

## □ 국외출장결과보고 : 동아시아 및 동남아시아의 건강영향평가 Consulting meeting

○ 출장지 및 일정 : 태국 방콕 (2017. 11. 30.-12.2.)

○ 배경

- WHO 와 UNEP가 공동 추진하여 3년마다 개최하는 환경보건장관포럼에서 동아시아 및 동남아시아 건강영향평가 작업그룹(Thematic Working Group on Health Impact Assessment(TWG on HIA))의 설치에 따라 2010년 4월에서 2013년 4월까지 3년간 우리 연구원이 의장기관(chair institution)으로 역할을 하였음.<sup>1)</sup>
- 2016년 9월 15일-16일 양일간 동남아시아 및 동아시아 환경보건장관회의 준비를 위한 TWG 회의(태국 방콕)를 통해 건강영향평가 관련 환경보건장관회의의 의제를 검토하고, 2017-2019년의 계획을 논의함.
- 2017년 12월 1일 TWG on HIA의 향후 운영계획에 대한 국제회의를 개최함.
- 발표자료 : 국가별 건강영향평가 동향 보고



1) 회원국 9개국(캄보디아, 베트남, 라오스, 태국, 필리핀, 몽골, 인도네시아, 중국, 한국)과 10개의 회원기관 및 국제 파트너 (호주, 뉴질랜드, 아시아개발은행(ADB)), WHO 서태평양지역 사무소, WHO 동남아시아지역사무소, UNEP 등이 참여함.

프로그램 일정표

2017. 12. 1. 금요일

08:30-09:00	등록	
09:00-09:30	개회사	
09:30-09:45	참석자 소개	유엔환경계획대표 TWG on HIA 대표(태국) - 회원국: 캄보디아, 인도네시아, 라오스, 말레이시아, 미얀마, 대한민국, 태국, 베트남, 필리핀 등 9개국
09:45-10:00	회의목표와 일정소개	TWG on HIA 의장
10:00-10:30	사진촬영 및 휴식	
10:30-12:00	국가별 진행사항 발표	TWG on HIA 회원국
12:00-01:00	점심	
13:00-13:30	아시아 지역 환경보건포럼진행에 대한 발표	UN Environment Regional Office for Asia and Pacific
13:30-15:30	2017-2019년 TWG on HIA 운영계획 논의	TWG on HIA 회원국
15:30-16:00	휴식	
16:00-16:30	부의장 선출	TWG on HIA 회원국
16:30-17:00	결론 및 폐회	TWG on HIA 대표

# **Republic of Korea**

## **Update on HIA practices, law and legal framework**

Eun Jin Choi  
Korea Institute for Health and Social Affairs

Consultation Meeting of Thematic Working Group on Health Impact Assessment (TWG-HIA)  
1st December 2017, Bangkok Thailand

### **1. Policy and legal framework related to HIA and EIA**

- Environmental Health Act(2008) included mandated HIA on certain projects and HIA has been conducted since 2010.
- About 240 projects including industrial sites, thermoelectric power plants, and incineration facilities were under the mandated HIA from 2010 to 2014. They measured and predicted major health hazards in the air and health status of residents.

## Local government's mandatory HIA

- National Health Plan under the Ministry of Health and Welfare includes healthy city and Health impact assessment
- Healthy City policy in local governments (84 cities)
- Local government of Muju province enacted a healthy city ordinance including mandated HIA for healthy public policy planning in 2011.
- Local government of Seocho in Seoul enacted a residents' health care ordinance including mandated HIA for Healthy public policy in 2015.

## 2. National HIA Guidelines

[Environmental Health Act]

- Investigation of the environmental vulnerability of the project
- Health impact assessment includes forecasting of the air pollutants emitted from the execution of the project expected to affect health.
- Quantitative and qualitative methods are used to measure and forecast air quality and water quality, noise and vibration.
- Reduction measures for recommendation



## HIA Guideline for local governments

- HIA process includes screening, scoping, identification of potential health impacts, assessment, decision-making and recommendations, and evaluation
- KIHASA(Korea Institute for Health and Social Affairs) has closely worked with local governments since 2008. KIHASA conduct seminars and workshops for officers in local governments.
- About 25 projects were done by KIHASA's HIA team.

## **3. HIA initiative /practices**

Best Practices/Cases in the Implementation of the HIA

## Gwangmyeong city (Healthy city)

- HIA on regeneration of AeGeeNeung Waterside Park (2009) included screening, scoping, assessment, and evaluation. There was a HIA committee with KIHASA and local government.
- Some results of HIA included protection of water quality, reduction of transportation, increase of employment and community network, accessibility of health and welfare service.

## Seocho-gu HIA project in Seoul(2016)

### **Yangjae Water Stream Maintenance and Improvement Project**

Seocho-gu is located in the southern part of Seoul metropolitan city.

Seocho-gu is a member of the Korean healthy city network.

### 3-1) Overview of the Yangjae Stream Maintenance and Improvement Project

#### ❖ Yangjae Stream Maintenance and Improvement Project

- ① Yangjae stream, a branch of the Hangang river, originally flowed into the Hangang river but its basin and flow line have changed due to various development projects.
- ② Yangjae stream is the first stream in Seoul chosen as a Seoul Future Heritage. The Yangjae stream maintenance and improvement project has been carried out to protect the natural environment and to enable citizens to enjoy healthy and comfortable lives.



### 3-2) Health Impact Assessment Procedures: the Yangjae Stream Maintenance and Improvement Project

Phase	Assessment Methods	Content
Step 1	Establishment of the steering committee for health impact assessment	- Healthy cities-related officials in Seochongu, community leaders, project operators, and experts (the academic world) - Set-up of the scope and direction of health impact assessments
Step 2	Screening	- Selection of appropriate types of health impact assessments
Step 3	Scoping	- Preparation of a project operation sheet - Discussions on the research schedule
Step 4	Target population profiling	- Sociodemographic and economic characteristics of local residents - Characteristics of local residents
Step 5	Measurement of the determinants of health	- Analysis on the correlation between city planning-related elements and health through literature review - (In particular) special considerations of the socially vulnerable
Step 6	Gathering experts' opinions and surveys of residents	- Research on the appropriateness and impact of the Firefly Center on health through the collection of experts' opinions - Identification of recommendations for promoting the health of local residents
Step 7	Policy Suggestions	

### 3-3) Steering Committee

#### ❖Steering Committee for Health Impact Assessments

- ④ Healthy cities-related government employees in Seocho-gu (three persons)
- ④ Community leaders (two persons)
- ④ Health experts (three persons)
- ④ Experts in health impact assessment (two persons)

Classification	Organizations
Experts in health impact assessment	- Professor, Kosin University - Professor, Sahmyook University
Healthy cities-related officials in Seocho-gu	- Director of the Seocho-gu community health center - Manager of the health policy team, Seocho-gu office
Project operator in Seocho-gu	- Manager of the residents administration team, Seocho-gu office
Local residents	- Head of the Firefly Center - Community leaders
Researchers	- Korea Institute for Health and Social Affairs - Hanyang University

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### 3-4) Screening: Selection of Appropriate Types of Health Impact Assessments

#### ❖Screening Information

- ④ Impact on health
  - Physical and psychological impact and impact on families and communities
- ④ Impact on communities
  - Whether to contribute to promoting equality in health by reducing inequality in health
  - Whether the assessment programs can have significantly negative effects on local residents
  - Whether the programs can have more significant effects on low-income brackets and vulnerable classes
  - Whether the impact on local residents is significant enough to cause worry

#### ❖Screening Methods

- ④ Decision-making through consultative meetings
- ④ Advisors: healthy cities-related officials in Seocho-gu, experts in health impact assessment, and researchers

#### ❖Result

- ④ Conduct simplified health impact assessments

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### 3-5) Scoping: Analysis on the Determinants of Health

#### ❖Determinants of health: socio-economic conditions

Specific determinants of health	Potential impact				Background
	Positive	Negative	No impact	Uncertain	
Public policies	●				<ul style="list-style-type: none"> <li>- Secure walkways and bicycle roads</li> <li>- Reduce water and air pollution</li> <li>- Expand health promotion facilities for residents and contribute to enhancing their satisfaction with lives.</li> <li>- Used for policies for developing another stream.</li> </ul>
Population-based policies	●				<ul style="list-style-type: none"> <li>- Improve trails and create rest areas, thereby contributing to residents' health promotion and leisure activities.</li> <li>- Make a short-distance trip on foot and by bicycle.</li> </ul>
Socio-cultural values and rules		●			<ul style="list-style-type: none"> <li>- Economic gaps between residents around the facilities and those in other areas may be incurred.</li> <li>- Differences in residential conditions may cause residents to be conscious of socio-economic classes and to change their attitude.</li> </ul>
Safety	●				<ul style="list-style-type: none"> <li>- Improve trails and install safety fences under the Yangjae Stream Bridge to prevent accidents from occurring.</li> </ul>
Crime		●			<ul style="list-style-type: none"> <li>- The development of nearby commercial districts and the inflow of the floating population may cause more crimes to occur.</li> </ul>

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### (continue) Scoping: Analysis on the Determinants of Health

#### ❖Determinants of health: physical environment

	Specific determinants of health	Potential impact				Background
		Positive	Negative	No impact	Uncertain	
Physical environment	Housing environment/supply	●				<ul style="list-style-type: none"> <li>- Make Yangjae stream a famous spot, increasing the inflow of the floating population and revitalizing nearby commercial districts.</li> </ul>
	Quality of water, air, and soil	●				<ul style="list-style-type: none"> <li>- Reduce Yangjae stream pollution, with streamside plants decreasing air pollution.</li> </ul>
	Noise		●			<ul style="list-style-type: none"> <li>- The commercialization of existing residential districts may cause nighttime noise pollution, doing damage to residents.</li> </ul>

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(continue\_Scoping: Analysis on the Determinants of Health

❖ Determinants of health: society, community, and personal lifestyles

	Specific determinants of health	Potential impact				Background
		Positive	Negative	No impact	Uncertain	
Community/society as a whole	Social support/alliance	●				<ul style="list-style-type: none"> <li>- The basic framework for promoting club activities can be set up, contributing to facilitating exchanges among community members. It can also be used as a community space.</li> </ul>
	Social exclusion control		●			<ul style="list-style-type: none"> <li>- The commercialization of existing residential districts around Yangjae stream may cause more residents to leave the areas.</li> <li>- Residents who can't have easy access to Yangjae stream may feel relatively excluded from the scheme.</li> </ul>
Personal lifestyles	Sports	●				<ul style="list-style-type: none"> <li>- Streamside trails and an inline skating rink were refurbished to enable residents to enjoy walking, marathons, bicycling, and inline skating. The sports infrastructure is expected to contribute to the health of local residents.</li> </ul>
	Mental health	●				<ul style="list-style-type: none"> <li>- In case community rest areas are more actively established as social network spaces, residents' morale can be boosted.</li> <li>- Policies for social networking are required to be devised.</li> </ul>

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3-6-1) Assessment results: Positive impact on health: The Yangjae stream maintenance and improvement project

Socio-economic conditions	<ul style="list-style-type: none"> <li>• Refurbish trails and bicycle roads</li> <li>→ Promote outdoor activities, reducing inequality from economic gaps among social classes.</li> <li>→ Help residents enjoy healthy and comfortable lives.</li> <li>• Expand health promotion facilities such as trails and rest areas → facilitate communion with nature that cannot be easily seen in cities.</li> <li>• Walking and so forth in green areas → control stress and promote psychological stability.</li> <li>• Diverse facilities including rest areas: spaces where residents gather together to communicate with one another.</li> <li>→ Strengthen fellowship among residents and their social support.</li> </ul>
Physical environment	<ul style="list-style-type: none"> <li>• Water quality management → Yangjae stream is characterized by higher naturalized ratios, lower urbanization indices, and fewer invasive alien plants.</li> <li>• Green area management → reduce air pollutants, control a rise in temperature, lessen daily temperature differences, and prevent rapid fluctuations in temperature.</li> <li>• Provide a comfortable physical environment → contribute to enhancing the quality of lives.</li> <li>• Make Yangjae stream a famous spot, accelerating the inflow of the floating population and promoting the development of nearby commercial districts.</li> <li>→ Facilitate the development of local economy.</li> <li>→ Create jobs, improving the quality of residents' lives.</li> </ul>
Society as a whole and communities	<ul style="list-style-type: none"> <li>• Lay the foundation for residents to enjoy sports</li> <li>→ promote club activities → used as health promotion and community spaces</li> </ul>
Personal lifestyles	<ul style="list-style-type: none"> <li>• Refurbish streamside trails and an inline skating rink</li> <li>→ help residents enjoy walking, marathons, bicycling, and inline skating, thereby promoting their physical activities.</li> <li>→ Every community member can use such facilities regardless of age, reinforcing fellowship among family members and communication among generations.</li> </ul>

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### 3-6-2) Assessment results: Negative impact on health: The Yangjae stream maintenance and improvement project

Socio-economic conditions	<ul style="list-style-type: none"> <li>Economic gaps and differences in the residential environment between residents around Yangjae stream and those in other areas.                             <ul style="list-style-type: none"> <li>→ Cause environmental inequality.</li> <li>→ Have negative effects on communities and the quality of personal lives.</li> </ul> </li> <li>A rise in the inflow of the floating population.                             <ul style="list-style-type: none"> <li>→ The commercialization of existing residential areas leads more residents to leave the districts.</li> <li>→ Noise pollution and so forth negatively affect the living environment and emotional stability, increasing crime rates.</li> </ul> </li> </ul>
Physical environment	<ul style="list-style-type: none"> <li>Making Yangjae stream a famous spot accelerating the inflow of the floating population.                             <ul style="list-style-type: none"> <li>→ More household waste</li> <li>→ Possible source of water pollution</li> </ul> </li> <li>Refurbish trails and rest areas.                             <ul style="list-style-type: none"> <li>→ The fear of crime attributed to the existence of blind spots makes residents feel unstable.</li> <li>→ Blurred boundaries between streamside pedestrian and bicycle roads cause more minor collisions to occur.</li> <li>→ Do damage to the health of residents.</li> </ul> </li> </ul>
Society as a whole and communities	<ul style="list-style-type: none"> <li>Promote club activities                             <ul style="list-style-type: none"> <li>→ Lack of systematic support and spaces for club activities</li> </ul> </li> </ul>

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### 3-7-1) Recommendation: Ways to promote positive impact on health

Encourage residents to actively take part in health promotion activities	<ul style="list-style-type: none"> <li>Create small eco theme parks near pedestrian and bicycle roads.                             <ul style="list-style-type: none"> <li>→ Promote projects that can help residents enjoy leisure activities by season and actively take part in physical activities.</li> </ul> </li> <li>Introduce health-related programs                             <ul style="list-style-type: none"> <li>→ Encourage residents to participate in the programs by giving gifts to participants.</li> </ul> </li> <li>For the introduction of systematic and advanced healthcare programs                             <ul style="list-style-type: none"> <li>→ Develop and disseminate smart healthcare programs based on health-related facilities around Yangjae stream.</li> </ul> </li> </ul>
Use of trails and rest areas	<ul style="list-style-type: none"> <li>Consider constructing music trails.                             <ul style="list-style-type: none"> <li>→ Enable residents and sports-related volunteers to enjoy stretching exercises together in rest areas.</li> </ul> </li> </ul>
Reinforcement of water quality management	<ul style="list-style-type: none"> <li>Stream water quality management                             <ul style="list-style-type: none"> <li>→ Strengthen cooperation with Gwacheon city.</li> </ul> </li> </ul>
Use of health promotion events	<ul style="list-style-type: none"> <li>Hold Yangjae stream-based health promotion events to boost Seocho-gu's economy.                             <ul style="list-style-type: none"> <li>→ Use Yangjae stream-based events for the Seoripul Festival held every year.</li> </ul> </li> </ul>
Use of sports activities	<ul style="list-style-type: none"> <li>Enhance mental and physical health through sports activities.                             <ul style="list-style-type: none"> <li>→ Offer fitness and sports education services to residents on a regular basis.</li> </ul> </li> </ul>

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### 3-7-2) Recommendations: Ways to reduce negative effects on health

Reduce environmental inequality	<ul style="list-style-type: none"> <li>• The economic gap between residents around Yangjae stream and those in other areas causes environmental inequality.</li> <li>→ Develop and disseminate programs that all social classes can enjoy, by using the strength of open spaces.</li> </ul>
Residential environment and emotional stability	<ul style="list-style-type: none"> <li>• The development of commercial districts is likely to cause noise pollution and to have negative effects on the residential environment and emotional stability, increasing crime rates.</li> <li>→ Organize volunteer service groups consisting of residents and merchants, leading them to take part in activities for preventing noise pollution and crimes.</li> </ul>
Household waste pollution minimization	<ul style="list-style-type: none"> <li>• A rise in the floating population is likely to increase household waste, thereby causing water pollution.</li> <li>→ Install trash cans for household waste.</li> <li>→ Install signs that show the location of trash cans.</li> <li>→ Strengthen PR activities to encourage people to pick up household waste.</li> </ul>
Safe trails and rest areas	<ul style="list-style-type: none"> <li>• The Yangjae stream maintenance and improvement project will add convenience but the resulting increase of bridges and blind spots may cause more crimes to occur.</li> <li>→ Install CCTVs or emergency phone booths in crime-prone areas.</li> <li>→ Increase patrols.</li> </ul>
Reduce health risk factors	<ul style="list-style-type: none"> <li>• Blurred boundaries between pedestrian and bicycle roads lead more minor collisions to occur.</li> <li>→ Install safety poles to distinguish pedestrian walkways from bicycle roads.</li> <li>• Sports clubs have actively been established but systematic management and support services have yet to be offered.</li> <li>→ Sports clubs can function as community spaces through which exchanges among residents can easily be promoted.</li> <li>→ Seek ways to provide community members with systematic management / support services and sports club information.</li> </ul>

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## 4. Capacity Building

1. Human and Institutional Resources for HIA  
professional networks : KIHASA and KEI

2. Current Activities related to Capacity Building:  
conduct seminars and workshops to gather information

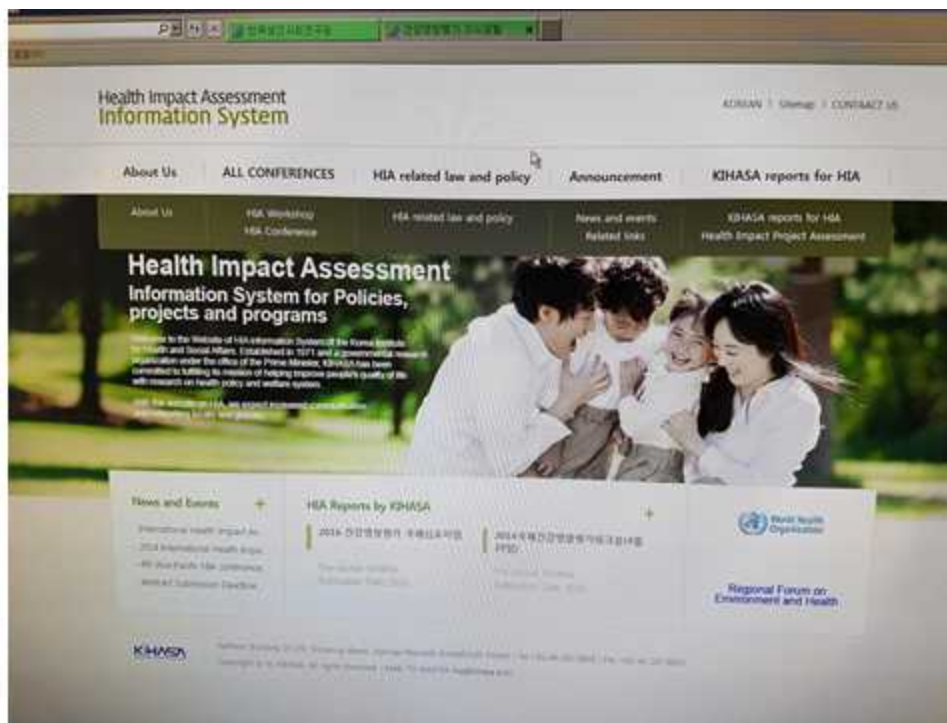


## HIA capacity building



## HIA Website (<http://hia.kihasa.re.kr>)

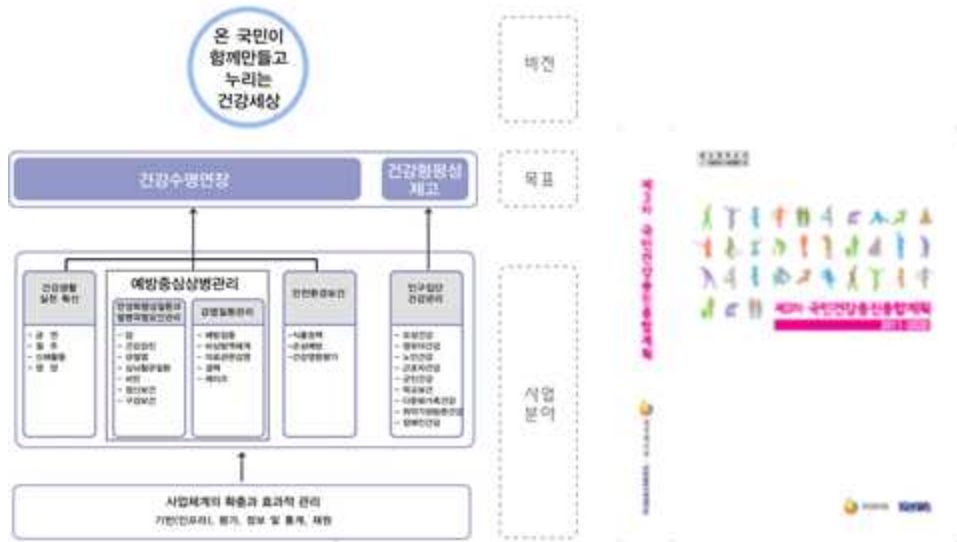




## 5. Challenges and Solutions to Strengthen HIA Related to Policies

- Incorporation of HIA in EIA : broaden determinants of Health
- Integration of HIA in the Health Promotion Policy Plan by the ministry of health and welfare
- Expanding HIA work with local governments
- Development of HIA tools for Korean officers

# The National Health Plan and HIA for Healthy public policy



Thank you