

**OUTLINE BRIEF FOR  
STUDY ON SUSTAINABLE DEVELOPMENT  
FOR THE 21ST CENTURY  
(SUSDEV21)**

## **BACKGROUND**

1. The Territorial Development Strategy Review (TDSR), now nearing completion, has proposed a medium-term (2006) and long-term (2011) development framework for Hong Kong that takes account of needs arising from population growth in the Territory, the need to sustain and enhance the hub functions of Hong Kong, and continued rapid economic development in South China, particularly the Pearl River Delta (PRD). In order to maintain the current momentum of development to meet our growing societal needs, it will be important to move ahead with the provision of additional land and infrastructure in the context of current policies and standards in the medium term.
2. With regard to the long term, strategic planning proposals have been formulated for a possible population of 7.5 to 8.1 million for two assumed development scenarios related to the extent of a regional hinterland. The general conclusion is that, given sufficient resource allocation for land production and infrastructure provision in a timely way, there is likely to be spatial capacity to meet Hong Kong's own housing, employment and transport needs, taking account also of the need to expand port facilities and to provide additional cross-border transport links. However, it is apparent that it will be difficult to meet all the assumed objectives, particularly with respect to environmental protection within the context of current policies and proven technology.
3. Given that a goal should be to achieve a comprehensively sustainable pattern of development and that such a goal will need to be reached by degrees over the long term, it would clearly be highly desirable to start taking steps to ensure that our overall urban-based system in which we live and work will be brought to an acceptable state of balance within the limits of resource availability, decision-making systems and other practical constraints.
4. In the above context, it will be necessary to make every endeavour to ensure that the needs of the community that arise from "domestic" growth pressures are met as fully as possible to achieve the best-practical standards, simply because there is no alternative. However, one of the greatest difficulties to be resolved in aiming to achieve a sustainable, urban-based system for Hong Kong is in coming to a view as to which hub functions to assume and promote. Such functions are essential generators of economic growth from which the community derives resources to support its development, social service and environmental protection programmes. At the same time, the type, scale and location of hub function activities can be a source of great pressure on the quality of the urban-based system in which we live, in terms of such attributes as the use of land, the efficiency of infrastructure services and diverse environmental conditions.
5. The Third Review of Progress on the 1989 White Paper "Pollution of Hong Kong - a time to act" released by the Government in March 1996 points out that if Hong Kong is to continue thriving in the 21st Century, we must begin now to give more attention to the sustainability of our way of life. The Review, with the sub-title "Heading towards Sustainability", contains a whole section exploring the concept of sustainable development and how this concept is relevant to Hong Kong, and setting out proposals for incorporating sustainability considerations into our development planning and policy making processes including the proposal to carry out a "Study on Sustainable Development for the 21st Century" or "SUSDEV21".

## CONCEPTS OF SUSTAINABILITY

6. In the above context, a fundamental issue is how to maintain an acceptable environmental quality and safeguard or indeed restore the integrity of our natural resource base while, at the same time, continue to develop to satisfy growing social and economic needs. Hitherto, there has been a tendency for economic, social and environmental policies, plans and programmes to be dealt with on their own account, with each sector competing for the allocation of scarce resources (see Figure 1). However, it is evident that society should, as far as practicable, operate as one, integrated sustainable system.
7. The 1987 Bruntland Report of the World Commission on Environment and Development provides a conventional definition of sustainable development as being a way of living that *"meets the needs of the present without compromising the ability of future generations to meet their own needs"*. A more recent definition comes from the United Nations Environment Programme's 'Caring for the Earth' as *"improving the quality of life while living within the carrying capacity of supporting ecosystems"*. Also, the 1992 Rio Earth Summit has proposed a way forward on the basis that a *"Government's strategy should build upon and harmonise the various sectoral, economic, social and environmental policies and plans that are operating in the country..... Its goals should be to ensure socially responsible economic development while protecting the resource base and the environment for the benefit of future generations. It should be developed through the widest possible participation."*
8. It is not intended at this juncture to lay down any strict guidelines with respect to which concept of sustainability should apply to Hong Kong. The Territory has a unique status in that it does not operate as a "closed system" in terms of its inherent capabilities of meeting all its own needs from locally-available resources. Whilst taking account of lessons from other countries, new thoughts will have to be generated in order to reach a consensus on a workable definition of sustainability for Hong Kong and the elements that contribute to the achievement thereof.

## GUIDING VALUES AND SUSTAINABILITY INDICATORS

9. As a basis for formulating a sustainability process suitable for Hong Kong, it will be necessary, at an early stage, to identify a set of values that reflect the beliefs and concepts important to the society and its people. To that end, a programme of public consultation will be needed. Taken together, such values should represent the essence of a sustainable society and should be at the core of decision-making to integrate economic, social and environmental policies, plans and programmes for the deployment of various resources.
10. There must also be a set of indicators that can be used to measure the extent to which the agreed guiding values related to sustainable development have been achieved through various current policies, plans and programmes. They thus provide a basis for deciding what steps may need to be introduced to help keep in balance the overall system in which we live and work.

## **OBJECTIVES AND SCOPE OF THE STUDY**

11. It is considered that the time has come to see what measures should and could be taken to help provide a basis for establishing an improved system for keeping the key elements of our life style in balance according to changing circumstances, as Hong Kong enters the 21st Century.
12. It is therefore proposed that SUSDEV21 should:
  - (a) define what the term “sustainability” should mean for Hong Kong;
  - (b) develop guiding values, sustainability indicators and criteria covering the economic, social and environmental objectives of the society;
  - (c) conduct baseline economic, social and environmental studies for the Territory;
  - (d) based on (a) to (c), establish a user-friendly “sustainable development system” (SDS) that could be applied on a corporate basis to provide a means by which associated policies, resource allocation, planning, programming and the implementation of works could be developed, applied and monitored on a co-ordinated basis, with involvement of the general community, to help achieve sustainable development appropriate to conditions prevailing in Hong Kong;
  - (e) test and refine the sustainability indicators, criteria and sustainability development system using the TDS as a reference;
  - (f) seek guidance from the Government at certain key stages of the study to identify policy and/or institutional areas that may need to be improved so as to facilitate the taking of decisions relating to sustainable development in a more informed and balanced way; and
  - (g) get the widest possible public participation throughout the study process, and bring the importance of sustainable development to the community’s attention.
13. In achieving the above aims of SUSDEV21, the study must have regard to all relevant, current policies and to the findings of all relevant, completed and on-going studies commissioned by the Government, environmental groups and academic bodies, both local and overseas.
14. For the purpose of the study, the study area will be confined mainly to Hong Kong, with relevant assessments concentrating on the territorial and sub-regional levels. The Consultants will be required, however, to take account of the developments in the wider PRD region, particularly in respect of socio-economic and infrastructure developments, and transboundary pollution problems.

## **GENERAL APPROACH OF THE STUDY**

15. The general approach to the study is illustrated by the diagram at Figure 2. Altogether, the tasks involved may collectively be considered as an initial phase that, on the basis of pilot tests, is expected to produce an integrated system that can be used in a subsequent phase which would focus on the implementation of the agreed system
16. At various key stages of the study, the views of the public and corporate bodies having a specific interest in sustainable development will need to be solicited to help ensure that appropriate values and indicators are built into the system. It is such values and indicators that will provide a basis for evaluating the extent to which relevant societal targets are being met, thus providing a basis for deciding what adjustments to make to inter-related policies, plans and programmes.
17. The study will require the application of various models and evaluation methodologies to help establish an integrated monitoring system. As far as is practical, currently available models and methodologies used for various strategic planning purposes in Hong Kong should be used and, where appropriate, modified to improve their effectiveness. Also, data from established local sources should be used as fully as possible but, where necessary, new sources of information should be developed within the constraints of the timing and budget for the study.

## **SPECIFIC REQUIREMENTS OF THE STUDY**

18. It is envisaged that the study will need to cover 12 major tasks as follows:

### **Task 1- Define Sustainability, Develop Guiding Values and Sustainability Indicators, and Postulate Preliminary Ideas for a Sustainable Development System requiring**

- (a) a review of relevant local and overseas literature on the subject of sustainable development and other related topics to define the concept of sustainability in the Hong Kong's context;
- (b) the formulation of appropriate guiding values covering economic, social and environmental aspects, and a set of practical sustainability indicators under each of these guiding values for measuring the achievement of milestone targets to be laid down for various sectors and evaluating the performance of strategic plans over time. It will be necessary to identify which indicators and associated criteria relative to the agreed guiding values are considered to be of key significance. It will also be necessary to develop appropriate sustainability principles and preliminary ideas for establishing an SDS under later tasks of the study; and
- (c) the production of a report covering the above for public consultation.

### **Task 2 - Public Consultation I requiring**

- (a) the planning and organisation of a public awareness and consultation programme on the study, in parallel with Task 1;

- (b) the production of a public consultation digest on the proposed guiding values, sustainability principles, sustainability indicators and preliminary ideas for setting up an SDS. The consultation digest will also propose an education and awareness strategy appropriate for Hong Kong for developing greater community understanding of sustainable development and sustainability issues; and
- (c) the review of comments/views received, to provide responses in the form of a bilingual report on the public consultation exercise. The public comments/views will be taken into account in the further development of the sustainability indicators as well as in carrying out the subsequent study tasks, particularly in the formulation of the SDS.

**Task 3 - Develop Working Assumptions** requiring

- (a) the formulation of an initial set of working assumptions relating to such matters as potential resource availability, solution spaces, population growth, and technological changes expected to affect the future level of sustainability for Hong Kong, taking account of prevailing policies, standards and institutional systems as well as the outcome of Tasks 1 and 2, in particular the public views/comments received.

**Task 4 - Review Development Trends in the PRD and Related Cross-border Issues** requiring

- (a) a review of past and possible future development trends in the PRD and related cross-border issues, based on all relevant studies and further research to provide an updated, wider-regional context for assessing issues affecting sustainability in Hong Kong. The outcome from this task may require adjustments to be made to the working assumptions developed under Task 3.

**Task 5 - Environmental Baseline Study** requiring

- (a) a programme of research to provide essential environmental and ecological baseline information for the assessment of environmental sustainability. This will include the collection and collation of existing data on Hong Kong's natural environmental capital stock and cultural heritage; the carrying out of necessary field surveys to fill in information gaps within the limits and budget relevant to the study; the compilation of a comprehensive inventory/database on the environmental and ecological capital stock; and the production of a Geographical Information System (GIS) for the inventory/database, using as fully as possible all currently available sources of information.

**Task 6 - Baseline Assessments of Other Relevant Aspects** requiring

- (a) on the basis of the agreed guiding values and associated indicators and criteria established under Task 1, the formulation of baseline assessments of social and economic conditions in respect of major sectoral components relevant to the question of sustainability in Hong Kong, such as urban and rural land uses,

provision of various community services and facilities, transport systems, industrial development, port and airport facilities, energy, and other renewable and non-renewable resources.

**Task 7 - Seek Guidance on Related Policies and Institutional Systems for Introducing an Effective SDS** requiring

- (a) assessment in broad terms the likely extent to which sustainable development objectives appropriate to Hong Kong could be achieved in the context of current policies, plans and programmes. The results from this task would need to be put before the Government to establish whether it may be necessary to strengthen current policies and related institutional measures to help better achieve such objectives. Decisions taken on this account would then be carried forward to Task 8.

**Task 8 - Produce a Prototype SDS** requiring

- (a) the development of an appropriate methodology for applying and integrating the sustainability indicators covering the three broad fields of economics, social needs and environmental conditions; and
- (b) based on the results of the foregoing tasks, the development of a Prototype SDS for the systematic monitoring and evaluation of relevant parameters that relate to the overall sustainability of future development. The structure of the proposed SDS should provide a means by which corporate decisions can be reached on relevant policies, plans, programmes and resource allocation to achieve, on a recurrent basis, a balance in meeting the economic, social and environmental needs of the community.

**Task 9 - Pilot Tests of the Prototype SDS** requiring

- (a) pilot tests of the Prototype SDS, using the TDS and other related sectoral strategies for reference, and any other modelling results from relevant studies available at the time. This task will determine the appropriateness of the SDS, but should at the same time endeavour to indicate to what extent Government's present strategic plans could achieve overall sustainability.

**Task 10 - Review Results, Refine SDS and Identify Future Study Requirements** requiring

- (a) a close examination of the results of the pilot tests and the making of adjustments to produce a robust and user-friendly SDS. The Consultants may need to take further guidance from the Government to identify any outstanding policy and/or institutional areas that may need to be improved so as to facilitate the taking of decisions relating to sustainable development in a more informed and balanced way. Also, suitable mechanisms will need to be identified by which the assessment of sustainability can be carried out and integrated into policies, strategies and programmes. The finally proposed SDS will also need to find a pragmatic way of taking external pressures into account;

- (b) the formulation of future monitoring systems and study requirements for carrying out phase 2 of the study; and
- (c) the production of a Final Report and an Executive Summary on the findings and results of the study, taking account of the public comments received in the public consultation exercise under Task 11.

**Task 11 - Public Consultation II** requiring

- (a) in parallel with Task 10, the production of a bilingual consultation digest on the findings and results of the study;
- (b) the promulgation of a second public consultation exercise according to the agreed public consultation programme worked out under Task 2;
- (c) the review of public comments/views gathered during the consultation exercise and the formulation of responses. These will then be published in the form of a bilingual report on the public consultation exercise; and
- (d) the adjustment of the SDS to take proper account of community values and perceptions on sustainable development.

**Task 12 - Outline Study Proposal for Phase 2** requiring

- (a) on the basis of the work carried out under Task 10 and the public consultation feedback, the preparation of an outline study proposal for phase 2 of the study, the principal object of which would be to establish the use of the recommended SDS on a recurrent basis for the formulation, review, adjustment and application of inter-related policies, plans and programmes required to achieve sustainable development over the long term.

**MAIN DELIVERABLES**

19. The main deliverables of the study will include:

- (a) a set of guiding values, sustainability indicators and criteria, and milestone targets for each key sectoral policy area;
- (b) a public consultation programme and a strategy for promoting awareness of sustainable development and sustainability issues within the community;
- (c) a GIS-based comprehensive assessment of the existing baseline environmental and ecological conditions, together with the establishment of the natural environmental capital stock of the Territory;
- (d) comprehensive baseline assessments of economic and social conditions in respect of major sectoral components relevant to the question of sustainability in Hong Kong;



- (e) an SDS for the systematic evaluation and monitoring of relevant parameters that relate to the overall sustainability of future development, to provide a means for corporate decision-making on relevant policies, plans, programmes and resource allocation;
- (f) an outline of the related policy and institutional mechanisms to help better achieve sustainable development objectives relevant to Hong Kong;
- (g) a report on community views and values on the issue of sustainability in Hong Kong;
- (h) an operational manual on the GIS and a training programme for Government staff; and
- (i) proposals for undertaking future work under a phase 2 programme of study.

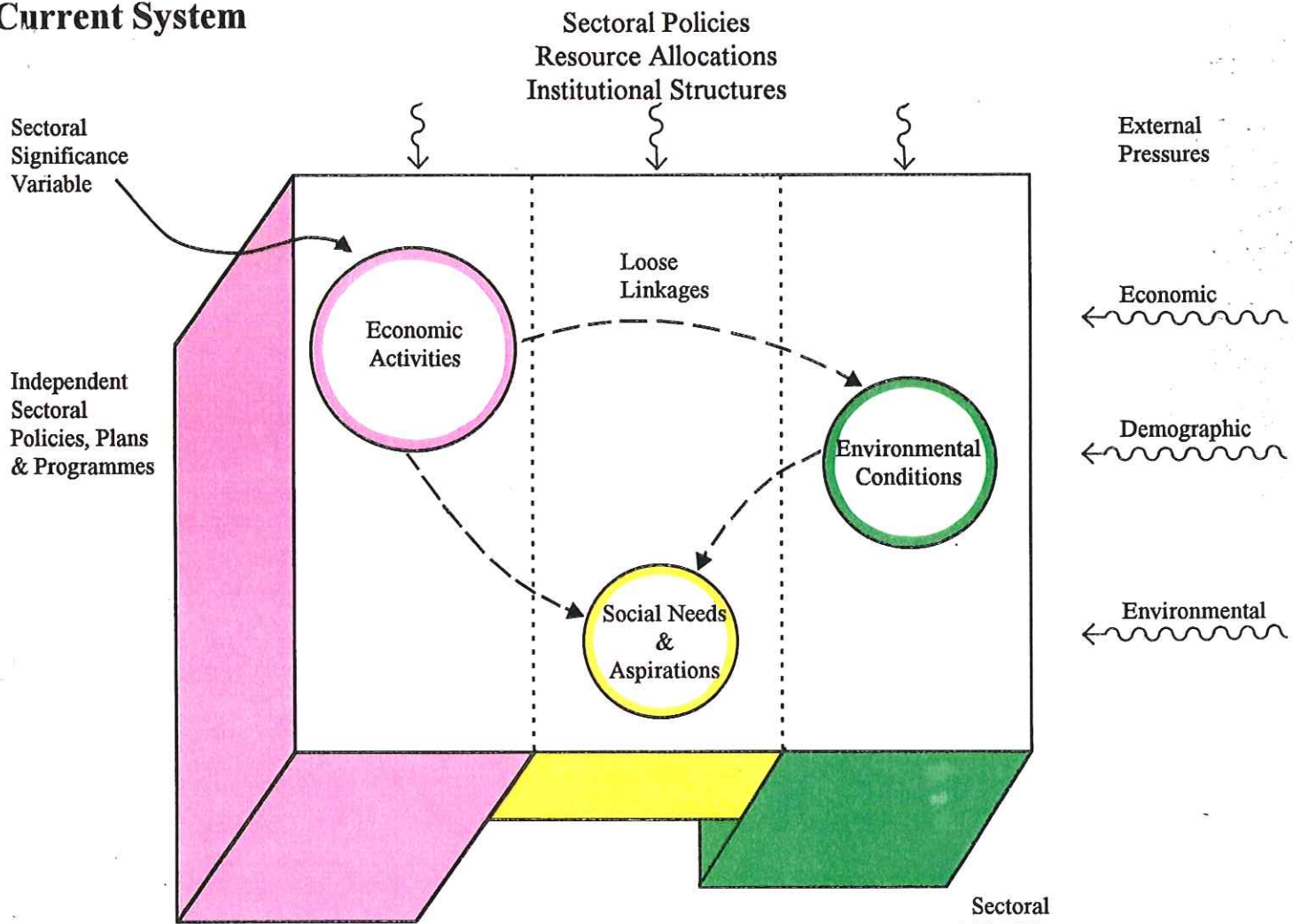
### **PROGRAMME OF THE STUDY**

- 20. An outline programme for the study is shown by Figure 3. The study is expected to be completed within 30 months.
- 21. The Consultants will be required to produce a study programme in draft form within the first month of the study detailing the main streams of the study, target dates for particular tasks and any decision dates that may be required for the uninterrupted progress of the study.

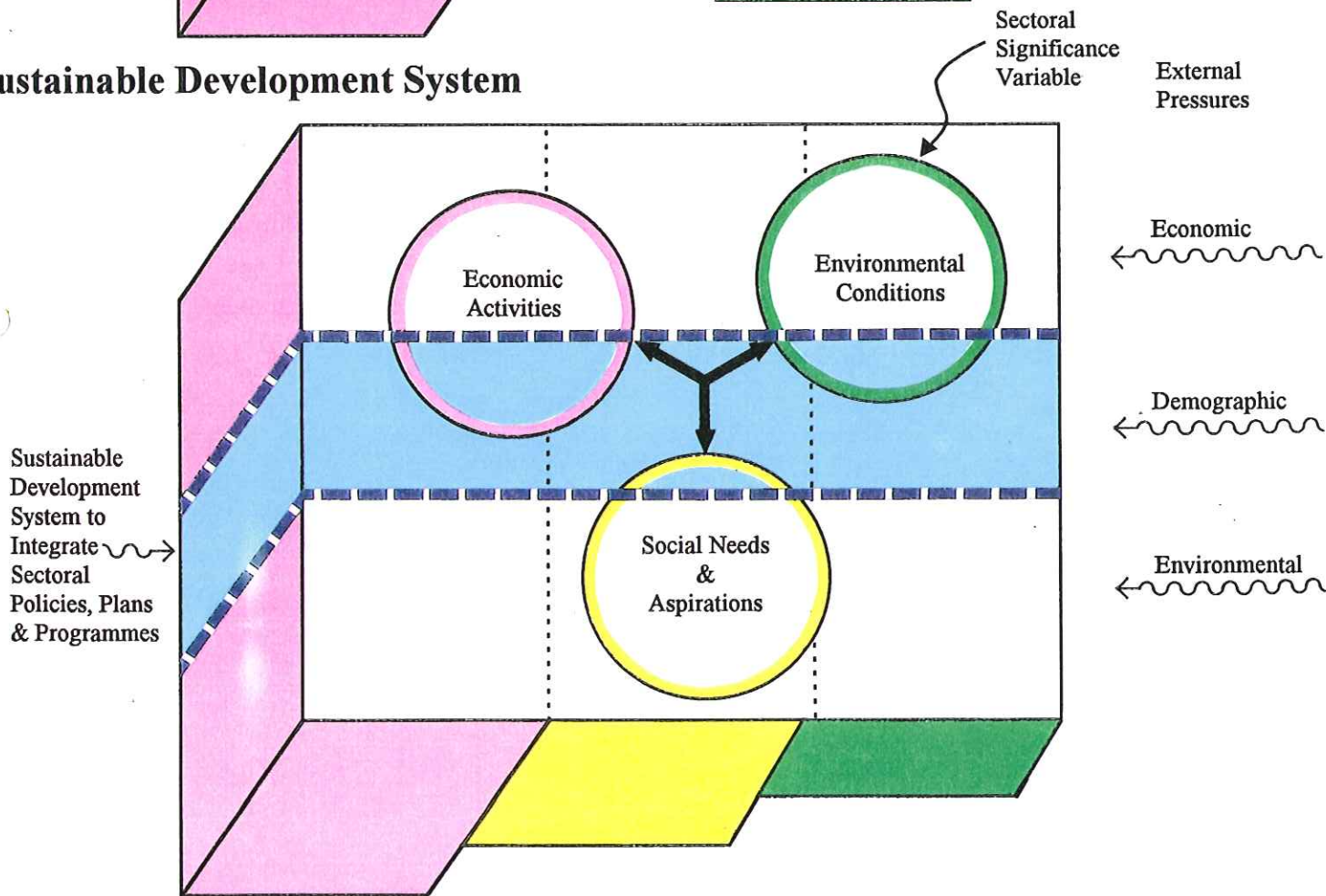
### **MANAGEMENT OF THE STUDY**

- 22. Day-to-day management of the study will be undertaken by the Director of Planning.
- 23. A Steering Group, chaired by the Secretary for Planning, Environment and Lands, will be set up to provide guidance on technical and procedural issues, to monitor general progress, to facilitate liaison and to co-ordinate with other relevant studies. An Environmental Study Management Group will be set up to oversee the environmental baseline study. Working Groups may need to be established to examine other specific issues.
- 24. At certain key stages, it will be necessary for submissions to be made to the Government on policy and institutional matters related to certain key tasks of the study.

# Current System



# Sustainable Development System

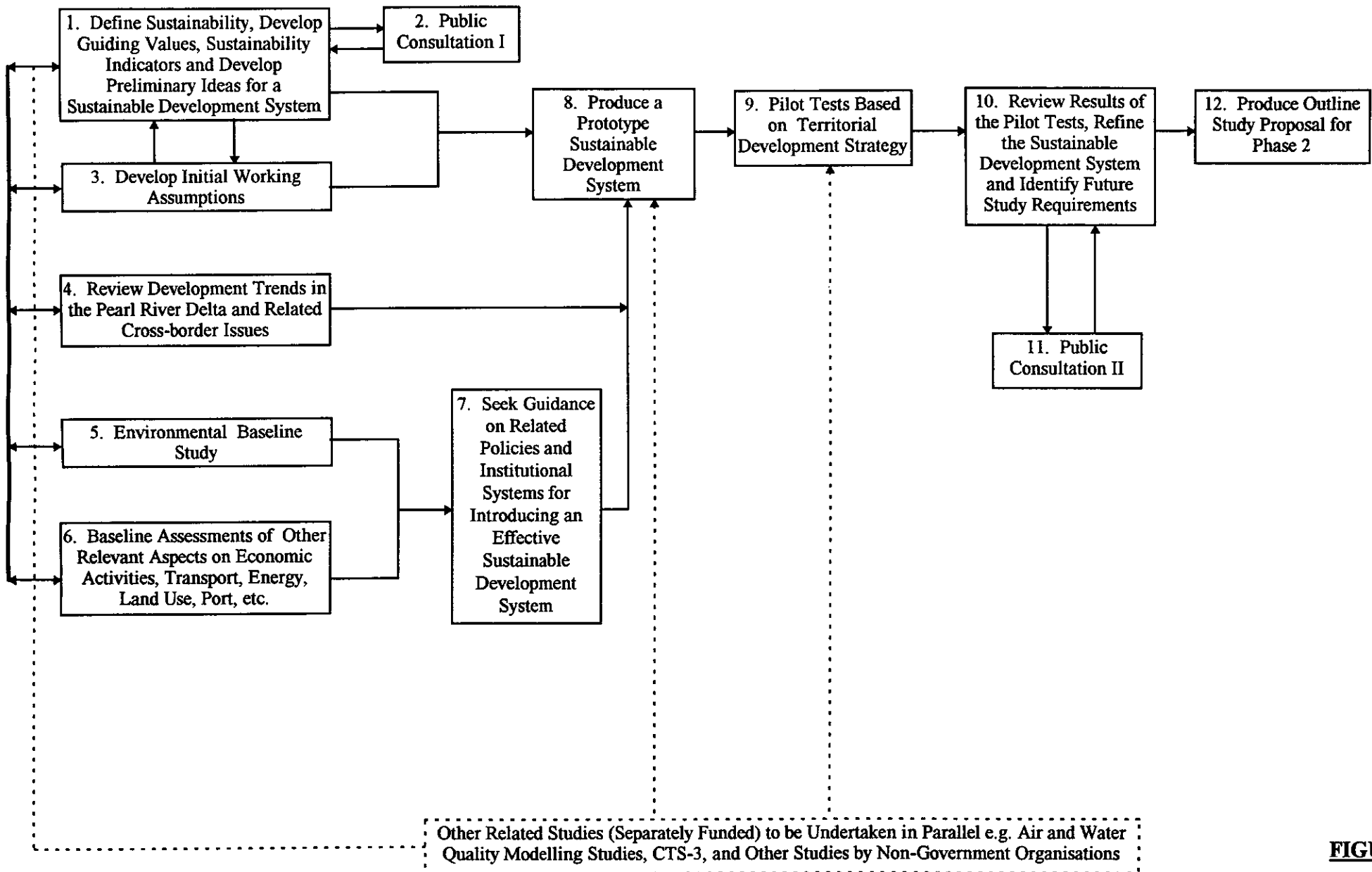


**BROAD CONCEPT FOR SUSTAINABLE DEVELOPMENT SYSTEM**

**FIGURE 1**

Study on Sustainable Development for the 21st Century  
(SUSDEV21)

Outline Study Process



**FIGURE 2**

# Study on Sustainable Development for the 21st Century (SUSDEV21)

## Outline Study Programme

TASK	MONTH																																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31					
1. Define Sustainability, Develop Indicators & Preliminary SDS	—————																																			
2. First Public Consultation Exercise	.....			—————																																
3. Develop Initial Working Assumptions	.....				—————																															
4. Review PRD Development Trends & Cross-border issues				—————																																
5. Stocktaking of Environment	—————																																			
6. Stocktaking of Other Relevent Aspects	—————																																			
7. Seek Guidance on Related Policies and Institutional Systems												.....			—————																					
8. Produce Prototype Sustainable Development System															.....		—————																			
9. Pilot Tests Based on Territorial Development Strategy																					—————															
10. Review Results of Pilot Tests and Refine SDS																					.....		—————													
11. Second Public Consultation Exercise																												—————								
12. Produce Outline Study Proposal for Phase 2																																				
<b>Reporting Schedule</b>																																				
Inception Report		*																																		
Topic Reports				*			*	*	*		*			*			*		*		*		*		*		*		*		*		*		*	
Progress Reports	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Substantive Interim Report															*																					
Draft Final Report																													*							
Final Report and Executive Summary																																		*		*
Consultation Digest				*																							*									*
Report on Consultation							*																												*	
<b>Submission to Relevant Government Committees</b>	#							#				#					#		#				#		#		#		#					#		

FIGURE 3