

YEAR 7 – THREE GORGES DAM

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Three Gorges Dam Source: <http://www.asianinfrastructure.com/media/media-news/news-thumb/100728/threegorgesdamflooding.jpg>

Asia and Australia's engagement with Asia priority in the Australian Curriculum provides a regional context for learning in all areas of the Geography curriculum. It reflects Australia's extensive engagement with Asia socially, culturally, politically, and economically.

A. WHAT ENCOMPASSES ASIA?

Asia can be defined in geographical terms, but it can also be described in terms of cultural, religious, historical and language boundaries or commonalities.

While it includes West and Central Asia, in Australian schools studies of Asia will pay particular attention to the sub-regions of:

- **North-east Asia**, including China, Mongolia, Japan, North Korea, South Korea and Taiwan
- **South-east Asia**, including Indonesia, Myanmar (Burma), Thailand, Malaysia, Brunei, Singapore, Vietnam, Laos, East Timor, the Philippines and Cambodia
- **South Asia**, including India, Pakistan, Nepal, Bhutan, Bangladesh, Sri Lanka and the Maldives

Source: <http://www.australiancurriculum.edu.au/CrossCurriculumPriorities/Asia-and-Australias-engagement-with-Asia>

B. BACKGROUND INFORMATION

The AEF website provides students with a variety of online data display software to investigate and present information about countries of the Asia region. Country-specific data and interactive maps and graphs aim to achieve an appreciation for the diversity of the countries that make up Asia.

www.asiaeducation.edu.au

Geographical skills such as maps, photographs, satellite images, graphs, tables and statistics helps students develop an understanding of Asia using digital software to research and present information on the diversity of the Asia region.

Inquiry process

- Where is Asia?
- What countries make up Asia?
- How has Asia changed over time?
- What are the connections between Australia and Asia?

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Resources

- **Satellite map** of countries in Asia Was Asia bigger than you thought?
http://www.asiaeducation.edu.au/curriculum_resources/geography/year_6_seeing_beyond_asia/location_of_countries_in_asia.html
- **Worldmapper** Compare the regions that comprise Asia on this map and the countries on your hard copy map of Asia. <http://sasi.group.shef.ac.uk/worldmapper/display.php?selected=1>.
- Watch the **video** by Hans Rosling called 200 Countries, 200 Years, 4 Minutes. Watch the rise of Asia
http://www.asiaeducation.edu.au/curriculum_resources/geography/year_6_seeing_beyond_asia/200_countries_200_years_4_minutes.html

Activities

1. **Draw mind maps.** Draw a mind map of Asia. This website provides examples of mind maps
<http://learningfundamentals.com.au/resources/How-to-speed-your-mind-mapping-Tricks-of-the-trade>
<http://learningfundamentals.com.au/blog/how-to-speed-up-your-mind-mapping-tricks-of-the-trade/>
2. **Design an infographic** Infographics collate information that is visually pleasing and understandable. It could be used to assess a topic <http://www.schrockguide.net/infographics-as-an-assessment.html>

C. YEAR 7 DAMMING THE YANGTSE AT THREE GORGES

Asia Education Foundation website

http://www.asiaeducation.edu.au/curriculum_resources/geography/year_7_damming_the_yangtze_at_three_gorges/year_7_damming_the_yangtze_landing_page.html

Key focus questions:

- What impact has the Three Gorges Dam had on the people and the environment?
- What are the most significant human and environmental impacts of the Three Gorges Dam?
- How can information be visually presented to effectively communicate your ideas?

Teacher notes

http://www.asiaeducation.edu.au/curriculum_resources/geography/year_7_damming_the_yangtze_at_three_gorges/year_7_damming_the_yangtze_teacher_notes.html

Photo: Three Gorges Dam

– http://commons.wikimedia.org/wiki/File:Three_Gorges_Dam_09.jpg



Three Gorges Dam during construction..

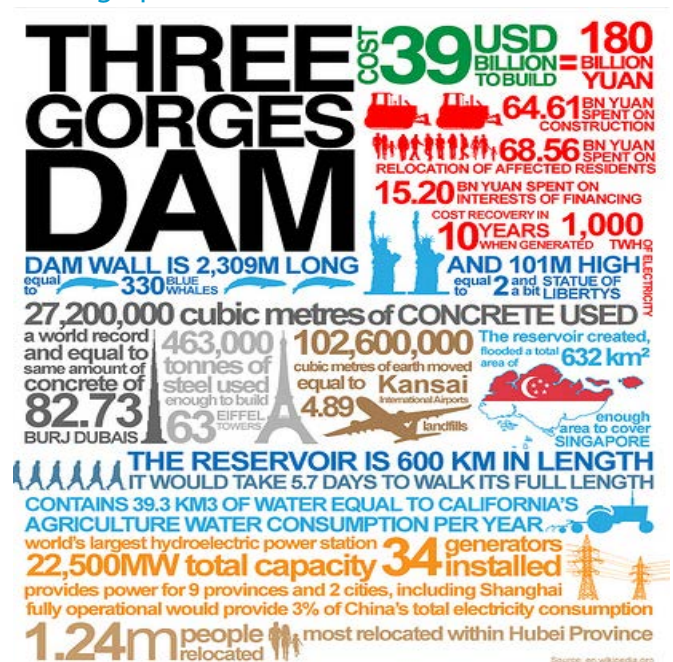
Source: http://commons.wikimedia.org/wiki/File:Three_Gorges_dam.jpg

Introduction

The Watchers website contain articles on watching the world evolve and transform. The article noted that the 'The Three Gorges Dam is a hydroelectric dam that spans the Yangtze River by the town of Sandouping, located in the Yiling District of Yichang, in Hubei province, China. The Three Gorges Dam is the world's largest capacity hydroelectric power station with a total generating capacity of 18,200 MW'

Source: <http://thewatchers.adorraeli.com/2011/06/03/china-admits-three-gorges-dam-has-urgent-problems-as-drought-persists/>

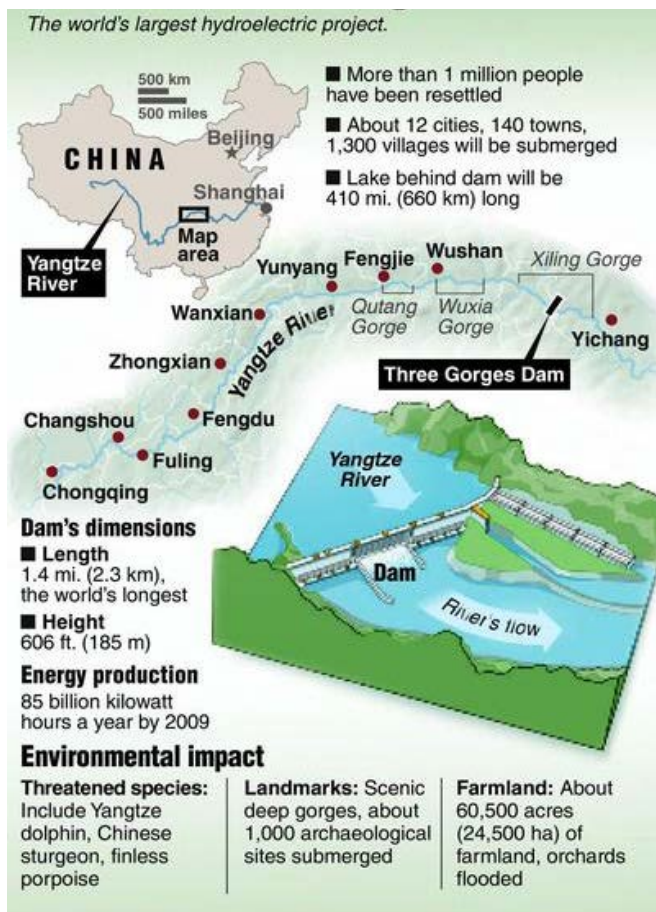
1. Infographic



Source: http://www.asiaeducation.edu.au/verve/_resources/4015688799_6a0cf3f9d2.jpg

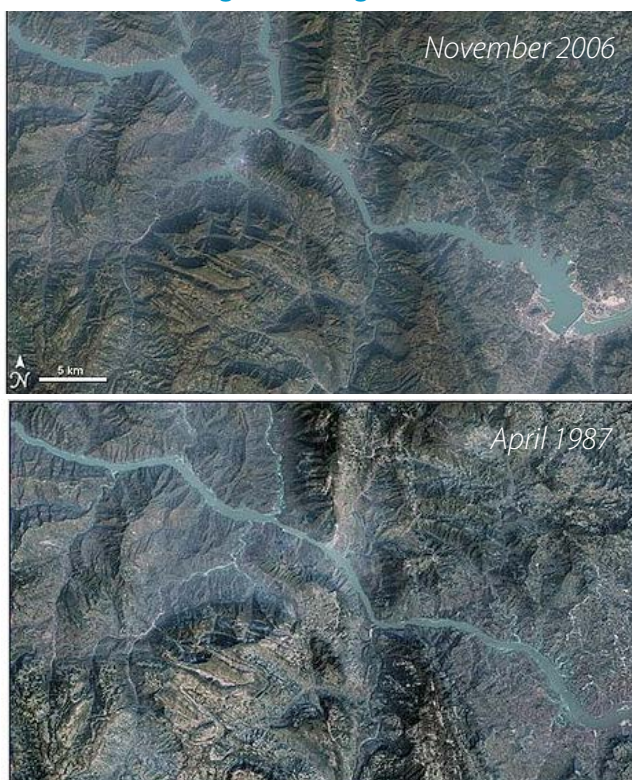
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2. China's Three Gorges Dam



Source: http://media.mcclatchydc.com/smed/ia/2007/10/11/17/723-20060518_CHINADAM-153.large.prod_affiliate.91.jpg

3. Satellite: Changes to Yangtse River 1987–2006



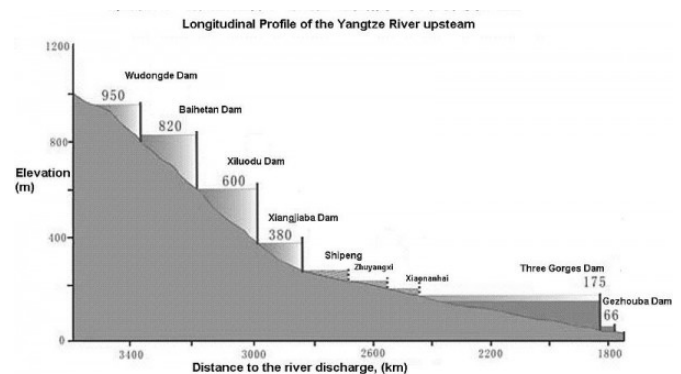
Source: <http://thewatchers.adorraeli.com/2011/06/03/china-admits-three-gorges-dam-has-urgent-problems-as-drought-persists/>

4. Aerial photographs illustrating change over time



Source: <http://www1.american.edu/ted/ICE/china-dam-impact.html>

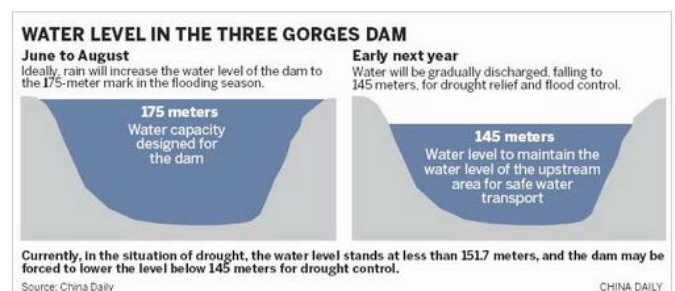
5. Longitudinal profile of the Yangtse River upstream



source: <http://thewatchers.adorraeli.com/2011/06/03/china-admits-three-gorges-dam-has-urgent-problems-as-drought-persists/>

6. Diagram: Changes in water levels during drought of 2011

The Three Gorges Dam, the world's largest hydropower project, hit by worst drought in Central China in 50 years. Water was discharged from the dam to ease the drought.



Source: <http://thewatchers.adorraeli.com/2011/06/03/china-admits-three-gorges-dam-has-urgent-problems-as-drought-persists/>

7. Photograph 2011 Drought

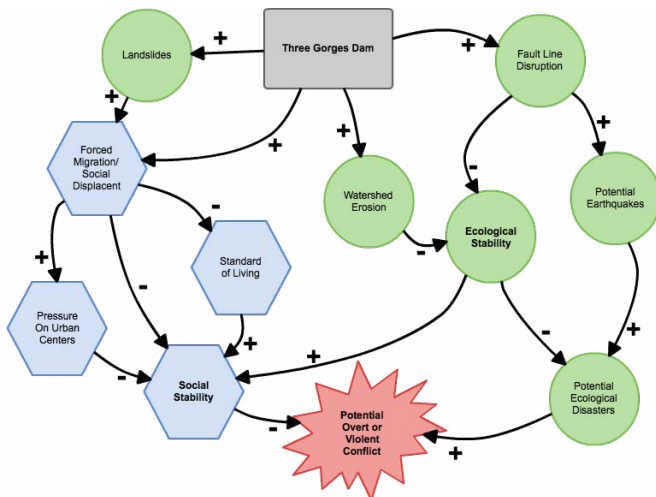
'A man walks on a river shoal, which appeared after the water level of the Yangtze River declined, as the city of Wuhan is seen in the background, in Wuhan, Hubei province May 26, 2011. The worst drought to hit central China in half a century has brought water levels in some of the country's biggest hydropower producing regions to critical levels and could exacerbate electricity shortages over the summer. (REUTERS)'



Source: <http://www.theglobeandmail.com/news/world/three-gorges-and-a-myrriad-of-doubts/article546562/>

8. Environmental-conflict link dynamics

The image provides a visual simplified representation of the complex issues surround the Three Gorges Dam



Source: <http://www1.american.edu/ted/ICE/china-dam-impact.html>

9. Infographic – When dams pollute

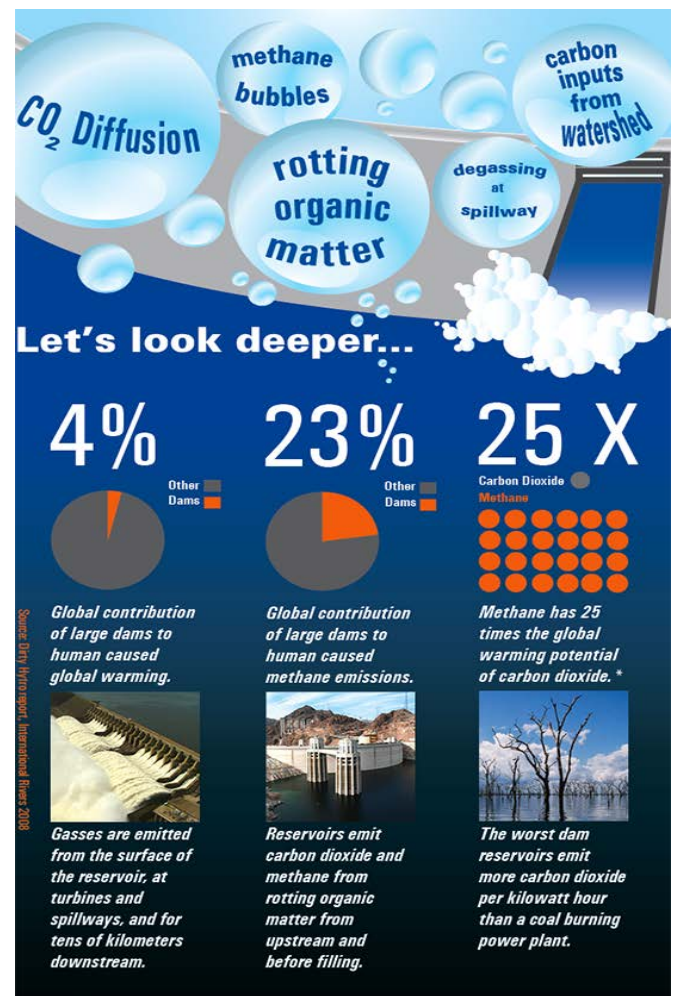
WHEN DAMS POLLUTE

What makes big dams so dirty?

Dam reservoirs are a significant source of global greenhouse gas pollution, including the very dirty gas, methane.

The warming impact of tropical reservoirs can be much higher than even the dirtiest fossil-fuel power plants.

Source <http://www.internationalrivers.org/blogs/252/infographic-when-dams-pollute>



Source <http://www.internationalrivers.org/blogs/252/infographic-when-dams-pollute>



Three Gorges Dam during construction. Source: Wikimedia Commons

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Activities

Refer to 1

Describe the Three Gorges Dam story. Explain why the infographic is a simplification

Refer to 2

- Where is the Dam located?
- What were the effects of the dam on people?
- How has the dam changed the landscape?
- What were the environmental impacts?

Refer to 3 and 4

Discuss changes to the Yangtze River

Refer to 5

- How many dams on the Yangtze upstream from the Three Gorges Dam
- How do dams impact on aquatic species?

Refer to 6 and 7

Read The Watcher's article on *China admits Three Gorges*

Dam has 'urgent problems' as drought persists – <http://thewatchers.adorraeli.com/2011/06/03/china-admits-three-gorges-dam-has-urgent-problems-as-drought-persists/>

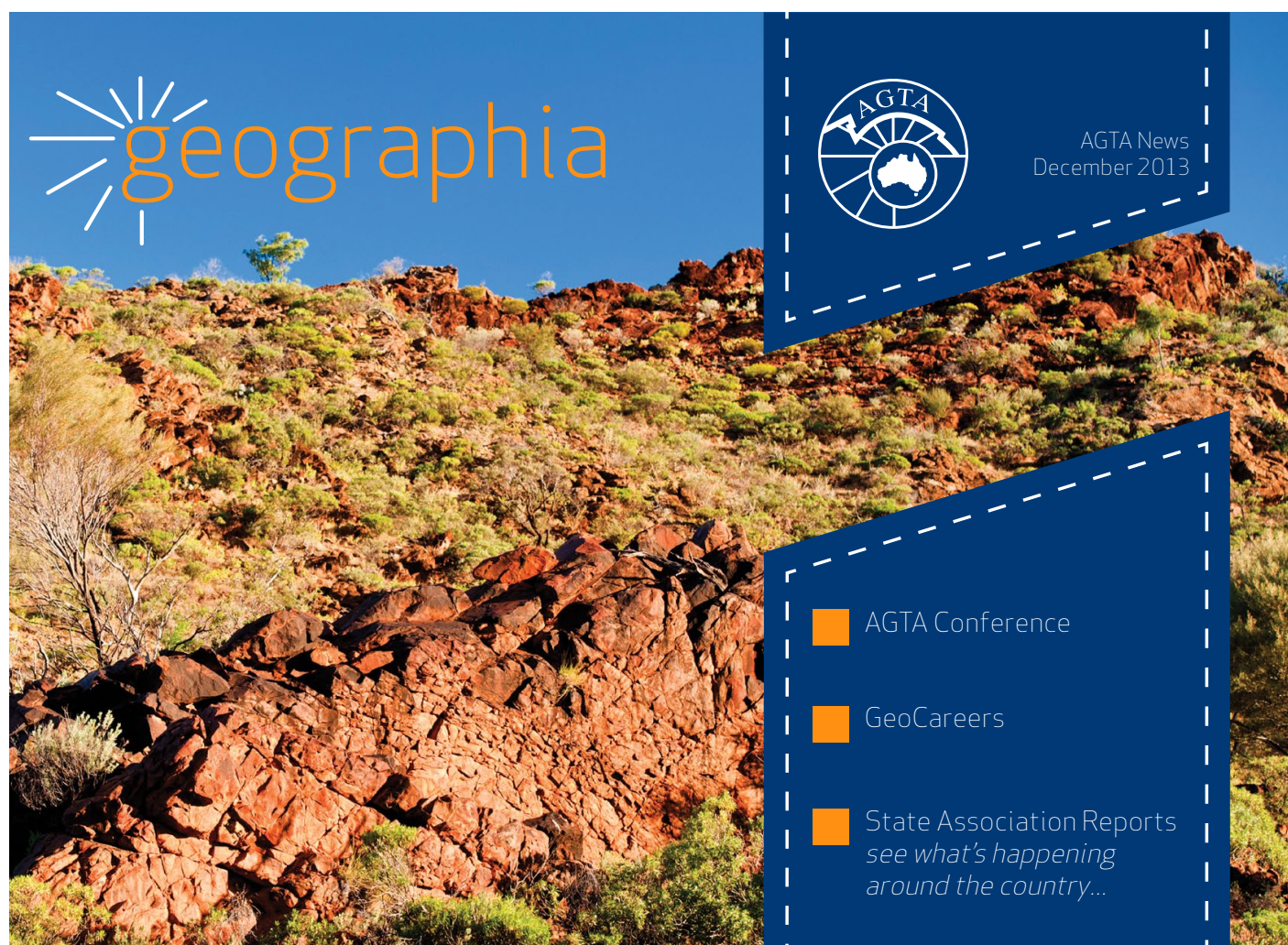
- Explain the problems of drought on the Three Gorges Dam
- Describe the changes on the water level in Three Gorges Dam
- Discuss the problems of sedimentation
- Explain the problems of the dam located on a seismic fault and area prevalent to landslides

Refer to 8

Describe the positive and negative effects of the Three Gorges Dam. Refer to environmental and social issues – <http://www1.american.edu/ted/ICE/china-dam-impact.html>

Refer to 9

Discuss environmental problems generated by dams. Present findings as a word!



The image shows the cover of the AGTA News December 2013. It features a photograph of a rocky, arid landscape with sparse green vegetation. Overlaid on the top left is the 'geographia' logo in orange and white. On the top right, there is a blue box containing the AGTA logo (a circular emblem with a map of Australia) and the text 'AGTA News December 2013'. On the bottom right, another blue box lists the contents: 'AGTA Conference', 'GeoCareers', and 'State Association Reports see what's happening around the country...'. The boxes are separated by dashed white lines.

December Issue of the AGTA News is now available – www.agta.asn.au