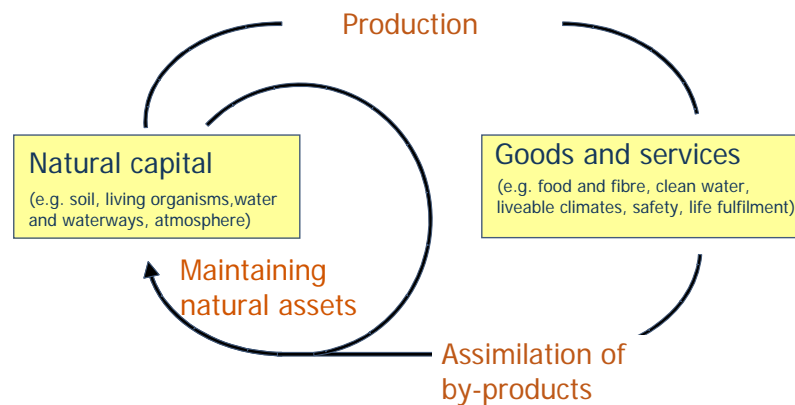


Figure 1. The Production of Ecosystem Services from Natural Capital



Natural Capital: Includes all the elements of ecosystems including; plants, animals, fungi, micro-organisms, soil, rocks, minerals, water, the atmosphere etc (refer to section on natural capital for more information).

Production: For example the reproduction of fish populations, vegetative regrowth and reproduction and the transformation of atmospheric CO_2 into O_2 by the photosynthetic process of plants.

Goods and Services: The production processes of ecosystems produce an array of ecosystem services (for example clean water, oxygenated air, food and medicinal products etc). These goods and services are then consumed and or used in other ways by humans

Assimilation of By-Products: In the process of consuming or utilizing ecosystem services by-products, often in the form of wastes, are produced. For example, when we burn wood for heat and light we produce carbon (charcoal) and CO_2 . Many of these by-products or wastes, such as organic matter and CO_2 , are processed or assimilated by ecosystems and converted back into natural capital. These assimilation processes (which fall into the category of regeneration processes) are another type of ecosystem service in addition to production services. Examples of assimilation processes include nutrient cycling, soil detoxification, purification and filtration of air and water etc.

Maintaining Natural Capital: Another type of ecosystem service human derive benefit from are services that maintain natural capital and ensure the future production of goods and services and the assimilation of wastes. These services fall into the category of stabilization processes and include services such as natural pest control (to ensure one species or group of species does not dominate an ecosystem and decrease the biodiversity of the system), maintenance of water ways and river banks etc., weather moderation, species substitution, etc.