Title: **TVET Networks – How International and Regional Networks can Contribute to the Development of National TVET Systems**

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RAVTE
Regional Association for
Vocational Teacher Education

Objectives:

1. To identify success factors for efficient TVET networks;
2. To discuss how to add value to existing national TVET networks; and
3. To formulate recommendations for policy makers.

Key questions:

1. What are your network's core activities (e.g. research/consultancy /capacity building/reform support etc.)?
2. What are your network's strategies and achievements/best practices/products that have an impact on actual TVET delivery?
3. How can cooperation between international/regional networks and national TVET systems be strengthened at a bilateral level?
4. What are your main recommendations to policy makers with respect to regional networks in TVET?

Facilitators:
1. Mr. Thomas Schröder, Technical University of Dortmund, Germany
2. Y.Bhg. Prof. Dato' Dr. Zul Azhar bin Zahid Jamil, Universiti Malaysia Perlis, Malaysia

Speakers:
1. Mr. Shyamal Majumdar, UNEVOC International Centre for TVET
2. Mr. Michel Carton, NORRAG
3. Mr. Numyoot Songthanapitak, Rajamangala University of Technology Lanna, Thailand

Outline:

In many countries of the Asia-Pacific region, technical and vocational education and training (TVET) is a political priority area for balanced social and economic development. Especially those societies that enjoy a dynamic socio-economic development strive to improve and adjust their TVET systems in order to foster a labour force that can meet the demands of their rapidly changing labour markets.

Global competition and its impact on societies is driving a worldwide trend of establishing regional political entities. For example, in Southeast Asia such political entities are ASEAN, ASEAN plus 3 and ASEAN plus 6.

Not only are nations establishing regional political structures but also "Communities of Practice" are being established worldwide and in the Asia-Pacific region.

In TVET, such communities include regional networks, associations and inter-governmental organizations. According to its particular objectives, networks may be comprised of individual experts, training providers, research institutes, government bodies and/or universities.

The establishment of regional networks inevitably produces advantages and offers new perspectives as well as challenges, especially with respect to enhancing TVET through generating evidence and disseminating knowledge on procedures and best-practices from a particular region. Members from one region are often facing similar and comparable problems and challenges which is why networks can contribute to innovation and development.

The challenge that remains is to identify existing solutions and to transfer them successfully. Thus, networks can enhance self-reliant development of national TVET systems, TVET organizations and individuals.

Session Title: The World of TVET Networks –

How International and Regional Networks Contribute

to the Development of National TVET Systems

Introduction

In the last past two decades, an enhanced establishment of networks, driven by information technology and its tools of permanent availability, such as the internet, emailing and social media, play a crucial role in almost all areas of modern life. These networks sustainably can enhance and accelerate the exchange and acquisition of relevant knowledge, the dissemination of valuable techniques, methods and good practices, nurture a demand-oriented, informal manner of individual or peer learning within specific "communities of practice". Experts from the world of TVET – scientists, practitioners and politicians alike - form such communities of practice.

In many countries of the Asia-Pacific region, Technical and Vocational Education and Training (TVET) is considered important for a balanced social and economic development. Societies which enjoy a dynamic socio-economic development continuously strive to improve and adjust their TVET-systems in order to educate and train a labor force to meet the demand of their changing labor market.

In addition, global and regional competition and its impact on societies is driving a worldwide trend of regional integration. For example, in Southeast Asia such political entities include ASEAN, ASEAN plus 3 and ASEAN plus 6. Cooperation in the Asia-Pacific region is not only being strengthened through regional political structures, but also through communities of practice. In TVET such communities include regional networks, associations and working groups often established by multilateral organizations. Depending on their objectives, networks may be comprised of individual experts, training providers, research institutes, government bodies and/or universities.

This paper addresses the question of success criteria in the implementation and operation of supranational networks and their impact on TVET-systems. The functionality and the potential of global or regional networks and their impact, as well as their interface with national TVET-systems, will be analyzed to formulate recommendations.

Networks – A Driver for Common Understanding, Learning and Development

Networks exist in various forms with a wide spectrum of functions. According to Castells (2001), we live in a "society of networks", although not everything that connects is a real network (cf. Hearn and Mendizabel, 2011). Networks serve multiple purposes and are often based on groups of experts forming "communities of practice" (cf. Wenger, 2005). These expert networks often begin with informal exchange of information and gradually undergo a process of institutionalization (Wielinga 2001). With increasing relevance of institutional or expert networks, being driven by technological advances, networks themselves have become an objective of social studies. The intention of such research is to examine and to define typologies of networks (cf. Sydow et al. 2003) and their characteristics and success factors (cf. Engel, van Zee 2004).

Research suggests that networks enhance mutual understanding and informal learning through cooperation and exchange in a demand-oriented manner (cf. Elsholz, 2006), which consequently leads to competence development (cf. Pinzás and Ranaboldo, 2003).Each network develops its own specific structure deriving from mutual agreements, procedures, culture and material circumstances (cf. Cummings, van Zee 2005). Wielinga (2001) points out that it is of utmost importance that networks do not lose their flexibility. Vitality, enthusiasm and satisfaction of the networking community vanish if procedures and controls become dominant factors.

What are the main factors that keep a network dynamic and effective for its members and users? Engel and van Zee (2004) summarize the following success factors:

- Maintain pertinence for the community of practice. Create a room for an open, honest and vivid discussion which will eventually lead to innovation at the basis of experimentation and learning (cf. Pinzás and Ranaboldo, 2003).
- Ensure added value by developing a distinctive profile focusing on a well-defined sphere (cf. Pinzás and Ranaboldo, 2003).
- Create an atmosphere of openness among participants. Allow participants to make mistakes and to learn from them. Networking is a social action that increases its value by its members daring to share (cf. LEISA, 2002).
- Ensure that participants have relevant skills, access and financial resources to participate in relevant activities (Creech and Willard, 2001).
- Ensure that participants consider the priorities of the network as their own. Participatory processes will lead to motivation, self-reliance and vital bottom-updevelopments. Initial self-reliance is the precondition for continuity (cf. Padron, 1991).
- Share common goals or problems in order to initiate a meaningful discussion among members, especially if they come from different cultural backgrounds.
- Create clarity about the network´s goals and priorities. Focus on a limited number of achievable objectives (cf. Guijit et al. 2003).
- Set up a flexible organizational structure, which is functioning as an "animator". The role of the animator is to ensure the flow of information, to keep the participants engaged, to balance consultation and with pushing towards objectives, and to monitor activities and financials (cf. Creech and Willard, 2001).

Initiating and maintaining a meaningful, dynamic and successful network is based on the readiness of the participants to engage, to share and to participate, and to be aware of the fact that it is necessary to establish and maintain flat hierarchies. The establishment of hierarchies is counterproductive. In order to propel an active community and create a successful network that has a positive impact, a collaborative environment has to be established that employs the above criteria.

Networks from the World of TVET – Research, Strategies and Policies

In the world of TVET, networks have emerged that have diverse focuses or objectives, as well as members or stakeholders. The following section introduces networks which are leveraging all potential advantages of network-based collaboration and which vastly contribute to the ongoing development of TVET systems and thus to the improvement of living conditions.

UNESCO-UNEVOC

The global UNESCO-UNEVOC network, with its International Centre in Bonn/Germany, is the worldwide largest network focusing on TVET (cf. UNESCO UNEVOC, 2015). Members of UNESCO-UNEVOC are leading institutions from UNESCO Member States with relevant

structures, responsibilities and roles in their national context. All members derive from four different groups: ministries (22 percent), national bodies (22 percent), universities (28 percent) and training providers (28 percent) (cf. Majumdar, 2014).

Furthermore, UNEVOC is organized into five regional clusters along geographic, linguistic and economic criteria, namely, Africa, Asia-Pacific, Arab States, Europe and North America, Latin America and the Caribbean. A cluster coordinator facilitates regional exchange and activities. Cooperation between the regions is facilitated through e-portals and e-media, as well as face-to-face meetings. The content is all about the exchange of information and knowledge about various aspects of vocational education and training, primarily improving the perception of vocational training and working on joint solutions to emerging problems. National UNEVOC centres disseminate information within the country and contribute to TVET development by influencing national policy-making (cf. Majumdar, 2014). At present, the most urgent political issues are youth unemployment and climate change. The UNEVOC regions have developed their own approaches to bring these topics onto the political agenda. Promising implementation options and recommendations have already been discussed at the International Congress on TVET in Shanghai, China (ct. UNESCO-UNEVOC, 2012).

UNESCO-UNEVOC provides instruments and tools to the network in order to enhance the dissemination and exchange of knowledge, solutions and best-practices. Relevant knowledge is being generated by supporting research and evidence-based studies (cf. Majumdar, 2014).

The tools provided are:

- An "e-forum", which is used for online conferences;
- "UNEVOC Network Portal", which is a directory of all TVET member institutions;
- "TVETipedia" a TVET-glossary; and
- "The TVET Database" with up-to-date information on TVET-systems worldwide.

UNESCO UNEVOC is organizing regional fora in order to promote its two main topics: greening TVET and youth unemployment. Such a forum was the Global Forum on "Skills for Work and Life Post-2015", where good practices and experiences were shared. Furthermore, UNESCO-UNEVOC is leading an international working group on Greening TVET and Skills Development with other stakeholders, such as Asian Development Bank (ADB), Centre for the Development of Vocational Training (CEDEFOP), European Training Foundation (ETF), International Labor Organisation (ILO), Organisation for Economic Cooperation and Development (OECD), United Nations Economic Commission for Europe (UNECE) and United Nations Institute for Training and Research (UNITAR).

The network poses a strategy based on national relevance and contribution to global impact. Sharing experience between systems is expected to lead to peer learning, to co-development of

solutions and provision of a frame for benchmarking and monitoring at global level. This collaborative approach has the potential to empower a shift from traditional donor-recipient models to self-reliant development. Through this, UNESCO-UNEVOC is expected to become a strategic tool for the 2030 development agenda (cf. Majumdar, 2014).

NORRAG

The Network for international policies and cooperation in education and training (NORRAG) aims at informing, challenging and influencing policy-making and dialogue on international education and training policies (IETPs) at national, regional and international levels. It builds and disseminates evidence-based critical information and knowledge and offers a platform for novel perspectives on IETPs topics. NORRAG serves as knowledge broker at the interface between research, policy and practice and also seeks to promote South-South-North cooperation. It has engaged the development of interactive partnerships in the global South (Bangladesh, South Africa, Argentina, Côte d'Ivoire –all on TVET- and Brazil). NORRAG has been a leading platform for discussion and debate in the field of IETPs since the early 1990's. NORRAG emphasizes the necessity to always look at education AND training in the perspective of a continuum. That is why in the mid1990's the network launched, in collaboration with ILO and the Swiss Development Cooperation (SDC), the working group for international cooperation in skills development (WGICSD).

In the period following the Jomtien Conference on Education for all (1990), when priority was given to basic education, TVET and Skills Development (SD) were no longer considered as key issues. Consequently, most of the multilateral and bilateral agencies switched their policies and instruments in favor of a limited vision of basic education, i.e. primary schooling. When the WGICSD was dissolved in 2008, NORRAG contributed to the re-emergence of skills development on the international agenda, thanks to its capacity to convene multi-stakeholder's meetings (agencies, NGOs, academics, participants from the "South") and stimulate discussions, not guided by vested interests, but by knowledge and experience sharing.

Other examples for NORRAG`s involvement in networking activities are:

- The consultation of NORRAG by the World Bank in the mid-90s about its study on Skills Development in Africa has partly influenced the content of the above mentioned key document;
- The round table organized by NORRAG during the Shanghai Conference on TVET in 2012 has allowed gathering a range of stakeholders around the post-2015 debates in that field;
- The participation of NORRAG in the African Ministerial Conference in Abidjan in July 2014 in the context of the Inter-Country Quality Node of ADEA, has contributed to put research on SD as one of the three priority actions of the ministers;

- The participation of NORRAG in the APREC conference in August 2014 has underlined the importance of putting TVET debates and policies in the context of the multi-stakeholder's governance arrangements on the international and regional levels;
- The collaborative South-South-North research on Skills Development for underprivileged youth in South Africa and Argentina, the collaboration between NORRAG and Bangladesh on the study of the national TVET institutions in relation with international cooperation agencies and the joint research on the role of education and training in the field of youth urban violence in Brazil and SA demonstrate the utmost importance of supporting the southern production of evidence to inform national, regional and international debates;
- The proposed participation of NORRAG in the World Education Forum in June 2015 will underline that the upcoming governance arrangements in the context of the SDGs have to cover education AND skills in order to secure the sustainability of both.

All of these examples illustrate the importance of international, as well as regional, networks in the context of complex and sometimes competing governance arrangements in the field of TVET/skills development.

SEAMEO VOCTECH

The Southeast Asian Ministers of Education Organization (SEAMEO) is an international organization established in 1965 among governments of Southeast Asian countries to promote regional cooperation in education, science and culture in Southeast Asia. Currently, there are 21 units, including centres and networks. The Centre in charge for TVET is SEAMEO VOCTECH established on the 28th of August 1990 in Brunei Darussalam. The purpose of the Centre's establishment is to assist the SEAMEO member countries to identify and help solve common problems in TVET. The Centre undertakes activities in staff training, research and consultancy, information management systems and publications.

Fiscal year 2014/2015 marked the beginning of the implementation of the 5th Five-year-Development Plan of SEAMEO VOCTECH (cf. 2015). During this period, the Centre is addressing various issues and challenges especially in response to globalization and the implementation of the ASEAN Economic Community. Some of the identified trends, issues, and challenges gathered during the needs analysis in 2013 include the following:

1. TVET Quality Assurance;
2. Qualification Framework;
3. Relevancy of Curriculum that incorporate green technology, employability skills, including entrepreneurship, and high order thinking skills;
4. Articulation;
5. Authentic Teaching-Learning and Assessment;

6. ICT in TVET;
7. Research and Development;
8. Access and equity;
9. Lifelong learning, and
10. Graduate employability.

To address these various issues and challenges, the Centre came up with five key result areas:

1. Professional Development;
2. Research and Development;
3. Knowledge Management;
4. Organizational Sustainability; and
5. Visibility and Corporate Responsibility.

The overarching topic that serves as a guideline for the implementation of the 5th Five-Year-Development Plan is "Ensuring Greater Impact of TVET for Sustainable Development".

The Centre collaborates with various partners at the national, regional, and global level. At this moment, the Centre has secured more than thirty partners to collaborate in capacity building programmes, research activities, publications and information sharing through seminars, conferences, and forums.

National TVET policy is sometimes created by national governments and supported by national bodies alone. Often, however, this can be insufficient to develop comprehensive policies due to globalization and fast changes of technology. Some countries are now interdependently addressing education and training issues with the assistance or input from regional and international organizations which are becoming more important considering the proliferations of bilateral, regional, and global networks and associations.

In Asia-Pacific, there are plenty of political initiatives and associations, such as ASEAN, ASEAN Plus 3, SEAMEO, APEC, and the East Asia Summit that initiate cooperation of member countries in order to address common challenges. Within these networks and associations, regional and international networks or organizations function as catalysts providing input to multi-national initiatives in TVET. The initiation of National Qualification Frameworks, the Regional TVET Quality Assurance Framework, and the ASEAN Qualification Reference Framework are examples of regional and international networks having an impact on TVET development in the Southeast Asian region.

RAVTE

The Regional Association for Vocational Teacher Education in Asia (RAVTE) is a newcomer in the World of TVET networks (cf. RAVTE, 2015). RAVTE was founded as an independent and self-

governed association on the 28th of March 2014 at Rajamangala University of Lanna in Chiang Mai, Thailand. Fourteen universities from East and Southeast Asia, which are involved in vocational teacher education and in research on vocational education and training, founded the association. One year after its foundation the association grew to twenty-one universities, including those from China and Southeast Asia. RAVTE is a regional non-profit organization focusing on following main objectives:

- Enhancing the quality of vocational teacher education (including institutional development and capacity building);
- Improving research on vocational education and the facilitation of scientific cooperation and exchange;
- Cooperating with the public and private sector in order to significantly improve practical vocational competences and employability of vocational teachers; and
- Fostering regionalization and integration processes through cross-institutional and transnational cooperation.

Throughout the region there is a tremendous demand for research on vocational education to support evidence-based decisions, the establishment of vocational education as an academic discipline, the transfer and dissemination of results and for the education of junior researchers. RAVTE primarily, but not only, promotes action-research in order to achieve an impact through evidence-based policy support at national and regional levels, as well as immediate support to systemic innovation, which includes organizational and individual competence development (cf. Schröder, 2014). Policy support can have a sustainable impact, if based on evidence and transparent research processes. Consequently, member universities and other regional organizations such as UNESCO, Colombo Plan Staff College (CPSC), ASEAN University Network (AUN) and SEAMEO VOCTECH signed the Thanyaburi Statement in 2013 (cf. RCP 2013). The statement aims at the establishment of vocational education as a self-reliant academic discipline in the region. Countries from the region that have developed successful TVET systems, also invest in vocational education as a scientific discipline, e.g. in TVET research and development.

Dissemination and mutual exchange of information is being organized in meetings, workshops, e-conferences, through an e-newsletter, a homepage (www.ravte.asia) and through TVET@Asia, an open online journal (www.tvet-online.asia). Additional innovative instruments and formats are currently being developed.

The steering structure of RAVTE is based on a constitution which was signed by all members. The highest body of the association is the General Assembly (GA) comprised of one delegate per university, who is granted voting power that cannot be transferred. Decisions are based on

majority vote. The Executive Board (EB) is responsible for enacting the GA's decisions and has to report once a year to the GA. An Advisory Board (AB), which has no voting power, can be nominated by the EB.

The association cooperates with national ministries or bodies and other relevant stakeholders from the region, such as Colombo Plan Staff College for Technicians Education (CPSC), UNESCO Asia and Pacific Regional Bureau for Education, ASEAN University Network (AUN), UNESCO-UNEVOC and SEAMEO VOCTECH in order to create synergies and avoid overlap.

In March 2015, the General Assembly agreed on a Strategy and Plan of Action (2015- 2018). The strategy comprises eight strategic areas that aim to establish RVATE as a regional partner and to contribute to the enhancement of regional cooperation and the development of TVET in the region.

1. **Criteria for Enhancing the Positive Impact of Networks on National TVET Systems**

Regional networks produce advantages and different perspectives, as well as challenges, especially with respect to enhancing TVET evidence and disseminating knowledge about procedures and best practices from a particular region. Network members from one region often face similar and comparable problems and challenges which is why networks often contribute to innovation and development. The challenge that remains is to identify existing solutions and to transfer them successfully.

Networks have the capacity to enhance self-reliant development processes of national TVET systems, TVET organizations and individuals in a sustainable, bottom-up process. Successfully designed and operated networks produce a quadruple-effect: positively affecting member institutions or experts, the network itself, the country and the region concerned. Therefore, three different perspectives - internal, national and supranational - need to be considered. Each stakeholder should address specific requirements at these three levels in order to unfold the networks potential for the innovation and development of TVET-systems:

To be considered from an internal perspective, define and develop a distinct profile in order to avoid overlap with regard to objectives, activities and regional scope in order to enable complementary cooperation with other organizations or associations.

- Develop an organizational structure, with a network hub (possibly with content-related sub-hubs), and a transparent allocation of members' functions and responsibilities (which can be based on a constitution, enhancing the self-government of its members).
- Employ amoderator who supports communication, common activities, and who provides technical support in order to facilitate the exchange of knowledge, best-practices, and peer interaction and advice.

- Establish a solution-driven atmosphere of objective-oriented freedom and flat hierarchies in order to unfold the network's full potential as a hub for creation, innovation and as a platform for the development of evidence-based policy support rather than policy-based evidence.
- Improve research processes, methods, fact-finding and results, thus supporting the generation of new knowledge which is a precondition for a demand-oriented development of systems in a continuously changing world.
- Mobilize funding in order to reach the objectives preferably based on a transparent strategy and plan of action.

To be considered from the national perspective:

- Strive for objective-oriented cooperation agreements with TVET-networks in order to enhance the impact of cooperation on improvement at the national level.
- Support and strengthen national cooperation with partners to make the network a national hub for TVET-networks. This will ensure that networks and national cooperation partners will identify themselves by mutual interest, which is the most conducive basis for cooperation.
- Provide additional funding for the network, and establish a communication structure that fosters free flow of information into the network and from the national hub to the national network. Identify or establish complementary national peer-groups or networks.
- Support an open access policy. Research products, i.e. studies, papers and concepts, contain valuable information and knowledge that should be available to the public. Support a national policy that allows publication of relevant studies in order to establish a regional knowledge management system.
- Support research, especially action-research, which strives for praxis innovation in cooperation with all relevant stakeholders. Enhance the basis for policy support, strengthen universities role in conducting research by strengthening organizational research capacities (vocational education as academic discipline) and research competences (e.g. Ph.D. programmes).

To be considered from the supranational perspective (e.g. ASEAN in Southeast Asia):

- Identify networks that contribute towards regional integration, and identify factors that will support the standardization and harmonization of products, processes and services.
- Strive for objective-oriented cooperation agreements with TVET-networks in order to enhance the impact of cooperation on improvement at regional and national levels, preferably in cooperation with relevant national bodies.

- Moderate and coordinate regional and international networks in order to minimize overlapping objectives and activities, enhance cooperation with national bodies, and thus, achieve an increase of impact.
- Set up a regional task force for aligning policies, objectives and activities.
- Support supranational cooperation between networks (e.g. South-South-North). Clearly define objectives, roles and responsibilities of involved institutions, especially with respect to the transfer and dissemination of knowledge.

Nations, which are aware of the potential which TVET-networks offer, actively have to identify interfaces, mutual interests and have to develop strategies how to employ them. Networks that act as a giant knowledge management system or even as a think tank pose an efficient instrument and effective driver for a sustainable development on the national level.

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