

Unit 11 Urbanization and the Environment

Text A

Preparatory Work

(1)

Shanty-town: A shanty town or squatter area is a settlement of improvised housing, called shanties or shacks, made of plywood, corrugated metal, sheets of plastic, and cardboard boxes. Such settlements are usually found on the periphery of cities, in public parks, or near railroad tracks, rivers, lagoons or city trash dump sites. Sometimes called a squatter, informal or spontaneous settlement, a typical shanty town often lacks proper sanitation, safe water supply, electricity, hygienic streets, or other basic human necessities.

Metropolitan area: A metropolitan area, sometimes referred to as a metro area or just metro, is a region consisting of a densely populated urban core and its less-populated surrounding territories, sharing industry, infrastructure, and housing. Metropolitan areas include one or more urban areas, as well as satellite cities, towns and intervening rural areas that are socio-economically tied to the urban core, typically measured by commuting patterns.

Smog: Smog is a type of air pollutant. The word "smog" was coined in the early 20th century as a portmanteau of the words smoke and fog to refer to smoky fog. Man-made smog is derived from coal emissions, vehicular emissions, industrial emissions, forest and agricultural fires and photochemical reactions of these emissions.

Infrastructure: Infrastructure refers to structures, systems, and facilities serving a country, city, or area, including the services and facilities necessary for its economy to function. It typically characterizes technical structures such as roads, bridges, tunnels, water supply, sewers, electrical grids, telecommunications, and so forth, and can be defined as "the physical components of interrelated systems providing commodities and services essential to enable, sustain, or enhance societal living conditions."

Commuting: Commuting is periodically recurring travel between one's place of residence and place of work, or study, and in doing so exceed the boundary of their residential community. It sometimes refers to any regular or often repeated traveling between locations, even when not work-related.

Downtown: Downtown is a term primarily used in North America by English speakers to refer to a city's core (or center) or central business district (CBD), often in a geographical, commercial, or communal sense. The term is not generally used in British English, whose speakers instead use the term city center. The term is thought to have been coined in New York City, where it was in use by the 1830s to refer to the original town at the southern tip of the island of

Manhattan. During the late 19th century, the term was gradually adopted by cities across the United States and Canada to refer to the historical core of the city (which was most often the same as the commercial heart of the city).

Greenway: A greenway is "a strip of undeveloped land near an urban area, set aside for recreational use or environmental protection". However, the term can in fact include "a scenic road" and though many are in urban areas. A greenway is a trail (and sometimes a wildlife corridor), found in both urban and rural settings, that is frequently created, out of a disused railway, canal towpath, utility, or similar right of way, or derelict industrial land.

Urban sprawl: Urban sprawl or suburban sprawl describes the expansion of human populations away from central urban areas into low-density, monofunctional and usually car-dependent communities, in a process called suburbanization. In addition to describing a particular form of urbanization, the term also relates to the social and environmental consequences associated with this development. The term urban sprawl is highly politicized, and almost always has negative connotations. It is criticized for causing environmental degradation, and intensifying segregation and undermining the vitality of existing urban areas and attacked on aesthetic grounds.

Traffic congestion: Traffic congestion is a condition on transport networks that occurs as use increases, and is characterized by slower speeds, longer trip times, and increased vehicular queueing. The most common example is the physical use of roads by vehicles. When traffic demand is great enough that the interaction between vehicles slows the speed of the traffic stream, this results in some congestion. Traffic congestion can lead to drivers becoming frustrated and engaging in road rage.

(2)

Town: A town is a human settlement larger than a village but smaller than a city. The size definition for what constitutes a "town" varies considerably in different parts of the world.

City: A city is a large and permanent human settlement.] Although there is no agreement on how a city is distinguished from a town in general English language meanings, many cities have a particular administrative, legal, or historical status based on local law. Cities generally have complex systems for sanitation, utilities, land usage, housing, and transportation.

Metropolis: A metropolis is a large city or conurbation which is a significant economic, political, and cultural center for a country or region, and an important hub for regional or international connections, commerce, and communications. The term is Greek and means the "mother city" of a colony (in the ancient sense). A big city belonging

to a larger urban agglomeration, but which is not the core of that agglomeration, is not generally considered a metropolis but a part of it.

Megacity: A megacity is usually defined as a metropolitan area with a total population in excess of ten million people. A megacity can be a single metropolitan area or two or more metropolitan areas that converge. As of 2015, there are 35 megacities in existence. The largest of these are the metropolitan areas of Tokyo and Shanghai, each of these having a population of over 30 million inhabitants, with 38.8 million and 35.5 million respectively. Tokyo is the world's largest metropolitan area, while Shanghai has the world's largest city proper population.

Global city: A global city, also called world city or sometimes alpha city or world center, is a city generally considered to be an important node in the global economic system. The use of "global city", as opposed to "megacity", was popularized by sociologist Saskia Sassen in her 1991 work, *The Global City: New York, London, Tokyo*; although the term "world city", which refers to cities that control a disproportionate amount of global business, dates to at least the May 1886 description of Liverpool, by *The Illustrated London News*. More recently, the term has been described as being synonymous with a city's influence and 'financial capital', with other factors becoming less relevant.

(3)

City	Location (continent/country)	Population	Importance
Sao Paulo	Brazil, South America	11,244,369	the most populous city in Brazil, the Americas, and the Southern Hemisphere
Mexico City	Mexico, North America	8.84 million	Capital of Mexico, one of the most important financial centers in the Americas.
Seattle	The United States, North America	684,451	Largest city in both the state of Washington and the Pacific Northwest region of North America.
New York	United States, North America	8,550,405	The most populous city in the United States, the center of the New York metropolitan area,

			one of the most populous urban agglomerations in the world, a global financial center.
Shanghai	China, Asia	24 million	The most populous city in both China and Asia as well as the most populous city proper in the world, a global financial center, and a transport hub with the world's busiest container port.
Bombay (Mumbai)	India, Asia	18.4 million	The most populous city in India and the ninth most populous agglomeration in the world, the wealthiest city in India
Paris	France, Europe	10,550,350	The capital and most populous city of France, known for its fashion and museums, the home of the most visited art museum in the world, the Louvre
London	The United Kingdom, Europe	8,673,713	The capital and most populous city of England, Great Britain, and the United Kingdom, a leading global city, one of the world's leading financial centers.

Critical Reading

I. Understanding the text

1.

Part	Paras.	Main idea
I. Background of urbanization in the world	1-3	Urbanization and urban planning has profound impacts on human and environmental well-being

II. Urban planning around the globe	4-9	Some cities are well planned (Paris and some English cities), some cities didn't have a good plan (North America & Australia), and the worst city planning is in the developing countries.
III. City planning as transportation planning	10-15	A city's transport system functions better if things are closer to home. Antiquated zoning laws need updating.
IV. Increasing density and diversity	16-21	Integrate homes not only with workplaces but with other amenities; allow homeowners to rent out small apartments within their houses; the example of Portland, Ohio
V. Room enough for all	22-24	Municipalities should enhance the supply of affordable housing by adopting controls that promote a mixture of housing types. (Portland)
VI. Humane cities	25-30	Making urban areas more humane includes planning the use of street space, holding the traffic in check, creating and increasing "greenways", and involving the public in the urban-planning process.
VII. A groundwork for urban land-use policy	31-37	Land-use should confine the development within existing boundaries so that cities can protect both their own future and that of rural areas. National funding support is needed for better urban planning in both developed world and the developing world.

2.

- (1) City-planning has profound impacts on human and environmental well-being. Uncontrolled urban growth can destroy the natural resources and create social disparity. Thus the world needs an urban-planning ethic that is sensitive to these environmental and human dimensions.
- (2) Congestion and pollution from motor vehicles, a lack of affordable housing, and the cancerous growth of blighted districts.
- (3) Western Europe has a long tradition of actively controlling land use

so that the small amount of available space serves the public's interest more than that of private developers. North America and Australia have the weakest planning traditions. Governments on these continents have done relatively little to guide development beyond separating industrial areas from those zoned for commerce and housing. Developing countries have the loosest controls over how cities develop. The enormous rapidly growing cities there are racked with pollution and rimmed by shanty-towns.

- (4) Compartmentalizing and zoning laws, which separate work place from living quarters, have caused both waste of land in the environment and waste of time for the commuters. To solve these problems, city planning should focus on transportation planning, and a city's transport system functions better if things are closer to home.
- (5) In well-established cities, dispersed areas can be made more compact by filling in underused space to improve their land-use patterns.
- (6) These cities can also allow homeowners to rent out small apartments within their houses to increase housing density.
- (7) Portland is a rapidly growing city of roughly 500,000 people. Instead of giving in to ever growing automobile dependence and sprawl, Portland has encircled itself with an Urban Growth Boundary beyond which new development is not allowed. Reinforced by zoning reforms, the Urban Growth Boundary allows Portland to grow quickly but compactly. The city has increased its housing density by encouraging a blend of multi- and single-family homes in pleasant, compact pattern. Its vibrant downtown boasts green spaces. City officials welcome new office construction but restrict the amount of accompanying parking. As a result, in two decades, the volume of cars entering Portland's downtown has remained the same even though the number of jobs there has increased by 50%.
- (8) Nearly every urban area has two faces—one well-housed and connected to a variety of services and amenities, and the other, ill-housed and excluded from many such opportunities. Governments can enhance the supply of affordable housing and promote a mixture of housing types to resolve the problem.
- (9) Many large cities are finding that the most transport-efficient land-use pattern combines a dense, well-mixed downtown with several, outlying, compact centers of activity—all linked by an extensive public transport system, for example Toronto and Vancouver in Canada. (para. 19) Instead of giving in to ever greater automobile dependence and sprawl, Portland, Ohio, USA has encircled itself with an Urban Growth Boundary beyond which new

development is not allowed. (para.20) The city has increased its housing density by encouraging a blend of multi- and single-family homes in pleasant, compact pattern. It also welcomes new office construction but restrict the amount of accompanying parking. (para. 21)

- (10) First, the general public and decision makers need better access to information about the characteristics of a community's population and the possible consequences of various planning decisions. Second, cities and surrounding areas need a greater degree of regional cooperation to prevent land use in one jurisdiction from producing problems in others. Third, urban areas in virtually all countries need stronger support from their national governments, giving them budgetary power to plan their own long-term development strategies.

II. Evaluation and exploration

(1) **Tentative answer:** I basically agree with the author about this phenomenon based on two reasons - one is that many examples in developing countries (Mexico, Brazil, India, South Africa, Egypt) support this statement; the other is the root cause that the third world countries have experienced fast economic growth and urbanization (the big cities such as Mexico City and Bombay) but have not yet found time to address the unbalance of the polarization between the haves and have-nots. One of the few exceptions is China which has done relatively better job in this regard (large numbers of big cities emerging and absorbing labors from the rural areas and relatively balanced and equal development in housing and transport provision for all citizens)

(2) **Advantages:** it's more efficient and easier to organize and build working areas and resident areas separately (residents can be protected from possible risks and dangers from traffic and factories). **Disadvantages:** since resident areas are separated from the work place or factories, it takes a lot of time for the workers to commute between the two areas, and also it inevitably causes traffic congestion.

(3) **Summary:** (1) Instead of giving in to ever greater automobile dependence and sprawl, Portland has encircled itself with an Urban Growth Boundary, an invisible line similar to England's green belts, beyond which new development is not allowed. (2) The city has increased its housing density by encouraging a blend of multi- and single-family homes in pleasant, compact pattern, and therefore successfully controlled housing prices. (3) The city has also built or expanded green spaces in the downtown (city center).

Chinese cities can definitely learn from these experiences and realize

balanced development, however, each city has its own features (land forms, population size, industries, climate etc.) and it should not simply copy the Portland model but follow its principle of balanced and sustainable development.

(4)“Making urban areas more humane includes planning the use of street space. In cities all over the world, automobile traffic needs to be held in check. Many European cities have redesigned roads in order to ‘calm’ traffic. Typically this entails reduced speed limits and strategically placed trees, bushes, flowerbeds, or play areas along or in the roadway—gentle inducements that make drivers proceed slowly and yield the right-of-way to pedestrians, cyclists, and children at play.” (para. 26)

Yes, definitely, humane cities need to put the well-being of the pedestrians (who should equally follow the traffic rules) ahead of the drivers, and China’s big cities need to improve in this respect (although the great number of people on the street makes it more difficult to realize). China’s big cities also have its own advantages in the provision of public transport (buses, subways, and city-link trains) and workers should be encouraged to use it instead of driving cars to work.

(5)**Tentative answer:** Singapore is a well-planned city with mature and developed business areas, clean and beautiful resident areas, advanced public transport system, reserved green land, and controlled private cars (As Singapore is a small island with a high population density, the number of private cars on the road is restricted so as to curb pollution and congestion. Car buyers must pay for duties one-and-a-half times the vehicle's market value, and bid for a Singaporean Certificate of Entitlement (COE), which allows the car to run on the road for a decade).These provide good principles and insights for China’s cities to learn from. You can compare these aspects with your own home city to find room for improvement.

(6)Food for thoughts:Big cities can absorb and transform large number of the surplus labor in the rural areas, provide a lot of job opportunity, have high-quality resources in culture, education, health care, and recreational activities, but the drawbacks are higher cost of living (including house price), serious traffic congestion, a lot of noise and air pollution. Small and medium-sized cities are basically opposite to the big ones in the above mentioned respects.

Tentative solution: small, medium and big cities are all needed in China because of their different functions, but they should be balanced in development –the number of mega cities like Beijing, Shanghai, Shenzhen, and Chongqing should be limited due to the huge pressure on environment (but they serve as political, business, or transport centers of the country or regions); medium cities should

be encouraged for its ideal balance of population size and the environment; but small cities should not be neglected (they are the basis for the other two types).

(7)**Tentative answer:** Major causes of traffic congestion and air pollution: too many private cars (causing both traffic congestion and air pollution), inadequate public transport capacity, manufacturing factories, traditional fuel burning for central heating in the winter, dust caused by construction sites.

Solutions: control the number and use of private cars (through various means), develop public transport system, esp. subway, close down polluting factories, replace coal burning with natural gas in the central heating season, and reduce dust of construction sites.

(8)**Food for thought:** you can discuss the problems from logical organization of the functional areas (such as teaching/learning area vs resident area vs dining area), clean environment and adequate infrastructure (green land, pond, sports center etc.), degree of convenience (distance between different areas), and then propose for improvement if there're flaws.

(9)**Food for thought:** with the rapid development such as online shopping and the service industry (some of its business such as translation, editing and designing) make it possible for the employees to work from home), where the employee live will be irrelevant to where the company he/she works for is located. This will give much more freedom for the employee to decide where he/she should live, and people will not crowd into big cities and suffer bad environment. Perhaps, small and medium cities as well as suburban areas of big cities with good environment will flourish.

(10) This question is open. The reader can use what they have learned from this unit (general principles of balanced and sustainable development as well as specific measures to realize it) to evaluate the government's plan.

Language Enhancement

I Words and phrases

1.

(1) C&E(2) B&C(3) D&F(4) D&F(5) C&E
(6) B&E(7) B&C(8) C&F(9) A&D(10) A&D

2.

(1) through (2) at (3) by (4) for (5) to (6) on(7) with
(8) on(9) by(10) in(11) until(12) to

3.

(1) yields to(2) range from(3) veered from(4) shuts out(5) excluded from
(6) connect... to(7) rented out(8) react to(9) turn...into(10) draws on

4.

- (1) met(2) controlling(3) separate...from(4)convert(5) addresses
(6) strive for(7) confined(8) devote ...to(9) fend off(10) facilitate

II Sentences and discourse

1.

- (1) Estimates from the UN show that the populations of Third World cities are now doubling every 10 to 15 years, and this is posing a serious challenge to governments' efforts to provide clean water, sewerage, adequate transport, and other basic services.
- (2) Many of England's urban areas are still circled by green belts intended to protect farmland and prevent city sprawl; the tradition has been carried out according to a farsighted decree by Queen Elizabeth I in 1580.
- (3) Zoning codes restrict residential density by requiring each house to occupy its own large lot, and this has forced development to use even greater tracts of open space.
- (4) These giant cities are racked with pollution and rimmed by shanty-towns. They have become increasingly features of the developing countries.
- (5) However, it is impossible to stop further development because prohibiting growth in their own jurisdictions and communities simply shifts it to neighboring areas. In these areas, controls may be looser and policies may be more encouraging to further expansion.
- (6) Many neighborhoods serve merely as pathways for car drivers to pass through to other places.

2.

- (1) The policies of reform and opening up initiated by Mr. Deng Xiaoping have enriched millions of people in China.
- (2) The trend of global warming will endanger flora/plants and fauna/animals in both the Arctic Circle and the Antarctic Circle.
- (3) The strategy of developing satellite towns is to prevent Beijing's urban construction from further sprawl.
- (4) In any urban area, high-end living quarters with low housing density always take up more urban space or farmland.
- (5) Any urban planning has to reconcile the contradiction between community development and traffic pressure.
- (6) You have no right to dictate me in this affair.
- (7) A person's attitude determines his/her future.
- (8) No government can afford to ignore the existence of urban poverty.
- (9) Encouraging and promoting the development of economically affordable housing is one of the major measures adopted by

governments of all levels to resolve the housing problem of low-income families.

(10) The successive rise in real estate prices over the years has undermined the foundation for sustainable development of the economy as a whole.

3.

一个城市对土地的利用方式比任何交通专家或工程师的计划和决策更能决定其交通系统的特点。城市发展的模式决定了人们是否能步行或骑车去上班或者需要乘几十公里的车去上班,也决定了一条新的公交线路或轻轨线路是否能吸引足够的乘客。总之,如果以离家就近原则来设计,交通系统就能发挥更好的作用。由于未能意识到交通系统在城市土地利用方面的战略作用,世界上的许多城市对汽车放任自流而任其主导城市的发展。很少有人能够预见,这种发展方向所造成的交通拥堵、致命事故、城市噪音、化学烟雾等城市恶疾,于此同时这总发展方式也造成了无车人的边缘化。

4.

(4) (2) (1) (3)