



# **Draft of ANSO Strategic Plan 2020-2022**

**(Version 0.2)**

**ANSO Secretariat**

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## CONTENTS

Foreword.....	4
Executive Summary .....	5
<b>Chapter 1 The Roles and Challenges of ANSO .....</b>	<b>6</b>
1.1 The Background of ANSO .....	6
1.2 The Need for ANSO .....	6
1.3 The Roles of ANSO .....	8
1.4 The Challenges of ANSO .....	8
<b>Chapter 2 The Vision, Mission and Priorities of ANSO.....</b>	<b>9</b>
2.1 What Is ANSO .....	9
2.2 The Vision of ANSO .....	9
2.3 The Mission of ANSO.....	10
2.4 Priorities of ANSO.....	10
<b>Chapter 3 ANSO Action Plan 2020-2022 .....</b>	<b>12</b>
3.1 ANSO Fellowship for Young Talents.....	12
3.2 ANSO S&T Cooperation Prize for Development.....	12
3.3 ANSO Training Program.....	13
3.4 ANSO Collaborative Research .....	14
3.5 ANSO Strategic Consulting Service.....	15
3.6 ANSO Professional Associations.....	15
3.7 ANSO Scholarship.....	15
3.8 ANSO Conferences and Workshops .....	16
3.9 Other proposed activity .....	16
<b>Chapter 4 The Management Approach of ANSO .....</b>	<b>17</b>
4.1 The ANSO Governing Bodies .....	17
4.2 The ANSO Secretariat .....	18
4.3 ANSO Regional Centers .....	19

<b>4.4</b>	<b>ANSO Partners .....</b>	<b>19</b>
<b>4.5</b>	<b>Others .....</b>	<b>20</b>
<b>Appendix I: List of ANSO Members and Governing Board .....</b>		<b>21</b>

## **Foreword**

- Letter from ANSO president

## **Executive Summary**

## **Chapter 1 The Roles and Challenges of ANSO**

### **1.1 The Background of ANSO**

The idea of establishing the “Alliance of International Science Organization” (hereinafter as ANSO), was firstly discussed in the “First International Science Forum of National Scientific Organizations on the Belt and Road Initiative” held in Beijing in November 2016. Leaders from 22 national scientific and research organizations, two Nobel Prize winners, over 30 academicians from all over the world and more than 350 scientists from nearly 40 countries and regions attended the Forum. As the result of this important event, “Beijing Declaration” was released to seek more comprehensive framework to support the international cooperation on science, technology and innovation along the Belt and Road and other regions as well.

In July 2017, the representatives from 12 academies, institutes and international organizations attended the workshop in Islamabad of Pakistan. The name of the alliance (ANSO) was determined, a draft the statutes and development strategy were formulated. It was also agreed that the first ANSO general assembly would be conjunct with “The second International Science Forum of Science Organizations on the Belt and Road Initiative” in November 2018 in Beijing. After 2 years, the ANSO inauguration and First General Assembly were held in 4-5 November 2018 in Beijing, about 700 participants from more than 40 countries attended this important event.

### **1.2 The Need for ANSO**

1) The Belt and Road Initiative (BRI) is covering the routes cross some of the most varied and rugged terrain, such as..... They also pass through a range of climate zones, extending from ... to .....:

- all these zones are affected by climate change
- the combination of terrain and climate lead to a range of natural hazards such as.....
- ANSO aims to support the building of the infrastructure along the routes that will require feats of engineering that account for the varying climates and natural hazards and are resilient against future changes in the environment

2) The Belt and Road routes are crossing many countries and regions with various cultures and histories

- ANSO aims to collaborate with the scientific and technical communities around the world to ensure that the benefits of enhanced Belt and Road routes are shared widely
- There is a need to enhance the scientific, engineering and technological capacities of communities involved in the developments
- There is a special need to promote interest in science and engineering in young people to ensure that future generations can benefit
- - etc

### **1.3 The Roles of ANSO**

ANSO is an initiative to promote research and the application of research related to sustainable development across regions associated with the Belt and Road Initiative (BRI). The ANSO program aims to enhance international collaboration with member institutes, Universities, international organizations through discipline-based associations or partnerships that bring together researchers with common interests. For example, ...

The program also aims to work with existing international and regional organizations to ensure that the benefits of the collaborative research are shared widely. For example,...

ANSO has a particular focus on capacity building through the enhancement of collaborations with regional decision-makers and researchers. For example,...

### **1.4 The Challenges of ANSO**



## **Chapter 2 The Vision, Mission and Priorities of ANSO**

### **2.1 What Is ANSO**

ANSO is a non-profit, non-governmental international scientific organization founded in 2018 by the Chinese Academy of Sciences and 36 other international science and education institutions from around the world. ANSO came into being under the principles of “joint consultation, joint effort and joint sharing” championed by the Chinese “Belt and Road Initiative”

ANSO is committed to promoting shared development, sustainable development and the advancement of the UN SDGs through catalyzing and implementing concrete international cooperation initiatives in Science, Technology & Innovation and Capacity Building (STIC). It is envisaged that ANSO will focus attention on the investigation and addressing of the most urgent regional and global scientific challenges. This focus includes supporting the needs and scientific capacity building of the Global South through partnerships and cooperation with the member countries and institutions. ANSO is an international organization designed to win global recognition and support through continuous activity, sound scientific programs and actions and success in addressing global needs and challenges.

### **2.2 The Vision of ANSO**

To become an international science organization of global impact in catalyzing and implementing concrete innovative programs, initiatives and actions in Science, Technology, Innovation and Capacity Building (STIC) for the promotion of shared-development and the advancement of the UN Sustainable

Development Goals (SDGs).

### **2.3 The Mission of ANSO**

ANSO is a non-profit, non-government international scientific organization founded in 2018 based on the general principles of “Joint consultation, Joint effort and Joint sharing” adhered to by the Chinese “Belt and Road Initiative for the promotion of shared development and achievement of the UN SDGs. ANSO members include national academies of sciences, universities, research institutes and international organizations. ANSO is committed to playing an effective role in catalyzing and implementing innovative international science initiatives with the member countries and other partners to advance the ANSO vision and help build a community of the whole humankind with a shared future. Science, Technology, Innovation and Capacity building (STIC) is essential to the progress and welfare of human societies and ANSO is particularly keen to cooperate and partner those who want to collaborate in these endeavors.

### **2.4 Priorities of ANSO**

- 1) Organize and provide science-based advice and consultations for regional and global sustainable development
- 2) Catalyze and initiate major international science programs with a special focus on areas of key importance for sustainable development (climate change, natural resource management, environmental protection, natural disasters, water security, agriculture and food security, ecosystem and biodiversity conservation, bio-safety, energy security, and big data).
- 3) Organize and provide S&T programs and initiatives focused on human livelihoods and wellbeing, around issues such as clean drinking water, sustainable agriculture, environmental protection, desertification control, poverty reduction, and

public health.

- 4) Promote improvement in wellbeing and economic development through close integration of innovation, technology, and marketing. Efforts will be made for the IP protection and the maintenance of standards.
- 5) Organize training, education and capacity building, creating the social foundation for the joint development of a community of the whole humankind with a shared future.
- 6) Create prizes and awards that encourage participation and collaboration in addressing humankind's big challenges.
- 7) The following areas are under special focus:

➤ Scientific Research Orientations:

Climate Change and Adaptation, Natural Disaster, **Artificial intelligence, Robotics**, Water Resource and Water Security, Air Pollution and Human Health, Ecosystem and Biodiversity, Combating Desertification, Energy Security, S&T Policy and Strategy on Sustainable Development, and Big Data.

➤ Human Well-being Orientations:

Agriculture and Food Security, Public Health, Poverty Alleviation, Disaster reduction, and Technology Transfer

- 8) **Training workshops may be conducted on issues of**
  - a) **Quality assurance of Higher Education (HE);**
  - b) **Interactive learning**
  - c) **Governance in HE**

**Responsible conducts of scientists (e.g. PFF)**

## **Chapter 3 ANSO Action Plan 2020-2022**

In the following 3 years, ANSO will be concentrating on infrastructure development and establishing series of programs, projects and activities jointly with member countries and other international S&T organizations. The following programs will be set up and implemented in ANSO future activity:

### **3.1 ANSO Fellowship for Young Talents**

To improve the research capacity on science, technology and innovation for young talents from all over the world, ANSO Fellowship is set up to strengthen the cultivation and training of young researchers. ANSO Fellowship aims to provide financial support for excellent overseas students to pursue their master and doctoral degrees in the University of Chinese Academy of Sciences and the University of Science and Technology in China. 200 master students and 300 doctoral students will be supported every year by this program.

### **3.2 ANSO S&T Cooperation Prize for Development**

ANSO Prize is set up to award individuals and organizations from around the world for their outstanding achievements in the promotion and support of cross-regional, multi-sectoral and multi-disciplinary cooperation in science, technology and innovation (STI).

There are five types of ANSO awards for individuals:

- 1) Lifetime Achievement Award
- 2) Outstanding Contribution Award

- 3) Outstanding Women Award
- 4) Youth Leader Award
- 5) Cooperation Coordination Award

There are two types of ANSO awards for organizations:

- 1) Outstanding Contribution Award
- 2) Outstanding Progress Award

### **3.3 ANSO Training Program**

The training program is designed in line with the needs of ANSO Members, aimed at promoting collaborations and capacity building for the countries in the Belt and Road Region in common S&T concerns and tackle common challenges. There will be featured training programs for ANSO Members based upon ANSO joint research programs and “Belt and Road” Training Program jointly launched with other international institutions, universities and funding agencies. The training activities would be very important to extend ANSO’s world influence.

The ANSO training program will be based on the following purposes:

- 1) Match the research plans of ANSO by providing related training programs.
- 2) Meet the needs of ANSO members by holding training programs jointly.
- 3) Build up characteristic training systems and consolidate

the basis of international cooperation of ANSO.

- 4) Work with other international institutions, universities and funding agencies on joint training projects and courses.
- 5) workshops on topics like Ethics in S&T and in publications, and on Science Policy.

### **3.4 ANSO Collaborative Research**

These research projects are developed to encourage joint S&T cooperation among ANSO Members and partners to tackle major regional and global S&T challenges, such as environmental change, green development, human well-being and sustainable development. The following areas are under special focus:

#### 1) Scientific Research Orientations:

Climate Change and Adaptation, Natural Disaster, Water Resource and Water Security, Air Pollution and Human Health, Ecosystem and Biodiversity, Combating Desertification, Energy Security, S&T Policy and Strategy on Sustainable Development, and Big Data.

#### 2) Human Well-being Orientations:

Agriculture and Food Security, Public Health, Poverty Alleviation, Disaster reduction, and Technology Transfer

### **3.5 ANSO Strategic Consulting Service**

ANSO strategic consulting service is to provide science-based assessment reports, strategic advice and other integrated suggestions to local and national governments, management departments, development organizations, public, media and other stakeholders.

### **3.6 ANSO Professional Associations**

These Associations are developed to promote S&T cooperation among ANSO Members and partners to tackle major common S&T challenges in specific areas, such as Climate Change and Adaptation, Natural Disaster, Water/Food/Energy Security, Ecosystem and Biodiversity, Big Data, Public Health, etc. They shall conduct activities under the framework of ANSO. Based upon some professional associations that are already in operation, we will create more such associations through joint efforts to increase ANSO's world influence and bring concrete cooperation opportunities to ANSO Members and partners.

### **3.7 ANSO Scholarship**

The Scholarship is aimed at promoting exchanges, sharing of knowledge and resources among scientists, scholars and researchers in the Belt and Road Region, especially those from ANSO Member Organizations and strengthen capacity-building for them. Currently, we are planning to set three kinds of Scholarship: ANSO Scholarship for Distinguished Scientists, ANSO Scholarship for Visiting Scholars, ANSO Scholarship for Postdoctoral Researchers.

### **3.8 ANSO Conferences and Workshops**

### **3.9 Other proposed activity**

Facilitate and bridge to link volunteers and retired intellect to spend time in marginalized universities and institutions.



## Chapter 4 The Management Approach of ANSO

### 4.1 The ANSO Governing Bodies

The governing system is mainly consisted by three bodies (shown in Figure 1):

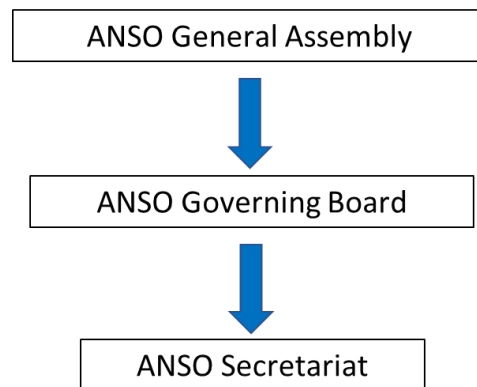


Figure 1: Governance Structure of ANSO

#### 1) The General Assembly

It is the highest decision-making body of ANSO, and it shall be empowered, subject to the provisions of these Statutes, to make decisions on all critical, major matters relating to ANSO; it elects the Governing Board.

#### 2) The Governing Board

It is the executive body of the ANSO General Assembly, and it consists of the ANSO President, two Vice Presidents and six other elected by ANSO members.

The current president is ANSO is Prof. Chunli Bai, president of Chinese Academy of Sciences, the vice-presidents are Prof. Alexander Sergeev, president of Russian Academy of Sciences, and Prof. M. Qasim Jan, president of Pakistan Academy of Sciences.

### **3) The Secretariat**

It manages the operations of ANSO led by an Executive Director to implement the decisions made by the Governing Board and General Assembly. There are three divisions under the ANSO Secretariat, covering Information and Communication, Science Planning and Consultation, Capacity Building and Training.

In addition to the three divisions of the Secretariat, the ANSO Working Group is set up to promote and maintain routine communication and interaction among ANSO members; it includes the Governing Board members and other active members.

## **4.2 The ANSO Secretariat**

The Secretariat of ANSO is located in the Institute of Tibetan Plateau Research, Chinese Academy of Sciences (ITPCAS) in Beijing. The Executive Director of ANSO Secretariat is Prof. Fahu Chen, Director of ITPCAS. Within 3 years, the ANSO Secretariat will be built into a professional team with about 15 staffs, including 5 regular staffs, 5 project-hire staffs and 5 staffs from talents introduction program. There are three divisions under ANSO Secretariat:

- 1) Division of Information and Communication: ensure the information exchange for the ANSO Governing Board and the member organizations; support the communication and cooperation between ANSO and international/national organizations; collect relevant information both at home and abroad; maintain the website and the database; publish the promotional materials; organize international conferences and workshops.
- 2) Division of Science Planning and Consultation: draft the strategic plans for the construction and development of ANSO; collect the information of B&R related ongoing international/national programs and projects; plan and organize the future ANSO projects; coordinate and draft the environment assessment and scientific consulting reports; provide the science-based development policy for the governments and agencies in the B&R countries.
- 3) Division of Capacity Building and Training: utilize national and international resources, work closely with member organizations, and support the young scientists training activities and talents nursing programs under the ANSO framework.

### **4.3 ANSO Regional Centers**

The ANSO Regional Centers will be jointly established with ANSO Member Organizations in the near future to better coordinate the work of ANSO.

### **4.4 ANSO Partners**

## 4.5 Others

## **Appendix I: List of ANSO Members and Governing Board**

### **37 Founding Members**

- 1) National Academy of Sciences, Republic of Armenia (NAS RA)
- 2) Bangladesh University of Engineering and Technology (BUET)
- 3) National Academy of Sciences of Belarus (NASB)
- 4) The Royal Academy for Overseas Sciences of Belgium (RAOS)
- 5) Brazilian Academy of Sciences (ABC)
- 6) Bulgarian Academy of Sciences (BAS)
- 7) Universidad de Chile
- 8) Chinese Academy of Sciences (CAS)
- 9) The Chinese University of Hong Kong (CUHK), China
- 10) University of Macau (UM), China
- 11) National Research Centre (NRC), Egypt
- 12) Hungarian Academy of Sciences (MTA)
- 13) Center for Progress and Development of Iran (CPDI)
- 14) National Academy of Sciences of the Republic of Kazakhstan (NAS RK)
- 15) Jomo Kenyatta University of Agriculture and Technology (JKUAT), Kenya
- 16) National Academy of Sciences of the Republic of Kyrgyzstan (NAS KR)
- 17) The Center for Research and Advanced Studies in Mexico (Cinvestav)
- 18) Mongolian Academy of Sciences
- 19) Hassan II Academy of Science and Technology, Morocco
- 20) Tribhuvan University of Nepal (TU)

- 21) The University of Auckland, New Zealand
- 22) Pakistan Academy of Sciences(PAS)
- 23) Polish Academy of Sciences(PAN)
- 24) Romanian Academy
- 25) Russian Academy of Sciences(RAS)
- 26) Slovenian Academy of Sciences and Arts(SASA)
- 27) University of Peradeniya, Sri Lanka
- 28) University of Ruhuna(UOR), Sri Lanka
- 29) The Academy of Sciences of the Republic of Tajikistan
- 30) National Science and Technology Development Agency (NSTDA), Thailand
- 31) The Thailand Research Fund(TRF)
- 32) The Scientific and Technological Research Council of Turkey(TUBITAK)
- 33) Academy of Sciences of the Republic of Uzbekistan
- 34) European Academy of Sciences and Arts(EASA)
- 35) The International Centre for Integrated Mountain Development(ICIMOD)
- 36) The World Academy of Sciences for the advancement of science in developing countries (TWAS)
- 37) United Nations Educational, Scientific and Cultural Organization(UNESCO)

## **9 Governing Board Members**

- 38) Chinese Academy of Sciences (CAS)

- 39) Russian Academy of Sciences (RAS)
- 40) Pakistan Academy of Sciences (PAS)
- 41) Hungarian Academy of Sciences (MTA)
- 42) National Academy of Sciences of the Republic of Kazakhstan
- 43) Tribhuvan University, Nepal
- 44) National Science and Technology Development Agency (NSTDA, Thailand)
- 45) Jomo Kenyatta University of Agriculture and Technology (JKUAT, Kenya)
- 46) UNESCO