This subject paper is intended to be a research paper delving into different views and analyses from various sources. The views and analyses as contained in this paper are intended to stimulate public discussion and input to the planning process of the "HK2030 Study" and do not necessarily represent the views of the HKSARG.

WORKING PAPER No. 28
"WHAT IF" SCENARIOS

Background

1. Under the HK2030 Study, a Reference Scenario has been prepared describing how we envisage Hong Kong will be as we strive to meet the vision targets set out by the Chief Executive and his Principal Officers. The Reference Scenario has attempted to translate the vision targets into planning assumptions, setting out how much of various broad types of land use is needed at different planning periods.

2. However, in view of the likelihood of unexpected changes, “What If” scenarios have been developed by varying key planning parameters under the Reference Scenario. The extent of impacts of these alternative scenarios will be assessed by conducting sensitivity tests, and Response Plans will be devised to respond to these alternative situations as necessary.

Outline of "What If" Scenarios

3. As alternatives can be countless, focus will be given to the ones that have direct implications for our strategic development plan and those that are more likely to happen in future. During Stage 3 Public Consultation, we will ask the public if they would like to propose further scenarios for consideration. A workshop with key stakeholders could be held as part of the consultation exercise to:
   • propose additional "What If" Scenarios;
   • debate on the plausibility of the proposed "What If" Scenarios;
   • describe them in further detail; and
   • deliberate upon their implications for our development strategy.
4. Of the "What If" Scenarios proposed, the ones which result in land use patterns which significantly differ from those assumed in the Reference Scenario will be selected for more detailed examination and quantitative assessment under Stage 4 of the Study. For other "What If" Scenarios, a qualitative approach could be adopted in assessing their implications. The selection of scenarios for quantitative assessment is explained below.

5. While assumptions are numerous, we believe that many can be reflected in the two key planning parameters, i.e. population and economic growth. Therefore, we have derived our "What If" Scenarios by varying these two parameters. We note that population growth and economic growth, while closely related, may not proceed in the same direction or at the same rate. Hence, the interplay between population growth patterns and economic growth patterns could give quite a number of different scenarios.

(A) High Population Growth

6. Hong Kong's population has grown steadily in the past and we projected, under the Reference Scenario, that this trend will continue, albeit at a slower rate. Factors of assumption in making population forecasts include fertility and life expectancy, as well as inward and outward migration (including temporary migration). Changes in any of the assumptions, it is noted, will give very different results in population size. A population higher than that anticipated in the Reference Scenario will result if there is, for example, a slower drop in the fertility rate, or a decrease in the outflow of Hong Kong residents. The inter-relationship between a high population growth pattern and different levels of economic growth is explained as follows.

High Population Growth - Economic Growth as in the Reference Scenario

7. Assuming that the vision targets related to the economy are met, Hong Kong's economic growth will proceed at a moderately fast level. As for population, the Reference Scenario has assumed a slowing down in the growth rate, mainly because of lower birth rates and higher out-migration. However, if for whatever reasons, fewer people leave the territory (say, for retirement), then our population will continue to grow at a rapid rate as in the past. Nevertheless, we believe that, given the increased mobility of people and better living conditions in the Mainland, this scenario is less likely to emerge.
High Population Growth - Low Economic Growth

8. A stagnant economy could also result in a high population if people are "trapped" inside Hong Kong. However, given the trend for higher mobility, it seems more likely that, if Hong Kong's economy fails, people will tend to seek out opportunities elsewhere.

High Population Growth - High Economic Growth

9. We can also postulate a scenario with higher population growth coupled with a similar increase in the rate of economic growth. That is to say, if Hong Kong manages to maintain very high levels of economic growth, more jobs will be created, high wages could be supported, and therefore even more people will be attracted into the territory. While many would argue whether Hong Kong could still sustain very high levels of economic growth, this scenario, if realised, would have very significant implications for our land use proposals.

Scenario Proposed for Quantitative Assessment

10. Since the scenario with high population growth and high economic growth will raise the requirements for both housing and economic land, and therefore will have significant implications for our land use options, we propose that this scenario be assessed in more detail under Stage 4 of the Study. We will explore how the development programmes should be advanced, whether additional development areas need to be identified and the extent of the impacts such a scenario may cause. As more development land is needed under this scenario, we consider that an additional increase of about 0.5 to 0.7 million in population over the next 30 years, and 0.5% in annual GDP growth will bring about a significant difference to our land use requirements.

(B) Low Population Growth

11. A lower population could when the fertility rate drops even faster than the current anticipated trend, or when more Hong Kong residents are leaving the territory for work, migration or other reasons.
Low Population Growth - Low Economic Growth

12. A "low population growth - low economic growth" scenario will arise when the number of jobs available in Hong Kong falls below the size of the workforce. People will tend to seek for work opportunities elsewhere. In this case, the need for housing and economic lands will be much less than that anticipated under the Reference Scenario. It could imply that there is a need to defer or even delete some of the development proposals (including new development areas and new infrastructure). In terms of traffic impact, environmental impact and use of resources etc., less development will likely result in lower damage, although sometimes development could help to realise improvement projects which are otherwise not viable. On the whole, we believe that the implications of this scenario could be considered in qualitative terms.

Low Population Growth - Economic Growth as in the Reference Scenario

13. On the other hand, a lower population may not necessarily indicate a slower rate of economic growth. It could imply that Hong Kong is moving much quicker towards a high-value added, non-worker-intensive, knowledge-based economy, thus maintaining the level of economic growth assumed under the Reference Scenario, despite having a different economic structure. Due to this different economic structure, it could be possible that some of the less skilled workers and those who cannot afford the higher costs of living may be displaced elsewhere, resulting in a lower population. This economic structure will also affect the mix of economic lands (i.e. CBD Grade A Offices, General Business, Other Special Uses) required.

Low Population Growth - High Economic Growth

14. As explained in paragraph 9 above, very high levels of economic growth are usually associated with a high demand for workers and will attract people to come to Hong Kong. Hence, a "low population and very high economic growth scenario" is less likely to emerge.

Scenario Proposed for Quantitative Assessment

15. As the scenario of a different economic structure will have significant implications for our land use proposals, we propose that the "low population growth - economic growth
as in Reference Scenario alternative be assessed in further detail under Stage 4 of the Study. We consider that a population growth of about 0.6 to 0.8 million less than that assumed under the Reference Scenario could bring about a significant difference to our land use requirements.

16. "What If" Scenarios will be discussed under Stage 3 Public Consultation so that public views on their appropriateness and additional proposals could be sought. Upon confirmation of the "What If" Scenarios, sensitivity tests will be conducted in Stage 4 of the Study.

PLANNING DEPARTMENT

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