

Environmental Impact Assessment
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Lecture 47

EIA Method – Cultural Heritage

Welcome to the course Environmental Impact Assessment. And in today's session, we are going to cover EIA methods for cultural heritage.

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Coverage	
①	Change in Perspective
②	Purpose
③	Definition and Concept
④	Baseline Study
⑤	Impact Prediction and Evaluation

So accordingly, our coverage will include that we will look at what is the changing perspective, while we are dealing with cultural heritage. And how does that influence our middle impact assessment? Further, we will look at what is the purpose of undertaking an impact assessment related to cultural heritage.

And then we will look into some of the definitions and concepts so that we understand and come to a basic understanding to take over cultural impact assessment. Further, we will look into what procedure you need to follow to undertake a baseline study, and then we will look into impact prediction and evaluation of what impacts happen in this domain.

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Learning Outcomes

- 1 Discuss approach for Cultural Impact Assessment
- 2 Review the purpose of Cultural Impact Assessment
- 3 Define various key Terms and Concept
- 4 Review key aspect of Baseline Study and Methods
- 5 Review various Impact Prediction and Evaluation Methods

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So, accordingly, our learning outcomes will include that after completion of this particular session, you should be able to discuss various approaches that are adopted for cultural impact assessments was the change in the perspective. Now, you should be able to review the purpose of impact assessment about cultural heritage, then you should be able to define various key terms and concepts in this domain. Then you should be able to review key aspects of the baseline study and then the methods involved. Similarly, you should be able to review various impact prediction and evaluation methods.

So, a key reference for this is, again, the methods book by Terrence and Woods. So, looking at the perspective change, like what is happening in this domain, we see that there is there has been a shift in how we look at cultural heritage and how we have been assessing it. So initial concern was that the approach was mostly to look at the historical component and undertake physical assessments. But now we see that it has changed and it has become wider and it covers a lot of aspects related to cultural aspects, which includes not only the tangible aspects but also intangible aspects, the spiritual aspects, the traditional aspects, among many things.

So we also see that there is a strong link between cultural heritage and the other environmental components. So these all are also addressed. While we undertake cultural heritage assessments, and the strong link when we say between cultural heritage and environmental components we are we may also include biodiversity, we might look at the landscape, human health and well-being quality of life, and all those aspects. So while you are going through this, you might also realize that this domain overlaps a lot with other domains. So, you will see how it overlaps with biodiversity, how it overlaps with landscape, health aspects, and so on.

So, looking at the purpose, why we need to undertake this, and what the key objective, which we are addressing this is like by undertaking this impact assessment from the cultural heritage point of view.

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Historical and Physical Assessment

Purpose

- To provide information about the impacts of a development on cultural heritage.
- To make impact available to the decision-maker.
- To allow appropriate mitigation and investment.

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We try to provide information to the decision-makers about the kind of impact or range of impacts that this proposal would have on cultural heritage. We make this information available to the decision-makers and so that the decision-makers or the proper project proponents can facilitate mitigation measures, appropriate mitigation measures, and they would also undertake investment-related investments with it. So, we see that the IFC performance standard 8, so, describes the purpose why cultural heritage assessment has to be undertaken. So, the key purpose which I have seen mentioned is that one should look into.

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Cultural Heritage Assessment

Purpose

- To protect cultural heritage from the adverse impacts of project activities and support its preservation;
- To promote the equitable sharing of benefits from the use of cultural heritage.

(IFC Performance Standard 8)

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They try to protect cultural heritage from any kind of negative impact that might happen because of the project activity. And there is a need to support its preservation and then also promote equitable sharing of the benefits. So that everyone who has been using or connected with the resource gets the opportunity to share it equally whatever is coming from that, whatever linkages, or services one gets from that place. So, that is what purpose is defined by IFC.

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World Bank Environmental and Social Standard (ESS) 8

Purpose

- To address cultural heritage as an integral aspect of sustainable development;
- To promote meaningful consultant with stakeholders regarding cultural heritage.

(World Bank 2017)

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Further, we see that World Bank Environmental Social Standard ESS 8 also defines the purpose of why one needs to undertake cultural heritage. We see that the key purpose they identify is to address cultural heritage as an integral aspect of sustainable development. So, they highlight that cultural heritage is an integral part of sustainable development. The idea to undertake this is to promote meaningful engagements for the people who are involved, concerning whom we are talking about in this cultural heritage aspect.

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Definitions and Concepts

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So looking into some of the key definitions and concepts, we see that UNESCO defines what is cultural heritage, it says that.

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Cultural Heritage

Definitions

- Whole complex of distinctive spiritual, material, intellectual and emotional features that characterize a community, society or social group.

UNESCO (1982)

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It is a whole complex of distinctive spiritual, material, intellectual, and emotional features, that characterize a community, society, or social group. So, that is how it defines culture. All of these can also include arts, literature, more, and then the way of life, and the rights of the people. And then the value system, they carry the kind of traditions they have the kind of faith system they have belief they have. So all that becomes part of cultural heritage.

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Cultural Heritage

Definitions

“The present manifestation of the human past”.

- **Tangible heritage**, i.e. heritage that is physical, touchable, and perceptible;
- **Intangible**, i.e. heritage that is not physical or represented by a physical object, and is of a value not precisely measurable.

World Bank (1994)

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Further, we see another definition given by the World Bank, which says that cultural heritage is the current present manifestation of our human past. So it identifies both the elements that look at the tangible heritage as well as intangible heritage and when we try to understand what is tangible heritage, it is the heritage that is physical something that we can touch and can perceive it.

So that is the tangible heritage and something intangible heritage that is not physical or you can address represent that in a physical sense, but it has value and you cannot measure it with precision so that is intangible.

So, the World Bank defines both these kinds of tangible and intangible as cultural heritage. So, in this if you look at the tangibles, there are various kinds, which are formally in the legal system recognized a lot and have been traditionally recognized are the archaeological remains.

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Tangible Cultural Heritage

Definitions

Archaeological remains, both above and below ground: these include buried remains as well as standing buildings, and archaeological sites as well as individual objects and artefacts.

World Bank (1994)

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So, when you look at archaeological remains, they cover both the objects that are above or below the ground, which are buried and could be the remains or the standing buildings or could be archaeological sites, individual objects or it can be complex buildings. So, all these can be there.

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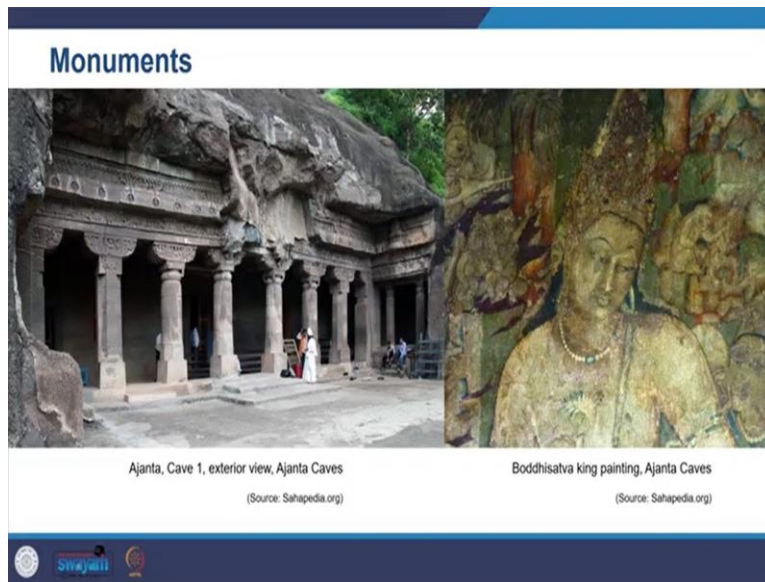
Archaeological Remains

Underground Archaeological Remains: Mohenjo Daro, Indus Valley
(Source: Gordovo, 2019)

Underwater Archaeological Remains: Phlegraean Fields, Italy
(Source: uw360 asia, 2019)

In the images, you can see examples of archaeological remains. Then, there is another term that is commonly used as a monument.

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So, when we say monuments, you would be referring to all the monumental sculptures, paintings, inscriptions, and cave dwellings.

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Then you have historical historic buildings and sites. So it can be individual or groups of different buildings, which are in terms of architecture and other things, which are identified here. There can be also all these buildings and sites can be in any kind of context, it can be in an urban or rural context.

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And then there is also a structure that is like it, it can have historic or architectural merit. This structure could be like roads, bridges, canals, or aqueducts, which have been studied in history, and then kind of irrigation systems, roads, ancient roads, and so on. So all these are considered. So, you also see the historical cultural landscape. So, you look at the work of human beings or the combined work of nature and humans. So, you see how those cultural landscapes are there.

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And these kinds of areas' cultural landscapes can be historic, it can be aesthetic or it can be ethnological, or anthropological it might be related to people's history and way of life. And so, this would include cultural landscape.

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Historic Artifacts – Movable Objects



Canopic Jars, Egyptian Artifacts
(Source: John Speight, 2022)



Indus Seal/Stamp, Indus Valley
(Source: Britannica, 2022)

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Then you might have movable objects as you have, you can have a history or like rare books, manuscripts, paintings and so on could be also there. And then even features of landscape and townscape can also be included in these things.

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Mexico City Declaration on Cultural Policies (UNESCO 1982)

What we mean by cultural rights?
Pre-Forum regional meetings
Dialogue on Cultural Rights and Human Development (2004)
Cultural Rights Projects
Documents
News
Links

Documents $\frac{1}{2}$ International instruments:

Mexico City Declaration on Cultural Policies, 1982

Mexico City Declaration on Cultural Policies, 1982

<https://culturalrights.net/en/documentos.php?c=18&p=190>

Summary

The Mexico City Declaration on Cultural Policies was adopted by UNESCO in 1982, during the Mandacuit World Conference on Cultural Policies. The objective of the conference and the Declaration was to define new lines of cultural cooperation and closer communication among people.

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So here you can also see that UNESCO also describes cultural heritage. So what do all things cultural heritage include, like the work of artists, architects, musicians, writers, and so on? Then you can also see the cultural heritage definition given by ICOMOS.

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• Cultural heritage is often expressed as either intangible or tangible cultural heritage.
(ICOMOS 2002).

• Cultural heritage is a group of resources inherited from the past which people identify, independently of ownership, as a reflection and expression of their constantly evolving values, beliefs, knowledge, and traditions. All aspects of the environment result from the interaction between people and places through time
(Council of Europe 2005)

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Where the cultural heritage is seen as an expression of ways of living developed by the community and passed on from generation to generation. And then you also see the definition here Council of Europe, which gives cultural heritage as a group of resources inherited from the past, which people identify independent slate of ownership as a reflection and expression of their constantly evolving values, fee, beliefs, knowledge and traditions. So these are all definition ranges of definitions you can look at.

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UNESCO's definition of Intangible Cultural Heritage:

- Oral traditions and expressions, including language as a vehicle of the intangible cultural heritage;
- Performing arts;
- Social practices, rituals and festive events;
- Knowledge and practices concerning nature and the universe (including traditional medicines);
- Traditional craftsmanship.

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When we look at these aspects so when we are looking at UNESCO's definition of intangible cultural heritage, we see that it includes like it takes care of oral tradition, like how people would have folk songs, how they would tell the stories, they would express themselves, and then looking at languages as a vehicle of intangible cultural heritage. They would also include the performing arts of the community, the kinds of practices, they

have rituals and festivals, and so on, which people celebrate, they all would be included under the intangible cultural heritage.

And then not only just that, but the knowledge and practices, which are related to how they interact with nature, and our surroundings. And then it will also include the craftsmanship, the skills, and the traditional knowledge, that they have. So that also you see in UNESCO provides that.

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The slide displays Article 8 of the Convention on Biological Diversity (CBD), titled "In-situ Conservation". On the left side, there is the logo of the United Nations and the text "CONVENTION ON BIOLOGICAL DIVERSITY" and "UNITED NATIONS 1992". A URL <https://www.cbd.int/doc/legal/cbd-en.pdf> is provided at the bottom left. The main text of Article 8 states: "Each Contracting Party shall, as far as possible and as appropriate:" followed by a list of sub-paragraphs (a) through (j) detailing measures for in-situ conservation, such as establishing protected areas, developing guidelines, regulating biological resources, promoting ecosystem protection, and respecting indigenous knowledge.

And of the key areas we see is the convention of biological diversity. It is important to note that even biodiversity and the various components of biodiversity also become very important because of indigenous knowledge and culture. So the convention of biological diversity of 1992 highlights that. So you could see here about indigenous communities, what are the other intangible knowledge, intangible aspects of culture, which comes here, so this particular convention further highlights article 8J.

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The slide is titled "Role of Biological Resources in Cultural Heritage". It contains the following text: "Each Contracting Party shall, as far as possible and as appropriate: Subject to its national legislation, respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices - Article 8(j). Convention on Biological Diversity 1992." At the bottom, it cites "Methods of Environmental and Social Impact Assessment, Cultural heritage, Amanda Chisholm and Julio Jesus, 2018, Pg 637".

To protect the knowledge and practice of indigenous and local communities. So it is emphasized that it is important that it is protected is conserved for the sake of sustainable development.

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**CONVENTION
ON BIOLOGICAL DIVERSITY**

Article 10. Sustainable Use of Components of Biological Diversity

Each Contracting Party shall, as far as possible and as appropriate:

- (a) Integrate consideration of the conservation and sustainable use of biological resources into rational decision-making;
- (b) Adopt measures relating to the use of biological resources to avoid or minimize adverse impacts on biological diversity;
- (c) Protect and encourage customary use of biological resources in accordance with traditional cultural practices that are compatible with conservation or sustainable use requirements;
- (d) Support local populations to develop and implement remedial action in degraded areas where biological diversity has been reduced; and
- (e) Encourage cooperation between its governmental authorities and its private sector in developing methods for sustainable use of biological resources.

**UNITED NATIONS
1992**

<https://www.cbd.int/doc/legal/cbd-en.pdf>

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Similarly, you see article 10, which again, emphasizes the need to protect and encourage the customary use of biological resources as per the traditional cultural practices. And then it also highlights the art and emphasizes the equitable sharing and fair sharing of all this knowledge and resources. So if you look at these, they are special concerns, special attention given to the indigenous people here, Aborigines here.

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**IFC
International
Finance
Corporation**

**International Finance Corporation's
Guidance Note 6:
Biodiversity Conservation and Sustainable
Management of Living Natural Resources**

January 1, 2012
revised June 27, 2019

**IFC
Guidance Note 6
Biodiversity Conservation and Sustainable Management of Living
Natural Resources**
June 27, 2019

Guidance Note 6 corresponds to Performance Standard 6. Please also refer to Performance Standards 1-5 and 7-8 as well as their corresponding Guidance Notes for additional information.

Introduction

1. Performance Standard 6 recognizes that protecting and conserving biodiversity, promoting sustainable resource use, and managing living natural resources are fundamental to sustainable development. The requirements set out in this Performance Standard have been guided by the Convention on Biological Diversity, which defines biodiversity as "the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic organisms and the ecological complexes of which they are a part. This includes diversity within species, between species, and of ecosystems."

2. Biodiversity conservation and the benefits that people deriving sustainable, viable food, ecosystem, biological services are recognized as part of (a) promoting services, and (b) the protected areas that have ecological, or historical, scientific, or other benefits, and (c) the ecological complex of which they are a part, and (d) supporting activities, and (e) the management of living natural resources.

3. Biodiversity services related to forests are often undervalued by markets. Hence an understanding of biodiversity services is essential to the delivery of ecosystem services. This Performance Standard addresses how clients can responsibly manage and mitigate impacts on biodiversity and ecosystem services through the project lifecycle.

Guidance to clients (Performance Standard 6) has been revised since 2012. Revised parts of Guidance Note 6 include: (a) updated definitions of biodiversity, (b) updated definitions of biodiversity services, (c) updated definitions of ecosystem services, (d) updated definitions of biodiversity services, (e) updated definitions of ecosystem services, (f) updated definitions of ecosystem services, (g) updated definitions of ecosystem services, (h) updated definitions of ecosystem services, (i) updated definitions of ecosystem services, (j) updated definitions of ecosystem services, (k) updated definitions of ecosystem services, (l) updated definitions of ecosystem services, (m) updated definitions of ecosystem services, (n) updated definitions of ecosystem services, (o) updated definitions of ecosystem services, (p) updated definitions of ecosystem services, (q) updated definitions of ecosystem services, (r) updated definitions of ecosystem services, (s) updated definitions of ecosystem services, (t) updated definitions of ecosystem services, (u) updated definitions of ecosystem services, (v) updated definitions of ecosystem services, (w) updated definitions of ecosystem services, (x) updated definitions of ecosystem services, (y) updated definitions of ecosystem services, (z) updated definitions of ecosystem services.

6061 The requirements set out in Performance Standard 6 and the description of those requirements provided in the Guidance Note are guided by the Convention on Biological Diversity (CBD), including its Strategic Plan for Biodiversity 2011-2020 and the Aichi Biodiversity Targets.¹⁰ Its endorsement by the Sustainable Development Program of the G20, including the use of such indicators in the G20 and the Sustainable Development Goals, and the fact that it is a key element of the global biodiversity framework, are also taken into account. The requirements set out in Performance Standard 6 are also informed by the 2012-2020 Strategic Plan for Biodiversity, including the Aichi Biodiversity Targets, and the 2019-2030 Strategic Plan for Biodiversity, including the Kunming-Montreal Biodiversity Framework and the 2030 Biodiversity Targets.

6062 The addition of ecosystem services provided in paragraph 2 of Performance Standard 6 is limited to the following categories: (a) ecosystem services, (b) ecosystem services, (c) ecosystem services, (d) ecosystem services, (e) ecosystem services, (f) ecosystem services, (g) ecosystem services, (h) ecosystem services, (i) ecosystem services, (j) ecosystem services, (k) ecosystem services, (l) ecosystem services, (m) ecosystem services, (n) ecosystem services, (o) ecosystem services, (p) ecosystem services, (q) ecosystem services, (r) ecosystem services, (s) ecosystem services, (t) ecosystem services, (u) ecosystem services, (v) ecosystem services, (w) ecosystem services, (x) ecosystem services, (y) ecosystem services, (z) ecosystem services.

¹⁰ Biodiversity: The Convention on Biological Diversity, 1992.
¹¹ Convention on Biological Diversity (CBD), 1992.
¹² Sustainable Development Goals, 2015.
¹³ Kunming-Montreal Biodiversity Framework, 2022.

https://www.ifc.org/wps/wcm/connect/5e0f350c-0a94-4290-a0f8-4490b619e245/GN6_E_n019h_June-27-2019.pdf?MOD=AJPER&ESMVD=mRQ2va

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GUIDANCE NOTE FOR BORROWERS	Environmental & Social Framework for IPF Operations	ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources
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<https://documents1.worldbank.org/curated/en/924371530217086173/ESF-Guidance-Note-6-Biodiversity-Conservation-English.pdf>

And you see that even IFC performance standards six recognize the cultural value of biodiversity. So you can see here IFC six I have also given you the link to download as well as you can see World Bank. ESS six also recognizes the cultural value of biodiversity. So the link is provided so that you can look at the framework that it provides to review it. So, here now, we have seen various key concepts and definitions and you will see that your EIA needs to take care of both the components, the tangible components and intangible components in the assessment process. So, now moving on we look at the scoping stage of EIA about cultural study. So, what do we do at the scoping stage?

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Scope of Cultural Study

- **Temporal scope** - Past, present and future.
- **Geographical scope** - terrestrial (including freshwater), coastal and marine environments.

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So, at the scoping stage, here, you have a concern about what period you are going to study like, in terms of what will be the scope for time, what stretch you should study. So, you would be looking at the past present, and future, then you have to decide how much past present, and future going to look at and then you also need to decide upon what will be the geography or the scope of your study. So, will you be including the terrestrial area, coastal area, or marine environment, all these become a part of it, but you need to determine what will be

your geographical scope. And when you look at different communities on which you will be studying or you will be emphasizing. So, you would be also deciding on which will be the affected communities.

So, now, we see that there is increasing emphasis on the integration of EIA, and then the indigenous people's interest. So, more and more emphasis is placed on that. The key reference to support this emphasis is that you can see the UN Declaration on Rights of Indigenous People Agenda 21 You also see the Convention on Biological Diversity and you also see accurate con voluntary guidelines. So, many of these guidelines we have already seen when we had covered the legislation part about this if you may recollect. And slightly giving a minute on like, which areas to be concerned for Aboriginals and indigenous culture.

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Emphases Points of Aboriginal and Indigenous Culture

- Aboriginal traditional knowledge;
- Sacred sites, important both in themselves and through the traditional rituals and practices that they support;
- Lands and waters traditionally occupied or used by indigenous and local communities.
- Participation, free prior and informed consent of their members before commencement.
- Funding for indigenous peoples participation (some countries provide).
- Key concern – community ownership, protection and control of traditional knowledge.

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So, the key points are that you look at the traditional knowledge of the people you look at sacred sites, which are important in like in terms of rituals as well as practices they support. Then you look at the land and water traditionally occupied by them. And then you also look at how the indigenous people have engaged in the entire process, how the participation and the key elements of their participation in a very free environment, in the very informed environment, and without the prior consent of the people. And then there now we also see this provision for funding for indigenous peoples' participation in many of the countries but still, there have been key concerns about indigenous communities, ownership, protection, and control of traditional knowledge. So the key concern, so that all needs to be taken care of.

So, that is what you look at when you have affected people communities when you study so indigenous people become one important area to look into. Then when you are further looking into the scoping, you also see various settings of cultural heritage.

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Setting of a Cultural Heritage

- Surroundings in which a place is experienced, while embracing an understanding of perceptible evidence of the past in the present landscape.
- Setting definition by ICOMOS (2005) :- "The immediate and extended environment that is part of, or contributes to, its significance and distinctive character".

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So what setting of cultural heritage means is the surroundings in which the place is experienced, how is the place where you get the sense of place, and you see how you connect to that place. So that is about setting off cultural heritage. The definition is given by ICOMOS, about the setting of the cultural heritage, that is the immediate and extended environment that is part of or contributes to its significance and distinctive character. So what makes it the care what the setting is the cultural heritage of that place.

So, for this purpose, when you need to analyze such a complex subject like the setting of cultural heritage, you need to look at your world because it is complex in needs like a multidisciplinary approach. You would also need inputs from the experts and the local community. You will also need to look into existing information and you also need to collect lots of data. So all Desktop studies secondary studies and services have to be taken.

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Consideration for Understanding and Analyzing Setting one needs:

- The use of a multidisciplinary approach;
- Seeking the views of both experts and the local community;
- Review of existing information, where available, including: formal records;
- Oral history and traditional knowledge;
- Artistic and literary descriptions.

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And you might also need to look at different oral history traditional knowledge. And also look at various descriptions which are there in artistic and literature, resources as well. So that would be required while you

have to analyze the setting. So, we will also look at another key landscape that we identify as a historic and cultural landscape. So, for these, the key references are UNESCO World Heritage Committee guidelines. And then you also see the Council of Europe landscape convention, then you also see the World Heritage Convention, they also identify and recognize many of the protected cultural landscapes.

So, you see that historic landscapes are also defined mostly it is defined by all national at the national level. So India also does that from the point of view of conservation. So one needs to look at each country's legislation and the acts that are there.

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So you can see here, the definition of landscape as provided by UNESCO. So UNESCO defines landscape as an area as perceived by people, so how people perceive it, what whose character is the result. So whatever is there is a character as a result and character of the action and interaction of nature and then human factors. So that is what makes it the landscape, what it is. And you have a lot of tools to integrate policies and practices for the conservation of these built environments that can be done here. And that can be done in the case of urban and rural contexts, as well. We also see that historic landscapes are important, you also find another term historic seascapes, which is also considered as important.

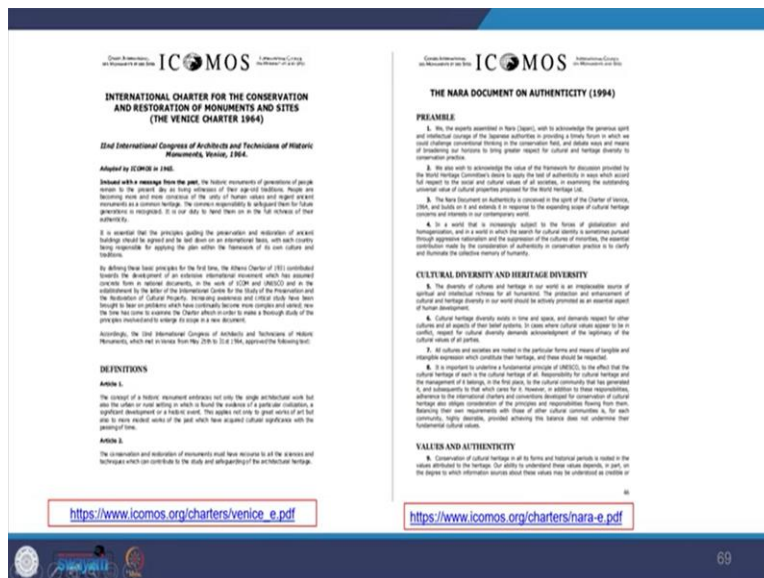
These are such sites of fishing, transport, and trade. And then you can also see sites where the shipwrecks and other things that they are so that are also considered historic seascapes.

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So there are others whenever you deal with the culture, there is also concern about authenticity and integrity. So for this, to understand how technically we define authenticity and integrity, you have a key reference, which is an international declaration at the conference in 1964.

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That is the key reference here. And you find another key reference, which is Nara, Japan, which produced the document NARA document on authenticity. So these are key references, and I have given you the link to the NARA document on authenticity. So, you can see your values and authenticity, which gives you an understanding and the significance of that. So, what are the real conditions under which authenticity is dependent?

So, you see that authenticity depends on the type of cultural heritage, and it is in what cultural context it is. So, when you are assessing it, you need to assess the authenticity of the cultural elements from the perspective of

the property and in its context, so that you need to understand how authentic is the cultural context which you are talking about.

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Various Factors of Authenticity

- Form and design;
- Materials and substance;
- Use and function;
- Traditions, techniques and management systems;
- Location and setting;
- Language, and other forms of intangible heritage;
- Spirit and feeling;
- Other internal and external factors.

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So, there are various factors of authenticity. So such as like form and design, what form and design is, is there about that the character of that particular cultural heritage you are looking at. And then what is the material in substance what kind of use it is put into the traditional techniques, how it is managed, and where is the entire setting of it? And how what kind of language and intangible heritage is there, the kind of feeling you get from the place, and what are the different factors that play together in that? So these all need to be reviewed, or like understood when you are taking care of authenticity.

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Consideration for Assessing Integrity of World Heritage Properties (by World Heritage Operational Guidelines-2013)

Extent to which the property:

- Includes all elements necessary to express its Outstanding Universal Value [OUV];
- Is of adequate size to ensure the complete representation of the features and processes which convey the property's significance;
- Suffers from adverse effects of development and/or neglect.

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There is another term that you look at is integrity. So, authenticity is one thing and then when you deal with integrity is integrity, which measures how everything together works as a complete structure. So, various

elements, the biodiversity, the culture, the tradition, and how come together, and maintain the integrity as an act as complete one. So the measure of wholeness and intactness of the cultural heritage and its attributes. So, you might think of any particular traditional city where you have like, the city offers certain skills and crafts as well as the rituals of the people also create and complete environment. So that would be called integrity.

So, while you are looking at the aspect of integrity, there are other considerations, that you get from World Heritage properties, guides, and world heritage operational guidelines, so how do you assess the integrity of a place? So while you are assessing the integrity of a place, you would be looking at the property what you would be looking at. You would be looking at like, what are the various necessary elements, in that particular context like you would be identifying the outstanding universal value of those places.

And then what size it is its considerable size or not, and whether it is giving a complete picture or not. And then what kind of adverse effects can happen to this?

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Purpose of Integrity

- To maintain physical fabric of the property and/or its significant features in good condition.
- Protection of key elements to retain its total value.
- Maintenance of Relationships and dynamic functions of the property.

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And then why we look at integrity, why integrity is important is to maintain the entire physical fabric of that particular property. And then it is important that you also look at the protection of all the key elements in that and how that relationship is maintained. So why do we assess integrity it works as a complete whole, so you must maintain that physical fabric, you maintain those key elements and you also maintain the interrelationship between them. So, there is a difference between Integrity and Authenticity, which we talked about.

So, authenticity is where all this kind of like you see that whatever things are coming are how much original attributes are there or not. Whereas integrity is looked at as how, together, these things are working as one complete straw element or a component, there is another term which see is the critical cultural resources.

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Critical Cultural Resources

- It includes natural areas with cultural and/or spiritual value such as sacred groves, sacred bodies of water and waterways, sacred trees, and sacred rocks.
- Natural areas with cultural value are equivalent to priority ecosystem cultural services as defined in Performance Standard 6.

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So, this includes natural areas with cultural or spiritual value, and these could be sacred groves sacred bodies of water, waterways, sacred trees, and sacred rocks. And then they can be natural areas with cultural values and all these equivalent priority ecosystem services as well. So, you can refer to the performance standard six for this purpose.

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Performance Standard 7 Indigenous Peoples

January 2012

Objective of Performance Standard on Environmental and Social Requirements

1. IFC's Sustainability Framework articulates the Corporation's strategic commitment to sustainable development and is an integral part of IFC's overall approach to risk management. The Sustainability Framework comprises IFC's Policy and Performance Standards on Environmental and Social Sustainability, and IFC's Access to Information Policy. The Policy on Environmental and Social Sustainability describes IFC's commitments, roles and responsibilities related to environmental and social sustainability. IFC's Access to Information Policy, which IFC's commitment to transparency and good governance is its foundation, and which the Corporation's voluntary disclosure obligations regarding to treatment of project impacts. The Performance Standards are related to the standards, providing guidance on how to identify risks and impacts, and are designed to help avoid, mitigate, and manage risks and impacts as a part of doing business in a sustainable way, including stakeholder engagement and disclosure obligations of the client in relation to project activities. In the event of a client's non-compliance involving project and corporate finance provided through financial intermediaries, IFC expects its clients to apply the Performance Standards to manage environmental and social risks and impacts on their development opportunities, and without IFC's use the Sustainability Framework along with other strategies, actions and initiatives to meet the business objectives of the Corporation in order to achieve its overall development objectives. The Performance Standards may also be applied to other financial institutions.

2. Together, the eight Performance Standards comprise standards that the client "is to meet" throughout the life of an investment by IFC.

Performance Standard 1	Assessment and Management of Environmental and Social Risks and Impacts
Performance Standard 2	Labour and Working Conditions
Performance Standard 3	Resource Efficiency and Pollution Prevention
Performance Standard 4	Community Health, Safety, and Security
Performance Standard 5	Land Acquisition and Involvement/Resettlement
Performance Standard 6	Ecological Conservation and Sustainable Management of Living Natural Resources
Performance Standard 7	Indigenous Peoples
Performance Standard 8	Cultural Heritage

3. Performance Standard 7 establishes the framework of all project-level assessment to identify the environmental and social risks, needs, and opportunities of projects. It affects community engagement through disclosure of project-related information and consultation with local communities in matters that directly affect them, and (2) the client's management of environmental and social performance throughout the life of the project. Performance Standard 7 through 8 establish objectives and requirements to avoid, minimize, and where needed, mitigate, monitor, and compensate for risks and impacts to indigenous, affected communities and the environment. While all assessed environmental and social risks and potential impacts should be considered in part of the assessment, Performance Standard 7 through 8 establish project environmental and social risks and impacts that require particular attention. Where environmental or social risks and impacts

Critical Cultural Heritage

16. Where a project may significantly impact on critical cultural heritage¹³ that is essential to the identity and/or cultural, ceremonial, or spiritual aspects of Indigenous Peoples lives, priority will be given to the avoidance of such impacts. Where significant project impacts on critical cultural heritage are unavoidable, the client will obtain the FPIC of the Affected Communities of Indigenous Peoples.

17. Where a project proposes to use the cultural heritage including knowledge, innovations, or practices of Indigenous Peoples for commercial purposes, the client will inform the Affected Communities of Indigenous Peoples of (i) their rights under national law; (ii) the scope and nature of the proposed commercial development; (iii) the potential consequences of such development; and (iv) obtain their FPIC. The client will also ensure fair and equitable sharing of benefits from commercialization of such knowledge, innovation, or practice, consistent with the customs and traditions of the Indigenous Peoples.

https://www.ifc.org/wps/wcm/connect/3274d05-7597-4cd3-83d9-2aca293e69ab/PS7_English_2012.pdf?MOD=AJPERES&CVID=iVQID

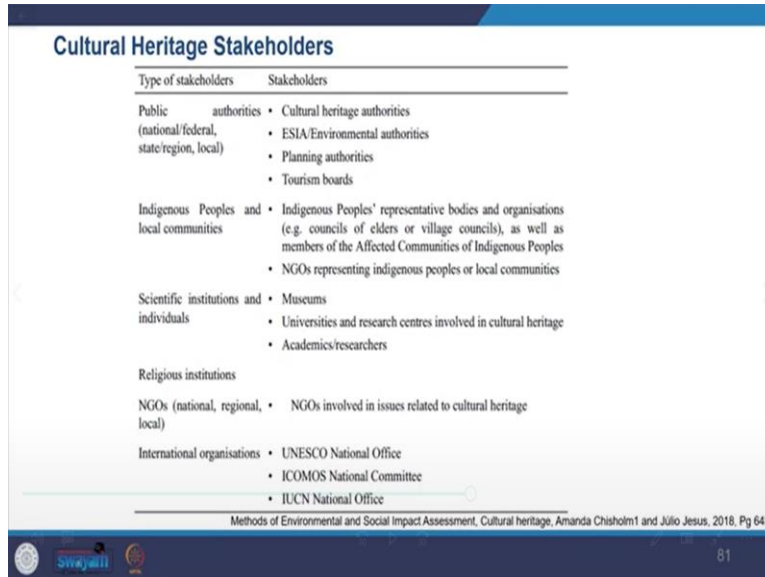
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So, you see the critical cultural heritage, this performance standard emphasizes that wherever the project may impact the critical cultural heritage, it is a, it is required that it has to be avoided, such impact should not happen, and if it is unavoidable, then the affected community peoples you need to have consent of that. And wherever the project intends to use the heritage knowledge or innovations of the people they need to inform the affected communities of the indigenous people. So you see how, these performances and standards aid, the

usage of critical, critical cultural heritage. And then it is also seen that it also highlights the participation of the people involved in stakeholder engagement.

And it is, again, like you have been seeing, it is always suggested that people should be engaged from the beginning of the project. So that adds value and it narrows down the later part of the engagement because it is very inclusive and takes care of lots of components.

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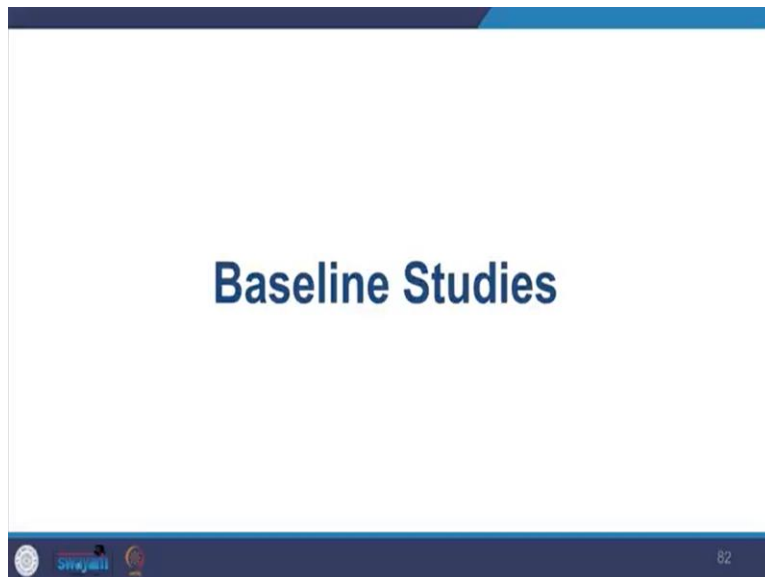


Type of stakeholders	Stakeholders
Public authorities (national/federal, state/region, local)	<ul style="list-style-type: none">• Cultural heritage authorities• ESIA/Environmental authorities• Planning authorities• Tourism boards
Indigenous Peoples and local communities	<ul style="list-style-type: none">• Indigenous Peoples' representative bodies and organisations (e.g. councils of elders or village councils), as well as members of the Affected Communities of Indigenous Peoples• NGOs representing indigenous peoples or local communities
Scientific institutions and individuals	<ul style="list-style-type: none">• Museums• Universities and research centres involved in cultural heritage• Academics/researchers
Religious institutions	
NGOs (national, regional, local)	<ul style="list-style-type: none">• NGOs involved in issues related to cultural heritage
International organisations	<ul style="list-style-type: none">• UNESCO National Office• ICOMOS National Committee• IUCN National Office

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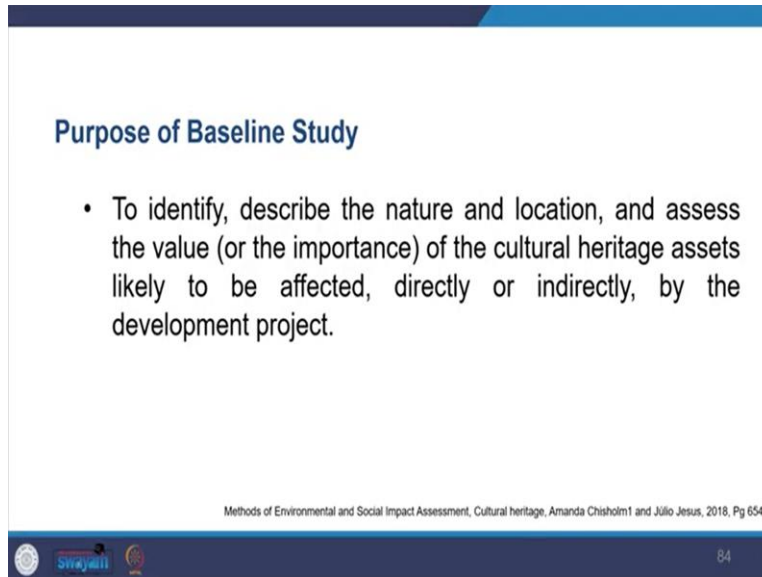
So if you see the range of stakeholders when you are studying the cultural heritage, then you can have public authorities, you can have indigenous people and local communities, then you can have scientific institutions and individuals who are involved. You can also have religious institutions, NGOs, and also international organizations. And then you can also see the examples related to all these stakeholders' range of stakeholders. So this was about the scoping part.

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Now we will look at the baseline studies and how you undertake baseline studies concerning cultural heritage. So looking at what is the purpose of the baseline study.

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Purpose of Baseline Study

- To identify, describe the nature and location, and assess the value (or the importance) of the cultural heritage assets likely to be affected, directly or indirectly, by the development project.

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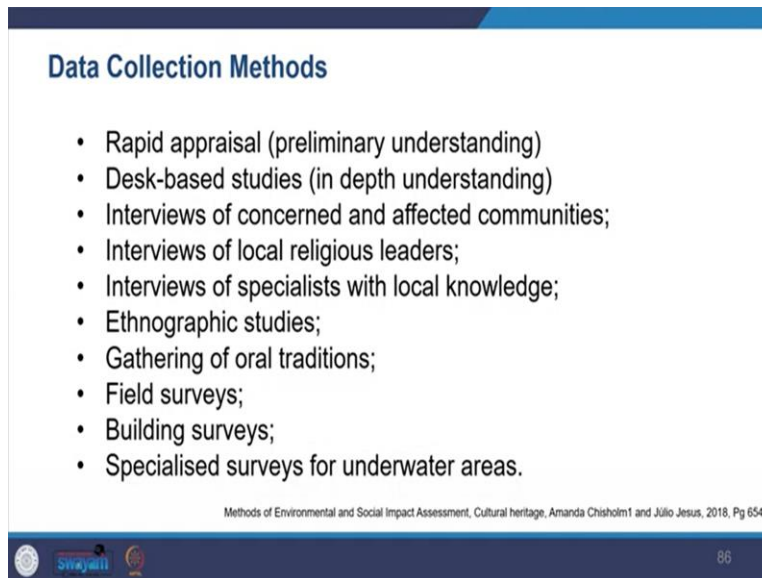
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So the key idea why we undertake baseline study in this domain is that we want to identify or and we want to describe the kind of culture the nature and where it is located. And then also look at the value associated with it and the importance that particular culture has to the people who will be affected. Then you also need to comply with the terms of reference for EIA what you need to undertake so you will also look at that and you also need to see in whichever country you are working you need to align it with the regulations.

Then you also need to decide how you are going to manage the future study how you are going to plan your work and how you are going to manage all the data. And then it is important to understand such work will need a lot of coordination between all the team members community and then you would need like if you see this this particular domain will need to work with the social team of social assessment.

Then the resettlement team also needs to work with the indigenous people aboriginals who have expertise in that and also landscape and biodiversity. So it will be a lot of overlapping will happen so you would need to integrate with that.

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Data Collection Methods

- Rapid appraisal (preliminary understanding)
- Desk-based studies (in depth understanding)
- Interviews of concerned and affected communities;
- Interviews of local religious leaders;
- Interviews of specialists with local knowledge;
- Ethnographic studies;
- Gathering of oral traditions;
- Field surveys;
- Building surveys;
- Specialised surveys for underwater areas.

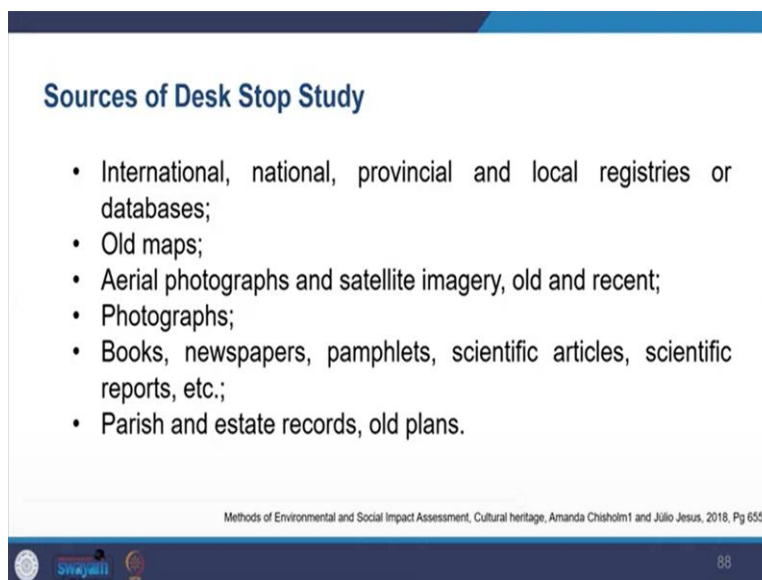
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Then we look at some of the data collection methods for your baseline study. So you have you can take rapid appraisal so this rapid appraisal helps you for primary understanding and it is fast to undertake so you get a sense of the place and you try to identify the key elements. Then you can undertake desk-based study also which helps you to have a better in-depth understanding. And then you can also interview the people who will be affected by the project. And then also you can connect with religious leaders in the place and then also look at people who are specialists in local knowledge.

You can also look at the ethnographic studies related to your study area and you need to try to gather oral traditions and undertake field surveys then you also need to design surveys. And then you might need to have a very specialized survey if you need to do underwater studies also. So these are different data collection methods.

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Sources of Desk Stop Study

- International, national, provincial and local registries or databases;
- Old maps;
- Aerial photographs and satellite imagery, old and recent;
- Photographs;
- Books, newspapers, pamphlets, scientific articles, scientific reports, etc.;
- Parish and estate records, old plans.

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And if you look at it like when you need to undertake desk stop study like we have been seeing you can use all forms of secondary data like international national and all kinds of databases. You can look at old maps aerial photography is also quite a lot used photography is used and then newspaper all these scientific articles are very handy. And then you can look at the library's old maps and all this. So aerial photographs and satellite imagery are now becoming very important sources of data.

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Examples of Sources of Information


National/Provincial level

- Cultural heritage authorities
- Cultural heritage registers
- Universities and colleges
- Public and private cultural heritage related institutions Religious bodies
- Local NGOs active in cultural heritage and socio-cultural affairs

Community and individual level

- Community leaders and individuals Schools
- Religious leaders
- Private scholars
- Cultural heritage specialists
- Historians
- Archaeologists
- Cultural anthropologists

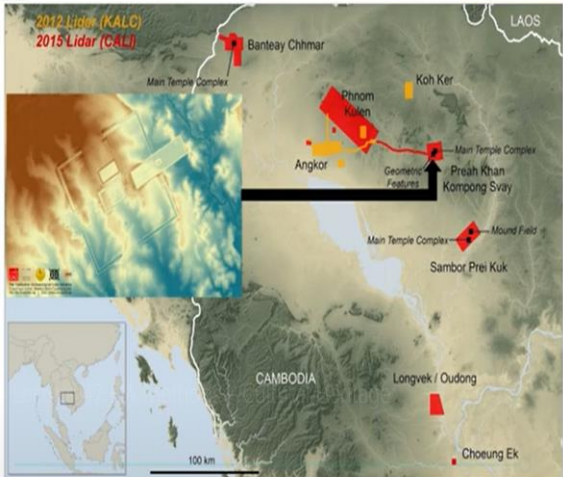
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So if you look at this example here of source of information at the national level you can have all the authorities cultural related ministries and departments and museums and universities which work. And then at the community and individual levels, you can have schools religious leaders, and so on.

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Discovery of old cities in the Cambodian jungle by the Cambodian Archaeological Lidar Initiative (CALI 2015).



Source: iIconsevation, Barbara Borghese, 2016



And then here is how the technology has been used you can see the Lidar has been used for discovering cities and how to work under shallow waters and also to find out to delve more into it. Then you can also see some field survey techniques.

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Field Survey Techniques

Geophysical Techniques
Purpose – changes in characteristics and properties of ground.

- **Resistivity survey** - measures ground resistance to the progress of an electrical current – change in resistance indicate nature and location of buried features.
- **Magnetometer survey** - measures the magnetic properties of the soil and is used to identify locations of past human activity (period of burning / hunting).

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So you have a geophysical technique so the purpose is to identify the changes in the character and property of ground which can happen. So you have a resistivity survey that measures ground resistance to the progress of an electrical current. So how the electrical current will move across the ground you keep checking. And then when there is a change in how the electrical current moves that will indicate that there is something underneath you will also be able to identify what is there inside and what is the nature of buried features there so that is the resist resistivity survey.

Then you also have a magnetometer survey which also measures the magnetic properties of the soil and is used to identify the location of past human activity like burning hunting and so on.

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Field Survey Techniques

Field walking – known as surface artefact collection (confined to ploughed fields).

- Process allows to collect and plot material on their location.
- Field walking is rapid and economical.
- It has its own limitation.

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Then you also have field walking which we had also seen before so where as you walk along the plowed field you try to collect the artifact and then in that process you collect and plot material on their location. So you create maps and then the rate at which you find those elements. So this field walking is said to be very it helps it is rapid it helps you to understand things rapidly and it is also said to be very economical. But all these techniques also have its limitation I am not going to get into them.

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Field Survey Techniques

Auguring

- Most frequently used in river valley where deposition has covered the land surface.
- In the process soil sequence is recorded through auger holes and maps are prepared.

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The other technique you see is Auguring and this is also especially used in river valleys. So wherever there is a deposition and there is a covered with the land surface is covered there is some kind of subtle cover masking of the element which you want to undertake. So in this process what you do is process soil in a very sequential manner and then you record what you find. So you create like auger holes and you prepare the maps for that.

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Field Survey Techniques

Test Pitting

- Hand excavation by creating small pits of planned sizes.
- Test pits can be of different sizes as per the requirements.
- Analysis of different artefact recovery rate over an area indicates date, location and extend of surveyed site.
- Machine trenching can also be done.

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Further another method is testing pits so you can do hand excavation and you can create small pits of different varying sizes and then as per your requirement. And then you can analyze how you are identifying artifacts and what is the recovery rate. So you can also have machine trenching can also be done rather than just hand.

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Field Survey Techniques

Earthwork Surveys

- Analytical earthwork survey provides useful information on the form and condition of earthworks;
- It is also extremely good at identifying the chronological relationships of the elements of the landscape to one another.
- This is the essence of analytical earthwork survey – using the measuring process to examine slopes and other features, their forms and patterns, and to examine relationships and compare them with analogous examples.

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There is another technique which is an earthwork survey so you also have an earthworks survey which also gives you information useful information like trying to understand what the form is and the condition of the earth. It helps you to see how all the factors are working like how is the slope, and how is the gradient, and then, and then you also look at the relationship here. So this helps you to examine all the aspects of the profile which is there.

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Historic England

Understanding the Archaeology of Landscapes

A Guide to Good Recording Practice (Second Edition)

4 Analytical Earthwork Survey

Archaeology of earthwork and landscape survey, however achieved, is a multi-disciplinary and interdisciplinary activity. Survey plans and diagrams must depict matters of interpretation correctly and survey reports must include interpretations, not just descriptions. The process of archaeological field surveying and data production, at any scale, can be broken down into three steps:

1. Reconnaissance
2. Observation and Measurement
3. Depiction

4.1 Reconnaissance

Reconnaissance ('rec-oh') is the process of preliminary inspection and is critical to the success and cost effectiveness of any survey. Through reconnaissance you should be able to bring out key identifying features at an early stage and allow time to be spent on those emerging in surprise later. This spent on reconnaissance is well worth, although it should be proportionate to the size and extent of the survey.

Although reconnaissance brings within the visible range of a survey, before entering into the field the fieldworker (or a colleague) should undertake some preliminary 'desk-top' research, so as to get the best value from the time spent on the reconnaissance. Research into the history of the fieldworker can assist the quality of information he or she can gather and the ability to spot or recognise in the field. Reconnaissance can also be targeted at specific sites or questions, as necessary.

Perceptions of a site or landscape acquired through the desk-top assessment are often refined, altered and the ground evidence is assessed. During the reconnaissance walk the fieldworker should address the site from three different perspectives:

1. Archaeological assessment
2. Survey strategy
3. Site layout

4.1.1 Archaeological assessment

The objective of the reconnaissance might be to identify the archaeological significance of a site or landscape. This may mean identification of previously unrecognised earthworks, or interpretation of what features are confirmation of existing knowledge. It is not, however, necessary to make detailed observations about archaeological interpretation at this stage. Understanding of the archaeological context may only come during, and because of, the survey.

<https://historicalengland.org.uk/images-books/publications/understanding-archaeology-of-landscapes/heart142-understanding-archaeology-of-landscapes/>

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So here I have given you the link to one of the detailed earthworks survey techniques so you can look at that.

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Finds or Recovered Artifacts

Archaeological artifacts recovered from Khirsara, Indus Valley Civilization.

Source: Pokharia et al., 2017

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And there is another one that is like find so wherever whatever artifacts you recover so that is also used as a technique. But you need to have some legal permissions you would need what kind of remains you find under the ground or the sea.

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Field Survey Techniques

Drones

- It "provide a useful low-level aerial platform for recording historic buildings, monuments, archaeological sites and landscapes.
- They can carry a wide variety of sensors including cameras, multi/hyperspectral imaging units, and even laser scanners".

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So we also see that drones are also used a lot these days to understand the historical structure. So they are providing like aerial platform where you can record historic buildings monuments archaeological sites and landscapes so that usage has also increased.

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Field Survey Techniques

Underwater Surveys

- Used for survey in rivers, lakes or the marine environment.
- Multi-beam sonar
- Magnetometry
- Sub-bottom profiling with sonar.
- By observations by divers (in shallow waters)
- By remotely operated vehicles (ROVs).

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And further you can also undertake underwater service and you can have done under river lakes or marine environments. Whenever you have to undertake an underwater survey you need to have very specialized techniques like multi-beam sonar and then you also have magnetometry sub-bottom profiling with sonar. So all these tools and techniques that you use have to be accompanied by the actual diversity in observations that has to be supplemented by whatever has been done with the machine. Then you also have remotely operated vehicles ROVs which are also used.

However, you have to have certain you have to look into the healthcare concerns that are involved in the process. This kind of technique can have very intensive data so you have to also look into how you are going to

manage data and how you are going to process these all these have to be considered. So that was about the baseline study.

So now we will look at how do we determine the importance of the cultural heritage. This is a very critical step and often there is debate about whether we should rank this as the important number one number two or so or we should just describe its uniqueness so that debate is on.

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Value	Cultural Heritage Resources Factors
Very High	<ul style="list-style-type: none">World Heritage Sites (including nominated sites).Assets of acknowledged international importance.Assets that can contribute significantly to acknowledged international research objectives.
High	<ul style="list-style-type: none">Nationally protected/designated cultural heritage assets.Undesignated assets of national importance or historical associations.Assets that can contribute significantly to acknowledged national research objectives.
Medium	<ul style="list-style-type: none">Designated or undesignated assets of regional importance.Designated or undesignated assets that can contribute research objectives.
Low	<ul style="list-style-type: none">Designated or undesignated assets of local importance.Assets of limited value, but with potential to contribute research objectives.
Negligible	<ul style="list-style-type: none">Assets with very little or no surviving cultural heritage interest.
Unknown	<ul style="list-style-type: none">The importance of the resource has not been ascertained.

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And then here we can see one example where a certain value has been assigned to heritage resources you can see very high-value high value medium low and negligible or unknown. So here you can see high value is given to world heritage sites and then also then you see high value given to nationally protected areas medium value given to the regional important areas and this. So you might think that what might be important for you in your local context might be given low value here so that is the problem about this kind of assigning value. So depending on who is the user from which perspective we are looking at these values have to be taken care of.

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Methodology for assessing the value of the assets of Cultural Heritage:

- The value of heritage attributes is assessed in relation to statutory designations, international or national, and priorities or recommendations set out in national research agendas, and ascribed values.
- Professional judgement is used to determine the importance of the resource.
- This method used as objectively as possible, qualitative assessment using professional judgement is inevitably involved.

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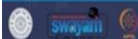
You also see that ICOMOS gives you an approach to assessing the value of cultural heritage. So it suggests that first, you need to look at what kind of national statutory status has been given to that heritage. And then you might also support with professional judgment and then as much as possible try for an objective approach.

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Critical Cultural Heritage:

- i. The internationally recognized heritage of communities who use, or have used within living memory, the cultural heritage for long-standing cultural purposes.
- ii. Legally protected cultural heritage areas, including those proposed by host governments for such designation.

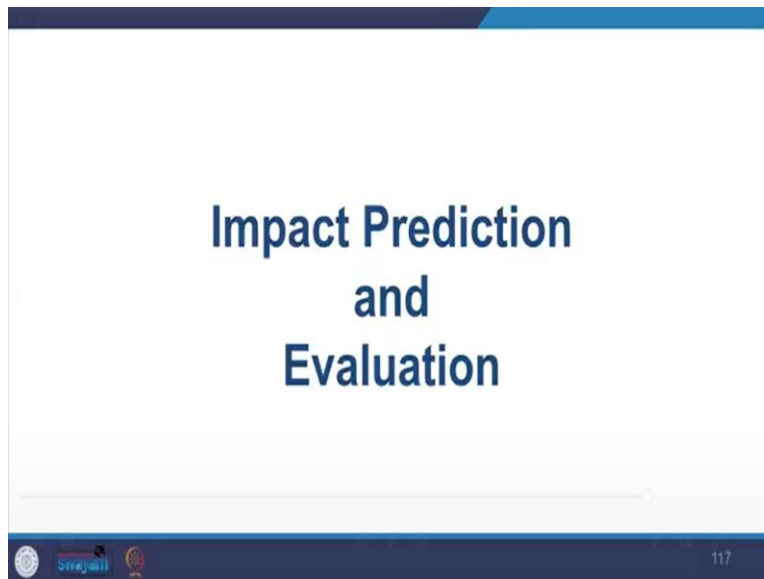
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Then even IFC performance standard 8 also gives input on critical cultural heritage. And then it also provides you with the definition of critical cultural heritage which we have already seen. And so that is about the importance part.

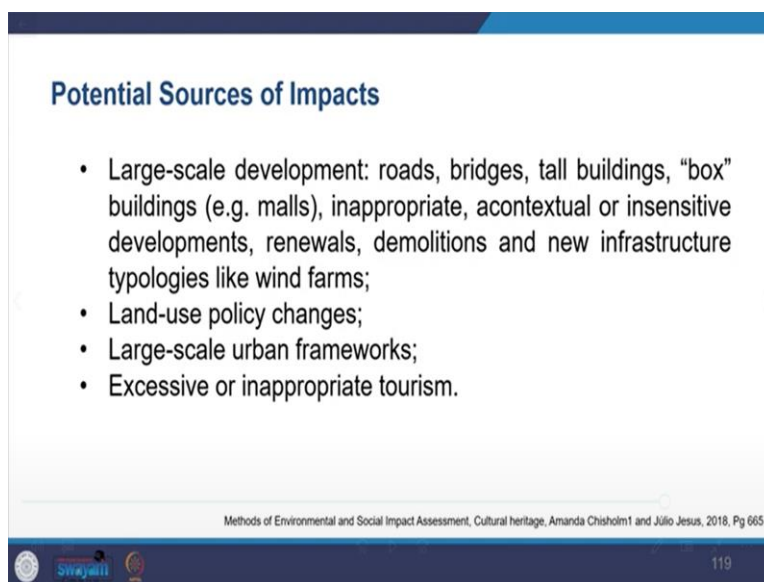
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Now we are looking at impact prediction and evaluation so once we have identified various impacts and then how do we look at its prediction and how do we evaluate that? So what we look at is what kind of changes will happen to cultural heritage. So because of the kind of project you are dealing with will it have any negative impact at what stage it would happen and what would be the significance of it that is the key element whenever you do the impact prediction and evaluations.

So all of this like impact prediction on tangible and intangible will depend a lot on the context which you are dealing with and then it will also vary with the resources the recipients recipient resources where this impact is happening so that will also make a lot of difference. So you see ICOMOS also gives you guidelines for identifying the impacts.

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And then you see that it gives you a list of sources which can have an impact on your cultural resources like you can have large projects like huge construction projects of roads and bridges and all which can have. Then you can also have a change in culture because of the change in the policy.

You can also have an impact because of the large-scale urban development and then also because of tourism, there can be changes. So you see what kind of activities can bring changes and ICOMOS gives that. Then you also see the World Bank gives you which of these sectors have major impacts on the cultural heritage.

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Sectors "Particularly Prone" to affecting Cultural Heritage:

- Energy (construction of gas pipelines, utility lines etc.);
- Communications (laying of cables, fiber optics);
- Transport (highways, road construction or extensions, bridge construction or replacement, canal construction, railway construction);
- Water (dams, irrigation and drainage schemes);
- Sewerage and sanitation (waste-water treatment works, laying of sewer mains, water treatment works);
- Urban development (infrastructure provision);
- Industry and mining;
- Agriculture (intensification and extensification) and forestry.

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So you have energy communication transportation water sewerage sanitation urban development industry mining agriculture all these are said to have an impact on cultural heritage.

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Potential Negative Impacts on Tangible Cultural Heritage:

Archaeological remains

Negative effects to archaeological remains
Removal of archaeological deposits (loss, damage)

Stage/activity

- Ground investigations: trial pits/boreholes;
- Site clearance: removal of trees and vegetation;
- Construction: topsoil stripping;
- Operational phase: induced development.

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So there are certain areas you can see that hurt tangible cultural heritage like you have when you remove the archaeological deposit then so that also has a negative impact. This can especially happen during the ground

investigation site clearance when you are doing your project and also while you are doing the construction stage. Then the impact can also happen on the setting we learned about what the is setting so impact can also happen on the setting. And again it can happen at any stage of the project construction stage site clearance stage or like even the operational stage.

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Potential Negative Impacts on Tangible Cultural Heritage:

Archaeological remains

Negative effects to archaeological remains
Disturbance of underwater archaeological sites, including human remains

Stage/activity

- Construction activities in the marine environment

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Then you see that there can be also disturbances to the archaeological sites and the disturbances can be also on the underwater sites. And again during all the stages of the project.

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Potential Negative Impacts on Tangible Cultural Heritage:

Archaeological remains

Negative effects to archaeological remains
Damage to archaeological deposits resulting from changes to hydrology and soil/water chemistry; desiccation of waterlogged archaeological deposits

Stage/activity

- Piling; installation of drainage systems (land/road drainage)
- Dewatering of excavations; removal of peat;
- Installation of drainage systems (Land/road drainage).

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Potential Negative Impacts on Tangible Cultural Heritage:

Archaeological remains

Negative effects to archaeological remains

Damage to monuments through trampling/erosion.

Stage/activity

- Increases in visitor numbers at the operational stage.

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Potential Negative Impacts on Tangible Cultural Heritage:

Historic Buildings/Monuments

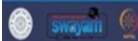
Negative effects to archaeological remains

Loss of historic buildings or upstanding remains.

Stage/activity

- Site clearance: demolition (partial or complete)

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Potential Negative Impacts on Tangible Cultural Heritage:

Historic Buildings/Monuments

Negative effects to archaeological remains

Damage to building fabric from air pollution.

Stage/activity

- Atmospheric emissions from operational traffic movements/power stations, industry etc.

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Potential Negative Impacts on Tangible Cultural Heritage:

Historic Buildings/Monuments

Negative effects to archaeological remains

Severance of one part of a property from another (loss of access; dereliction/neglect).

Stage/activity

- Site clearance: fencing; construction of access and haul roads.
- Construction: construction of buildings/ infrastructure/ structures/ car parks/ access roads.

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Potential Negative Impacts on Tangible Cultural Heritage:

Cultural/Historic Landscapes

Negative effects to archaeological remains

Change to landscape integrity.

Stage/activity

- Site clearance: building demolition (partial or complete); loss of open spaces.

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So you see all these examples are given about what different negative impacts can happen so you can see a range of impacts that can happen negative impact.

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Potential Negative Impacts on Tangible Cultural Heritage:

Cultural/Historic Landscapes

Negative effects to archaeological remains

Severance of landscape elements from one another (loss of continuity; dereliction/neglect).

Stage/activity

- Site clearance: fencing; construction of access and haul roads
- Construction: construction of buildings/ infrastructure/ structures/ car parks/ access roads.

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Potential Negative Impacts on Tangible Cultural Heritage:

Cultural/Historic Landscapes

Negative effects to archaeological remains

Improvement of setting.

Stage/activity

- Screening provided by landscaping (earth mounds/bunds) and/or landscape planting;
- Improvement of lighting ambience;
- Removal of traffic from sensitive areas such as historic town centres;
- Re-establishment of historic setting.

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Potential Negative Impacts on Tangible Cultural Heritage:

Cultural/Historic Landscapes

Negative effects to archaeological remains

Slowing/reduction building/monument deterioration.

Stage/activity

- Removal of traffic from sensitive areas such as historic town centres.

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You also find ICOMAS gives another list of possible impacts on the indigenous people related to cultural heritage.

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Intangible Cultural Heritage Impacts

- Effects on continued customary use of biological resources/access to traditional sites;
- Effects on the respect, preservation, protection and maintenance of traditional knowledge, innovations and practices (inappropriate behaviour in certain locations for example);
- Effects on sacred sites and associated ritual or ceremonial activities;
- Effects on the exercise of customary laws.

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So what kind of impact it can have is it can affect the continuity of the customary use of biological resources it can have an impact on the preservation protection and maintenance of traditional knowledge and their innovations. And then it can also affect their sacred sites and it can also influence how they exercise their customary loss so that kind of impact can also happen to indigenous people. So in this particular stage, you also try to find out when you are doing the impact assessment.

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Identification of the Activities associated with the Project

- Land take;
- Amount of excavation;
- Construction methods and programming;
- Details of temporary and permanent works;
- Predicted traffic type and volumes, during both construction and operation;
- Building layout and height.

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You see what kind of activities will have what kind of impact. So there are a lot of project activities like when you are taking the land when you are excavating when you are doing construction so all that can have impact so that those are very key elements when you are doing um EIA. You can arrange all these in a matrix format and then you can also show what kind of positive impact and what kind of negative impact direct indirect impact can happen.

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Magnitude of The Impact of The Activities

- Positive/negative;
- Direct/indirect;
- Permanent/temporary;
- Irreversible/reversible;
- Short, medium or long term;
- Cumulative.

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So there is also guidance provided in that direction so that you can see.

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Assigning value to Impact Magnitude

Magnitude	Impact
Major	<ul style="list-style-type: none">• Changes to most or all key features, such that the resource is altered or lost.• Comprehensive changes to setting.
Moderate	<ul style="list-style-type: none">• Changes to many features, such that the resource is clearly modified.• Considerable changes to setting that affect the character of the asset.
Minor	<ul style="list-style-type: none">• Changes to features, such that the asset is slightly altered.• Slight changes to setting.
Negligible	<ul style="list-style-type: none">• Very minor changes to features or setting.
No change	<ul style="list-style-type: none">• No change.

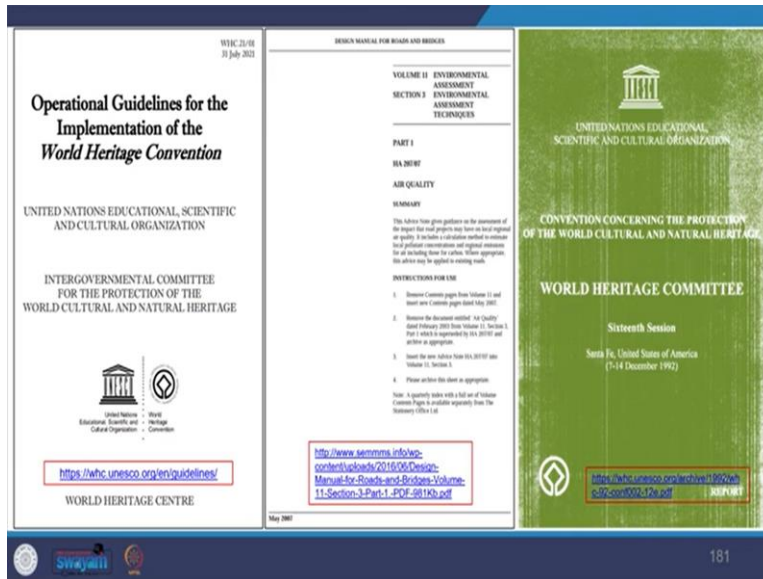
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How do you determine the magnitude also so you can fix it what does the major moderate minor or negligible?

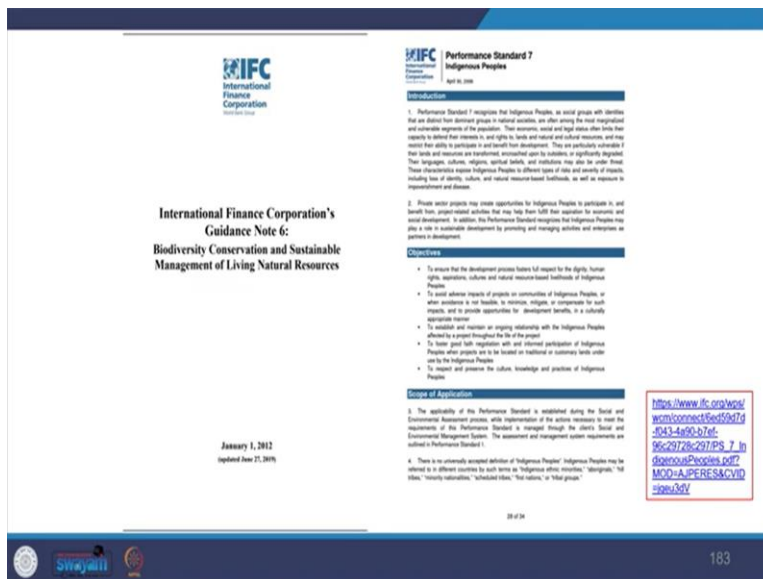
So there are other guidelines also which are available.

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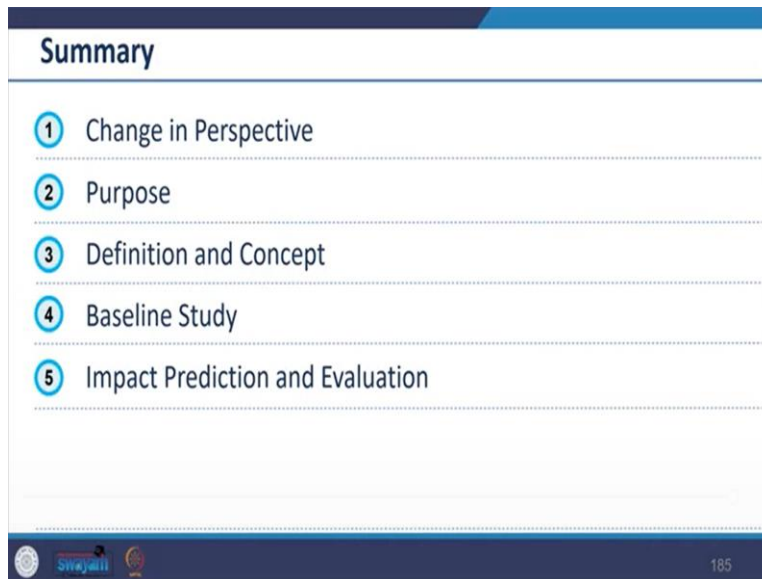
So you can look at the World Heritage site operational guidelines you can also look at the UK design manual on roads and bridges that also gives you on the cultural aspect. Then you have UNESCO World Heritage Committee guidelines also which are there.

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You will also find IFC performance standard seven which gives you information. So we have seen all like or range of things so we will wind up for today.

(Refer Slide Time: 48:51)

A presentation slide titled "Summary" with a blue header. It contains a numbered list of five items: 1 Change in Perspective, 2 Purpose, 3 Definition and Concept, 4 Baseline Study, and 5 Impact Prediction and Evaluation. The slide has a footer with logos and the number 185.

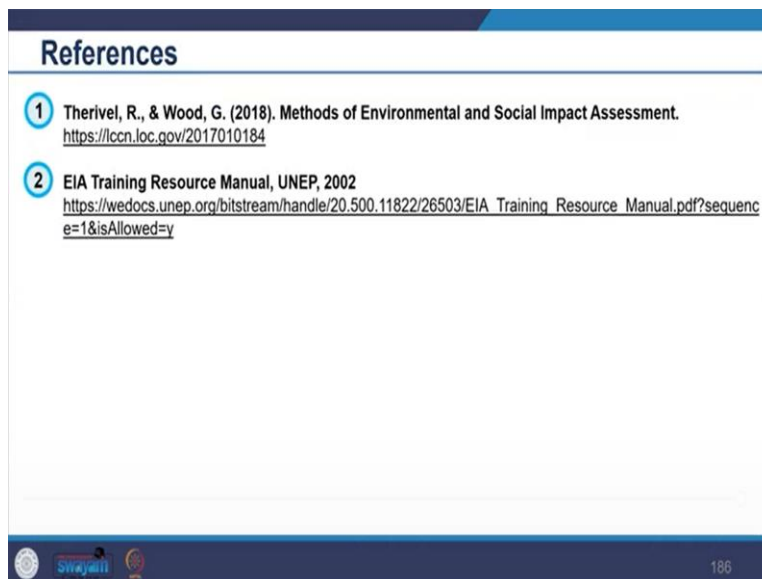
Summary

- 1 Change in Perspective
- 2 Purpose
- 3 Definition and Concept
- 4 Baseline Study
- 5 Impact Prediction and Evaluation

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So summarizing what we covered we looked at the change in perspective like how culture was seen before in terms of the assessment we did and then how we looked at different purposes of undertaking cultural assessment. Then we looked at definitions and concepts, then we looked at a range of methods for baseline study what is the purpose of baseline study. Then we looked at different impacts and how we evaluate them how we look at their significance and magnitude and so on. And what range of impacts are there?

(Refer Slide Time: 49:23)

A presentation slide titled "References" with a blue header. It contains two numbered references: 1 Therivel, R., & Wood, G. (2018). Methods of Environmental and Social Impact Assessment. https://lcn.loc.gov/2017010184 and 2 EIA Training Resource Manual, UNEP, 2002 https://wedocs.unep.org/bitstream/handle/20.500.11822/26503/EIA_Training_Resource_Manual.pdf?sequence=1&isAllowed=y. The slide has a footer with logos and the number 186.

References

- 1 Therivel, R., & Wood, G. (2018). *Methods of Environmental and Social Impact Assessment*. <https://lcn.loc.gov/2017010184>
- 2 EIA Training Resource Manual, UNEP, 2002 https://wedocs.unep.org/bitstream/handle/20.500.11822/26503/EIA_Training_Resource_Manual.pdf?sequence=1&isAllowed=y

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So that was what we covered today this was our key reference for this purpose.

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Suggested Watch and Read

https://www.youtube.com/watch?v=RIE5Bv-wQNA&ab_channel=InstituteofPublicHealth

https://www.youtube.com/watch?v=3Se7a3d5D0&ab_channel=CCROMOfficialChannel

https://www.youtube.com/watch?v=bPIABCSe8MI&ab_channel=UNESCO

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And these are the suggested watch and read.

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Please feel free to ask Questions.

Let us know about any Concerns you have .

Do share your Opinions, Experiences and Suggestions.

Looking forward to Interacting and Co-learning with you while exploring EIA.

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So winding up please feel free to ask questions. Let us know about any concerns you have. Do share your opinions, experiences, and suggestions. Looking forward to interacting and co-learning with you while exploring EIA. Thank you.