

Exemplar revision sheet: The dry lands of Asia – Food security and vulnerability

Big scale ideas: Asia has a huge range of food security vulnerabilities;

- Some countries such as the drylands of Syria, Afghanistan, Eastern Horn of Africa face conflict and food insecurity.
- There are a huge number of Asian countries where growing economies are causing rapidly changing societies, although food insecurity may not be a current issue – it could be in the future. In such countries – China being the main example – some of the societal changes - top down agricultural management strategies and loss of traditional nomadic farming techniques in drylands are worrying concerns for the future in China re food insecurity.

Gobi desert

- **PHYSICAL FACTORS:** 3rd largest desert in the world – caused by continentality. Very low rainfall annually – 120mm and cold winters – 40 C. Hazard of winter dzuds. Desertification increasing as a result of poor farming outlined below and possibly climate change. Traditionally herding has been used as a method of farming to cope with food security in this physically very challenging landscape.
- A huge number of society changes – including increased rates of out-migration and changes in employment structure - in the Gobi desert in both China and Mongolia that potentially could lead to food insecurity in the future for both areas.

Understanding & Place Knowledge

a) **Minquin County, Gobi Desert, China:**

- Part of Inner Mongolia in the North of China, close to the border with Mongolia

This was a dryland area that was sparsely populated with nomadic herders. 1960s – area increased population with Chinese farmers. Nomadic herders also forced to settle.

- Government as a key player – has influenced the settled farming of crops. Markets controlled, crops decided by government. Loans offered and high tech farming with greenhouses are encouraged. Dam and irrigation system – farmers given swipe card for water
- There was a huge drought in wheat growing eastern China in winter 2011 – however China managed this by importing wheat from the world market (this had impacts elsewhere – world food prices rose).

b) Gobi Desert, Mongolia:

- Covers much of the southern part of the country
- In contrast to China – there is not the forced settling of nomads nor is there encouragement towards rain-fed intensive farming. Move towards capitalism.
- Herders have bigger herds to sell more milk and cashmere from goats
- Herders are moving away from traditional life style – women to university, and the men to mines (gold, copper, tin – a huge growth area of Mongolia). Both of which have resulted in out-migration to the city.
- Because of loss of herders, but with larger herds, community ‘networks’ are now weaker, these had traditionally been the way of managing disasters. Now – lack of kinship networks and little/no government intervention and safety nets as in China. Herders have been therefore forced to move to the city and rely on cheap (Chinese) imported food which is not sustainable. No food insecurity at present; but society change and food insecurity in the future.

Summary

- The growing economies of Asia have moderate food security issues, particularly in its drylands of the Gobi Desert.
- There are many inherent physical factors that make farming a challenge. Human factors in rural societies are changing food security rapidly.
- Food security is not a current issue – but food security is not sustainable and the changing society mainly due to loss of traditional herding farming looks like the region could be incredibly vulnerable to food insecurity in the future.