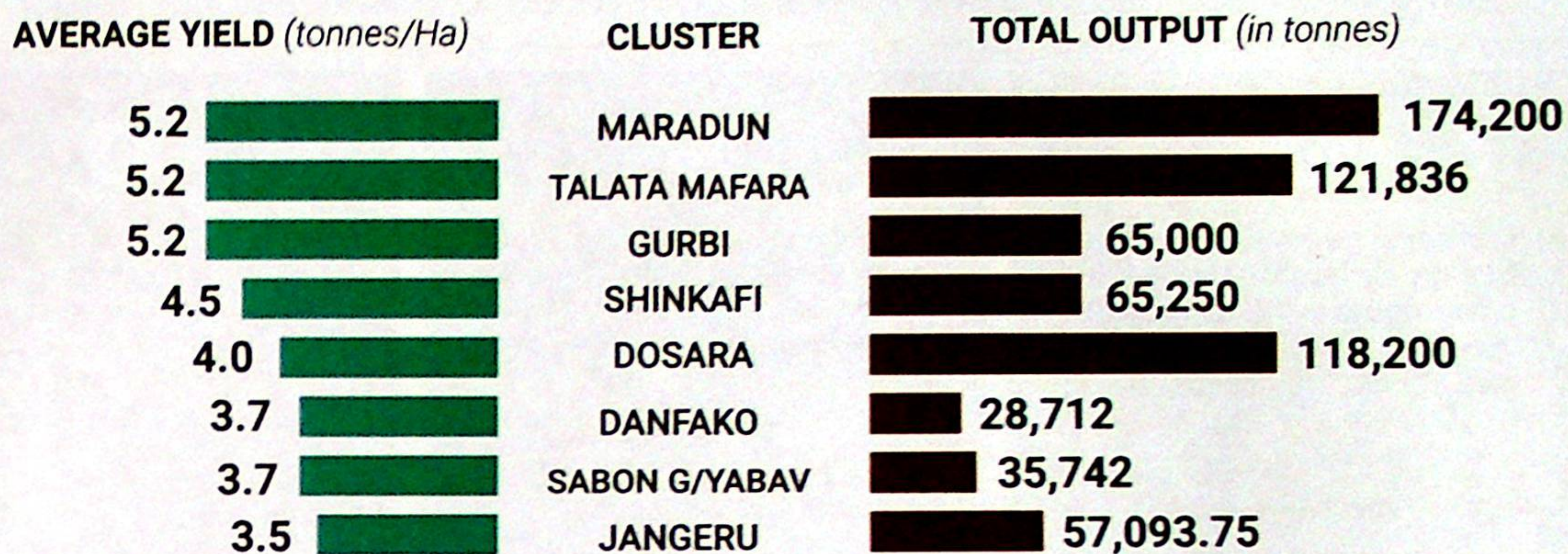
DRY SEASON



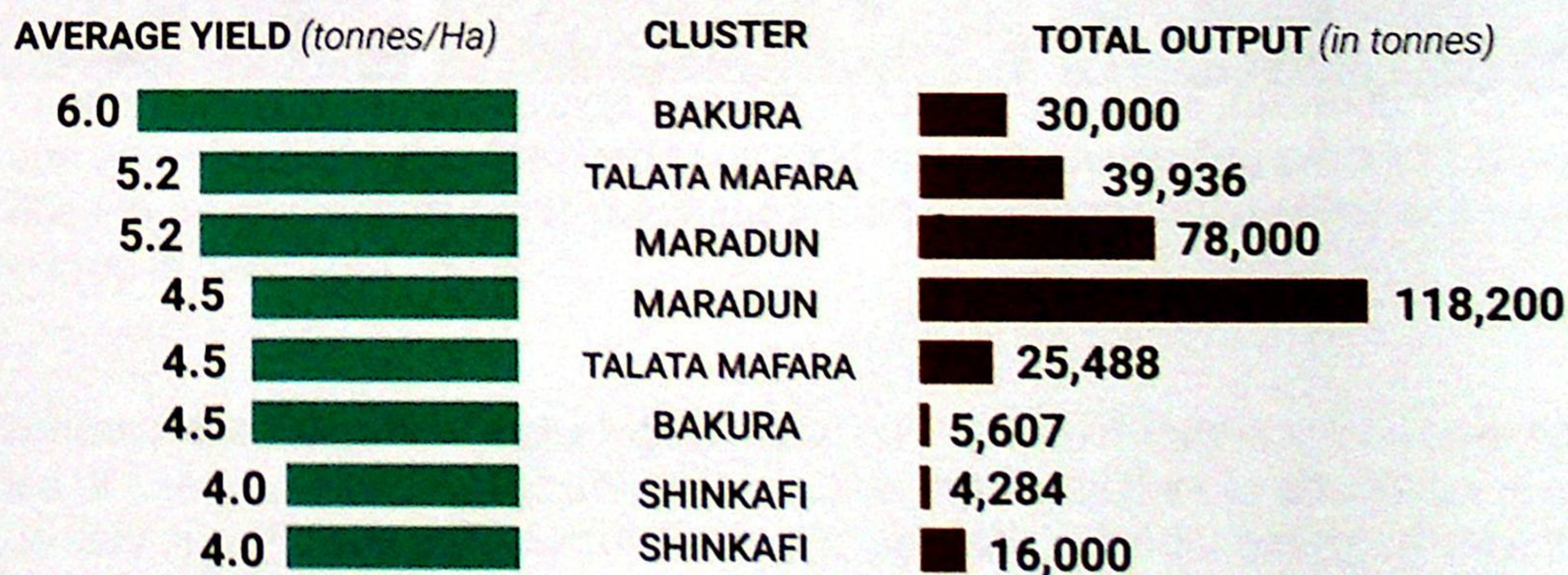


Zamfara State

WET SEASON



DRY SEASON





Rice Production Challenges

1

Farmers generally reported having difficulties acquiring agro-inputs particularly quality seed and fertilizer, and accessing credit.

2

Infrastructure such as irrigation facilities, feeder road and storage facilities was generally of poor quality

3

In lowland rice production areas, wet season flooding is a major challenge for farmers.

4

Poor access to information on modern and mechanical production and post-harvest technologies, and associated high costs of acquisition

5

Difficulties associated with accessing credit particularly high interest rate and cumbersome nature of registration and verification which results in late disbursement

6

A loss of labour through migration of young people to cities resulting in aging farming population.

Implications and opportunities for stakeholders

Existing and potential processors: The mapping study characterized all clusters in terms of yields, output and seasonality of paddy production. Processors can use this information to make informed decisions about raw materials procurement, location and capacity of new milling plants. Pinpointing locations in the north-west or Taraba (the areas constituting 80% of total production) for new development, is easily possible through the geo-location of clusters and sub-clusters.

Government: The accumulation of knowledge and learning is critical for any type of development strategy. Therefore, for self-sufficiency in rice production to be effective, there is the need for up-to-date information and data on rice production. The findings of this study can be used to make evidence-based planning decisions. This can guide government in understanding the potentials of the rice sub-sector in creating employment and incomes. This is also particularly important for planning of infrastructure development strategies.

International donors and development partners: The findings of the study reveal the structure of rice production in Nigeria detailing socio-economic and bio-physical information on 165 geo-located rice producing clusters and 2812 sub-clusters across 96 LGAs of 18 major producing states. This information can be used by international donors and development partners with interest in the rice sector, to assist the focus of their interventions in rice value-chain development in the most appropriate manner.

Financial institutions: The findings of the mapping study can guide financial institutions in targeting potential areas for diversifying their customer base. It can be used to focus banks attention on the best areas to develop banking in rural areas. The information on timing of production activities highlights the need to provide appropriate lending products; that is, lending facilities must enable farmers to purchase inputs at the appropriate time and repay loans once the crop is harvested and sold.

Manufacturers and dealers of agro-inputs: data on number of farmers, total area cultivated and types of seed, provided by the study can enable inputs dealers to estimate the potential market in very specific areas. The information on cropping calendar based on varying cycles of production (wet and dry seasons) will give the dealers a clear vision of when inputs are required. This enables the manufacturers and dealers of the inputs to plan their inventory, their production and their distribution, in a timely manner.

Manufacturers and vendors of agro-machinery: The information on number and locations of rice clusters and the major markets (aggregation centres) for each of the LGA's can guide vendors of machinery and equipment to the geographical location of potential customers and also to appropriate locations for establishing distribution centres (i.e. permanent sales outlets).

For more information please visit: <http://gems4.coffeycloud.com>



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