



LS HUB
PRESENTS:

SUSTANABLE
DEVELOPMENT

Concept of Sustainable Development

Definition of Sustainable Development – 必背

Level 1 – Sustainable **Development** in Time

Sustainable development is the development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

- Meets the needs of the present Need to meet the present
- Without compromising the ability of future generations Not harming the future

Level 2 – **Sustainable** Development in Balance

Sustainable development achieves between the economic, social and environmental aspect.

- Economic × Cultural
- Social × Political
- Environment

Sustainability



Components of Sustainable Development

Economic Sustainability

Economic sustainability aims to achieve long-term (future) economic benefits. Not only considering current return of economic benefit only but also the future benefits and costs.

Future benefits: The benefits obtained in long-run for example future wealth, goodwill

Future costs: Opportunity cost such as time cost, pollution cost, injury cost.....

1. GDP – Economic Growth

GDP -> *continuous* economic growth (profit maximization) -> increase future income

Present: Economic stability and growth

Future: Increase future income (Trend of economic growth)

E.g. Investments on developing countries

2. Employment Rate (Job Opportunities)

In a society, all people should work in order to let all people enjoy a stable income. If someone is willing to work but cannot work, he/she will suffer from no income

Present: Getting a job to meet present needs and earn money

Future: Future income increase, preparing for retirement, sustain workforce, no unemployment

E.g. The government develop project to allow 100 unemployed low-skilled labour to work

3. Income Inequality – Distribution of Wealth

Better distribution of wealth -> solving the problem of income disparity -> relieving intergenerational poverty -> achieving equity and fairness in the society -> everybody can harmoniously survive in the future

Present: Solving the current income disparity

Future: Solving future intergenerational poverty (equalizing opportunities)

E.g. The government provides low-income family subsidies to the low-income group

4. Aggregate Demand – Consumption Market

Increase the wealth of citizens -> citizens will accumulate wealth and tend to consume more in the market -> improve citizens material quality of life -> increase market transaction -> increase GDP (aggregate demand) -> economic activities going-on in the future -> boost up the consumption market

Current: Increasing wealth and consumption of the citizens

Future: Continuous economic growth in the consumption market

5. Supply of resources

Stable supply of natural resources (do not exploit, extract too much natural resources) -> cost of production remains stable -> supply becomes stable -> continuous to boost up economic activities and maintain the economy

Current: Maintain and do not use too much natural resources

Future: Steady supply of natural resources

E.g. Generate less coal for energy to maintain coal natural resources

6. Government Expenditure and Reserves

Sustain economic growth -> the government reserves will increase -> sufficient tax revenue towards the government -> government will have the resources to sustain the growth of different industries

(Hong Kong government is famous for its high government reserves)

Current: Save money for the government reserves

Future: Use government reserves to sustain the growth of the economy when the economy is turning bad (以防不時之需)

想 point methods: Econ – Macroeconomic Problems

1. GDP (Econ – Measurement of Economic Performance)
2. Unemployment (Econ – Macroeconomic Problems)
3. Income Disparity (Econ – Efficiency, equity and role of the government)
 4. Aggregate Demand (Econ – ADAS Model)
5. Government Reserves (Econ – Money and banking)
6. Sustain trade (Econ – International trade and finance)

Social Sustainability

Social sustainability hopes to achieve social justice and equity. Become fair towards the society such as poverty alleviation, improve social aspects of quality of life such as health and education.

1. Social Stability

Create a social harmonious environment -> less unfairness towards the society -> everybody in the society can live happily -> stable society -> future can be happy

Present: Creating a social harmonious environment

Future: Living in this fair and happy environment forever

E.g. For a country, military defence policies

2. Education Sustainability

Provide sustain education for students, teenagers and kids -> students can improve their educational level, learn more stuff and contribute to the society, can also equalize opportunity to get rid of intergenerational poverty -> education makes people have knowledge and know words -> increase literacy rate -> jobs with better prospect -> support the society in long run

Present: Provide more education

Future: Contribute more to the society and equalize opportunity to earn higher income

E.g. Extend the free education to 15 years

3. Public Health Sustainability

The medical sector provides medical support to people in need -> increase life expectancy and ability to obtain more future income -> the public health of the whole society can be enhanced -> the health environment is good -> people live more happily

Present: Provide sustain medical support to the citizens

Future: Improve the life expectancy and the public health of the whole society

E.g. A price ceiling on the public medical services

4. Achieving Equality

Fairness in the society -> everybody feels fair and happy -> there are equal opportunities -> people feel fairly treated -> the social atmosphere is fair -> productivity can be sustained -> promote social sustainability

Current: Develop fairness policy (equalize opportunities)

Future: People feel fair and productivity can be sustained

E.g. The Fair Ordinances

5. Catering daily needs

Catering daily needs of different households -> households daily life can be sustained -> household material quality of life can be achieved -> physiological needs are attained

Current: Understand and cater different household daily needs

Future: Basic needs are achieved -> try to achieve other needs (under the Maslow hierarchy of needs)

6. Interpersonal Relationships

Neighbour relationship/interpersonal relationships are enhanced -> people become more happy and spiritual quality of life is attained -> living in the happy environment -> less conflicts -> promote sustain social growth

Current: Improve the relationship between one another (e.g. neighbour networking)

Future: Helping with each other to promote sustain social growth

E.g. Community Centre activities

7. Population Growth

A population growth might not be beneficial depending on the problem of ageing population

Kids	Low birth rate -> less kids -> less labour force in the future
Adult	Adults will turn into elderly in the future
Elderly	More elderly might not be good because their labour force and productivity is low

Environmental Sustainability

Environmental protection and conservation has to be considered as the environment directly affects the future. The consumption of natural resources should not exceed the carrying capacity of the ecosystem, promoting green life

1. Eco-system and the environment

Protecting the eco-system and the environment -> the animals and species can live peacefully with humans -> the life cycle of all animals can sustain -> non-interventionist (不干預大自然的運作)

Current: Protect the eco-system

Future: Society and the environment can reach an equilibrium

2. Natural habitats and endangered species

Protecting the habitats and endangered species -> the endangered species can survive -> they have high environmental values and promote sustain environmental growth and habitat of the ecosystem

Current: Protecting the endangered species

Future: The endangered species can be survived

E.g. Policies to ban the hunting of endangered species

3. Food Chain

Food Chain Environmental Impacts

Food Chains



If one animal species has been severely affected, then the upper level will have no food to eat and they will become extinct. The level below has an excess of it so they will eat all the more. Below that, no food and they will become extinct as well -> damaging the whole food chain

4. Pollution, Emission and Waste Management

Better pollution control of emission and waste -> less waste is produced in the society -> air quality and public health of the society could be enhanced

Current: Control the pollution, emission and better the waste management

Future: The public health and environment of the city can be enhanced

5. Resources Management

Resources including land-use should be used efficiently and protecting the environment such that the future resources will not be exploited

6. Biodiversity

Biodiversity is very important because 生物多樣才能夠保持生態平衡

If biodiversity is being reduced, then the ecology will be damaged -> the resilience and survival of ecology reduces -> damaging the food chain -> causing irreversible damage (e.g. If the environment has both snake and eagle, then they can eat some mouse. But if the environment has only snake, then the mouse amount will decrease less -> causing imbalance of food chain)

For endangered species biodiversity -> it is irreversible as when the species is extinct, it will never exist again

Environmental Conservation

- Usually environmental conservation will need to sacrifice economic and social development -> then this is NOT sustainable as you are sacrificing the current needs

Relationship among different components of sustainable development

<p>Economic X Social</p>	<ul style="list-style-type: none"> • Labour supply and population -> employment and business environment -> social stability (If people are unemployed, it may cause income inequality and social unrest) • Income disparity and income distribution: The government policy equalizes income and reduces the income gap -> things are getting more fair -> society is happy and becomes more stable • Economic prosperity and GDP returns to the society -> distribution of wealth -> accumulated wealth increase material quality of life of citizens due to GDP increase, aggregate demand increase
<p>Social X Environmental</p>	<ul style="list-style-type: none"> • Appropriate land use: balance between social needs (e.g. housing, recreational land) and the environment (e.g. countryside park) -> well urban planning is needed • Protecting the environment -> controlling the pollution -> air quality is enhanced -> people can breathe fresh air and visit the nature (e.g. the countryside park)
<p>Environmental X Economic</p>	<ul style="list-style-type: none"> • Development of eco-tourism: Through environmental conservation, eco-tourism can be developed and earn from tourism industry • Better environment -> attract foreign direct investment (FDI) from other countries which can boost economic development • Using governmental reserves (money) to protect the environment (e.g. developing renewable energy)

Ultimate Sustainable Development

A policy can at the same time sustain the economy, society and the environment (Most OP)

Factors affecting sustainable development

1. Technology

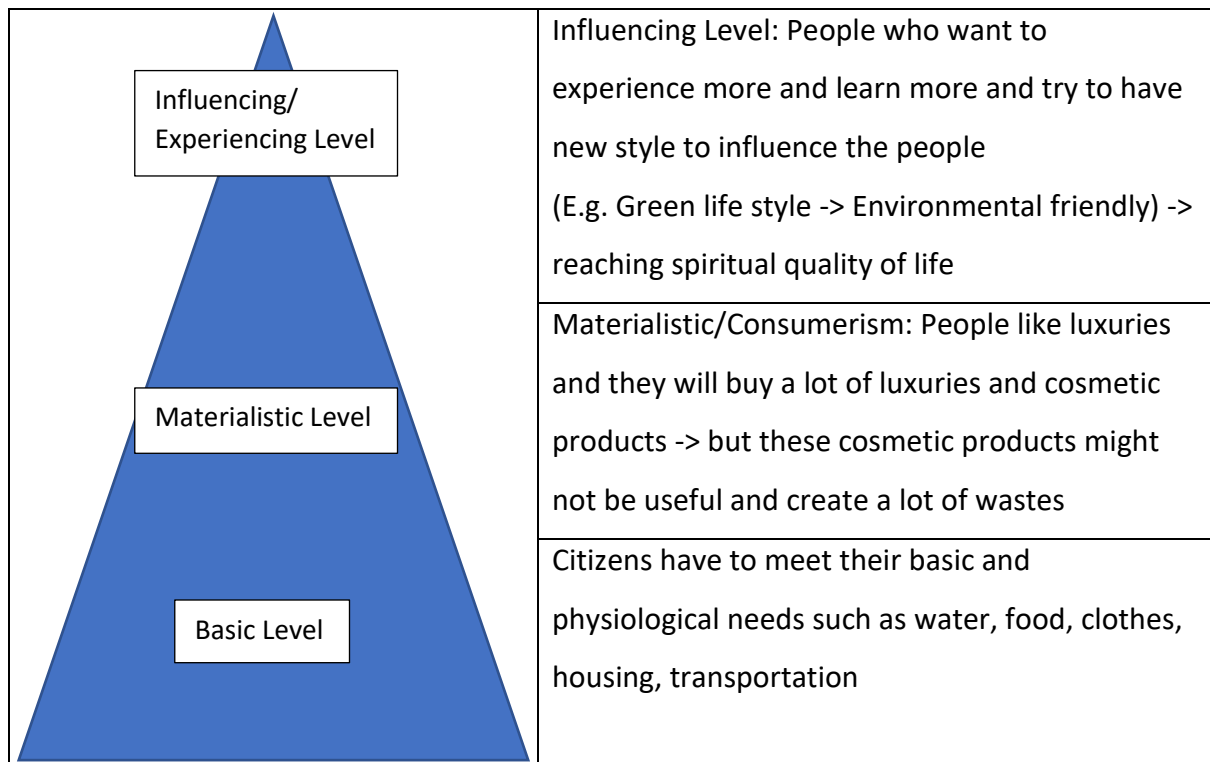
Technologies will positively or negatively influencing sustainable development

	Positive Sustainable Development	Negative Sustainable Development
Economic	Economic Technologies through economic globalization can improve productivity and GDP	/
Social	Medical technologies, agricultural technologies, transportation technologies -> facilitating people's quality of life	People rely too much on technology, some controversies on medical technology
Environmental	Monitoring and renewable energy technologies to reduce emission of greenhouse gases	Environmental problems such as the burning of fossil fuels

2. Life-style

Different people have different life-style. But there is a lifestyle concept (LS Hub Concept)

For everybody's life style, it will be separated into 3 levels:



Green-life Style: After understanding the material and luxurious life will create a lot of waste and harming the environment, people will try to achieve spiritual quality of life by green and sustainable consumption to reduce the environmental impacts

5R Lifestyle

Reduce	Reduce purchases of products and wastes
Recycle	Recycle recyclable products
Refuse	Refuse to use products that harm the environment (e.g. plastic)
Replace	Replace products which are good to the environment (E.g. using biodegradable straws rather than plastic straws)
Reuse	Reuse things, use it again to prevent wastage

3. Government Interventionist

Government sets up policy which might affect sustainable development.

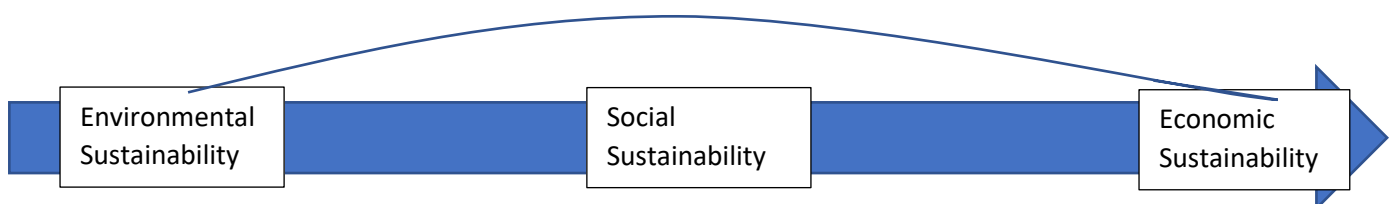
If the government policy aims to protect the environment, it can increase the awareness of the public towards protecting the environment

Individual	Promoting sustainability through green life style and ecological footprints. However some government policies affect individual such as levy on solid waste which will increase people's burden
Society	The government provides financial resources to improve the environment, economic and social sustainability

Spectrum of Sustainable Development

Conflicts between economic development VS environmental conservation

Usually, economic development and environmental conservation are in two sides conflicting with each other, it is very difficult to achieve both aspects to sustainably develop



拆題 – Sustainable Development

扣題策略



SD 五部曲 (PCFFC) [必定要用]

Step 1: Explanation of the policy + Raise examples of the policy + Aspect

Step 2: Explain how it HELPS the CURRENT needs (Current benefits towards quality of life of the citizens)

Step 3: Explain how it DOES NOT sacrifice the FUTURE needs (How will it NOT/less affect the future)

Step 4 (Bonus): Whether it will benefit/harm the FUTURE (the future situation)

Step 5: Conclusion: Whether it can achieve economic/social/environmental sustainability

For example: Evaluate the impacts of China's coal to gas policy towards sustainable development.

Wrong example: In terms of environmental sustainability, converting coal to gas can let the society use more natural gas and pollute less pollutants such as carbon dioxide such that it can promote environmental sustainability.

Correct example using SD 五部曲

Step 1: POLICY: China's coal to gas policy aims to decrease the amount of coal (dirty non-renewable energy generation) to natural gas (non-renewable but clean energy generation)

Step 2: CURRENT needs: Provide more cleaner energy sources towards Chinese citizens and protecting the current environment due to too much carbon dioxide emission from coal

Step 3: FUTURE needs: Use less coal which can leave coal natural resources in the future

Step 4: FUTURE benefit: helping the environment to be cleaner so the future generations can also survive in China

Step 5: Conclusion: The China's coal to gas policy can enhance environmental sustainability.

Thinking points and aspect

Framework 1 – Using the Aspects

- Economic Aspect (Economic Sustainability)
- Social Aspect (Social Sustainability)
- Environmental Aspect (Environmental Sustainability)
- Cultural Aspect
- Political Aspect

Framework 2 – Using the Time Framework

- Current needs NOT sacrificed
- How does it affect the future

Framework 3 – Other

- Population Impact
- Amount of Resources (Natural resources, monetary resources, labour resources)

Ultimate Framework – Three Aspect Sustainability

- Sustainable development should reach all three aspects to sustain the development

Rebuttal Skills – Sustainable development

通常個 policy 都能夠達致兩方面的 sustainable development 但總有一方面不能夠達到全面三個的 sustainable development

E.g. Economically and socially the policy is sustainable but only the environmental aspect is not sustainable.

Rebuttal: Sustainable development is the integration of long-term development among ALL three aspects of environment, economic and social. As the policy can fulfil the ____ (other two) ____ aspects of needs and beneficial to the future generation, the comparative impacts towards sustainable development is less as there are ____ (two aspects) ____ being sustainable already. Therefore the policy can achieve sustainable development.

技巧: 兩項已經 sustainable, 沒可能完全完美, 唯有選擇最好的

Sustainable Development Question Skills

When the question mentioned the key word “sustainable development”

E.g. Evaluate the impacts of _____policy_____ towards sustainable development of HK.

To what extent the _policy_ can reach the principles of sustainable development

Thinking points: It must surround the aspects of sustainable development

- Economic
- Social
- Environmental

When elaborating your points

Step 1: Explanation of the policy + Raise examples of the policy + Aspect

Step 2: Explain how it HELPS the CURRENT needs (Current benefits towards quality of life of the citizens)

Step 3: Explain how it DOES NOT sacrifice the FUTURE needs (How will it NOT/less affect the future)

Step 4 (Bonus): Whether it will benefit/harm the FUTURE (the future situation)

Step 5: Conclusion: Whether it can achieve economic/social/environmental sustainability
必須緊扣現今和未來 -> Sustainable

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Paragraph 1 – Stance

Paragraph 2 – Aspect 1 – Aspect of Policy -> Sustainable Development

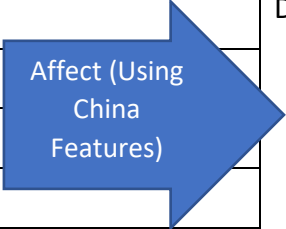
Paragraph 3 – Aspect 2 – Aspect of Policy -> Sustainable Development

Paragraph 4 – Counter Argument (Other aspect) + Rebuttal -> Sustainable development

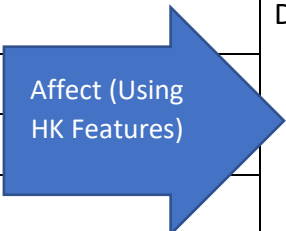
Paragraph 5 – Concluding Paragraph

Question Bank: Paper 2 Thinking Exercises

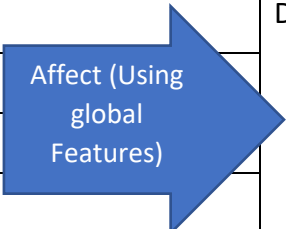
Evaluate the impacts of the Paris Agreement towards the Sustainable Development of China. (12 marks)

Impact		Sustainable Development
Aspect 1 -		
Aspect 2 -		
Aspect 3 -		
Aspect 4 -		
Aspect 5 -		

Evaluate the impacts of the levy of municipal solid waste towards the Sustainable Development of Hong Kong. (12 marks)

Impact		Sustainable Development
Aspect 1 -		
Aspect 2 -		
Aspect 3 -		
Aspect 4 -		
Aspect 5 -		

Explain the difficulties for tackling global climate change with respect to the principles of sustainable development. (12 marks)

Difficulty		Sustainable Development
Aspect 1 -		
Aspect 2 -		
Aspect 3 -		
Aspect 4 -		
Aspect 5 -		