

2014

KISTEP-ISTIC

**S&T Innovation Training Program
for High Level Policy Makers**

***“P.I.E. (Planning, Investment, Evaluation) Framework
and Government Policy in S&T”***



8 – 12

**DECEMBER
2014**

**MALACCA,
MALAYSIA**

Organized by:

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

&

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

**2014 KISTEP-ISTIC S&T INNOVATION TRAINING PROGRAM FOR HIGH LEVEL POLICY
MAKERS:**
“P.I.E. (Planning, Investment, Evaluation) Framework and Government Policy in S&T”

8-12 DECEMBER 2014, MALACCA, MALAYSIA

OVERVIEW

The 2014 KISTEP-ISTIC S&T Innovation Training Program for High Level Policy Makers: “P.I.E. (Planning, Investment, and Evaluation) Framework and Government Policy in S&T” will be held on 8-12 December 2014, Malacca, Malaysia.

The 2014 KISTEP-ISTIC Program have main features as follows:

- Magnifying the macro topics related to society and economics in the perspective of S&T
- Enhancing interaction between participants with more discussion sessions
- Supporting continued networking opportunities after the program

The 2014 KISTEP-ISTIC Program will follow the P.I.E. framework. Especially, in order to address the specific national issues that the participants want to share, Korea’s S&T experience will be introduced mainly focusing on the National Innovation System (NIS). Also, we will introduce the case studies of international cooperation that can be applied to the participants’ countries. In addition, we will hold interactive workshops to promote active discussion between the participants.

The purpose of this program is to enhance the capabilities of high level policy makers from developing countries by presenting them the experience of Korea. This program covers topics from Korea’s nationwide science and technology (S&T) policies to techniques for P.I.E. (Planning, Investment, Evaluation) which are beneficial for S&T policy makers and give a guide to improve the developing countries’ S&T capacity. To offer a practical and comprehensive instruction, interactive workshop will be conducted during the program.

Also, this program aims to work as a new useful communication platform for relevant high level policy makers. Policy makers can meet together in one place and share together their personal experience, good practice and other useful information. And it plans to support an extensive networking scheme to deepen and extend the relationships between all participants afterwards.

Meeting these purposes should help the participating policy makers to enhance both their personal and their country’s R&D capabilities and competencies, and should support further development of their respective countries.

ORGANIZERS

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

Korea Institute of S&T Evaluation and Planning (KISTEP) is a global institution specializing in S&T planning and evaluation with the aim of creating future value of S&T in Korea. The Republic of Korea has been able to accomplish a remarkable growth and advancements in the field of S&T, and KISTEP has played one of the crucial roles in this process. Particularly, KISTEP has been playing a key role in the work of technology foresight, S&T policy planning, R&D priority setting, policy coordination, program coordination and budget allocation, R&D program evaluation.

KISTEP has carried out its pivotal roles in nation-wide technology foresights, national S&T basic plans including “High Five Strategy” and national technology roadmaps. And KISTEP sets investment priorities that are most helpful for achieving national development goals and it is involved in every step of every budget allocation process in national R&D programs, pursuing the optimal allocation of R&D resources. Also, KISTEP is conducting Meta- and In-Depth R&D program evaluations and managing S&T observatory including “National S&T Information Service” and “K2 Base System”. With the significant experience gained through its services to Korea, KISTEP has recently started to focus on the international dissemination of its expertise and on the global cooperation in the S&T evaluation and planning.

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 function of ISTIC is to develop and implement science, technology and innovation development program 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.

COMPONENTS AND MODES OF DELIVERY

The training programme will be delivered by using the combinations of the following methods:

- Series of lectures.
- Interactive Workshop: Challenge Report of S&T.
- Case Studies.
- Study visit to selected company.

PROGRAMME

Time	8/12 (Mon)	9/12 (Tue)	10/12 (Wed)	11/12 (Thu)	12/12 (Fri)
9:00~9:30	Opening Ceremony	R&D Program Coordination and Budget Allocation	Introduction of NIS of Korea	Interactive Workshop	Cultural Visit
9:30~10:30	Experience of Malaysia S&T development				
10:30~10:50	Tea Break				
10:50~11:50	History of Korea S&T development	Ex-ante Feasibility Study on New R&D Program	National R&D Program & Administrative Structure		
11:50~12:20	Introduction of P.I.E				
12:20~14:00	Lunch			12:00~14:45 Lunch	
14:00~15:30	Technology Foresight	R&D Program Evaluation	Introduction of International Cooperation in Korea	Study Visit CTRM Melaka	Interactive Workshop
15:30~15:50	Tea Break				
15:50~17:20	S&T Master Plan and its Role	NTIS	S&T Cooperation in Establishment of S&T system		
17:20~18:00	Wrap-up	Wrap-up	Wrap-up	Break	Closing Ceremony

Note: This program schedule may be subjected to minor changes without prior notice

DESCRIPTION OF KEY SESSIONS

History of Korea S&T development

Korea has experienced a remarkable socio-economic growth over the previous five decades, which transformed a poverty-ridden agricultural country into one of the strongest Asian economies. The national S&T strategy has served as one of the engines enabling the dramatic transformation. Korea began developing its S&T infrastructure in 1960s, when the Ministry of S&T was established to coordinate and support the S&T activities. Korea further promoted S&T as a source of national competitiveness in 1970s and 1980s. Recently Korea is focusing on increasing efficiency of S&T efforts and expanding investments on the basic and fundamental research. Thanks to the proper and right S&T policies followed since 1960, Korea has become one of the leading countries in the field of S&T support.

This lecture will provide a brief description of how Korea's S&T policies have evolved. All the participants will have chances to see the milestones of Korea's S&T development. This programme is designed to give to the participants S&T-fic inspiration of how the right S&T-fic choices can transform one country into an advanced one.

Introduction of P.I.E.

The concept of Planning-Investment-Evaluation provides an approach for S&T management and continuous improvement of S&T activities on all levels, including policies, programs and projects. The P.I.E. approach works as a cycle, whose goal is to set the most suitable national S&T priorities and to implement them in the most efficient way. The priorities and their implementation are periodically evaluated. The evaluation results have direct impact both on the planning of future S&T activities and on the improvement of the current ones.

This lecture will show how the P.I.E. framework works and thus will be an introduction to all the other lectures in Module 1 of the KISTEP-ISTIC Program 2014.

Technology Foresight

The future is full of uncertainties social, economical, technological, political, environmental, domestic, international, etc. The uncertainties might lead the country to sink down. Thus, it is quite important to prospect what the future will be like and how the future will be changed and shaped. There may be many ways to prepare for the future.

Technology foresight is an S&T-fic instrument to prospect the future and thus to identify futuristic technologies with which to prepare for the future. In Korea technology foresight plays a role of the first chapter of S&T P.I.E. framework. Technology foresight identifies the futuristic technologies with time horizon of about 25 years, and the technologies are the major R&D targets for the coming P.I.E. activities. Due to its positional importance it is

clearly articulated in Korea's S&T Basic Law that technology foresight should be carried out every five years.

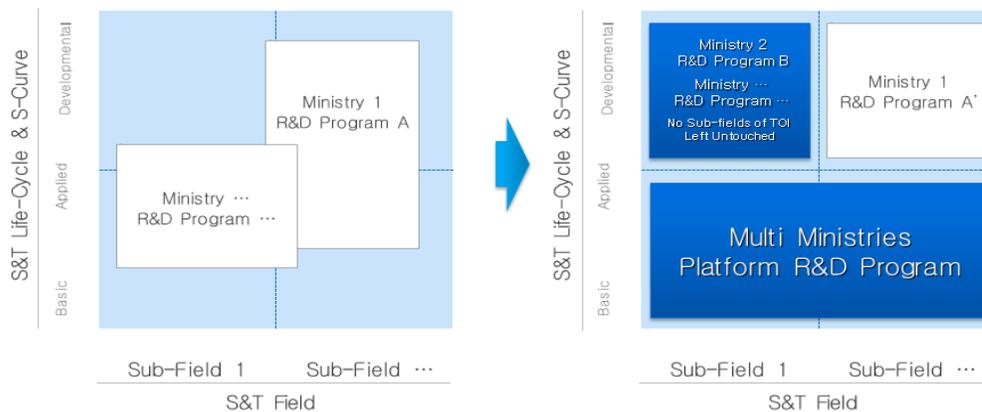
This lecture will cover the concept of technology foresight, its role in S&T P.I.E. framework and a wide range of methodologies. Also, the results of Korea's 4th Technology Foresight will be introduced.

S&T Master Plan and its Role

Having the list of all the futuristic key technologies and their corresponding analysis results via technology roadmap, technology tree, capability analysis, priority-setting and etc, the S&T Master Plan is ready to be designed. The Master Plan is the compass in all S&T activities, in particular, containing the list of futuristic key technologies and their priorities and aiming at the systematic promotion of those futuristic key technologies. This means all of R&D policies and programs must be based upon the Master Plan. In this context Korea's S&T Basic Law clearly articulates that the S&T Master Plan should be renewed every five years.

This lecture will cover the concepts of S&T Master Plan, its role in S&T P.I.E. framework and a wide range of types and methodologies. Also, brand-new results of Korea's S&T Master Plan will be introduced.

Strategic R&D Program Coordination and Budget Allocation



R&D investment follows the policy coordination. Policy coordination provides guidelines to program coordination. Policy coordination will provide R&D programs with S&T-fic goals and proper budget estimates. It must ensure that the goals are reached through the most efficient ways. Thus, it is important not only to follow the strategy plan and to track the development in reaching the objectives, but also to continuously monitor changes in the R&D environment and eventually to adapt the activities to new circumstances. It must be also traced whether the proposed methods really correspond with the intended goals and, if necessary, more suitable modifications must be implemented. Here, particular attention

should be paid in order not to leave any important technologies or sub-technologies untouched.

This lecture will cover the concepts of R&D program coordination and budget allocation, their roles in S&T P.I.E.-ing framework and the processes and viewpoints. Also, brand-new results of Korea's R&D program coordination and budget allocation will be introduced.

Ex-ante Feasibility Study on New R&D Programs

Frequently it is required to design new R&D programs with specific goals. Sometimes the imminent S&T-fic needs from technology foresight may ask a country to prepare for the future. Mostly, with the S&T-fic Compass, the policy/program coordination ask not to leave any important technologies or sub-technologies uncovered. In either case, it is necessary to design new R&D program to satisfy those asking from technology foresight-ing and/or policy/program coordination. However, it is extremely important to check if or not the new R&D programs are properly designed and thus prepared enough to satisfy the asking. Ex-ante feasibility study is being carried out, aiming to prevent any budget from being improperly invested on any unfeasible programs and thus to enhance the investment efficiency. In Korea ex-ante feasibility study has been mandatorily conducted with three angles of policy, economy and technology.

This lecture will cover the concepts of ex-ante feasibility study, its role in S&T P.I.E. framework and the processes and viewpoints. Also, brand-new results of Korea's ex-ante feasibility studies will be introduced.

R&D Program Evaluation

There should be monitoring and evaluation on on-going R&D programs. It is to assure the efficiency and appropriateness of the R&D activities in all their phases. Before the activities are approved and actually executed, ex-ante feasibility studies must confirm their legitimacy and viability. Also, during the investment phase, continuous evaluations must ensure the efficiency and appropriateness of the R&D activities on the levels of policies, programs and projects. Eventually, evaluations assess the results in comparison with the original goals. All evaluation reports must both assess the current status of the evaluated activities and offer suggestions for improvements. It is of utmost importance that the results of evaluation are considered by all relevant stake-holders during all relevant R&D activities. Otherwise, the evaluation couldn't serve its crucial purpose and may become useless.

This lecture will cover the concepts of R&D program evaluation, its role in S&T P.I.E. framework and the processes and viewpoints. Also, brand-new results of Korea's R&D program evaluation will be introduced.

National Science & Technology Information Service (NTIS)

Every S&T P.I.E. activities require S&T-fic evidences. Many stake-holders from ministries, industries, academia and etc. are being involved at every gate of S&T P.I.E. activity. At each gate S&T-fic angles of variety are being discussed and reviewed. Any S&T-fic policies, programs and projects are objects of review, monitoring and evaluation. This means that any decision-makings in any phases of P.I.E. activities should be based upon appropriate evidences. Those evidences should be reasonable and acceptable to most of the stake-holders. In this context, Korea designed and is operating NTIS (National Technology Information System). Also, KISTEP is operating S&T observatory named K-Base System.

This lecture will cover the concepts of S&T Observatory, its role in S&T P.I.E. framework and the processes and viewpoints. Also, brand-new results of Korea's S&T observatory system will be introduced.

INTERACTIVE WORKSHOP: CHALLENGE REPORT OF S&T

The interactive workshop is designed for the participants to have an opportunity to share each country's current status of S&T policy. It focuses on the main theme of the Program-P.I.E. (Planning, Investment, Evaluation) and aims to provide solutions to the specific problems identified from their own countries while sharing the issues with other participants and Korean experts. In order to facilitate the discussion, the participants must submit the Country Challenge Report based on the provided framework (in Box 1) **until September. 31, 2014.** All reports will be shared among all participants for active discussion to explore possible solutions for the raised issues. The PPT template will be provided by KISTEP.

(Box 1)

Contents

1. Overview of S&T policy (2~4 page)

- Administrative Framework on S&T
- Country S&T policy
- P.I.E. Framework

2. Analysis of National Capabilities (1~2 page)

- Strong points and Weak points of country
 - National Capability perspective (Natural resources and Political, Social conditions and etc.)
 - S&T perspective

3. Identification of National S&T Challenge (1~2 page)

- Challenging Issues in S&T field

CRITERIA OF PARTICIPANTS

A total of 35 participants (S&T policy makers from governments of developing countries and government funded research institutions) will be selected to attend the training programme. About 30 participants will be from developing countries and five participants will be from Malaysia. The combination of participants from developing countries and Malaysia will allow for the exchange of knowledge, ideas and experiences as well as opportunities for discussions, networking and possible collaboration.

Participants should be holding senior position such as **Vice Minister, Director General or Secretary General / Assistant Minister** of Ministry of Science and Technology or Ministry responsible for Science, Technology and Innovation from developing countries.

MEDIUM OF INSTRUCTION

The training workshop will be conducted in English.

TRAVEL & HOSPITALITY

The organizer will sponsor the cheapest airfare ticket (economy special fare) and local hospitality to qualified international participants who are selected to attend this training program. For those participants who are willing to pay their own airfare, the organizer is agreeable to pay for their hotel accommodation and local cost.

APPLICATION AND ENQUIRIES

All applicants are required to submit application form and recommendation letter and applicant's C.V to following address:

Secretariat

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

ISTIC, c/o Academy of Sciences Malaysia

902-4, Jalan Tun Ismail

50480 Kuala Lumpur

MALAYSIA

Tel: +603-2694 9898

Fax: +603-2698 4549

Email: info@istic-unesco.org

Website: www.istic-unesco.org

CLOSING DATE

Closing Date of Applications: All applications should be submitted to the ISTIC secretariat office by 15 August 2014.

ISTIC will inform the successful applicants to the training workshop not later than 15 September 2014. Applicants who do not receive word within this date are rendered unsuccessful.

Application form also can be downloaded from www.istic-unesco.org

APPLICATION FORM
(Typewritten or blocked letters)

FOR OFFICIAL USE ONLY Reference No: Received: Checked:	Please affix latest passport photograph
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Title Of Course: 2014 KISTEP-ISTIC S&T INNOVATION TRAINING PROGRAM FOR HIGH LEVEL POLICY MAKERS	Date, duration & venue of course: 8-12 DECEMBER 2014, MALACCA, MALAYSIA
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1. PERSONAL PARTICULARS:

Family name (surname):	Date of Birth: (Date/Month/Year)
First name:	Nationality: (Citizenship)
Other given names:	Gender: (Male/ Female)
City and country of birth:	Marital status: (Single/ Married)
Passport No:	Designation : Prof. / Dr / Mr / Mrs / Ms

2. COMMUNICATION AND MAILING ADDRESS:

Applicant's Office Address:	Office Phone No:	
	Office Fax No:	
Email address:		
Mobile No:		
Person to be contacted in case of emergency (name, telephone and address):		

3. EDUCATION:

Name of institution and place of study	Major field of study:	Years of study	Degree

4. EMPLOYMENT RECORD:

A. Current Post:			B. Previous Post:		
Employer:			Employer:		
Duration of service:	From	To	Duration of service:	From	To
Title of post:			Title of post:		
Current monthly salary(US dollars):			Monthly salary (US dollars):		
Name of supervisor and title:			Name of supervisor and title:		
Type of organization: Government/Semi-Government/ Private/ NGO			Type of organization: Government/Semi-Government/ Private/ NGO		
Main functions of organization:			Main functions of organization:		
Total number of employees in organization:			Total number of employees in organization:		
Description of your current work including your responsibilities:					
*Please use supplementary pages if necessary					

5. REASONS FOR APPLYING THIS TRAINING PROGRAM:

Please briefly state the reasons for applying this training program and how you hope to benefit from this program	
Have you participated in any ISTIC training programs before: YES/ NO	
If yes;	
Name of program	Date

6. CERTIFICATION OF ENGLISH LANGUAGE PROFICIENCY:

	Excellent	Good	Fair	Remarks
Listening				
Speaking				
Writing				
Reading				
Mother tongue:				

7. DECLARATION:

Have you ever been convicted by a Court of Law of any country? Yes/ No If yes, please give brief details:	
I certify that my statements in answer to the foregoing questions are true, complete and correct to the best of my knowledge and belief. If accepted to the training workshop, I undertake to:	
i) carry out such instructions and abide by such conditions as may be stipulated by both the nominating government and the host government in respect of this course of training;	
ii) follow the course of study or training, and abide by the rules of the institution in which I undertake to study or train;	
iii) refrain from engaging in political activities, or any form of employment for profit or gain;	
iv) submit any progress reports which may be prescribed; and	
v) return to my home country promptly upon the completion of my course of studies or training.	
I fully understand that if I am granted an award it maybe subsequently withdrawn if I fail to make adequate progress or for other sufficient cause determined by the host Government.	
Signature of Application	: _____
Name	: _____
Date	: _____

8. OFFICIAL DECLARATION (to be completed by the Head of Department):

The Government / Organisation of nominates (name of applicant)	
For the training workshop under the International Science, Technology and Innovation Centre for South-South Cooperation (ISTIC) and certifies that:	
i) all information supplied by the nominee is complete and correct;	
ii) the nominee had adequate knowledge and was appropriately tested for English Language proficiency.	
Remarks:	
_____	_____
(Name)	(Signature of responsible Head of Department)
_____	Address of Department/ Ministry
(Designation)	_____
Official seal/ stamp	_____
	Office telephone no:
	Office fax no:
Date:	Email address:

Note: INCOMPLETE AND/OR UNENDORSED FORMS WILL NOT BE PROCESSED



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ISTIC
INTERNATIONAL SCIENCE, TECHNOLOGY AND
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COOPERATION UNDER THE AUSPICES OF UNESCO

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