

## UNESCO Science Centres Coordination Meeting

Beijing, China, 15-18 May 2016

SUMMARY OF PROCEEDINGS



### Introduction

The UNESCO Science Centres Coordination Meeting was held from 15 to 18 May 2016 at the Beijing Conference Centre, Chaoyang District, Beijing, China. The meeting gathered 45 Centres out of the 65 Category 2 centres affiliated to the Natural Sciences Sector, which represent over 50% of all UNESCO Category 2 Centres (115 in total). UNESCO-IHE Institute for Water Education, the Abdus Salam International Centre for Theoretical Physics (ICTP), The World Academy of Sciences (TWAS) and the United Nations World Water Assessment Programme (WWAP) also attended. Among the 45 centres, 24 were from HYD, 16 from PCB and 5 from EES (see matrixes at the end of this report).

As Category 2 Centres are considered a powerful tool to enable UNESCO SC to assist Member States in view of the achievement of the Sustainable Development Goals, the main objectives of the coordination meeting were:

- (i) to identify how UNESCO can assist the centers in aligning the scope of their action towards the achievement of the SDGs;
- (ii) to identify how centers can increase their contribution to the implementation of SC's programme for the current biennium and beyond;

- (iii) to devise mechanisms increasing cooperation between regionally - and similarly-themed centers to work together as a network;
- (iv) to create synergies between Centres for addressing the global challenges and;
- (v) to initiate an inclusive information sharing tool or platform for the Centres.

## **DAY 1 - Monday 16 May 2016**

### **1. Opening Ceremony (Master of Ceremony Qunli Han)**

The Opening Ceremony of the UNESCO Science Centres Coordination Meeting gathered more than 120 participants from 38 countries, as well as the directors of 45 out of the 65 Category 2 Centres in the Science Sector. Flavia Schlegel, UNESCO Assistant Director-General for Natural Sciences (ADG/SC) took the floor, for an Opening Address in which she expressed UNESCO's gratitude for the fruitful cooperation with the engineering and science communities in China, through the Chinese Academy of Engineering (CAE) and the Chinese Academy of Sciences (CAS). This excellent cooperation which is demonstrated by this important gathering: "the first ever UNESCO Science Centres Coordination Meeting".

ADG/SC particularly stressed the crucial role of the 3-day conference in capitalizing on the experience, the expertise and know-how of the 45 Centres participating, to shape an inclusive approach in coordinating the Science Centres. She hoped the meeting be characterized by a novel « Beijing spirit » of collaboration and partnership, which would be a step forward in bolstering the contribution of the network of Science Centres in the implementation of the United Nations 2030 Agenda for Sustainable Development, and in improving communication between Centres and in gaining visibility.

Mr. Zhou Jiagui, Deputy Secretary-General of the Chinese National Commission for UNESCO took the floor after ADG/SC and underlined the great need to team-up in order to create synergies and cooperation between Centres. In his words, such common action and shared vision is important for the efficient programme delivery of UNESCO.

Prof. Zhou Ji, President of the Chinese Academy of Engineering (CAE), in his address, conveyed the satisfaction of the CAE with this major first international coordination meeting, that will contribute to strengthen interdisciplinarity, joint strategic approach on challenges, and regional and international collaboration between Centres. He applauded UNESCO for the great work done and underlined that CAE attached a lot of importance to their cooperation with UNESCO, especially through the two engineering category 2 centres - the International Knowledge Centre for Engineering Sciences and Technology (IKCEST) and the International Centre for Engineering Education (ICEE), which he hoped will serve as new bridges promoting more cooperation in the future.

Prof Tan Tieniu, Vice President of the Chinese Academy of Sciences (CAS) stated: "The CAS always attached great importance to the cooperation with UNESCO since the 1980s, especially in the basic sciences and science policy fields". He thus called the C2Cs to

work together towards the achievement of the 2030 Agenda for Sustainable Development. Prof Tan Tieniu ensured that CAS will continue its meaningful cooperation with UNESCO, and will continue to offer the necessary support towards the development of UNESCO's programme in sciences.

IKCEST also signed a MoU on the morning of Day 1 with the Regional Centre for Urban Water Management based in Tehran, Iran.

## **2. Presentation of the SDGs, the 2030 Agenda and the Global Framework Agreements (Moderator Giuseppe Arduino)**

ADG/SC presented the different Global Framework Agreements, which set the basis of UNESCO's work and which should guide the cooperation with and between Centres. She clearly highlighted the prevalent need for an alignment of the Science Centres programmes toward the achievement of the SDGs. In this context and in view of getting familiarized with the landscape of the Global Framework Agreements, the ADG introduced the (i) SDGs; (ii) the Samoa Pathway which focuses on small Island Developing States; (iii) the Sendai framework on preparedness and management of Disaster Risks; (iv) the Istanbul Programme of Action which targets LDCs; (v) the Addis Ababa Action Agenda which set priority areas such as the adoption of STI strategy as part of national Sustainable Development plans, promotes SC collaboration, (vi) the enhancement of STEM education at all levels, and recognizing ILKs; (vii) the Technology Bank for LDCs and, (viii) the Technology Facilitation Mechanism. ADG/SC mentioned a «All or nothing Agenda», which should take advantage of the strong interlinkages of the pillars of the before-mentioned Global Frameworks in view of attaining global sustainable development.

The comparative advantages of UNESCO in contributing to these global agendas were underlined: universal (for developed and developing countries), multi-disciplinary (SC, IOC, SHS, ED, CLT, CI), with a global mandate, comprising networks of Centres, Chairs, laureates, awardees and alumni.

## **3. Breakout session on the Contribution of Centres to the implementation of the 2030 Agenda**

How to improve the contribution and how to have a more focused actions of the science Centres in the implementation of the 2030 Agenda together with UNESCO was a pervading topic throughout the three-day meeting. In this context, the breakout session allowed the mapping of the specific SDGs covered by the Centers against the ones which are priority for the Natural Sciences Sector's programmes. This session has shown an acute coverage and alignment with the main SDGs that the Natural Sciences Sector targets, i.e.: SDG4-Education, SDG6-Water, SDG9-Innovation, SDG13-Climate Change, SDG15-Environment, and SDG17-Partnership; and to a lesser extent: SDG7-Energy and SDG11-Sustainable cities.

The session also gave the opportunity for the 6 groups to discuss the levers they have to influence policies at national and regional levels towards the implementation of science SDGs, to identify possible synergies between Centres in view of fulfilling specific targets of the SDGs, to define sustainable STEM education for national and regional scientific integration and development, to discuss means of networking and of implementation to leverage STI for development, to promote basic and applied research and innovation as one of the main triggers of scientific development, and to better communicate science e.g. through the establishment of an inclusive communication platform.

## **DAY 2 – Tuesday 17 May 2016**

### **1. Centers in the implementation of UNESCO SC programmes and objectives (Moderator Shahbaz Khan)**

ADG/SC introduced the day's session by outlining the important role of centers in the implementation of the Natural Sciences Sector programmes. The document 37 C/18 explaining the process of renewal of category 2 centers has been used as a row material to introduce the main assets of science centers in contributing to SC programmes and objectives. In light of this, few working recommendations have been given as examples to the discussion:

- a) stay focused on priority areas of SC;
- b) keep the quality of the partnership towards the implementation of the SDGs;
- c) team-up for a more efficient delivery;
- d) promote open access towards scientific knowledge.

### **2. Breakout session on the way to increase cooperation among the similarly-themed Centres: On the way to the “Beijing Action Plan”**

Following the expressed will to enhance understanding and synergies between C2Cs, as well as between C2Cs and UNESCO programmes, and to agree on a non-legally binding common statement, the C2Cs worked on Day 2 on a joint declaration termed “The Beijing Action Plan” (Annex I). The discussion inside the different groups, to contribute to the joint statement, has been nourished by the following guidelines:

- the preparedness of centres to science knowledge building or/and policy advice in connection with the 2030 Agenda for sustainable development
- the mechanisms for centres to contribute to the development of STI conducive to the attainment of SDGs
- achieve effective communication.

### **3. Breakout session (regional groups) on how the Centres can improve their contribution to the implementation of the mid-term strategy for SC and how they can work together more efficiently: On the way to the “Beijing Plan of Action”**

In this session, special focus lay on the ways to improve efficiency among C2Cs and the collaborative mechanisms of implementation of programmes that may be developed at regional level. In this context few ideas and recommendations came out from the discussion:

- to develop common approaches to funding bodies for joint projects and programmes;
- to render available and regularly the information on the work of the Centres, especially regarding the contribution to UNESCO's mid-term strategy;
- mobilize Member States on rotational basis on the Centres work and achievements;
- create bridges with regional strategies, such that the STISA 2024 and the Agenda 2063 The Africa We Want;
- for the Centres in Europe, it has been recommended to take advantage of the European Commission for project funding and partnerships;
- to stimulate a collective communication strategy at all levels;
- to establish science centres coordination meeting at regional level.

In this context, 3 MoU were signed between Centres sharing the same objectives. In the same venue, the Asia-Pacific group announced that Malaysia will host the next regional science Centres coordination meeting in 2017.

### **4. Significance of establishing an information sharing platform among Centres (Moderator Michael McClain)**

After a short introduction from Qunli Han, Director of UNESCO Ecological and Earth Sciences, on existing initiatives pertaining to data sharing and information, and the role of social media, benefits were stressed but limitations that could be improved were also commented on. The latter may be improved through a renewed, open and transparent mechanism for collaboration and information sharing platform based in IKCEST.

The creation of a communication tool to share and exchange on the diverse and purposeful experiences of each Centres; to nourish and draw links among joint commitments/work on the ground, was raised on different occasions during the meeting. It is with pleasure, therefore, that UNESCO welcomed the offer of IKCEST to establish a joint platform for communication where the ownership should be shared. It is worth mentioning that, in addition to the joint platform, Centres have in great majority expressed appreciation with respect to thematic and regional groupings to better work together for the same objective: to advance science as one of the main developmental levers.

## **DAY 3 – Wednesday 18 May 2016**

### **1. Session on best practices (Moderator Giuseppe Arduino)**

The morning session allowed 11 Centres to present their work, success, achievements and difficulties in the spirit of sharing best practices. ISTIC, the African Regional Centre for Eco-Hydrology (ARCE), IKCEST, the International Centre on Coastal Ecohydrology, HIST, MCTP, ICHARM, CIMPA, the International Research Centre on Karst (IRCK), the Asia Pacific Centre for Ecohydrology (APCE) and the International Centre on Water Resources and Adaptation to Global Change (BfG) all shared their experiences with the group. A wide range of success stories and best practices have been shared and discussed, namely:

1. the ISTIC Inquiry-based science education programme in South East Asia;
2. the ARCE experience in applying ecohydrological solutions to water management in Ethiopia
3. the IKCEST DRR educational platform, including on-line educational module
4. ICCE presenting the network of UNESCO Ecohydrology family programme
5. the HIST platform to preserve UNESCO's World Heritage sites through remote sensing
6. the Academic mobility in the MCTP
7. the ICHARM programme of best practicable knowledge to local practices on water-related disaster management
8. the CIMPA in-countries decentralized way of capacity development in mathematics, as well as the international open call for proposals of research schools in mathematics
9. the International Research Centre on Karst (IRCK)
10. the APCE experience in ecohydrology in Indonesia
11. the e-learning tool developed by the Koblenz Centre, as well as the programme on water diplomacy.

### **2. Closing Ceremony**

The closing Ceremony of the UNESCO Science Centres Coordination Meeting held in the afternoon of 18 May 2016, and gathered more than 90 participants. The CAE, the CAS, the representative of the Centres and the ADG SC took the floor respectively:

Prof. Zhong Zhihua, Academician of the Chinese Academy of Engineering, Secretary General of the Chinese Academy of Engineering, Director of IKCEST expressed to all participants congratulations for the success of the meeting with outcomes beyond the expectations. He expressed his satisfaction to the presence of 45 Centres to this meeting, which helped to clarify the important role of Centres in the implementation of science programmes and strategies for the benefit of Member States in the context of the SDGs.

Prof. Guo Huadong, Academician of the Chinese Academy of Sciences, Director of HIST praised the great achievement made in setting the “Beijing Action Plan”. He welcomed the upcoming second edition of the regional meeting of Asia-Pacific Science Centres to be held in Malaysia and encouraged the other regions in that way.

H.E. Mary M. Khimulu, Former Ambassador of Kenya to UNESCO and Chairperson of the Governing Board of the Regional Centre for Groundwater Resources Education, Training and Research in East Africa, Kenya conveyed the great thanks of the centres and participants to the hosts of this first edition of the UNESCO Science Centres Coordination Meeting.

ADG/SC, in her concluding remarks, thanked the participants and expressed UNESCO's satisfaction with the different outcomes of the meeting, especially the “Beijing Action Plan” (see Annex 1) adopted by the Centres attending the meeting. She pointed out that this is not a legally binding document but a declaration of will to collaborate ahead towards the achievement of the UN 2030 Agenda. She expressed her appreciation to Malaysia for proposing to host the next SC category 2 centres meeting for the Asia-Pacific region in 2017 and encouraged the other regions to do likewise. She also welcomed the idea of a joint platform of communication, and requested the creation of a working group to proceed with the concept. ADG/SC also warmly welcomed the idea of regional meetings between Centres, as well as the 3 MoUs of cooperation signed by category 2 Centres during the meeting in Beijing.

Below is the matrix of the UNESCO Science Category 2 Centres by region and themes in general and matrix of the distribution of C2Cs present at the Beijing Meeting.

**SCIENCE C2C MATRIX TOPIC/REGION**

	HYD	PCB	EES	TOTAL
AFR	4	3	1	8
APA	11	10	4	25
ARB	5	1	0	6
EUR	10	6	2	18
LAC	6	2	0	8
<b>TOTAL</b>	<b>36</b>	<b>22</b>	<b>7</b>	<b>65</b>

**C2C TOPIC/REGION PRESENT AT BEIJING**

	HYD	PCB	EES	TOTAL
AFR	3	3	0	6
APA	9	10	4	22
ARB	3	0	0	3
EUR	6	5	1	12
LAC	1	1	0	2
<b>TOTAL</b>	<b>22</b>	<b>19</b>	<b>5</b>	<b>45</b>

Please visit the UNESTEAMS platform at the following address for the photo gallery, videos, presentations and flipcharts of sessions of the Meeting:  
<https://teams.unesco.org/cop/unesco-s/SitePages/Home.aspx>

## ANNEX I

### UNESCO Science Centres Coordination Meeting Beijing, China, 15-18 May 2016

#### Beijing Action Plan

##### **Preamble**

We, the representatives of the science-related Category 2 Centres and Institutes under the auspices of UNESCO and representatives of IHE, ICTP, TWAS and WWAP and the UNESCO Secretariat from Headquarters and the field, gathered in Beijing during 15-18 May 2016 at the first UNESCO Science Centres Coordination meeting;

**Expressing** our gratitude to the hosts (the Chinese Academy of Engineering and the Chinese Academy of Sciences), supporters (the Chinese National Commission for UNESCO and the Ministry of Environment of Germany) and co-organizers (IKCEST and HIST of China);

**Taking note** of the recent adoption by the United Nations General Assembly of the Agenda 2030 and the Sustainable Development Goals (SDG); Sendai Framework on Disaster Risk Reduction, Regional strategic plans, such as African Union 2063 Development Agenda; Samoa Pathway, the adoption of the Paris Agreement on Climate Change; and the commencement of UNESCO's preparations for the 39<sup>th</sup> Programme and Budget;

**Recognizing** the rapid global increase in the number of UNESCO Science Centres and range of science and technology domains they cover, representing a new modality for delivery of UNESCO's science mission and programmes;

**Recognizing** the difference in the coordination mechanisms; the lack of diversification in the themes of the centres and low number of Category II Centres in Africa compared with other regions;

**Emphasizing** that substantial contributions from the sciences will be required to attain the 17 SDGs and associated targets and other global and regional Strategic Development Agenda

**Further emphasizing** that these contributions will in turn require institutional capacity-building in both developed and developing countries, towards which UNESCO's Science Centres represent a highly effective modality;

**Stressing** that UNESCO's Science Centres and affiliated institutions constitute a vast pool of high specialized scientific knowledge and expertise across the full range of UNESCO's science mandate – ranging from science policy, to basic and engineering sciences, to water, ecological and earth sciences to disaster risk reduction – and are positioned to make a decisive contribution towards attaining the SDGs and other global and regional Strategic Development Agenda

**Taking note** that in order to fully realize this potential, coordination, collaboration and sharing among UNESCO's Science Centres should be further enhanced and aligned with UNESCO's overall contributions towards the SDGs with consideration to UNESCO's strategic plans and programmes along with other global and regional Strategic Development Agenda

### **Agreed Actions**

*Therefore, within the mandate of UNESCO and its Natural Science Sector, we aim to:*

**Align** the strategic plans and programmes of each UNESCO Science Centre with the relevant SDGs, regional development agendas, the Paris Agreement on Climate Change and the Sendai Framework on Disaster Risk Reduction, and map the contributions of each Centre towards these agreements;

**Make available** and regularly update standardized information brief on the mandate, areas of expertise, deliverables, services, products and tools of each Centre for dissemination to UNESCO's member states and for the attention of the Governing Bodies of the Organization;

**Enhance** coordination and exchange between UNESCO Science Centres through existing and new UNESCO initiatives, as well as bilateral or multilateral collaboration;

**Welcome** the establishment of an Information and knowledge Sharing Platform based on proposals such as the one presented to the meeting by IKCEST or others;

**Facilitate** the Member States to strategically diversify Category 2 Centres especially in Africa and Arab States, in all mandates of Natural Science Sector.

**Build** mutual capacity realizing the full potential of cooperation among the Centres;

**Encourage** member states on a voluntary basis to enable the organization of regular meetings of UNESCO Science Centres at global, interregional and regional levels;

**Develop** joint efforts to approach funding bodies for cooperative projects and programmes that bring together complementary resources and scientific expertise to meet the specific needs and requirements of UNESCO's member states;

**Promote** and advocate through public information channels - including UNESCO publications, workshops and information meetings - best practices that demonstrate how UNESCO Science Centres benefit societies.