2021 KISTEP-ISTIC
S&T Innovation
Online Training Programme
for High Level Policy Makers

24 – 27 August 2021, Korea (GMT+09:00)

“Designing and Implementation of STI Policies for National Growth”
INTRODUCTION

Science, technology and innovation (STI) is vital for socio-economic development in today’s knowledge-intensive, innovation-led economy. The world now is becoming more competitive and globalized and the countries that have adopted the knowledge paradigm with high proficiency in STI undoubtedly command success. Korea is an example of a country that has undergone a transformation and experienced extraordinary economic rise in just a few decades because of the advancement in STI. The Korea Institute of Science and Technology Evaluation and Planning (KISTEP) is one of the key players supporting the Korea’s national R&D system. The International Science, Technology and Innovation Centre for South-South Cooperation under the auspices of UNESCO (ISTIC) took the initiative to collaborate with KISTEP to enable the sharing of knowledge and experience of Korea’s development in advancement of STI.

On 20th April 2009, the President of KISTEP Dr. June Seung Lee, and the then Chairman of ISTIC Governing Board, Academician Dato’ Ir. (Dr.) Yee Cheong Lee FASc signed the agreement and confirmed the mutual intention of KISTEP and ISTIC to conduct the KISTEP-ISTIC S&T Innovation Training Program for High-Level Policy Makers (KISTEP-ISTIC Programme). The contracting parties scheduled the execution of the KISTEP-ISTIC Programme annually from 2009 to 2013. The 1st Phase of the KISTEP-ISTIC Programme successfully established the foundation for knowledge sharing and collaboration. Following the success of the 1st Phase, KISTEP and ISTIC agreed to enter the 2nd Phase of the KISTEP-ISTIC Programme on 20th April 2013 for the next five years. The 2nd Phase of the KISTEP-ISTIC Programme was held in continuous efforts to enhance the capabilities of policy makers in developing countries and promote cooperation and joint growth.

Considering the need for capacity building in this area, the International Science, Technology and Innovation Centre for South-South Cooperation under the auspices of UNESCO (ISTIC) in collaboration with the Korea Institute of S&T Evaluation and Planning (KISTEP) continue the organisation of the 3rd Phase of KISTEP-ISTIC Programme starting in 2019. This year programme themed on “Designing and Implementation of STI Policies for National Growth” will be held on 24 - 27 August 2021.
### Phase I (2009 ~ 2013)

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<th>2009</th>
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<tr>
<td><strong>Date</strong></td>
<td>Nov 16-20</td>
<td>Nov 7-12</td>
<td>Nov 27-Dec 3</td>
<td>Nov 5-9</td>
<td>Nov 11-15</td>
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<td><strong>Venue</strong></td>
<td>Seoul, Korea</td>
<td>Cairo, Egypt</td>
<td>Daejeon, Korea</td>
<td>KL, Malaysia</td>
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<td><strong>Participants</strong></td>
<td>19 participants 14 countries</td>
<td>31 participants 14 countries</td>
<td>22 participants 16 countries</td>
<td>23 participants 16 countries</td>
<td>25 participants 17 countries</td>
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<td><strong>Theme</strong></td>
<td>S&amp;T policy and management in general with Korean case examples</td>
<td>Strategic S&amp;T management framework in terms of P.I.E.</td>
<td>P.I.E. framework and its applications to emerging technology areas of 5T</td>
<td>S&amp;T P.I.E. framework focusing on foresight, policymaking and evaluating</td>
<td>P.I.E. framework and its application to green technologies</td>
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### Phase II (2014~ 2018)

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<td><strong>Date</strong></td>
<td>Dec 8-12</td>
<td>Nov 23-27</td>
<td>Sep 26-30</td>
<td>Nov 13-17</td>
<td>Nov 26-30</td>
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<td><strong>Venue</strong></td>
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### PURPOSE

The purpose of this programme is to enhance the capabilities of high level policy makers from developing countries by presenting the experience of Korea. This programme covers the topics from Korea’s nationwide science and technology (S&T) policies to techniques for P.I.E. (Planning, Investment, Evaluation) which may serve as a guide to enhancing S&T capacity of developing countries. The programme which offers a practical and comprehensive instruction also includes an interactive workshop focusing on the analysis of each country’s innovation capacity and discussion. Also, this programme aims to provide a unique communication platform for relevant high level policy makers. Policy makers can meet together in one place and share their experience, examples of best practices as well as challenges they face in common.

### CRITERIA OF PARTICIPANTS

About 30 participants from developing countries (S&T policy makers from governments of developing countries and government funded research institutions) will be selected to attend the online training programme. The combination of participants from developing countries will allow for the exchange of knowledge, ideas and experiences as well as opportunities for discussions, networking and possible collaboration.
Participants should be holding a senior position or working as senior executives/officers at Ministry of Science and Technology or Ministry responsible for Science, Technology and Innovation from developing countries.

PLATFORM

Online Video Conferencing and Online Lecture Videos

MEDIUM OF INSTRUCTION

The training programme will be conducted in English.

ORGANIZERS

Korea Institute of S&T Evaluation and Planning (KISTEP)

As a government affiliated research institute under the MSIT (Ministry of Science, and ICT), KISTEP has been one of the leading institutes in providing future vision and strategies, as well as promoting technology innovation. KISTEP supports the full cycle of Korea’s national R&D system, including S&T planning, budget allocation and coordination, and R&D evaluation. The major functions of KISTEP include:

- Foresight and Future Strategies in S&T
- S&T Policy Planning and Coordination
- Feasibility Study on Government R&D Programs
- Budget Allocation and Coordination of Government R&D Programs
- Evaluation of Government R&D Program Performance
- Global Cooperation and Collaboration

International Science, Technology and Innovation Centre for South-South Cooperation under the auspices of UNESCO (ISTIC)

The International Science, Technology and Innovation Centre for South-South Cooperation under the auspices of UNESCO (ISTIC) was established on 21 January 2008 and is based in Kuala Lumpur. The creation of the ISTIC is a follow up of the Doha Plan of Action which has been adopted by the Heads of States and Government of the Group of 77 and China, during the meeting in Doha, Qatar, from 12 to 16 June 2005 on the occasion of the Second South-South Summit of the Group of 77 (G77).
ISTIC is fully funded by the Government of Malaysia. One of the main functions of ISTIC is to develop and implement science, technology and innovation development programmes for members of G77 and China targeted at facilitating the integration of national science, technology and innovation policies, capacity building, exchange of experiences and best practices, and creating a problem-solving network of centres of excellence in developing countries.

TENTATIVE PROGRAMME

The KISTEP-ISTIC Programme comprises seven online lecture sessions, which are designed to provide a comprehensive and in-depth overview of Korea’s R&D management model, and help maximize the capacity of participants in STI policy decision-making. The lectures will provide insight into the key aspects of P.I.E. (Planning, Investment and Evaluation) framework by introducing related activities and examining case studies.

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SESSION 1: TECHNOLOGY FORESIGHT

In order to establish the national science and technology strategies, technology foresight (TF) studies are performed to analyze future S&T trends and identify emerging technologies in consideration of their economic and social impacts. Since the introduction of the first TF in 1994, Korea has conducted TF in five-year interval and recently finished the fifth TF exercise and one revision that target the entire field of S&T. Beginning with the 3rd TF, it has strengthened the link between S&T and society by determining future technologies which can solve future needs. This session will cover the key elements of technology foresight and demonstrate how TF has become a key process in setting S&T policy such as Science and Technology Basic Plan (S&T Basic Plan).

SESSION 2: SCIENCE AND TECHNOLOGY BASIC PLAN

The Science & Technology Basic Plan, the highest standing plan in S&T operated by all government ministries, is established every 5 years based on Framework Act on Science and Technology of Korea. This plan includes the vision, goals and policy direction of Korea’s STI policy and its annual action plans and outcomes are actively monitored. This session will review the main contents of the 4th Science and Technology Basic Plan (2018-2022) and identify key strategies and major science and technology fields selected in line with objectives under the plan.

SESSION 3: HUMAN RESOURCES IN S&T POLICY

Talented, motivated and well-prepared human resources in S&T (HRST) are considered to be an indispensable key for national development. Every five years, the Korean government establishes the ‘National Basic Plan for HRST’ which includes main policies related to education and supporting systems for HRST. This session will cover policy initiatives for HRST including five strategies for building competency for employment, increasing education and research competence, expanding HRST career development and fields of activities, enhancing creativity, and optimizing potential HRST utilization in society.

SESSION 4: R&D PROGRAMME BUDGET ALLOCATION AND COORDINATION

KISTEP provides support for establishing the directions for effective government R&D investments and standards in overall government budget allocation and related coordination. The outlays of R&D budget allocation and adjustment for the next fiscal year are proposed, reflecting major S&T policies and current issues in technological development. This session will overview the major steps of the government R&D program budget allocation and coordination as well as the roles of execution bodies involved.
SESSION 5: R&D PROGRAMME EVALUATION

The R&D programme evaluation in Korea has been systematically performed since the enactment of R&D performance evaluation law in 2005. The application of R&D program evaluation to the budget allocation accelerated the emphasis on the performance-oriented evaluation in accordance with the evaluation law. Currently, R&D evaluation focuses on the efficiency of performance rather than on the effectiveness of objective and policy relevance. This session will introduce the new framework and indices for R&D program evaluation and guidelines for performance measurement.

SESSION 6: NATIONAL S&T INFORMATION SERVICE

As the Korean government is constantly increasing its R&D investment, efficiency and productivity issues of the investment have been emerged significantly. The need for evidence-based S&T policy making through S&T knowledge information creation, diffusion and utilization have been grown as well. To meet such demand, the National Science and Technology Information Service (NTIS) and KISTEP Knowledge Base (K2Base) were established to provide information on national S&T knowledge, data and tools. This session mainly focuses on how these services support policy makers and researchers for national R&D innovation and evidence-based decision-making.

SESSION 7: R&D PERFORMANCE MANAGEMENT

R&D performance management bridges between R&D activities to stakeholders and the needs of society. Effective R&D performance management ensures R&D programs to achieve optimal value from the resources that are allocated to achieving its strategic objectives. Also, it will contribute to improving R&D performance, disseminating R&D outcomes and enhancing the utilization of developed technologies. This session will cover R&D performance management system and provide an overview on R&D Performance Management and Utilization Plan in Korea.

SESSION 8: SPECIAL SESSION ON GLOBAL ISSUES AND CHALLENGES

In recent years, especially after the outbreak of COVID-19, the need to address global challenges has grown in urgency. Climate change, infectious diseases, food security and many other challenges continue to adversely affect people’s everyday lives. These challenges call for cooperation on a global scale to build capacity in science, technology and innovation at both national and international levels. This session will explore emerging global issues and how science, technology and innovation (STI) can support our efforts to achieve sustainable development and build more resilient world.
SESSION 9: REAL-TIME ONLINE SESSION: Q&A / DISCUSSION AND COUNTRY REPORT

Q&A and country report session will be held in real-time through online video conferencing program. This session will help participants better understand the lecture contents and take a closer look at the details of case studies. Upon completion of lecture sessions online, participants will be asked to raise at least one question for each lecture session and submit a Country Report (Box 1) for presentation. The Country Report session will provide an opportunity to share current issues and challenges related to national S&T system among the participants. Each participant will be granted 10 minutes for country report presentation.

Box 1: Country Report

1. Overview of S&T Policy
   • Administrative framework of S&T policymaking
   • National long-term plans for S&T development

2. Analysis of National Capabilities
   • Strengths and weaknesses of S&T capacity

3. Main Issues in S&T
   • Challenges faced in S&T development

4. Future Plans for Discussion
   • Future plans and goals for advancement in S&T

APPLICATION AND ENQUIRIES

Applicants are urged to use online application. The link of online application form can be accessed from the link [https://forms.gle/1YRnU2M6eHEzeBmW7](https://forms.gle/1YRnU2M6eHEzeBmW7). All applicants are required to submit the recommendation letter and applicant’s C.V to adzim@istic-unesco.org.

CLOSING DATE OF APPLICATIONS

All applications should be submitted before or by 15 July 2021. ISTIC will inform the successful applicants to the training program not later than 26 July 2021. Applicants who do not receive word within this date are consider unsuccessful.
CONTACT INFORMATION

For further information, please contact KISTEP-ISTIC Secretariat:

KISTEP-ISTIC S&T Innovation Training Program for High Level Policy Makers

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