



Argus Media Conference
Europe Fertilizer
Barcelona 18-20 OCT 2017

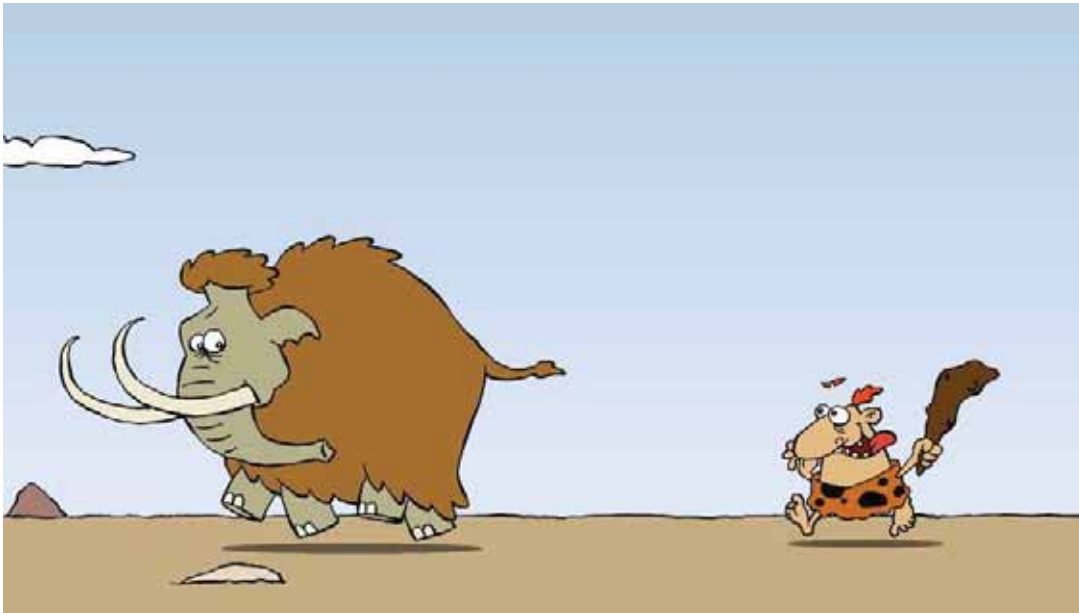
Phoenix Vision Consultant Group

Update on Iranian Production and
Impact on Global Fertilizer Trade

Civilization and Agriculture



The first foods were mostly coming through Animals, by Hunting.



The problem was that they ancient people have to change the places to hunt.



Civilization and Agriculture



Once the people begun planting they could settle down permanently and then thinking of civilization



Civilization is based on agriculture and once the people thought of planting in high amount



History of Agriculture



- The first Agriculture plant on earth in **Chogha Golan**
- It is almost 10,000 Years ago that people began planting and providing their food and one of the giant step to make the civilization

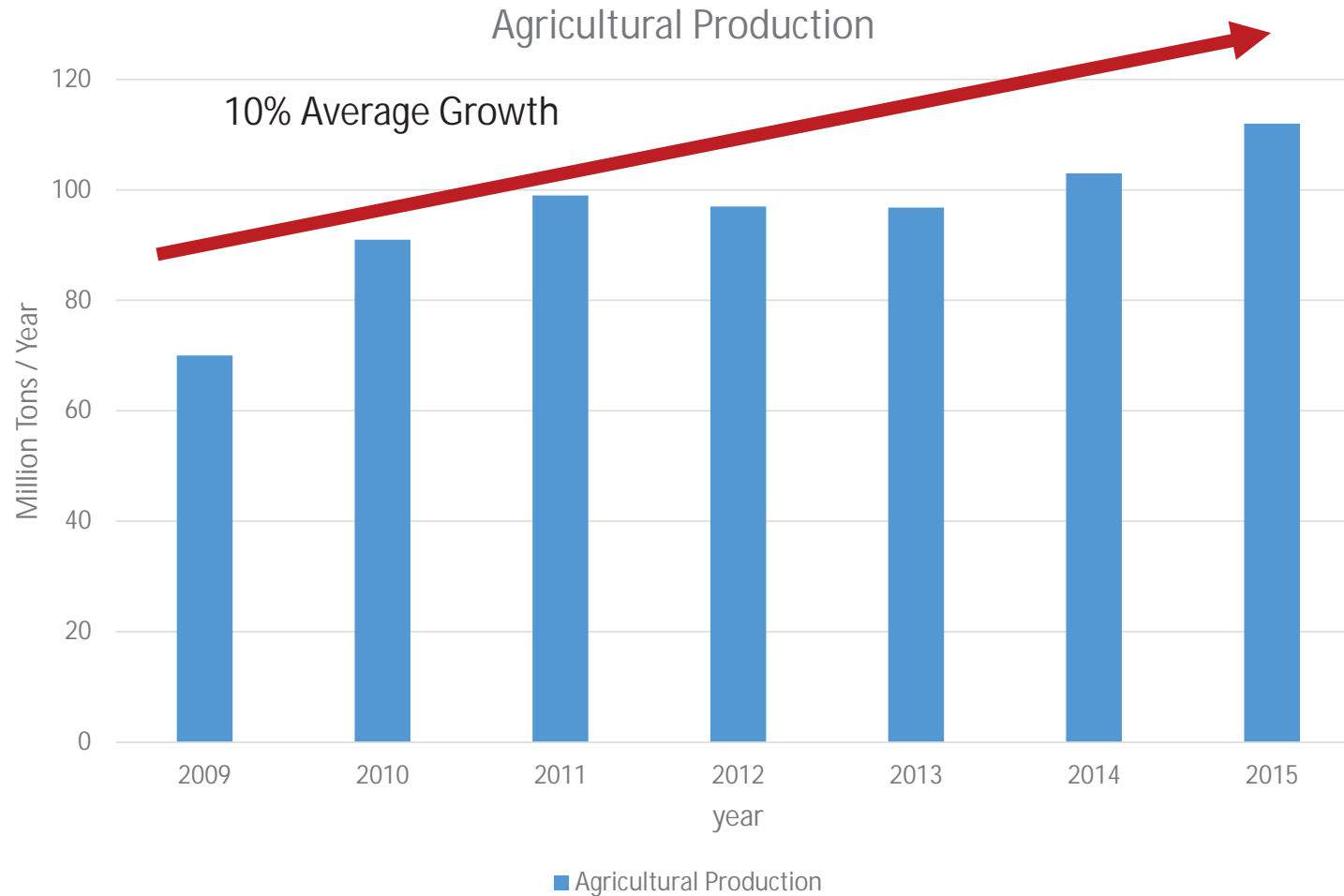


Some Highlights of Iran Agriculture Ranking

Ranking in World	
1 st	Saffron, Pistachio, Caviar, Berries , Pomegranate
2 nd	Date and Apricot
3 rd	Watermelon, Cherry, Cantaloupe, Apple, walnut and Cucumbers
4 th	Almonds, Lamb, Wool and Quince
5 th	Pea, Vegetables and Fennel
6 th	Nuts, Caw milk and Tomato
7 th	Grape, Onion, Black Cherry, Sheep Milk and Kiwi



Iran Agricultural development



Iran Fertilizer Industries



Iran Fertilizer installed capacity

Fertilizer Product	KTPY	No. of operating Units
Urea	5400	7
Ammonia	4530	8
DAP	450	2
Ammonium Nitrate	215	1
Ammonium Sulphate	27	1

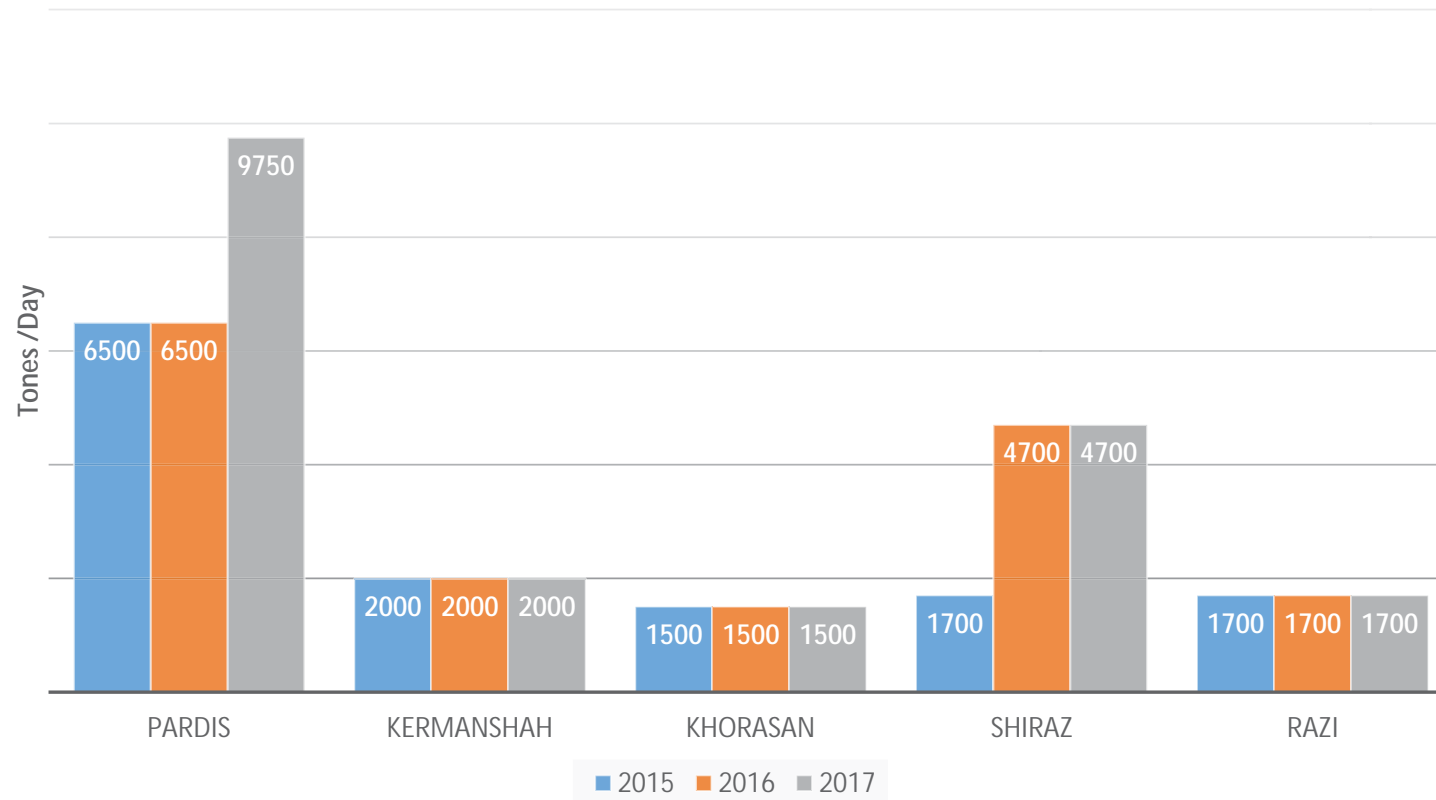


Nitrogen based Fertilizer



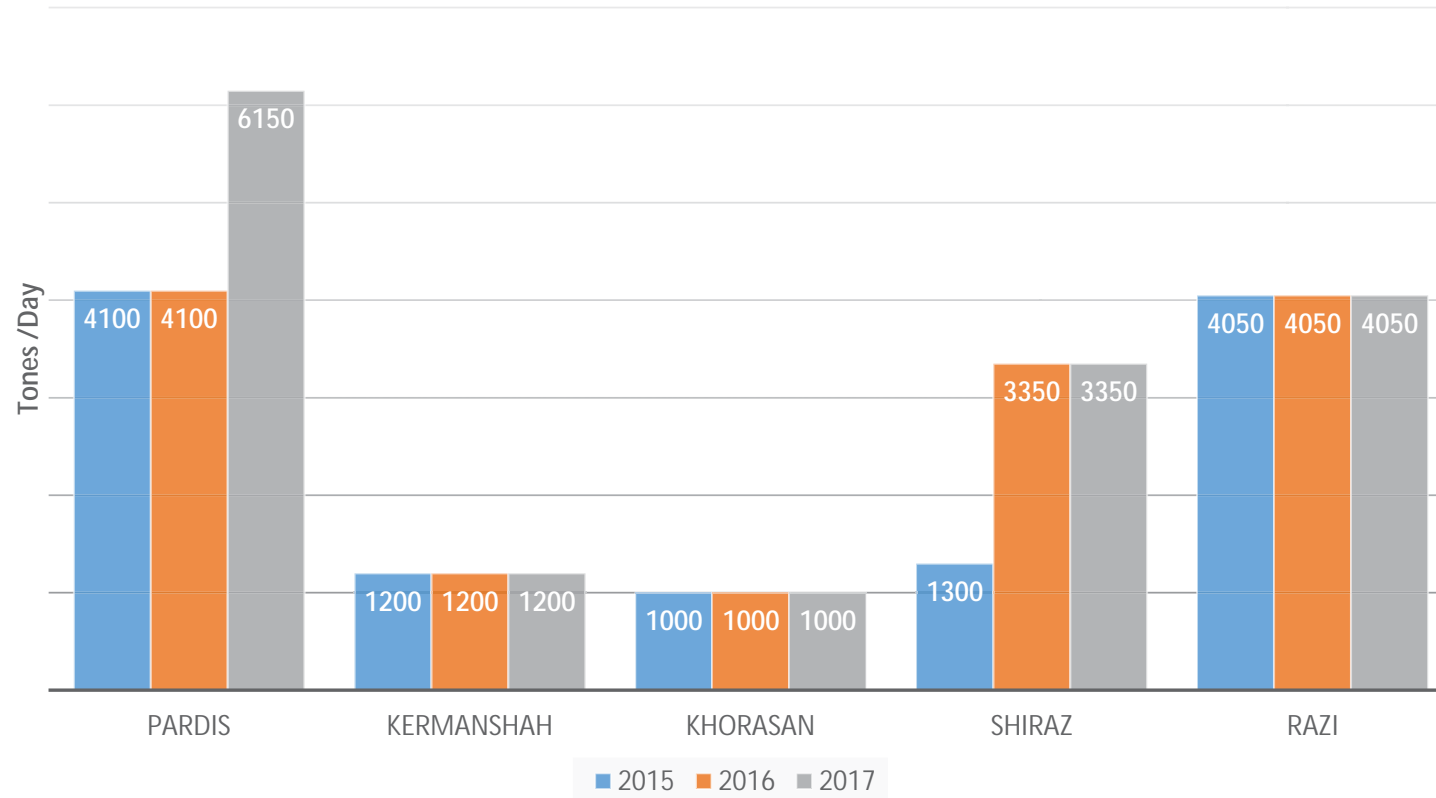
Local Production Capacity (Urea)

Operating Company Capacity



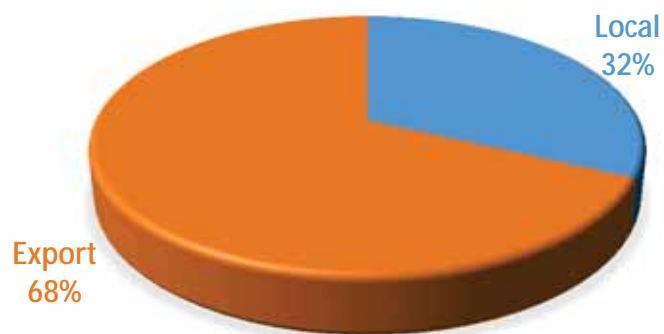
Local Production Capacity (Ammonia)

Operating Company Capacity



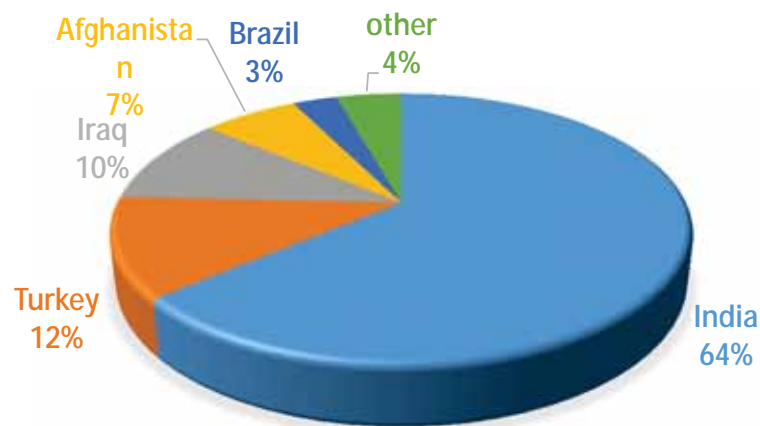
Export and local consumption in 2015 (Urea)

Local – Export Balance



Total : 3,999,000 MTPY

Export Targets

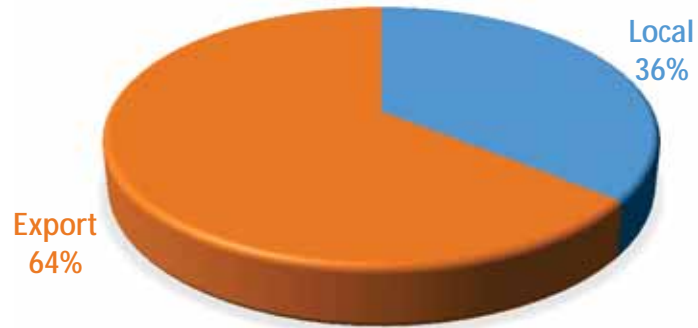


Total : 2,704,200 MTPY



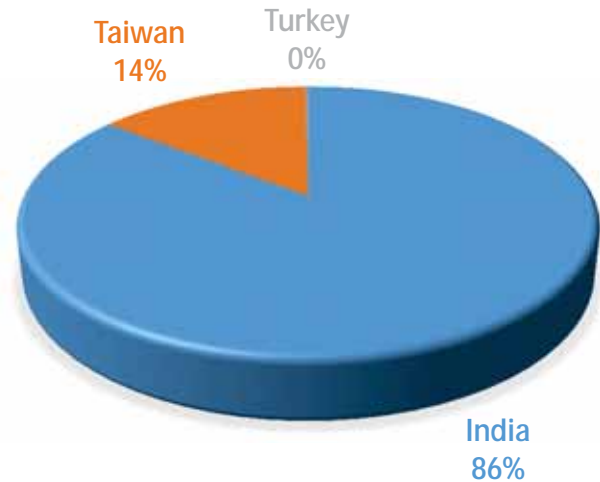
Export and local consumption in 2015 (Ammonia)

Local – Export Balance



Total : 1,299,000 MTPY

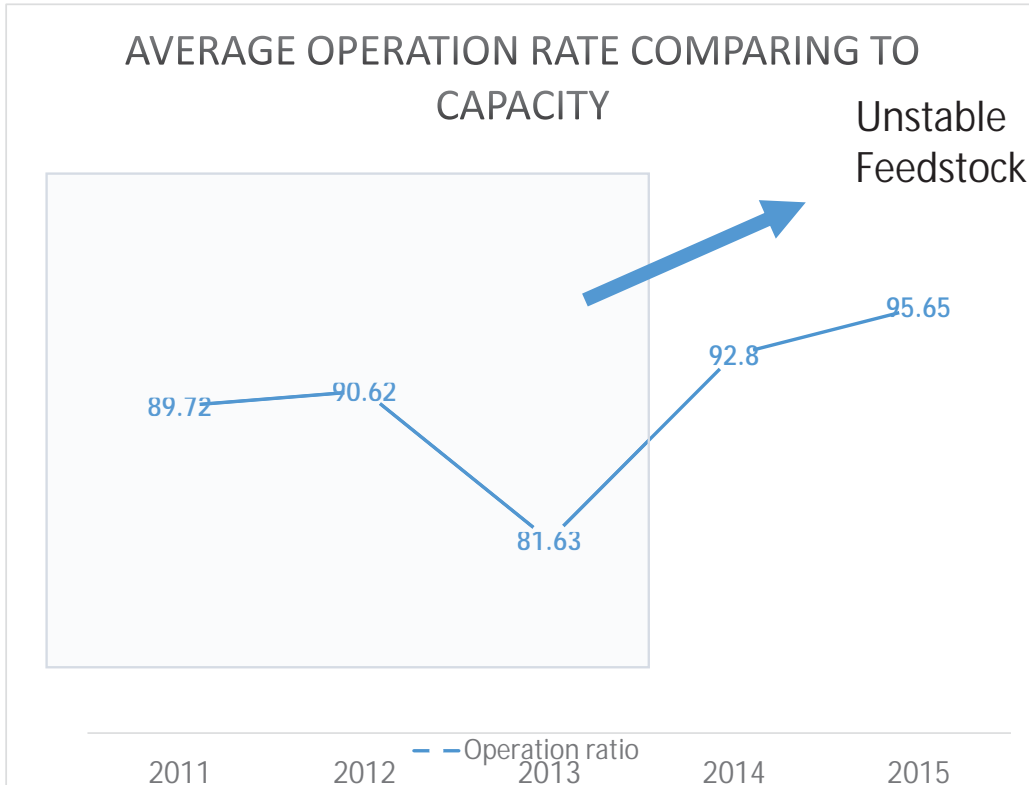
Export Targets



Total : 831,200 MTPY



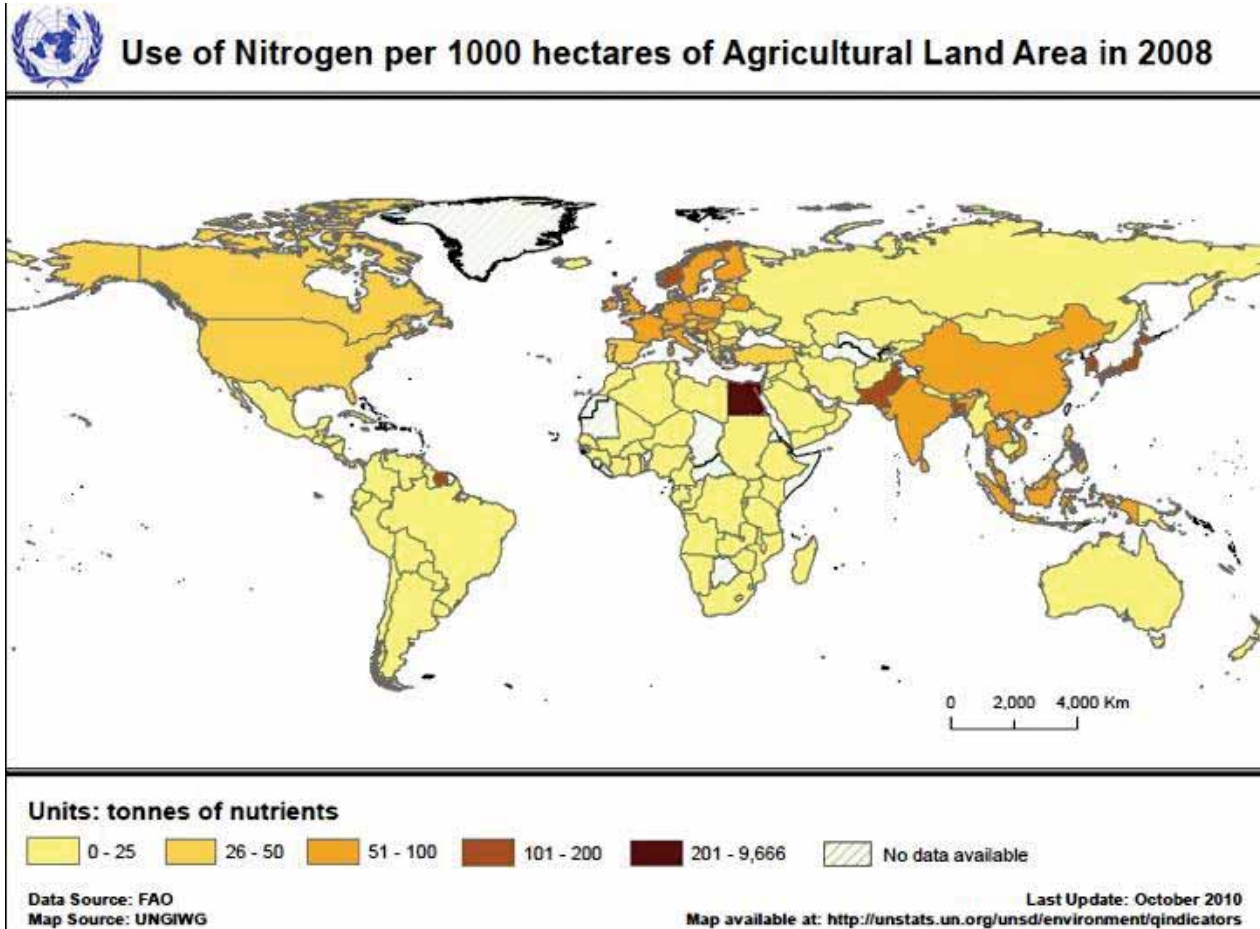
Operation Ratio



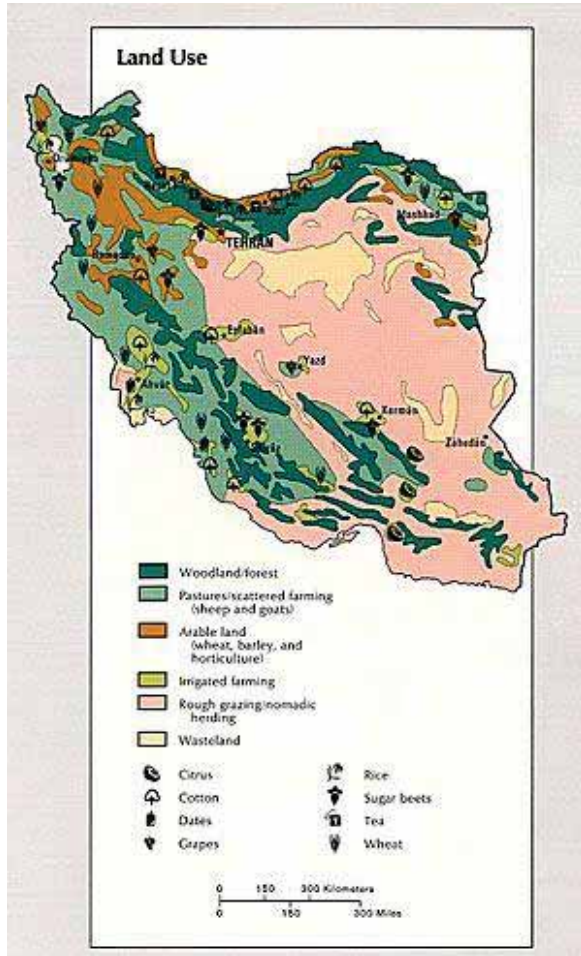
- This is the Average ratio considering the capacities as Wight factor.
- Up to 2014 the Feedstock was not stable so the ratio is not operation ratio.
- In 2014 and 2015 considering the 4.42 MTPY the plants could not gain about 80-100 Million USD each year.



Urea Consumption in Iran



The Consumption of Urea / Hectare

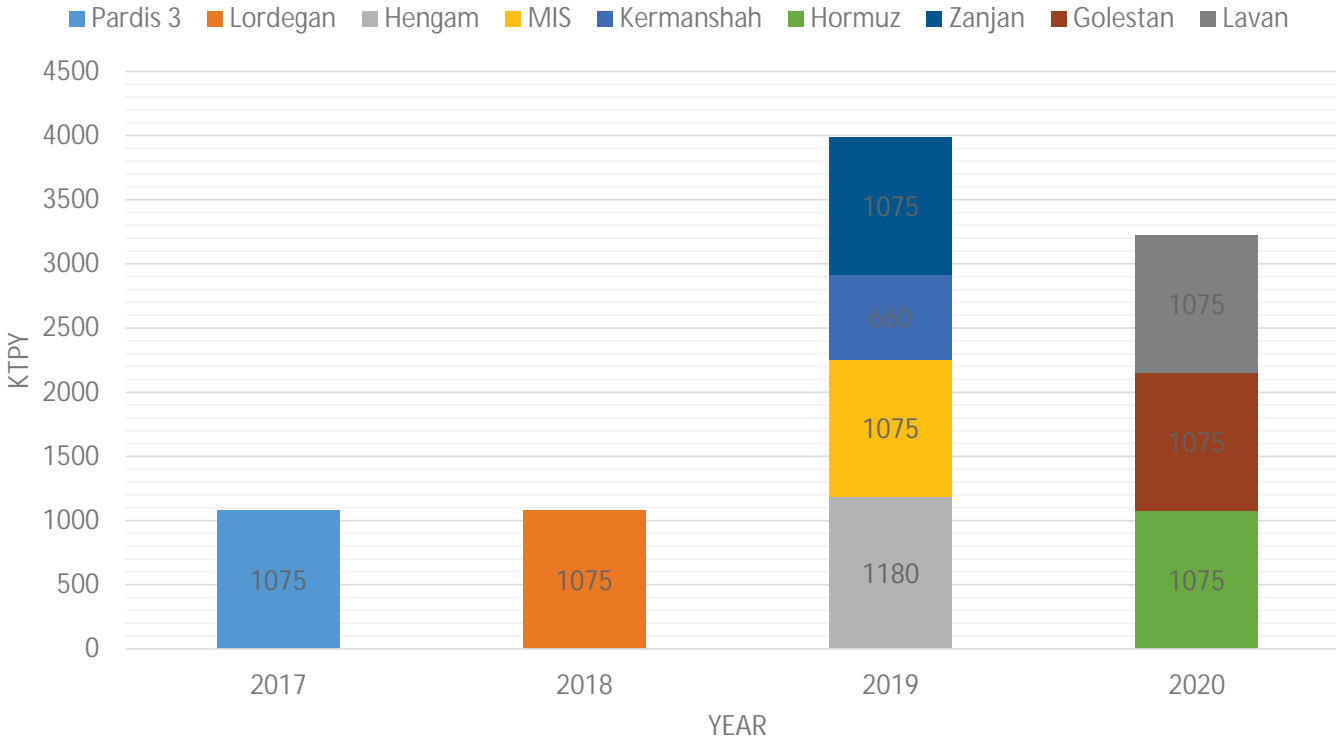


- Iran is the first place on the planet that agriculture has been done, as a human activity.
- 12% of the grounds is now using for agriculture means 200,000 Km² (which is around 5 times of The Netherland).
- The consumption of Urea is around 65 Kg / Hectare, means almost 30Kg of Nitrogen per Hectare is almost 1/3 of average consumption of Urea (1/10 of Egypt).
- The expectation is around 3-5 % growth / year.
- The total market could increase to 4 Million MT/year. With in next 10-15 years.



Future Project Perspective

Approved Project

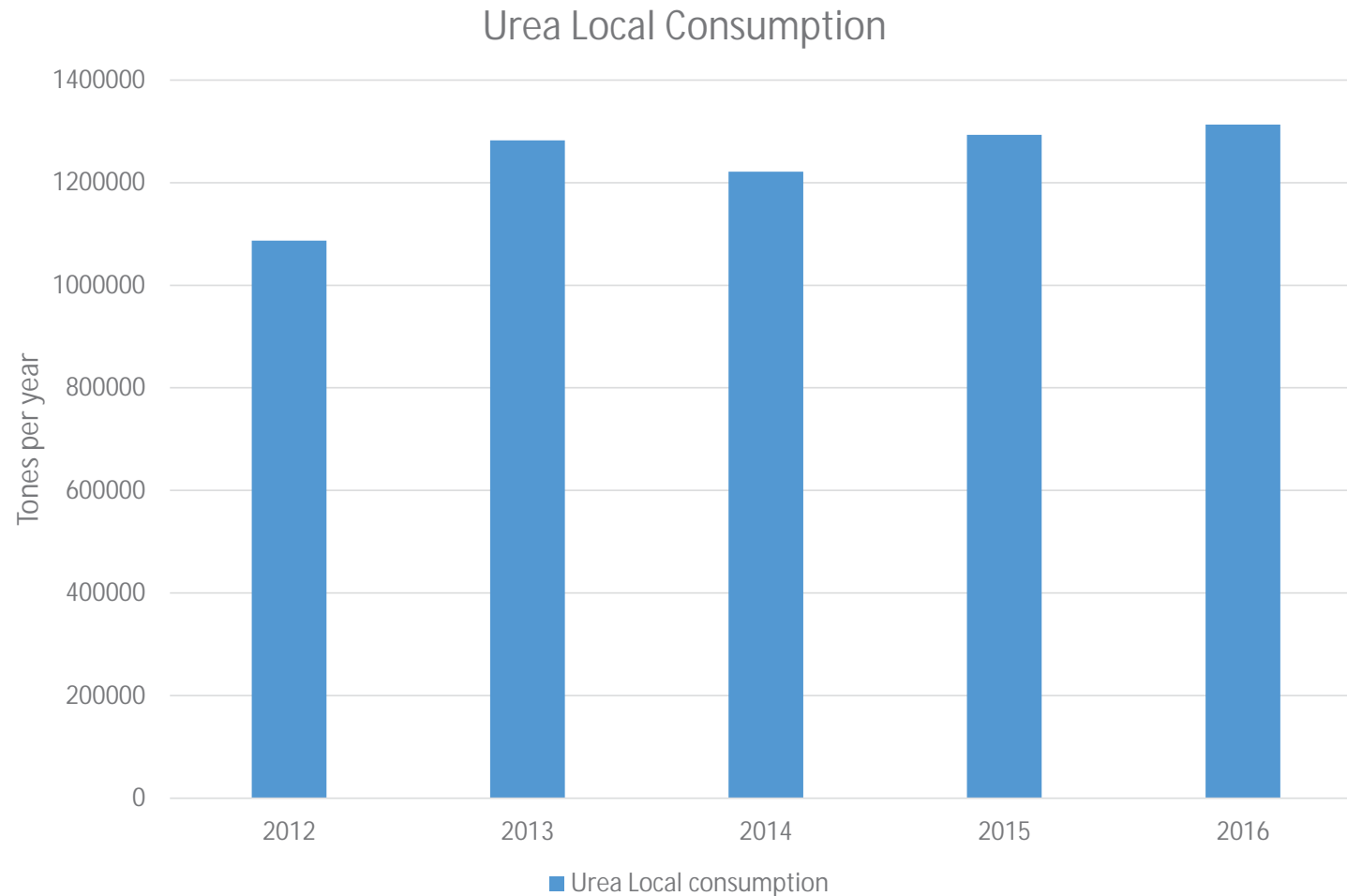


Total Projects : 9,365,000 Tons/Year

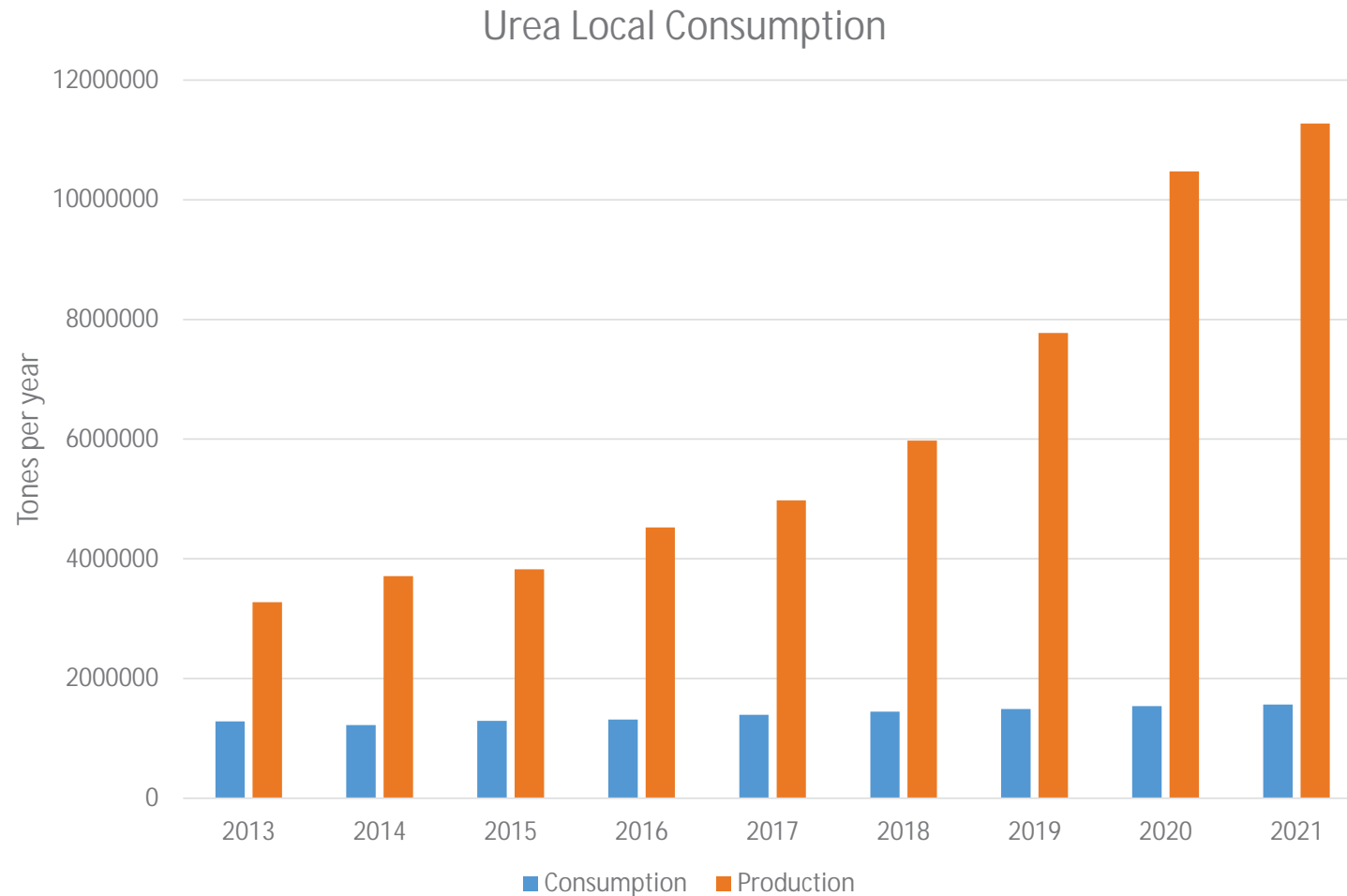
- Pardis 3 is almost finished and going for Commissioning.
- Lordegan and MIS has got Chinese Financing.
- Hengam is using local financing and PGPIC support.
- Zanjan has got the finance from National Development Found.
- Other 4 Projects are looking for Financing Scheme which are under negotiation



Urea Local Consumption



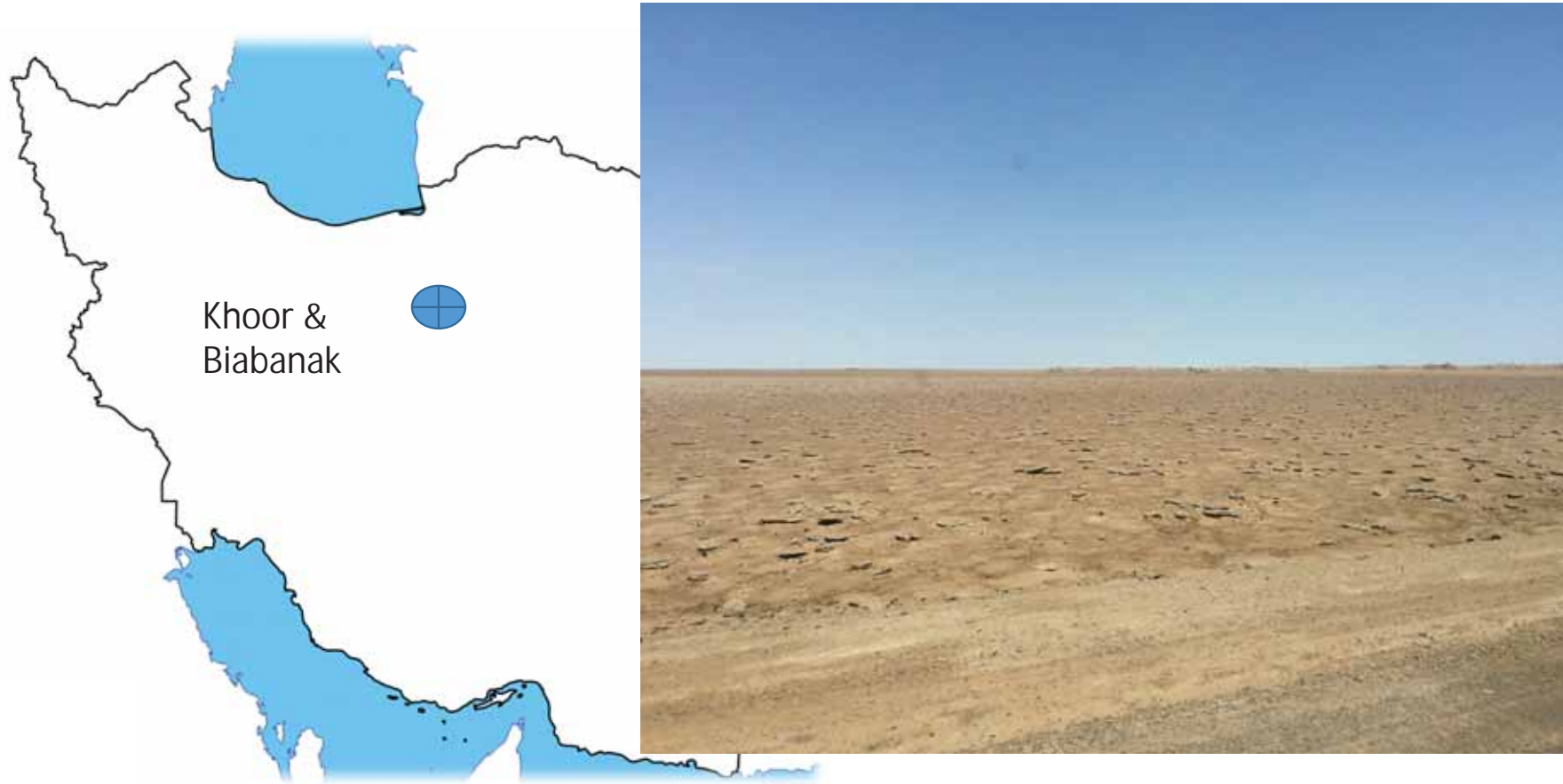
Urea Local Outlook



Potash based Fertilizer



Potash Mine in shape of Chloride is available in the country

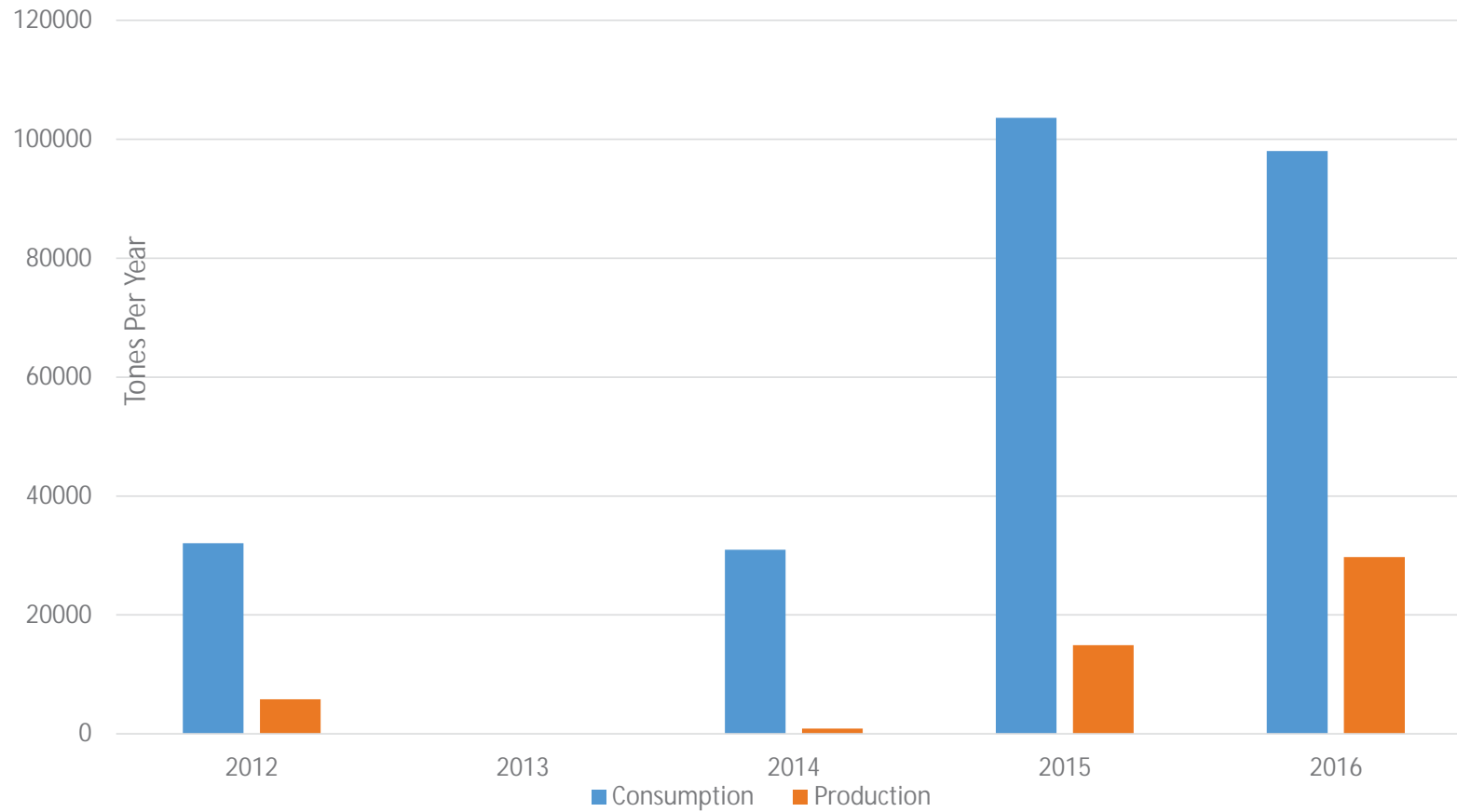


Potash Mine in shape of Chloride is available in the country

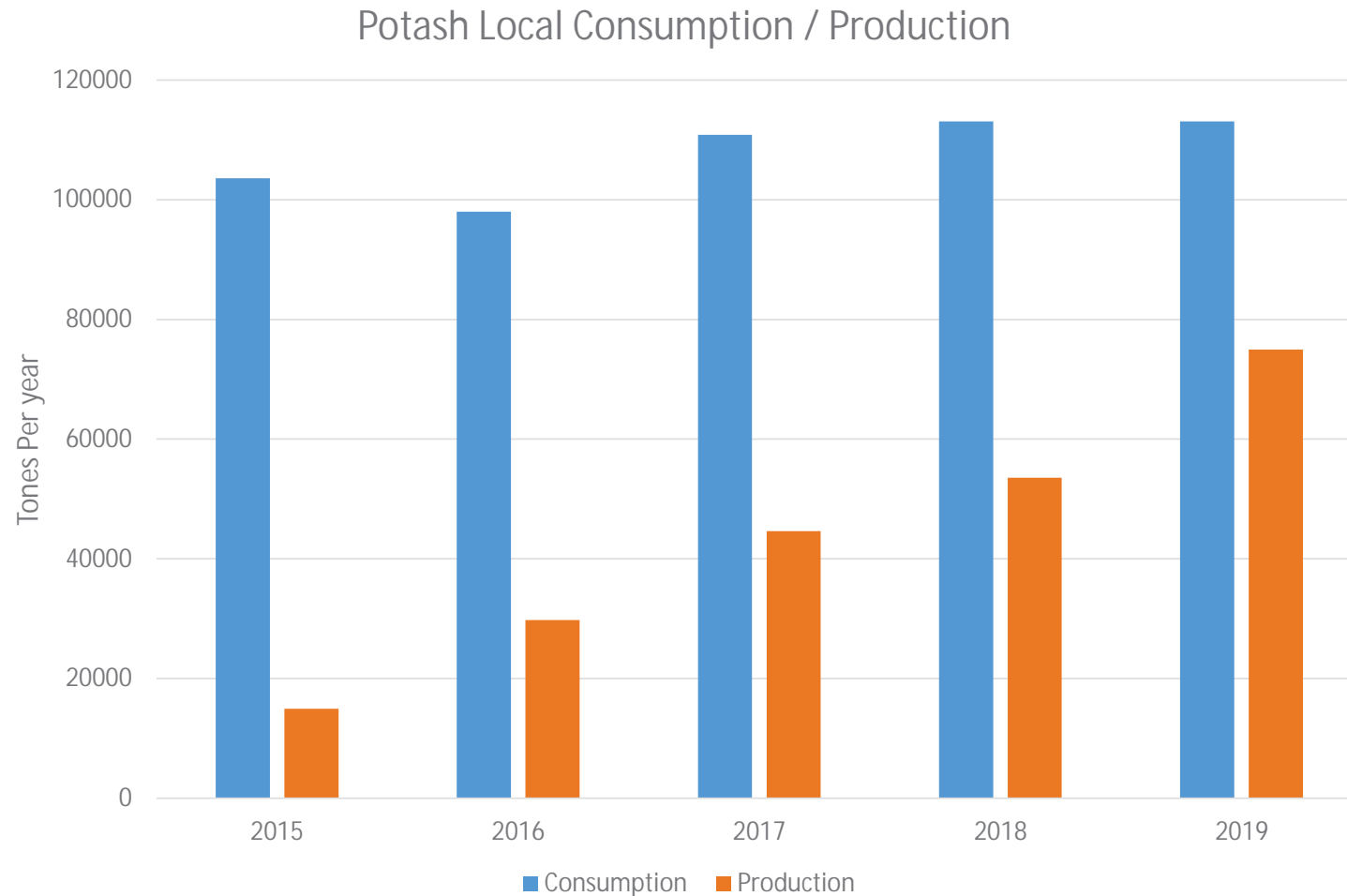


Potash Local Consumption

Potash Local Consumption / Production



Potash Local Outlook

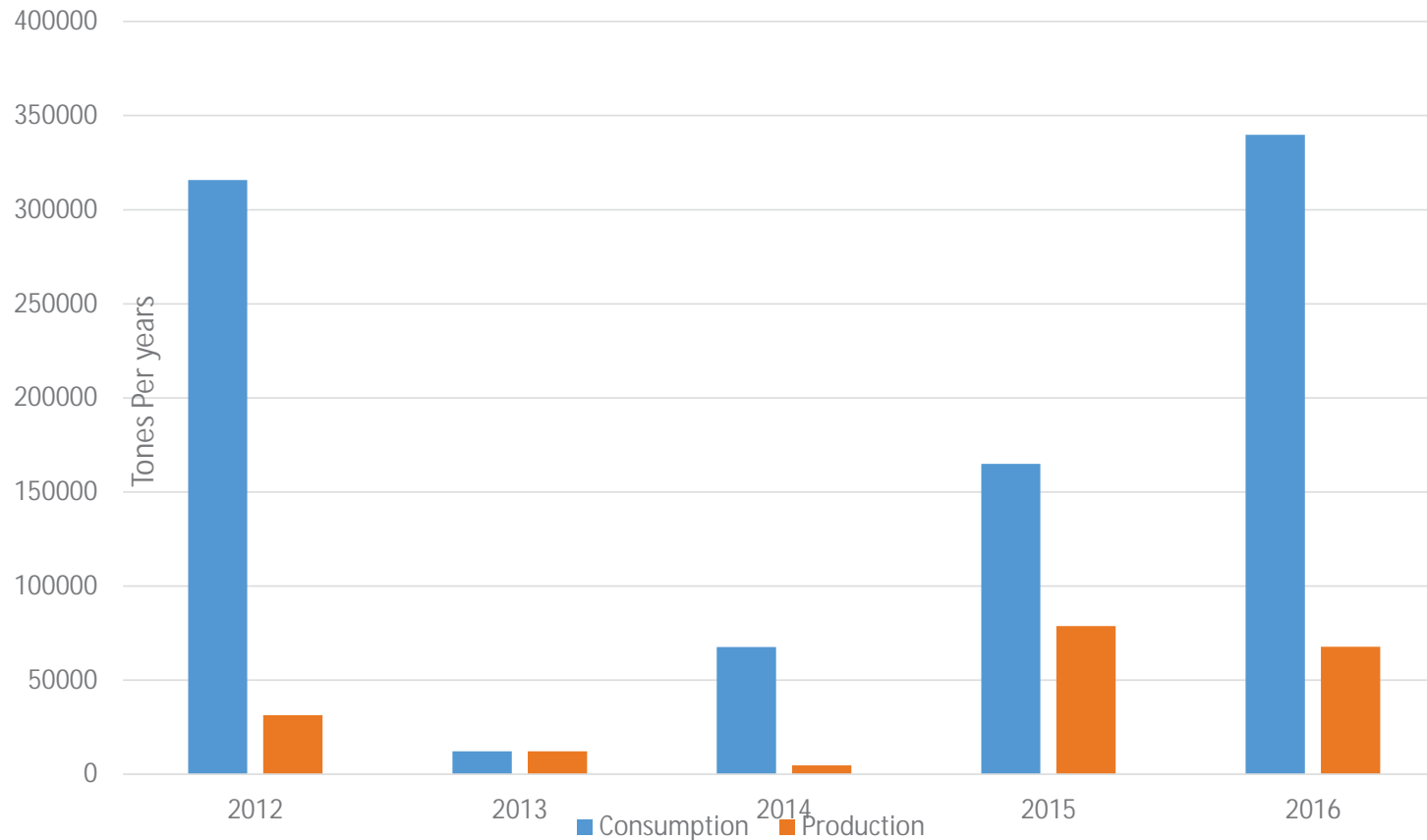


Phosphate based Fertilizer

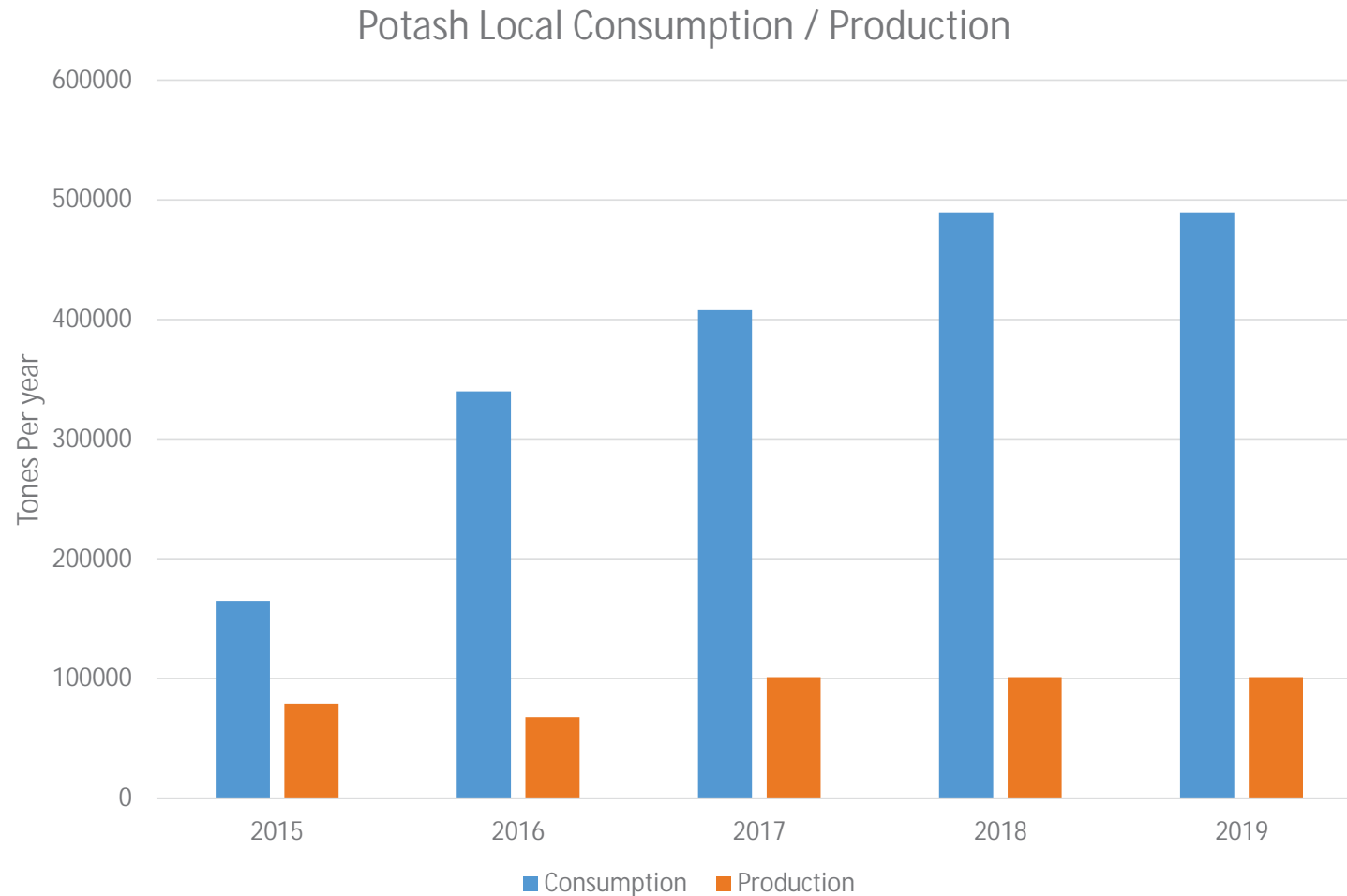


Phosphate Local Consumption

Phosphate Local Consumption / Production



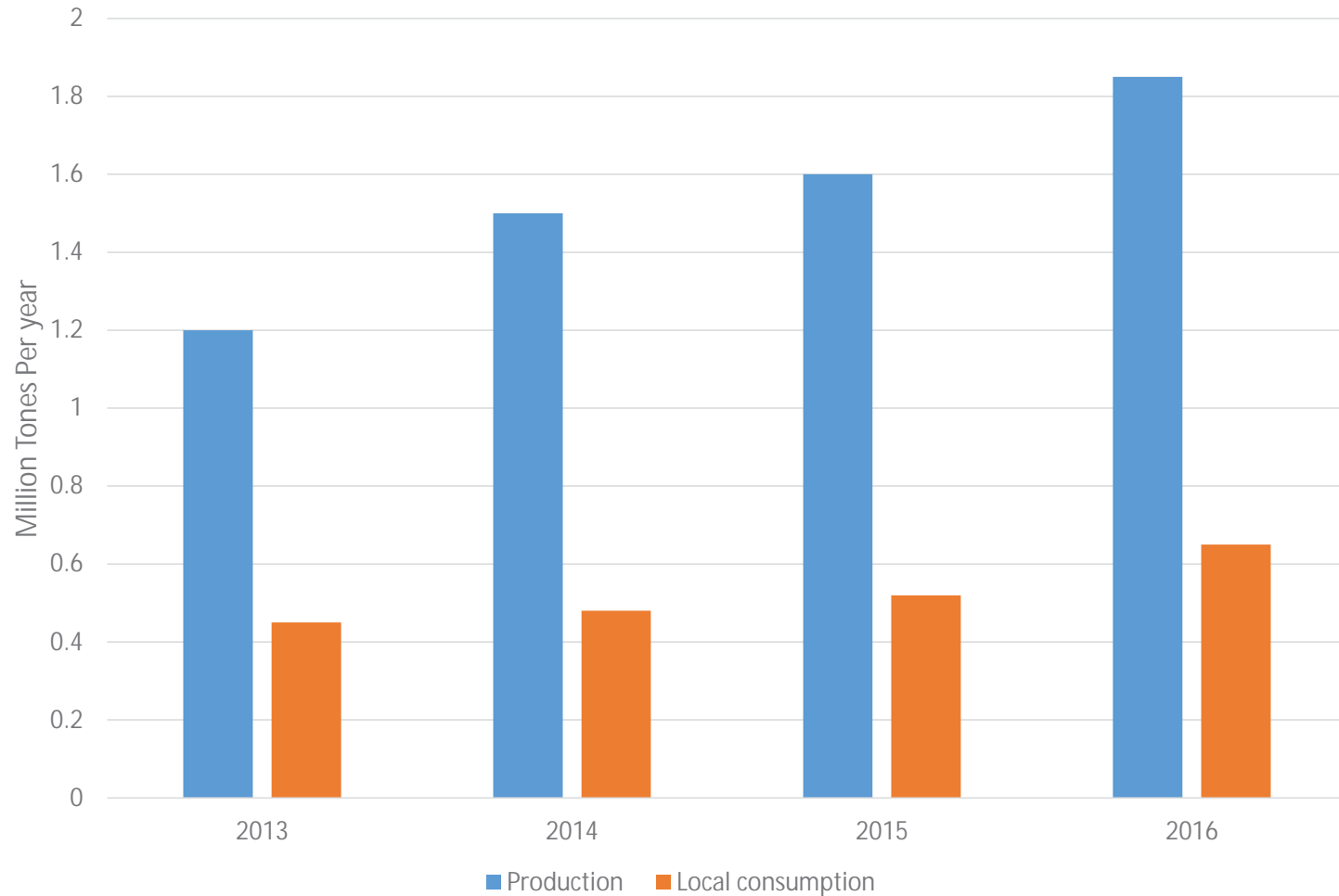
Phosphate Outlook



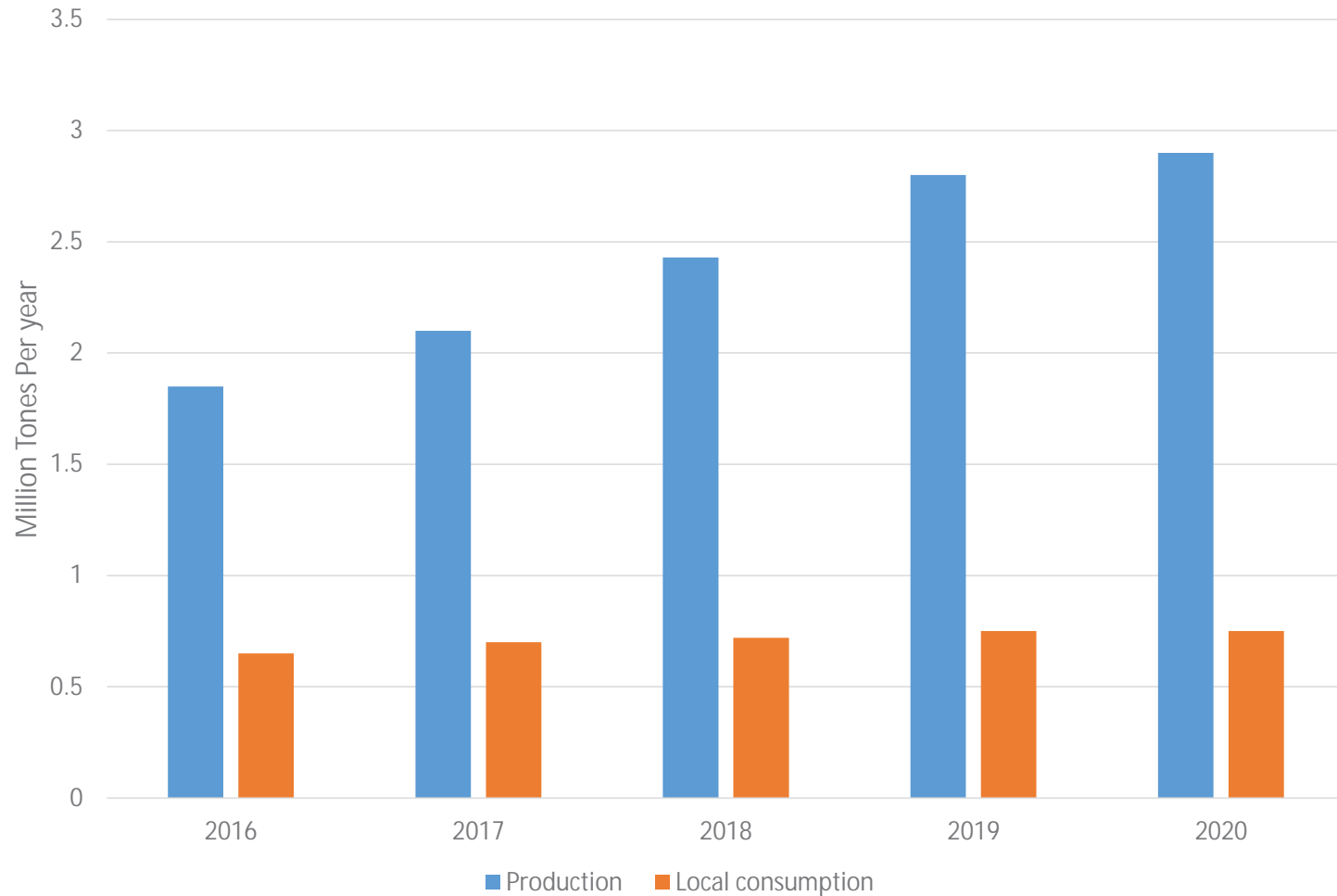
Sulfur added Fertilizer



Sulfur Production



Sulfur Local Outlook



Sulfur added fertilizer

- Although there is high production of Sulfur in the country, There are not too much production of Ammonium Sulfate and Potassium Sulfate.
- The Capacity of Ammonium Production is 27 KTPY
- The Capacity of Potassium Sulfate is almost 5 KTPY

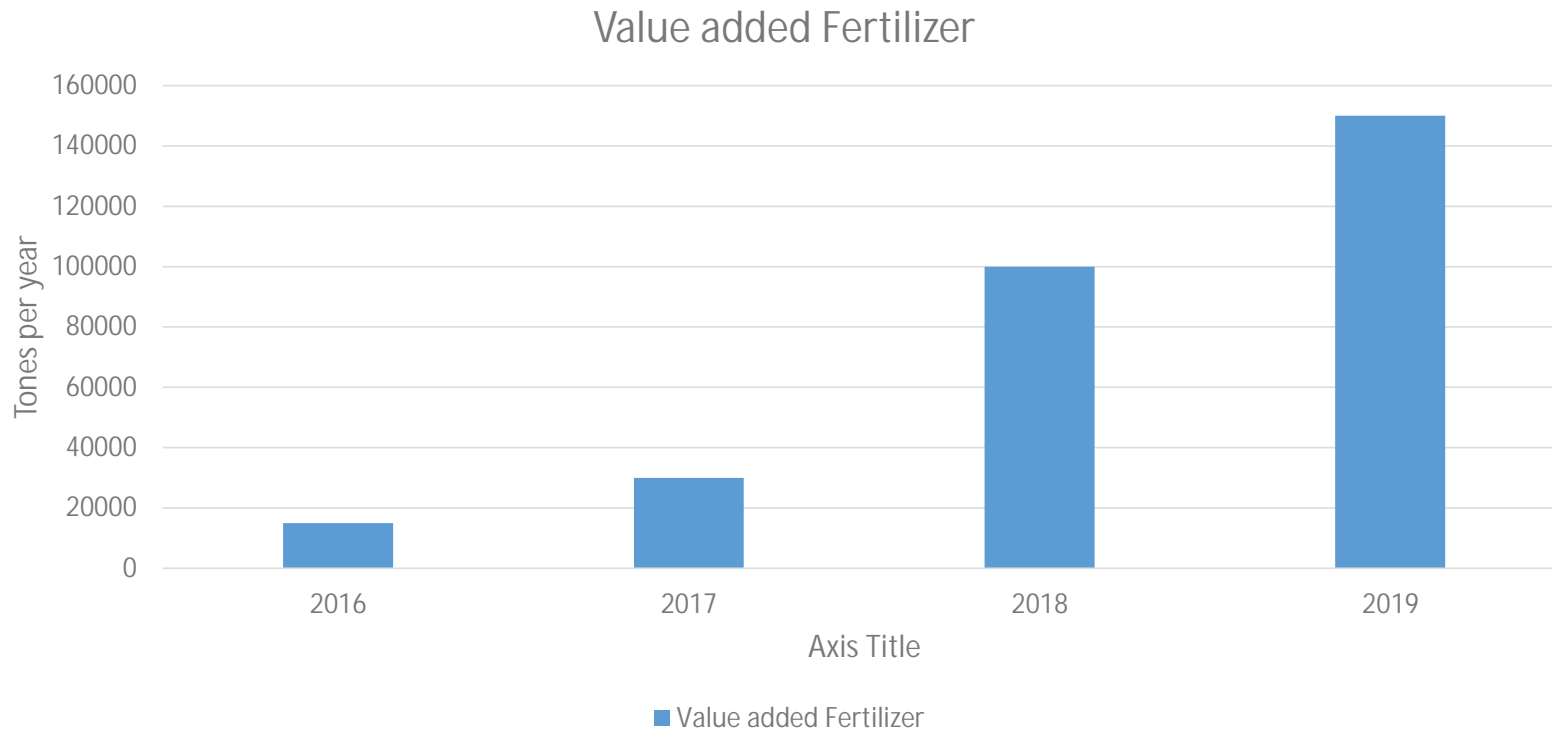


Value added Fertilizer

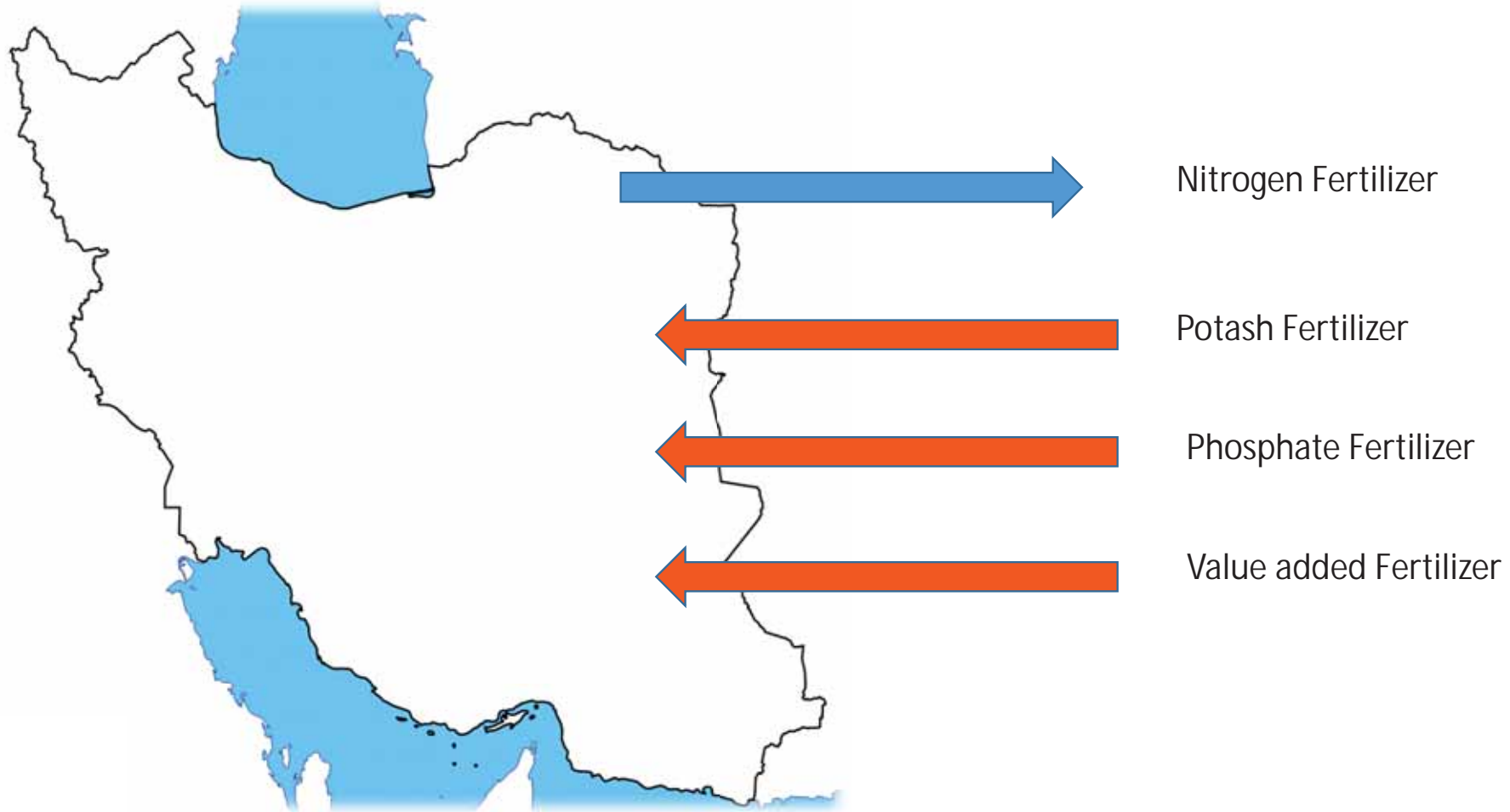


Value added Fertilizer in Iran

- Few companies recently are producing NPK and other valued added Fertilizers



Conclusion

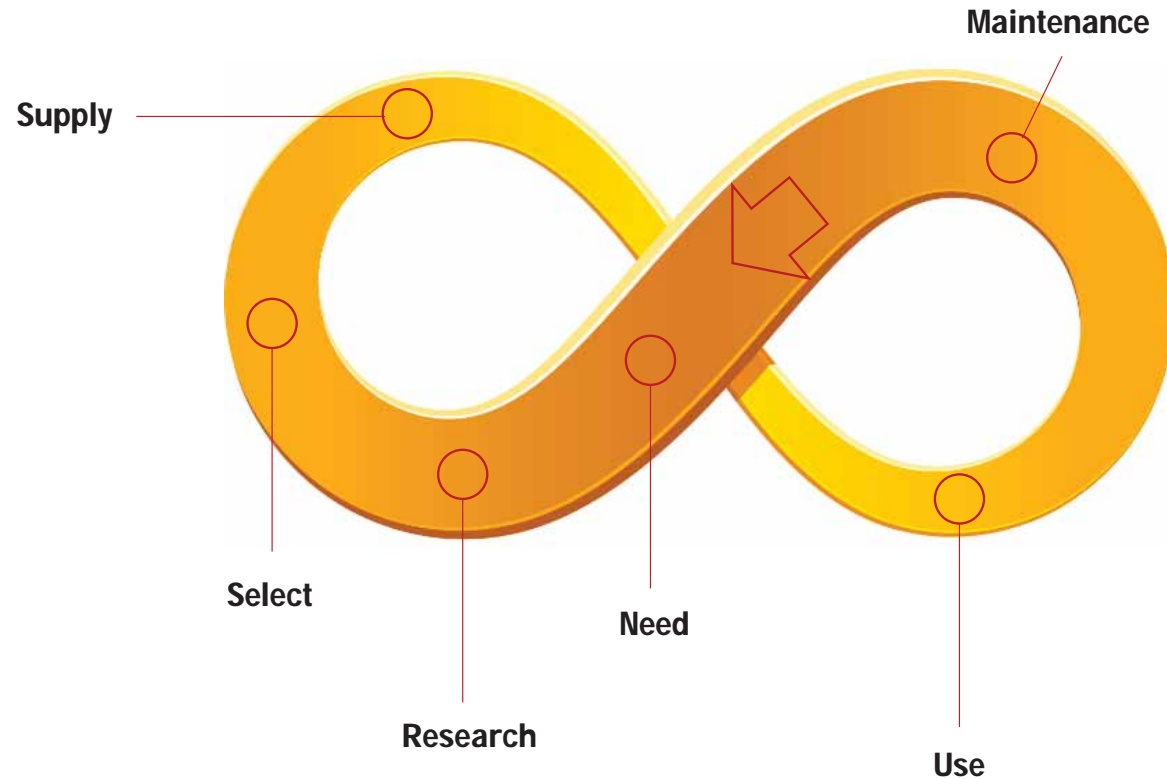


Conclusion

- For the N the country is not only self-sufficient but also exporting . Thanks to cheap feed stock this section is still growing.
- For the K the market will be self-sufficient in later years, due to good Potash resource this section has ability for development.
- For the P, which is most suitable nutrient for the Soil of country there are some mining needs to be developed, the demand for P will increasing every year by at least 20%.
- Few amount of advanced Fertilizer like NPK is importing, some mixing companies are providing production in this section, but needs much more investment and import as well.
- Due to availability of Resources , the best solution could be providing the production technologies in land and local production, which financing of the projects will be a challenge



How Phoenix Can Help



Continuously **Improvement** To Eternity

Rebirth To Eternity

Phoenix

