

WORLD SPICE CONGRESS

Ahmedabad

27th to 29th February 2016

CROP REPORTS – CHILLY

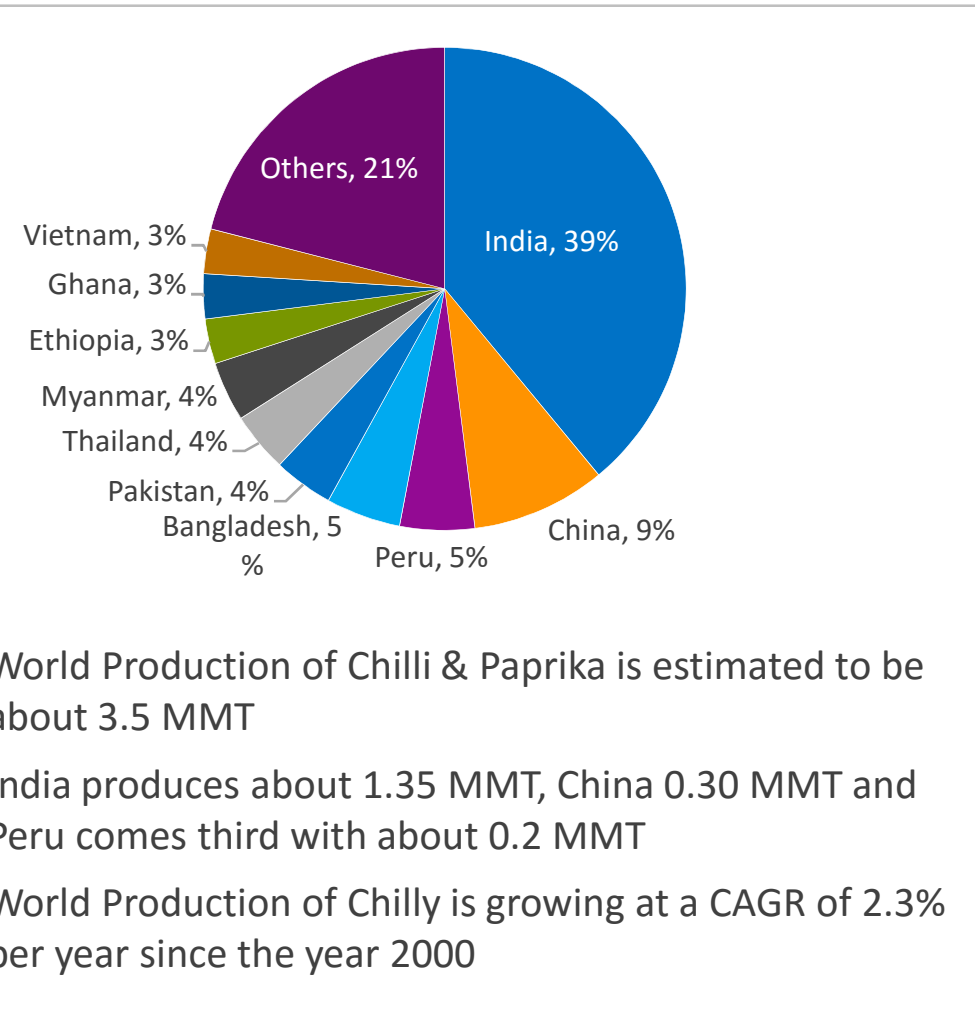
GIRIDHAR RAO

Director - Sustainable Spices & Herbs

GRIFFITH FOODS



World Chilli Production

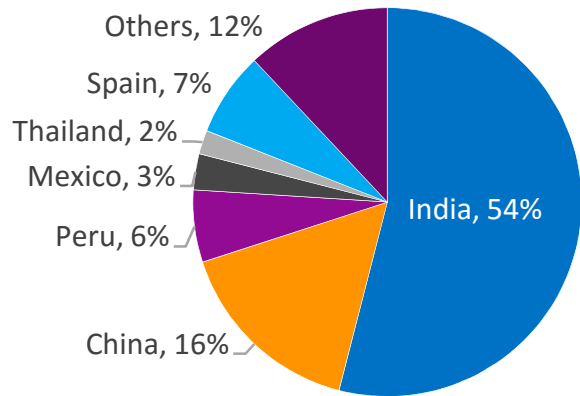


Source: FAO Statistics, 2014

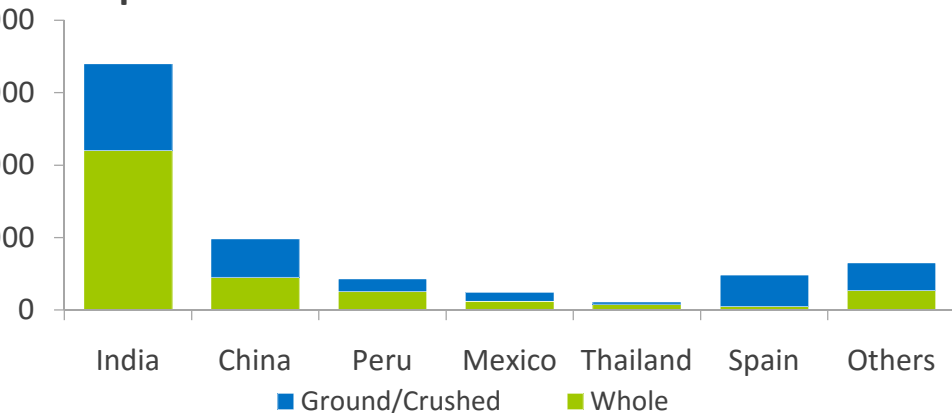
- World Chilly production has been increasing steadily mainly due to the increase in the two major growing countries: India & China
- In India the crop has increased due to several new growing regions coming into reckoning during the last four to five years
- Area in China has been increasing in the existing growing regions
- Guntur is the major market in India and determines the price of Chilly for all other domestic markets
- With the advent of on-line trading the Market has also been used to derive prices by most of the Importing world

World Chilli Trade

International Trade in Chilli



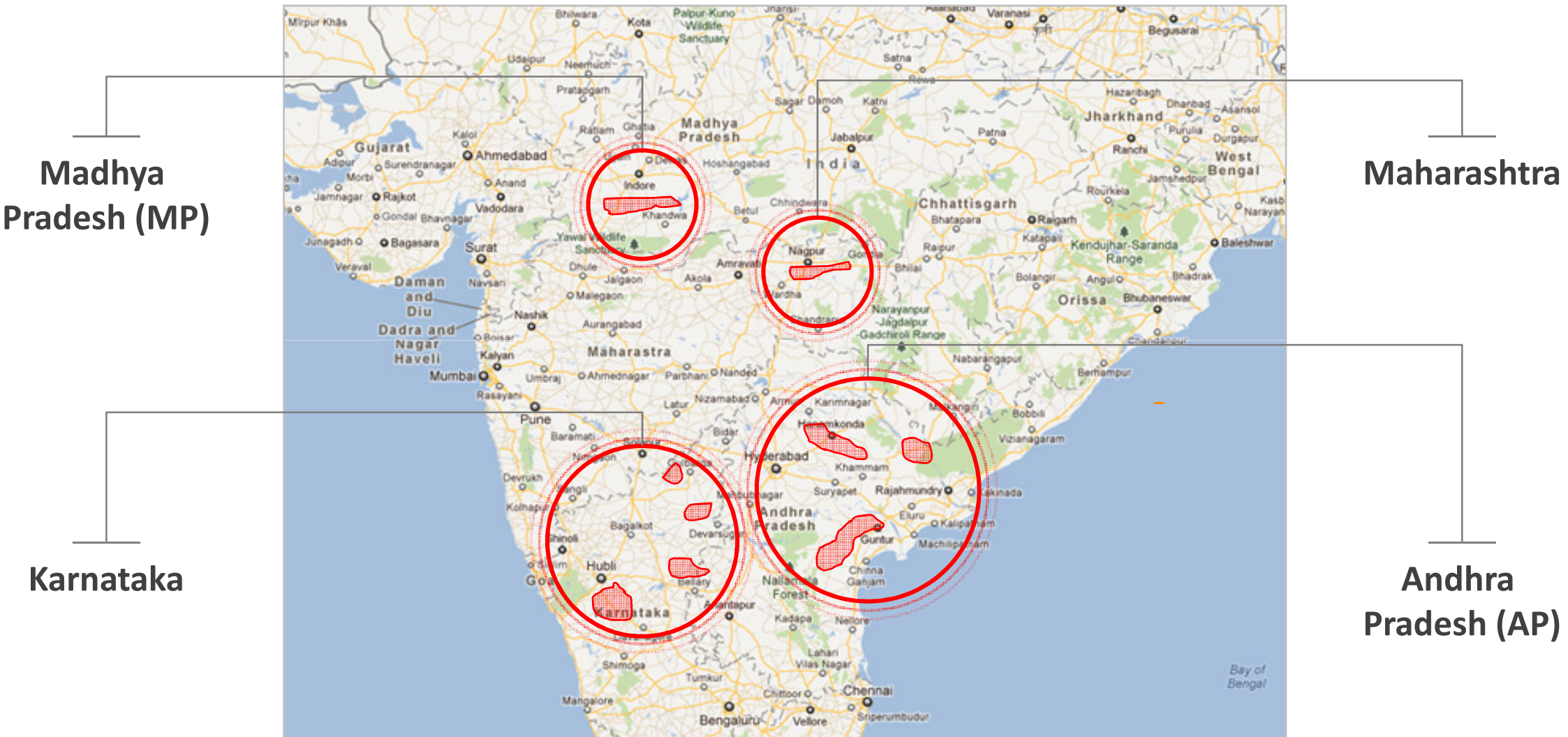
Exports of Chilli & Products in 2014 in MT



Source: International Trade Centre (ITC)

- India, China and Peru account for nearly 75% of World Chilli Trade in volumes
- The total exports of Chilli (Whole & Ground) during 2014 amounted to about 0.62 MMT
- Valued at about 1,370 Million US\$ during 2014
- India Exported nearly 54% of World's Chilli by volume
- Its about 40%, only in US Dollar terms
- We will look at the Crop situation in the top three exporting/growing countries:
 - India
 - China &
 - Peru

Major Growing Areas in India



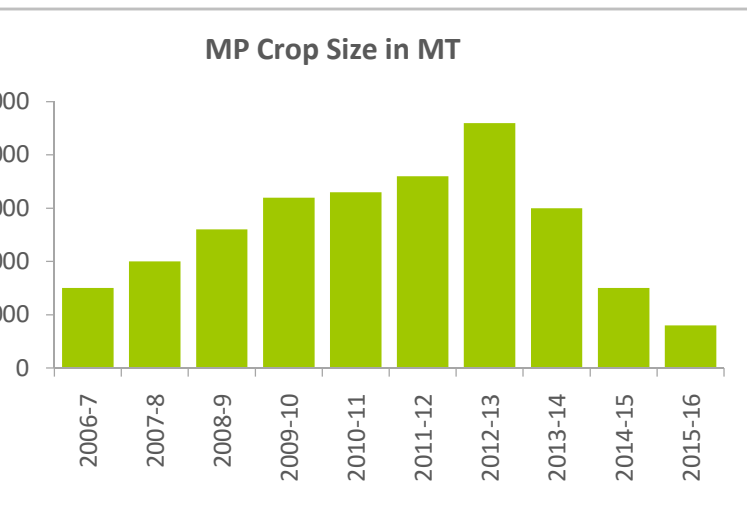
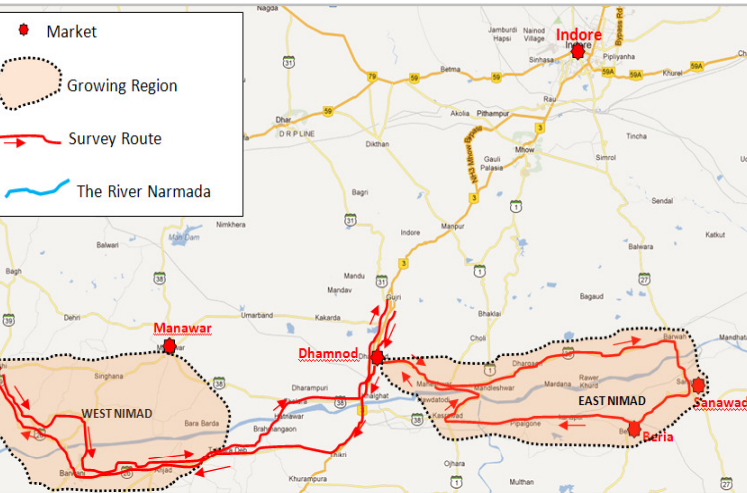
Madhya Pradesh (MP)

Maharashtra

Karnataka

Andhra Pradesh (AP)

Madhya Pradesh (MP)



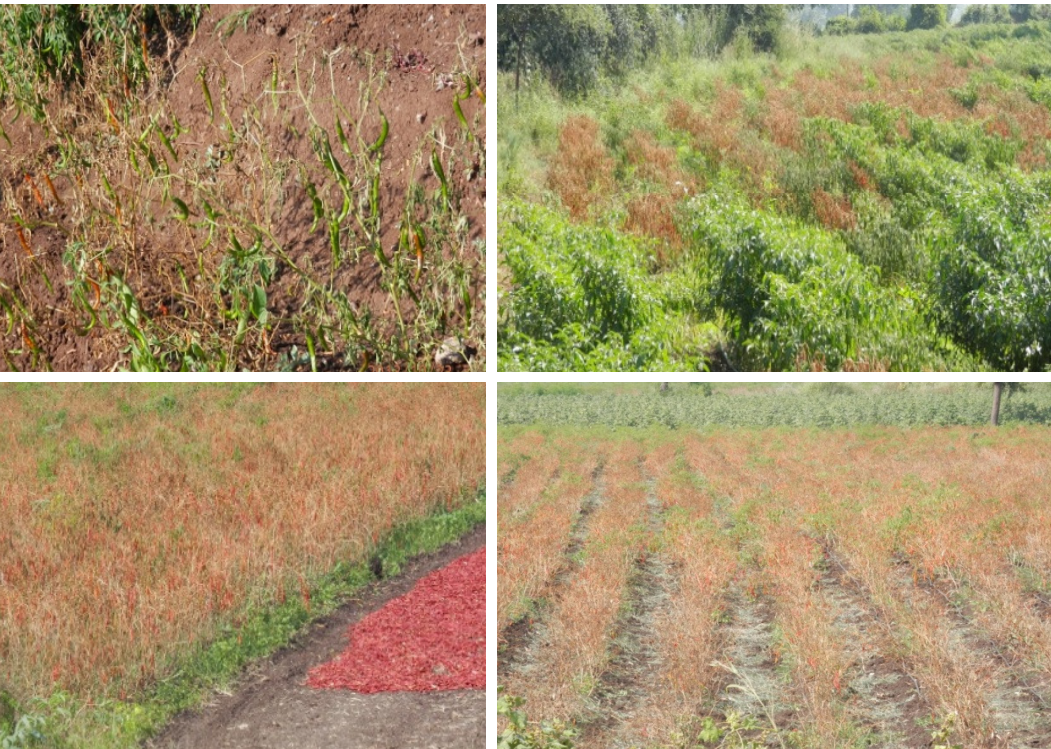
- There are two major growing areas in MP, East and West Nimad regions
- Though the acreage went up during 2015-16 season, the crop was affected due to wide-spread and Severe Virus attack
- In fact the disease first made its appearance in a severe form during 2013-14 and began to spread during the subsequent seasons
- In 2014-15 the crop had already decreased to about 80,000 MT, due to the same disease

The M.P Crop for 2013-4 is estimated to be about 45,000 MT, which is considered to be a poor crop. This is a shortfall of about 35,000 MT from the last year's crop

Madhya Pradesh (Contd...)

These are pictures I showed during my presentation at the previous WSC on 19th Feb. 2014

Photographs taken on 24th & 25th Oct. 2013 shows effect of water logging



Photographs taken on 24th & 25th Oct. 2013 show effect of viral disease



Madhya Pradesh: 2015 (Current Season)

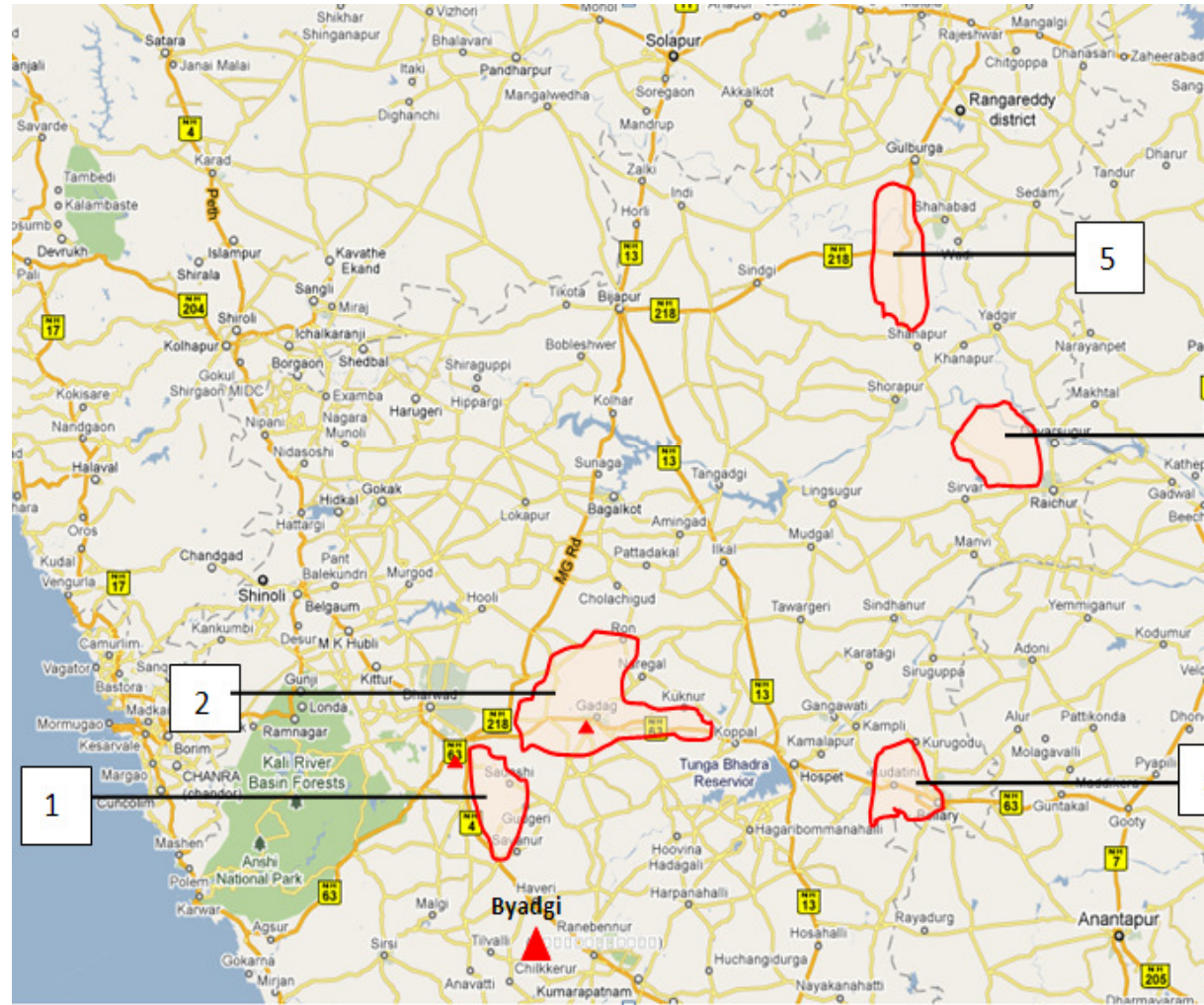
Although the planted area was higher than last year, the crop was badly affected



Top Report – Karnataka

increase in Acreage by about 20% in all the areas
 extremely Poor rainfall in Kundgol, Annigeri & Gadag regions
 Bellary acreage increase and crop faring well so far;
 water availability in March is a concern
 Raichur also seeing good crop so far and harvesting
 has commenced in Feb
 due to an increase in the area and good performance in
 Bellary and Raichur area, the crop is expected to be about
 20% compared to the last year, which was a good crop

Production Estimates for Karnataka (in 1000 MT)						
Regions	Normal	2011-12	2012-13	2013-14	2014-15	2015-16
Kundgol	12	16	4	14	15	10
Annigeru/Gadag	21	36	9	35	38	27
Bellary	58	65	55	57	65	60
Raichur	47	51	45	38	38	35
Gulbarga	28	30	26	21	22	18
Others	18	22	21	22	22	20
Total	184	220	160	187	200	170



Karnataka Colour Chilly Crop Survey

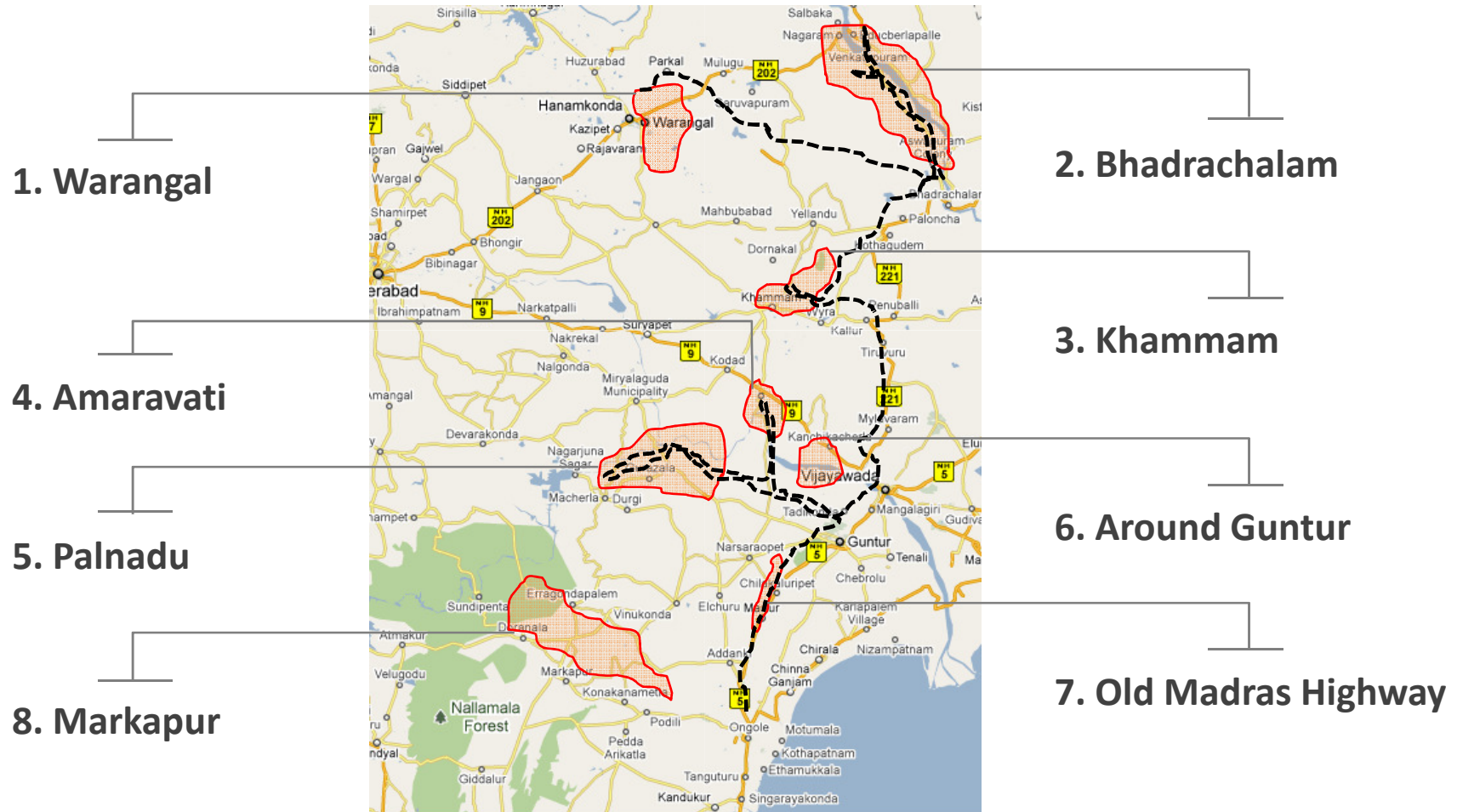


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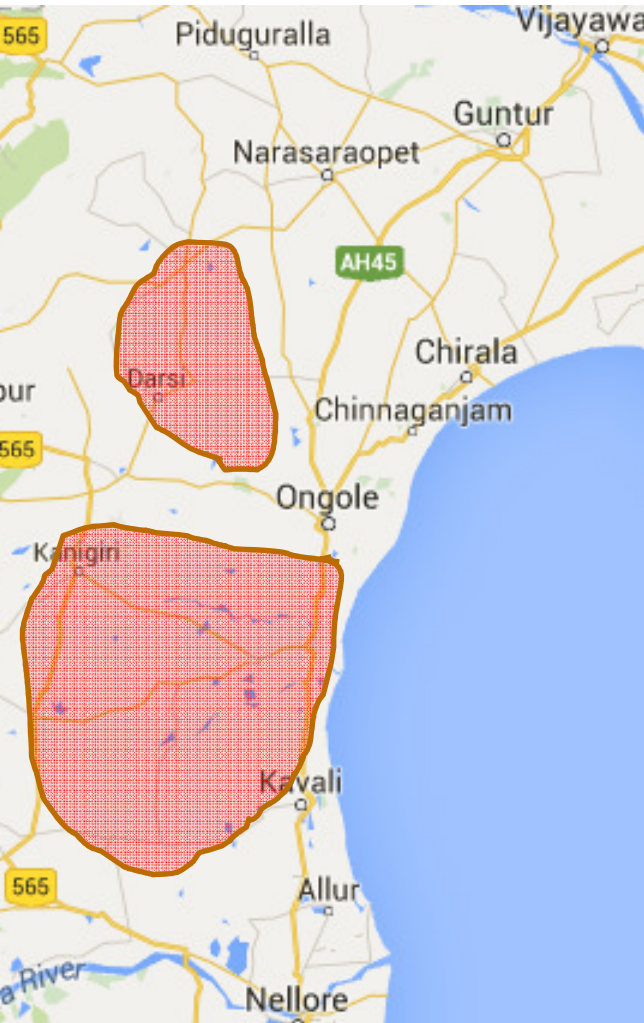


Top Report – Andhra Pradesh & Telangana

Traditional Chilli Growing Areas in A.P/Telangana



Andhra Pradesh & Telangana: New Growing Areas



- Several new areas have now become regular growing areas of Chilli
- The region in Prakasham dist. Shown in the map is now a major belt; These are late sowing areas
- A good proportion of acreage is for high pungent varieties
- This region received good rains twice during November & December when there was floods in Chennai
- As a result, the ground water availability is very good
- Farmers here are expecting normal to good crop
- Due to these areas, we can expect Prakasham district to provide much higher crop than the last two years

Crop Report – Andhra Pradesh

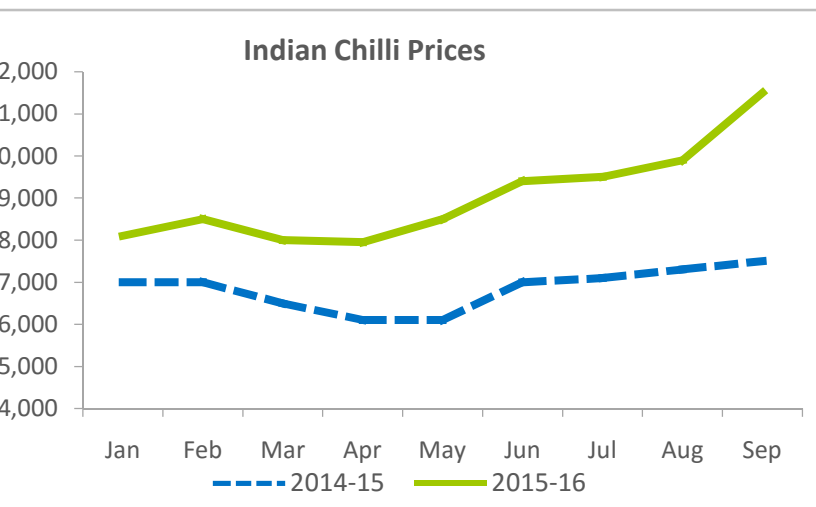
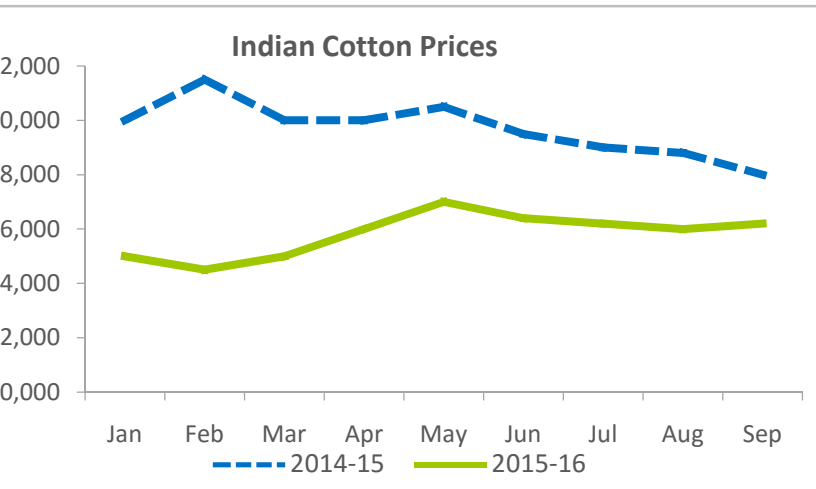
Production Estimate based on Crop Survey in Feb. 2016 (*Yield in MT/Acre, Crop in MT*)

Location in AP/Telangana	Yield 2014-15	Crop 2014-15	Change in Area 2014-15	Yield 2015-16	Crop 2015-16 Forecast
Chilchikhal	2.00	35,000	20%	1.50	31,500
Chilchalam	2.50	1,00,000	20%	2.50	1,20,000
Chilcham	2.50	40,000	20%	1.50	28,800
Chilchavati belt	2.50	48,000	35%	2.00	51,840
Chilchadu	2.00	1,30,000	25%	0.75	60,938
Chilchounding Guntur	2.00	22,000	15%	1.50	19,800
ChilchMadras Road	2.00	35,000	30%	1.10	23,100
Chilchkapr & Dornala	2.00	1,20,000	20%	1.50	1,08,000
Chilchhool	2.50	30,000	10%	2.00	26,400
ChilchDry Areas in Prakasham	2.00	35,000	60%	2.50	70,000
Chilchlers	2.00	40,000	35%	1.50	40,500
Total		6,35,000			5,80,878

In AP & Telangana, the crop is expected to be less than 10% lower than the previous year's

based on surveys done from Oct. to Feb 2015-16

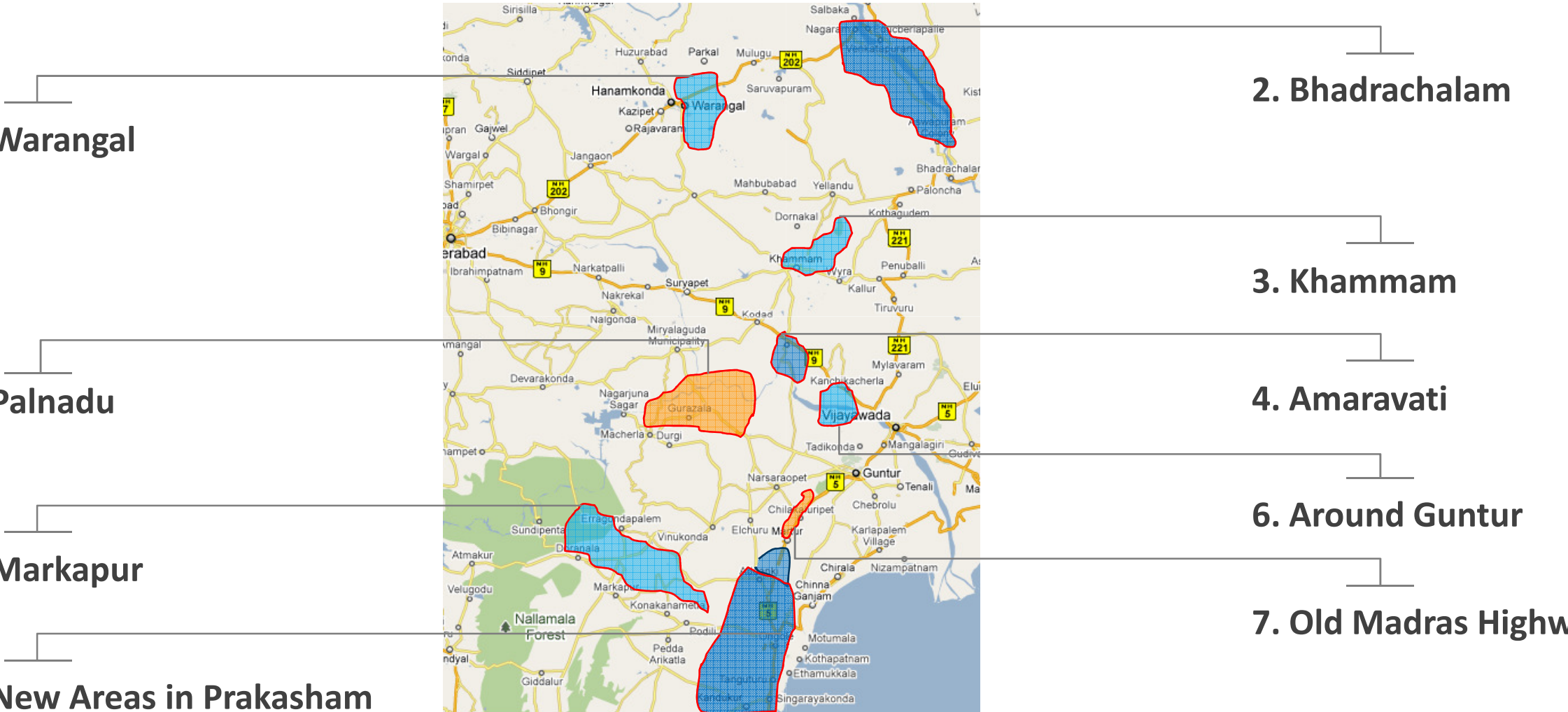
Reasons for Increase in Acreage of Chilli



- In Andhra Pradesh and Telangana, Cotton is the main crop competing with Chilli
- The Price of Cotton during of 2015 was lower than that during the previous year
- In the costal regions (Prakasham/Nellore) Tobacco and Paddy are the major other crops
- The Tobacco Board limited the production of Tobacco to 120 M kg down from 172 M kg last year due to gloomy outlook
- Dry Monsoon also forced farmers to abandon Paddy cultivation this year
- Above all, the high price prevailing for Chilli also attracted farmers to increase the planted area
- Many new farms and areas also came under Chilli Cultivation this year

Milli Yields: A.P & Telangana

Yield about 1.0 T/Acre Yield around 1.5 T/Acre Yield above 2.0 T/Acre



Water Availability

Among all the areas in
Andhra Pradesh and Telangana, the
first hit in terms of
crop yields is the
Palnadu belt

A few years back, this
would have disastrous
effect as this region
contributed to over 70%
of the crop of Andhra
Pradesh

But, now Prakasham and
other regions like
Bhadrachalam have also
emerged as large
producers of Chilly

In
Prakasham, Bhadrachalam
and
Amaravati, availability
of water was not a major
issue

Even as late as 20th
century, water was
available in these regions
except in Palnadu and
parts of Old Madras
and regions

However, the water
needed to be moved
over long distances to
get to the farms and
farmers have incurred
high costs on this count

In Khammam and
Warangal, the crop was
mostly done
well, however the water
availability towards the
end of the season was a
question mark

In the case of Old
Madras Road, the region
up to 30 km from Ongal
has poor water
availability

Madras road on 21st Feb 2016



Crop after first picking



First Pick drying yield was 10 to 11 quintals per acre



Local Cold Storages had about 30,000 bags of new crop



After first picking, the farm was expected to yield another 500

Inadu (22nd Feb 2016)- The worst hit



thenapally – Karempudi



New Areas in Prakasham doing well (20th Feb 2016)



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The late rains during early December, benefited this region

Amaravati Belt Feb. 23rd 2016: Doing well

Between Amaravati and Satenapalli, majority of fields are doing well, water is available even now



Water being moved to the farm

Long pipelines are used to carry water to the fields by farmers (Kandakuru, Prakasham);
Cost of cultivation this year is higher at about ₹ 1.25 L per acre here



Underground Water available



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Pumping water from River bed in Palnadu area



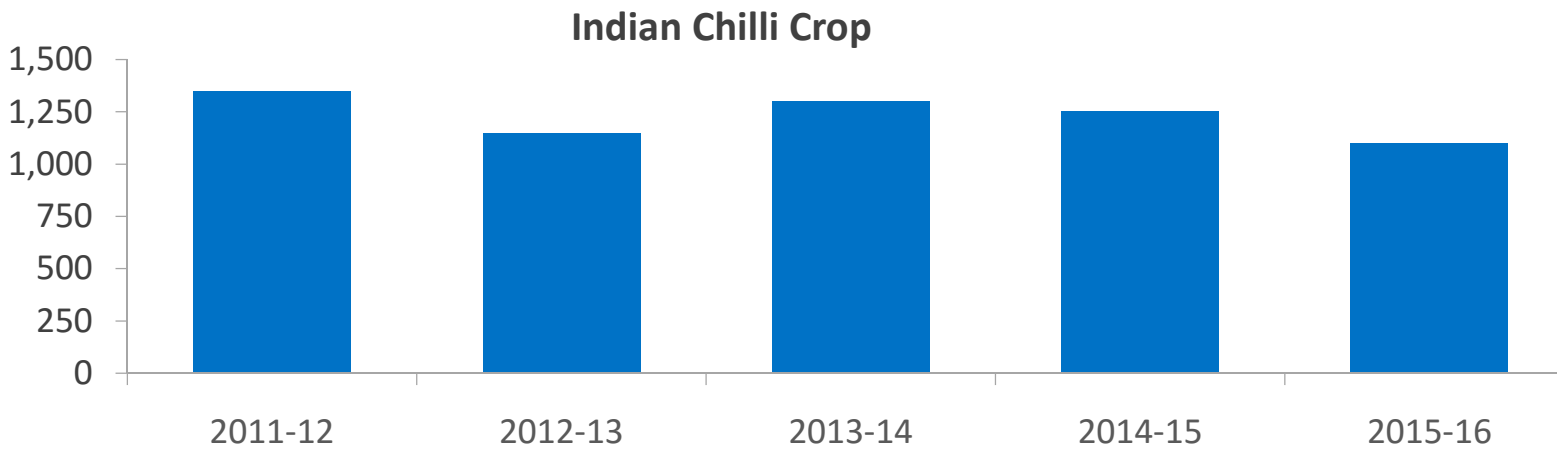
umping of Water over a long distance

High Market price has encouraged farmers to make arrangement to get water to the farms, all over AP



Indian chilly Crop Production Estimate

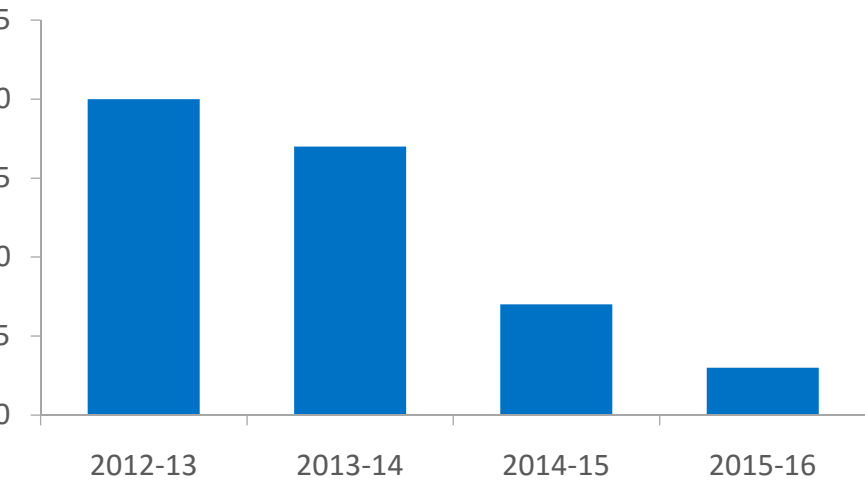
States	2011-12	2012-13	2013-14	2014-15	2015-16
Andhra Pradesh	175	225	150	80	45
Karnataka	220	160	187	200	170
Kerala & Telangana	663	465	600	635	581
Madhya Pradesh	50	48	50	50	40
Others	256	290	305	293	295
Total	1,334	1,188	1,292	1,258	1,131



The chilli crop for 2015-16 in India is expected to be short by 10% compared to the previous period's production.

Milli Stocks in Growing Regions

Season Carry Forward Stock in Lakh Bags



Center	No. of Cold Storages	Estimates bags new crop per cold storage	Total bags	Quantity in M 36 kg per b
Warangal	14	15,000	210000	7,560
Khammam	20	10,000	200000	7,200
Palnadu	18	12,000	216000	7,776
Surrounding Guntur	102	18,000	1836000	66,096
Old Madras Road	11	12,000	132000	4,752
Prakasham	20	3,500	70000	2,520
Others	10	5,000	50000	1,800
Total	195		2,714,000	97,704

Due to the failure of the MP crop last year, there was a good demand for the material and the carry forward stock was lower

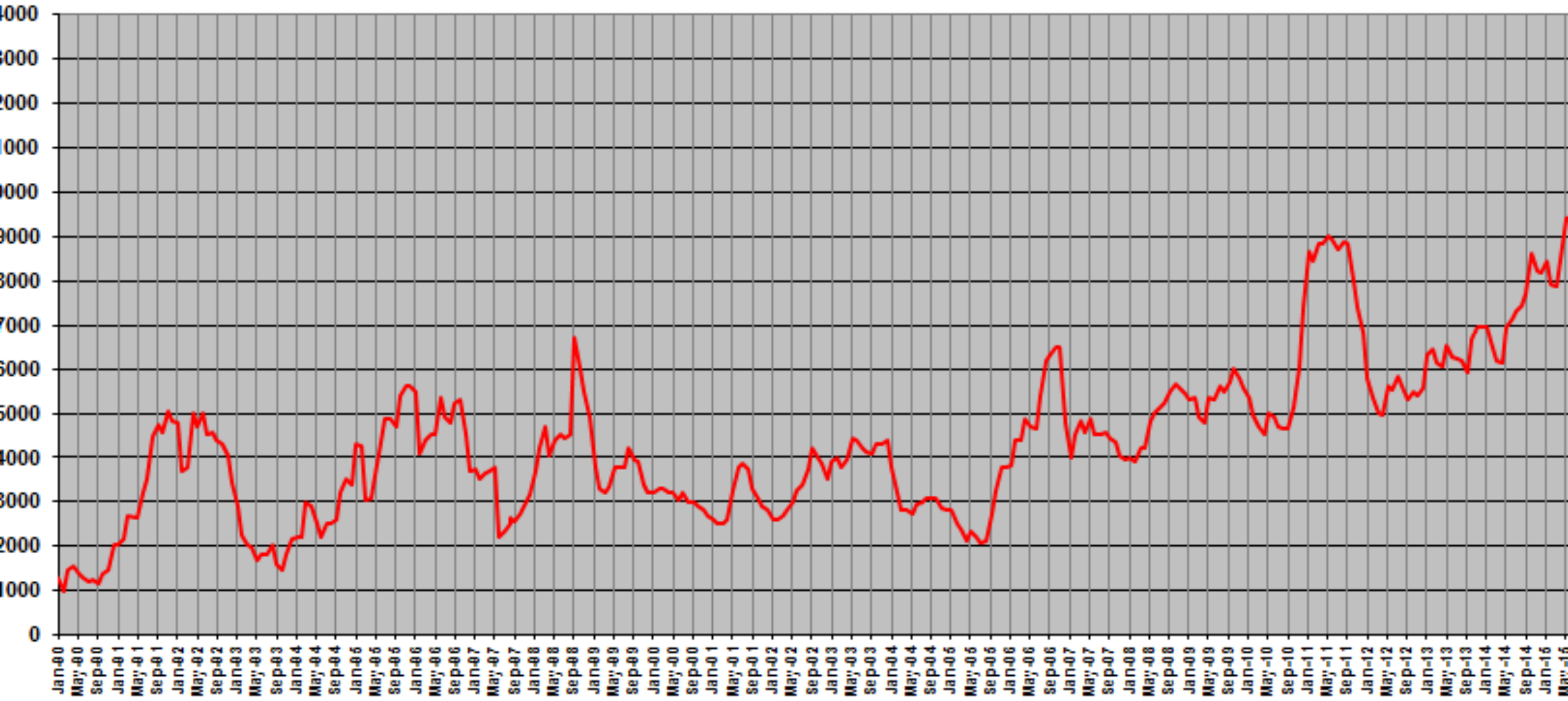
the situation prevailed even during this year leading to further lowering of the stocks

It is estimated that a total of 26 Lakh bags of the new crop has been stored in the Cold Storages by the end of Feb. 2016

Most of the stock is held by traders or Grinders and very little by Farmers

Overall, the current stock position is comparable to that at the same time last year

Monthly Avg. Price of S4 since 1990



Indian Chilly Crop: Summary

MP Crop has been a near washout

Karnataka is affected mainly due to the poor performance of the traditional rain-fed areas

Andhra Pradesh, The area has increased considerably. This added to the fact that new areas have been doing well absorbs the poor performance of the Palnadu belt to a major extent

MP Crop may be **delayed by a month** due to delayed planting and also due to later areas performing **better**




Far lower Carry forward stock in Feb 2016, compared to previous years

However rapid movement of stocks in the new season is observed

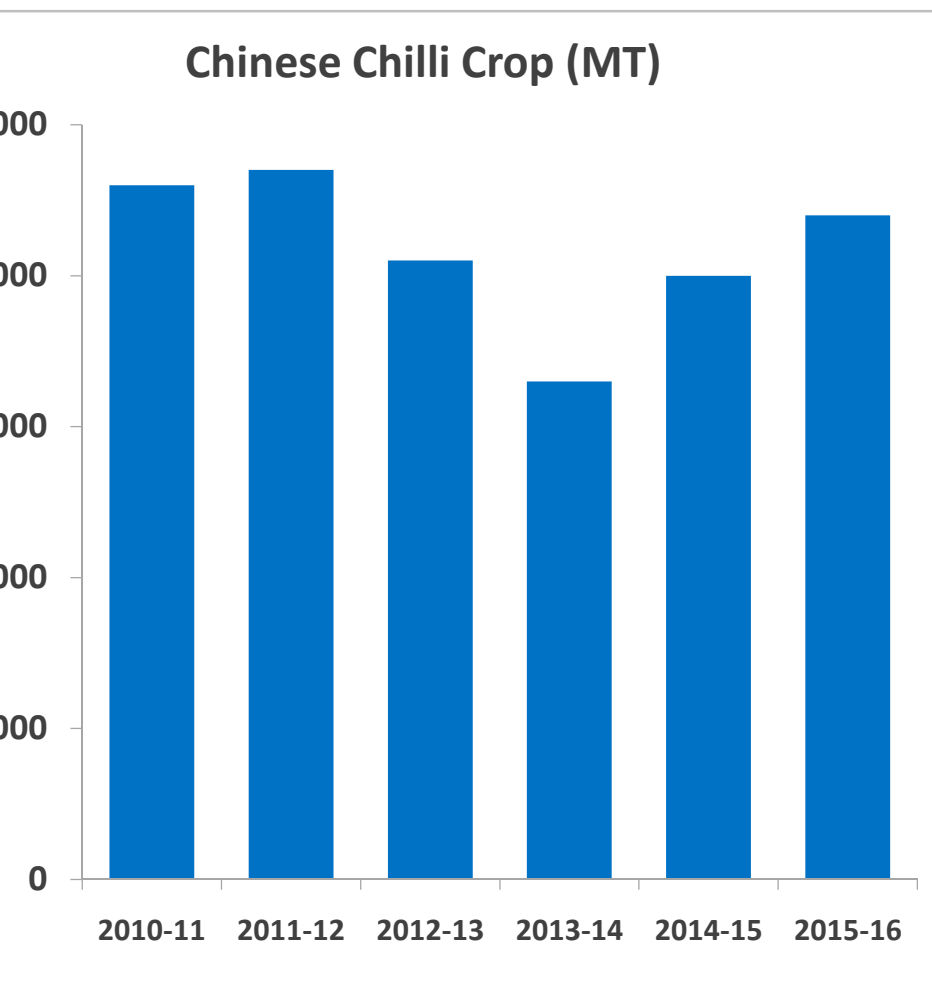
An estimated shortfall of not more than 9 to 10 % over last year; New areas still not fully identified in A.P and Karnataka

Chilli/Paprika Growing Regions in China



-  Low Pungent
-  High Pungent
-  Paprika

Chinese Crop Report



- Low pungent and medium pungent chillies are cultivated in the eastern provinces of China, Heilongjiang, Jilin, Hebei, Shandong, Inner Mongolia, Henan are the main chilly growing provinces
- Yidu and Tian Ying are the two important varieties grown in China
- This year the acreage of Chilli increased by nearly 20% as the domestic demand has been increased
- This year the acreage of Chilli increased by nearly 20% as the domestic demand has been increased

Chinese Chilli: Photographs taken in Oct. 2015



Tian Ying Chillies in Hebei province

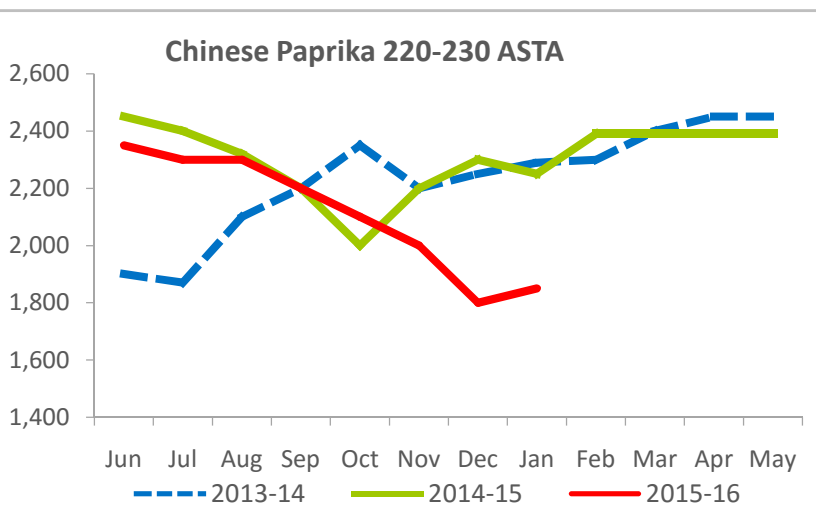
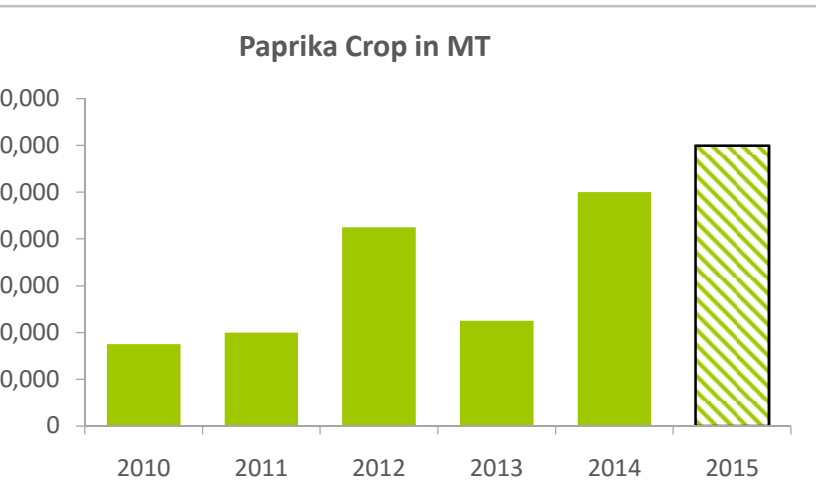


Yidu plantation in Shangond Province



Yidu crop harvested

Chinese Paprika



- During Last year, the prices shot up during the month of Dec 2014 and kept increasing till March 2015
- This was because of very good domestic demand from Extractors and Grinders
- The carry forward stock is estimated to be about 2000 MT, nearly all of this being of poor colour value
- The area of the crop this year, due to this, has increased by over 20%
- Yields were affected due to prolonged hot conditions during July 2015 and this lead to dropping of flowers
- Thereafter, however there was no undue adverse climatic conditions and the crop fared very well
- The Arrivals happen in Oct – Dec

Paprika arrivals Korla Region October 2015

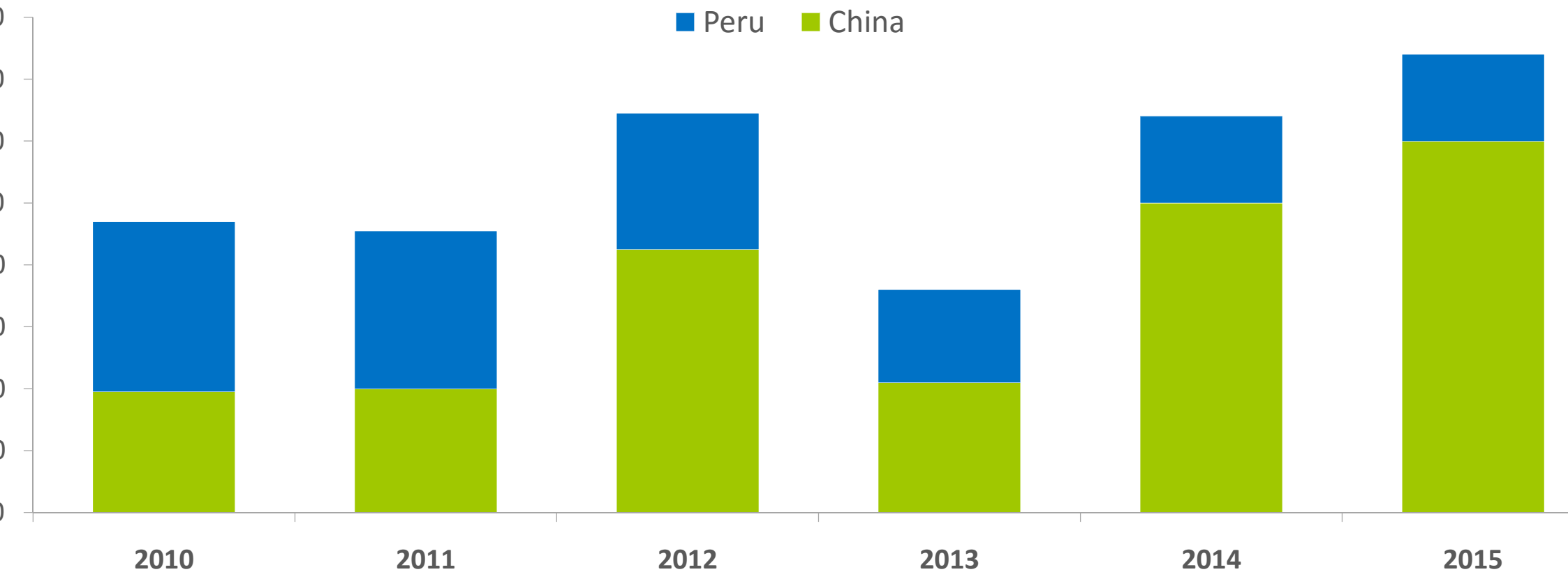


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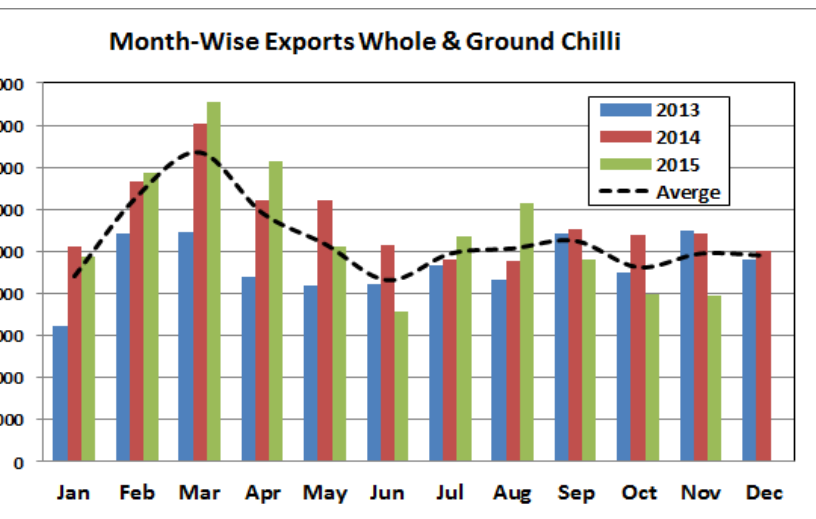
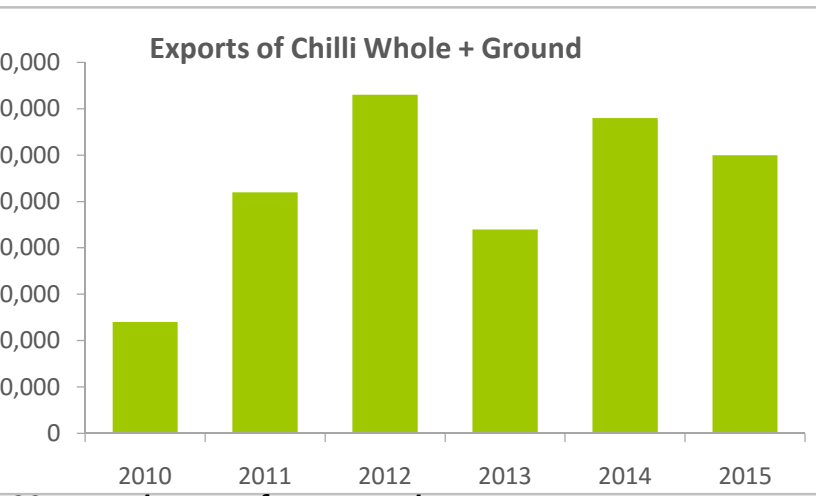
Visit to Korla region confirmed the very good Paprika crop



Production of Paprika



Exports From India



Source: ITC Statistics

- The Exports for 2015 is expected to be about 3,15,000 MT which is marginally lower than the Exports of 2014
- During 2016, we should expect the exports to remain at the same levels or lower due to higher prices and good Crop in China
- Although the Rupee has depreciated against the US\$, the price have increased much more compared to the previous year
- Overall, there are no factors that point out to an increase in Exports during 2016
- In Fact, Exports could decline during 2016

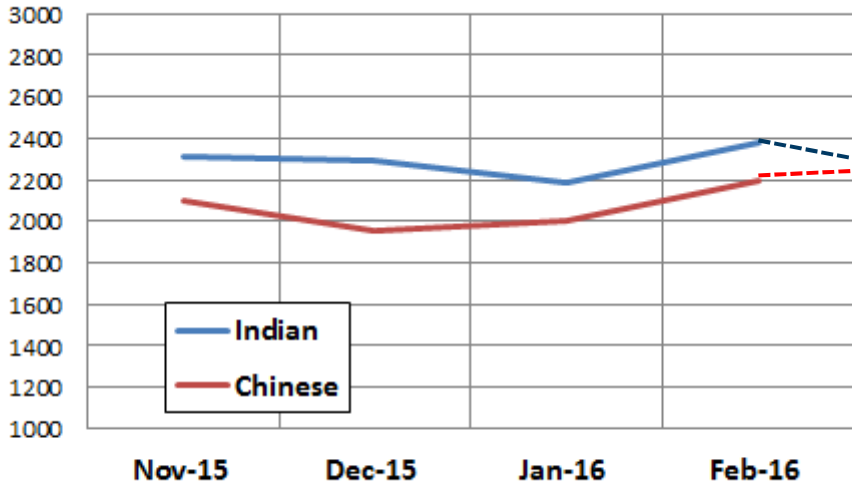
Exports of Chilly and Chilly Products from India in 1,000 MT

	2010	2011	2012	2013	2014	2015
Total	119	260	369	218	337	302
Bangladesh	11	13	22	21	27	7
Sri Lanka	15	46	42	35	48	45
Thailand	3	7	18	2	3	2
Indonesia	5	13	15	14	18	18
Malaysia	34	42	61	29	32	32
Pakistan	9	20	19	0	10	1
Vietnam	11	48	35	18	23	23
Philippines	3	5	5	3	4	3
Other	0	0	0	20	53	62
Maldives	2	17	36	36	61	56
Others	20	46	102	33	44	40

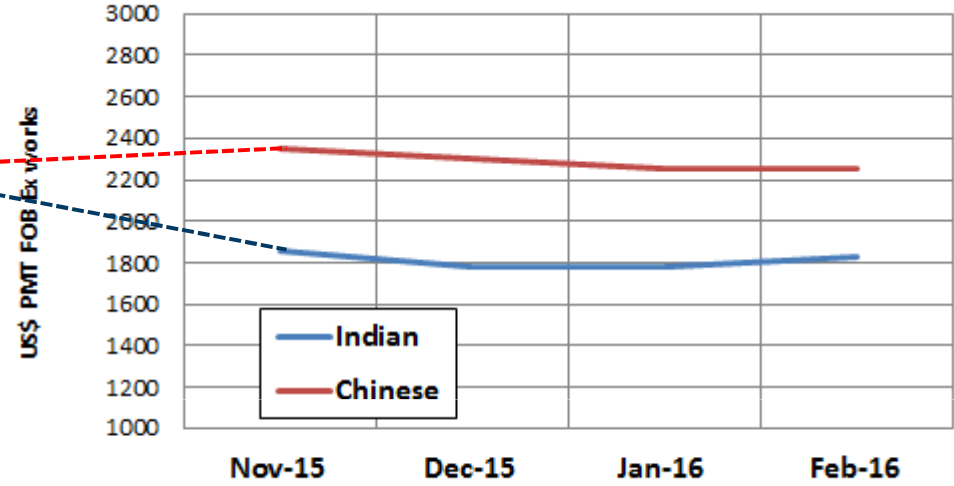
2015 quantity is for 11 months only (Jan – Nov)

Imports could be lower for 2016 (Quantity)

Indian vs Chinese Price Parity 2015-16



Indian vs Chinese Price Parity 2014-15



Major quantities exported are High Heat varieties

In fact, acreage of high heat varieties like Tejaswani has increased specially in the new areas

Tejaswani has not suffered a major setback as it seems to be more resistant to the "Virus" disease

There is no price parity for imports...Current prices are too high for many importers to buy large volumes

This is in spite of the depreciating Rupee; Currencies of most importing countries have depreciated against the US\$

Overall Chilly Outlook

The Indian Crop is lower than the previous year's about 10%, while the Chinese Crop is higher 20%

The Trade became aware of the problem with the M.P crop as early as August 2015; This turned the sentiment bullish

The market has already corrected for these factors had has moved up from a level of about ₹80.00 per kg to ₹125 per kg by January 2015, a jump of over 50%

The major crop in AP is yet to arrive with late sowing as well as a large portion of arrivals from Prakasham and new areas still expected

Many areas we see that picking is going on the first harvest is being dried

We should see good arrivals to continue during March and April this year

Exports during 2016 could be lower by about 30000 MT; Teja would have better availability to exporters

There is no need to panic and go for large volume coverage; better to wait and cover steadily during the season



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THANK YOU