



Year 9 – Spring 2 - Geography

Opportunities in Mumbai

Social	Economic
A major centre of learning and education	Financial capital of India
The city runs more than 1,000 primary and secondary schools	Important economic hub of India
Most people have an electricity and water supply	Many of India's TNCs are based here
Literacy rates are high	Has most of India's specialised technical industries
Best city transport system in India	
Easier access to a wider range of medical services	

Opportunities in Dharavi

Dharavi is a slum in Mumbai, one of the largest in the world. Despite the poorer living conditions, the slum has many opportunities.

- Over 7,000 different businesses in the slum
- Millions of dollars earned from these businesses
- They reuse everything to produce something else
- Strong community spirit
- Rooms are cheap. Each room has electricity and gas stoves

Challenges in Mumbai

Growth of slums – Estimated that around 40% of the population live in poor quality houses of the street. Many cannot afford rent so live in illegal slums. Very difficult to supply services to these unplanned and overcrowded areas. An estimated 9 million people live in slums. Dharavi was initially a temporary shelter but is not a permanent feature

Clean water, sanitation system and energy – In many parts of Mumbai, access to services is limited. A study of one slum found that 95% of households had lower access to clean water than the minimum amount recommended by WHO. Lack of access to basic services increases the risk of illness and disease. Mumbai has severe water shortages and water is rationed. 60% of Mumbai uses communal taps and some are only on for 30 minutes a day. Rapid urbanisation has also caused uncontrolled water pollution – 800 million litres of untreated sewage go into the river everyday.

Access to services – Satisfying the growing demand for health services and education is a real challenge. The youthful population means there is a constantly rising demand for school places. The poor environmental conditions in slums means the risk of disease is high – puts pressure on health services. Doctor's deal with 4,000 cases a day of typhoid and diphtheria. Drop out rates from school as high – need jobs to support their family in slums.

Unemployment and Crime – Growing demand for skilled labour means opportunities for unskilled workers are increasingly limited and wages are low. This can lead to rising crime and people turn to illegal activities to survive. Rapid urbanisation main cause of unemployment – economic growth has not been fast enough to create sufficient jobs. Nearly one-third of the population has been victims of crime.

Environmental Issues – Dealing with increasing volumes of human and industrial waste is difficult and expensive. Lack of sanitation in some parts of the city means streams and rivers used to dispose of sewage. Rubbish frequently left in the street which attracts vermin. Poisonous liquids might contaminate groundwater supplies. Air pollution is high as old cars emit dirty and harmful fumes. Little regulation of emissions from factories.

Multiplier Effect

People moved from rural to urban areas so the city has grown. As more people live in the city – more services are needed (schools, hospitals, shops, etc...) This creates jobs for people (to provide these services). More jobs available = more people move into the city looking for jobs. High population density in the city has attracted government investment = the city's infrastructure is developed making it more attractive for migrants. More people living in the city – more taxes being paid – so further investment in the city – attracting more people.

China - Geography

Major Rivers: Yellow, Yangtze and Pearl
Major Cities: Beijing, Shanghai, Tianjin, Guangzhou, Hong Kong, Chongqing
Mountain Ranges: Himalayas
Bordering Countries: Afghanistan, Bhutan, India, Kazakhstan, North Korea, Kyrgyzstan, Laos, Mongolia, Myanmar, Nepal, Pakistan, Russia, Tajikistan and Vietnam

Three Gorges Dam

2,309m long and 101m high. Cost US\$39 billion. 1.24 million people had to move house. Located on the Yangtze river in south east China near the cities of Yichang and Chongqing

Why was it built?

- To prevent flooding further downstream. Need was highlighted in 1954 when many died from a flood. By building the dam it is possible to control the flow along the river.
- Power generation – several generators in the dam which can generate electricity and can be sold. Renewable energy source which is much better for the environment. Helped China reduce CO2 emissions.

Disadvantages:

- Ordered 1.2 million people to move
- Increase in landslides in surrounding regions – has caused deaths. Changing water level in reservoir weakens the surrounding cliffs.
- Biodiversity threatened as the dam floods habitats and reduced water flows to others. Endangered at least 57 plant species. Also imperils fish population in the Yangtze. Endangered 25 of the 177 unique fish species.
- Now spurring drought in eastern and central China.
- Shanghai at the mouth of the river is facing water shortages.
- Sea water flowing farther upstream causing more jellyfish.
- Disturbance to ecosystems spreading diseases and causing number of cases to spike.

Environmental Issues in China

Air pollution – Environmental protection agency states any pollution rating above 300 means the air is unsafe. In Beijing readings above 300 are usual and even above 500. Manufacturing industries and 5 million plus cars are the causes along with coal-burning power plants.

Water Pollution – More than half of China's surface water is so polluted it cannot be treated to make it drinkable and one quarter of it is so dangerous it can't even be used for industrial purposes. Groundwater isn't any safer with 90% of it polluted as well. Chemical accidents leak dangerous liquids into river systems which hospitalise people.

Deforestation and desertification – Population pressure, conversion of forest to farmland and other infrastructure projects have placed China's remaining forests at risk. UN states they are in need of protection. About 1 million square miles of China is now under desertification, eroding soil and reducing viable farm land.

Biodiversity – Habitat loss and resulting loss in biodiversity as a result of deforestation. Endangered species are struggling to survive.

Cancer Villages – Entire towns that have been written off as so polluted that simply living there is a cancer risk. Government finally acknowledging these places – now action is needed. Many contaminants released in areas are known to cause cancer.

Population growth – As China's GNI increases, more people are adopting a western style of consumer patterns. Dramatically increasing the pressure on the world's resources.

Vitality Air – cans of fresh air sold in China as the pollution is so bad and deadly. The air is captured in Canada's Banff National Park and shipped to China as it is clean and fresh. Other companies in other countries are also shipping air to China.

What is a megacity?

A city with a population of 10 million people or more. India currently has 5 megacities – Mumbai being one.

Mumbai's Importance Nationally and Globally

Nationally:

- Accounts for 6% of India's GDP
- Accounts for 40% of foreign trade
- 25% of industrial production occurs in Mumbai
- City creates \$10 billion in taxes – money used to make improvements
- It is the entertainment, fashion and commercial center of India.

Globally:

- 40% of foreign trade
- One of the world's top 10 centres of commerce in terms of global financial flow
- Many foreign companies have branches in Mumbai

Why has Mumbai grown?

Migration from other regions for a better quality of life
 Higher incomes in Mumbai than other areas
 Lower death rates in Mumbai