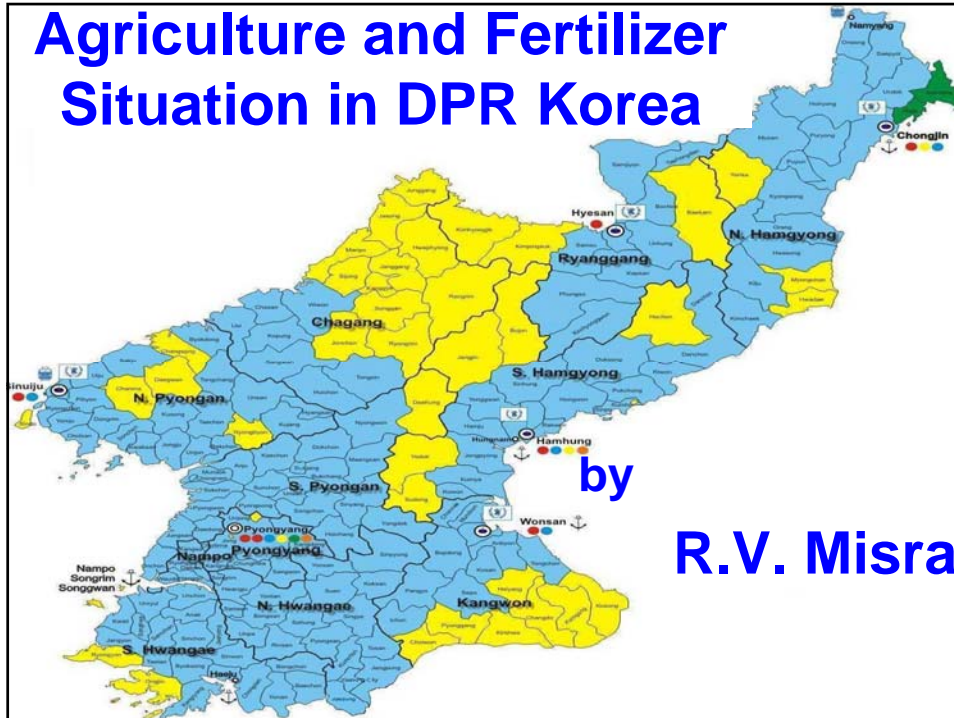
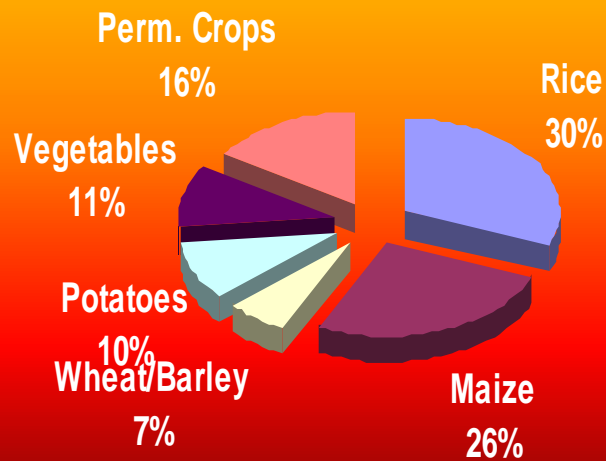


Agriculture and Fertilizer Situation in DPR Korea



- Arable land extremely limited due to the peculiar topography.
- Approximately 80 percent of territory covered by mountains, and only 20 percent in flat land.
- Climatic conditions do not permit more than one crop per year in many areas.

Area under various crops in DPR Korea



Rice

Most important crop.

Grown mainly in central, south-western and south-eastern parts of the country (the lowlands of North and South Pyongan, North and South Hwanghae, Pyongyang and Kaesong) -collectively known as the "Cereal Bowl" and, the narrow east coastal strip comprising parts of Kangwon, and North and South Hamgyong.



Maize

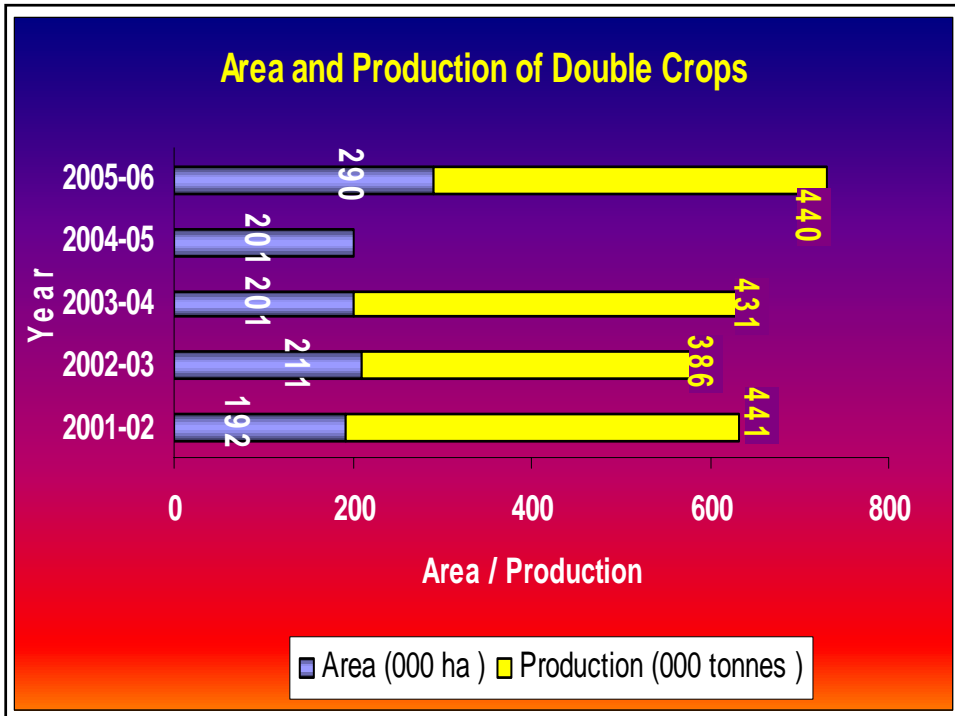
Mainly produced under rainfed conditions, and more universally distributed than rice.



Potato

Although a recent introduction in DPR Korea, has substantial potential for increasing food supply.

Potatoes are grown as a summer crop in the cooler northern highlands (Jagang, Ryanggang), as a spring (double) crop in the Cereal Bowl region.



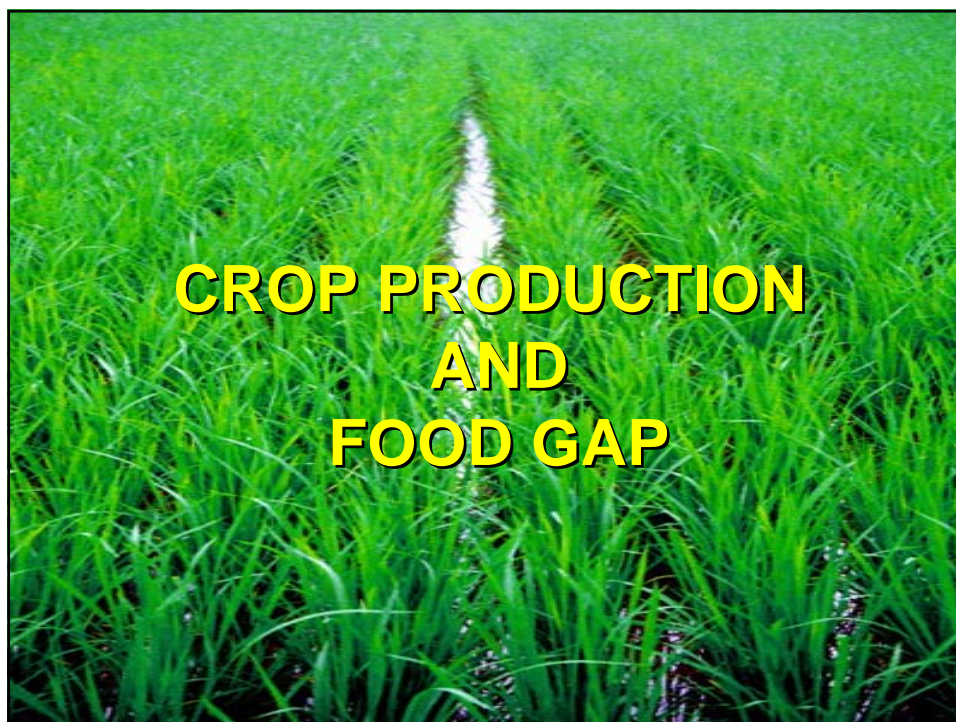
DOUBLE CROPPING

Constraints

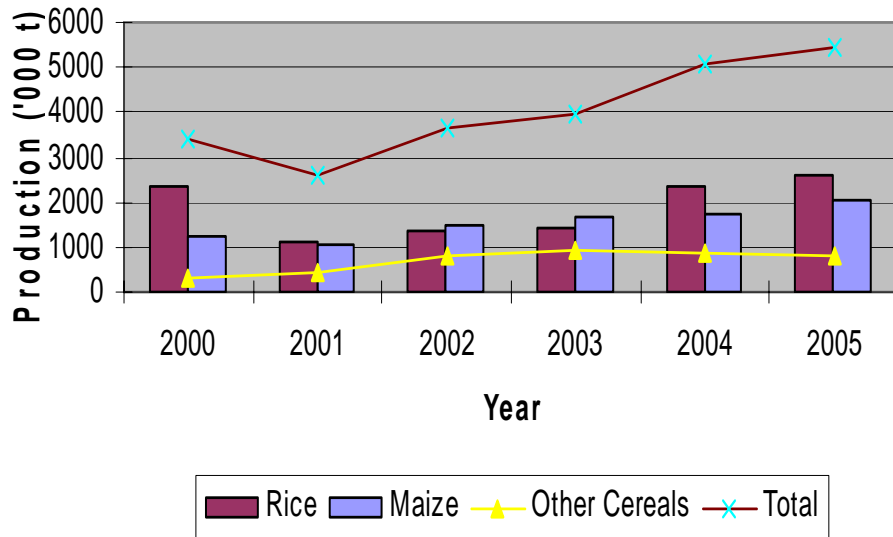
- **Poor soil fertility**
- **Shortage of inputs esp. fertilizers**
- **Inadequate irrigation**
- **Inadequate mechanization**
- **Insufficient plant protection measures, and**
- **Lack of short duration crop varieties.**

Prospects

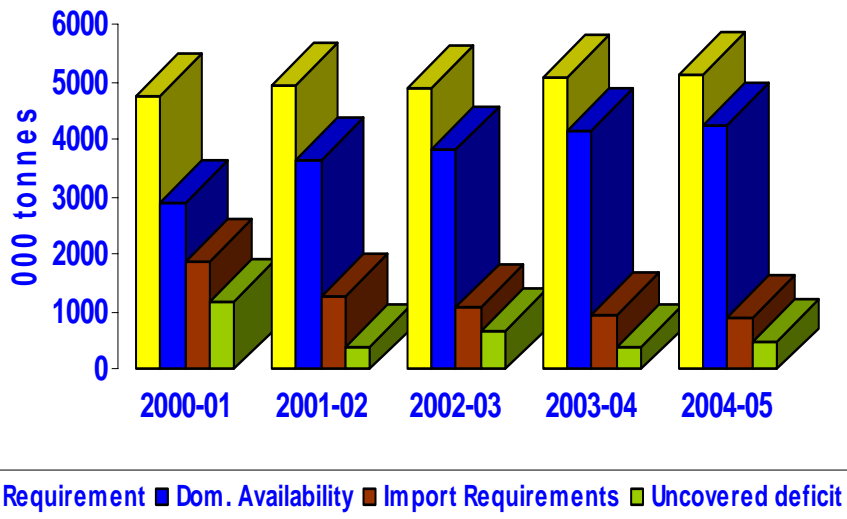
A substantial area could be brought under winter/spring cropping, provided that the needed resources such as tractors, tyres and spare parts; fuel, fertilizer, pesticide and labour are made available.



Crop Production in DPR Korea

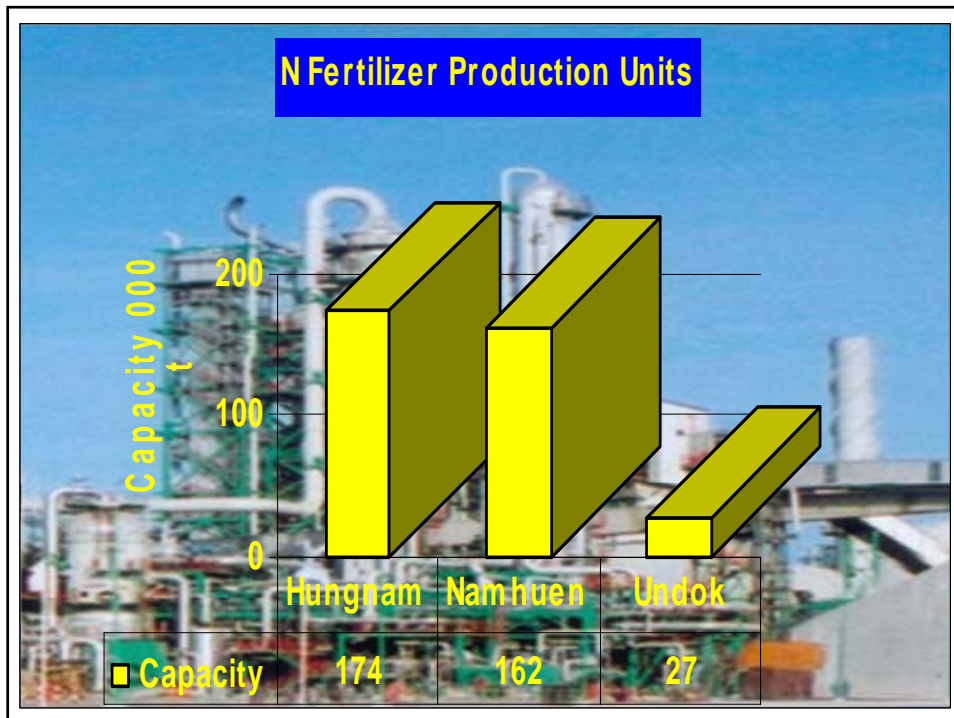


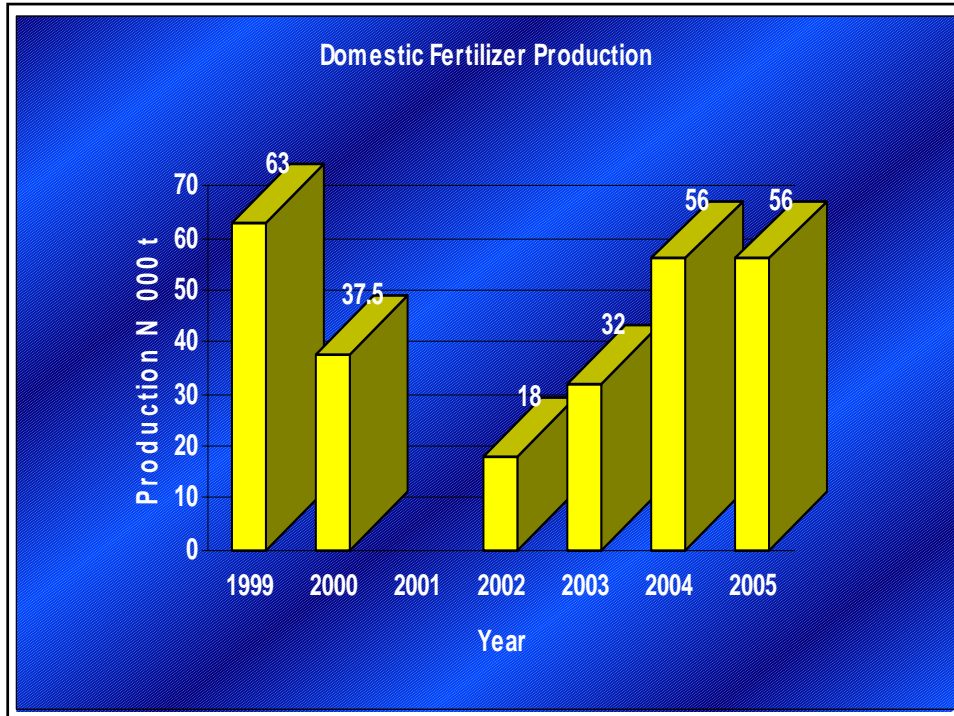
Cereal Supply/Demand Balances



Soil Fertility

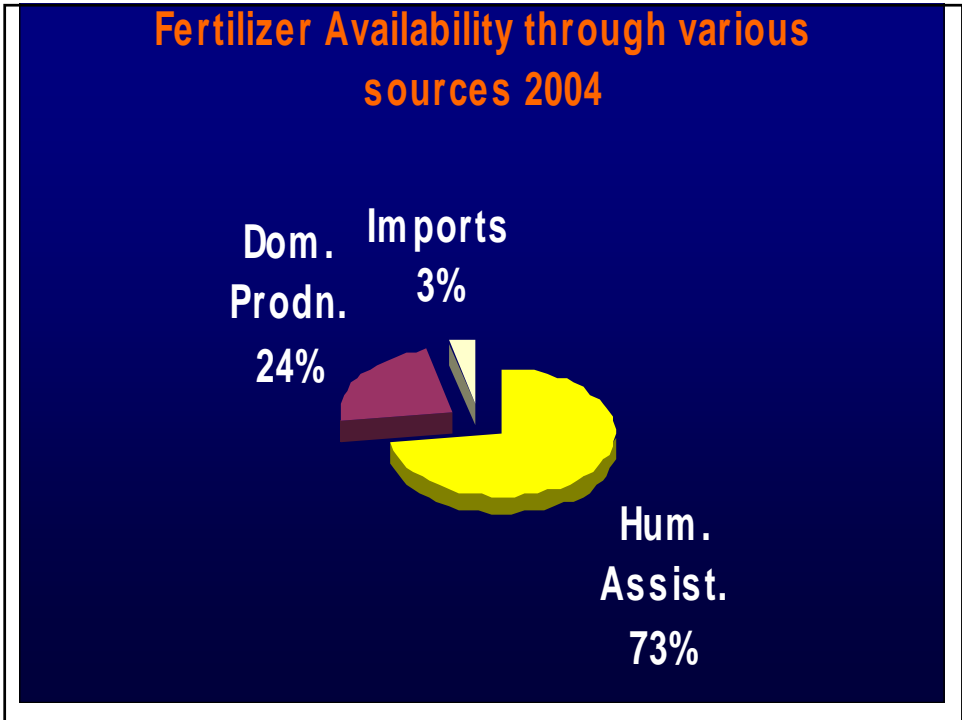
- The fertility of most of the soils is low.
- Soils mostly acidic and deficient in organic matter.
- Most of the arable land, deficient in major and micronutrients.
- Sloping lands with shallow soils and maize cultivation are especially poor.
- Short fallow periods, high plant densities and limited crop rotations have inevitably led to declining soil fertility.
- Growing crops without fertilizers or with low rates is mining the soil nutrient reserves.





Raw Materials

- DPRK relies on imports of crude petroleum for its fertilizer plants at Namhueng and Undok county.
- For Hungnam plant, coal requirements can be met from the large reserves in S. Pyongan, Ryanggang and N. Hamgyong.
- Low-grade rock phosphate deposits for super phosphate production exist. sulphuric acid requirements met through imports.
- Potassium resources under exploration and undeveloped.
- Abundant resources of limestone exist to meet soil reclamation needs. Gypsum, however, is imported.





Logistics

