



**UNITED NATIONS  
UNIVERSITY**

**UNU-IAS**

Institute for the Advanced Study  
of Sustainability

**Joint Webinar  
By SKY project and UNU-IAS**

## **Industrial Skill Development in Developing Countries: Education, Skills Demands, and Productivity**

16:00-18:00 JST, 28 February 2022

### **The objective of this workshop**

This workshop will discuss skill development in developing countries from multiple angles. In the face of the knowledge economy and the desire to catch up economically with industrialized countries, the interest and commitment to industrial skills development is ever higher in the developing world. At the same time, the criticism does not cease that school-based training does not meet the skills demands in the industries.

Recently, an idea has been widely accepted that, for a worker to be productive and effective in workplace, technical skills specific to his/her occupation are necessary but not sufficient. They also involve the cognitive capacity to read, calculate, and theorize. In addition, many studies indicate the importance of non-cognitive skills that enable workers to adapt themselves to different situations and solve problems in collaboration with colleagues for effective operation in the workplace.

To fill the gap between the demands for a skilled workforce and educational provision, we would need to reconsider the opportunities and challenges of technical and vocational education and training (TVET) based on the evidence from the ground, particularly regarding the nature of skills composition required in respective contexts of work.

In this regard, the SKY project has been trying to profile a variety of skills of workers in Africa. What is the relationship among different types of skills? What kind of skill

matters, in which context, and why? How can we train those skills? This workshop aims to bridge between the abstract macro policy discourse and the actual workplaces through the discussion based on data we obtained in the field.

### Who is the “SKY project”?

The Skills and Knowledge for Youth (SKY) of Nagoya University in Japan has engaged an interdisciplinary team of scholars. In support of the United Nations University Institute for the Advanced Study of Sustainability (UNU-IAS), the SKY project aims to apply academic knowledge to solve problems on skills and employment in developing countries.

SKY project website: [https://skills-for-development.com/home\\_en](https://skills-for-development.com/home_en)

Work: [https://skills-for-development.com/category\\_report\\_book/en\\_report\\_book/?jp](https://skills-for-development.com/category_report_book/en_report_book/?jp)

## Provisional programme

Duration	Content	
<b>10 min</b>	<b>Opening remarks</b> Dr. Shinobu Yamaguchi (United Nations University Institute for the Advanced Study of Sustainability)	
<b>20min</b>	<b>Part I: Framing Presentation</b> (Dr. Jonghwi Park, United Nations University Institute for the Advanced Study of Sustainability)	Skills Development and Sustainable Development Goals: Issues and Trends
<b>20 min</b>	<b>Part II: Introduction</b> (Dr. Shoko Yamada, Nagoya University)	Opportunities and Challenges of Skills Development – Why Do We Need Evidence-Based Decisions?
<b>10 min</b>	<b>Q&amp;A session</b>	
<b>5min</b>	<b>Break time</b>	
<b>15min</b>	<b>Part III: Discussion Based on Empirical Data</b> (Dr. Christian Otchia, Dr. Natsuki Kondo, Nagoya University)	<p>What Can We Learn from the Multi-Dimensional Data? Two Analysis from Data Acquired in Ethiopia and Ghana</p> <ul style="list-style-type: none"> <li>• Perception gaps regarding Skills - comparison among stakeholders in the Ethiopian garment industry</li> <li>• Comparative analysis of the formal and informal garment sector workers in Ghana</li> </ul>
<b>15 min</b>	<b>Part IV: Training Intervention</b> (Ms. Pimmada Charoensilp, Nagoya University)	<p>Non-Conventional Soft Skills Training Intervention for Garment Factory Workers</p> <ul style="list-style-type: none"> <li>• How can we train soft skills?- The use of Behavioral-Modeling-Training (BMT)</li> <li>• What can be alternative approaches? Gamified soft skills training</li> </ul>
<b>20 min</b>	<b>Q&amp;A session</b>	
<b>5 min</b>	<b>Closing remarks</b>	

(120 minutes in total)

## Session abstracts

- **Part 1** (*Skills Development and Sustainable Development Goals: Issues and Trends*, Dr Jonghwi Park)  
This talk provides an overview of the roles of skills development and technical vocational education and training (TVET) in achieving Sustainable Development Goals (SDGs). Despite the ever-growing importance of TVET and skills development in sustainable economic and social development, the TVET sector faces pertaining challenges, such as lack of financing, mismatch of curriculum to the industrial needs, and outdated pedagogical approaches to teaching skills. This talk therefore identifies the current issues in TVET and share innovative cases from different countries that have been employed to tackle those issues. Examples from the Regional Centres for Expertise on Education for Sustainable Development (RCEs) will be also showcased to illustrate UNU's role in promoting innovative and sustainable skills development at local level.
- **Part 2** (*Opportunities and challenges of skills development – why do we need evidence-based decisions?*, Prof Shoko Yamada)  
This talk will consider development issues from the lens of skills acquired by individuals. While national development is captured by the advancement of the economic and humanitarian status of the society at the aggregate level, it will not be achieved without individual capacity growth and self-fulfillment. In this sense, skills development is the node of developmental agendas both at the aggregate and individual levels.  
The speaker will untangle the mechanism of how skills mismatches occur and suggest the means to identify the whereabouts and nature of such mismatches. She will also discuss the differential effects of schooling and skills on the labor market experience of people. Then, as the premise of the following presentations, the importance of understanding skills from multiple angles and their implication to the training programs will be discussed.
- **Part 3** (*What can we learn from the multi-dimensional data?: Two Analysis from data acquired in Ethiopia and Ghana*, Dr Christian Otchia & Dr Natsuki Kondo)  
In this part, we present findings from the SKY project's large data collection in Ethiopia and Ghana. The project designed a framework to measure the knowledge and skills in the real work environment. Through intensive research and collaboration with different stakeholders, the project has collected unique and extensive information on skills comparable over time and across countries. The discussion on Ethiopia will focus on the perception gaps on the importance

of employable skills between teachers and students of technical vocational education and training and the reasons behind such gaps. The study finds large perception gaps, mainly due to exposure to the labor market and the efficacy of the education and training system. The talk on Ghana will discuss the role of skills among workers in the formal and informal sectors. Generally, formal-sector workers earn higher salaries on average and have less internal variance, while informal workers' wages vary greatly. The study shows that differences in practical skills and personality can explain differences in wages between the two sectors.

- **Part 4** (Non-conventional soft skills training intervention for garment factory workers, Ms Pimmada Charoensilp)

Recently, many international organizations and development agencies emphasized the importance of soft skills/ non-cognitive skills to train a competent workforce. One of the challenges in training these skills in vocational education is interpreting the idea to fit into the specific work conditions. Since soft skills/ non-cognitive skills tend to be discussed in an abstract, general, and universal manner, workers face difficulty connecting conceptual understanding with improving their behavior in everyday work situations. Aiming to advance behavioral levels, SKY project employs Bandura's (1977) 'Behavior Modeling Training' to originate a soft skills training module for garment factory workers. One of the most influential components of this non-conventional training approach is the opportunity for trainees to practice applying learned skills to their real life. Hence, gamification or game-based training is highly advisable for SKY project's training module as gaming functions allow trainees to practice skills in more surreal situations related to actual workplaces. Through the unlimited creativity in game design, the gamified module can create mimicked places, events, and intangible concepts. This presentation will deliver more profound ideas of how SKY project brings together the behavior modeling training and game to generate a soft skills training module.