

# **State-wise analysis of Production, Storage, Market arrival and Price trends for Onion and Potato**



Horticulture Statistics Division  
D/o Agriculture & Cooperation

# Onion Season

- In India, three crops of onion are grown:
  - Rabi (March-June)
  - Kharif (October-December)
  - Late Kharif (January-March).

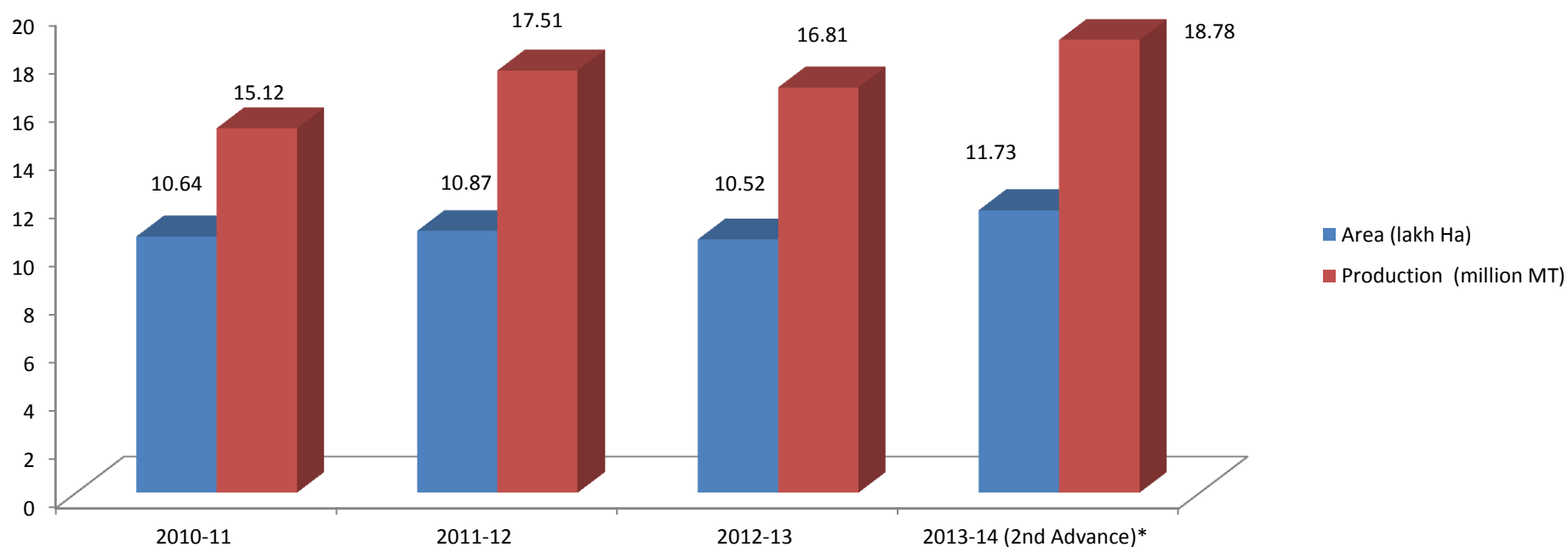


- Kharif produce is available in the market from **October to December**, which accounts for 15-20%.
- Late Kharif produce comes in the market from **January to March** and accounts for 20-25%.
- The Rabi crop is harvested in **April to June** which accounts for 60-65%. Mainly, the Rabi onion is stored till **October-November** and is made available steadily for domestic as well as export markets.

# All India Onion Production for last three years

Year	Area ('000 Ha)	Production ('000 MT)	Productivity (in MT/Ha)
2010-11	1064.0	15118.0	14.2
2011-12	1087.2	17511.1	16.1
2012-13	1051.5	16813.0	16.0
2013-14 (2 <sup>nd</sup> Advance)*	1173.3	18777.5	16.0

\* Provisional



# Major Onion Producing States

A: Area (in '000 Ha)  
P: Production (in '000 MT)

States/UTs	2010-11		2011-12		2012-13		2013-14 (2 <sup>nd</sup> est.)\$		Average Productivity (MT/Ha)
	A	P	A	P	A	P	A	P	
Maharashtra	415.0	4905.0	382.00	5638.00	260.00	4660.00	468.00	5867.00	14.3
Karnataka	190.5	2592.2	177.20	2451.20	159.60	2395.90	164.30	2466.40	14.4
M.P.	58.3	1021.5	88.07	1957.00	111.73	2691.00	117.31	2826.00	22.0
Gujarat	62.0	1514.1	61.30	1562.20	28.85	704.38	72.6*	1858.00*	24.9
Bihar	53.3	1082.0	53.81	1236.74	53.02	1107.84	54.32	1304.15	22.0
Andhra Pradesh	47.8	812.6	48.52	824.77	86.67	1560.06	89.72	1525.18	17.2

Source: State Horticulture Departments

\$ Prov.

\*As per Rabi estimates

# Present Situation in Onion

- As per Agriwatch estimates, the lower production in Maharashtra in 2013-14 owing to rains and hailstorms is expected to be compensated by higher production in Gujarat and Karnataka.

## As per Agriwatch:

- Total Rabi production - in the range of 95-100 lakh tons.

## As per State Government figures:

- Total Rabi production – around 112 lakh tons.(assuming 60% of total onion production)

# Present Situation in Onion

- As per State Government of Maharashtra:
  - ❖ Total Rabi area ~ 2.14 lakh ha
  - ❖ Affected area by rains & hailstorms ~1.20 lakh ha
  - ❖ 2012-13 Rabi onion acreage was 1.56 lakh ha.
  - ❖ It is estimated that total Rabi onion production this year in the state would be similar to that of last year.
- In Karnataka:
  - ❖ Total targeted area for Rabi crop ~21,967 ha.
  - ❖ Sowing was completed in 28,078 ha
  - ❖ Area affected due to hailstorm and rains ~ 1,777 ha.
  - ❖ Rabi yield is expected to be 15 ton/ha.
- In Madhya Pradesh:
  - ❖ Total area for Rabi crop ~1,17,000 ha.
  - ❖ 10–15% of crop loss is expected but exact estimation is expected to be made after a couple of weeks.

# Market Arrival of Onion in 2013-14 vis-a-vis in 2012-13

States/UTs	Market Arrival (in '000 MT)											
	Nov-13	Nov-12	Dec-13	Dec-12	Jan-14	Jan-13	Feb-14	Feb-13	Mar-14	Mar-13	Apr-14	Apr-13
<b>MAHARASHTRA</b>	201.04	191.19	317.84	318.55	467.08	368.92	335.93	307.58	311.58	287.64	236.72	293.48
<b>MADHYA PRADESH</b>	40.04	57.95	34.12	52.18	39.62	35.69	30.6	25.21	37.68	39.18	53.73	57.60
<b>KARNATAKA</b>	151.57	129.37	103.98	80.57	84.3	64.80	72.56	56.28	86.23	57.45	87.99	55.55
<b>ANDHRA PRADESH</b>	19.6	9.49	9.97	8.09	12.85	1.30	13.68	2.06	20.97	3.10	18.12	6.91
<b>GUJARAT</b>	70.62	34.38	181.48	40.48	198.26	112.19	328.6	195.69	268.72	145.90	271.99	80.15
<b>OTHERS</b>	297.5	191.17	455.9	219.30	469.26	271.49	291.34	211.95	339.68	311.15	375.55	305.22
<b>TOTAL</b>	<b>780.37</b>	<b>613.54</b>	<b>1103.29</b>	<b>719.17</b>	<b>1271.37</b>	<b>854.38</b>	<b>1072.71</b>	<b>798.82</b>	<b>1064.86</b>	<b>844.42</b>	<b>1044.1</b>	<b>798.91</b>

Source: AGMARKNET

# Onion Prices(Rs./quintal) in major markets (as on 12<sup>th</sup> May 2014)

	Agriwatch				AGMARKNET/NHRDF		
Centre	Min. Price	Max. Price	Modal. Price	Retail Price	Min. Price	Max. Price	Modal.Price
Ahmedabad	400	1200	800	1400	500	800	700
Amritsar	900	1100	1000	1800	700	1200	1000
Bangalore	1000	1200	1100	1500	500	900	700
Bhopal	600	800	700	1000			
Chennai	1600	2000	1800	2400			
Delhi	1000	1500	1250	2000	800	1500	1183
Jammu	1400	1500	1450	2000	1200	1300	1250
Lasalgaon	300	1371	975	1600	300	1401	1025
Lucknow	1200	1500	1350	2000	1200	1300	1250
Mumbai	600	1400	1000	2000	600	1400	1000
Nasik	1100	1200	1160	1400			
Patna	1000	1300	1200	2000			
Pune	1000	1400	1200	1600	500	1200	850



# State wise Wholesale Prices(Rs./quintal) Weekly Analysis for Onion for Major States

State	09-15 May 2014	09-15 May 2013	% Change (Over Previous Year)
Andhra Pradesh	706.37	916.74	-22.95
Gujarat	626.05	781.06	-19.85
Karnataka	866.26	914.18	-5.24
Madhya Pradesh	686.37	450.24	52.45
Maharashtra	858.97	795.79	7.94
NCT of Delhi	1131.77	891.19	27
Orissa	1283.75	1503.51	-14.62
Punjab	930.15	883.71	5.26
Rajasthan	681.03	703.72	-3.22
Uttar Pradesh	1096.35	1020.53	7.43
West Bengal	1312.71	1193.38	10
<b>Average</b>	<b>1264.6</b>	<b>1102.67</b>	

As per the data reported by APMCs

# State-wise onion storage during 2010-2014

Quantity in Lakh MT				
STATES	2010-11	2011-12	2012-13 (Estimated)	2013-14 (Estimated)
MAHARASHTRA	14.50	15.50	15.00	Information awaited from States
GUJARAT	2.00	1.80	0.85	
BIHAR & JHARKHAND	1.50	1.50	1.65	
HARYANA	0.75	0.75	0.85	
KARNATAKA	1.25	1.25	0.85	
M.P. & CHHATTISGARH	1.75	1.85	1.25	
U.P. & UTTARAKHAND	1.85	1.80	1.75	
ORISSA	0.50	0.50	0.50	
RAJASTHAN	1.75	1.75	1.85	
PUNJAB	0.75	0.75	0.75	
TAMIL NADU	1.00	1.00	1.00	
ANDHRA PRADESH	0.30	0.45	0.45	
OTHERS	0.50	0.60	0.75	
<b>TOTAL</b>	<b>28.40</b>	<b>29.50</b>	<b>27.50</b>	

# Onion Balance Sheet –Agriwatch

## (as on 24<sup>th</sup> April 2014)

	Year 2014								
(Qty in Lakh Tons)	Jan, 2014	Feb, 2014	March 2014	April 2014	May 2014	June 2014	July 2014	Aug 2014	Sep 2014
Stored /Carry-in	0.7	0.9	2.6	2.6	25.1	49.8	42.6	29.6	19.4
Fresh Prod/arrivals	12.0	15.0	14.0	40.0	43.0	7.0	0.0	0.0	0.0
Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Availability	12.7	15.9	16.6	42.6	68.1	56.8	42.6	29.6	19.4
In LT Storage			0.0	22.5	47.2	40.0	27.0	16.7	6.9
Consumption	10.0	11.0	12.0	12.0	12.0	11.0	11.0	9.0	9.0
Exports	1.2	1.5	1.2	1.5	1.5	1.5	1.2	0.8	0.6
post production losses	0.6	0.8	0.8	4.0	4.8	1.7	0.8	0.5	0.3
Total Usage	11.8	13.3	14.0	17.5	18.3	14.2	13.0	10.3	9.9
Carry out (incl temp storage)	0.9	2.6	2.6	25.1	49.8	42.6	29.6	19.4	9.5

# Assumptions made by AGRIWATCH

- Rabi production is expected to be 95-100 Lakh ton.
- Higher water content in onion has led to higher post harvest losses in Maharashtra
- Rabi arrivals start from March end and continue till May-June
- Exports till February are actual and from March it is estimated based on past trend and prices
- Post harvest losses are assumed to be 10% of fresh arrivals and 2% monthly of stored onion
- There could be further losses in cold stores like weight loss etc
- Lower production in Maharashtra is compensated by higher production in Gujarat and Karnataka

# Conclusion

- As is evident from the [Balance Sheet](#), there is a monthly surplus even during the months July-September, when there is no fresh production of onion. This is presuming that the post harvest loss in the stored onion is not over 10%.
- If losses in stored onion in Maharashtra and Madhya Pradesh are higher because of onion bulbs rotting due to higher water content, the availability of onions in the months of July to September may be affected.

# Critical Issues

- The States of Maharashtra and Madhya Pradesh have not furnished the production figures of onion for 2013-14 in the second advance estimates taking into account the loss incurred due to hailstorms and rains. The area and production figures for onion of Gujarat for 2013-14 are also awaited.
- States need to furnish the onion storage figures for 2013-14.
- In order to work out a month wise balance sheet for onion, it is pertinent for the States to furnish month wise, season wise area, production and storage (Farmer level and in cold storage) figures for onion.

# POTATO SCENARIO



# Potato Season

Potato is mainly a Rabi crop in the country.

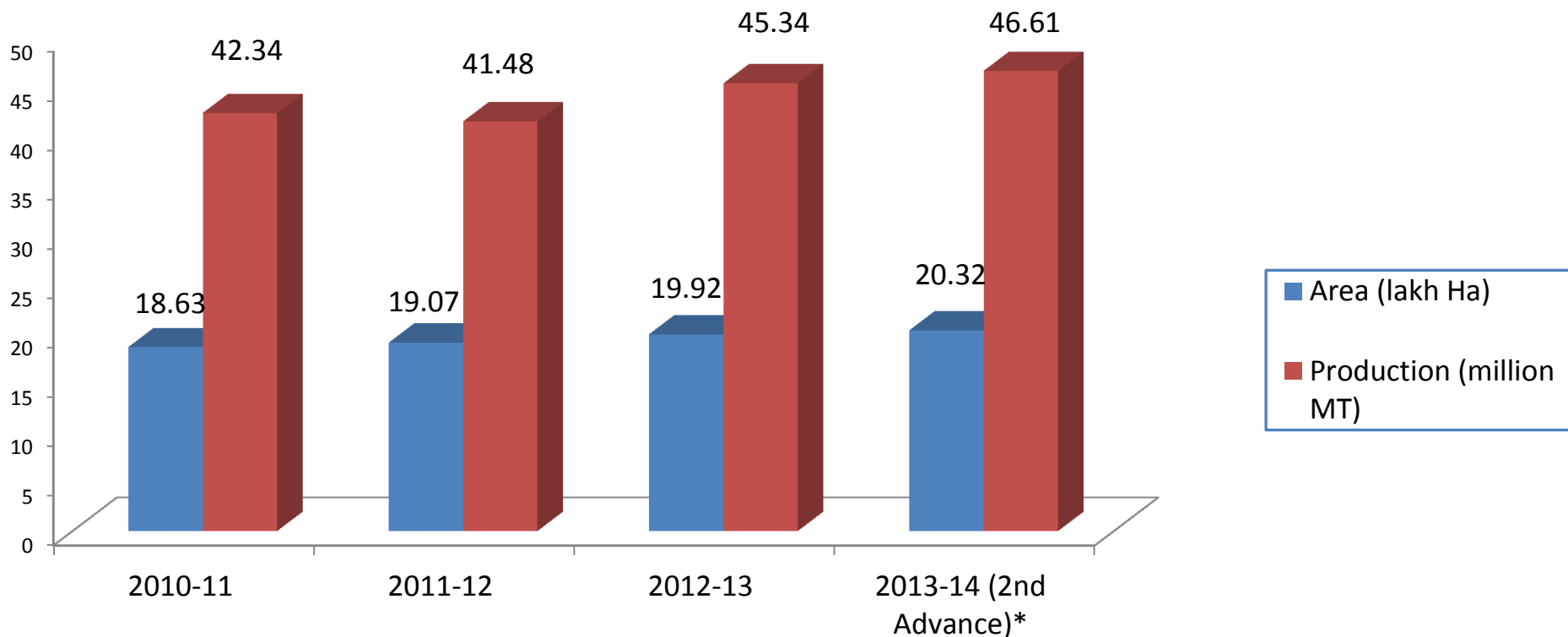
Sl. No	Region	Crop	Planting	Harvesting	
<b>A</b>	<b>Hills</b>				
	North-western	Summer	January-Feb	July-Aug	
	North-eastern	Summer	March-April	Sept-Oct	
	Southern	a. Summer	March-April	Aug-Sept	
		b. Autumn	Aug-Sept	Dec-January	
		c.Spring	Jan-Feb	May-June	
<b>B.</b>	<b>Plains: Northern</b>	a. Autum	Sep-Oct	Dec-January	
		b.Winter	Oct-Nov	<b>Feb-March</b>	<b>Contributes about 80% of the production</b>
		c.Spring	Dec-Jan	<b>March-Apr</b>	
<b>C</b>	<b>Plateau</b>	a. Kharif	June	Sept-Oct	
		b. Rabi	Oct-Nov	Feb-March	



# Potato All India Production

Year	Area (lakh Ha)	Production (million MT)	Productivity (in MT/Ha)
2010-11	18.63	42.34	22.7
2011-12	19.07	41.48	21.8
2012-13	19.92	45.34	22.8
2013-14 (2 <sup>nd</sup> Advance)*	20.32	46.61	22.9

*\* Provisional*





# Market Arrival of Potato in 2013-14 vis-a vis in 2012-13

STATES/ UTs	Market Arrival (IN '000 MT)											
	Nov-13	Nov-12	Dec-13	Dec-12	Jan-14	Jan-13	Feb-14	Feb-13	Mar-14	Mar-13	Apr-14	Apr-13
J.P	259.15	276.97	429.73	480.70	688.99	560.51	503.77	483.14	517.76	539.09	425.95	460.28
West Bengal	22.82	38.28	27.14	38.25	28.72	40.07	32.99	40.97	156.66	201.56	64.21	52.53
M.P	7.85	13.07	23.20	13.51	25.97	17.21	30.12	22.53	25.30	22.44	13.63	8.07
Punjab	28.03	32.45	45.91	65.38	33.64	57.54	30.19	47.00	84.95	41.07	110.96	26.73
Gujarat	38.06	33.46	61.24	56.83	50.11	60.83	43.98	49.28	57.35	57.98	42.26	44.37
Others	577.83	261.89	634.85	300.87	472.18	413.06	357.22	349.21	363.57	395.70	319.77	377.23
<b>Total- India</b>	<b>933.73</b>	<b>656.12</b>	<b>1222.07</b>	<b>955.81</b>	<b>1299.61</b>	<b>1149.21</b>	<b>998.26</b>	<b>992.12</b>	<b>1205.58</b>	<b>1257.83</b>	<b>976.78</b>	<b>969.20</b>

Source: AGMARKNET

# Potato Prices(Rs./quintal) in major markets (as on 12<sup>th</sup> May 2014)

	AGRIWATCH				AGMARKNET		
C ENTRE	Min. Price	Max.Price	Modal.Price	Retail.Price	Min.Price	Max.Price	Modal.Price
AHMEDABAD	900	1600	1250	1800	1200	1600	1500
AMRITSAR	900	1200	<b>1100</b>	2000	800	1200	1000
BANGALORE	1700	1900	1800	<b>2600</b>	2000	2450	2150
BHOPAL	1200	1400	1300	<b>1600</b>			
BURDWAN	1230				1430	1450	1440
CHANDIGARH	1200	1400	1300	2500			
CHENNNAI	2000	2200	<b>2100</b>	3000			
DELHI	1300	1600	1450	2000	1400	1500	1450
JAIPUR	1100	1200	1160	2000			
JAMMU	1400	1500	1450	2000	1500	1700	1600
L UCKNOW	1400	1500	1450	2000	1400	1500	1425
MUMBAI	1500	1800	1700	2400	1400	1700	1550
PATNA	1400	1650	1525	2100			

# State wise Wholesale Prices Weekly Analysis for Potato

## Second week May, 2014

			Prices in Rs/Quintal
State	09-15 May 2014	09-15 May 2013	% Change (Over Previous Year)
Andhra Pradesh	1487.59	1113.33	33.62
Gujarat	1421.63	1183.71	20.1
Himachal Pradesh	1506.21	963.49	56.33
Karnataka	1673.41	1347.98	24.14
Madhya Pradesh	943.24	603.92	56.19
Maharashtra	1574.55	1311.29	20.08
NCT of Delhi	1440.09	944.64	52.45
Odisha	1359.03	1061.71	28
Punjab	1081.08	736.6	46.77
Uttar Pradesh	1312.11	850.61	<b>54.26</b>
Uttarakhand	856.11	562.57	52.18
West Bengal	1364.13	800.07	<b>70.5</b>
<b>Average</b>	<b>1528.17</b>	<b>1051.76</b>	

As per the data reported by APMCs

# Potato Current Scenario

- In Khandauli (Agra), modal prices are hovering in the range of Rs 1450/ quintal compared to last year price of Rs 1050/ quintal during same time. The reason for higher prices is due to less storage in cold stores.
- In West Bengal, cold storages are filled with approximately 60.84 lakh ton of potatoes.
- In West Bengal, approximately 50% of the Cold storages have opened and expected that rest of the cold storages will open fully after 16 May.

# Potato –Future Prices

- Future prices of potatoes are showing sharp increasing trend.
- For delivery of 30<sup>th</sup> September 2014,
  - ❖ Initial price as on 20 Feb, 2014 : Rs. 1400/ quintal
  - ❖ 28<sup>th</sup> April, 2014 : Rs. 1646/ quintal and now fallen to Rs 1410/qtl.
- Similarly, prices for August, July and June deliveries are also showing falling trend after showing increase in April.

# Potato –Future Prices

<b>Delivery Date</b>	<b>Prices as on 14<sup>th</sup> May 2013</b>	<b>Delivery Date</b>	<b>Prices as on 14<sup>th</sup> May 2014</b>
<b>Sept, 2013</b>	Rs.753/quintal	<b>Sept, 2014</b>	Rs.1410/quintal
<b>August 2013</b>	Rs. 825/quintal	<b>August 2014</b>	Rs. 1382/quintal
<b>July 2013</b>	Rs. 891/quintal	<b>July 2014</b>	Rs. 1352/quintal
<b>May 2013</b>	Rs.991/quintal	<b>May 2014</b>	Rs.1229/quintal



# Potato Balance Sheet - AGRIWATCH

(Figures in million tons)

Population (in billion)	1.175	1.206	1.22	1.23	1.24	Quarterly			
Year	2008-09*	2010	2011-12 Nov-Oct	2012-13 Nov-Oct	2013-14 Nov-Oct	2013-14 Nov-Jan	2013-14 Feb-April	2013-14 May-July	2013-14 Aug-Oct
Carry-in(A)	0.00			0.59	3.92	3.92	0.92	25.20	15.18
Production(B)	34.39	42.33	41.48	45.34	41.00	4.00	36.00		1.00
Total Availability (C=A+B)	34.39	42.33	41.48	45.93	44.92	7.92	36.92	25.20	16.18
Table Consumption(D)	22.30	22.91	23.79	24.60	24.80	6.20	6.50	6.10	6.00
Processing Purpose(E)	2.67	2.80	2.94	3.12	3.31	0.00	2.25	1.05	0.00
Post harvest losses (F)	4.07	6.35	8.30	9.07	8.20	0.80	2.47	2.47	2.46
Exports(G)	1.85	1.59	1.71	1.14	1.30	0.00	0.50	0.40	0.40
Usage (H=D+E+F+G)	30.89	33.65	36.74	37.93	37.61	7.00	11.72	10.02	8.86
Seed Purpose (I)	3.42	4.23	4.15	4.08	4.10	0.00	0.00	0.00	4.10
<b>Balance (J=C-H-I)</b>	<b>0.08</b>	<b>4.45</b>	<b>0.59</b>	<b>3.92</b>	<b>3.21</b>	<b>0.92</b>	<b>25.20</b>	<b>15.18</b>	<b>3.22</b>

(\* CPRI, Agriwatch Research)

# Assumptions made by AGRIWATCH

- Potato production for 2013-14 assumed to be 41 million MT.
- Potato year is taken as November to October, as fresh arrivals starts from Punjab in November.
- Post harvest losses are 15-20%. 20% has been taken for this exercise. Losses in Feb to Oct are equally spread.
- Potato processing industry growing at CAGR 5-6%.
- Tables consumption is approximately 19-20 kg/capita.
- 60-70% of Rabi production goes to store.
- Table consumption is expected to grow at 3% p.a.
- Seed requirement is approx 10% of production.

# Critical Issues

- The States of Uttar Pradesh and West Bengal have not furnished the production figures of potato for 2013-14 in the second advance estimates taking into account the loss incurred due to incessant rains and blight disease.
- States need to furnish the potato storage figures for 2013-14.

**THANK YOU**