# Workshop on National Science, Technology and Innovation Strategy and Policy for Sustainable Development

## **Training Programme**

# First week (11-15 October 2021)

Day 1, Monday, 11 October 2021

#### **Opening Ceremony (14:00-17:00 CEST)**

**Chaired by Mr. Shi Xiaoyong**, *Director*, *National Center for Science and Technology Evaluation (NCSTE), China* 

#### 1. Opening Remarks delivered by:

- Dr. Wang Ruijun, Vice Chair of UNCSTD at its 24<sup>th</sup> session
- **Ms. Shamika N. Sirimanne,** *Director, Technology and Logistics Division, UNCTAD and Head of UNCSTD Secretariat*
- Mr. Chen Linhao, Deputy Director General, Department of International Cooperation, Ministry of Science and Technology (MOST), China
- Mr. Nie Biao, Director General, NCSTE

#### 2. Group Photos

All participants face the camera, and the organizer will take a screenshot as group photo.

#### 3. Ice Breaking Event

#### Ice breaking event

The training plan will be briefly introduced. Then all participants will introduce themselves, as well as their expectations from this workshop, etc.

# Day 2, Tuesday, 12 October 2021

## Lecture 1: China's Science and Technology System Reform. (14:00-15:20 CEST)

**Speaker:** Dr. LI Yan, Senior Researcher, Chinese Academy of Science and Technology for Development (CASTED).

• This lecture will introduce the overall background of science and technology in China, the reform of science and technology system in recent years, and interpret important science and technology policies of China.

Day 3, Wednesday, 13 October 2021

## Lecture 2: China's STI Policy System and Policy Evaluation. (14:00-15:20 CEST)

Speaker: Dr. WANG Zaijin, Deputy Director, NCSTE.

• This lecture will introduce the basic composition and characteristics of China's current STI policy system, the needs of accelerating the transformation of government functions and deepening the reform of STI system for strengthening the evaluation of STI policies, and shares the main practices, methods and typical cases of key STI policy evaluation at the national level, as well as some personal evaluation observations, thoughts and experiences.

# *Lecture 3: Practice on Scientific and Technological Evaluation in China.* (15:40-17:00 CEST)

Speaker: Mr. SHI Xiaoyong, Director, NCSTE.

• This lecture will introduce the basic theory and method of science and technology evaluation and its role in science and technology management. At the same time, it will show the supporting role of science and technology assessment on government management in combination with the relevant practice of science and technology assessment in China.

#### Day 4, Thusday, 14 October 2021

# *Lecture 4: Development of Science and Technology Talents in China.* (14:00-15:20 CEST)

**Speaker:** Dr. DUAN Liping, Researcher at China's Science and Technology Talents Center.

• This session will give an overview of scientific and technological talents in China as well as China's policies in the management of scientific and technological talents.

#### Lecture 5: China's Science and Technology Statistics. (15:40-17:00 CEST)

Speaker: Dr. SUN Yunjie, Associate Researcher, CASTED.

• The science and technology statistics in China covers the following areas: statistical surveys, in-depth research and analysis of science and technology activities in China and effects of government policies relating to science and technology. They will support the government's decision-making process and provide public products for the society. This lecture will introduce China's experience on science and technology statistics.

#### Day 5, Friday, 15 October 2021

#### Seminar-Part 1

11 Participants will engage in this seminar (part 1). They will discuss what they have learned during this week, and share their expectations and plans of participating in this workshop. They are also welcomed to seek clarifications about the lectures and ask other questions about scientific and technological management. (20:00-23:00 CST)

**NOTE:** <u>Day 6</u> and <u>Day 7</u> are weekends. There is no activity arranged for the workshop, and trainees can have a rest.

#### Second week (18-22 October 2021)

#### Day 8, Monday, 18 October 2021

#### *Lecture 6: Innovation and role of change.* (14:00-15:20 CEST)

Speaker: Mr. Dimo Calovski, Economist at UNCTAD.

• The goal of this lecture is to bring together three themes that are common in policy discussions on innovation – creative destruction, disruptive innovation, and the role of change – and relate these to critical assessments of the effect of innovation on growth and development. Innovation theory proposes a number of themes that influence policy development and dialogue. One distinctive theme is Schumpeter's concept of creative destruction. A more recent deliberation, and following on Schumpeter, tackles the issue of disruptive innovation. A third theme is the relationship between innovation and societal change. These are themes that sometimes appear in discussions on the nature of innovation, it's role in economic development and how a systems approach can propose certain advantages for policy, or not.

Lecture 7: Financing for Innovation. (15:40-17:00 CEST)

Speaker: Mr. Dimo Calovski, Economist at UNCTAD.

• This Lecture focuses on financing innovation. It describes sources of funding for innovation and identifies respective STI policy instruments. It provides a detailed examination of two instruments widely used for this purpose: innovation funds and R&D tax incentives. Finance plays a fundamental role in technological change and innovation. The understanding of financing innovation has been evolving since the late 20th century. Initially financing meant public spending on R&D or policy support for increasing private R&D spending. Moving towards a more systemic understanding of innovation, the financing concept broadened to include funding of supporting mechanisms and infrastructures such as networks and clusters (technology parks, business incubators, et.), or public-private partnerships for early-stage funding.

#### Day 9, Tuesday, 19 October 2021

Lecture 8: Practice and Experience on the Technical Task Force Policy in Rural Revitalization—Achievements Promote Rice Production to Benefit Rice Farmers. (14:00-15:20 CEST)

**Speaker:** Dr. PAN Junfeng, Associate scientist at Guangdong Academy of Agricultural Sciences.

• This lecture focuses on the experience of the Technical Task Force in Guangdong province as part of the Rural Revitalization Strategy, and the specific practices of Guangdong Academy of Agricultural Sciences in implementing Technical Task Force policy. The lecturer will also share his personal reflections on this task force as well as his work experience as a representative of the Task Force.

# *Lecture 9: Microbiological Technology Foster Sustainable Development.* (15:40-17:00 CEST)

Speaker: Dr LI Taihui, Professor at Guangdong Institute of Microbiology.

• Microbiological technology is a common agricultural technology to plant mushrooms, improve soil nutrients, etc. In this lecture, the participants will explore the frontier trends of microbiological technology and its application in China, such as improving public health by using microbiological technology.

## Day 10, Wednesday, 20 October 2021

# *Lecture 10: Poverty Alleviation by Science and Technology-Practices in China.* (14:00-15:20 CEST)

Speaker: Dr. XU Zhuqing, Researcher at CASTED.

• Poverty alleviation through science and technology is an important way for governments to help the poor out of poverty. This course mainly introduces China's experience and practice of poverty alleviation through science and technology, and analyzes it with specific cases.

# *Lecture 11: The Operation Management of Business Incubator: Experience on Innovative Mechanism and Incubator Construction in Optics Valley.* (15:40-17:00 CEST)

Speaker: Dr. HU Zhi, Deputy General Manager at Wuhan Industrial Institute of Optoelectronics.

• This lecture will give participants a description of the following: (a) the development of Optics Valley; (b) policy supports and measures Optics Valley has provided for the development of incubators; (c) what is WIIO and how WIIO has become a successful optoelectronic service operator; (d) WIIO's

incubator mechanism on how to construct, operate and innovate; and (e) WIIO's international cooperation and international incubator Projects.

#### Day 11, Thursday, 20 October 2021

#### Seminar - Part 2

11 Participants will engage in this seminar (part 2). They will discuss what they have learned during this week, and share their expectations and plans of participating in this workshop. They are also welcomed to seek clarifications about the lectures and ask other questions about scientific and technological management. (14:00-17:00 CST)

## Day 12, Friday, 22 October 2021

#### Closing Ceremony (14:00-17:00 CST)

#### Chaired by Mr. Shi Xiaoyong, Director, NCSTE

#### 1. Closing Remarks

Delivered by:

- **Ms. Shamika N. Sirimanne,** *Director, Technology and Logistics Division, UNCTAD and Head of UNCSTD Secretariat.* (10 mins)
- Mr. Nie Biao, Director General, NCSTE. (10 mins)

#### 2. Communication

Participants will discuss what they have learned and share their feelings about the workshop. (60 mins)

#### **3. Group Photos**

All participants face the camera, and the organizer will take a screenshot as group photo.