

UNESCO Regional Capacity Building Programme on Safeguarding the Underwater Cultural Heritage of Asia and the Pacific

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Abstract

In response to the recommendation of delegates and experts during the Asia-Pacific Regional Workshop on the 2001 Convention on the Protection of Underwater Cultural Heritage (Hong Kong, Special Autonomous Region of China, November 2003), The United Nations Educational, Scientific and Cultural Organization (UNESCO) is implementing a regional capacity building programme on underwater cultural heritage (UCH) in Asia and the Pacific through the establishment of a Regional Field Training Centre. Supported by the Norwegian Government, the programme aims to facilitate and enable the training of maritime archaeologists and conservation experts from Asia and the Pacific region in the proper safeguarding and management of UCH, in line with the principles of the 2001 Convention and the Rules of its Annex. Operated by the Government of Thailand, the Regional Field Training Centre is attached within the precinct of the Underwater Archaeology Division of the Fine Arts Department in Chanthaburi, Thailand. With the support of implementing partners including International Council of Monuments and of Sites - International Council of Underwater Cultural Heritage (ICOMOS-ICUCH), the Centre has successfully organized since 2009 three Foundation Courses and an Advanced Course on the application of Geographical Information systems (GIS) in underwater archaeology and cultural heritage management. The six-week Foundation Courses aim to bring regional experts of different academic backgrounds to a common level of understanding on the multi-disciplinary nature of UCH management. So far, the regional capacity building programme has benefitted seventy national experts from seventeen countries in the Asia-Pacific Region, including Kenya.

This paper will discuss the development of the regional capacity building programme, the training activities and projects in which the Centre is involved, future plans and efforts to sustain the Centre over the long term.

Background

The threats of treasure hunting and illicit trafficking of artefacts found underwater, as well as commercial exploitation of marine resources were the reasons why UNESCO engaged to take legal and practical action to ensure better protection for the underwater archaeological sites. After four years of intense negotiations, four experts meetings and the participation of more than 100 Member States², the UNESCO General Assembly finally adopted the *Convention on the Protection of the Underwater Cultural Heritage* in 2001 (2001 Convention). More importantly, every Member State agreed that the Annex to the Convention, which sets out very specific rules concerning activities directed at UCH, should be accepted and applied as the reference document for interventions directed at UCH.

To introduce and discuss the 2001 Convention among concerned stakeholders in our region, UNESCO organized the Asia-Pacific Regional Workshop on the 2001 Convention on the Protection of Underwater Cultural Heritage in Hong Kong, Special Autonomous Region of China in November 2003. Eighty six delegates and experts from twenty-three Member States participated in the workshop. Realizing that the 2001

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²Sovereign States that are members of UNESCO. There are currently 193 Member States of UNESCO.

Convention can only be effectively implemented through capacity building in underwater archaeology, a relatively new discipline in the Asia-Pacific region, the participants unanimously recommended the establishment of a regional field training centre. In response, the delegates from Sri Lanka offered to host the centre within the infrastructure of their Maritime Archaeology Unit located in the World Heritage Site of Galle, Sri Lanka.

In 2005, a project document entitled *Safeguarding the Underwater Cultural Heritage of Asia and the Pacific: Building Regional Capacities to Protect and Manage Underwater Archaeological Sites through the Establishment of a Regional Centre of Excellence Field Training Facility and Programme of Instruction* was formulated and submitted to the Government of Norway for their consideration under UNESCO-Norway Funds-in-Trust Cooperation. Approved for funding by the Government of Norway in 2007, project implementation started in March 2009 with a training programme for Sri Lankan archaeologists and conservators to prepare them for their eventual role as trainers of trainees coming from the region. Due to civil unrest in Sri Lanka and lack of facilities and necessary equipment to support regional training activities, UNESCO decided to transfer the venue of the regional field training centre to Thailand in early 2009.

The UNESCO regional capacity building programme

The regional training platform aims to facilitate and enable the training of underwater archaeological site managers and conservation professions from Asia and the Pacific. It aims to provide a system of embedding this training into the national development planning of participating Member States, particularly the national strategy for capacity - building and human resource development through the participation of national experts nominated by the relevant national agencies of participating Member States. It focuses on integrated approaches towards the conservation and management of underwater archaeological sites that are participatory and inclusive, and foster social cohesion and peace by promoting intercultural dialogue through the animation of shared heritage.

Professional capacity - building has been identified as the key to successfully safeguard the UCH. Without a concerted and sustained effort to build the region's capacity to manage it, it is not possible for UCH to be protected in the long term.

The development goals towards which the regional project contributes are: (a) the protection of UCH; and (b) fostering peace and social cohesion among participating Member States. The protection of UCH also has an important economic aspect, considering that tourism may develop around underwater sites if properly managed and interpreted in on - site museums which may be established.

Through the establishment of a Regional Field Training Centre in Underwater Cultural Heritage (hereinafter referred to as the Centre), the project aims to achieve the following objectives:

1. To build regional capacity in the protection and management of UCH through professional training in field techniques on underwater archaeological site inventory and mapping, non-invasive techniques of site identification, inventory

and investigation, museology techniques, and site monitoring and protection according to international professional standards. The application of the provisions of the Annex to the Convention is particularly stressed.

2. To provide a platform for an effective networking among partner Member States by encouraging close collaboration and dissemination of best practices, thereby promoting regional cooperation through exchange of information on the conservation and management of a shared heritage.
3. To prepare Member States in the ratification and implementation of the 2001 Convention and its Annex.

Thailand as venue of the Centre



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Sited along the riverbank of Chanthaburi, Thailand, the Regional Field Training Centre has classroom and accommodation facilities for participants of training programmes. Inset: Dive boat of the Underwater Archaeology Division with complete facilities and equipment, including a new decompression chamber.

The Government of Thailand hosts the Centre within the infrastructure of the Underwater Archaeology Division (UAD) of the Fine Arts Department in Chanthaburi, Thailand. The UAD has a long experience in underwater archaeology since 1974 and has closely collaborated with the Royal Thai Navy, the Regional Centre for Archaeology and Fine Arts of the Southeast Asian Minister of Education Organization (SEAMEO-SPAFA) and Silpakorn University over the years. UAD has more than adequate human and technical resources to support the training activities of the Centre. It has a professional staff of two maritime archaeologists and a technical diving team of ex-navy personnel. The staff operates under high safety standards, collaborates closely with the Royal Thai Navy and links up with a nearby naval hospital during their diving missions. Just before the first training course was organized, the UAD procured a new fully-

equipped diving boat with a decompression chamber. UAD has also adequate diving equipment including technical diving equipment, re-breathers and trimix.

Implementation strategy

In April 2008, a Project Steering Committee meeting was convened in Galle, Sri Lanka to discuss and decide how to best implement the regional capacity building programme. Considering that maritime archaeology is relatively a new discipline in Asia and the Pacific, and that expertise in most countries in the region is mainly focused on terrestrial archaeology, the Committee decided to build national capacities through Foundation Courses aimed at bringing national experts of different academic backgrounds from participating Member States to a common level of understanding on the multi - disciplinary nature of maritime archaeology. The Committee also decided to organize Advanced Courses aimed at training heads of maritime archaeology units and senior UCH managers on specialized topics using state - of - the - art technologies and latest developments.

To embed the training programmes into the national development planning of participating Member States, particularly their national strategy for capacity - building and human resource development, the committee decided that only those who are nominated by national agencies responsible for the protection of their territorial waters are eligible to take part in the training activities of the Centre under the project.

Foundation Courses

ICOMOS-ICUCH assisted in devising the course curriculum for the Foundation Course. Considering that prospective regional trainees working for relevant government agencies cannot leave their work for an extended period of time, a six-week Foundation Course was decided upon in consultation with the UAD of Thailand and other project implementing partners.

Four weeks of the Foundation Course are devoted to lectures, country reports and practical exercises on the following topics:

- Introduction to the 2001 Convention and its Annex
- Nautical Archaeology Society (NAS) Introductory and Part 1 training modules (under license)
- Diving safety and project logistics
- Iron and steel ship construction and site formation
- Desk based assessment
- Significance assessment
- Material cultural analysis
- Archaeological publication
- Finds handling and conservation
- Public archaeology
- Museology
- Asian ship technology
- Asian ceramics



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Lecture at the Regional Field Training Centre.

Trainees also undergo two weeks of training in underwater field survey exercises at the ship wreck site of Ruea Mail. At a depth of 20 meters, the site is located near Mannok Island in Kleng District, Rayong Province, Thailand. The ship is possibly a mail steamboat plying the French colonial coastline from Thailand to Cambodia and Viet Nam about 90 to 100 years ago. Coins dating back to 1917 during the reign of King Rama VI of Thailand were found in the shipwreck.

During the underwater field exercises, trainees are taught the following topics and how they are applied. After two weeks of site survey, the trainees are required to prepare a management plan and storyboard on the shipwreck, which they present during the closing ceremonies of the Foundation Course.

- Baseline and offsets
- Ties to baseline for levelled profile bars
- Site datum for vertical depth gauge measurements
- Geographical Positioning System (GPS) location using site recorder
- Use of photo scales for underwater photographs
- Seabed elevation/ profiles survey using depth gauge and site datum
- Centreline/baseline elevation survey using depth gauge survey and site datum
- Port and starboard hull elevations using depth gauge survey and site datum
- Taking sections/ profiles across wreck using levelled profile bars
- Drawing using planning frame
- Measuring and recording iron ship construction details (frames and spacing, rivets, plating, stem and sternpost dimensions)
- Circular searches



To ensure high standards of the Foundation Course, trainees nominated by participating Member States are selected based on the following criteria:

- Must have a college degree from a reputable university;
- Must be an archaeologist in a scientific institution/agency, a site manager or a conservator in UCH;
- Must have interest in the conservation and management of UCH, and must agree to the principles of the 2001 Convention and its Annex;
- Must have logged a minimum of 50 dives, of which 20 dives have been conducted under supervision by recognized research/academic/scientific institution, and 5 dives undertaken deeper than 25 meters (applicants are required to submit their dive logs before they can be considered for the Foundation Course);
- Must be medically certified to be fit for diving (applicants are required to submit their medical certification before they can be considered);
- Must have good comprehension, writing and communication skills in English (applicants are required to submit proof of their English skills before they can be considered).

To ensure the safety of the trainees, UNESCO has provided trainees with dive injury insurance coverage and membership with the Diving Alert Network (DAN Asia-Pacific) before the start of their training course.

Three Foundation Courses of six-week duration were successfully organized in October 2009, March 2010 and February 2011. The three Foundation Courses have benefitted fifty five (55) national experts from 15 countries (Bangladesh, Brunei Darussalam, Cambodia, India, Fiji Islands, Indonesia, Kenya, Kyrgyzstan, Lao PDR, Malaysia, Pakistan, Philippines, Sri Lanka, Thailand, Viet Nam).

Adapted to the Asia-Pacific regional context, the curriculum of the Foundation Course has been developed for the Regional Field Training Centre in Chanthaburi, Thailand. The curriculum will be made available for use by other UNESCO-sponsored training programmes elsewhere in the world.



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Practical exercises during the Asian ship technology practicum.

Advanced Courses

The Centre also delivers **Advanced Courses** aimed at training heads of maritime archaeology units and senior UCH managers on specialized topics using state-of-the-art technologies and latest developments identified during the Foundation Courses and recommended by ICOMOS-ICUCH. Advanced Courses of short duration (one to two weeks) provide the opportunity for national authorities in maritime archaeology to develop strategies for collaborative endeavours.

An **Advanced Course on the Application of GIS in the Management of Underwater Cultural Heritage** was organized during the period from 20-29 September 2010. Nineteen national experts from 13 countries (Bangladesh, Cambodia, Fiji Islands, India, Indonesia, Malaysia, Pakistan, Palau, Philippines, Singapore, Sri Lanka, Thailand and Viet Nam) took part in the training.

An **Advanced Course on *In Situ* Preservation of Underwater Cultural Heritage** was organized from 19-26 October 2011. Fifteen graduates of earlier Foundation Courses were chosen by a selection committee. They came from nine participating countries: Cambodia, Indonesia, Kenya, Kyrgyzstan, Malaysia, Pakistan, Philippines, Sri Lanka and Thailand. The Advanced Course enabled the selected participants to apply knowledge and skills they learnt during the Foundation Course in *in situ* preservation, which is the first option in the preservation of UCH under the 2001 Convention.

Number of Beneficiaries of the UCH Training Programme

Countries	1st Foundation Course	2nd Foundation Course	Advanced Course on GIS for UCH	3rd Foundation Course	Advanced Course on In situ Preservation	TOTAL
Bangladesh		1	*1	1		2
Brunei		3				3
Cambodia	1	1	1	2	*1	5
Fiji			1	*1		1
India			1	1		2
Indonesia	2	3	2	4	*3	11
Kenya				1	*1	1
Kyrgyzstan				1	*1	1
Lao PDR	2			2		4
Malaysia	2	2	1		*2	5
Pakistan		1	1		*1	2
Palau			1			1
Philippines	2	1	2	(1*) 2	*1	5
Singapore			1			1
Sri Lanka	2	3	2	3	*2	10
Thailand	4	3	2	3	(2*) 3	13
Vietnam		1	2			3
TOTAL	15	19	17	(2*) 21	(14*) 15	70

* Number of trainee(s) who completed the requirements of a Foundation Course and also participated in an Advanced Training Course. All participants of the Advanced Course on In Situ Preservation are graduates of an earlier Foundation Course, except for a member of the Secretariat who took part in activities during earlier Foundation Courses.

Expert trainers and resource persons from Australia, Netherlands, Philippines, Thailand, United Kingdom, United States and Switzerland have shared their expertise with the regional trainees during the training courses. They were carefully selected, in consultation with the ICUCH of ICOMOS³ (Footnote: [List of Expert Trainers](#)).

³ Karina Acton, Senior Objects Conservator, International Conservation Services, 1st Foundation Course : Finds Handling and Conservation

Ross Anderson, President of the Australian Institute of Maritime Archaeology, Maritime Archaeologist of the Western Australian Museum, 1st and 2nd Foundation Courses: Co-Trainer: Underwater Survey Field Exercises

Will Brouwers, Development educational programmes Museum het Valkhof, Netherlands, GIS Advanced Course

Somlak Charoenpot, Former Deputy Director General, Fine Arts Department, Thailand, 1st, 2nd and 3rd Foundation Courses: Museology

Wim Dijkman, Project Leader, Hydrography, Ministry of Transport, Public Works and Water Management, Region IJssel Lake at Lelystad, Netherlands, GIS Advanced Course

Other project activities

“Saving the Underwater Cultural Heritage” Exhibit

To bring UNESCO's message on the need to safeguard UCH to a wider audience, UNESCO Bangkok Office organized the first ever UNESCO exhibition on global UCH in the Asia-Pacific region at the Siam Ocean World Bangkok from 16 August to 31 October 2010. The interactive exhibit featured underwater heritage scenes from around the world, life-sized replica of a Thai shipwreck, showcases of artefacts recovered from the seabed, special demonstrations of maritime archaeologists in action, and various interactive play zones for children. The exhibit was viewed by an estimated 150,000 local and foreign visitors. Exhibit items are now part of the permanent exhibition of the National Maritime Museum in Chanthaburi, Thailand.

Project Experience Exchange Asia: 8-16 December 2010

To encourage active networking and experience sharing among graduates of the Centre, UNESCO and the Dutch Government supported the Project Experience Exchange Asia initiated by the Central Cultural Fund of Sri Lanka. The project was a joint survey and research activity to conduct non-intrusive survey on an ancient

David Gregory, Conservation Scientist, National Museum of Denmark, Co-Trainer: Advanced Course on In Situ Preservation

Martijn Manders, Member of ICOMOS-ICUCH, Senior Maritime Archaeologist, Dutch Cultural Heritage, Lecturer, Leiden University, Leiden, Netherlands, Lecturer, Saxxion University, Deventer, Netherlands, 1st, 2nd and 3rd Foundation Courses: Archaeological Resources, Managing UCH, In-Situ Preservation, GIS for UCH; Co-Trainer: Underwater Field Exercises; Co-Trainer: Advanced Course on In Situ Preservation; Coordinator, Curriculum preparation for the Foundation Course

Bobby Orillaneda, Museum Researcher II, Underwater Archaeology Section, Archaeology Division, National Museum of the Philippines, 2nd and 3rd Foundation Courses: Asian Ceramics, 3rd Foundation Course: Support Trainer during the Underwater, Field Exercises

Charlotte Pham, Bursary of the Ecole Française d'Extrême Orient – Vietnam; Brussels, BELGIUM, 3rd Foundation Course : Asian Ship Technology and Practicum

Sayan Praichanjit, Dean of the Faculty of Archaeology, Silpakorn University, Thailand, 1st Foundation Course: Asian Ceramics, 2nd Foundation Course: Public Archaeology and Awareness Raising

Mark Staniforth, Director, Maritime Archaeology Programme, Faculty of Archaeology, Flinders University, South Australia, 1st Foundation Course: Significance Assessment, Desk-based Assessment, Material Culture Analysis, Archaeological Publication

Christopher Underwood, International Development Officer, NAS, 1st, 2nd and 3rd Foundation Courses: NAS Introduction and Part I; Supervising trainer, Underwater Field Exercises

Hans Van Tilburg, NOAA Office of National Marine Sanctuaries Regional Maritime Heritage Coordinator for Pacific Islands Region, Honolulu, Hawaii, USA, United States of America, 2nd and 3rd Foundation Courses: Desk-based Assessment, Significance Assessment, Archaeological Publication

Erbprem Vatcharangkul, Director, Underwater Archaeology Division, Fine Arts Department of Thailand, 1st, 2nd and 3rd Foundation Courses: Asian Ship Technology and Practicum

Andrew John Viduka, Assistant Director Maritime Heritage, Department of Environment, Water, Heritage and the Arts, Historic Heritage Division, Maritime Heritage Section, Australia, 2nd and 3rd Foundation Courses: Material Culture Analysis, Introduction to Intrusive Archaeology, Finds Handling and Conservation

shipwreck, located at 31 meters depth in Godawaya, southern Sri Lanka. The ship wreck dates back to the 1st-4th century Anno Domini (AD)⁴, making it one of the oldest shipwrecks found in Asia. UNESCO sponsored the participation of one Malaysian and one Filipino, while the Dutch Government sponsored the participation of three Indonesians and one Indian. They joined the maritime archaeologists of the Maritime Archaeology Unit of Sri Lanka. All participants including the team from the Maritime Archaeology Unit are graduates of the Foundation Courses. Their joint report will be published in a scientific journal.

Implementing partners

The Thai Government through its relevant national agency, the Fine Arts Department, has supported the project by hosting the Regional Field Training Centre within the precinct of the UAD of Thailand. It has provided a permanent venue and building to house the facilities of the Centre in Chanthaburi. The Fine Arts Department has designated the Director of UAD to administer and implement the training activities of the Centre, until such time that a Director of Centre can be assigned. UAD has provided its human and physical resources, and logistic support for the implementation of training courses. It has also enlisted the support of relevant Thai government agencies and academic institutions, and arranged for national experts to complement international expertise provided by UNESCO.

ICOMOS-ICUCH has assisted in coordinating the preparation of training curricula, and in identifying and providing technical advice to expert trainers and resource persons.

The following institutions in the region have supported the regional capacity building programme by providing their experts to share their knowledge during the training courses:

- Flinders University (Australia)
- International Conservation Services (Australia)
- Western Australian Museum (Australia)
- Department of Environment, Water, Heritage and the Arts (Australia)
- Bursary of the Ecole Francaise d'Extreme Orient (France)
- Dutch Cultural Heritage (Netherlands)
- Museum het Walkhof (Netherlands)
- Ministry of Transport, Public Works and Water Management (Netherlands)
- National Museum (Philippines)
- Bursary of the Ecole Francaise d'Extreme Orient (Viet Nam)
- Silpakorn University (Thailand)
- Nautical Archaeology Society (United Kingdom)
- NOAA Office of National Marine Sanctuaries (United States)

⁴ Georgian Calendar designation that begins at the birth of Jesus Christ of Nazareth in year one, with additional years added one by one.

Project sustainability

After the Norwegian-funded project expires at the end of 2011, the Fine Arts Department of Thailand has expressed its commitment to sustain the Centre over the long term and to nominate the Centre to be placed under the auspices of UNESCO as a Category II Centre in the near future. To realize these objectives, the Department shall explore long-term collaboration with the Association of Southeast Asian Nations (ASEAN), the Regional Centre for Archaeology and Fine Arts (SPAFA) of the Southeast Asian Ministers of Education Organization (SEAMEO), Silpakorn University (Thailand) and other institutions in the region to assist in future activities of the Centre. The Department plans to organize one Advanced Course on specialized topics and new technologies on maritime archaeology once every year and one Foundation Course every two years. To take advantage of the relatively low cost of organizing training programmes in Thailand, national and sub-regional training initiatives are welcome to arrange with UAD of Thailand for the use of the Centre's facilities and to avail of the technical support of the experienced team of UAD.

Conclusions

Being the first training courses on UCH that are regional in scope, the project has achieved high visibility not only within the Asia-Pacific Region but beyond. As a result of the regional capacity building programme, participating Member States have started to strengthen their existing underwater archaeology units or establish their units. Four graduates of the Foundation Courses have established the Underwater Archaeology Unit in Cambodia. Five beneficiaries at the National Museum of the Philippines have initiated collaborative projects with other government and academic institutions for a shipwreck management program in the Philippines. Amjad Ali of Pakistan (2nd Foundation Course) has submitted project documents on underwater archaeology to funding agencies. Using knowledge and skills learnt during the 3rd Foundation Course, Caesar Bitia of Kenya supervised an UCH impact assessment on an underwater fibre optic cable laying project and dredging of a harbor. Eko Triarso of Indonesia (3rd Foundation Course) has mobilized a team to prepare a management and conservation plan for underwater archaeological resources in the Natuwa Waters in northern Indonesia. Chandraratne Wijamunige (2nd Foundation Course) initiated the Project Experience Exchange Asia in Sri Lanka in December 2010, participated by graduates of earlier Foundation Courses from four countries. Beneficiaries working for the Malaysian Department of Heritage have launched an awareness campaign among divers and coastal communities. Nia Ridwan of Indonesia (2nd Foundation Course) has conducted a survey of potential underwater archaeological resources to support the establishment of a Maritime Conservation Area in Bangka Belitung Waters, and a survey of a ship wrecked by tsunami in Mentawai Waters. Other beneficiaries of the regional programme have sent their feedbacks on how they have improved their strategies in the protection and management of their UCH.

Considering the multi-disciplinary nature of maritime archaeology and given the limited knowledge and skills acquired by trainees during a six-week Foundation Course, participating Member States are encouraged to support their continuing education and training in established universities offering maritime archaeology courses, and to enable

them to participate in joint underwater research and survey activities in other countries. Relevant national agencies are therefore encouraged to seek bilateral cooperation with countries with expertise in maritime archaeology and financial resources to sponsor the training of their experts.

For further information

Capacity Building Programme of UNESCO Bangkok Office

<http://www.unescobkk.org/culture/uch/capacity-building/>

Tutorial on the Annex to the 2001 Convention:

<http://www.unesco.org/new/en/culture/themes/underwater-cultural-heritage/underwater-heritage-tutorial/tutorial/>

Code of Ethics for Diving on Submerged Archaeological Sites:

<http://www.unesco.org/new/en/culture/themes/underwater-cultural-heritage/scuba-diving/>

2001 Convention on the Protection of the Underwater Cultural Heritage

<http://www.unesco.org/new/en/culture/themes/underwater-cultural-heritage/>

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