

The Collaboration on Indicators on the Nation's Environment

(CINE)

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Council on Environmental Quality

About the CINE

- The CINE will recommend the institutions and institutional arrangements the U.S. needs for statistical reporting on the environment.
- The CINE will use a collaborative process involving institutional partners and high level leaders from both the Federal and non Federal sectors.

The CINE Planning Group

- CEQ
- Heinz Center
- National Council for Science & the Environment
- Meridian Institute
- Key National Indicators Initiative
- Federal agencies: Interior, Ag, EPA, NOAA
- NGOs
- State and local governments
- Congress
- Deans of Environmental Schools

This Presentation will Cover The Following Questions:

- What do we want to achieve?
- Why is it important?
- What do we need to achieve our goal?
- What strategic approach is most likely to be successful at overcoming the hurdles?

This Presentation will Cover The Following Questions:

- What do we want to achieve?
- Why is it important?
- What do we have and what do we need to achieve our goal?
- Why should we move ahead now?
- What are the hurdles that must be overcome?
- What strategic approach is most likely to be successful at overcoming the hurdles?

What do we want to achieve?

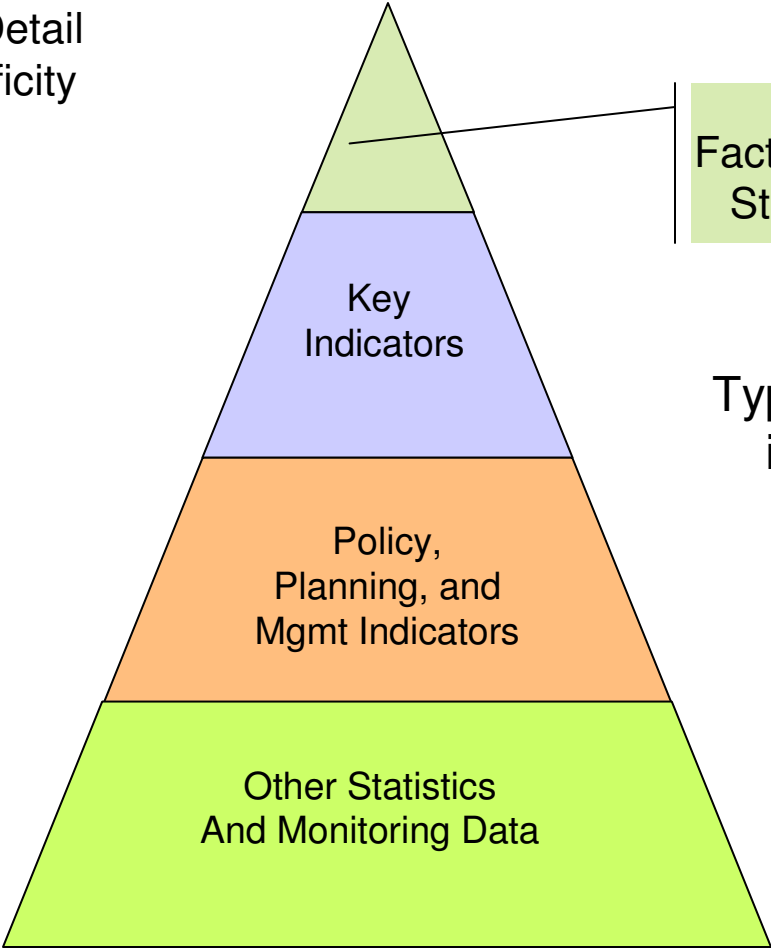
- An enduring institutional capacity to regularly publish a comprehensive set of indicators and statistics on natural and environmental resources
- A few highly respected and trusted institutions responsible for publishing “Gold Standard” indicators and statistics

What is Statistical Reporting on the Environment?

- Indicators and other statistics
- National coverage with geographical zoom
- Long term coverage
- Consistent measurements and methods
- Increasingly accurate
- Increasingly comprehensive
- Increasingly integrated using ecological and economic concepts and theories

The Information Pyramid

Increasing Detail
and Specificity



Fact Based
Stories

Key
Indicators

Policy,
Planning, and
Mgmt Indicators

Other Statistics
And Monitoring Data

Types of Information that could be
included in a Comprehensive
Statistical System

Number of Pieces of Information

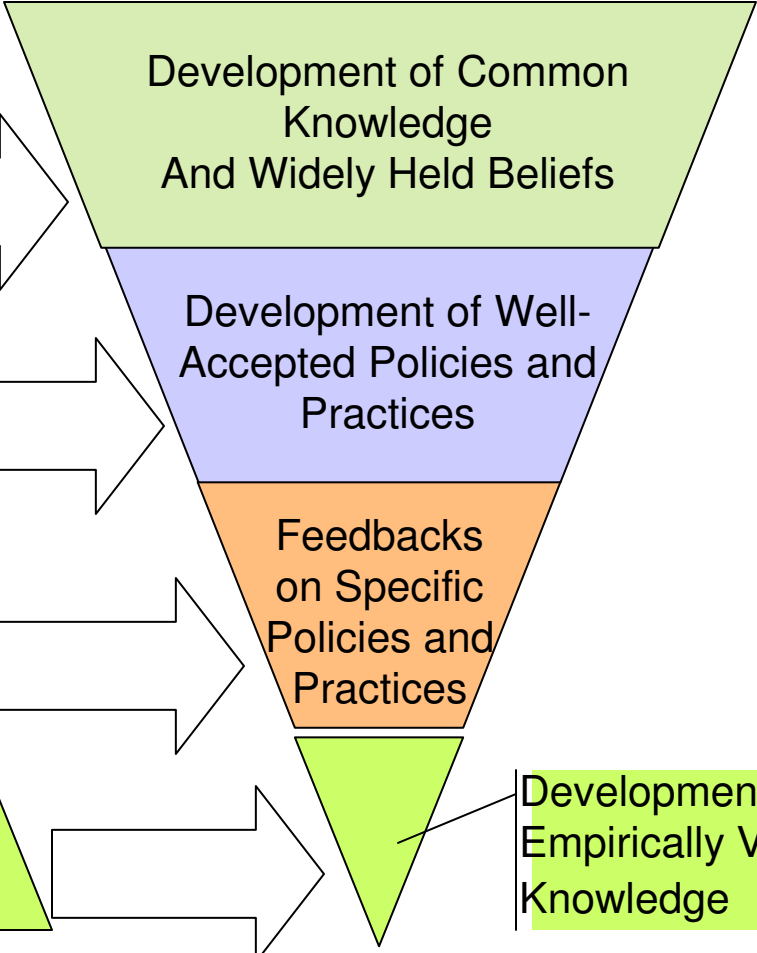
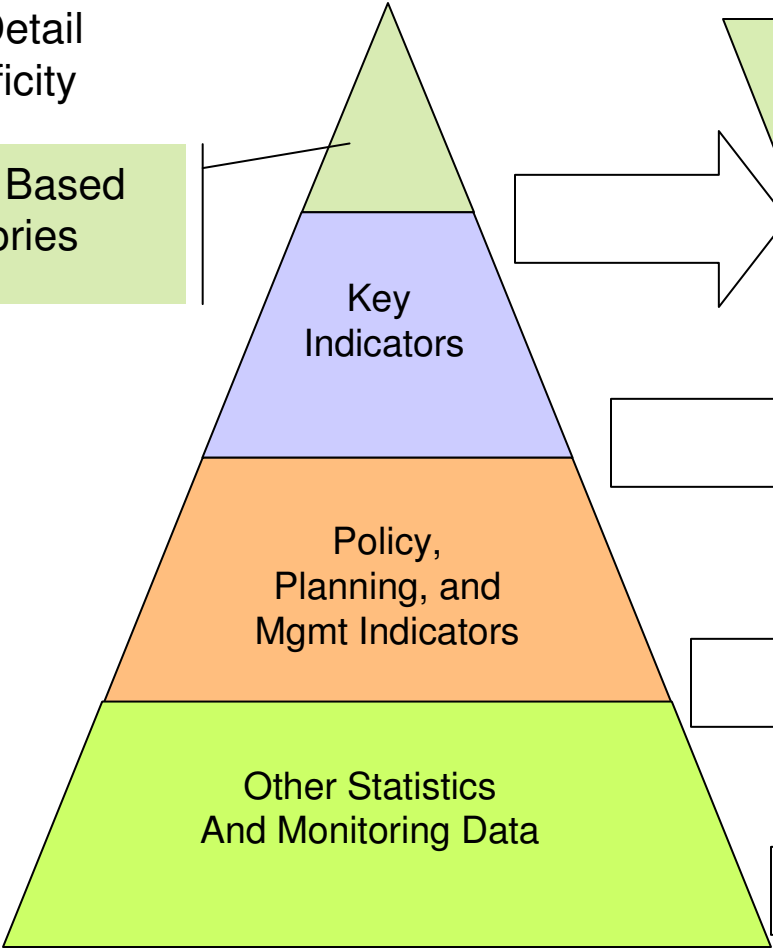
Types of Information and Functions

Types of Information from
A Comprehensive System

Functions Performed
Using Information

Increasing Detail
and Specificity

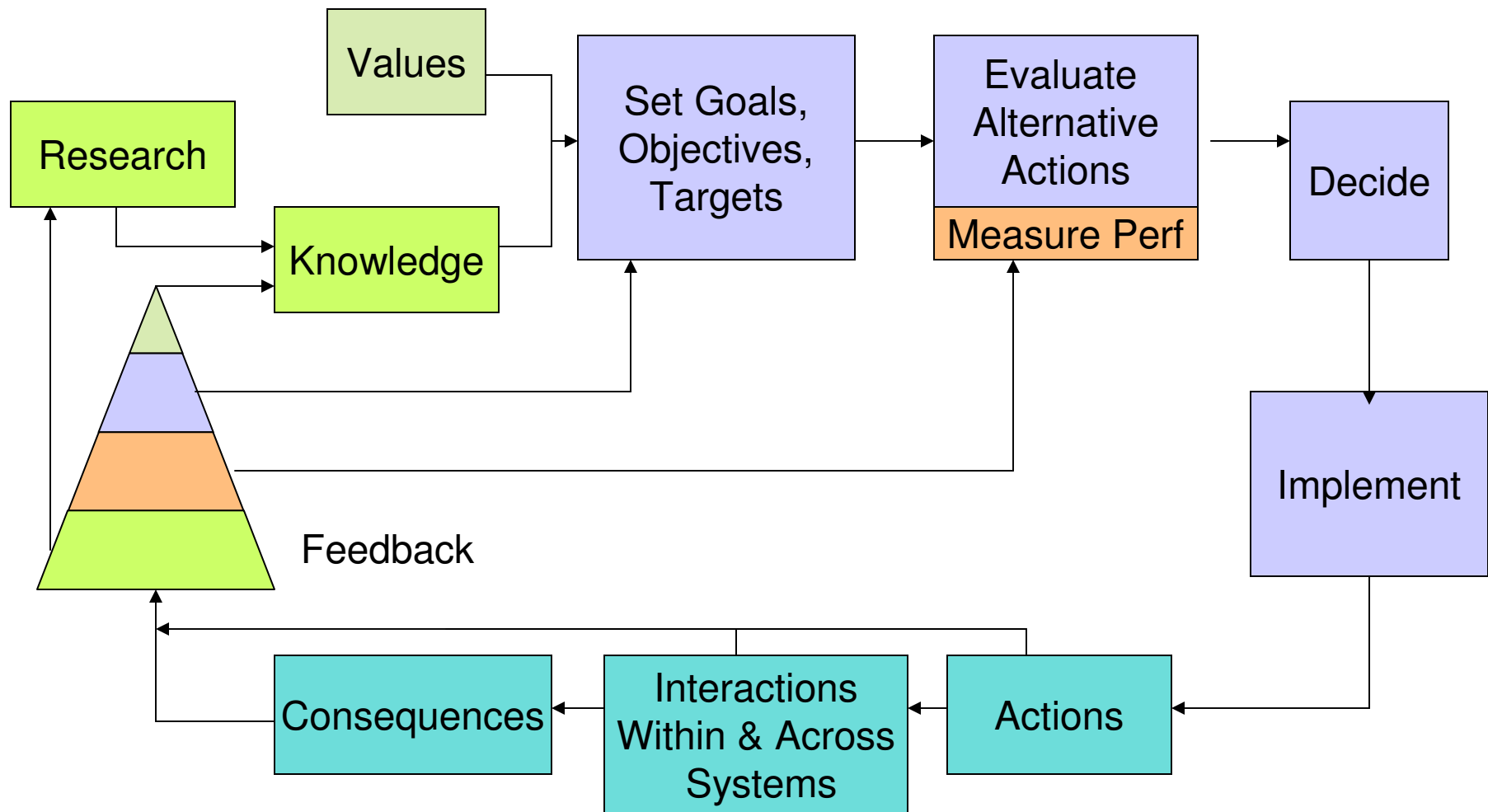
Fact Based
Stories



Number of Pieces of Information

Number of People Using
Each Piece of Information

The Role of Feedback In Policy, Planning and Management



Why is statistical reporting on the environment important?

- So that we can respond effectively and efficiently to significant environmental changes.
- Responses by governments, businesses and citizens will be more in concert if they are based on a more commonly accepted factual understanding.

What do we have in place?

- We have technical resources and significant environmental monitoring capabilities that produce large amounts of data.
- They are located within existing research, regulatory and management organizations.

We have projects that identify environmental indicators

- CEQ's "annual" reports
- Heinz Center's State of the Nation's Ecosystems
- EPA's Report on the Environment
- EPA's Coastal Condition Report
- US Forest Service National Report on Sustainable Forests
- Sustainable Resource Roundtables: Forests, Rangelands, Water Resources, Minerals
- The National Academies' Key National Indicators Initiative

Programs that provide data for environmental indicators are widely dispersed

- The Heinz Center's 2002 Report found adequate data for 58 of the 103 indicators it selected.
- Data for the 58 came from 20 Federal programs in 15 different agencies located in 6 different departments. (Source: GAO-05-376)

What do we lack?

- Monitoring programs adequate to produce the data for over half of the indicators that have been selected by recent efforts.
- Institutional arrangements that can bring forth additional monitoring, improve its consistency and provide for its continuation.

We lack institutions with the primary mission of statistical reporting on the environment.

- That can become forceful customers of environmental monitoring programs
- That can become trusted sources of high quality indicators and statistics.

Why should we move ahead now?

- Because the challenges of responding to environmental changes are increasing;
- Because it takes many years to design and establish new institutions;
- Because of the opportunities created by emerging information technology;

Why should we move ahead now?

- Because indicator projects have made good progress over the last decade in identifying relevant indicators; and
- Because they have shown that collaborative processes can promote consensus about indicators.

What are the hurdles that must be overcome?

- The complexity and “turfiness” of Federal and non Federal institutions and programs that currently produce environmental data
- The busy-ness and inertia inherent in the performance of their current missions
- The perception that developing the needed institutional capacity is not urgent.

What strategic approach is most likely to be successful?

- Use a collaborative process involving high level leaders from non Federal and Federal institutions.
- Recommend designs for the statistical reporting institutions and institutional arrangements that are needed.
- Present recommendations in a manner likely to bring about implementation.

Key tasks to be performed

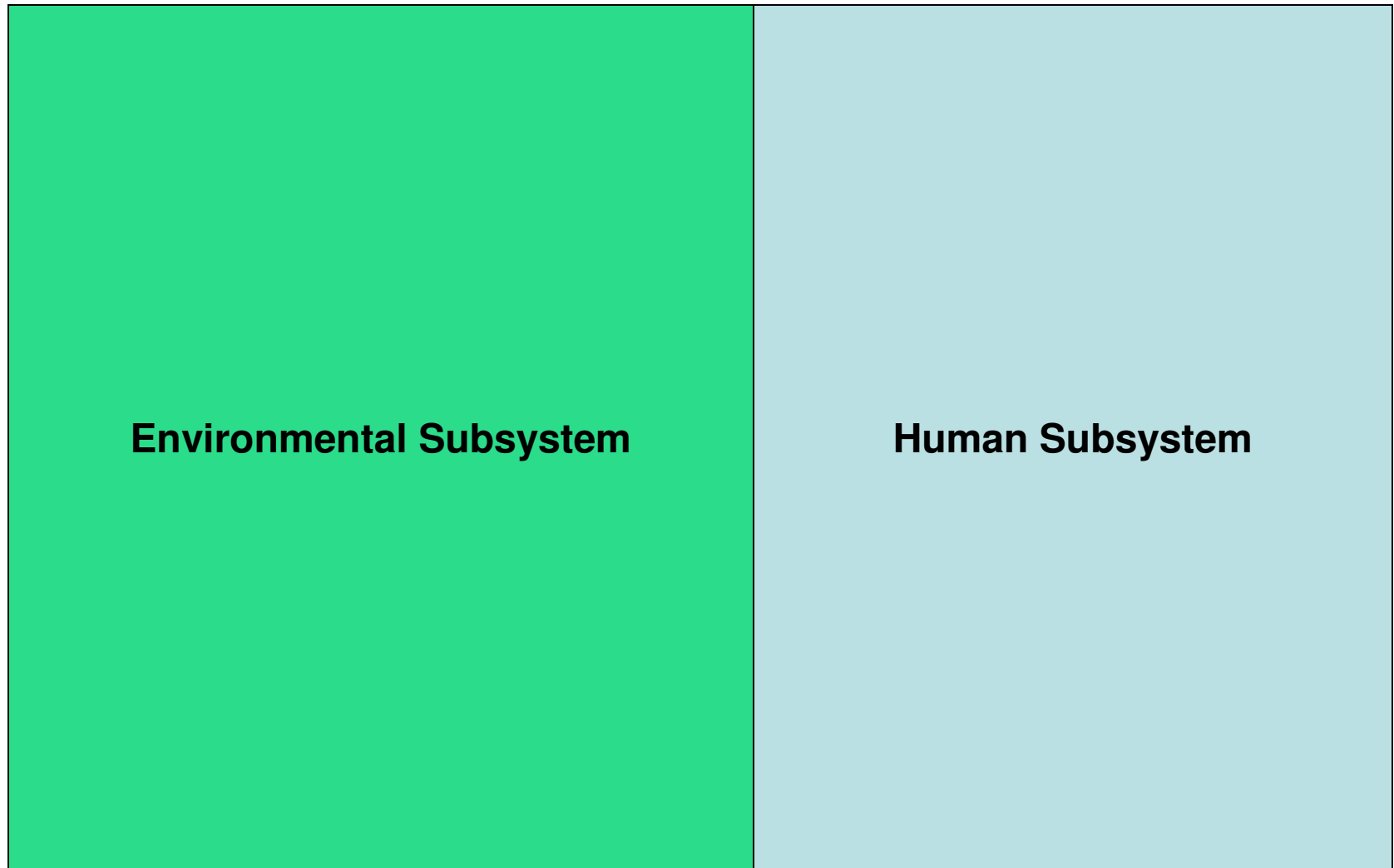
1. Design the Scope and Architecture for a National System of Indicators
2. Identify Institutional Functions and Design Criteria
3. Survey and Analyze Current Institutions
4. Develop and Assess Options
5. Select and Implement Recommended Institutional Arrangements

ISG Conceptual Framework

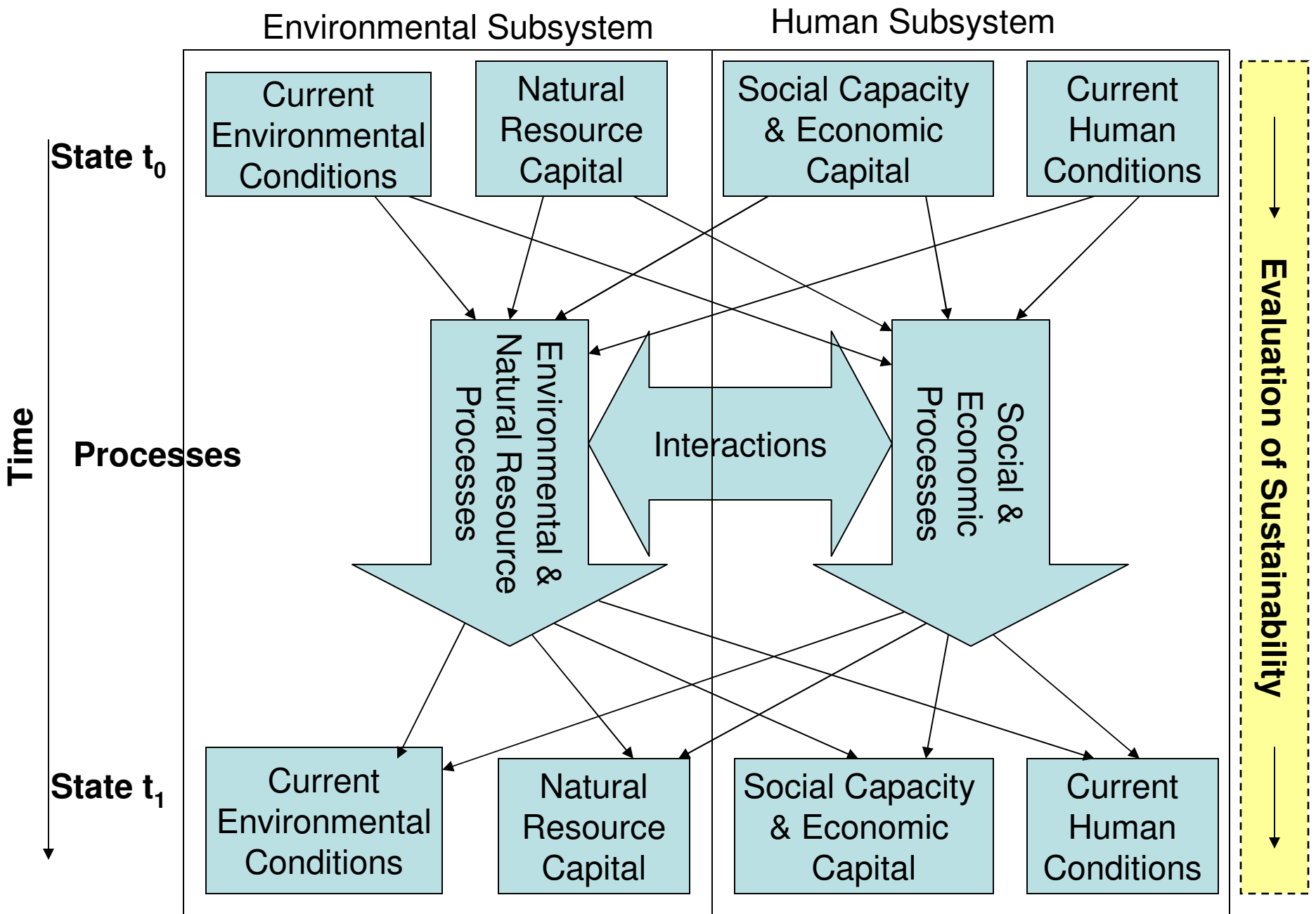
Revised per Discussion of
Ecosystem Services

October 4, 2004

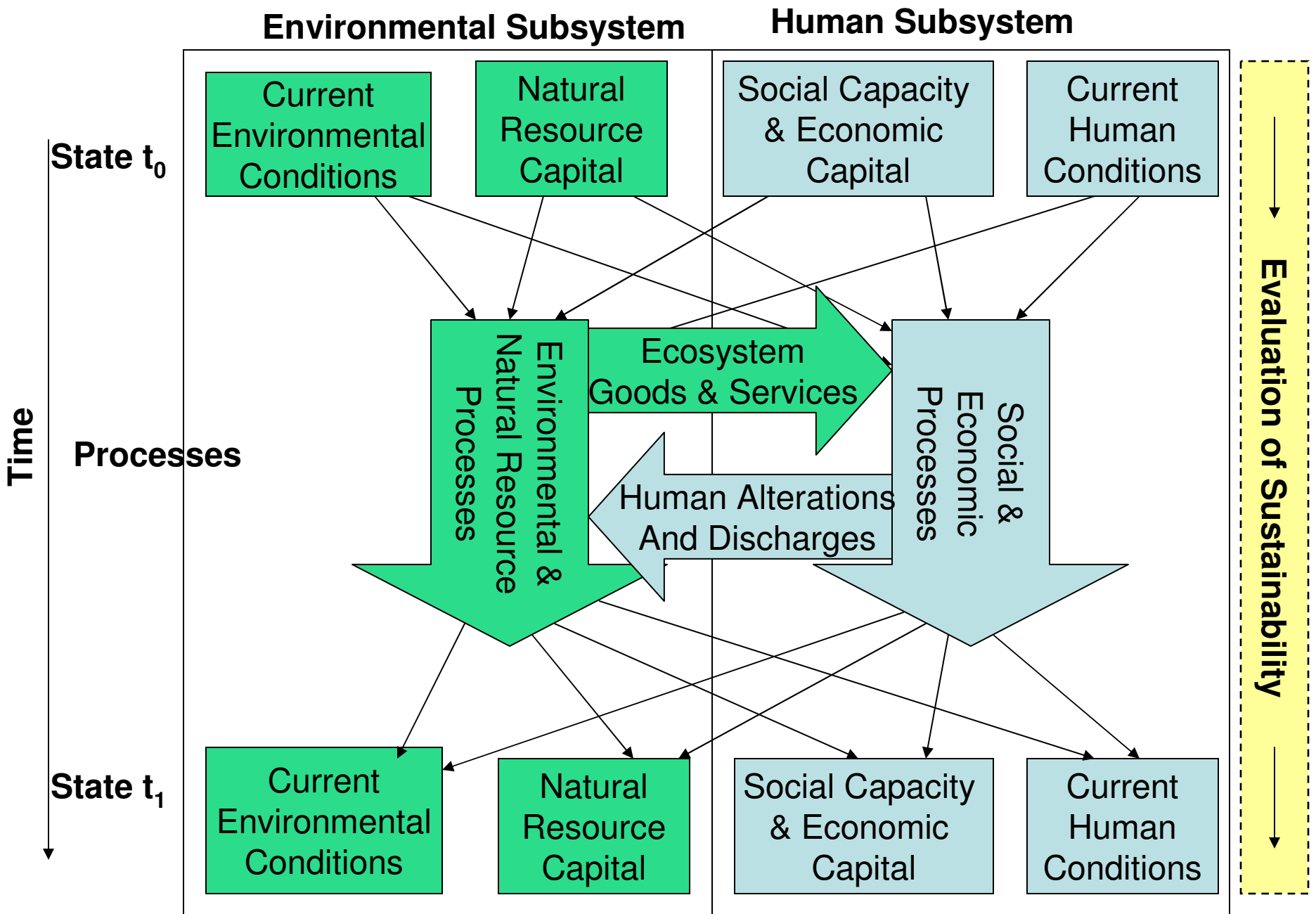
The Earth's Ecosystem



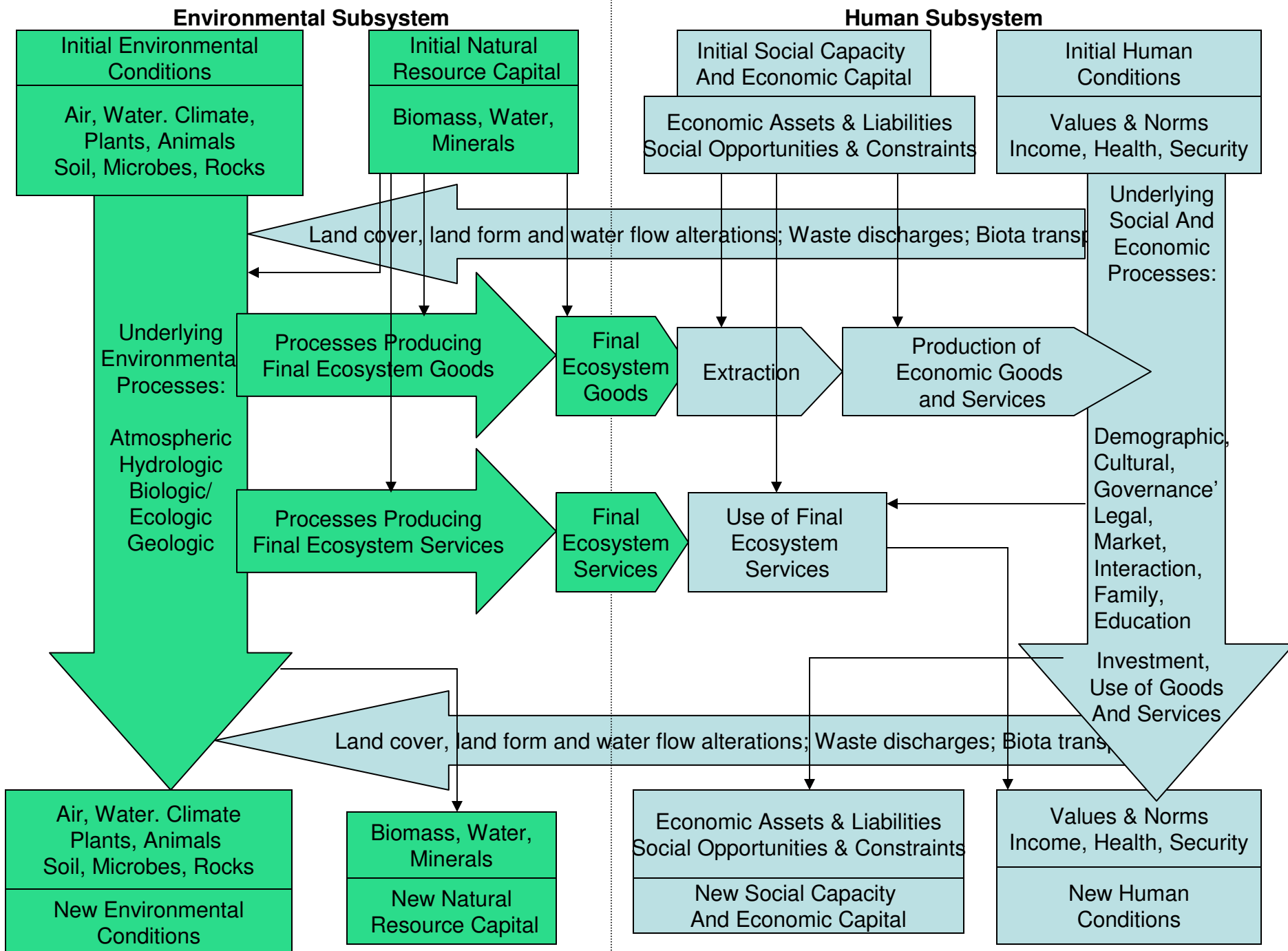
Tier 0 – ISG Conceptual Framework



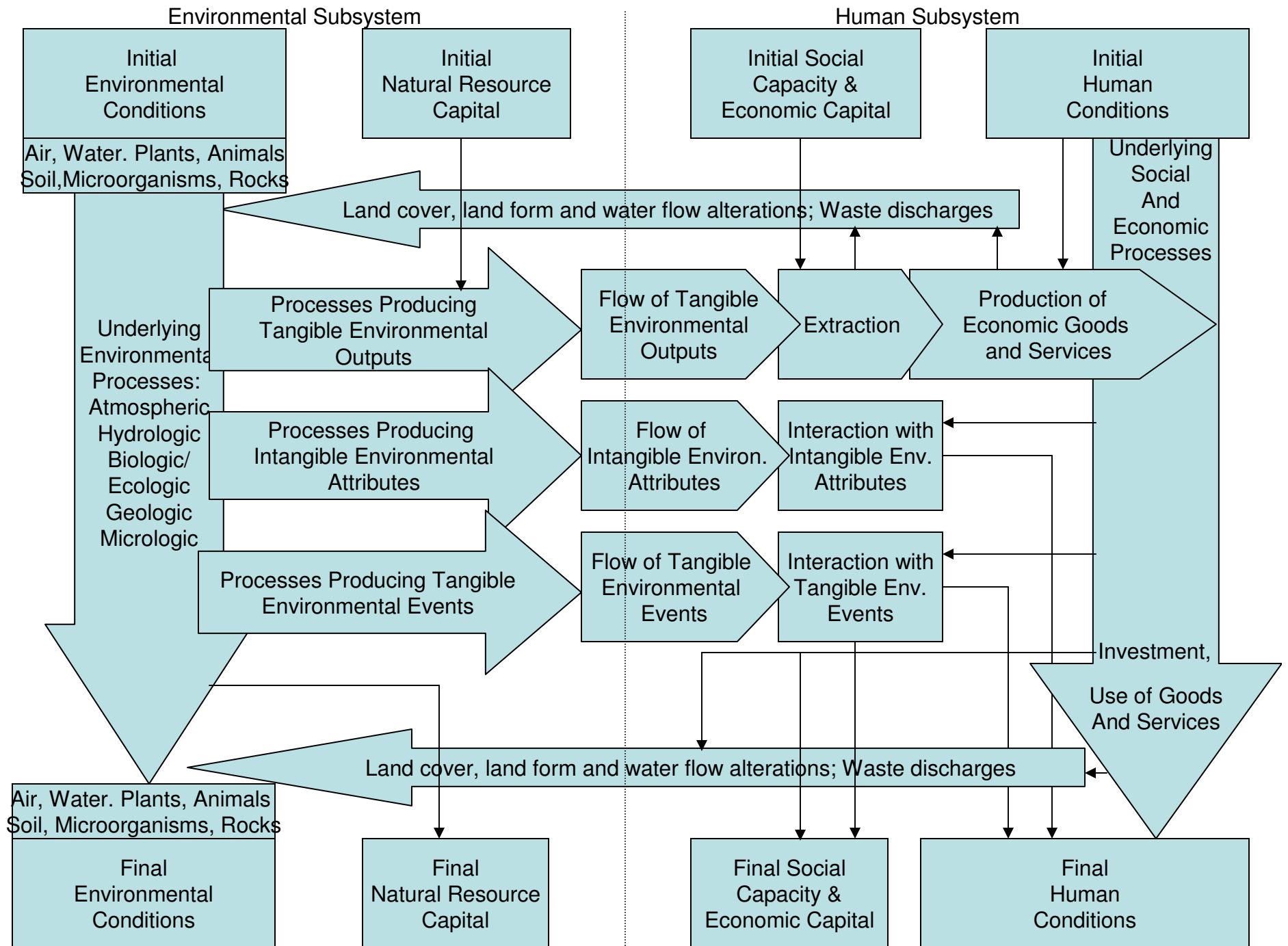
Tier 1a - ISG Conceptual Framework



Tier 1a - ISG Conceptual Framework with Ecosystem Services



Toward Tier 2 – ISG Conceptual Framework



Tier 2 – ISG Conceptual Framework