

MINGGU VI
Thursday, March 15, 2018

MATA KULIAH PILIHAN
MANAJEMEN JASA LANSKAP
ARL 333 : 2 (2-0) 2

 DEPARTEMEN ARSITEKTUR LANSKAP
FAKULTAS PERTANIAN
INSTITUT PERTANIAN BOGOR
15 March 2018

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MATERI PERKULIAHAN
MG I – UTS

MG/TOPIK	URAIAN	TUGAS	DOSEN
I PENDAHULUAN Ruang Lingkup dan Definisi	Kontrak Perkuliahan; Ruang Lingkup dan Definisi Jasa Lanskap	Tugas Resensi	KAS
II MANAJEMEN JASA LANSKAP Management Plan & Jenis-jenis Jasa Lanskap	Jasa Ekosistem; Jasa Lingkungan; Jasa Lanskap	Tugas Resensi	KAS
III JASA LANSKAP: Keragaman Vegetasi dan Karbon Tersimpan	Horizontal dan Vertical Diversity Index Aboveground dan Belowground	Tugas Analisis	KAS
IV JASA LANSKAP: Manajemen Sumber Daya Air dan Udara	Kuantitas dan kualitas air Kuantitas dan kualitas udara	-	KAS
V JASA LANSKAP: Keindahan dan Kenyamanan Lanskap	Keindahan <i>terrestrial</i> dan <i>spatial</i> Nilai Kenyamanan Lanskap	Tugas Analisis	KAS
VI JASA LANSKAP: Lanskap Sejarah dan Budaya	Nilai Manfaat Lanskap Sejarah dan Budaya	Tugas Analisis	KAS
VII JASA LANSKAP: Agrowisata dan Agroforestri	Potensi Agrowisata dan Agroforestri	-	KAS
VIII UTS			

*) Pokok/Sub-pokok bahasan dapat berubah, disesuaikan dengan kasus yang sedang hangat didiskusikan.

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MATERI PERKULIAHAN
MG IX – UAS

MG/TOPIK	URAIAN	TUGAS	DOSEN
IX Coupling Landscape Ecology with Natural Landscape Management	Penjelasan tentang perubahan paradigma dan pendekatan dalam pengelolaan lanskap alami	-	SWI
X Landscape Structure and Multi-scale Management	Konsep dan studi kasus	Tugas makalah	SWI
XI Landscape Function and Cross-Boundary Management	Konsep dan studi kasus	Tugas makalah	SWI
XII Landscape Change and Adaptive Management	Konsep dan studi kasus	Tugas makalah	SWI
XIII Landscape Integrity and Integrated Management	Konsep dan studi kasus	Tugas makalah	SWI
XIV Review	Presentasi	-	SWI
XV Review	Presentas	-	SWI
XVI UAS			

*) Pokok/Sub-pokok bahasan dapat berubah, disesuaikan dengan kasus yang sedang hangat didiskusikan.

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MG VI
JASA LANSKAP:
LANSKAP SEJARAH
DAN BUDAYA

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CP MINGGU VI

Mahasiswa mampu menjelaskan Jasa Lanskap Sejarah dan Budaya

dan

mampu mengaplikasikannya dalam proses perencanaan, desain dan manajemen lanskap

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ES: Great Green Hope



Ecosystem services (ES):
The processes by which nature renders benefits for people

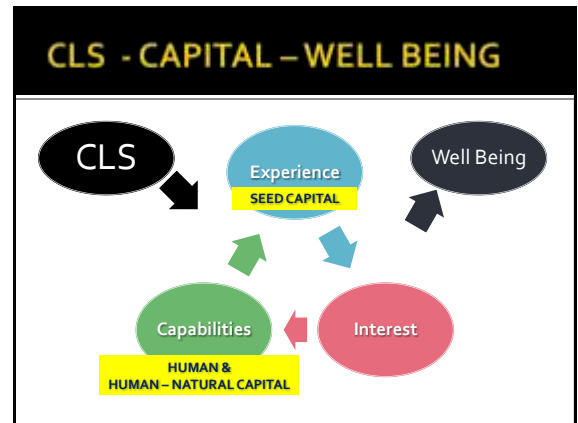
LS Categories

1. Provisioning 
2. Regulating 
3. Supporting 
4. Cultural 

LS Supply Types

1. Supply services of **physical assets** that produce direct benefits to people
2. Services carried out by ecosystems in **regulating** environmental processes
3. **Support services**, which do not provide direct benefit to people but are required for functioning of ecosystems
4. Services related to **cultural and spiritual needs** of the community

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CULTURAL LANDSCAPE



Cultural Landscape Services [CLS]

- **The intangible benefits** that people receive from ecosystems through **spiritual enrichment, cognitive development, reflection, recreation and aesthetics experience**, including **cultural systems, social relations** and **the aesthetic value**.
- **The contribution** of the ecosystem to the intangible benefits (experience, skills) that people derive from human-ecological relationships
- **Those which satisfy** the needs of daily life, **as a function** of information, **as gratification** services, **as comfort** services, or **as services for satisfaction** of socio-cultural needs.

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CLS is important

CLS constitute an **important category of services** at a landscape scale, as they are able to express the "sense" of a place and the identity of a community interacting over time in a specific area.

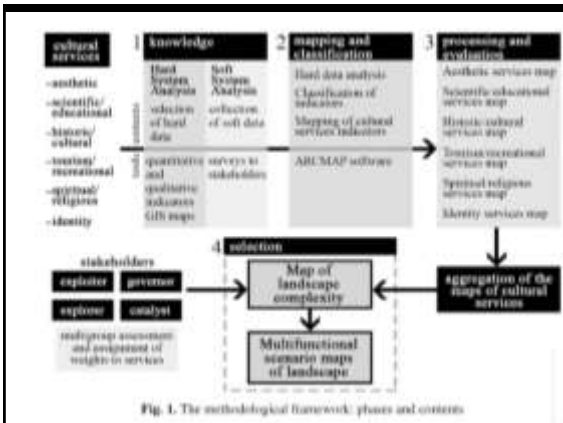
Physical, emotional and psychological benefits of cultural products are often only **implicitly expressed** through indirect manifestations.

CLS are treated as a residual category since they are difficult to assess --> Therefore **poorly** integrated in landscape management plans.

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(Dis)service	Definition
Spiritual services	Sites of spiritual, religious, or other forms of exceptional personal meaning
Educational values	Sites that widen knowledge about plant and animal species
Inspiration	Sites that stimulate new thoughts, ideas or creative expressions
Aesthetic values	Sites of particular beauty
Social relations	Sites serving as meeting points with friends
Sense of place	Sites that foster a sense of authentic human attachment, in German language commonly epitomized as <i>Heimat</i> ("home")
Cultural heritage values	Sites relevant to local history and culture
Recreation and ecotourism	Sites used for recreational activities (walking, dog walking, horse riding, swimming, gathering wild foods, angling, hunting, etc.)
Unpleasantness	Sites that are neglected, abused, damaged, or unpleasant
Scarciness	Sites that feel dangerous or threatening
Noisiness	Sites that are disturbingly noisy

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THE BEST PLANNED CITY is CLS



Table 1. Comparison of typologies of cultural services in different ecosystem service classification systems

Human Well-being Dimension	Cultural Service Classification				
	MEA (2000)	Research Ben et al. (2009)	de Groot et al. (2010)	TEEB (2010)	Hansen-Young and Potschke (2014)
Aesthetic values			Aesthetics	Aesthetics	Aesthetics
Recreation and motivation		Recreation (leisure and activities)	Recreation	Recreation and leisure	Recreation
Personal fulfillment	Educational values	Learning	Educational and leisure		Information and knowledge
	Knowledge (science, traditional and formal)				
	Spiritual and religious values	Spiritual	Spiritual and religious practices	Spiritual experience	Spiritual
	Inspiration	Inspiration	Inspiration for culture, art, and design	Inspiration for culture, art, and design	
Health		Escapes		Mental and physical health	
Social fulfillment	Social relations	Cults			Community activities
	Cultural heritage values	A sense of history and continuity	Cultural heritage and identity		Heritage
	Cultural diversity				
	Sense of place	A sense of place		Sense of place	

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Table 2. Landscape services classified based on ecosystem functional classification of Ecosystem Services (Hansen-Young and Potschke 2014). New proposed services are indicated in bold.

Theme	Class	Group
Provisioning	Nutrition	Terrestrial plant and animal foodstuffs Aquatic plant and animal foodstuffs Marine plant and animal foodstuffs Potable water
	Material	Biota materials Abiotic materials
	Energy	Renewable biofuels Renewable abiotic energy sources
	Daily activities	Place to live Place to work Place to move
	Regulation and Maintenance	Regulation of water Flow regulation Dilution and sequestration Air flow regulation Mass flow regulation Regulation of physical environment Atmospheric regulation Water quality regulation Regulation of biotic environment Ecosystem maintenance and habitat protection Pest and disease control Gene pool protection
Cultural and Social	Regulation of the spatial structure	Construction of space Biodiversity enhancement Provision of spatial complexity of the place
	Health	Mental health Physical health
	Employment	Protein supplement Active enjoyment Wax fishing Scholarly tourism

Table 3. Description of the new service proposed for classification of landscape services and their related concepts

Class	Events	Definition	Related Concepts
Daily Activities	Place to live	Provision of a space for residential location, i.e. home.	Carrying functions (de Groot 2000), home, Provision of space (Antrop et al. 2002)
	Place to work	Provision of open spaces or urbanized areas where people develop their job.	Carrying functions (de Groot 2000), Provision of space (Antrop et al. 2002)
	Place to move	Provision of spatial communication. It is not only related to transport activities but also to open spaces that allow people to communicate, social, or get access to other services.	Carrying functions (de Groot 2000), Provision of space (Antrop et al. 2002)
Regulation of the Spatial Structure	Connection of spaces	Ability to facilitate ecological, visual, or functional connectivity between different areas.	Connectivity (Forman 1995)
	Buffer/distracting use	Ability to separate incompatible uses and to buffer negative interactions from an ecological or geographical point of view.	Buffer zones (Forman 1995, Bounie and Malgouyres 2004)
Provision of spatial complexity		Related to the degree of diversity and richness of landscape elements that may improve possibilities for exploration, reflection, and visual absorption capacity.	Diversity (Forman and Godron 1996), heterogeneity (Forman 1995), and complexity (Kaplan and Kaplan 1989, Fry et al. 2009)
		Contribution to the enhancement of physical fitness by facilitating walking or other alternative uses of transportation and the practice of open air sports.	Physical health (TEEB 2010)
Health	Physical health		
	Mental health	Opportunities to relax, recover from stress, escape from noise, traffic, routine, and transience, to calm, or just fulfill our need of mental space.	Mental health (TEEB 2010), calm and escapism (Research Ben et al. 2009)
Employment	Protein supplement	Employment of attractive views, a quiet place to read a book, the possibility of seeing wildlife, or cultural heritage.	Aesthetic appreciation, values (MEA 2000, de Groot et al. 2010, Hansen-Young and Potschke 2014), TEEB 2010, and heritage (Hansen-Young and Potschke 2014, de Groot et al. 2010)
	Active enjoyment		Aesthetic appreciation, values (MEA 2000, de Groot et al. 2010, Hansen-Young and Potschke 2014), TEEB 2010, and heritage (Hansen-Young and Potschke 2014, de Groot et al. 2010)

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Personal Fulfillment	Way finding	Provision of cues that influence our spatial orientation, our sense of where we are, and how to get where we are going.	Harrison (Lynch 1990, Kaplan and Kaplan 1989)
	Scientific discovery	Source of research for a wide range of fields such as history, geography, botany, zoology, geology, or anthropology.	Information and knowledge, knowledge systems, and services (MEA 2000, de Groot et al. 2010, Hansen-Young and Potschke 2014)
	Educational tourism	Opportunities to learn about such fields as: flora and fauna species, past civilizations or traditional farming practices.	Education, educational values, and learning (MEA 2000, Research Ben et al. 2009, de Groot et al. 2010)
Spiritual experiences		Provision of sacred places for religious practices or rituals connected to legends or myths.	Spiritual experience and religious values or inspiration (MEA 2000, Research Ben et al. 2009, de Groot et al. 2010, Hansen-Young and Potschke 2014, TEEB 2010)
	Sources of inspiration	Inspiration for art, literature, music, architecture, cinema, or advertising.	Inspiration for culture, art, and design (MEA 2000, Research Ben et al. 2009, de Groot et al. 2010, TEEB 2010)
Social Fulfillment	Social interactions	Provision of social surroundings capable of generating social interactions of diverse nature and the workplace that provides opportunities for social encounters.	Community activities, social relations (MEA 2000, Hansen-Young and Potschke 2014)
	Place identity	Contribution to shaping of community identity by providing icons and characteristics to their values.	Sense of place, place identity, cultural identity, and cultural identity (MEA 2000, Research Ben et al. 2009, de Groot et al. 2010, TEEB 2014)
	Sense of continuity	Provision of stable reference points through the landscape.	Sense of history, sense of continuity (Research Ben et al. 2009)

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VALUING CLS – SPATIAL ANALYSIS

The methodology of analysis enables to elaborate all the information relating to landscape sensitivity and to summarize them into a synthetic index: **the Sensitivity Index (SI)**.

The **landscape sensitivity analysis** is carried out via a geographical multi-criteria decision making technique, by using the **Saaty's Hierarchical Analysis**. Evaluation criteria, attributes, sub-attributes valuation classes and scores are shown in detail in Table 1.

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Evaluation criteria	Criteria attributes	Sub-attributes	Valuation classes	Score
Landscape Sensitivity	Landscape Sensitivity	Landscape Sensitivity	High	10
			Medium	5
Landscape Sensitivity	Landscape Sensitivity	Landscape Sensitivity	Low	1
			Very Low	0.5
Landscape Sensitivity	Landscape Sensitivity	Landscape Sensitivity	Very High	15
			Very Low	0.5
Landscape Sensitivity	Landscape Sensitivity	Landscape Sensitivity	High	10
			Medium	5
Landscape Sensitivity	Landscape Sensitivity	Landscape Sensitivity	Low	1
			Very Low	0.5
Landscape Sensitivity	Landscape Sensitivity	Landscape Sensitivity	Very High	15
			Very Low	0.5

SDGs



MESH - SDGs

Mapping Ecosystem Services to Human well-being for the Sustainable Development Goals

<http://www.naturalcapitalproject.org/mesh/>

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TUGAS ANALISIS

1. Tentukan SDGs yang berkaitan dengan topik penelitian Anda.
2. Berikan penjelasan yang jelas, lugas dan argumentatif mengapa SDGs tersebut sangat relevan bagi penelitian Anda.



Jawaban ditulis pada blog
kaswanto.staff.ipb.ac.id
 paling lambat sebelum UTS minggu depan dimulai.

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TERIMA KASIH

Atas perhatian dan kerjasamanya dalam tatap muka kali ini

**SAMPAI JUMPA
 PADA KULIAH MINGGU DEPAN**

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