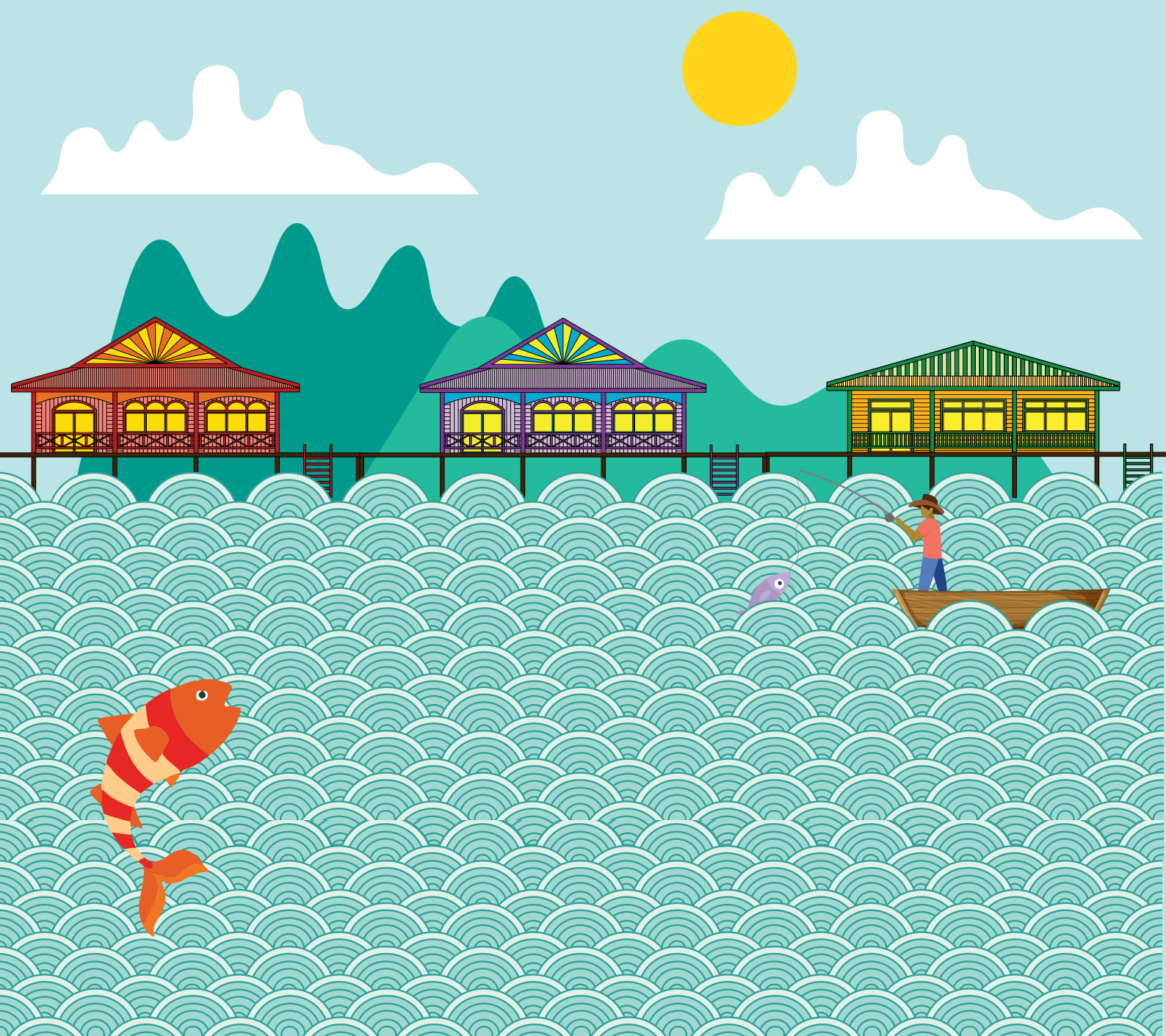




# LIVING WITH WATER, HERITAGE & RISKS:

An Educator's Toolkit for Global Citizenship





APCEIU, a UNESCO Category 2 Centre, is an international organization established by an agreement between the Government of the Republic of Korea and UNESCO to promote and develop Education for International Understanding (EIU) and Global Citizenship Education (GCED) with UNESCO Member States.

APCEIU has played a pivotal role in promoting GCED reflected in both the UNESCO Education 2030 and UN Sustainable Development Goals (SDGs).



SEAMEO SPAFA, Regional Centre for Archaeology and Fine Arts, is part of the Southeast Asian Ministers of Education Organization (SEAMEO), an international organization dedicated to promoting co-operation in education, science and culture in Southeast Asia.

The Centre aims to cultivate cultural awareness of and appreciation for cultural heritage through collaboration in information dissemination and other relevant programme activities.

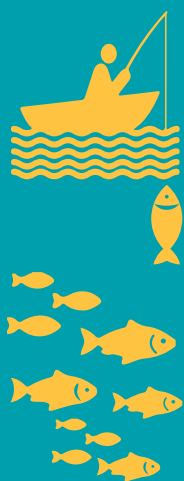


# LIVING WITH WATER, HERITAGE & RISKS:

An Educator's Toolkit for Global Citizenship

CONTENT CONTRIBUTOR





# **LIVING WITH WATER, HERITAGE & RISKS:**

## **An Educator's Toolkit for Global Citizenship**

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Moken Alive Museum

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# FOREWORD

The Asia-Pacific Centre of Education for International Understanding (APCEIU), the Southeast Asian Ministers of Education Organization (SEAMEO Secretariat) and the Southeast Asian Ministers of Education Organization Regional Centre for Archaeology and Fine Arts (SEAMEO SPAFA) share a strong passion for purposeful education. APCEIU, SEAMEO and SEAMEO SPAFA have been able to actively engage educators and youth to help make the world a more just, peaceful and sustainable place.

While APCEIU and SEAMEO SPAFA have worked hand in hand successfully on numerous occasions, two stories of creative partnership stand out. In 2013, APCEIU, SEAMEO Secretariat and SEAMEO SPAFA published *Cultural Understanding through Paintings of Southeast Asia and Korea* to enhance cross-cultural awareness. In 2015, this meaningful collaboration continued with the publication of *100 Everyday Objects from Southeast Asia and Korea* under the generous ASEAN-ROK Cooperation Fund. This resource book also aims to foster international understanding of and respect for one another's cultural heritage.

In 2019, focussing on cultural heritages, such as those threatened by climatic and human-induced risks, APCEIU and SEAMEO SPAFA once again found common ground to collaborate on developing quality educational materials for Global Citizenship Education (GCED). Entitled *Living with Water, Heritage & Risks: An Educator's Toolkit for Global Citizenship*, this educational resource will help young global citizens gain an awareness of the culture-nature connection in heritage conservation.

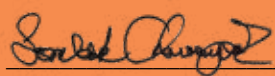
This toolkit provides visual learning aids and ideas designed to explore water heritage in Southeast Asia through the cognitive, socio-emotional and behavioural dimensions of GCED. Learners are encouraged to **THINK, SHARE** and **ACT** in ways that will enable them to become critical thinkers who can make compassionate and ethical decisions.

We hope that this toolkit will foster global citizenship by generating conversations, mindsets and actions that promote peaceful and sustainable co-existence with nature and diverse cultures.



**LIM Hyun Mook**

Director, UNESCO APCIEU



**Somlak Charoenpot**

Director, SEAMEO SPAFA

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## PURPOSE AND SCOPE

This toolkit provides educators in schools, museums or conservation organizations with a variety of learner engagement tools to explore how communities live with Water, Heritage and Risks. The term Water Heritage is used in this resource to refer to tangible and intangible aspects of human interaction with water. The five domains of Intangible Cultural Heritage (UNESCO 2003) are particularly useful in helping learners think of values and practices that enable communities to thrive in, on and above water.

This toolkit contains an overview of Water as Heritage and how Global Citizenship Education can help people to forge societies that are more just, peaceful and tolerant. Educators will find teaching tools that were conceptualized with adapted pedagogical principles found in the spheres of Global Citizenship Education (GCED), Sustainable Development Goals (SDGs), Intangible Cultural Heritage (ICH), and Disaster Risk Management (DRM). While there are ten lesson ideas and five photocards related to water heritage sites in Southeast Asia in this toolkit, educators are encouraged to design their own learning experiences together with their learners.

This toolkit is designed for use with learners aged between seven and twelve years of age. Educators may use the toolkit in schools or in community settings. School teachers may design single-subject lessons or lessons that require a multi-disciplinary approach. A social studies lesson on water villages may be combined with an art lesson, where learners design a risk awareness campaign poster for a nearby community. Community educators may also craft experiential learning episodes that invite young learners to interview elders on Intangible Cultural Heritage.

This toolkit aims to enable educators to facilitate explorations of Water Heritage with three simple tools.



### TOOL #1 THINK

Activities that hone observation and critical thinking skills of learners in examining their own heritage through water heritages in Southeast Asia.



### TOOL #2 SHARE

Discussions that help learners reflect on how Water, Heritage and Risks connect communities locally and globally.



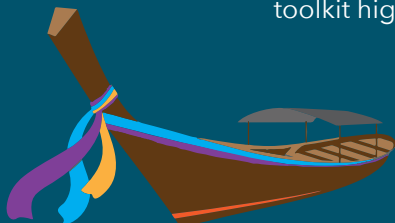
### TOOL #3 ACT

Small but meaningful projects to promote more sustainable mindsets and actions that reduce risks to heritage.

## CONTENTS OF THIS TOOLKIT

This toolkit offers educators creative strategies to discuss Water Heritage from multiple perspectives. Educators may invite learners to study water as an economic resource, as part of our cultural and natural heritage, or as a risk. For learners, they can be encouraged to examine their responsibilities as Global Citizens and discuss their roles in Sustainable Development and Disaster Risk Management.

In order to understand the benefits and risks borne by communities living near water bodies, this toolkit highlights five water heritage sites in Southeast Asia:



- Ha Long Bay, Vietnam
- Inle Lake, Myanmar
- Kampong Ayer, Brunei Darussalam
- Moken Sea Nomads, Mergui Archipelago, Myanmar and Ko Surin, Thailand
- Tonle Sap, Siem Reap, Cambodia

**Chapter 1** presents Water as Heritage. Educators are introduced to World Heritage Sites in Southeast Asia that demonstrate the diverse relationships that humans have cultivated with water. Thereafter, the toolkit focuses on water heritages that presently survive on community connections, care and expressions. The historical, economic, social and environmental dimensions of these five water heritage sites in Southeast Asia are outlined to provide educators with basic background knowledge to facilitate student discussions.

**Chapter 2** presents natural and cultural heritages found on water. The five domains of Intangible Cultural Heritage as recognized by UNESCO are employed to systematically study water heritages. In addition, the chapter outlines the possible natural and human-made hazards from which water heritage needs safeguarding.



**Chapter 3** defines the key learner attributes of Global Citizens that will help learners make the world a more just, peaceful and sustainable place. This chapter also presents UNESCO's core conceptual dimensions of Global Citizenship Education along with its pedagogical principles. A THINK-SHARE-ACT Heritage Education Framework for Global Citizens is then proposed as a basis to investigate water heritages.

**Chapter 4** introduces inquiry-based learning through facilitated conversations inspired by photocards. Topics and themes that will allow educators to discuss global citizenship and risks to heritage are listed in this chapter. Educators can also locate ten participatory lesson ideas based on the THINK-SHARE-ACT Framework as case examples to demonstrate how learners may be invited to reflect on local and global concerns. These lesson ideas may be contextualized to specific sites where learners can carry out field studies or design small acts of sustainable living.



### Photocards

The photocards of five water heritage sites in Southeast Asia are provided with suggested questions and activities that are organized according to the tools of THINK, SHARE, ACT. They are conceptualized for learners to develop critical thinking skills through inquiry-based learning. Educators can also encourage learners to share multiple viewpoints and imagine ways they can act to help make the world a more just, peaceful and sustainable place.



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# GLOSSARY

## Heritage

Important tangible and intangible expressions of religious, social and cultural, architectural traditions as well as natural environments that local and international communities value enough to preserve for future generations.

## Water Heritage

The material, spiritual, social, cultural and environmental resources created and treasured by communities that live near water bodies.

## Natural Heritage

The elements of a place's biodiversity - the flora, the fauna, the ecosystems, the geological structures and formations - that are deemed important for its ecology, for its contribution to science and for the identities of local and international communities.

## Cultural Heritage

Tangible and intangible expressions of historical, symbolic, spiritual, aesthetic and social values that are appreciated by local and international communities.

## Living Heritage

Intangible cultural heritage that requires continual community connections, care and expressions.

## Risk

The probability of harmful consequences, or expected losses (deaths, injuries, including damage to property, livelihoods, and disruption of economic activity or environment) resulting from interactions between natural or human-induced hazards and vulnerable conditions.

## Disaster

A serious disruption of the functioning of a community or a society causing widespread human, material, economic or environmental losses which exceed the ability of the affected community or society to cope using its own resources.

## Hazard

A potentially damaging physical event, phenomenon or human activity that may cause the loss of life or injury, property damage, social and economic disruption or environmental degradation.

## Globalization

Processes that lead to an increasingly connected and complex world where science and technology have accelerated the rate of industrialization and urbanization. Expanded networks and channels of communication and transportation are connecting more people across borders and cultures.

## Global Citizenship Education

Education that empowers learners to think, share and act for a more just, peaceful, inclusive and sustainable world.

## Sustainable Development

Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

## Inquiry-based Learning

A type of learning that requires teachers to guide, facilitate and encourage their students on a journey of critical thinking, inquiry and self-discovery about the world around them.



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## ABBREVIATIONS

<b>ADB</b>	Asian Development Bank
<b>APCEIU</b>	The material, spiritual, social, cultural and environmental resources created and treasured by communities that live near water bodies.
<b>Natural Heritage</b>	Association of Southeast Asian Nations
<b>ASSI</b>	ASEAN Safe Schools initiative
<b>CC</b>	Creative Commons (See <a href="https://creativecommons.org/about/downloads">https://creativecommons.org/about/downloads</a> for all abbreviations of licenses)
<b>GCED</b>	Global Citizenship Education
<b>ICCROM</b>	International Centre for the Study of the Preservation and Restoration of Cultural Property
<b>IUCN</b>	International Union for Conservation of Nature
<b>OHCHR</b>	Office of the High Commissioner for Human Rights
<b>SEAMEO</b>	Southeast Asian Ministers of Education Organization
<b>SEAMEO SPAFA</b>	Southeast Asian Ministers of Education Organization Regional Centre for Archaeology and Fine Arts
<b>SDG</b>	Sustainable Development Goals
<b>UDHR</b>	Universal Declaration of Human Rights
<b>UNDP</b>	United Nations Development Programme
<b>UNEP</b>	United Nations Environment Programme
<b>UNESCO</b>	United Nations Educational, Scientific and Cultural Organization
<b>UNISDR</b>	United Nations International Strategy for Disaster Reduction

# 01

## Introduction to Water as Heritage

### NOTE TO EDUCATORS

This toolkit aims to raise awareness of Water Heritage amongst young learners in Southeast Asia. This chapter introduces to educators:

- Water as Heritage from ancient times to the present
- What we can learn from Water Heritage
- A brief outline of the five water heritages featured in this toolkit

## Water as Heritage

Water is life. Water supports natural heritage. Water also bears our cultural footprints. Water was an essential part of ancient kingdoms. Early kingdoms in Southeast Asia harnessed water to support agriculture, to facilitate trade and to avert climatic disasters. In the present time, water continues to play important roles in the daily lives of communities in Southeast Asia. Here are four World Heritage Sites located in Southeast Asia that are closely related to water:



Rulers in Angkor Wat in Cambodia engineered large reservoirs, moats and canals that controlled, stored, distributed water.

Image 1:

**An aerial view of Angkor Wat, Siem Reap, Cambodia**


© Courtesy from Yann ARTHUS-BERTRAND to the APSARA National Authority



The builders of Ayutthaya in Thailand constructed artificial canals that connected goods and people.

Image 2:

**Wat Mahathat, Ayutthaya, Thailand**

Templo Mahathat, Ayutthaya, Tailandia by Diego Delso Delso.  
photo 

[https://commons.wikimedia.org/wiki/File:Templo\\_Mahathat,\\_Ayutthaya,\\_Tailandia,\\_2013-08-23,\\_DD\\_14.jpg](https://commons.wikimedia.org/wiki/File:Templo_Mahathat,_Ayutthaya,_Tailandia,_2013-08-23,_DD_14.jpg)



Ha Long Bay showcases floating villages, scenic karst landscapes, pristine beaches, coral reefs and valuable biodiversity.

Image 3:

### **Ha Long Bay, Vietnam**

Ha long Bay Port by Harald Hoyer 

[https://500px.com/photo/103340169/Ha-Long-Bay-by-Harald-Hoyer?ctx\\_page=2&from=gallery&galleryPath=20650025&user\\_id=8627441](https://500px.com/photo/103340169/Ha-Long-Bay-by-Harald-Hoyer?ctx_page=2&from=gallery&galleryPath=20650025&user_id=8627441)



Ifugao farmers in the Philippines shape rice terraces with planting and harvest rituals as well as traditional knowledge of water.

Image 4:

### **Rice Terraces, Banaue, Ifugao, the Philippines.**

Banaue Rice Terraces by Edwin Juen Jr. 

[https://commons.wikimedia.org/wiki/File:Banaue\\_Rice\\_Terraces\\_3.jpg](https://commons.wikimedia.org/wiki/File:Banaue_Rice_Terraces_3.jpg)

Communities in Southeast Asia still experience strong connections between water, livelihoods and cultural identities.



More than a million Cambodian people still depend on fish in Tonle Sap for their daily meals.

Image 5:

### **Fisherman, Tonle Sap, Siem Reap, Cambodia.**

Here fishy by Dennis Jarvis 


<https://www.flickr.com/photos/archer10/3643666619/>



About fifty years ago, batik-making communities in West Java were forced to stop producing the famed Cipedes batik cloth because the river had become too polluted to interact with the rich red dye that makes it unique. (A Royal Treasure: The Javanese Batik Collection of King Chulalongkorn of Siam, 2019)

Image 6:

### **A batik-making workshop, West Java, Indonesia.**

Batiking women in a batik factory near Tasikmalaya 1925-1933 by G.F. Johannes 

<https://hdl.handle.net/20.500.11840/20457>



# WHY EXPLORE WATER HERITAGE?



Image 7:

**Floating fish farms at Halong Bay, Vietnam**

Habitation baie d'halong 2 by Preparetavalise.com 

[https://commons.wikimedia.org/wiki/File:Habitation\\_baie\\_d%27halong\\_2.jpg](https://commons.wikimedia.org/wiki/File:Habitation_baie_d%27halong_2.jpg)

This toolkit focuses on Water Heritage because the once common way of living intimately with water in Southeast Asia is fast disappearing. The only World Heritage Site in the region that features contemporary water heritage is Ha Long Bay, Vietnam with its floating villages. However, the outstanding universal value of Ha Long Bay was based primarily on its natural landscapes and its rich biodiversity, and not the iconic flotillas. Cultures created by villages built over water or communities that live on houseboats in Southeast Asia have yet to be recognized by UNESCO and many governments as important heritages.



Image 8:

**Tourist boats at Tonle Sap, Siem Reap, Cambodia**

Watch the Mud by Dennis Jarvis 


<https://www.flickr.com/photos/archer10/3631909015/>

Besides climate change, the way of life in water bodies inhabited by humans is also undergoing rapid social transformations. The flotillas, houses on stilts or boathouses may look rudimentary but we know that cultures developed on water are often expressed in intangible ways. The traditional knowledge, the stories, the songs and the dances developed by communities who live with water can be considered living heritage. Today, we see this living heritage simultaneously performing old and new functions for society. There are communities who have lived near or on waters for centuries. There are also the international tourists who have just discovered novel cultural experiences in water villages. Some of the traditional trades and crafts that tourists have come to appreciate are vanishing at alarming rates.



Image 9:

**A house built on stilts in Inle, a freshwater lake in Myanmar**

Floating Village by Thomas Schoch 

<http://www.retas.de/thomas/travel/photo.php?album=burma2009&chapter=inle&pic=39&lang=en&w=1>

Some communities construct floating villages on freshwater lakes. Some line mangrove-laden coasts with houses on stilts while others sink wooden poles into the seabed to support their houses. There are also those who choose waters protected by limestone towers sculpted by the sea and some who bravely build their village upon corals in the middle of the sea. A few communities make their homes on boats. Whichever the case, communities living on water are invariably connected to their natural environment. While the surrounding flora and fauna have shaped the livelihoods and diets of communities on water, the supporting ecosystems are increasingly threatened by climate change, unsustainable lifestyles and irresponsible economic activities.

Water Heritage offers educators and learners opportunities to

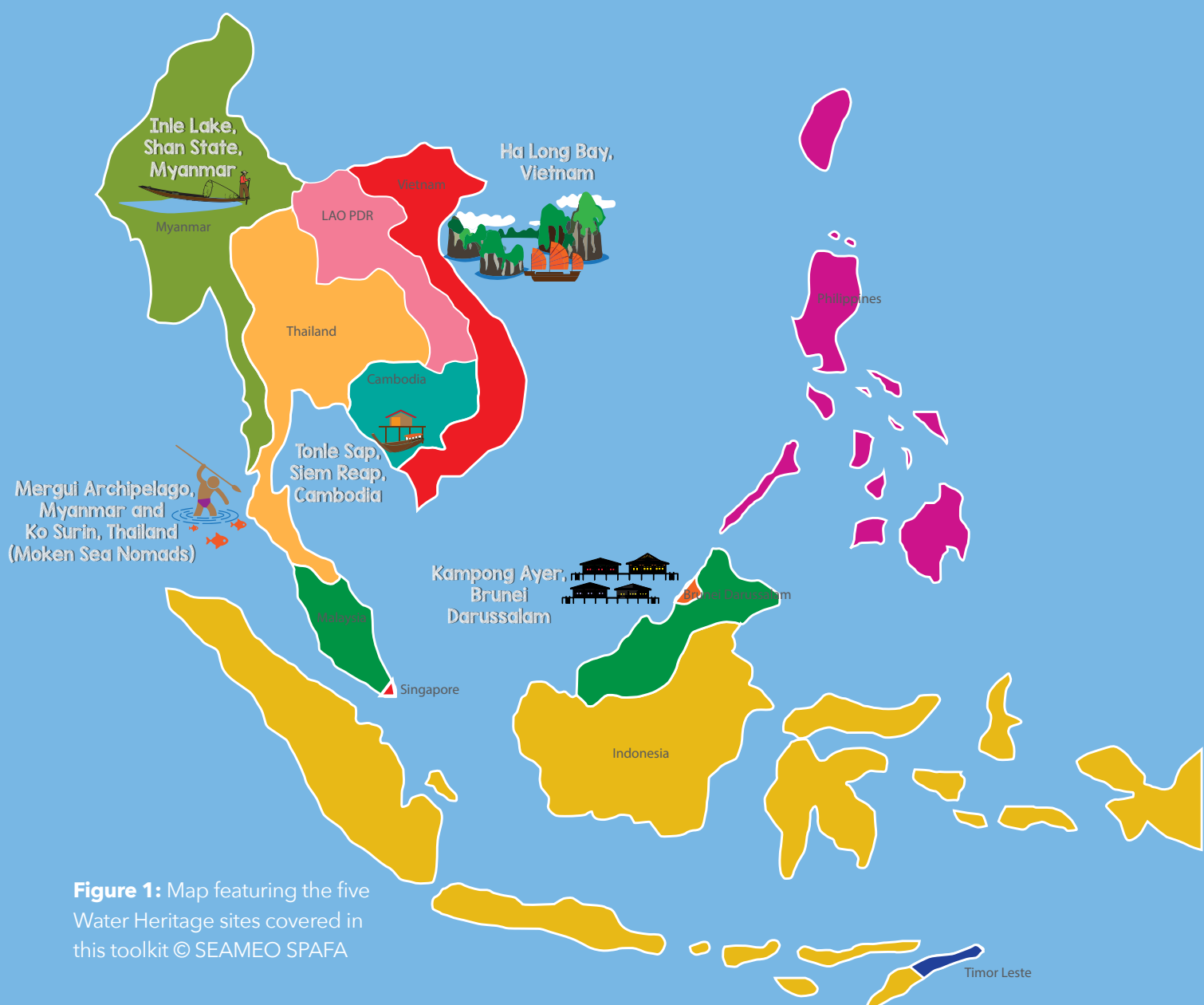


- Explore the Living Heritage of Self and Others
- Discover Environmental Concerns
- Become Aware of Risks, Hazards and Disasters
- Imagine Sustainable Homes, Habitats and Heritage
- Take Action as Global Citizens

Even if learners do not have the chance to visit a water heritage site or community, educators can still use lesson ideas in this toolkit to start thinking about heritage and global citizenship.

## Water Heritage featured in this Toolkit

Human activity in Southeast Asia is closely connected to seas, rivers and lakes. It is beyond the scope of this toolkit to present all the Water Heritage communities in the region. The following five Water Heritage have been selected to introduce Global Citizenship Education through a better understanding of risks related to culture and nature conservation.



**Figure 1:** Map featuring the five Water Heritage sites covered in this toolkit © SEAMEO SPAFA



# HA LONG BAY VIETNAM

Image 10: **A Floating Village, Ha Long Bay, Vietnam**

Fishing Village Ha Long Bay Vietnam by Christophe Meneboeuf  
<https://www.xtof.photo/blog/index.php?showimage=128>



## WHAT DOES HA LONG MEAN?

'Ha Long' means 'descending dragons' in Vietnamese. An ancient legend tells us that the Jade Emperor in the Heavens sent the Mother Dragon and her children to help the Vietnamese defend their homeland. The dragons drove the invaders away with divine fire and giant emeralds that turned into the 1,600 islands and islets we see in Ha Long Bay today. The victorious dragons stayed on in the bay as humans tending to crops and cattle.

## WHERE IS HA LONG BAY ?

Ha Long Bay is located on Vietnam's northeastern coast.

## HOW MANY PEOPLE LIVE ON THE WATERS OF HA LONG BAY?

There used to be more than 2,000 people living in 7 villages that were made up of about 650 rafts on the waters of Ha Long Bay. Since 2012, they have been gradually relocated to mainland through a government project to keep Ha Long Bay environmentally clean (Vietnamplus.vn, 2013).

## WHAT IS SO SPECIAL ABOUT HA LONG BAY?

- Ha Long Bay was inscribed as a UNESCO World Heritage Site in 1994. Cat Ba island is also recognized by UNESCO as a World Biosphere Reserve since 2004. The globally important golden-headed langur can only be found on this island. The island's hawksbill turtles and seahorses are also rare and threatened (UNESCO, 2004).
- Ha Long bay consists of 1,600 limestone islands, grottos and caves that houses more than 2,000 types of plants and animals (IUCN, 2015).
- In the bay, we can spot mobile floating villages that are made up of fish farms, wooden platforms and houses kept afloat by a wooden or bamboo frame held together by plastic drums.

## HOW DO THE RESIDENTS FEEL ABOUT HA LONG?

**"The heritage of Ha Long Bay is not just the landscape, it is also the people,"**

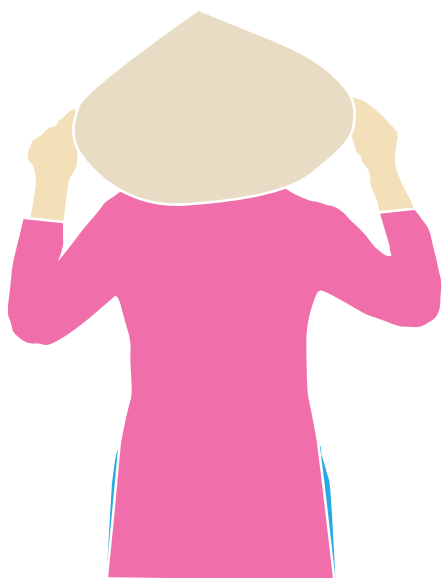
Nguyen Kim Anh, project coordinator in Vietnam for the United Nations Development Programme (UNDP)

**"If the waste stays here all the time, we will die. It will be impossible to live here."** Que, a resident of Ha Long Bay

Source: Brown, M. & Tran, L.T. (2012)

**"I think travel cruises are not the only reason the sea is polluted. The authorities and Ha Long Bay managers should involve transport boats. Every day many kinds of boats travel in the bay, and they also need to meet the environmental standards."** Dao Manh Luong, director of Ha Long Bien Ngoc Company, representing tourism companies in Ha Long Bay

Source: Minh, T. (2015)





# INLE LAKE MYANMAR

Image 11: **A village on stilts, Inle Lake, Myanmar**

**Floating Village by Thomas Schoch**

<http://www.retas.de/thomas/travel/photo.php?album=burma2009&chapter=inle&pic=35&lang=en&w=1>



## WHAT DOES INLE MEAN?

'Inle' means 'a large lake' in Burmese.

## WHERE IS INLE LAKE?

Inle Lake is located in Taunggyi township, capital of the Shan State, 150km northeast of the nation's capital, Nay Pyi Taw.

## HOW MANY PEOPLE LIVE AROUND AND ON INLE LAKE?

Approximately 200,000 people live in 200 villages on and around the lake.

## WHAT IS SO SPECIAL ABOUT INLE LAKE?

- Inle Lake is situated 1,328 metres above sea level in the highlands and is the second largest lake in Myanmar. This freshwater lake is 22km long and about 11km wide.
- Inle Lake was designated a UNESCO World Network of Biosphere Reserve (WNBR) in 2015. It is also an ASEAN Heritage Park since 2004.
- Inhabitants of Inle Lake row their boats with only one leg leaving their hands free to handle fishing nets. Besides fishing, inhabitants grow their fruits and vegetables on floating gardens.

## HOW DO RESIDENTS FEEL ABOUT INLE LAKE?

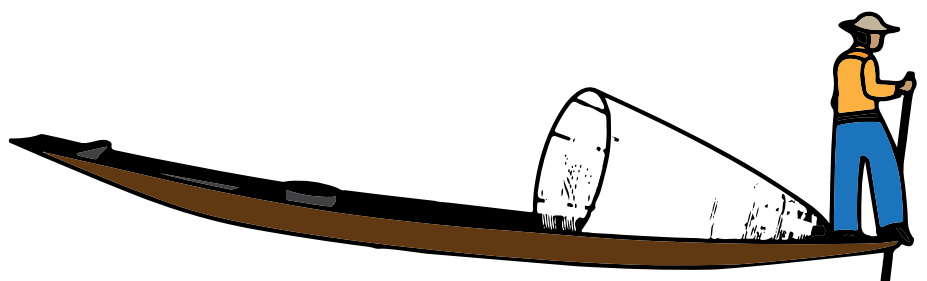
**"Believe it or not, not too long ago you could drink the water in the middle of the lake when you got thirsty. You could swim. Fish was abundant and drought in the summer was unheard of. The situation now is different."** 62 year-old Daw Than Tin

**"We have lived here for centuries. The people of Inntha have always depended on the lake for food and water. But our ancestors knew how to take care of the natural resources without causing too much harm. We must re-discover what we have long forgotten and teach our children too. We need to learn how to live smarter to reduce our impact on the environment."** 62 year-old U Tin Aung Kyaw, vice-chairman of the Innthar Literature, Culture and Regional Development Association.

Source: UNDP (2015)

**"In 2012, the town was asleep. Then, there were 17 hotels and overnighting facilities in Nyaung Shwe; now, there's around 100."** Mike Haynes, a heritage management and tourism consultant based in Nyaung Shwe.

Source: Starr, S. (2018)





# KAMPONG AYER BANDAR SERI BEGAWAN, BRUNEI DARUSSALAM

Image 12: **Kampong Ayer, Bandar Seri Begawan, Brunei Darussalam**

**Sultan Omar Saifuddin Mosque Brunei by Bernard Spragg**  
<https://www.flickr.com/photos/88123769@N02/27957296900>



## WHAT DOES KAMPONG AYER MEAN?

'Kampong ayer' means 'water village' in Malay. Italian explorer Antonio Pigafetta called Kampong Ayer the 'Venice of the East' in 1521. He likened it to Venice of his time – a city of commerce and art connected by canals in Italy.

## WHERE IS KAMPONG AYER?

Kampong Ayer is located on the Brunei River in Bandar Seri Begawan, the capital of Brunei Darussalam.

## HOW MANY PEOPLE LIVE IN KAMPONG AYER?

Some 13,000 people live in Kampong Ayer today. At its largest state in the 1500s, there were about 60,000 residents.

## WHAT IS SO SPECIAL ABOUT THIS WATER VILLAGE?

- Kampong Ayer is the world's largest settlement on stilts. Historians believe that it was established in its current location around 1660.
- There are 38 kilometres of boardwalk that connect 40 water villages. Each village has its own pier, mosque, school and police station. Every household enjoys running water and access to electricity.
- Kampong Ayer is recognized as a living heritage under Brunei's Antiquities and Treasure Trove Act 2002 (ATTA).

## HOW DO RESIDENTS FEEL ABOUT KAMPONG AYER?

**"I was born here. I grew up here. So, I wouldn't want to leave my hardship and good times [behind]. If Kampong Ayer was to get destroyed, I'd be very, very devastated. It's ok if people don't want to stay here anymore. I'll stay."** Md Ali Ismail Bin Haji Bohari, restaurant owner

**"Now, with a lot of the houses [torn] apart and a lot of changes, the population has dropped. These days, there are too much changes and it affects our income sometimes."**

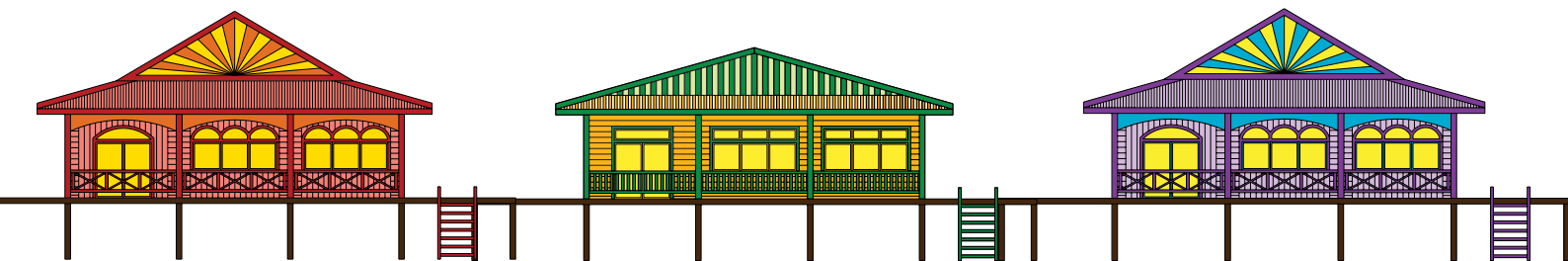
Hassan Hasri Bin Hassan, boatman

Source: Board, J. (2018)

**"I love the sound of the water. Everything is simple in the water village. You have no rush to go anywhere. You take it calmly and easy. On the land, we're forever rushing, chasing after the next thing, but here I'm so relaxed."** Dk Kemariah Pg Hj Duraman, owner of Kunyit 7 Lodge,

a homestay at Kampong Ayer

Source: Wong A.H. and Tham, D. (2018)



# THE MOKEN MERGUI ARCHIPELAGO, MYANMAR AND KO SURIN, THAILAND

Image 13: **The Moken and their houseboats**

© Moken Alive Museum



## WHAT DOES 'MOKEN' MEAN?

Moken refers to 'people immersed in the sea'. The name is derived from the Moken story of origins about their being banished to live at sea because of their leader's mistake. Presently, they live in dozens of sub-groups. Besides the Moken, there are two other groups of sea nomads in Southeast Asia. The Orang Laut can be found in the Riau Archipelago and along the western coast of the Thai-Malay peninsula, while the Sama-Bajau can be found in Sabah, Malaysia, eastern Indonesia and southern Philippines.

## WHERE DO THEY LIVE?

The Moken are traditionally nomadic, living nine months at sea on houseboats and the remaining three months in temporary shelters built on islands to protect themselves from monsoonal storms. They live on the seas between and on any of the 800 islands between the Mergui Archipelago in Myanmar and Ko Surin, Phuket and Rawai in Thailand.

## HOW MANY MOKEN ARE THERE?

There are an estimated 3,000 Moken living around the Mergui Archipelago and about 800 on and around Ko Surin, Thailand. (HRW, 2015)

## WHAT IS SO SPECIAL ABOUT THE MOKEN?

- The Moken can dive as deep as twenty metres into the sea with just one breath, and have developed the ability to see clearly underwater.
- Moken men traditionally practise free-diving and spearfishing while women and children catch squid and gather mollusks. Sometimes, they collect forest products such as bamboo or honey. Today, many are working in the tourism industry in Ko Surin and as fishermen in Myanmar. The Moken have for centuries been able to adapt to their environment and circumstances; they are resilient and keen to preserve their heritage.
- The Moken have an oral tradition that teaches them about tsunamis, tides, moon phases, and seasons. They call the tsunami 'laboon', and describe it as a monster that swallows everything in its path. On Ko Surin, the Moken are the sole survivors of the 2004 tsunami that happened in the Indian Ocean (Ivanoff, 2001).

## HOW DO THE MOKEN FEEL ABOUT THEMSELVES?

**"Wherever we go we go with our boats, always on the move, drifting. For the Mokens, the ocean is our entire universe. But today the big boats come and take every fish. I wonder what will they do when the ocean is empty. We wonder...do they care? Does this mean we have to stop being Moken?"**

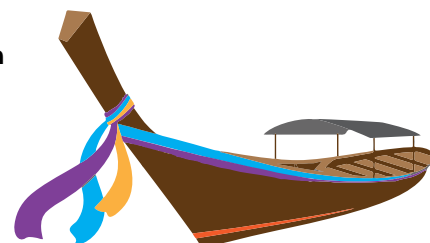
Hook, young man, Moken Village, Ko Surin, Thailand  
Source: Thousand Images and Nomad Films Inc (2012)

**"When the tsunami happened, development came very quickly. I thought when the tsunami came, people would be afraid to build here but in fact desire to build here has been huge. The resources that the Mokens depend on have all disappeared. The rights we want aren't for building hotels or buying hundreds of plots of land but the rights we want are to live the way we traditionally live."**

Hong Klatalay, Curator of Moken museum, Ko Surin, Thailand  
Source: Al Jazeera (2014)

**"The catch was increasingly declining to the point when one could not sustain a family. So we decided to settle down permanently and I joined a fishing boat,"**

Shar, a community leader at the Ma Kyone Galet village of sea gypsies, Myanmar  
Source: Caballero, N. (2018)





# TONLE SAP SIEM REAP, CAMBODIA

Image 14: **Kampong Phluk, Tonle Sap, Siem Reap, Cambodia**

**Kampong Phlout, Cambodia by Jakub Hafun**

[https://commons.wikimedia.org/wiki/File:20171129\\_Kampong\\_Phlouk\\_Cambodia\\_5860\\_DxO.jpg](https://commons.wikimedia.org/wiki/File:20171129_Kampong_Phlouk_Cambodia_5860_DxO.jpg)



## WHAT DOES TONLE SAP MEAN?

'Tonle sap' means 'the great lake of fresh water' in Khmer.

## WHERE IS TONLE SAP?

Tonle Sap is situated 15km south of Siem Reap, a northwestern province of Cambodia.

The lake is connected to the Mekong River by the 120-km long Tonle Sap River.

## HOW MANY PEOPLE LIVE ON AND AROUND TONLE SAP?

Tonle Sap is home to 1.7 million people.

## WHAT IS SO SPECIAL ABOUT TONLE SAP?

- Tonle Sap is the largest freshwater lake in Southeast Asia. In the dry season, the lake is 2,500 km<sup>2</sup> but during the wet season it can grow five to six times larger to about 16,000 km<sup>2</sup>.
- The water level in Tonle Sap can increase from two to ten metres during the rainy season, covering the tops of trees. This unique phenomenon gives rise to its rich biodiversity. In 1997, Tonle Sap was successfully nominated as a UNESCO Biosphere Reserve.
- Land-water based communities build their houses three to six metres above ground on stilts; they live six months on land and six months on water. Water-based communities construct floating houses while land-based communities live in houses built on land along the bank of Tonle Sap.

## HOW DO RESIDENTS FEEL ABOUT TONLE SAP?

**"When I was young, I saw fish abundances in the Tonle Sap Lake. I paddled by boat, fish jumped in and if I took a long ride, I could get almost enough fish for my meal. At present, we use a small mesh size net to fish; we still catch less fish."**

Om Chhim, fisherman in Kampong Phluk, 75 years old

Source: Mak Sithirith (2016)

**"We have to be on the lookout for people cutting trees, to clear land, to plant rice in the dry season. And, also other problems like cutting firewood. People just don't care how they cut the trees. In the dry season, sometimes they cut the whole tree, and this destroys our [flooded] forest."**

Ning Ni, Member of the Community Fishery Management Committee, Kampong Phluk. He educates villagers on sustainable woodcutting practices.

**"We look for the big trees with many branches as big as the wrist, then we cut four to five. We don't cut the big ones, only the small ones. The [flooded] forest is where fish spawn. When there is a storm from the lake, the forest protects our houses."**

Heouring Hak, Resident commenting on the Community Fishery Management Committee's policy of safeguarding flooded forest, Kampong Phluk

Source: Asian Development Bank (2015)





# 02

## Learning about Water Heritage

### NOTE TO EDUCATORS

This chapter focuses on Water Heritage and some related risks faced by communities in Southeast Asia. Educators can expect to pick up information that enables them to discuss with their learners:

- natural and cultural elements in Water Heritage
- environmental and human-induced risks faced by Water Heritage
- Water Heritage as a global concern

## Culture and Nature in Water Heritage



Image 15: **Boys playing in front of the flooded forest of Tonle Sap**

**Boys in Kampong\_Phlok by Jakub Halun** 

[https://commons.wikimedia.org/wiki/File:20171129\\_Boys\\_in\\_Kampong\\_Phlok\\_5838\\_DxO.jpg](https://commons.wikimedia.org/wiki/File:20171129_Boys_in_Kampong_Phlok_5838_DxO.jpg)

Water is a physical and cultural necessity for communities living on and around water. These communities have developed lifestyles and intangible cultural heritage practices that are intricately linked to nature. For centuries, nature has shaped cultural expressions in these communities. Culture, likewise, has altered waterscapes to support human co-existence with nature. This culture-nature link is extremely important in understanding the

“Living Heritage” or Intangible Cultural Heritage connected with Water Heritage.

Educators may choose to study Water Heritage through the five domains of Intangible Cultural Heritage which are listed in the Convention for the Safeguarding of the Intangible Cultural Heritage (UNESCO, 2003).

**THE CONVENTION FOR THE SAFEGUARDING OF THE  
INTANGIBLE CULTURAL HERITAGE (UNESCO 2003)  
DEFINES**

**“intangible cultural heritage” as the practices, representations, expressions, knowledge, skills - as well as the instruments, objects, artefacts and cultural spaces associated therewith - that communities, groups and, in some cases, individuals recognize as part of their cultural heritage.**

**The Convention recognizes that Intangible Cultural Heritage**

1. is transmitted from generation to generation
2. is constantly recreated by communities in response to their environment, their interaction with nature and their history
3. provides communities with a sense of identity and continuity, thus promoting respect for cultural diversity and human creativity
4. needs to be compatible with existing international human rights instruments, as well as with the requirements of mutual respect among communities, groups and individuals, and of sustainable development.

© Moken Alive Museum



# THE FIVE DOMAINS OF INTANGIBLE CULTURAL HERITAGE\*



## 1 Oral Traditions and Expressions, including language as a vehicle of Intangible Cultural Heritage

### Elements commonly expressed in Water Heritage

- Language; sayings and philosophies related to water
- Stories and storytellers
- Poems and poets

An example can be found in the offerings presented at Bon Om Touk Water Festival where Cambodians offer moon salutations and celebrate the changing direction of the Tonle Sap River.



## 2 Performing Arts

### Elements commonly expressed in Water Heritage

- Songs
- Dances
- Music

Image 16: **A Moken drummer**

© Moken Alive Museum



## 3 Social Practices, Rituals and Festive Events

### Elements commonly expressed in Water Heritage

- Seasonal, religious or post-disaster rituals and spiritual persons
- Water-based rites of passage e.g. marriage arrangement, and community events e.g. boat races
- Cultural spaces embedded in nature

Image 17: **Leg-rowers participating in a boat race at Inle lake**  
**Inle Lake Leg Rowers by Mark Fischer** 

[https://commons.wikimedia.org/wiki/File:Inle\\_Lake\\_Leg\\_Rowers.jpg](https://commons.wikimedia.org/wiki/File:Inle_Lake_Leg_Rowers.jpg)



## 4 Knowledge and Practices concerning Nature and the Universe

### Elements commonly expressed in Water Heritage

- Traditional knowledge about tsunamis, ecosystems, flora and fauna
- Traditional healing systems, shamans and their knowledge
- Worldviews and beliefs about water

Image 18: **Some families at Kampong Ayer, Brunei Darussalam, still possess the knowledge to prepare dried fish for meals and for a living.**


© Karen Chin



## 5 Traditional Craftsmanship

### Elements commonly expressed in Water Heritage

- Agricultural, economic, technical or recreational innovations
- Boat construction
- Vernacular architecture, objects or artefacts adapted to water and seasons as well as inspired by social or spiritual needs

Image 19: **Woman rowing a boat woven from bamboo with both her legs in Ha Long Bay, Vietnam**   
**Just rowing by Benjamin Arnold**

[https://commons.wikimedia.org/wiki/File:Just\\_Rowing\\_\(187850273\).jpeg](https://commons.wikimedia.org/wiki/File:Just_Rowing_(187850273).jpeg)



Sometimes a few domains can be found in a single event. For example, the Moken ancestral ceremony requires the production of the ancestor pole, a shaman's knowledge as well as musical instruments, memories of song lyrics, musical rhythms and ritual dance steps.



Image 20: **The Moken Ancestor Pole Ceremony**

© Moken Alive Museum

- 💧 **Water heritage is intrinsically tied to traditional knowledge of boats and water, water-related livelihoods and the health of the natural environment. The natural habitat provides sustenance, a home and a source of identity for communities whose very existence depends on water.**
- 💧 **Getting students to be curious about natural and cultural heritage elements that are valuable to communities is the first step towards creating an awareness of what needs to be safeguarded for a more just, peaceful and sustainable world.**



# SAFEGUARDING WATER HERITAGE



Image 21: **Rubbish becomes more evident at low tides in Kampong Ayer, Brunei Darussalam**

**The Water Village. Rubbish. By Bernard Spragg**

<https://flickr.com/photos/88123769@N02/8619138720>



Image22: **Mangroves, Kampong Ayer, Brunei Darussalam**

© Alongkorn Jutagate



To conserve Water Heritage, we need to understand some of the threats faced by communities living on or near water. Given that 90% of all disasters are water-related (UNISDR 2015), Water Heritage faces a significant number of climatic hazards. Because of their proximity to water bodies, the physical locations to express their cultural heritage may be wiped out by environmental disasters. Typhoons, floods, droughts and rising sea levels are some of the common hazards faced by communities in Southeast Asia (ASEAN ASSI, 2016).

While it is beyond the scope of this toolkit to cover disaster preparedness, mitigation or recovery, it is important to be aware of the potential destruction that can be caused by natural and human-induced disasters. In Southeast Asia, communities living with Water Heritage are also some of the poorest. Poverty makes recovering from a disaster challenging. Poor communities may also resort to less ecologically friendly lifestyles or are at the mercy of environmentally disastrous decisions adopted by commercial or governmental organizations.

Some natural disasters are actually human-induced. Poor maintenance of Water Heritage sites sometimes leads to fires; badly wired electrical systems or open cooking stoves threaten to burn down wooden houses. Rubbish has also become a common risk faced by communities living on and around water. The quality of water and the quality of life at many Water Heritage sites is more often than not affected by plastics, synthetic fertilizers and toxic factory waste.

Climate change for example is often caused by unsustainable development practices. For example, new research has now proven that the clearing of mangrove forests has led to more severe tropical storms (Moolna, A. 2019). Coastal degradation is common in poverty-stricken communities and where greedy land developers respond to local and global demands of growth and tourism.



**Figure 2: Definition of Risk based on *Living with Risks* (UNISDR, 2004) © SEAMEO SPAFA**

To safeguard heritage, communities need to be aware of risks. We need to understand what would happen to lives, cultural assets, possessions in the future should a disaster happen. People tend to be more aware of risks when

1. there is access to information about hazards
2. they can see the value of their natural and cultural heritage
3. they can assess the strengths and weaknesses of their community's infrastructural facilities, mindsets, habits and skills.

Vulnerable communities have less knowledge and resources to cope with the immediate and long-term effects of the potentially damaging event. Here are some natural and human-induced hazards that could pose risks to your community:

© Moken Alive Museum



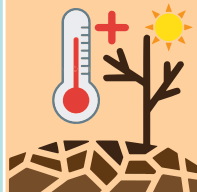


## SOME NATURAL HAZARDS



**STORMS** consume all that is in their path.

**FLOODS** sweep away properties and disrupt natural drainage systems.



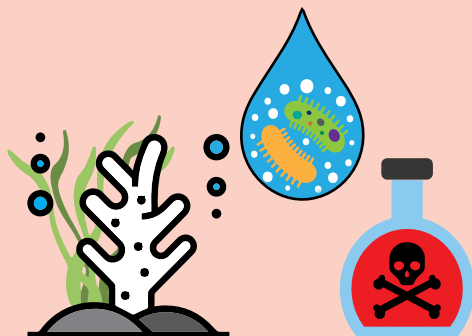
**HEATWAVES** destroy crops and livestock.

**DROUGHTS** lower water levels in lakes and rivers.

**TSUNAMIS** caused by underwater earthquakes, landslides or powerful volcanic eruptions destroys everything in their path.



## SOME HUMAN-INDUCED HAZARDS

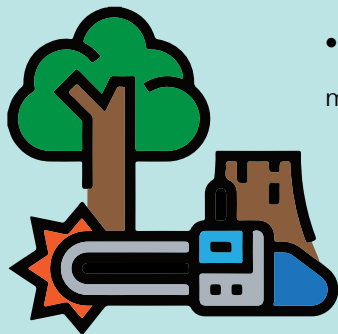


- **PEST INFESTATION**
- **WATER-BORNE DISEASES**
- **CORAL BLEACHING**
- **CHEMICAL POISONING**

caused by pollution, unsustainable fishing, agricultural and manufacturing practices



- **CLIMATE CHANGE**
- **RAISED SEA LEVELS** that affect coastal communities and wildlife
- **CHANGE IN RAINFALL PATTERNS**
- **INCREASED FREQUENCY AND INTENSITY OF EXTREME WEATHER**
- **DEFORESTATION** Flooded forests or mangrove with less flora or fauna means higher temperatures, less rain, less fish and less forest products.



- **LOSS OF TRADITIONAL KNOWLEDGE AND PRIDE** in Intangible Cultural Heritage
- **POLLUTION** caused by increased population or tourist numbers and factories disposing waste and new non-biodegradable materials into waterways
- **VOLUNTARY EMIGRATION** from water villages
- **INVOLUNTARY SETTLEMENT** of sea-borne nomadic communities or coastal villages inland



To be able to discuss heritage and risks, educators and their learners must first be familiar with what happens when disasters strike. While the Disaster Risk Management (DRM) agenda has advanced substantially over the past decades, discussion on systematically integrating the protection of heritage in case of disasters is fairly recent. In fact, experience shows that cultural heritage is often damaged or destroyed in the aftermath of a disaster due to insensitive conservation, recovery, and reconstruction. (World Bank, 2017).



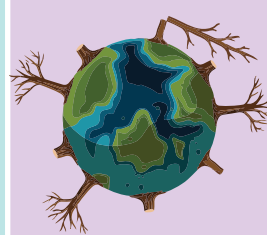
**Lives are lost**



**Livelihoods, food and water supplies are disrupted.**



**Lessons in schools are usually halted due to unsafe classrooms.**



**Nature is affected.**



**Cultural heritage, both tangible and intangible, are often wiped out.**

## **SO WHAT HAPPENS WHEN DISASTERS STRIKE?**

**Whether your community was affected by disasters, connecting awareness of our natural and cultural heritage to knowledge of risks and hazards is the first step towards safeguarding our lives, our identities and our dreams.**

# WATER HERITAGE AS A GLOBAL CONCERN

Here are three key concerns and three success stories that can inspire us to **THINK, SHARE** and **ACT** as global citizens!

## 1. NINE MILLION TONS OF PLASTIC END UP IN OUR OCEANS EVERY YEAR.

Scientists discovered microplastics even in the remote areas of the Arctic. They were transported there by wind. Microplastics are tiny pieces of plastics that are less than 5 millimetres in length (National Geographic, n.d.). Wildlife in rivers and seas has been regularly consuming microplastics. Some end up as human food exported internationally. This is a huge global concern.

We can learn sustainable habits from the Moken who do not believe in accumulating material possessions. They consume just enough for their needs. Because of this belief, they have always recycled and reused whatever they find in the sea or on beaches. These sea nomads often repurpose rubbish as part of a shrine and recycle discarded materials such as plastic sheets as boat sails for everyday use. The Moken belief and knowledge systems also protect mangroves and forests which halt erosion and reduce the impact of storms.



Image 23: **A Moken freediving fisherman using a harpoon**

© Moken Alive Museum

## 2. HUMAN ACTIVITY IS THE MAIN CAUSE OF CLIMATE CHANGE!

The burning of fossil fuels and deforestation have greatly increased global emissions of carbon dioxide which traps heat. Deforestation also affects land and water temperatures. Less forests or mangroves increases the impact of storms and droughts. In Tonle Sap, less forests means less areas for fish to spawn. The community at Kampong Phluk in Tonle Sap is fighting deforestation by creating a rotation system where only smaller branches, not trees, are cut down as firewood from different zones throughout the year (ADB, 2015). The village has also established community fish conservation areas that have brought fish back into the lake. These sustainable practices help revive the lake where fishermen had experienced a sharp decrease in fish yields in the past decade (IUCN, 2017).



Image 24: **Healthy forests safeguarded by the community at Kampong Phluk, Tonle Sap**

© Karen Chin

The use of chemicals in agriculture and industry has also polluted many lakes, rivers and seas. UNDP Myanmar supports organic farming and the construction of bio-septic tanks to reduce toxic pollution of the lake. To decrease reliance on wood, fuel-efficient or electric stoves have been introduced (UNDP, 2015).

Both Tonle Sap and Inle lake are UNESCO Biosphere Reserves where local, regional and global experts are testing out sustainable development solutions (UNESCO, n.d.).

### 3. RESPECT FOR CULTURAL DIVERSITY AS A HUMAN RIGHT

In order to pursue their nomadic livelihoods out at sea, the Moken sea nomads have often lived differently from the majority of people in villages, towns and cities. Traditionally, the Moken reject formal education. They prefer for their children to learn knowledge essential for survival from the sea and from their elders. This livelihood choice has enabled them to keep their oral history and knowledge of the sea alive. Unfortunately, many came to perceive the Moken as a people in need of resettlement in permanent villages and access to education. When forced to settle on land, they often had to give up their rights to express their cultural identity and traditional ways of life. Some of these permanent settlements are often located in maritime national parks where strict conservation laws forbid the Moken to fell trees for building their houseboat or kabang. They also cannot catch or consume sea turtles as they once did.

However, there is still hope. It is fortunate that the Moken, who traditionally do not read or write, have been keeping a living memory of their culture and their oral and mythological history. Such traditional knowledge becomes invaluable in the face of renewed interest from the Moken about their cultural identity. More mindful and informed of the Moken ways of life, anthropologists, museologists, photographers, filmmakers and environmental as well as human rights workers have recently started collaborating with the Moken in the Mergui Archipelago to document their culture as well as their traditional wisdom about the ocean and the tsunami. One example that stands out is the Moken Alive Museum where Moken boat-making knowledge, mental maps of the archipelago and ritual objects are being systematically documented and researched.

**Human activity and mindsets directly and indirectly contribute to climate change, unsustainable development and unequal human rights. Since we are part of the problem, we can also be part of the solution.**



Image 25: **The Moken construct their boat out of one single tree trunk**

©Moken Alive Museum

# 03

## Fostering Global Citizenship

### NOTE TO EDUCATORS

This chapter presents how Global Citizenship Education (GCED) may be used to build up the knowledge, skills and values that empower global citizens to work together in solving the most pressing challenges of today. Educators can locate:

- key learner attributes of global citizens
- pedagogical principles for Global Citizenship Education (GCED)
- a Heritage Education Framework for Global Citizens

### KEY LEARNER ATTRIBUTES OF GLOBAL CITIZENS

A global citizen is a person who understands that the world is connected and who shows interest and critically thinks about global issues. Besides possessing a sense of belonging to a common humanity, a global citizen is someone who shares empathy, solidarity and respects differences and diversity. This person acts responsibly at local, national and global levels for a more peaceful and sustainable world (APCEIU, 2017).

Global Citizenship Education (GCED) is a framework for collective action where learners of any age in any setting can learn to become global citizens who proactively contribute to a more just, peaceful, tolerant, inclusive, secure and sustainable world. The goal of GCED is to empower learners to engage and assume active roles both locally and globally to face and resolve global challenges.

Here are the key learner attributes of global citizens adapted from the *GCED Topics and Learning Objectives* (UNESCO 2015):



• **Informed and critically literate** Learners become aware of the connections between local and global systems, structures and issues through inquiry-based and active learning.



• **Socially connected and respectful of diversity** Learners think inclusively and respectfully about the sameness and differences between various cultures and societies, as well as understand shared values and common humanity.



• **Ethically responsible and engaged** Learners understand the impact of our choices on people as well as the environment, and advocate responsible behaviours for self and the community in daily life.

The teaching strategies in this toolkit help nurture these learner attributes through active learning processes and environments that promote dialogue, collaboration and reflection. The pedagogical principles of GCED support active learning settings that empower learners to create a more just, inclusive, and sustainable world.

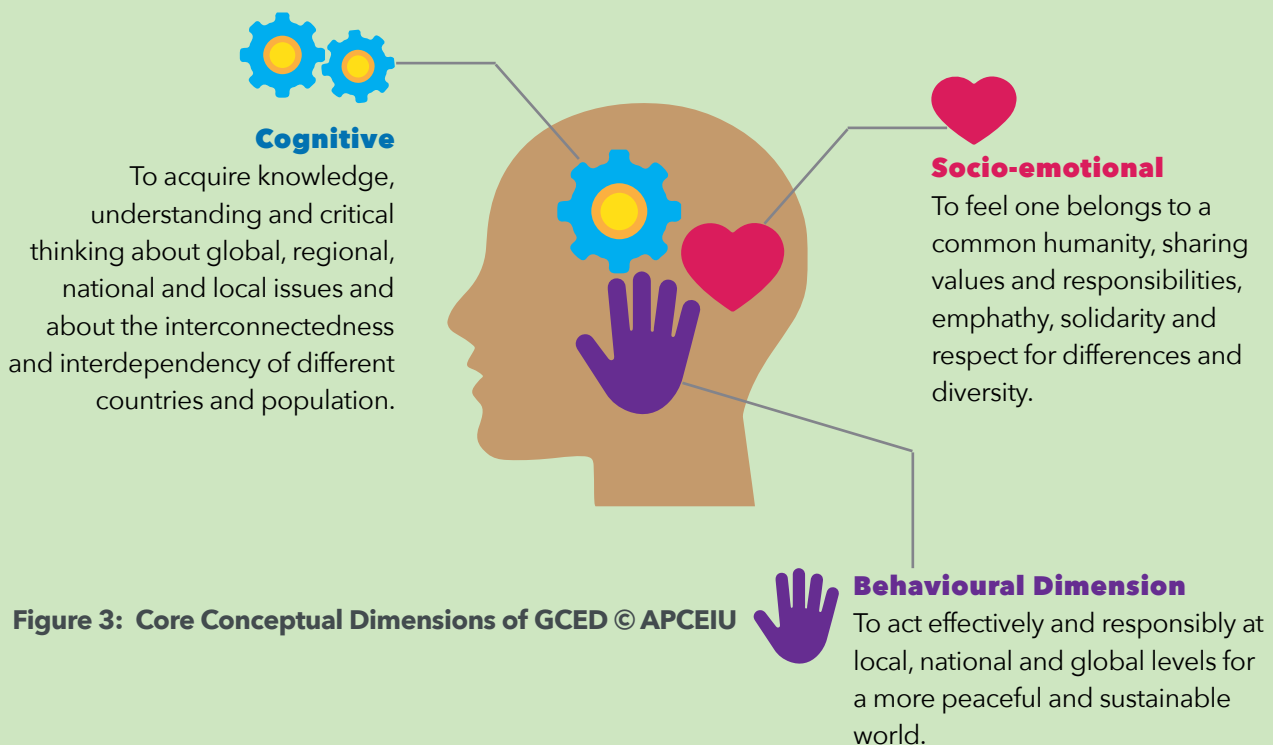
## CONCEPTUAL FRAMEWORK OF GCED

Global Citizenship Education (GCED) is concerned with learning to live together with each other and with our planet. Conservation of Water Heritage requires the kind of transformative learning that is embedded in GCED. For learning to be transformative, GCED approaches learning through three core conceptual dimensions. The cognitive dimension concerns learners' acquisition of knowledge, understanding and critical thinking. The socio-emotional dimension relates to learners' sense of belonging to a common humanity, sharing values and responsibilities, empathy, solidarity and respect for differences and diversity. The behavioural dimension expects learners to act responsibly at local, national and global levels for a more peaceful and sustainable world.

Educating about the content (cognitive knowledge) of a global issue is not enough. Educators should guide learners to simultaneously develop critical thinking skills for assessing local or global concerns as well as nurturing appropriate socio-emotional competences and values that will empower them to take personal and social actions for transformation (APCEIU, 2018).

While the world may be increasingly interconnected, students rarely wonder about how they can contribute to a more inclusive and sustainable world. There is a need to foster global citizens who understand that cultural conservation, disaster preparedness and sustainable living are global and not just local issues, and who can become active promoters of more inclusive, and peaceful societies. Thus, the transformative purpose in GCED that focuses on action, change and transformation is key to developing global citizens.

### GCED ENTAILS THREE CORE CONCEPTUAL DIMENSIONS

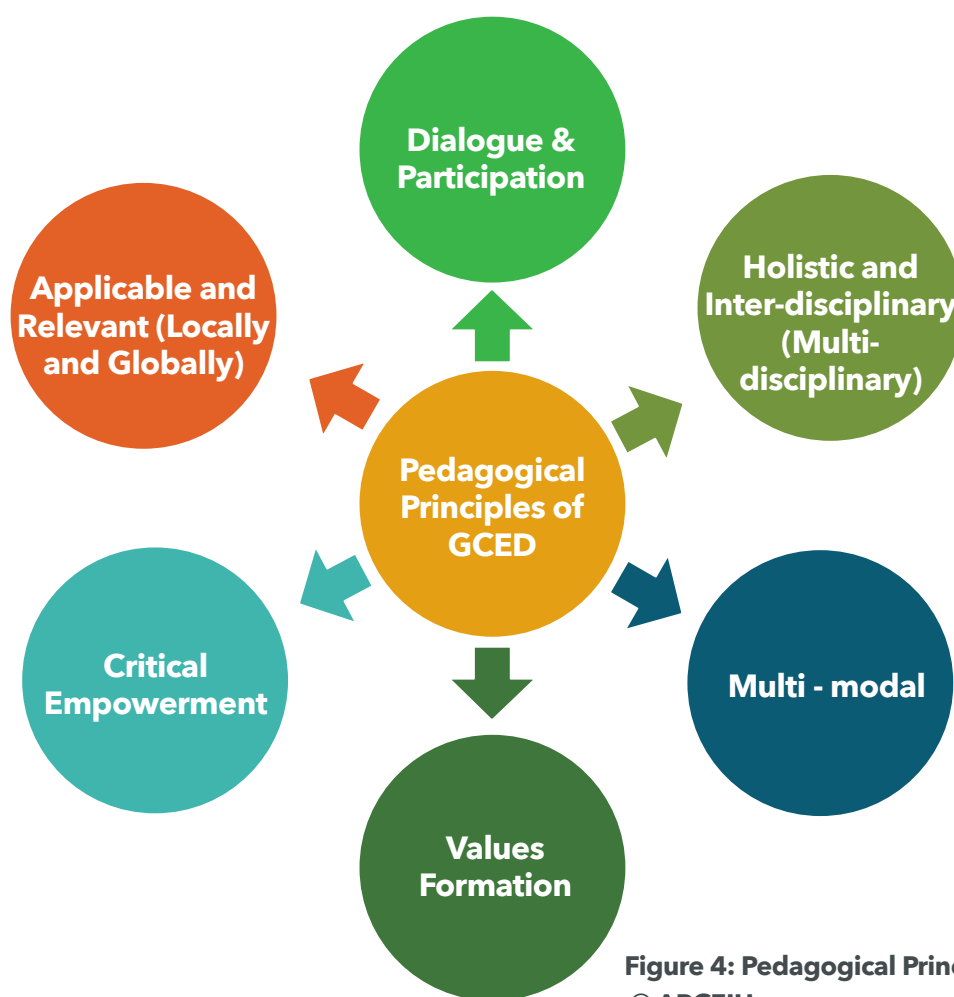


**Figure 3: Core Conceptual Dimensions of GCED © APCEIU**



## PEDAGOGICAL PRINCIPLES OF GCED

Achieving the goals of GCED requires a transformative and holistic approach to teaching that not only expands students' knowledge of global affairs and challenges but also develops their skills and the values necessary to make the world a better place. GCED pedagogy has six pedagogical principles, comprising of shifts from conventional to transformative teaching. (APCEIU, 2018)



**Figure 4: Pedagogical Principles of GCED**  
© APCEIU

## DIALOGUE AND PARTICIPATION

GCED performs best in a learner-centered environment where learners and teachers can discuss issues and learn things together. Teachers should engage in dialogue with learners and encourage them to engage in dialogue with one another. Dialogue allows students to share their ideas, raise questions, listen to one another, and reflect on the many new perspectives they learned.

## HOLISTIC AND INTER-DISCIPLINARY (MULTI-DISCIPLINARY)

Learners should become aware of the big picture that people and the environment are interconnected. Thus, GCED requires holistic learning or studying issues from many different angles (inter-disciplinary) using various ways of learning. Learning about global issues such as heritage conservation and disasters cannot be reduced to just cognitive acquisition of content knowledge. The learning processes encourage learners to discover diversity in standpoints through group discussions and reflection on real-life issues. Educators can arrange for community activities where learners get to interact with people from different backgrounds with different perspectives.

## MULTI-MODAL

Teachers should engage students holistically – the mind, the heart, and the body – so it is important to use different learning strategies that involve the senses such as sight, sound, smell, taste, and touch when teaching. These creative forms of learning include debating, drama, simulation, art, role-play, and visual storytelling. The multi-modal techniques allow students to internalize what they have learned because they are engaged at multiple levels – the cognitive, the socio-emotional, and the behavioural.

## VALUES FORMATION

Educators should not only focus on teaching new facts, knowledge, and information to learners but also help them develop values such as empathy, justice, compassion, respect, and non-violence. As facilitators, educators should teach students how to examine their values and principles, how to assess their expectations and actions, and how to develop good values and habits.

## CRITICAL EMPOWERMENT

Learners should not only become aware of the world but also be able to critically respond to local and global challenges by taking action. Global citizenship education requires educators to guide, facilitate and motivate their learners to think critically about how local concerns are connected to global issues. Learners are encouraged to embark on a journey of inquiry and self-discovery about the world around them.

## APPLICABLE AND RELEVANT (LOCALLY AND GLOBALLY)

GCED promotes learning that nurtures greater consciousness of real-life issues. It offers students relevant ideas and applicable ways to make a positive impact at the local level that can eventually influence the global level. Relevant knowledge and practical skills empower learners to apply what they have learned to their daily lives.

APCEIU's approach is also similar to that of Baxter (2012). To craft an active learning environment that is conducive for Global Citizenship Education, Baxter proposed a rights-based approach whereby

- the educator respects the learner's needs and prior experience;
- interactive methods of learning are offered to allow learners to internalize new concepts;
- the learning environment reflects the basic principles for human rights: protection, equality, freedom and dignity;
- the learning processes are open and participatory in order to support the child's freedom to express viewpoints and the child's rights to participate fully.

# A HERITAGE EDUCATION FRAMEWORK FOR GLOBAL CITIZENS

Cultural heritage education helps ground the learning process in the realities of the local environment and community by providing an opportunity for us to explore, understand and safeguard legacies left by nature and culture. Examining heritages helps us to have a global perspective into our shared heritage.

Cultural heritage education provides the context, while global citizenship education builds vital 21st century skills in learners. Both cultural heritage education and GCED are heavily aligned with the social transformative model of education. (APCEIU and Arts-ED, 2016)

According to the United Nations International Strategy for Disaster Reduction (UNISDR), over 100 million children (aged 0 to 17 years old) in Southeast Asia are affected by disasters annually (ASEAN, 2016). There have been calls for children and their communities to become more aware of the local and global connections between heritage, disasters and sustainable development. This toolkit adopts a heritage education framework that is informed by Global Citizenship Education (UNESCO, 2015). The cultural expressions created by communities with Water Heritage are important, not just for their own identity and history, but to all humanity.

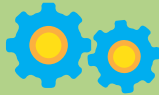



A Heritage Education Framework for Global Citizens		
Core Conceptual Dimensions of Global Citizenship Education (GCED) (UNESCO, 2015)	The Heritage Education Framework of this Toolkit as aligned to GCED	
<b>COGNITIVE DIMENSION</b>		<b>TOOL #1 THINK:</b> Learners think critically about the conservation of Water Heritage as well as their own heritages as local, regional and global issues.
<b>SOCIO-EMOTIONAL DIMENSION</b>		<b>TOOL #2 SHARE:</b> Learners imagine a better world where people feel connected enough to a common humanity to care about risks to heritage and diverse cultures.
<b>BEHAVIOURAL DIMENSION</b>		<b>TOOL #3 ACT:</b> Learners initiate small but meaningful projects to promote sustainable mindsets and actions that reduce risks to heritage.

Figure 5: A Heritage Education Framework for Global Citizens © SEAMEO SPAFA - APCEIU

This heritage education framework aims to nurture global citizens who are curious about the interconnectedness of heritage hazards faced by various communities and countries. This curiosity not only motivates learners to think critically about global issues but also leads them to imagine positive as well as negative consequences of natural and human-induced hazards.

This Heritage Framework also captures Sustainable Development Goal (SDG) Target 4.7 as well as **SDG Target 11.4** that are aimed for completion by 2030.

 <p><b>4 QUALITY EDUCATION</b></p>	<p><b>SDG Target 4.7</b></p> <p>To ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and nonviolence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development.</p>
<p><b>SDG Target 11.4</b></p> <p>To strengthen efforts to protect and safeguard the world's cultural and natural heritage.</p>	 <p><b>11 SUSTAINABLE CITIES AND COMMUNITIES</b></p>

For more information on the SDGs, please visit <https://sustainabledevelopment.un.org>

# 04

## Teaching and Reflecting for Action

### NOTE TO EDUCATORS

This concluding chapter presents to educators:

- proposed global citizenship themes that learners can explore through Water Heritage
- inquiry-based learning strategies that can be used with the photocards found in this toolkit
- ten ideas for participatory lessons

### GLOBAL CITIZENSHIP THEMES IN WATER HERITAGE

Global Citizenship Education (GCED) fosters a sense of common belonging, shared values and social justice. Global citizenship promotes universal values of human rights, democracy, non-discrimination, and diversity (UNESCO, 2016). These values are also important to the preservation of Water Heritage. GCED recognizes that in order to build peaceful and sustainable societies, communities need to make fundamental changes in how we co-exist with each other and with our planet.

Here are ten global citizenship themes educators may want to explore through Water Heritage. They are non-exhaustive. Can you think of more topics or themes relevant to your own school or community?



## INQUIRY-BASED LEARNING WITH PHOTOCARDS

GCED encourages educators to design interactive and learner-centred lessons that enables exploratory, action-oriented and transformative learning. The set of 25 photocards in this toolkit features images from five Water Heritage sites that can be used as entry points for active learning. Each site is presented through five images. Four images make up a bigger picture of the key image. On the back of the four images are four other images of life at each site. Each set of photocards belonging to a particular site bears the same colour banner.

### Ha Long Bay, Vietnam

#### MAIN PHOTOCARD



Habitation baie d'halong 2 by Preparetavalise.com 

[https://commons.wikimedia.org/wiki/File:Habitation\\_baie\\_d%27halong\\_2.jpg](https://commons.wikimedia.org/wiki/File:Habitation_baie_d%27halong_2.jpg)





About 4 million tourists visited Ha Long Bay in 2018. Most of them would have visited the bay in one of these tourist boats. What do you think attracts tourists to Ha Long Bay?

Ha Long Bay North East Vietnam by Francesco Paroni Sterbini



[https://commons.wikimedia.org/wiki/File:Ha\\_Long\\_Bay\\_-\\_North\\_East\\_Vietnam.JPG](https://commons.wikimedia.org/wiki/File:Ha_Long_Bay_-_North_East_Vietnam.JPG)



A small fishing boat on Ha Long Bay. Such boats are used on fishing trips where fishing families live on board for a few days to catch and sell fish. What else would you bring on board?

Bateau\_dans\_la\_baie\_de\_Halong by Ji-Elle



[https://commons.wikimedia.org/wiki/File:Bateau\\_dans\\_la\\_baie\\_de\\_Halong\\_\(10\).jpg](https://commons.wikimedia.org/wiki/File:Bateau_dans_la_baie_de_Halong_(10).jpg)



While floating villages have been resettled on the mainland, some fish farms have remained as sources of income. The local government also uses a few fish farms as cultural heritage spaces for tourists to learn about the lifestyles of fishing communities in the bay.

Fishing Village Ha Long Bay Vietnam by Christophe Meneboeuf



<https://www.xtof.photo/blog/index.php?showimage=128>



It is not uncommon to see mobile shops on boats selling water, fresh food, seafood, fruits and souvenirs. If you lived on water, what kinds of foods will you need to buy?

Ha Long Bay, northern Vietnam by Richard Mortel



<https://www.flickr.com/photos/43714545@N06/26767431829>

## Inle Lake, Myanmar

### MAIN PHOTOCARD



Floating Village by Chen Huang 

<https://web.archive.org/web/20161101131411/http://www.panoramio.com/photo/120980348>





Villagers at Inle Lake grow their vegetables on floating gardens. Organic farming has cut down the amount of chemical fertilizers polluting the lake. What kinds of fertilizers does your nearest farm use?

Floating farm on Inle Lake in Maing Thauk by Christophe



[https://commons.m.wikimedia.org/wiki/File:Floating\\_farm\\_Maing\\_Thauk.jpg](https://commons.m.wikimedia.org/wiki/File:Floating_farm_Maing_Thauk.jpg)



A fisherman uses one leg to row a boat, leaving his hands free to handle the fishing net. What are some unique abilities in your community?

Fisherman on Inle Lake in Myanmar by Jakub Hafun



[https://en.wikipedia.org/wiki/Inle\\_Lake#/media/File:20160805\\_-\\_Inle\\_Lake,\\_Myanmar\\_-\\_8453\\_DxO.jpg](https://en.wikipedia.org/wiki/Inle_Lake#/media/File:20160805_-_Inle_Lake,_Myanmar_-_8453_DxO.jpg)



Houses built on stilts provide protection from the seasonal rising of lake waters as well as space to store boats and fishing implements.

Inle Lake, Myanmar by Clay Gilliland



<https://flic.kr/p/op7BdY>



Phaung Daw Oo Pagoda Festival lasts for 18 days. Held once a year, the Karaweik or mythical bird barge carries four revered Buddha images in a procession that stops at 14 villages around Inle Lake. What is the most important festival in your community?

Inlay Karaweik Raft by Paingpeace



[https://commons.m.wikimedia.org/wiki/File:Inlay\\_Karaweik\\_Raft.jpg](https://commons.m.wikimedia.org/wiki/File:Inlay_Karaweik_Raft.jpg)

## Kampong Ayer, Brunei Darussalam

### MAIN PHOTOCARD




Sultan Omar Saifuddin Mosque Brunei by Bernard Spragg 

<https://www.flickr.com/photos/88123769@N02/27957296900>



Stairways into the river are common in Kampong Ayer where river taxis are the main mode of public transportation.

The water village Brunei by Bernard Spragg   
<https://www.flickr.com/photos/24975001@N04/5502071842>




At this fire station, firefighters use both boats and fire engines to serve all the houses in Kampong Ayer, whether they are built on land or over water. What would you protect in your homes and in your community if a fire broke out?

Fire and Rescue Station at Sungai Kebun, Kampong Ayer  
 © Kim Dowon



38 kilometres of boardwalk connect 40 villages. Water pipes and electrical wires that follow the paths of these boardwalks ensure that every household has access to water and electricity. How will life be like without water and electricity?

Village on the water. Brunei by Bernard Spragg   
<https://www.flickr.com/photos/volvob12b/9567183316/>



A few households still make kites as a small side business and for leisure. Interestingly, kites to be sold are made from new coloured paper while kites for this family's own children uses recycled materials e.g. plastic bags. How else can we repurpose plastic bags?

Kite maker, Kampong Ayer, Brunei Darussalam  
 © Karen Chin



## THE MOKEN, MERGUI ARCHIPELAGO, KO SURIN, THAILAND

### MAIN PHOTOCARD



© Moken Alive Museum



The Moken communicate their happiness and sorrows through music, songs and dances at social gatherings as well as ancestral ceremonies. What traditional performances does your community treasure?

Listen to a recording of a Moken song about the 2004 tsunami at <https://archive.org/details/Moken>

© Moken Alive Museum



The Moken spend nine months at sea. During the monsoon season, they build temporary shelters to protect themselves from rain and storms. The houses are abandoned in the dry season.

© Moken Alive Museum



In some communities, spirit poles or *lobung* are carved to honour the ancestors each time the rainy season arrives. These poles are sometimes put in front of houses for protection or used in *bo lobung*, an annual ritual to retell the history of the Moken. What kinds of annual festivals do you celebrate in your community?

© Moken Alive Museum



A Moken child illustrated the 2004 tsunami as a gigantic wave with eyes that is threatening to destroy people and houses.

Drawing of a tsunami with eyes by Moken child  
© Moken Alive Museum



## Tonle Sap, Siem Reap, Cambodia

### MAIN PHOTOCARD



Houses on the water in Kampong Phlouk [Tonle Sap, Cambodia] by Krzysztof Golik



[https://commons.wikimedia.org/wiki/File:Houses\\_on\\_the\\_water\\_in\\_Kampong\\_Phlouk.jpg](https://commons.wikimedia.org/wiki/File:Houses_on_the_water_in_Kampong_Phlouk.jpg)




The bridges that link houses built on stilts are built by residents of Kampong Phluk. These bridges also allow boats to pass under them.

Kampong Phluk, Tonle Sap, Cambodia  
©Karen Chin




There are floating houses in Tonle Sap. They are usually home to people who do not have citizenship papers to buy houses on land. 20 to 30 floating houses usually gather together to form a community. You can also see floating hospitals, schools and shops on the lake.

Floating house Tonle Sap by Dennis Jarvis   
<https://flickr.com/photos/22490717@N02/3637577752>



Like many villages in Tonle Sap, the main thoroughfare of Kampong Phluk is a waterway. Sometimes, you can see fishermen repairing their nets or making a fish farm as well as people having a small party on the roof of their boat. How does the main road in your community look like? What kinds of livelihoods or leisure activities can you spot?

Village main water way. Kompong Phluk by Christophe   
<https://flic.kr/p/5vKhwd>



Water reaches the tops of trees when Tonle Sap swells during the wet season. Children adapt to life in the lake by learning how to swim and to use motorboats from a young age. The forests are important as they protect villages from storms, and when flooded, they provide safe spaces for fish to reproduce.

Boys in Kampong Phlout [Tonle Sap, Cambodia] by Jakub Halun   
[https://commons.wikimedia.org/wiki/File:20171129\\_Boys\\_in\\_Kampong\\_Phlok\\_5838\\_DxO.jpg](https://commons.wikimedia.org/wiki/File:20171129_Boys_in_Kampong_Phlok_5838_DxO.jpg)

## 5

## WAYS TO USE THE PHOTOCARDS

## STRATEGY

**Younger Learners  
(7 to 9-year olds)****Older Learners  
(10 to 12-year olds)****1. Puzzle Cards**

Educators can put up the main photocard and invite learners to piece together 4 photocards to identify each of the five Water Heritage Sites.

After completing the puzzle, learners make a list of things they see in the photocard in small groups.

After solving the puzzle, learners create a list of questions they would like to ask residents at a specific Water Heritage site.

**2. Form a Word Bank**

Educator prompts learners to come up with as many adjectives as they can to describe the photocard they have on hand.

In pairs, learners come up with as many imaginary conversations as they can based on the photocard they have on hand.

**3. Story Circle**

In smaller groups of ten, each learner is invited to come up with a sentence to form a fictional story based on one photocard.

In smaller groups of four, discuss what might have happened just before and after the photograph was taken. Make up a story.

**4. Blind Drawing**

Educator describes a photocard and encourage learners to draw details described without letting them look at the photocard.

In pairs, one learner describes what he/she sees on a photocard to the other learner attempts to draw the details described without looking at the photocard.

**5.THINK-SHARE-ACT**

On the back of the main photocard is a series of prompting questions and mini activities that empowers learners to THINK, SHARE and ACT for a more just, peaceful, inclusive and sustainable world.

Younger learners may require the help of the educator to read the questions together.

Older learners can read and respond to the questions on their own in small groups.

## 10

## PARTICIPATORY LESSON IDEAS

On top of using the photocards, educators and learners can design their own heritage and global citizenship experiences. To help you start your journey, here are ten lesson ideas that can allow learners to actively participate in activities and gain knowledge in GCED principles.





## Ha Long Bay, Vietnam

**Lesson Idea #1 Biodiversity Bingo (7 to 9-year-olds)**

**Objective:** Learners to observe animals and plants in your community and discuss how best to protect them.

**THINK**

There are many kinds of animals and plants at Ha Long Bay. If we look closely, we can learn to appreciate the nature around us. Invite learners to complete a Biodiversity Bingo while taking a walk in a park or any green space near your school. They can fill in the name or draw to complete any four squares vertically, horizontally or diagonally (Annex 1: Bingo template).

An animal with four leg 	A tree with flowers	An insect	A tree-climbing plant
A plant with leaves smaller than my palm	An insect 	A plant shorter than me	An animal that flies
A plant with leaves bigger than my palm	An animal with two legs	 A plant taller than me	An animal with no legs
An animal that flies	A plant with flowers bigger than my eye	An animal with four legs	A plant with flowers 

**Sample**

Think about why these animals and plants are important in the ecosystem.

**SHARE**

Have small groups choose one animal or plant they want to protect from their bingo sheet. Collect fallen dry leaves, twigs and seeds from nature to make an image of the selected animal or plant. Encourage learners to include as many details as they can spot.

Share responses to a few “What if ...” scenarios.

What if there were no more bees in the world? What would happen?

**ACT**

In groups of four, select one animal or plant to focus on. Make a poster out of natural materials to draw attention to how important this plant or animal is to our ecosystem. Discuss how we can help protect the plants and animals in our natural environment.



## Lesson Idea #2 Conservation Refugees (10 to 12-year-olds)

**Objective:** Learners imagine the feelings of fishing folks who have been forced to resettle before thinking more deeply about stories, places and objects that your community treasures.



Image 26: **Fishing with small nets and buckets, Ha Long Bay, Vietnam** 

Ha Long Bay, north Vietnam by Richard Mortel  
<https://flickr.com/photos/43714545@N06/38511896652>

### THINK

The fishing communities in Ha Long Bay had been living on floating houses and mobile fish farms for a long time. When Ha Long Bay became a UNESCO Heritage Site, the local government resettled the fishermen and their families on the mainland in order to keep the bay clean from human waste and activity.

This conservation effort has displaced the fishing folks, making them refugees in their own homes. Article 23 of the Universal Declaration of Human Rights (UDHR) states that everyone has the right to work, to free choice of employment, to just and favourable conditions of work and to protection against unemployment. However, families who were forced to resettle on the mainland are still unemployed despite being promised alternative livelihoods by the local government. They also could not get used to life on land. On top of that, construction of a new harbour to ensure easy access to their boats was halted due to financial difficulties. Although a few floating fish farms were retained as cultural heritage items for tourism, the fishing communities did not benefit from the effects of the tourism boom. In fact, they became worse off. At the same time, tourists who visit Ha Long Bay to experience life on a floating village are disappointed with the lifeless structures (Tran, 2019).

If you were the most powerful government servant in Ha Long Bay, what would you do to help the fishing communities and Ha Long Bay?

### SHARE

In groups of four, learners imagine they are members of an illiterate fishing family who are currently unemployed on land. Use the photocards to help set the context. Label yourselves father, mother, and children (choose an age) and share what it might feel like to move to a new place. What do you miss most? What do you look forward to on land? How do you feel? Write the role you play on one side of a small piece of paper and on the other side, pen their thoughts down. Exchange them with another group.

Read out the imagined thoughts. Guess if it is the father, the mother, or the children who might have voiced such thoughts.

### ACT

**“The heritage of Ha Long Bay is not just the landscape, it is also the people,”**

Nguyen Kim Anh, project coordinator in Vietnam for the United Nations Development Programme (UNDP)

What does this sentence mean to you?

What kinds of people and lifestyles are unique in your community?

Which stories, places and objects does your community cherish?

Use the Cultural Heritage Table in Annex 2 to make an inventory of important cultural heritages around you. Interview elders if needed.



# Inle Lake, Myanmar

## Lesson Idea #3 Festivals: Past and Present (7 to 9-year-olds)

**Objective:** Learners discover similarities and differences between other community festivals to develop respect for cultural diversity.

### THINK

The communities around Inle Lake celebrate the Phaung Daw Oo Pagoda Festival every year for 18 days. The Karaweik or mythical bird barge carries four revered Buddha images in a procession that stops at 14 villages around Inle Lake.

What is the most important festival in your community? What are the lesser known festivals celebrated by minority groups? Invite learners to work in groups of four to collect and use recycled materials to make diorama boxes depicting several festivals in your community. After completion, get learners to think about the similarities and differences between the various festivals from diverse groups of peoples in the community.



### SHARE

Learners use suggested questions in Section 3 **Social Practices, Rituals and Festive Events** and other sections, if appropriate, from the Cultural Heritage Table (Annex 2) to interview elders, family members or other important figures in community festivals. Prompt learners to share their own reflections on the festival too.

Inlay Karaweik Raft by Paingpeace

[https://commons.m.wikimedia.org/wiki/File:Inlay\\_Karaweik\\_Raft.jpg](https://commons.m.wikimedia.org/wiki/File:Inlay_Karaweik_Raft.jpg)



### ACT

Get learners to think about how they can use the diorama boxes that have been created to spread awareness about the different kinds of festivals around them. How would they stress the similarities they have discussed to create a more inclusive community?

Diorama of Inle Lake's Phaung Daw Oo Pagoda Festival using recycled materials by Linh Anh Moreau and Nipon Sudngam

## Lesson Idea #4 New Life for Rubbish! (10 to 12-year-olds)

**Objective:** Learners discuss responsible consumption and production in their community.



Image 27: **Increased tourist numbers at Inle Lake means more waste to manage.** 

© Roelof Schierbeek

### THINK

**Inle Hnin Si is a social enterprise at Nyaung Shwe township, Inle Lake, that takes charge of waste disposal. This company focuses on sustainable processes such as rubbish segregation and repurposing waste. Instead of burning rubbish, it separates rubbish into what can be recycled, like plastic and tin; kitchen waste, which can be used as fertilizer; food waste, which can be used as animal feed; and construction waste, which is used in landfills. The government has provided the company with land where it converts biodegradable garbage from hotels and restaurants in town into fertilizer. It also plans to raise pigs and cattle (Khin, 2019).**

- How is rubbish disposed of in your community?
- What are the different groups of people that need to cooperate in managing rubbish disposal more effectively?
- Find out from the rubbish collector or visit a rubbish processing plant.

### SHARE

Each learner brings a piece of rubbish from home. In groups of four, discuss new purposes for the rubbish gathered and work together to give it new life. For example, newspapers could be turned into paper bags, a tin can could be used as a pencil holder, or a fruit crate could become a stool with some creative thinking.

#### Share

- what people in your family or the community usually throw away.
- how you feel about transforming rubbish into useful things.
- why the community should recycle and upcycle



### ACT

Using the upcycled items that you have created, how would you promote responsible consumption and production in your community?

# Kampong Ayer, Brunei Darussalam

## Lesson Idea #5 Documenting Crafts (7 to 9-year-olds)

**Objective:** Learners document a traditional craft of choice and learn how they can promote community awareness of vanishing trades and crafts.

### THINK

Traditional crafts often go unnoticed in communities until they start to vanish. In Kampong Ayer, some villagers still make paper kites to sell or to play with. What kind of unique crafts do you spot in your community? Use suggested questions in Section 5 Traditional Craftsmanship from the Cultural Heritage Table (Annex 2) to interview craftsmen, buyers, users of items that are cherished in the community. Think about why they are important to the community.



### Resource card: Kampong Ayer

*Kite maker, Kampong Ayer, Brunei Darussalam*

© Karen Chin

### SHARE

Many traditional crafts do not come with written instructions or photographs. To make sure they can still be appreciated by future generations, learners can be invited to draw or take a series of photographs or short video clips of a craft that interests them. They can prepare captions for each drawing, take photographs to document the process of making a specific craft that is regarded as special to their own community. They may also upload their photographs or video clips on appropriate channels to help raise awareness of their own cultural heritage.



If you have access, examples of students from different countries in Southeast Asia video-documenting their local cultural heritage can be shown from SEAMEO Cultural Week playlists on SEAMEO SPAFA's YouTube channel (categorized by country) at

<https://www.youtube.com/user/SEAMEOSPAFA>.

### ACT

Have learners think about how they can make use of the craft instruction booklets to spread awareness about traditional crafts or vanishing trades in their own community.

## Lesson Idea #6 Cultural and Hazard Mapping (10 to 12-year-olds)

**Objective:** Learners map out cultural and natural resources as well as hazards in the community.

### THINK

In Kampong Ayer, we spot healthy mangroves and wildlife as natural heritage. We can also see closely-knitted social ties and traditional production of dried seafood as cultural resources. Residents reported collapsing houses, construction debris, and rubbish as hazards to more sustainable lifestyles in the village.

Get learners to map out the cultural and natural heritage of their own community from a bird's eye view. They can use simple drawings to represent culturally important places and social practices valued by the community. With a red marker or crayon, learners highlight hazards or any potentially damaging physical event or human activity that may cause the loss of life or injury, property damage, social and economic disruption or environmental degradation.



Image 28 : Mapping of cultural and natural heritage as well as hazards at Kampong Ayer in a SEAMEO SPAFA workshop 2019

© Karen Chin

### SHARE

Have learners share

- What needs to be preserved for future generations? And why?
- What are some hazards that could possibly damage places, objects and practices that the community treasures?
- How can hazards to cultural heritage be reduced?

If we could only save one thing in the community, what would it be? Have learners debate on possible options and invite learners to vote for what they think is the most important heritage element in the community.

### ACT

Learners discuss, vote and decide on one cultural heritage element to initiate a small awareness project in school or in a community space.

# The Moken, Mergui Archipelago, Myanmar and Ko Surin, Thailand

## Lesson Idea #7 Human Rights through Art (7 to 9-year-olds)

**Objective:** Learners explore the effects of a tsunami and suggest ways to protect what they love.

### THINK

The Moken have a folklore about laboon or the tsunami. They call it the wave that eats everything in its path. Their traditional knowledge about nature and about signs of a tsunami on its way saved the lives of many people during the 2004 tsunami. Invite learners to find out

- Which parts of your country or the world were affected by tsunamis?
- Are there any traditional tales or sayings in your community about tsunamis, climatic hazards or the weather?



### Resource: Moken Photocard

Drawing of a tsunami with eyes by Moken child  
© Moken Alive Museum



Image 29: **Some Moken were involuntarily resettled on land, Ko Surin, Thailand**  
©Moken Alive Museum

### SHARE

The Moken who witnessed the 2004 tsunami all survived as they knew the signs of this all-consuming wave. This picture was drawn by a Moken child who experienced the 2004 tsunami. Here are some questions to develop empathy for anyone who had to face a tsunami.

- In groups of four, talk about what you can see in the photocard containing a drawing of the tsunami.
- In pairs, share what might happen to your homes, your school or your community should a tsunami or natural disaster happen? How would you, your family and friends feel during and after the disaster?
- If you could write a letter to a child who suffered from the 2004 tsunami, what would you say to comfort them?

### ACT

The Moken wish to roam the seas and preserve their way of life. At Ko Surin, the laws relating to the Nature Reserve require them to settle down in houses and do not allow the Moken to fell trees for the construction of boats. While Article 27 of the Universal Declaration of Human Rights (UDHR) maintains that everyone has a right to participate in the cultural life of the community, many Moken are unable to maintain their nomadic lifestyle and develop their cultural heritage. What if you were faced with a similar situation?

Invite learners to draw a family treasure they want to protect. It could be a person, an item or a way of life. In groups of four, discuss possible ways of preserving what they love.



## Lesson Idea #8 Plastic Ocean (10 to 12-year-olds)

**Objective:** Learners think critically about plastic pollution and find ways to cut down on single-use plastics or to upcycle plastic waste.

### THINK

To the Moken, the ocean is their universe. Plastics are threatening the survival of life above and under the sea. Every year nine million tonnes of plastics enter our oceans.

If you have access, get learners to watch the animated video on Plastic Pollution as an opening activity. Alternatively, get learners to name the places in the community that are affected by plastic pollution. Discuss what might be the reasons behind the huge amount of plastic waste humans have generated in your community, in your country and globally?

### Resource:

Educational animation on Plastic Pollution in English (<https://youtu.be/RS7IzU2VJIQ>), in Indonesian ([https://youtu.be/VC\\_guaMaQcw](https://youtu.be/VC_guaMaQcw)) and in Vietnamese (<https://youtu.be/ALpVB6P6zLw>)

### SHARE

The ocean is home to the Moken but this home is being polluted by trash that does not belong to them. Gather plastic trash in the school compound or in a community area. You can use sticks or tongs and recycled cardboard boxes to keep the activity environmentally sustainable and safe for participants. Examine the trash, sort them out and discuss why they have been thrown away.

- Learners use the collected trash to create images of marine animals that are affected by such pollutants. In 2018, United Nations Environmental Programme (UNEP) organized 'Beat Plastic Pollution', an art exhibition using plastic rubbish found in Bali and Seoul. You, too, can create an exhibition to raise awareness of plastic waste.
- Learners ask the elders in their family or in your community what was used in place of plastic packaging and products in the past.
- Encourage learners to think about ways to reduce single-use plastics or upcycle plastic trash.

Image 30: **#BeatPlasticPollution Exhibition in Seoul, Korea.**

© UNEP



Image 31: **A colourful playground made with upcycled plastic rubbish at a farmers' market in Nakhon Pathom, Thailand**

© Vassana Kerdsupap



### ACT

The Moken recycle or reuse whatever they find in the ocean or on the beach. Likewise, the organizers of a farmers' market in Nakhon Pathom, Thailand repurposed plastic rubbish to create a playground.

Create a photo journal or a short video on how your school or community is cutting down on single-use plastics or upcycling plastic trash. You can share the photographs or video clip on social media or curate a school or community exhibition to spread the message of reducing plastic trash.

**Resource:** UNEP Clean Seas Campaign and education packs for teachers, students and parents. Available at <https://www.cleanseas.org/back-school>

# Tonle Sap, Siem Reap, Cambodia

## Lesson Idea #9 Challenge Deforestation! (7 to 9-year-olds)

**Objective:** Learners explore how livelihoods and water are connected.



Image 32 **Flood Forest of Tonle Sap, Cambodia**  
by **Jakub Halun** 

[https://commons.wikimedia.org/wiki/File:20171129\\_Tonle\\_Sap\\_Kampong\\_Phlok\\_6027\\_DxO.jpg](https://commons.wikimedia.org/wiki/File:20171129_Tonle_Sap_Kampong_Phlok_6027_DxO.jpg)

### THINK

Deforestation deprives fish of spawning spaces in the flooded forests of Tonle Sap. Trees are extremely important for a sustainable planet. Invite learners to draw their favourite tree in the school or in the community. Then in groups of four, learners make a list of 10 things that trees in your community do for people, animals and other plants.

### SHARE

Villagers in Tonle Sap know that the forest shield them from tropical storms.

- Learners use suggested questions in Section 4 Knowledge and Practices about Nature and the Universe from the Cultural Heritage Table (Annex 2) to interview elders and traditional medicine practitioners.
- Collect stories and sayings about trees, water forests and animals.
- Share different views on nature.

### ACT

Get learners to locate areas in the community where the replanting of trees is needed. Think of ways to raise awareness and funds to plant trees.

## Lesson Idea #10 Water and Sustainable Livelihoods (10 to 12-year-olds)

**Objective:** Learners consider the economic activities and effects of poor water quality



Image 33: **A vegetable seller on her boat which is also her shop, Tonle Sap, Cambodia**

by **Luca Nebuloni** 

<https://www.flickr.com/photos/nebulux/23687473644/>

### THINK

About 1.2 million people depend on Tonle Sap for a living.

- Draw or list the types of livelihoods in your community that are connected to water, e.g. clothes factory, fish farming.
- What would happen if these livelihoods had to come to an end because of water pollution?

### SHARE

Learners choose one of the livelihoods listed and imagine how they would feel if they were told that the waters had become too polluted for them to continue working. Have learners respond to these questions:

- How would you feel?
- What would you do?

### ACT

Organize a field-trip to a water body in your community. Invite learners to observe the environment and discuss the following questions:

- How clean or how polluted is this specific waterscape?
- What livelihoods at this site require water?
- What groups of people should work together to maintain the cleanliness and portability of water?
- What issue needs attention at this site?
- How can we raise awareness of the importance of water in our community?

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