



Tools and Methods Series

Reference Document N° 24

Vocational education and training

for inclusive growth in development cooperation

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for inclusive growth in
development cooperation

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Foreword

This reference document was commissioned by the Directorate-General for International Cooperation and Development (DEVCO) Migration, Employment, Inequalities Unit. This document is addressed to EU staff working at Headquarters and in Delegations, and to national partners and donors engaged in promoting reforms in the vocational education and training (VET) and skills development sector. It is based on the past experiences of the European Union (EU) and its member states in providing support for the VET sector to countries cooperating with the European Commission (EC).

The document is designed to serve as a practical tool and reference guide for identifying, formulating, implementing, and monitoring and evaluating EU initiatives to support VET reforms in developing countries. It follows a 2013 study that looked specifically at EU support to technical and VET and skills development in EU development cooperation. The overall objective of this study was to provide a comprehensive picture of tools and methods used to implement VET projects across the EC's development cooperation portfolio. This was achieved through an accurate mapping and analysis of the state of play of VET actions and reforms in EC development cooperation, with distinct attention given to the youth perspective.

The first part of this reference document gives a

broad overview of international concepts, policies and EU approaches towards an engagement in VET reforms. It discusses internationally accepted VET definitions and explains the importance of VET for economic and social development. The outline of challenges VET reforms are facing sets out a framework for an evidence-based VET sector review, leading to systemic building blocks that are considered to be of strategic importance for EC-supported VET reform programmes. The final chapter of Part I looks at the EU approach to support VET reforms in developing countries.

Part II contains 13 practical guidance notes for making VET system development work in practice, with a view towards identifying entry points for EU support in terms of policy dialogue and operational support. Each guidance note consists of a summary of key messages, an overview of the topic and 'how to' steps, complemented by examples and case studies from VET systems in developing countries. EU staff engaged in supporting VET projects can use the guidance notes to structure their dialogue with partner governments on topics related to VET systems development.

The reference document was prepared by consultant Werner Heitmann. The work was coordinated and completed by the DEVCO Migration, Employment, Inequalities Unit.

Abbreviations and acronyms

AFD	Agence Française de Développement	IVET	Initial Vocational Education and Training
CBT	Competency-Based Training	LMIS	Labour Market Information System
Cedefop	European Centre for the Development of Vocational Training	MSME	Micro, Small and Medium-Sized Enterprise
CVET	Continuing Vocational Education and Training	NEET	Not in Education, Employment or Training
DEVCO	Directorate-General for International Cooperation and Development	NQF	National Qualifications Framework
EC	European Commission	NVQF	National Vocational Qualifications Framework
ECVET	European Credit System in Vocational Education and Training	OECD	Organisation for Economic Co-operation and Development
EQAVET	European Quality Assurance Reference Framework for Vocational Education and Training	SPSP	Sector Policy Support Programme
EQF	European Qualifications Framework	TVET	Technical and Vocational Education and Training
ETF	European Training Foundation	UNESCO	United Nations Educational, Scientific and Cultural Organization
EU	European Union	UNEVOC	International Centre for Technical and Vocational Training
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit	VET	Vocational Education and Training
ILO	International Labour Office		

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Executive summary

The main purpose of this reference document is to provide conceptual and operational guidance, practical how-to tools and available information on technical resources to staff in European Union (EU) delegations and all internal stakeholders for the implementation of European aid in vocational education and training (VET) and skills development. The document is intended to provide support for the various steps entailed in identification, formulation, implementation, and monitoring and evaluation of VET projects in partner countries. Operational guidelines and concrete examples will help EU staff in formulating coherent interventions, identifying appropriate implementation modalities and involving relevant stakeholders.

The EU considers **VET an instrument to support employability**, in particular of youth. Recognising the pivotal role of the private sector as the engine of employment, the VET sector must be more responsive to labour market needs as a precondition to increase the number of VET graduates able to find decent work.

Part I presents an **introduction and overview** of present EU engagement with developing countries in reform initiatives to transform the VET sector and deliver VET programmes to varied needs of human development — such as to increase employability and entrepreneurship in order to tackle youth unemployment, already significantly high in many developing countries. This is fully in line with Sustainable Development Goals 4 and 8 of the United Nations 2030 Agenda for Sustainable Development, which sees VET as a mechanism to substantially increase the number of youth and adults with skills relevant for the labour market, including technical and vocational skills for employment, decent jobs and entrepreneurship. The process of refining and upgrading VET systems requires major work. Strategies should take into

account systemic building blocks such as governance, funding, information systems for strategic skills planning, labour market-oriented qualifications and curricula, training partnerships with the private sector, quality of provision and quality assurance as well as active labour market training programmes.

Part II contains 13 **practical guidance notes** for making VET system development work in practice, with a view towards identifying entry points for EU support in terms of policy dialogue and operational support. Each guidance note consists of a summary of key messages, an overview of the topic and ‘how to’ steps, complemented by examples and case studies from VET systems in developing countries.

Guidance Note 1: Analysing the general context to support VET reforms aims to help in planning and selecting EU projects to support the particular dynamics of the VET reform at play — both positive (opportunities for reform) and negative (challenges, risks, etc.). The VET system should not be considered in isolation from the various economic and social factors that exert a major impact on the national VET strategy.

Guidance Note 2: Programming of building blocks and EU support describes the value-added chain for the delivery of VET services. The value-added chain approach is based on the idea of seeing all involved stakeholders and VET institutions as a social system, made up of six systemic building blocks.

Guidance Note 3: Private sector involvement in VET governance aims to adopt a tailored approach to promoting private sector involvement in VET governance structures. A precondition for the negotiation process is the willingness of the partner government to share responsibility for VET system development

with stakeholders from the private sector and to capture the interest of the latter.

Guidance Note 4: Promoting funding for VET systems looks to ensure both the stability of funding needed to develop capacity for policy implementation and the level of financing to improve VET outcomes. Diversified financing of VET systems is considered crucial for successful transition from policy formulation to long-term policy implementation.

Guidance Note 5: Promoting labour market information systems addresses the need for an in-depth understanding of the skills to support desired economic development, and those required in the short, medium and long term. The labour market information system facilitates information flow between employment seekers, employers and VET providers offering training and qualification programmes.

Guidance Note 6: Promoting national qualifications frameworks looks at the frameworks which have emerged as a popular policy measure designed to raise skills levels, reduce skills mismatches, improve labour market productivity, promote labour mobility and efficiency, and contribute to economic growth. National vocational qualifications frameworks establish competency standards, assess workers' skills and certify competences acquired from different provider sources.

Guidance Note 7: Implementing an efficient and effective VET delivery cycle examines the demand for evidence-based policies to improve research on internal efficiency and external effectiveness of the delivery of VET programmes. Related questions have called for the collection of VET provider and employment data to assess efficiency and effectiveness, as both dimensions constitute the VET performance matrix.

Guidance Note 8: Implementing work-based learning looks at any form of VET programme that occurs inside an enterprise or workplace. Examples

include formal apprenticeships that are regulated by a training contract, informal or unregulated apprenticeships, moving between work and study, as well as adult participation in continuing training.

Guidance Note 9: Implementing VET staff development highlights that attention must be given to efforts to professionalise VET teachers and trainers, improve pre-service VET teacher and trainer education and enhance their continuing professional development.

Guidance Note 10: Implementing VET in the informal economy takes as its starting point the informal economy as a persistent feature of the economic landscape in all developing countries. Its economic and social importance makes a strong case for attention to improving VET programmes to reflect its characteristics.

Guidance Note 11: Implementing VET in post-conflict and fragile countries centres on the fact that participation in employment-driven VET programmes is greatly desired by young people, because it offers the chance to work, improves employability, and leads to income generation.

Guidance Note 12: Implementing gender mainstreaming examines how to pursue the goal of gender equality. A gender-sensitive VET system needs to be aware of the existing differences in women's and men's access to such programmes and to employment, and be capable of improving the equity outcomes of VET systems.

Guidance Note 13: Promoting VET to support a green economy looks at a policy direction that is still young and underdeveloped. In several developing countries, the reforms of vocational qualifications and the influence of industry on learning outcomes, together with workplace learning, have triggered new programmes and changes in VET curricula that will promote green skills for all jobs.

PART I

International concepts, policies and EU approach

CHAPTER 1

Introduction

1.1 VET in the international agenda

In 2012, more than 500 representatives from 107 countries met in Shanghai for the Third International Congress on Technical and Vocational Education and Training presented by the United Nations Educational, Scientific and Cultural Organization (UNESCO) to debate current trends and future drivers of vocational education and training (VET) and skills development (see Box 1.1). This global dialogue culminated in the Shanghai Consensus which, among other things, recognised that VET plays ‘an essential role in tackling youth unemployment and underemployment’ and that ‘better visibility and support for TVET [technical and vocational education and training] as an integral part of the post-2015 international education and sustainable development agendas’ should be ensured (UNESCO, 2012). Furthermore, the triennial meeting of the Association for the Development of Education in Africa (ADEA) made an urgent call for Africa to expand its investment in VET to generate the internal growth capable of **addressing the unemployment and underemployment of youth and adults**, and of creating businesses, jobs and substantial economic revenue (ADEA, 2012). VET is increasingly recognised in global debates and government priorities as a pivotal instrument for education and national development agendas. There is no doubt that the VET system, together with literacy and higher education, is one of the **priority educational sub-sectors** (see Figure 1.1) to foster inclusive and equitable quality education and lifelong learning opportunities for all.

VET ranks high in the strategic and operational priorities of regional economic communities and of

SUMMARY OF KEY ASPECTS

- Both youth unemployment and underemployment negatively affect human capital accumulation, reduce potential output in national economies and dampen future economic growth perspectives. These effects can be expected to raise the vulnerability of youth to many forms of social and economic risk, reducing their future earning capacity.
- The existence of a powerful vocational education and training (VET) system is a strategic key to the social and economic development of a country. Good, demand-driven VET delivery programmes are potentially one of the most important tools for capacitating young people.
- The response time of VET systems to changes in the employment system can be reduced, facilitating swift and decentralised adaptation of VET provision to the needs of the economy. The VET training market thus becomes established as an adjustment mechanism between labour market supply and demand.
- VET systems in OECD countries benefit from close communication and linkages with the private sector; this is generally absent in developing countries.
- Countries that improve their VET offerings can help meet the labour demands of private sector employers, reduce unemployment, and increase national productivity and competitiveness. The process of refining and upgrading VET systems requires major work—but the rewards will justify the effort.

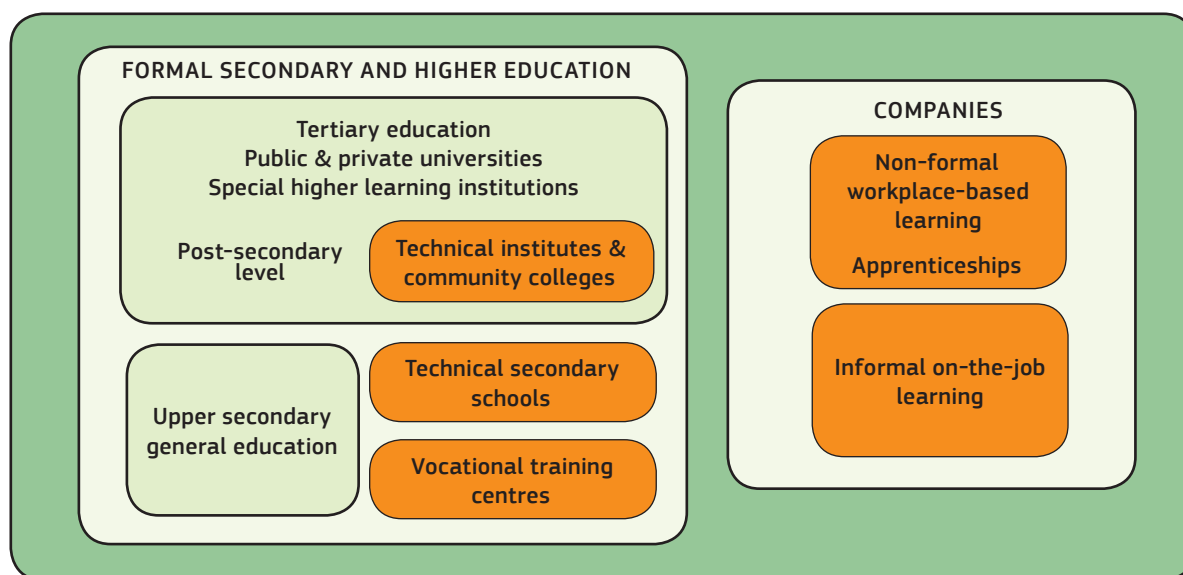
BOX 1.1 A note on terminology

Various terms are used internationally to describe structures seen as comprising a VET system. Along with VET and skills development (SD), these include technical and vocational education and training (TVET) and apprenticeship training schemes (ATS). Notably, UNESCO uses TVET to indicate those aspects of the educational process involving — in addition to general education — the study of technologies and related sciences, and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupations

in various sectors of economic and social life (UNESCO, 2001). The definition of the International Centre for Technical and Vocational Training (UNEVOC) complements the UNESCO definition by referring to a range of learning experiences that may occur in a variety of learning contexts including educational institutions and workplaces.

Reflecting the phrasing used in EU policy messages, this reference document uses the term VET rather than TVET, but the two are

understood to be equivalent. Further, as used here, VET is also understood to include SD, acknowledging the diversity of training provision and pathways in acquiring skills (formal, non-formal, informal). This is in line with the European Centre for the Development of Vocational Training's (Cedefop's) definition of VET as 'Education and training which aims to equip people with knowledge, know-how, skills and/or competences required in particular occupations or more broadly on the labour market' (Cedefop, 2008).

FIGURE 1.1 Overall VET and higher education system

Note: ● = VET sub-sectors.

multilateral organisations such as the African Union, the Caribbean Community (CARICOM), the European Union (EU), the International Labour Organization (ILO), the Organisation for Economic Co-operation and Development (OECD) and UNESCO.

The strong linkage between **VET and the labour market** is also stressed by the European Commission

(EC) in a 2012 communication, 'Rethinking education: Investing in skills for better socio-economic outcomes' (see Box 1.2).

Furthermore, the OECD recently published a skills strategy in which it acknowledges that VET has become the '**global currency of twenty-first century economies**' (OECD, 2012). Young women and

BOX 1.2 Investing in VET systems for economic and employment growth

The EC communication 'Rethinking education: Investing in skills for better socio-economic outcomes' highlights VET as a means to improve economic growth, employment and competitiveness to lay the foundation for productivity and innovation. A key element to foster employment and improve the competitiveness of developing countries is therefore the development of stronger links between the worlds of education and employment. Investment in VET is also seen as an investment in innovation, since much technical change results from incremental innovations by skilled workers and engineers at the workplace.

Source: EC, 2012.

men looking for their first jobs are better prepared for a smooth transition from school to work when they are given adequate VET opportunities, including in-work apprenticeships and on-the-job experience. While VET by itself will not necessarily lead to national development, without knowledge, skills and occupational

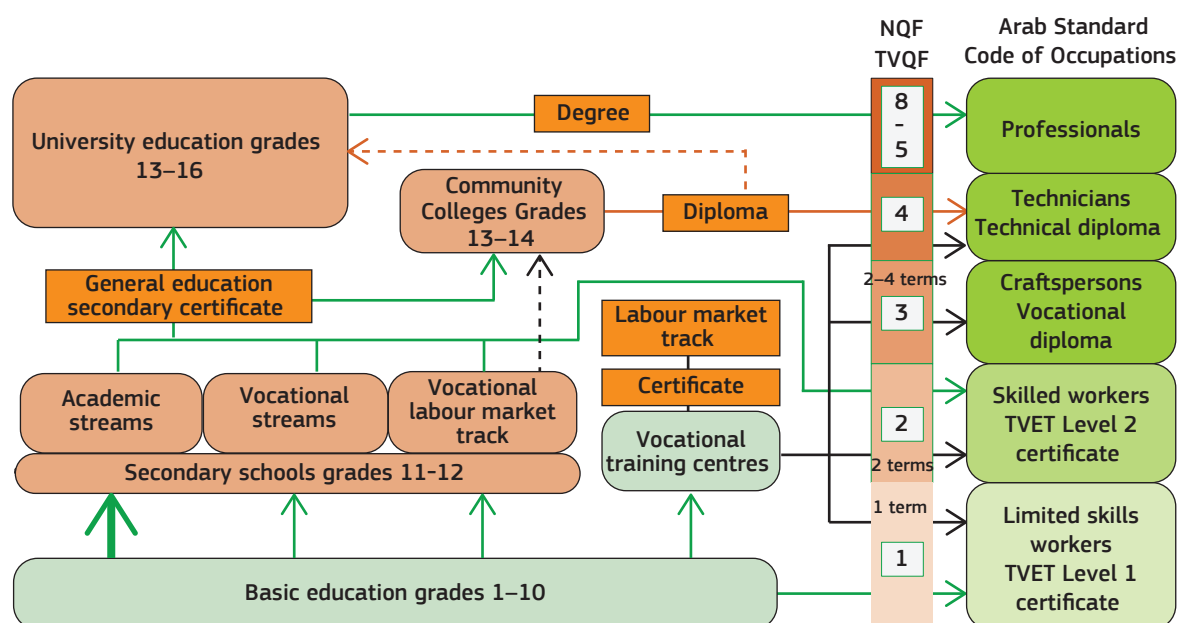
competences the possibility for individual and national development seems much more difficult to achieve.

However, VET programmes are sometimes seen as a last resort. Many individuals and families still find some forms of VET delivery unattractive in relation to secondary general education and academic tertiary education programmes. This is particularly so where VET delivery is **perceived as leading to less prestigious career paths** or to lower prospects for higher earnings once employed. Albeit quite slowly, these perceptions are changing, and in some developing countries, VET offerings at the post-secondary level are considered to provide better preparation for employment than traditional academic university programmes.

Generally speaking, VET can take place at the secondary, post-secondary, further and tertiary non-academic education, and higher education levels. At the post-secondary level, vocational education is often provided by a highly specialised institute of technology/polytechnic, a university or a local community college.

As an example, VET in Jordan (see Figure 1.2) is mainly delivered through the initial VET (IVET) sub-system.

FIGURE 1.2 Integration of VET pathways into Jordan's education and training system



Source: ETF, 2014.

The large majority of Jordanian VET provision is public and consists of:

- **secondary vocational education** of two years' duration in comprehensive upper-secondary schools under the Ministry of Education;
- **vocational training (targeting 16- to 18-year-olds), apprenticeships and short courses** by the Vocational Training Corporation, a semi-autonomous agency under the Ministry of Labour;
- **post-secondary technical education** after secondary comprehensive school, delivered by 26 publicly supported community colleges, which offer two-year programmes leading to a diploma;
- a **continuing VET sub-system** (CVET), which is only slightly established in Jordan (this is true for almost all developing countries).

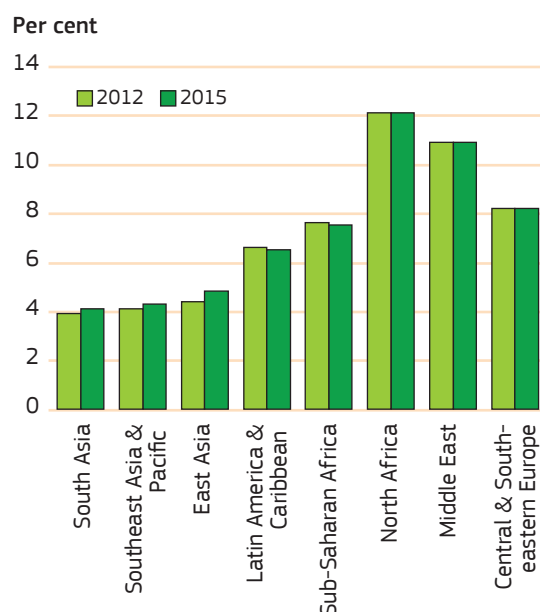
Entry to one type of education or another is based on grades, and the pathways from one type to another are very limited. Almost 90 % of learners who complete the 10th grade of basic education are streamed on the basis of their performance either to general education (high performers) or to vocational education in the comprehensive secondary schools; the remainder (low performers) can continue to one of the vocational training centres. There is **no accreditation to allow mobility across the system pathways**. This, together with the low-status image of VET as an educational last resort, has a negative impact on the demand for VET in Jordan as well as in other countries. Low permeability — together with other issues that will be further analysed — is one of the elements determining the status of VET as a 'second choice' compared with general education.

1.2 The importance of VET for economic and employment growth

According to the ILO's *Global Employment Trends: Risk of a Jobless Recovery?*, it is estimated that some 74.5 million young people aged 15–24 were unemployed in 2013 — almost 1 million more than in the year before (ILO, 2014). The global youth unemployment

rate has reached 13.1%, **almost three times as high as the adult unemployment rate** (see Figure 1.3). The most affected regions are the Middle East and North Africa.

FIGURE 1.3 Regional total unemployment rates in 2012 and 2015



Source: ILO, 2014.

Roughly 1.3 billion 15- to 30-year-old young people now live in the developing world — the largest youth population in the history of the world. Young people make up nearly **half of the world's unemployed**. Moreover, in many developing countries, **youth under-employment** is a more pressing problem. Young people often have to work under precarious conditions with little chance to lift themselves out of poverty. In this sense, women are at particular risk. The share of young people (aged 15–29) that are not in education, employment or training (NEET) has risen in 30 out of the 40 countries for which data are available for 2007 and 2011–2012 (ILO, 2014). Most surveys indicate that **access to employment** is young people's biggest concern.

Although VET systems development is not a panacea for all economic ills, steps to improve national VET systems can yield clear benefits both in economic and employment terms (see Box 1.3). However, **skills mismatch** between the VET offered (labour supply) and

BOX 1.3 Three major trends with implications for VET systems development

- In several regions, the **growing size of the youth cohort** will continue to challenge both VET delivery capacities and job creation rates as more young people enter the world of work.
- **Economic growth** will depend even more heavily than today on the productivity of the workforce, complemented by rising labour force participation rates, especially among women and older workers. The challenge of lifelong learning, particularly among aging but economically active persons, will increase in relevance correspondingly.
- International **flows of migrant workers** will continue to rise, creating challenges concerning fair access to VET programmes and how to fill VET gaps in some countries without creating them in others.

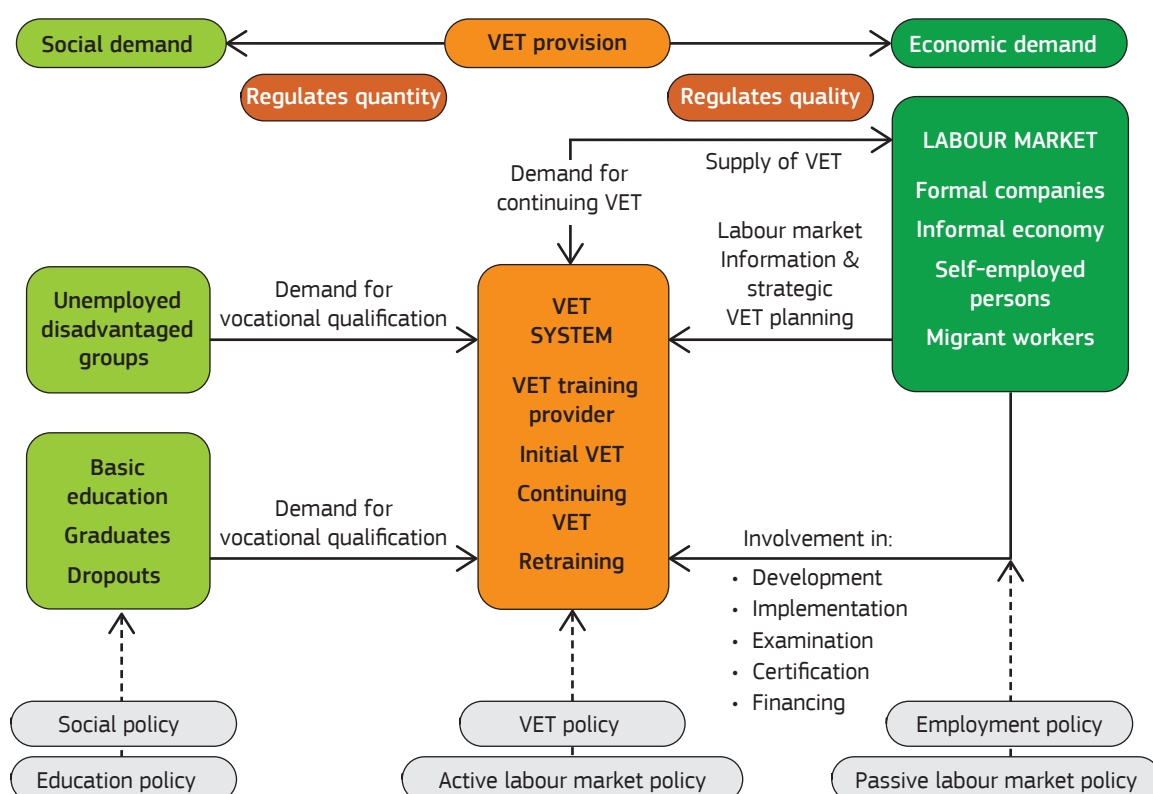
the VET required (labour demand), is, in an ever-changing labour market, a common problem in developing countries⁽¹⁾.

Close and comprehensive coordination mechanisms between companies requiring workers (demand side) and public and private VET providers (supply side) can facilitate swift adaptation to the needs of the labour market. The VET system thus becomes established as an **adjustment mechanism between labour market supply and demand** (see Figure 1.4).

In 2011, the EU ‘Agenda for change’ (EC, 2011) led to a greater focus on investing in drivers for inclusive and sustainable economic growth, providing the backbone for efforts to reduce poverty based on a more comprehensive approach to human development. This involves giving young people the knowledge and skills

⁽¹⁾ The Beveridge curve — the empirical relationship between unemployment and vacancies — is thought to be an indicator of the efficiency of the functioning of the labour market.

FIGURE 1.4 Matching VET demand and supply



Source: BMZ, 2005.

to be active members of an evolving society. Through capacity building and exchanges of knowledge, the **EU seeks to support VET for employability** and is prepared to use its range of aid instruments with intensified policy dialogue.

Nevertheless, the challenge is massive:

According to demo projections, 330 million young people will enter the labour market in the next 15 years in Sub-Saharan Africa. The challenge of their socio-economic integration is immense. The loss of young people to frustrated aspirations and hopelessness is not only a drain on development potential, but may also foster radicalisation and the spread of instability and violence or even violent extremism (EC, 2016).

In addition, recent United Nations studies estimate that the global human population is expected to reach **8 billion in the spring of 2024**. Almost all population growth will take place in less developed regions. This number underlines the challenge facing developing countries in the coming years in terms of their ability to stimulate job creation to absorb the large youth cohort into their formal and informal labour markets. Particularly the informal economy does, however, give income-earning opportunities to those who would otherwise be without any means of livelihood, offering potential for entrepreneurship, innovation and creativity. There is no doubt developing countries have a very short time to get this right before the **youth dividend** turns into a generation of unemployed adults.

Building on the experience and international reputation of European VET systems, and within a context of a more **demand-driven VET system**, the EU seeks to deepen its support through development cooperation to the following areas.

■ **VET for the formal economy** comprises IVET programmes, post-secondary programmes relevant to the workplace as well as CVET programmes. VET often does not adequately prepare young people for work or for the fast-changing nature of modern economies. This is especially noticeable in developing countries, where the formal VET system is still strongly supply driven. Private sector contributions

are growing slowly, due to a lack of trust between public and private stakeholders.

■ **VET for the informal economy** comprises VET programmes for people who have to earn a living in the informal economy and require VET services which are precisely tailored to their circumstances and sphere of life. The informal economy is growing in all economic sectors in many developing countries. It plays an important role in creating jobs for young people. However, developing the right skills and adapting VET programmes to the particular circumstances of the informal economy are often neglected.

■ **VET for specific labour market segments** comprises VET programmes for specific situations and requires tailor-made strategies. For instance, South-South migration, particularly in Africa, has a considerable effect on VET delivery. In fact, 'evidence shows that the magnitude of South-South movements (82.3 million migrants worldwide) is roughly equal to South-North flows (81.9 million)' (UN DESA, 2014). Recognition of skills and qualifications should be improved and better information should be provided in order to improve matching between job seekers and vacancies.

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CHAPTER 2

Challenges and systemic building blocks

To identify the systemic building blocks intended as guiding principles and recommended elements to include in any VET system, it is important of having a clear idea of the challenges faced by VET systems development.

2.1 Challenges facing VET systems development

The Shanghai Consensus (UNESCO, 2012) identified **seven major fields of action** to address the strategic direction for cooperation among countries and with the international community to support VET for all (see Figure 2.1).

FIGURE 2.1 The Shanghai Consensus



Source: UNESCO, 2012.

SUMMARY OF KEY ASPECTS

- VET systems need sustained transformation and revitalisation to meet the demands of a changing world.
- Transformation of VET systems for life-long learning and mobility will require the strong involvement and commitment of all stakeholders.
- Diversified financing of VET systems is crucial for a successful transition from policy formation to long-term VET policy implementation.
- A labour market information system is a policy instrument which collects, evaluates and provides labour market information to both the labour supply and demand sides.
- National qualifications frameworks are a popular policy measure designed to raise skills levels, reduce skills mismatches, improve labour market productivity, promote labour mobility and efficiency, and contribute to economic growth.
- The combination of work-based and classroom learning has been an attractive idea for policymakers concerned with employment, education, VET and youth transition to the world of work.
- Efforts to build capacity through systemic building blocks, as delineated in the guidance notes, will support and shape the future transformation of VET systems in developing countries.

The real importance of the Shanghai Consensus was agreement on the key challenges facing VET and the main directions and priorities for VET policy transformation, which emphasise the necessity of **rethinking VET learning for broader human development needs** and not just to respond to the demand for immediate skills. The strategy of transformation presented in the Shanghai Consensus proposes ‘shifts in VET focus on four key dimensions, — strategic, people, learning and policy process’ (Chakroun, 2013).

2.2 Systemic building blocks

This section provides a conceptual framework for the development of a comprehensive VET system that can be relevant to the diverse realities and needs of individual countries.

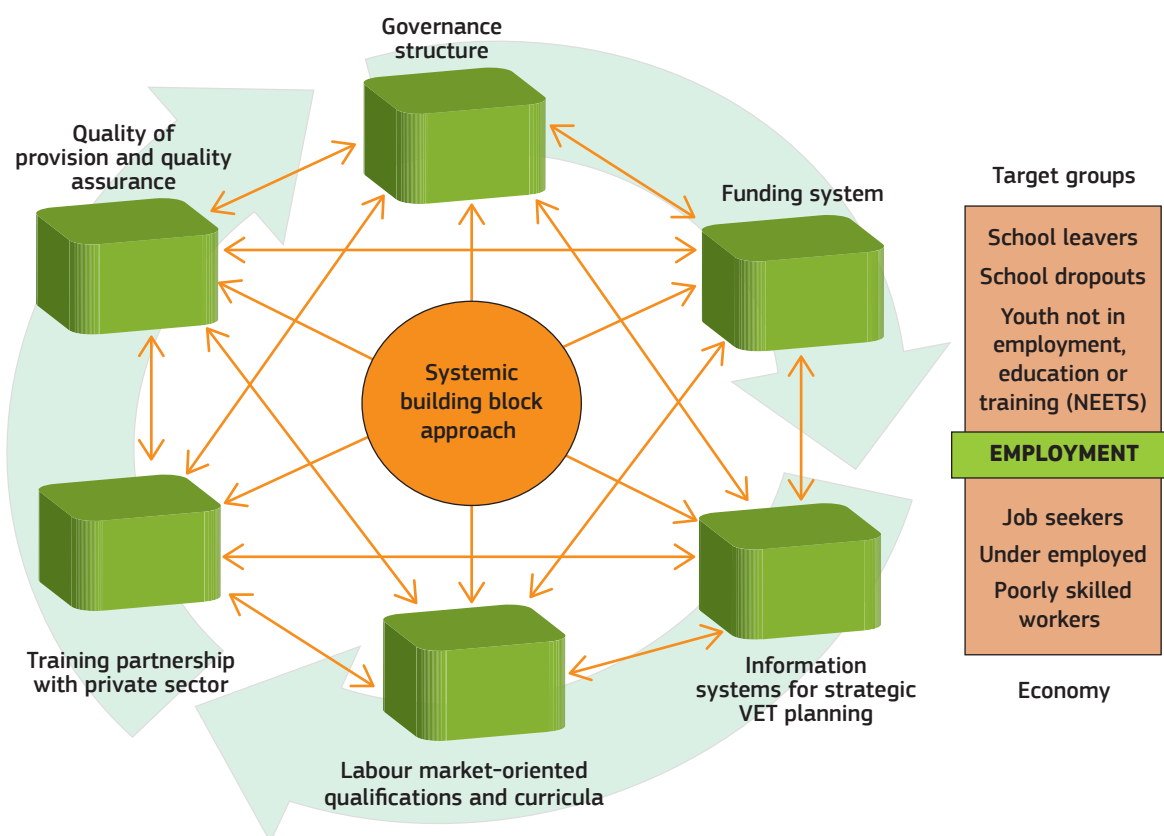
In light of the challenges outlined by the Shanghai Consensus, future EU development cooperation

strategies have to take into account a number of systemic building blocks, which are the **elements of the VET value chain**. Supporting the creation of demand-driven, reliable, flexible and cost-effective VET systems is a key challenge for EC development cooperation. Some core principles may be useful for policymakers to help ensure the relevance, internal quality and efficiency of VET and thereby improve social/economic efficiency. In addition, the following systemic building blocks are considered to be of strategic importance for VET reform programmes in partner countries and should be analysed and considered for inclusion when identifying a VET programme (see Figure 2.2).

2.2.1 BUILDING BLOCK 1: GOVERNANCE STRUCTURE

Governing structures should engage and include all relevant stakeholders to ensure the relevance and effective implementation of VET reforms

FIGURE 2.2 Systemic building blocks in VET reform programmes



VET systems in developing countries are often governed exclusively by the public sector, which consists of separate government ministries and agencies including education, labour and industry, among others. Institutional fragmentation is a real obstacle to coordination, involvement of social partners and the implementation of VET reforms. Future policy measures for governance of VET systems development should therefore engage social partners as active stakeholders; strengthen the information and evidence base for policy development; link policy frameworks and implementation strategies to better realise VET reforms; and, in large countries, consider decentralising VET administration in order to enhance local economic coherence.

The preparation and promulgation of new VET legislation is clearly an important part of the policy actions to advance implementation of VET reforms. Issues that remain important for moving from design to implementation of VET reforms include the need for **developing leadership capacity in the institutions that have to implement these processes**. However, articulation with the rest of the education sector and with the labour market can be challenging, as ministries of education often share responsibility for VET policy with other ministries. Furthermore, by its nature, a ministry of education tends to be output-oriented with limited regard to the needs of the labour market. Constructive dialogue among line ministries is often hampered by internal conflicts, mistrust and diverging interests.

The VET transformation process begins with developing a clear picture of the private sector in a given country, focused on economic sectors with a high employment potential and aligning VET policy with economic opportunities as part of national economic development plans. The transformation of VET systems for lifelong learning and mobility will require the strong **involvement and commitment of all stakeholders**. Public authorities at all levels play different but crucial roles. Social partners should be supported in playing their role part in the organisation, provision and financing of VET programmes. Stakeholder-driven intermediaries such as sector skills councils give social partners a strong voice in developing demand-driven and growth-oriented VET programmes. The private sector can provide input on the skills demanded by

the labour market, contributing to the identification process and increasing the relevance of the VET system. As potential employers, private sector actors should also be involved in the partnerships to establish on-the-job training schemes both for apprentices and for workers wishing to improve in skills.

2.2.2 BUILDING BLOCK 2: FUNDING SYSTEM

VET funding requires a strategic dimension for the sustainability of the interventions promoted in developing countries and for scaling up innovative approaches and pilot interventions.

In developing countries, existing financial resources for VET systems are generally provided by the public sector, but they are often insufficient and not allocated effectively. Public VET provision typically uses an input-driven approach to financing: VET providers often receive budgetary allocations based on some input-related funding formula (e.g. number of teachers, number of learners, previous year's budget, etc.) that remains the same whether the VET provider is performing well or not. Therefore, diversifying the sources of financing and using funding to **motivate effective and efficient institutional management of VET systems** is a major area of concern.

Diversified financing of VET systems is considered crucial for a successful transition from policy formation to long-term VET policy implementation. Financing policies are expected to ensure both the stability of funding needed to develop the capacity for policy implementation and the level of financing to improve VET delivery. Key examples of policy measures which are being used in developing countries include the establishment of national or sectoral VET funds and improvement of the effectiveness, efficiency, equity and accountability of funding. Hence, funding mechanisms and methodologies are being used as an integral aspect of VET systems steering.

Funding systems can be used to improve the expected results of VET systems, especially when users (e.g. learners, job seekers, employers) are empowered to exercise choice in how funding is spent. Policy decisions on financing VET systems are moving away from VET providers and centralised

bureaucracies, and placing control into the hands of end beneficiaries, which can lead to more efficient allocation of these resources. When VET providers are held accountable by customers for the quality and relevance of the VET programmes they offer, accountability for results is greatly improved. VET funds that purchase training services through competitive bids can hold providers accountable for achieving results.

The experience of implementing **funding instruments** confirms that they are becoming more diversified, as illustrated by the use of public-private partnerships (PPPs), payroll levies, VET funds, employer sponsorship and individual sponsorship. Performance-based financing formulas used by government agencies are being implemented to improve VET providers' accountability for results. The use of vouchers is intended to provide training beneficiaries with choice.

2.2.3 BUILDING BLOCK: INFORMATION SYSTEMS FOR STRATEGIC VET PLANNING

Reliable information systems should be available for anticipation of skill needs and identification of labour market shortages and bottlenecks in order to improve matching between VET and labour market needs.

Identifying and forecasting future VET requirements — at the individual, enterprise and societal levels — and implementing these requirements in the framework of a transformed VET system has long been the subject of intensive research efforts and political discussions. Making a good match between the VET programmes supplied by public and private VET providers and those needed by the productive economic sectors require the anticipation of VET needs. **Identifying future VET requirements and integrating this information into planning** for VET provision is a process involving many different bodies and stakeholders, including employers.

Planning of VET programmes should use innovative methods of prospective analysis and must take into account that every national system of early identification of VET needs has its internal logic that corresponds to the country's current and future employment prospective and VET system, legal and institutional

environment and economic situation — including the needs of innovation to respond to the challenges of technology and sustainable development. Such initiatives have to consider the future VET requirements of target groups, enterprises, sectors and regions and — increasingly — incorporate options and alternatives for policy and strategic actions. In this context, the objectives of the early identification of VET requirements may in fact differ substantially between urban and rural areas as well as between regions and countries.

A **labour market information system (LMIS)** is an active labour market policy instrument which collects, evaluates and provides labour market information to both the labour supply side and the labour demand side. Skills mismatch can be reduced through better management and more transparent information. Providing reliable, impartial career guidance and reducing skills mismatch require reliable, accessible data and regularly updated sources of information to identify emerging occupations and areas of skills shortages, and current or potential areas of skills oversupply and redundancy. National private and public agencies, including national employment services, should be strengthened to better link labour supply and demand. The labour market relevance of VET can be strengthened by the development of forward planning tools to match skills and jobs. Based on such matching, VET providers in cooperation with local labour market representatives should be able to adapt curricula to reflect skills shortages, surpluses, gaps or obsolescence.

2.2.4 BUILDING BLOCK: LABOUR MARKET-ORIENTED QUALIFICATIONS AND CURRICULA

Unemployment is often worsened by a mismatch between the needs of the labour market and the skills supplied by the education and vocational training systems. One of the key challenges for VET is therefore to switch from being a supply-driven system to a demand-driven one.

During the last two decades, **national qualifications frameworks (NQFs)** have emerged as a popular policy measure designed to raise skills levels, reduce skills mismatches, improve labour market productivity,

promote labour mobility and efficiency, and contribute to economic growth. Competency-based models of curriculum development and instruction dominated VET curricular reforms alongside the implementation of NQFs. **Competency-based training (CBT)** was introduced with the goal of identifying the practical skills that comprise different occupational profiles and the standards of performance required for successful employment. A focus on demand-driven learning outcomes rather than inputs has become part of these reforms (see Figure 2.3).

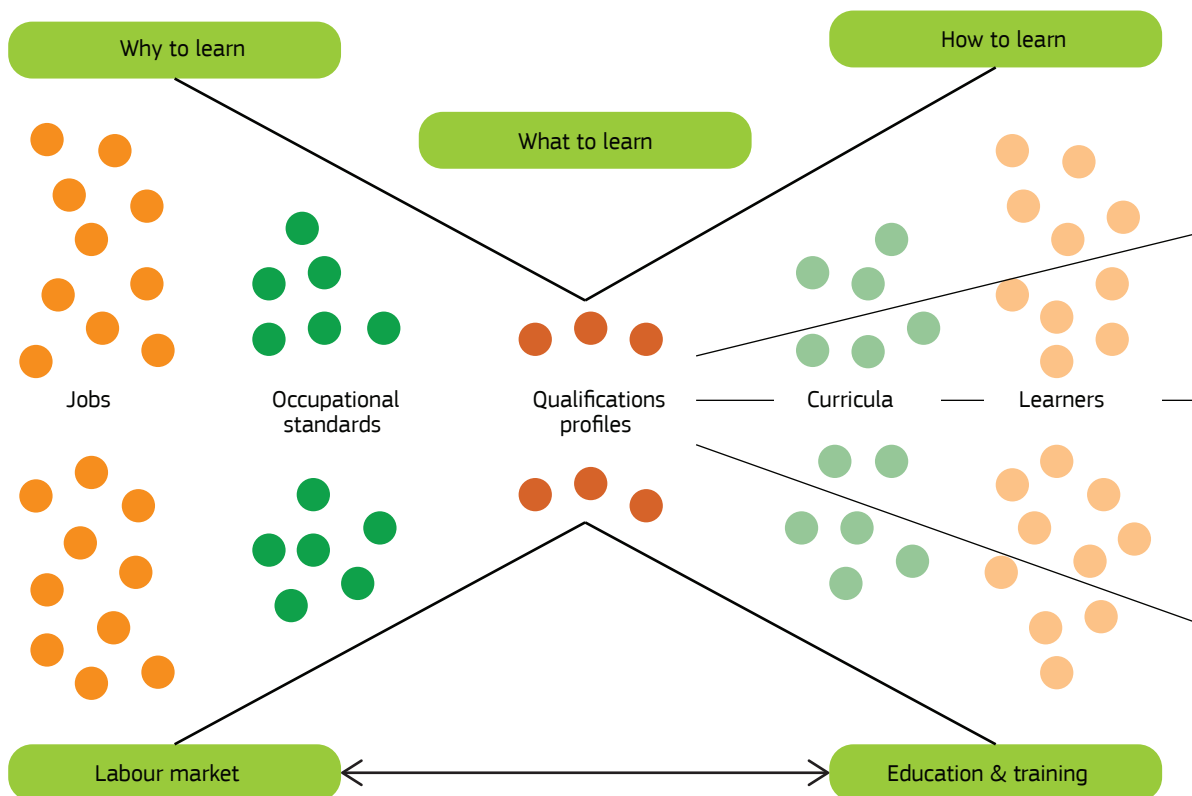
This shift moves away from traditional VET qualifications, based solely on inputs such as subjects and hours of study requirements. Qualifications are now not only seen as the result of successfully completing a VET programme, but can rather be considered a ‘currency’ declaring what the learner achieved at the end of the learning pathway in either a formal or non-formal context. **Qualification is the formal outcome of an assessment and validation process**, obtained when a competent body determines

that an individual has achieved learning outcomes to given standards (Cedefop, 2014).

VET relates not only to technical or job-specific skills, but also to a whole range of **action-oriented competences** and soft or transversal skills such as critical thinking, taking the initiative, problem solving and teamwork. Action-oriented learning is not just a method, but a principle. According to it, occupational action can be learned at different learning sites. The point of action-oriented learning is to confront learners in VET programmes with practice-related tasks which have to be solved.

Policymakers should not view a single policy tool such as an NQF as the magic solution to VET challenges, capable of accomplishing great things on its own. Rather, a **judicious combination of systemic policies and actions are needed** that can be sustained and updated over time and as situations change. In this respect, an NQF may be a useful policy tool, as it can improve transparency and permeability and can

FIGURE 2.3 Demand-driven qualifications



Source: Cedefop, 2008.

support the people's mobility (geographical and professional), when used alongside other tools.

2.2.5 BUILDING BLOCK: TRAINING PARTNERSHIP WITH THE PRIVATE SECTOR

In a market economy, public-private partnerships are the glue which links education and employers. The policy framework that governs these partnerships is varied, although there are archetypical systems.

The **involvement of social partners acts as a guarantee of the maintenance and quality of investment in vocational training**. It plays different roles at the national, regional, local and sectoral levels. In particular, the private sector acts as a training partner, a training organiser, a training consumer and a training provider.

Furthermore, the **quality of education can be improved by employer involvement in curriculum and testing**, particularly in the development of educational standards. For the last 10 years or more, the combination of work-based learning and learning in the classroom has been an attractive — if not tempting — idea for policymakers concerned with the school-to-work transition. In this respect, policymakers and others have found work-based apprenticeships a useful means to combine work and learning. Among apprenticeship models, the German dual system has held — and indeed still holds — a particular interest for VET policymakers, as evidenced by the 2013 launch of the European Alliance for Apprenticeships⁽¹⁾.

Four main lines of argument have been advanced for promoting policies that support the combination of work and learning for youth — i.e. that these can:

- enhance pathways to adulthood;
- deliver economic and labour market benefits;
- improve pedagogy;
- reduce costs and increase capacity within the VET system.

⁽¹⁾ See the [joint partners' declaration](#) of the Alliance launch and the subsequent [EU Council declaration](#).

2.2.6 BUILDING BLOCK: QUALITY OF PROVISION AND QUALITY ASSURANCE

Assuring VET quality and relevance has become a more important and challenging task. Quality in VET is related to a modern and flexible curriculum, new teaching methods, continuing professional development for teaching staff, and improved and well-equipped facilities in VET schools.

Staff competence is pivotal in the innovative VET system development. There is convergence in the roles of VET staff: a trainer in a work-based setting will need more practical and pedagogical competences; while a teacher of occupational theory in a vocational school will need a good understanding of work practices. This convergence should be reflected in policies for recruitment and continuing development of skills and competences (e.g. through workplace exposure), which should be validated and reflected in their career status. Appropriate promotional campaigns should be taken by all kinds of media and communication channels to promote VET programmes to young people and parents in order to combat the stigma around it.

The VET value-added chain approach with its underlying framework of building blocks suggests that VET systems development should increasingly be seen in a **systemic perspective** while connecting to contextual demands and linking to broad long-term development objectives. This approach can also help reorient the processes through which VET systems are developed away from a poor reactive mode and immediate time frame, with its sometimes haphazard stops and starts and tactical moves, towards a more rational, resilient, purposeful and long-term sustainable trajectory.

Table 2.1 lists the relationships between policies, systemic building blocks and the guidance notes contained in this reference document.

2.3 References and further reading

Cedefop (European Centre for the Development of Vocational Training), 2008. *The shift to learning outcomes: Conceptual, political and practical developments in Europe*. Office for Official Publications of the European Communities, Luxembourg.

TABLE 2.1 Relationship of VET system development challenges, systemic building blocks and guidance notes

CHALLENGE	SYSTEMIC BUILDING BLOCK	GUIDANCE NOTE
Strengthening governance and expanding partnerships	Governance structure	1. Analysing the general context to support VET reforms 2. Programming of building blocks and EU support 3. Promoting private sector involvement in VET governance
Increasing investment in VET and diversifying financing	Funding system	4. Promoting funding for VET systems
Improving the evidence base Advocating for VET	Information systems for strategic VET planning	5. Promoting labour market information systems
Adapting qualifications and developing occupational pathways	Labour market-oriented qualifications and curricula	6. Promoting national qualifications frameworks
Enhancing relevance of VET	Training partnership with the private sector	7. Implementing an efficient and effective VET delivery cycle 8. Implementing work-based learning
Expanding access and improving quality and equity	Quality of provision and quality assurance	9. Implementing VET staff development
Complementary measures: Quality and inclusive VET programmes, especially to disadvantaged groups including learners with disabilities, marginalised and rural populations, migrants and those in situations affected by conflicts and climate change		10. Implementing VET in the informal economy 11. Implementing VET in post-conflict and fragile countries 12. Implementing gender mainstreaming 13. Promoting VET to support a green economy

Cedefop (European Centre for the Development of Vocational Training), 2014. [Terminology of European education and training policy: Second edition](#). Publications Office of the European Union, Luxembourg.

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ILO (International Labour Office), 2010. 'A Skilled Workforce for Strong, Sustainable and Balanced Growth: A G20 Training Strategy'. ILO, Geneva.

UNESCO (United Nations Educational, Scientific and Cultural Organization), 2012. 'Shanghai Consensus. Recommendations of the Third International Congress on Technical and Vocational Education and Training. Transforming TVET: Building Skills for Work and Life'. UNESCO, Paris.

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CHAPTER 3

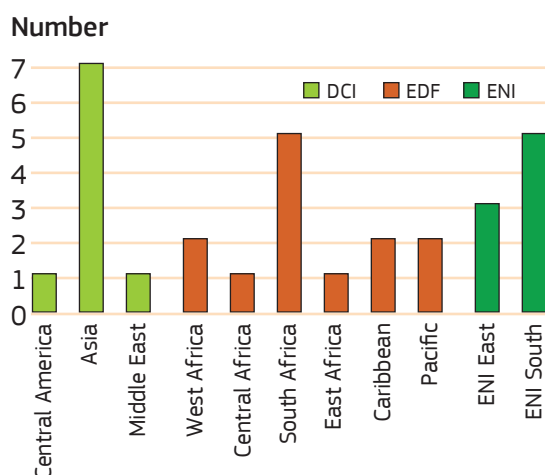
The EU approach to supporting VET reforms

3.1 Overview of past and present EU engagement in VET

For the period 2014–2020, the European Union has earmarked a total of EUR 65 billion for development cooperation projects worldwide, of which approximately **EUR 500 million is for VET**. The EU's engagement in VET reforms spans a wide range of regions (see Figure 3.1).

As discussed in Chapter 1, the EU considers **VET a major instrument in support of employment**. Recognising the pivotal role of the private sector as the motor of employment, the VET sector should be more

FIGURE 3.1 New VET projects in regions, by instrument



Source: EC, 2015.

Note: DCI = Development Cooperation Instrument; EDF = European Development Fund; ENI = European Neighbourhood Instrument.

SUMMARY OF KEY ASPECTS

- The VET sector must be more responsive to the needs of the workplace as a precondition to increase the number of VET graduates able to find decent work.
- The EU has a track record of contributing to VET reforms in developing countries.
- Many EU-funded VET projects have integrated components related to social cohesion, labour demand, the inclusion of vulnerable groups into the labour market, private sector development (micro and small enterprises) as well as rural and environmental development.
- More strategic utilisation of the EU VET model might be helpful in raising the impact of EU-funded VET projects.
- General conditions for disbursements of budget support are related to progress achieved on a set of performance indicators.
- Evidence-based analysis of VET policies, such as the ETF's Torino Process, leads to building consensus on possible ways forward in VET system development.
- A variety of EU tools such as stakeholder analysis, risk management and assessment, gender impact assessment, environmental and climate assessments and conflict analysis are available for development cooperation and are useful in assessing and responding to challenges in VET reforms.
- The OECD's Development Assistance Committee recommends harmonising donor contributions through the division of labour approach.

responsive to its needs as a precondition to increasing the number of graduates able to find decent work. This is fully in line with Sustainable Development Goal (SDGs) 4 (quality education) and 8 (decent work and economic growth) of the 2030 Agenda for Sustainable Development; VET delivery is specifically mentioned in Target 4.2, which seeks to ‘substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship’. In line with this ambition, this reference document aims to help the reader design actions and engage in dialogue with authorities in developing countries to reform VET systems.

The EU has been funding large **geographic and thematic initiatives on VET** for more than a decade, mostly in European Neighbourhood Policy (ENP) countries, Asia and Sub-Saharan Africa. It has also been present to a lesser extent in Latin America and the Caribbean, as well as in middle- and low-income countries and fragile contexts. The EU’s engagement in VET reforms spans a wide range of interventions (see Box 3.1).

BOX 3.1 Variety of Interventions implemented by EU-funded VET projects

- Addressing **national VET system reforms** with the participation of social partners and key stakeholders
- Enhancing the quality of supply, **increasing access to competences and skills** relevant to occupations in growing economic sectors for all segments of the population, with particular attention to youth and women
- Including **vulnerable, marginalised target groups** in active citizenship
- Promoting **decent work in informal economies** as a concrete contribution to the national poverty alleviation efforts
- Supporting **environmentally sustainable development**
- Establishing links with formal education and **lifelong learning**

Source: EC, 2014.

The EU supports VET reform to sustain **economic growth, employment and employability development**, and the mainstreaming and incorporation of VET initiatives into other socio-economic policies and sectors. EU support typically varies according to the characteristics of regions and countries and the specific agreed-upon. In countries that fall under the European Neighbourhood Instrument (ENI), the Instrument for Pre-accession Assistance (IPA) and the Development Cooperation Instrument (DCI), the European Training Foundation (ETF) supports EU VET projects using the so-called Torino Process (ETF, 2016), inspired by the Copenhagen Process and the 2010 Bruges Communiqué (EC, 2010). Through this evidence-based analysis of VET policies and projects, the ETF, through policy dialogue, embeds VET in the socio-economic contexts of each country and provides the EC with recommendations for external assistance. ETF does not provide support in countries under the European Development Fund (EDF).

In times of constrained employment, **boosting the employability of youth and workers** through VET has become a priority for governments, development partners and actors in the global development discourse. VET reforms are incremental processes that demand time and resources that developing countries are often not capable of mobilising and concentrating upon at the right time. International aid and support remains the answer.

3.2 Lessons learned

An assessment study of EU-funded VET projects points to recurrent strengths arising from the **EU’s comparative advantages in the VET sector** (EC, 2013c). Many projects supported and leveraged VET policy changes. Policy changes are evident with respect to partnerships between key stakeholders (e.g. skills councils, social dialogue platforms) and sustainability and affordability of VET (financing mechanism and accountability). Under the European Neighbourhood Instrument (ENI), VET projects have benefited from ETF expertise, which structured the assistance to the evidence-based approach to human capital development policy as part of the Torino Process (see Box 3.2 and further details in [Annex 2](#)). These strengths include the high relevance of EU support, respect for national ownership and a multi-sectoral approach.

The EU has a track record of contributing to VET reforms in developing countries. It was possible to observe how **embedding VET within the socio-economic context of policy dialogue** helped establish active partnerships between governments; employer and worker organisations; and VET providers in policy-making, regulation, governance and implementation, and monitoring and evaluation of VET systems and programmes. This led to a higher degree of national consensus on the possible directions of VET policies and implementation of VET system development. Nonetheless, capacity development and policy learning within and among partner countries and the EU could be better targeted and the strong ownership of key national stakeholders translated into a solid basis for coordinating donor contributions.

Another important result observed is the **holistic approach** of the EU's sponsored projects that support VET reforms. Many VET projects have integrated components related to social cohesion, labour demand, the inclusion of vulnerable groups into the labour market, private sector development (micro and small enterprises), and rural and environmental development. More strategic integration between different kinds of EU-funded projects leveraging VET reforms — even in the same country — is recommended on the basis of the results of the VET assessment study. In some developing countries, VET systems sometimes appear non-coherent as a result of an accumulation of independent interventions established by different development partners at different system levels: from governance to curricula and programmes as well as assessment and certification. The effects materialise in the implementation of often contradictory options, placing further pressure on already weak systems and undermining governance and transparency.

Furthermore, **VET reforms need to be viewed as incremental processes** demanding time and resources which developing countries are often not capable of mobilising and concentrating on at the right time.

3.3 Approaches and tools available for VET projects

The EU requires the use of the Project Cycle Management (PCM) principles for the identification, appraisal, implementation and evaluation of EU-funded projects. To ensure the overall integrity of projects supported within the EU development aid programmes, the model emphasises the use of a logical framework approach to analyse problems and work out suitable solutions through project design and successful implementation. Recent years have seen an increased interest in evidence-based policymaking in VET projects and the use of **valid and robust objectively verifiable indicators**. Table 3.1 gives an example of a VET project with a special focus on objectively verifiable indicators for performance assessment.

The **VET sector is diverse**. It comprises formal and non-formal pathways and takes place across a wide range of settings including public and private vocational centres and institutes, higher education institutions and workplaces in both the formal and informal economies⁽¹⁾. VET also has a multitude of very different institutional arrangements, organisational approaches and regulations.

⁽¹⁾ The EC defines three basic categories of purposeful learning activity (Commission of the European Communities, 2000). *Formal learning* takes place in education and training institutions, leading to recognised diplomas and qualifications. *Non-formal learning* takes place alongside the mainstream systems of education and training and does not typically lead to formalised certificates. Non-formal learning may be provided in the workplace and through the activities of civil society organisations and groups. It can also be provided through organisations or services that have been set up to complement formal systems (such as arts, music and sports classes or private tutoring to prepare for examinations). *Informal learning* is a natural accompaniment to everyday life. Unlike formal and non-formal learning, informal learning is not necessarily intentional learning, and so may well not be recognised even by individuals themselves as contributing to their knowledge and skills. This terminology is acknowledged by UNESCO and other international agencies. In development cooperation the term 'non-formal vocational education and training' is often used. It 'is provided by a wide range of organisations, including non-governmental organisations, church institutions, profit-making education and training providers, companies, and employer and employee organisations. Governments also finance and run vocational education and training programmes that operate outside the formal education and training system, for example as part of an active labour market policy or efforts to promote the private sector and reduce poverty' (GIZ website, 'Non-formal vocational education and training').

TABLE 3.1 Examples of objectively verifiable indicators for performance assessment

LOGICAL FRAMEWORK APPROACH LEVEL	INDICATOR FUNCTION	INDICATOR EXAMPLE
Overall objective (impact) The shared vision the VET project contributes to (e.g. increase the employability of the labour force)	To know how the EU contribution has contributed to the shared vision of the VET project (impact-level indicators)	X % increase of (self-) employed VET learners with whom employer expresses satisfaction (disaggregated by gender)
Specific objective(s) (outcome(s)) What is intended to change during the VET project period? (e.g. promote demand-driven VET for young people)	To know how the intended change has occurred and is sustainable (outcome-level indicators)	X % increase in enrolment by formal and non-formal VET programmes in selected priority economic sectors (disaggregated by gender)
		X % increase of number of VET participants financed by pilot VET fund (disaggregated by course type and gender)
		X % increase of number of learners in non-formal VET entrepreneurship courses (disaggregated by gender)
		X % increase of VET policy and strategy papers
Expected results (outputs) Tangible results of each work package intended to bring about change (e.g. increased number of young people with relevant skills)	To know how the expected results of the VET project have been achieved (output-level indicators)	Y % increase of percentage of public VET provider funding allocated on the basis of performance
		Legal framework governing the VET system revised and strengthened
		Y % increase of number of VET qualifications registered at the NQF
		Y % increase of budget spending on equipment and learning materials
		Y % increase of number of VET teachers, trainers and managers who attended industrial attachment programme
		Y % increase of number of people from disadvantaged segments of society benefiting from VET programmes
		Y % increase of number of people benefiting from recognition of prior learning
		Y % increase of number of people from disadvantaged segments of society and disadvantaged regions benefiting from active labour market measures

Source: EC, 2013b.

Note: As per the OECD, results are 'Changes in a state or condition which derive from a cause-and-effect relationship. There are three types of such changes (intended or unintended, positive and/or negative) which can be set in motion by a development intervention — its output, outcome and impact'; impact refers to 'Positive and negative long-term effects on identifiable population groups produced by a development intervention, directly or indirectly, intended or unintended. These effects can be economic, socio-cultural, institutional, environmental, technological or of other types'; outcomes are 'The intended or achieved short-term and medium-term effects of an intervention's outputs, usually requiring the collective effort of partners. Outcomes represent changes in development conditions which occur between the completion of outputs and the achievement of impact' (OECD, 2010).

The **careful selection of indicators** is crucial in order to reduce the risks associated with the use of indicators for performance measurement. As VET strives to increase employability, indicators should not be limited to educational aspects, depending on the nature of the project. The EU supports the use of **outcome indicators**, because it encourages evidence-based policymaking and promotes domestic accountability. Outcome indicators can focus on quantity — e.g. school enrolment or employment results of graduates — but attention should also be given to indicators measuring quality. For that purpose, proxy indicators can be used that give an indication of quality. Examples are the pupil/teacher ratio, school completion rates, youth not in employment education or training (NEETS), unsatisfied VET demand, and attendance or utilisation rates for public services (EC, 2012a). Delegations should agree with the authorities on a number of indicators derived from public policy, in consultation with other stakeholders.

Indicators and targets should be agreed during the formulation phase. To this end, the ‘Sector indicator guidance for programming’ (EC, 2013a) provides key indicators for delegations to draw from as they develop their Multiannual Indicative Programmes (MIPs). In particular, it includes indicators at different levels of the results chain with a focus on the output and outcome levels. Concerning VET, examples of outcome and output indicators are provided in relation to the improvement of equity, quality and access under the education sector. However, **employment objectives should be integrated into actions**.

The **EU Results Framework** established in 2015 plays an important function, as it is the basis of yearly corporate reporting from the EC Directorate-General for International Cooperation and Development (DG DEVCO) and the Directorate-General for Neighbourhood and Enlargement Negotiations (DG NEAR) on operational results. It defines the quantitative indicators used for the collection, aggregation and presentation of the following three types of results data:

- wider development progress made by partner countries, setting the context within which EU external assistance operates;
- partner country results to which the EU contributed through EU-funded projects and programmes, demonstrating how the EU is contributing to development progress in sectors which reflect the EU’s development policy priorities;
- the EC’s own organisational performance with respect to international cooperation and development.

The data are drawn from international sources for the results indicating wider development progress of the partner countries, from the reports of the various partners implementing EU-funded projects and programmes for the results to which the EU has contributed and from the EC’s internal data for its own organisational performance. The first report on selected results was published in July 2016; for VET, it shows the number of people benefiting from VET/skills development and other active labour market programmes intended to improve employability, productivity and competitiveness (EU, 2016).

This report presents the results of development cooperation activities in aggregate, using quantitative indicators. The figures were calculated using a contribution approach — i.e. where a project was financed by the EU jointly with other funders (other donors and/or the partner country governments themselves), the overall results of the collective effort were reported. Information on results has been drawn from reporting by partners implementing EU-funded projects and programmes (i.e. partner countries, international organisations, EU member state development agencies, international financial institutions and non-governmental organisations).

The indicators of the EU Results Framework should be taken into consideration when performance indicators are defined.

Monitoring and evaluating VET performance and identifying possibilities for improving its quality and coverage require an understanding of the nature of VET and its functions, goals and key characteristics. This was highlighted in an Inter-agency report, ‘**Proposed Indicators for Assessing Technical and Vocational Education and Training**’ (ETF,

ILO and UNESCO, 2012), which is a useful reference document for defining indicators in relation to policy objectives. The report is the product of a joint effort by of UNESCO, the UNESCO Institute for Statistics (UIS), the International Labour Office and ETF with technical support from the EC, the OECD, the Asian Development Bank, the World Bank and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ).

IMPLEMENTATION MODALITIES AND CHOICE OF INDICATORS

The choice of indicators is affected by the implementation modality of the contract. In all cases, **poorly designed indicators can create perverse incentives**; it is also important to recognise that, in reality, the development of indicators is as much a political process as a technical process.

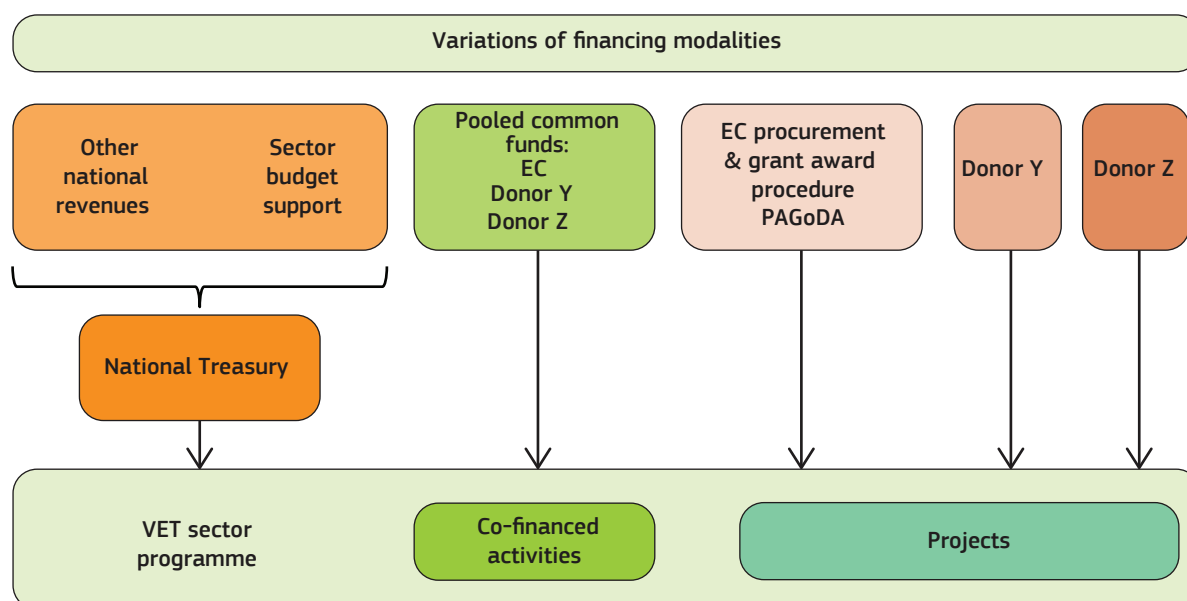
A **Sector Policy Support Programme (SPSP)** is an EC instrument for financial support to a sector programme. The SPSP supports the objectives and action plan of the sector programme and utilises its planning, monitoring and overall management and coordination structures. As such, it depends for its design on the specific features of the sector programme it aims to

support. An SPSP may follow three types of operating modality (see Figure 3.2).

An SPSP has to add value to the VET sector programme by supporting its reform agenda. SPSPs can be financed through sector budget support (SBS), pooled common funds or single projects. When the EC eligibility criteria are meant, **sector budget support may be a preferred modality**. In other circumstances, the EC can choose between pooled common funds and/or EC project procurement and grant award (pagoda) procedures. The choice is based on the intervention objectives of the SPSP and the country circumstances.

- Use of **pooled common funds** has to consider potential costs and benefits (preparation costs, transaction costs and fiduciary risks versus ownership, flexibility, economies of scale, visibility, etc.).
- Use of the **project modality** can include a programmatic approach (objectives and the mode of operation of the activities identified should clearly support the principles of ownership, coherence and harmonisation, and fit within the framework of the SPSP).

FIGURE 3.2 VET sector programme and financing modalities



Source: DEVCO, 2015.

■ **Blending** is another implementation modality which may be relevant when it comes to the provision and rehabilitation of infrastructure and equipment. It allows leveraging of additional resources and increases the impact of EU aid to support inclusive, sustainable growth and job creation. Nevertheless, its use in VET projects and programmes is still limited.

BUDGET SUPPORT

The EC's 'Budget support guidelines' prescribe that the transfer of financial resources be made in respect of agreed conditions for payment (EC, 2012a). An important operational **objective of budget support is to achieve predictability** between actual disbursements and the forecast disbursement levels incorporated in the budget and treasury plans of the recipient government. A lack of predictability was identified as a significant problem in the early years of budget support. The general conditions for disbursements of financial tranches are related to meeting eligibility criteria and the progress achieved on a set of agreed performance indicators — which are in principle aligned with those defined in the recipient government's national VET/employment strategy and action plan.

Inspiration for specific performance indicators can be found in the above-referenced interagency report, 'Proposed Indicators for Assessing Technical and Vocational Education and Training', which can help in identifying a **set of performance indicators that can support countries in assessing the efficiency**

and effectiveness of their VET systems. Table 3.2 shows the performance indicators selected for a budget support project that could be translated into direct and indirect outputs in the logframe.

EVIDENCE-BASED ANALYSIS: SOME SUGGESTIONS FROM THE TORINO PROCESS

A robust and evidence-based analysis of VET systems puts in place the necessary means to select the most relevant and realistic indicators. An **example of evidence-based analysis of VET policies** conducted by the ETF is the Torino Process that leads to building consensus on possible ways forward in VET system development in a given country. The ETF currently works with 30 partner countries, which can be geographically grouped in the enlargement, neighbourhood and Central Asia regions. The Torino Process is conducted biennially (see Box 3.2). At the conclusion of each round, the ETF brings together key stakeholders to review trends in VET development and governance. A Torino Process conference affords an opportunity every two years for partner countries to share progress and consider areas where more can be done, particularly in light of lessons learned from a range of European policies and experiences.

Large numbers of partner countries, sectors and aid interventions in donor portfolios are said to limit the quality, effectiveness and efficiency of donor activities and have led to recommendations by the OECD's Development Assistance Committee to **harmonise**

TABLE 3.2 Examples of performance indicators used for disbursement

INDICATOR 1	Percentage of public VET provider funding allocation on the basis performance
INDICATOR 2	Legal framework governing the VET system revised and strengthened
INDICATOR 3	Number of VET qualifications registered at the NQF
INDICATOR 4	Budget spending on equipment and learning materials
INDICATOR 5	Number of VET teachers, trainers and managers who attended industrial attachment programme
INDICATOR 6	Number of people from disadvantaged segments of society benefiting from VET programmes
INDICATOR 7	Number of people benefiting from recognition of prior learning
INDICATOR 8	Number of people from disadvantaged segments of society benefiting from active labour market programmes

Source: EC, 2013b.

BOX 3.2 The ETF Torino Process

Since the first round of the Torino Process in 2010, the ETF has progressively refined the methodology, gaining insights from implementation and providing partner countries with a specific method of data collection and analysis, as well as an approach to policy analysis based on participation and consultation. Through the three rounds already implemented (2010, 2012, 2014), the focus of the Torino Process has moved from description to measuring the progress of partner countries in the area of VET — thereby transforming itself into a tool for dialogue on the status of VET reforms across partner countries.

The Torino Process is an evidence-based approach to the analysis of VET systems, based on country ownership and the broad and open participation of stakeholders from the public and private sectors. The process is a vehicle for policy development, policy implementation and policy learning. It identifies five key dimensions:

- overview of VET and vision for VET;
- effectiveness and efficiency in addressing economic and labour market demand;
- effectiveness and efficiency in addressing demographic, social and inclusion demand;
- internal efficiency of the VET system;
- governance and policy practices in the VET system.

In addition, the Torino Process informs ETF recommendations to the EU's external assistance instruments and serves as a basis for the design of the ETF's support strategy to partner countries. The Torino Process was inspired by policy assessment processes at the EU level, notably the Copenhagen Process in VET and the 2010 Bruges Communiqué.

Source: ETF, 2016.

donor contributions through the so-called division of labour and joint programming approach. Donor aid management capacities vary, depending not only on their size but also e.g. on the staff capacities of each donor. Using a country's own institutions and systems, where these provide assurance that aid will be used

for agreed purposes, increases aid effectiveness by **strengthening the partner country's sustainable capacity** to develop, implement and account for its policies to its citizens and parliament. VET systems and procedures in developing countries typically include, but are not restricted to, national arrangements and procedures for public financial management, accounting, auditing, procurement, results frameworks and monitoring. Therefore, the focus of the division of labour and joint programming approach is on improving the situation at the partner country level as can be seen by the Moroccan example described in Box 3.3.

Diagnostic reviews are an important — and growing — source of information to governments and donors on the state of VET systems in partner countries. Partner countries and donors have a shared interest in being able to jointly **monitor progress over time in improving VET systems**. They are assisted by performance assessment frameworks and an associated set of VET reform measures, that build on the information set out in diagnostic reviews and related analytical work. In addition, independent cross-country monitoring and evaluation processes are suggested — which should be applied without imposing additional burdens on partner governments — to provide a more comprehensive understanding of how increased aid effectiveness contributes to meet the objectives of VET reforms.

BOX 3.3 Division of labour between the EU and other donors in Morocco

The EU-funded project Support to the Development of Vocational Training in Tourism and ICT Sectors – II is credited by national institutions and development partners as having established the basis for the main VET developments in recent years. Coordination with other donors was high. The various donors consider support to a VET reform as a high priority in their agendas (e.g. the World Bank, the African Development Bank, etc.). The EC, the European Investment Bank and the Agence Française de Développement have aligned their respective programming exercises in support of VET reform to the expected national VET strategy, that has been drafted with ETF support.

Source: EC, 2013c.

The capacity to plan, manage, implement and account for results of VET policies and projects is critical in achieving development objectives — from analysis and dialogue through implementation, monitoring and evaluation. **Capacity development is the responsibility of partner countries with donors active in the countries' VET system playing a support role.** It needs not only to be based on sound technical analysis, but also to be responsive to the broader social, political and economic environment, including the need to strengthen human resources.

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PART II

Practical guidance notes

GUIDANCE NOTE 1

Analysing the general context to support VET reforms

Topic overview

This guidance note aims to help European Union (EU) staff to plan, conduct and use the analysis that should help to tailor EU support to the **particular dynamics of the vocational education and training (VET) reform at play**, both positive (opportunities for reform, drivers of change) and negative (challenges, risks, etc.).

VET systems in each country should not be considered in isolation from the **external economic and social factors** (see Figure GN1.1). Rather, economic prospects and labour opportunities for each target group should be analysed to understand the underlying social tensions that can arise and exert a major impact on the national VET strategy.

There is no fundamental right or wrong way to analyse the context, nor is there a single appropriate model.

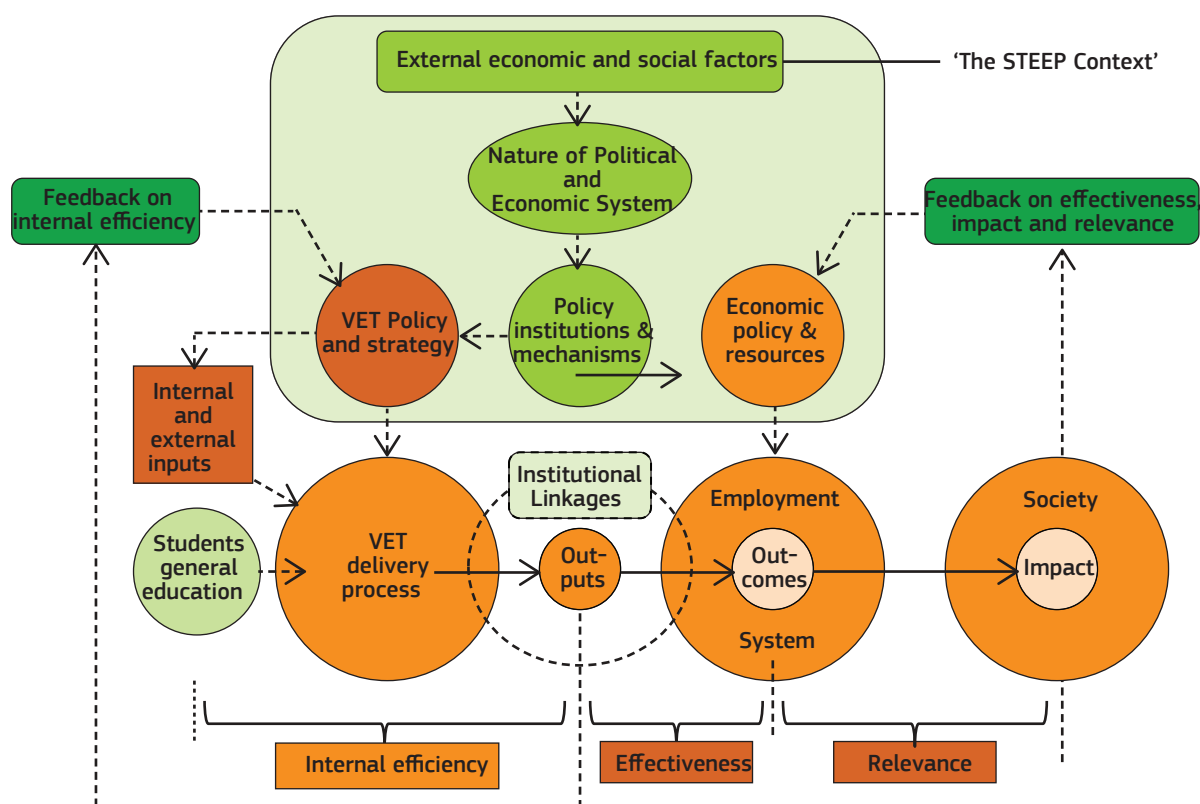
A generic heuristic model may be used as the basis for the context analysis to identify the key factors that **determine the internal efficiency** and the **effectiveness, relevance and impact** of the VET system.

- **Relevance** means the relationship between training outcomes and the requirements of economic and social demand;
- **Effectiveness** means the relationship between training outputs and outcomes, i.e. how well the VET system is achieving its goals and how much it is able to support labour market insertion.
- **Internal efficiency** is the relationship between inputs and outputs.

SUMMARY OF KEY ASPECTS

- A VET reform is set in a specific context that is influenced by social, technological, economic, ecological, political and legal factors. The factors examined in an analysis of the general context are usually outside the immediate action radius of EU staff;
- Field staff of the EU often complains that the tools and methods for general context analysis are available, however, the challenge is that the time to do general context analysis is not available. Nevertheless, a 'quick and dirty' desk review and annual one-day-workshop with participants from various stakeholders might be hugely beneficial in identifying the main trends and opportunities for impact;
- EU-funded VET reforms should be underpinned by a general context analysis in order to have a clear picture and being precise on how the project design should look like to ensure that analysis yield its intended value;
- General context analysis for a VET reform is useful only if it is conducted in a participatory manner, involving EU staff, local counterparts, social partners from business and labour, other donors as well as representative of the civil society speaking for the target groups. Participation of a single champion or as an 'ivory tower' exercise should be avoided.

If the VET system is not closely related to the overall economic and social requirements, and it is therefore **not relevant**, then it does **not matter whether it is effective or efficient**. Similarly, if the VET system is ineffective and does not achieve what it sets out to do, then it matters little whether it is internally efficient.

FIGURE GN1.1 Generic heuristic model of VET systems

Source: Adams and Schwartz, 1988.

It is important to **understand these aspects of the context before considering specific initiatives that support the VET system** with reform measures.

In the development cooperation practice, especially when conducting **feasibility studies**, it has been proved to be useful to analyse the general context through at least the five dimensions of the so-called STEEP model⁽¹⁾:

1. The **social component**, which describes features of the societal context in which the planned VET project is embedded; it compasses factors such as demographics and illiteracy rate;
2. The **technological component**, comprising technological and scientific factors relevant for jobs and VET systems;
3. Analysing the **economic component** involves looking at the distribution and management of resources; this includes factors such as the relevant economic sectors and unemployment rates;
4. The **ecological component** encompasses the physical and biological dimension with a focus on climate impacts, recycling, green jobs and pollution;
5. The **political component** encompasses the basic attitude of people and their government towards the VET system; factors here may include social partners, business associations, regulatory authorities, political stability.

⁽¹⁾ **Foresight Cards** is a product of IVTO, a research- and educational institute located in The Netherlands.

Table GN1.1 shows how the political and economic system of a society, as shaped by external economic and

TABLE GN1.1 Linkages between the heuristic VET model and the STEEP model

STEEP MODEL	GENERIC HEURISTIC MODEL		
	RELEVANCE	EFFECTIVENESS	INTERNAL EFFICIENCY
Social context	Population dynamics and demographics, immigration and emigration trends	Unemployment rate, gender equity, HIV/AIDS prevention, internal/regional movements	Illiteracy rate, access to employment, teaching and learning
Technological context	Resource-efficient technologies and scientific innovations	Access to information and communication technology (ICT)	Delivery of demand-driven and innovative VET programmes in ICT
Economic context	Employment system and resources for financing VET system	Access of VET graduates to (self)-employment in the formal and informal economy	Delivery of demand-driven learning outcomes, quality assurance
Ecological context	Sustainable development and green economy	Climate change, recycling, pollution and access to green jobs	Delivery of new green qualification profiles for green jobs
Political/legal context	Legislative framework for VET, Public-Private-Partnership	Regulatory authorities, social partners, business associations and political stability	Attitudes of workers, employers and local government towards VET

social factors, functions through its policy institutions and mechanisms to establish basic policy parameters for the VET system.

The **heuristic model for a VET system** (see Figure GN1.1) allows the analysis and tracing of the impact of economic policies on the internal efficiency and effectiveness of VET systems. The model implies that resource and policy parameters are established by a political and economic system and are handed over to representatives of employment and VET systems. In the VET system, for example, delivery of VET programmes is comprised of VET staff, students, facilities and equipment linked through a curriculum and learning activities in vocational secondary schools, training centres or workplaces in companies.

Procedure

The best way to begin an analysis of the general context to the VET system at play is usually for the European Union staff involved to identify and agree on the boundaries of the VET system described above. These boundaries should demarcate the breadth, depth and time frame of the general context in question.

STEP 1: Develop an understanding of the general context and identify trends

First of all, it is necessary to develop an **understanding of the general context** to be analysed. This involves analysing the five components of the general context (see table GN1.1) and discussing their relevance. The idea is to ensure that the **general context is well understood**, so that European Union support is highly tailored to it, and therefore has the greatest impact. In other words, the idea is to ‘think and act politically’ (EC, 2014). For this to happen, it might be useful to clarify the following:

- What kind of **VET context analysis has already been done** or is planned in the near future?
- What are the **current key events and general VET trends** from the perspective of the five components of the general context?
- What obvious events confirm the **existence of these VET trends**?
- How did these **VET trends arise in the past**?
- What is the **nature of these VET trends**, and how volatile are they?

- Where are the **key bottlenecks in the current VET system**?
- What are the **main sources of financing VET services**? How are they evolving over time?
- Who is the **champion or owner** that will ensure that the context analysis translates into VET programming?

STEP 2: Identify effects and processes

The next step has to shed light on the **identified VET trends** by asking the following questions:

- Who are the **key VET stakeholders** in the public and private sector?
- What **negative effects** are to be expected?
- What **positive effects** are to be expected?
- What **neutral, stabilising or irrelevant factors** are also in play?
- Is the region, the country, a district, an economic sector or a specific problem the **focus of the VET context analysis**?
- To what extent should the VET context analysis involve relevant European Union **member states and other donors**? There is much benefit to derive from analysis conducted jointly across development partners. Joint analysis can lead to a common understanding and agreement on the positive and negative effects on VET reforms and on the appropriate response.
- To what extent should the analysis process involve national counterparts, civil society, social partners, etc.? Take into account that the process is more robust if it is **participatory**, and makes a special effort to have a good sample of stakeholder across target groups. The level of participation of the stakeholders in the preparation of the action and their commitment and in relation to the thematic issue are crucial elements for success.

- Is the **application of the SWOT** (Strengths, Weaknesses, Threats and Opportunities) part of the VET analysis process?

STEP 3: Understand interdependencies

The next step is to explore the possible **links between the identified VET trends**. Questions to be raised here are:

- How are the **VET trends linked**? For instance, at the core of the Republic of Korea's sustained economic growth pattern lies a **government-led skills development strategy**. Investment in a well-educated and highly skilled workforce was an integral part of encouraging **adoption of new technologies**. A current challenge is to avert shortages in the more highly skilled vocational occupations by increasing the attractiveness of non-academic skills development paths (ILO, 2010:22).
- Do any of the **VET trends conflict with/reinforce** each other? In Egypt for instance, both the internal efficiency and effectiveness of VET can be considered low. Improvements are necessary in the responsiveness to labour market needs and in the attractiveness and quality of VET programmes. The status of various strategic documents on VET that have been developed in recent years must be clarified, and a number of pending policy decisions need to be tackled with greater determination (ETF, 2015:3).

STEP 4: Localise relevant factors

Not all the VET trends identified will affect the planned VET project. It is therefore important to obtain a clear picture of the **key factors that will influence the VET trends**. Those trends of factors identified as being the most relevant form the issues that need to be considered further.

STEP 5: Forecast how the issues will develop

To be able to forecast the trajectory of the relevant issues it is necessary to **analyse the driving forces**

that underlie them. Here too it must be remembered that **driving forces may reinforce or weaken each other**. It is often helpful to also run through alternative scenarios of how the issue will develop.

STEP 6: Draw conclusions to shape EU support

Once a picture is obtained of the **assumed trajectory of the key VET issues**, the next step is to identify the possible consequences. Conducting the context analysis is only half the challenge. Many context analyses are shelved and subsequently only marginally influence project design and implementation. Questions to be raised here are:

- Which **factors were identified through the analysis** of the general context of the planned VET project? For example, the strong presence of the informal economy in Ghana with around 86 % of the economically active people operating in the informal economy has implications on the approach to VET reforms. Does it mean a need to shift the focus from VET services for the formal economy towards more to the informal economy?
- What **positive/negative implications** are evident?
- What are the **options for action** that would be most appropriate in light of the insights gained?
- **Validating underlying assumptions**, making them as explicit and precise as possible. Are they still reasonable and part of the most possible scenario, given the newly gathered evidence?

- Has the context analysis identified **new areas of risk**, as well as **new opportunities** on which to build?

- Who is likely to **resist a VET reform** and why?

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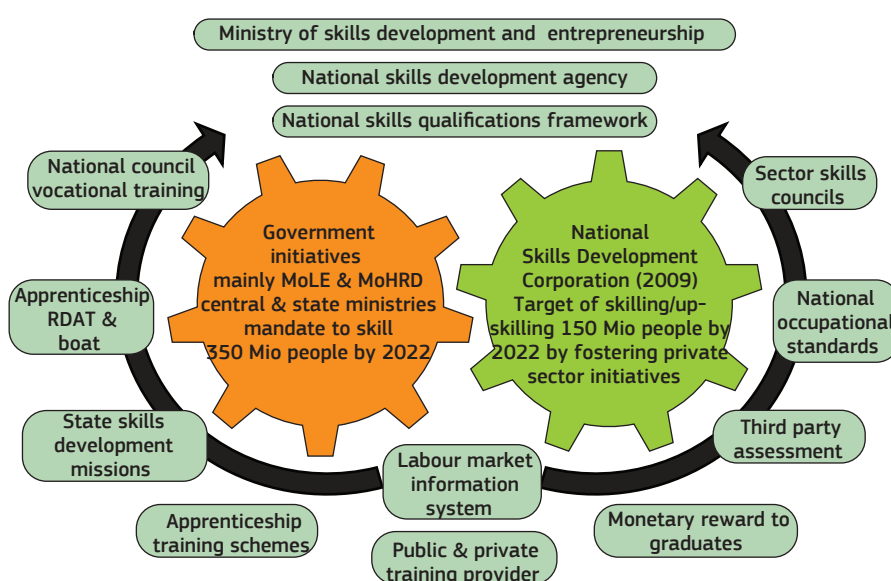
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Case study: General context analysis of VET in India

CONTEXT	<p>Since the economic liberalisation in the 1990s India has experienced sustained economic growth. India's own vision for development as outlined in the Twelfth Five-Year Plan (2012–17), which calls for faster, sustainable, and more inclusive growth. India could face considerable stress if employment opportunities are not commensurate with expectations. India has a unique 20–25 years' window of opportunity with a large and expanding workforce and relatively few people in the dependent age bracket and can reap the so-called 'demographic dividend'. While the formal (organised) sector employs about 10 % of the workforce, the remaining 90 % of the workforce spread over informal (unorganised) micro, small and medium enterprises (MSMEs).</p>
CHALLENGES AND OPPORTUNITIES	<p>India is expected, optimistically, to grow economically at a rate of up to 8 %, on an average, in the next 10 years. India's Twelfth Five-Year-Plan (2012–17) aims to increase the percentage of workforce with formal skills to 25 % at the end of the plan. It is estimated that 50–70 million jobs will be created in India over the next five years and about 75 %–90 % of these additional jobs will require some training in VET schemes. Comparing the size and rate of growth of economy of India, the performance of the present Apprenticeship Training Schemes (ATS) are not satisfactory and a large number of training facilities available in the industry are being unutilised. Employers are of the opinion that provisions of the Apprenticeship Act 1961 are too rigid to encourage them to engage apprentices.</p> <p>There is an urgent need to mainstream VET into the formal education system. Since over 90 % of India's labour force is engaged in the unorganised sector, the most important challenge would be to reach out to this sector. A future approach would need to be worked out such as a work-based oriented apprenticeship scheme to cater to the skills needs of this very large section of the workforce. India has to make necessary changes to the regulatory framework governing the employment of apprentices. To achieve this, industry needs to be made an active partner.</p>
ACTIONS TAKEN	<p>VET system development has been addressed during the past with the introduction of the Eleventh Five-Year-Plan (2007–12) pushed by a prediction that India will need 500 million skilled people to sustain its economic growth. This wake-up call led to the development of the National Skill Development Policy (NSDP). The Eleventh Five-Year-Plan (2007–12) has seen a paradigm shift in the VET implementation strategy wherein a public-private-partnership model has been established. An institutional structure called National Skill Development Corporation (NSDC) has been put in place to catalyse the private sector efforts. To bring together all stakeholders, namely industry, VET providers and the academia, NSDC has been setting up of private sector led Sector Skill Councils (SSCs) for identified priority sectors.</p>

- Already one day after taking office in May 2014, Prime Minister Narendra Modi has created a **new Ministry of Skill Development and Entrepreneurship** (MoSDE) with a vision of creating a ‘Skilled India’. However, it is **still unclear how the new MoSDE is going to conduct the political leadership for the VET sector** responsible for coordinating and harmonising the implementation of all VET efforts on the central level, the **‘private sector-driven’ National Skills Development Corporation** (NSDC) as well as the **‘government-driven’ Directorate General for Employment and Training** (DGE&T) in the Ministry of Labour and Employment (MOLE). The competition of the two contra rotating steering structures can be seen in Figure GN1.2.

FIGURE GN1.2 Government- versus private sector-driven VET system in India



Source: MoSDE India and GIZ, 2014.

- The complexity and duplication of the regulatory and governance framework surrounding VET in India means that **initiatives and schemes are still occurring in silos and creating confusion** which leads to inefficient and incoherent outcomes in implementation. Government (49 % stake) and Indian industry (51 % stake) bodies such as CII, FICCI, ASSOCHAM teamed together to set up the **National Skills Development Corporation (NSDC)** in 2009.
- On the meso level under the NSDC, SSCs are designed to be led voluntarily by private sector actors and **develop national occupational standards** (NOS). Private sector involvement can greatly enhance what is offered by the state, but this needs to be done in partnership with the state, with clearly delineated responsibilities which recognise each other's strengths, rather than state and private provision working independently of each other.

Source: MoSDE of India and GIZ, 2014.

GUIDANCE NOTE 2

Programming of building blocks and EU support

Topic overview

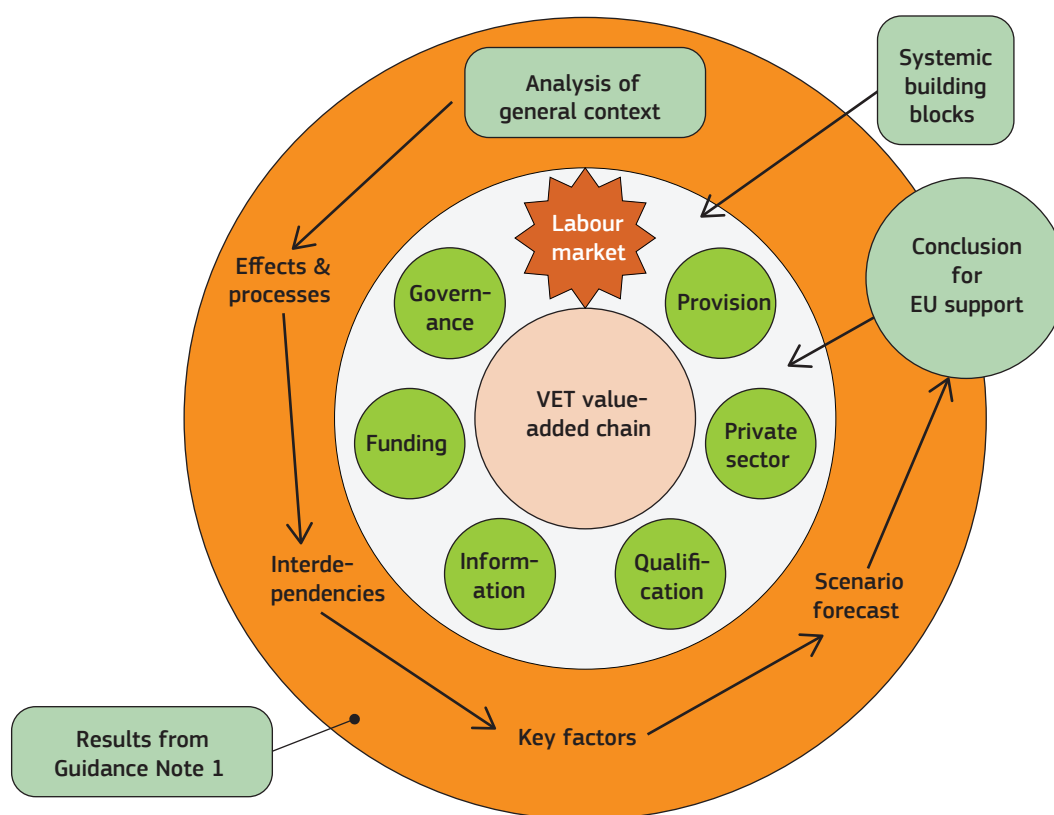
Unleashing the potential of vocational education and training (VET) reforms will require a **decisive redress and eradication of constraints** that stand in the way of the transformation of VET systems in developing countries (see results from [Guidance Note 1](#)). Sustaining the development relevance of VET systems, and ensuring they meet their expected contribution to society as currently understood, requires a serious improvement of the seven building blocks of the VET system. Each building block is an element in the so-called **VET value-added chain** and thus contributes to the value of the VET services. In case of shortcomings in the building blocks, it can be expected that the VET value-added chain will not meet the demand of learners and workplaces. As a result, the new VET project then has to intervene into the non-performing building block with the aim to improve the overall VET output. The necessary project interventions may relate to **one or more building blocks**, depending on the deficits discovered in the VET value-added chain, on the political and economic environment, and on budget available. The visualised relationship between the analysis of the general context, the value-added chain constituted by the six building blocks and the new VET project is shown in Figure GN2.1.

VET VALUE-ADDED CHAIN

The VET value-added chain is a physical representation of the six systemic building blocks involved in creating knowledge, skills and occupational competence, starting with the identification of demand-driven VET needs to be trained for employment and ending finally with the supply of qualified VET graduates into the labour market. The value-added chain approach is

SUMMARY OF KEY ASPECTS

- Programming is focused on the development of a general intervention strategy for European Union's assistance aligned with the country strategy (whenever possible). The outcome of programming is the outline of a general intervention strategy and an internal budget allocation/funding decision by the European Commission (as defined in Country Strategy Paper and National Indicative Programme);
- Strong coordination and cooperation with and between European Union member states and other donors (including emerging donors, NGOs and private foundations) is essential;
- The VET value-added chain that will be reviewed are grouped into seven generic building blocks;
- During programming, it may be decided, whether all six building blocks should be considered in a systemic sense, or only partly with a specialised focus on less than six building blocks;
- The available financial commitment and the appropriateness of the financing modality of the European Union has a major influence on the scope of the planned VET reform programme;
- Programming should set achievable strategic objectives and keep the level of ambition realistic. Scenario planning is useful in the selection process of strategic options for action.

FIGURE GN2.1 Programming of building blocks and EU support

based on the idea of seeing all **involved stakeholder and VET institutions as a social system**, made up of **six systemic building blocks**. Furthermore, inputs, transformation processes, and outputs involve the acquisition and consumption of resources — funds, materials, teaching staff, equipment and buildings. The costs to operate the value-added chain affects to a great extent the quality of VET programmes.

Programming is the establishment of a **general intervention strategy** for EU's assistance for a VET reform in a developing country. Based on the analysis of the general context (see [Guidance Note 1](#)), the problems, needs and opportunities, of other players' actions and of local and EU capacities, the focus of EU aid has to be agreed. The outcome is the outline of a general intervention strategy and an **internal budget allocation/funding decision by the EU**. The European Commission has proposed that the EU should adapt its support (the mix of instruments and aid levels and modalities) to the country's situation.

In order to boost financial resources for growth and development, it also proposed to develop blending mechanisms to allow for the **appropriate mixing of financial instruments**.

It is nonetheless important for the European Union to prioritise jointly with member states, as it is a powerful tool for coordination that can build on the momentum of different actions and can avoid repetition. Strong coordination and cooperation with and between European Union **member states and other donors** (including emerging donors, international non-governmental organisations and private foundations) is essential.

The **general intervention strategy** (see Box GN2.1) identifies all the key options, necessary decisions and activities for **implementing a long-term strategy**. It forms the basis to design the EU-funded VET reform project and serves to **document negotiated activities and priorities**.

BOX GN2.1 Elements of the general intervention strategy

- **Intended impact** of the VET reform project
- Strategy and **strategic objectives**
- Critical aspects for **project success, risk** and **alternative plans**
- **Indicators** to measure the **achievement of objectives**

The Malawi Growth and Development Strategy, as an example, underpins a number of specific sector strategies on which the EU Delegation has based its project aimed at improving the efficiency and effectiveness of the Technical, Entrepreneurial and Vocational Education and Training system to satisfy the economy's need for skilled artisans and technicians (see Box GN2.2).

BOX GN2.2 The Malawi Growth and Development Strategy

The Malawi Growth and Development Strategy (MGDS II) is the overarching strategy for Malawi for the fiscal years 2012-2016. Despite the stated goals are unrealistic, the strategy underpins a number of specific sector strategies such as the TVET Policy. This policy promotes a demand-driven approach to TVET and proposes the introduction of a decentralised approach to its governance and management. Furthermore, the country has set up a National Export Strategy (NES 2013-2018), which identifies a number of potential growth areas that will support economic diversification and add value to Malawi's commodity base. The three prioritised clusters — oil seed products, sugar cane products and manufacturing — place emphasis on agro-processing. The National Export Strategy also gives emphasis to the existing economic clusters of tobacco, tea, mining and tourism, and to research and technology development.

Source: Checklist for the Project: Skills and Technical Education Programme (STEP), Malawi, CRIS Number: 2014/037-755, Lilongwe/Malawi.

Procedure

STEP 1: Define the vision, mission and strategic objectives

The starting point for any planning process is **the intended impact** of the VET reform and the defined strategic objectives. Normally, the partner government has already developed and approved a comprehensive national VET strategy. Where this precondition has not been clearly defined, proper planning cannot take place, but support to the development (or strengthening) of the strategy can be one of the preliminary activities of the programme. Questions to be addressed in this context are:

- What kind of **vision and mission** do we expect to achieve through the VET reform?
- What kind of **strategic objectives** do we expect to achieve through the VET reform?
- Which **implicit/explicit mandate** has been given to European Union development cooperation?
- What objectives does that imply and which **strategic objectives** of the partner government have already been formulated as part of a National VET Strategy?

Table GN2.1 provides some strategic options for action, based on the six building blocks. These options are influenced by the country's features determined by its history, traditions, and institutional and legal frameworks.

STEP 2: Outline guiding strategies

The next step is to determine how **each individual strategic objective** can be achieved. The decisions, options for action and priorities required for this can be recorded in the form of **guiding strategies**. Questions to be addressed when formulating the guiding strategies are:

- How can we achieve the **strategic VET objective**?

TABLE GN2.1 Objectives and strategic options for action for VET reforms

OVERALL STRATEGIC OBJECTIVE		STRATEGIC OPTIONS FOR ACTION
Systemic building blocks	Governance structure	<ul style="list-style-type: none"> • Liberal VET System Model • Statist VET System Model • Segmentalist VET System Model • Cooperative VET System Model
	Funding system	<ul style="list-style-type: none"> • Budget-based Allocation Model • Programme-based Allocation Model • Contract-based Allocation Model • Target Group-based Allocation Model
	Information system for strategic VET planning	<ul style="list-style-type: none"> • Employment Placement and Matching • General Information on Occupations • Information on VET Courses • Information for Employers
	Labour market-oriented qualifications and curricula	<ul style="list-style-type: none"> • Sub-Sector NQF Model • Network NQF Model • Unified NQF Model
	Training partnership with the private sector	<ul style="list-style-type: none"> • Work-based Apprenticeships Model • Company Internships Model • Workplace Simulation Model
	Quality of provision and quality assurance	<ul style="list-style-type: none"> • VET Model for Formal Economy • VET Model for Informal Economy • VET Quality Assurance Model

- Which **strategic options for action** are available to us in this context?
- Which **decisions need to be taken**, and under what conditions are which options available?
- How should we **set our priorities** within the list of strategic objectives?

A decision will have to be taken on whether all six building blocks should be considered in a systemic sense, or rather only **partly with a specialised focus on less than six building blocks**. It makes sense from a systemic point of view that all six building blocks should be included in the strategic planning in order to **avoid a fragmented general intervention strategy** for the VET reform. A comprehensive way to support VET sector needs and objectives are a **Sector Policy**

Support Programme However, it must be noted that the available European Union **financial commitment** and appropriateness of the financing modality for the given country has a major influence on the scope of the proposed VET programme.

STEP 3: Crucial aspects for success

Before proceeding to the next step, it is important to pause and consider which will be the **crucial aspects** when selecting and implementing the **strategic options for action**. The following questions can be helpful in this context:

- Which critical aspects for **successful selection and implementation** of the strategic options for action can be identified?

- What **risks are inherent in the selection and implementation** of the strategic options for action?
- What **alternative action plans** would be conceivable should certain risks materialise?

STEP 4: Identify performance indicators and define work packages

Once the crucial aspects for success have been identified with sufficient clarity, the next step is to **translate the strategic VET objectives into performance indicators** (see under 3.3, part I). These will be used later on to help determine whether the respective strategic objectives have actually been achieved. It is often already appropriate at this level to **outline the main measures** that appear necessary in order to achieve the strategic objective.

STEP 5: Strategic planning and budgeting

The VET reform project requires appropriate **resource planning and budgeting**. It is not recommended to deal with this step in **any great detail** here, as it forms part of general contract and cooperation management. It may be sufficient for a **rough strategic**

project overview plan to implement steps one to five.

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Case study: Reform of VET system in Rwanda

CONTEXT	<p>The total labour force in Rwanda is 4.96 million people. Overall, the informal economy accounted for about 94 % of the labour force. The availability of sufficient numbers of skilled workers is a limiting factor on economic growth. The VET system operates under the mandate of the Ministry of Education and its executing agency Workforce Development Authority (WDA), which was established with regulatory responsibilities for VET and has administrative autonomy. Its responsibilities include the development of national occupational standards and curricula and the establishment of a National VET Qualifications Framework (RTQF).</p>
CHALLENGES AND OPPORTUNITIES	<p>The establishment of further Integrated Polytechnic Regional Centres (IPRCs) shall contribute to rationalise the VET system, and incorporation of different levels of VET providers into an integrated and flexible VET system allowing for movement between the various levels. Despite the visible efforts made by the government recently to improve the VET system, weaknesses are apparent. An evidence-based sector analysis identified a number of challenges within the systemic building blocks of the Rwandan VET system.</p> <p>The financing of VET system is facing several constraints. A sound financial framework for the financing of VET reforms is not yet in place. Private investment in VET is promoted by announcements but there is not clear incentive structure or cost-sharing strategy in place, which would encourage private VET providers to become innovative. Funding for the VET system comes mainly from government revenues.</p> <p>There is a lack of proper labour market information about skills demand and graduate absorption into the labour market. There are only a few VET providers that cater to training for the informal economy. A standardised national system of enterprise-based training does not exist. Any discussion regarding the VET system has to include consultation with the private sector, namely the Private Sector Federation (PSF). Insufficient linkages exist between VET providers and companies.</p>
ACTIONS TAKEN	<p>The VET Strategy Paper 2015 has been developed and aspires to develop an accessible VET system that produces graduates with employability skills that respond to the changing demands of employers and self-employment and the country's labour market. The VET strategy identified the following needs:</p> <ul style="list-style-type: none"> • improve the understanding of skill needs in economic sectors; • improve horizontal and vertical pathways; • develop the human capacity within the VET system; • improve coordination of VET-initiatives; • improve VET facilities and its sourcing; • expand the availability of responsive curricula in VET; • improve the attractiveness of VET; • increase employer engagement in VET; • increase equitable and inclusive VET; • establish sustainable Innovative financing mechanisms in VET.

LESSONS LEARNED

- The new **National VET Strategy** of 2015 reflects an important paradigm shift that has been taking place in Rwanda over the last years which places access, quality and relevance of VET as its priority. However, the VET strategy 2015 is **silent on the skills needs of the informal economy** which accounts for 94 % of the labour force with skills needs very different to the formal economy. Informal apprenticeship systems have the potential to meet the needs of substantial numbers of Rwandan youth.
- The capacity of formal VET system in Rwanda is limited due to inadequate training infrastructure and the relatively high costs of full-time, centre-based training. Hence, growing numbers of youth are learning and then working in the informal economy. VET programmes such as **work-based apprenticeships for the informal economy are missing**. Apprentices in micro- and small businesses learn technical skills from master crafts persons and practitioners at the workplace and are inducted into a business culture and a business network which makes it easier for them to find employment or start their own businesses.
- Upgrading of traditional/informal apprenticeships would create major opportunities to **improve skills provision in the informal economy** in Rwanda and means the gradual improvement of a VET system embedded in the culture and traditions of the Rwandan society. It aims at making the informal apprenticeship system more dynamic to respond to current and future changes.
- A **platform for consultations with formal employers** has been established through eight employer-led councils called Sector Skills Councils (SSCs). SSCs are national partnership organisations that bring together all the stakeholders — Industry, labour and the VET&D providers, for the purpose of VET development of particular industry sectors. **SSCs are largely formal employer led** and the aim is to boost the skills and productivity in the formal sector's workforce. Private sector involvement can greatly enhance what is offered by the state, but this needs to be done in **partnership with the state**, with clearly delineated responsibilities which recognise each other's strengths, rather than state and private provision working independently of each other.

Source: WDA of Rwanda, GIZ and KfW, 2013.

GUIDANCE NOTE 3

Promoting private sector involvement in VET governance

Topic overview

This guidance note provides *European Union* (EU) staff with practical instructions to engage with national counterparts on how to adopt a realistic tailored approach to **promote private sector involvement in vocational education and training (VET) governance structures**. The literature on VET research identifies a number of crucial dimensions of **variation in the design of VET governance structures**, such as the degree of standardisation and certification of skills and the role of the state. To this regards, four **generic models** (see Figure GN3.1) of VET governance structures can be identified, showing the **alternatives that political and social actors have at their disposal**.

There are **two central dimensions of variation** that are helpful in describing the variety of VET governance structures.

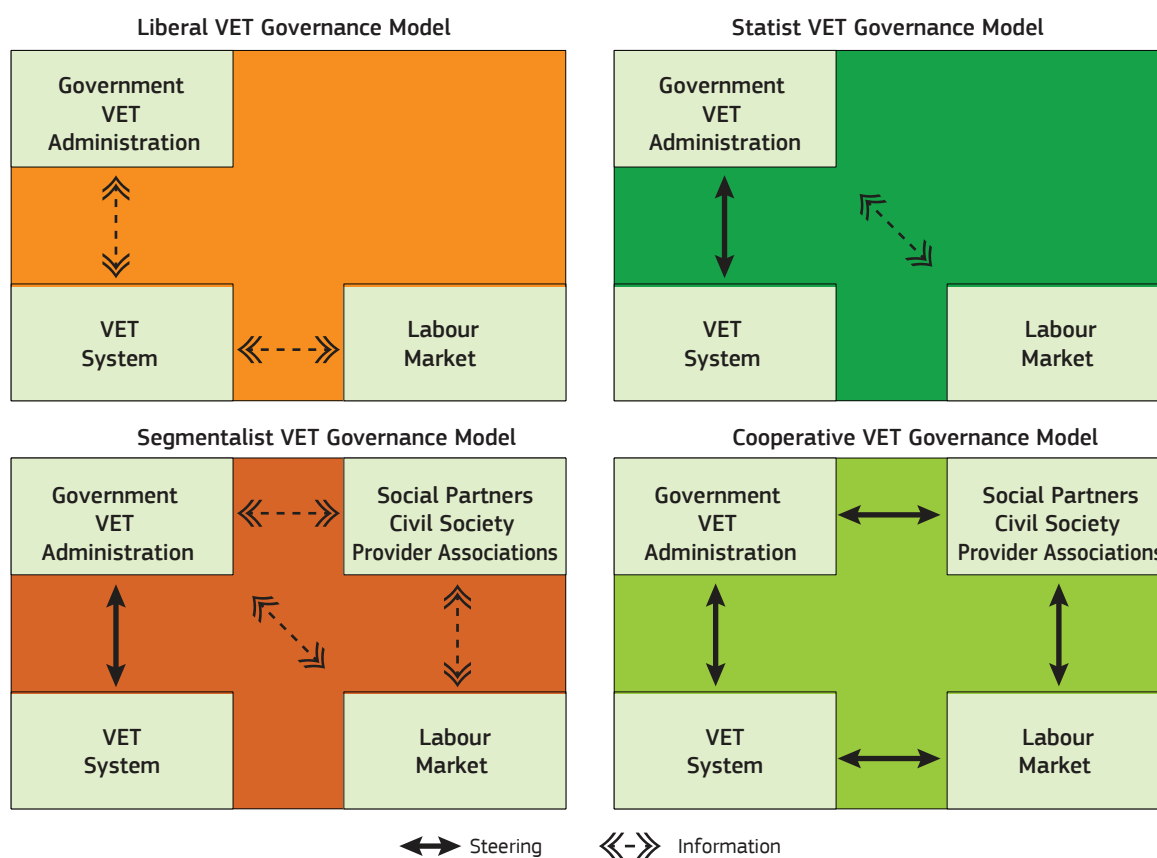
The first is the degree of company involvement in the delivery of VET courses and it pertains to the **willingness of companies to invest in VET programmes**, in particular in initial and continuing VET programmes. A higher involvement of companies in VET systems might imply a higher specificity of VET programmes, but it is important to keep in mind that it can also lead to VET programmes being polyvalent and thus potentially transferable to other companies.

The second dimension is the **degree of state involvement in VET governance structures**. This dimension captures various aspects including the existence of state subsidies to fund VET courses and public policies that monitor VET by certification, and

SUMMARY OF KEY ASPECTS

- A precondition for the involvement of private VET stakeholders' negotiation is the willingness of the partner government to share responsibility for the VET system development with stakeholders from the private sector.
- Drawing up public and private VET stakeholder profiles based on various criteria provides a useful basis on which to make visible the relative importance of VET stakeholders and decide whether relationships between VET stakeholders need to be established and developed.
- In negotiations between public and private VET stakeholders, clashes occur between different interests — that are legitimate from the participant's point of view. Nonetheless, this logic may be compelling, real negotiations never follow this pattern exactly. Negotiations are influenced by time and place.
- To obtain really good negotiations results it is absolutely crucial to build mutual trust. Often, favourable solutions are possible that require the other party to show willingness. This willingness will only be forthcoming if the party concerned feels able to trust in that willingness not being exploited.

the standardisation and formulation of occupational training profiles. This dimension also includes the degree to which the institutional set-up of the education system acknowledges and supports the existence of **VET system as a viable alternative to academic higher education**.

FIGURE GN3.1 VET sector programme and financing modalities

Source: Busemeyer and Trampusch, 2012.

Both dimensions are influenced by **decisions on the division of labour** between the state and the private sector in providing and financing VET.

THE LIBERAL VET GOVERNANCE MODEL

In the **liberal VET governance model**, VET is largely delivered through the general education system and the labour market. This kind of governance model is typical for developing countries with a **traditional apprenticeship training system** such as in Ghana, where informal trade associations and master craftsmen organise VET apprenticeship schemes independently from the state. The general education system provides individuals with generic educational qualifications that are often followed by traditional apprenticeship schemes in the first stages of employment careers.

THE SEGMENTALIST VET GOVERNANCE MODEL

Japan is a prominent case of the **segmentalist VET governance model**. Compared to the liberal VET system, the segmentalist model is characterised by a much higher willingness of formal firms to invest in the building of their employees' skills. Through this system, a sizable share of a typical youth age cohort enters the **internal labour markets of large firms** immediately after leaving the general school system and subsequently undergoes an intensive process of VET programmes that entails **job rotation schemes and off-the-job VET programmes at in-house training centres** and technical secondary schools.

THE STATIST VET GOVERNANCE MODEL

The **statist VET governance model** is best exemplified by many formal educational systems in **developing countries**. In contrast to both the liberal and the segmentalist VET systems, public policymakers are much more committed to supporting VET as a viable alternative to academic higher education to promote the integration of young people with weak academic qualifications into education and employment. For instance, in many developing countries VET programmes are fully integrated into the general education system, which allows and **encourages people with vocational qualifications to pursue tertiary education**. As a corollary, the involvement of employers in the process of VET system development is limited.

THE COOPERATIVE VET GOVERNANCE MODEL

The **cooperative VET governance model** occupies a special position, as it is characterised by a **strong commitment of both state and companies** to invest in the building of knowledge, skills and occupational competence. When cooperative VET systems are compared with the other types of basic governance structures, this distinctiveness becomes apparent because the dimensions of company involvement and public commitment to VET are often in conflict. However, a crucial prerequisite for a cooperative VET governance model is the **willingness of companies to play an active role**. This is not always the case, particularly in developing countries with a small formal economy.

Nonetheless, as in some newly industrialised countries such as South Africa, the cooperative VET governance model is gaining ground. In the **South African case study**, the dominance of the political force of social democracy after the end of apartheid in 1994 resulted in a strong public commitment to the development of a **stakeholder-driven VET system**, which in turn contributed to the marginalisation of the direct role of employers in VET programmes offered by public Further Education and Training (FET) Colleges.

The cooperative VET system, combines the strong involvement of companies in work-based VET schemes with the commitment of the state to support **apprenticeship training schemes**. Essentially,

what is at stake is the degree to which the **interests of employers, the state**, and (increasingly over time) the **trade unions** prevail at specific moments in the development of the VET system.

Procedure

The preference for a reform of VET governance structures is the **result of a negotiation process between the state and the private labour market actors**. A precondition for the negotiation process to happen is the willingness of the partner government to share responsibility for the VET system development with the private sector. To identify and compare the various perspectives and interests of the public and private VET stakeholders, it is helpful to ask the following questions:

- Which **agenda, mandate or programme** do the various private VET stakeholders have?
- In which **arena do they act** and how great is their action radius and political influence?
- What **links do they have** with other public and private VET stakeholders?

Drawing up private VET stakeholder profiles based on various criteria provides a useful basis on which to make **visible the relative importance of private VET stakeholders** and decide whether relationships between private and public VET stakeholders need to be established and developed. These profiles also point to the possibility of **forming groups of private VET stakeholders** with similar profiles. Groupings of this kind are important, because private VET stakeholders can **reinforce supportive or critical attitudes** towards the change of VET governance structures.

STEP 1: Identify and engage with private VET stakeholders

As a first step, VET stakeholders are listed indicating how they are connected to the VET reform and to the change of the governance structures. Particular attention should be paid to the identification of private VET stakeholders. The list can indicate and clarify where information gaps need to be closed and can provide a first overview of the context (see Table GN3.1).

TABLE: GN3.1 Example of relevant stakeholders for change of VET governance structures

PUBLIC AND PRIVATE VET STAKEHOLDERS	AGENDA MANDATE & MISSION STRATEGIC GOALS	ARENA AREA AND RANGE OF ACTIVITY	ALLIANCES RELATIONSHIP TO OTHER STAKEHOLDERS
Ministry of education and other relevant ministries (labour, industry, etc.)	National VET Strategy National employment strategy	Administration of VET system Administration of employment service	Government cabinet
Chamber of commerce and industry	Promotion of Interests of the private sector	Representation of the private sector	National network of sector chambers of commerce and industry
Informal trade associations	Promotion of interests of MSMEs operating in the informal conomy	Mouthpiece of MSMEs operating in the informal economy	National network of informal trade associations
Trade unions	Promotion of interests of workers	Representation of workers	National confederation of trade unions
Civil society non-governmental organisations	Promotion of interests of non-governmental organisations	Representation of organisations that manifest interests of citizens	National network of non-governmental organisations

STEP 2: Support an agreement to start negotiations between VET stakeholders

In negotiations between public and private VET stakeholders, **clashes can occur between different interests**. Negotiations between VET stakeholders are conducted to **soften hardening positions, to openly address interests** and **to harness new potential for creative agreement** (see Box GN3.1).

BOX GN3.1 Basic principles of VET stakeholder negotiations

- **Acknowledgement of the different interests** of public and private VET stakeholders;
- **Broadening of the boundaries of VET system** during the negotiation process to include new ideas and elements;
- **Precise definition of the various interests**, and the advantages and drawbacks of different solutions to change of VET governance structures;
- **Development of solutions** that are better for the public and private VET stakeholders than no solution at all or than leaving the partnership.

Although this logic may be compelling, **negotiations hardly follow this pattern**. Negotiations are influenced by time and place, but above all by the parties themselves, who influence the process with their cultural orientations, capacities and more or less transparent strategies. The purely **analytical description of strategic options** often remains unsatisfactory. Plans often fail to capture the rich and varied experiences of the **private sector, nor their hopes or action strategies**.

To generate an ethos of partnership between public and private VET stakeholders based on fair play, it is helpful in a first step for all **VET stakeholders to declare their respective interests** in the change of VET governance structure to be negotiated. For a negotiation process to be successful, VET stakeholders must make their own positions clear and transparent, as well as their reasons for holding them.

STEP 3: Obtain new Information jointly

In a further step, the reform of the VET governance structure to be negotiated can now be **jointly analysed in detail**. During this step it may well be appropriate to obtain further information from the outlined VET governance models, or listen to the **opinions of**

external experts. The feeling of having obtained new information jointly paves the way for the next step.

STEP 4: Build trust between the public and private VET stakeholders

To obtain really good negotiations results it is absolutely crucial to **build mutual trust**. Often, favourable solutions are possible that require the other party to show willingness. This willingness will only be forthcoming if the party concerned feels able to trust in that **willingness not being exploited**. It is helpful here to **clarify mutual expectations**, and exchange of information on the change of VET governance structures and possible options.

STEP 5: Develop alternative options

VET stakeholders should **avoid reaching premature solutions**; instead, they should utilise all the new information available on the change of VET governance structures to **develop alternative options**. It is worthwhile to promote this process of creative thinking because, as new options emerge, VET stakeholders will gain the feeling that all they now need to develop are appropriate criteria for selecting from among those options. The modernisation of VET systems meant a more **open and active social partnership** (see Box GN3.2) between public authorities and the associated private VET stakeholders, particularly employer organisations and trade unions. Social partnership is the best term to describe this more participative cooperative governance form of VET. It is inextricably linked with employment policymaking and to processes of social and economic innovation in which decision-making is distributed across a wider range of public agencies and private sector partners than was previously the case.

STEP 6: Agree on assessment criteria

The final step is to agree on corresponding criteria by which possible solutions for private sector involvement in VET systems development can be assessed. The joint evaluation and selection of possible options can be rounded off by skilfully introducing compensatory elements wherever there is any remaining sense of

BOX GN3.2 National Skills Partnership in Belarus

Belarus urgently needs a new model of collaboration between the labour market/economic sectors and the system of education (and first of all — VET) that would enable the matching between the supply of skills and the demand from the employers. Over the past years, the VET system in Belarus has undergone a number of organisational and structural changes in education and training. There have been significant developments regarding development and strengthening of social partnership in VET system development. One of the key initiatives is improving labour market relevance of skills and competences of human resources, with the focus on the **establishment of Sector Skills Councils** and the introduction of the National Qualifications' Framework, as well as modernisation of standards and upgrading curricula. The current momentum provides a window of opportunity for EU added value co-operation in VET systems development. In order to strengthen link and establishing sustainable partnerships between the labour market and VET providers, the following activities could be envisaged:

- Setting up a system of **National Skills Partnership**, involving the key public and private stakeholders through the introduction of Sector Skills' Councils;
- Elaboration of a methodology and **setting up of institutional structures** for continuous review and upgrading of occupational standards and qualifications — through capacity development and peer learning;
- Development of a Labour Market Information System capable of anticipating skills needed.

Source: Action Fiche on Employment and Vocation Education and Training in Belarus, 2014

unease. Whatever VET governance model is chosen, important challenges remain, such as how to **fund sectoral structures**, particularly in poorer developing countries; how to **manage their relations with the state**; and how to **ensure that the voices of micro- and smaller enterprises** are represented.

To conclude, we can say that after a long tradition of supply-driven, government-led VET, in some developing countries public and private stakeholders on the supply and demand sides are adjusting to a **new decision-making context** comparable to developments in the European Union, where social dialogue is a basic component of the social model which is a core value in European policies. The ministries are having to step back from taking all the decisions as suppliers of VET programmes. By the same token, the public and private stakeholders have had to assume jointly responsibilities that previously were left to the government. However, the introduction of such stakeholder-driven VET bodies is complex and was often hampered by delays, a lack of capability and sometimes difficulty in establishing legitimacy.

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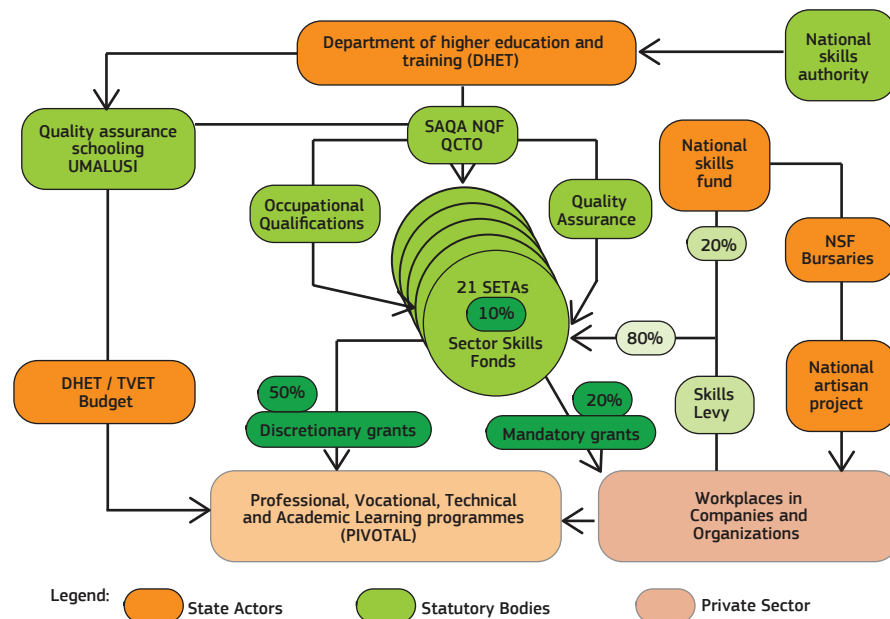
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Case study: Involvement of stakeholders in post-Apartheid VET reform in South Africa

CONTEXT	<p>Since the advent of democracy in 1994, South Africa has made significant gains and progress in overcoming the VET legacy of its past. But despite this progress, low levels of knowledge, skills and occupational competence among the majority of the formerly disadvantaged population and stubbornly high unemployment rates, especially among youths (age 15-24), still remain one of the country's most pressing concerns and greatest impediments towards a better future for all. The VET challenge as it has been inherited from the restrictive Apartheid policies of the past is not easy to be overcome. Apart from dealing with pressures produced by a globalised economy, South Africa faces some unique domestic challenges in the field of VET systems development.</p>
CHALLENGES AND OPPORTUNITIES	<p>Given these challenges the new democratically elected South African government has recognised the importance of VET and providing an integrative framework for all learning achievements regardless of their origin based on private sector involvement as being the most vital element for the VET systems development. Embarking on a comprehensive and universal reform process of VET policies the government invested in the transformation of the institutional landscape of the VET system on all levels (see Figure GN3.2).</p> <p>An initial vision towards an integrated South African National Qualifications Framework (NQF) was first formed. The South African NQF concept was designed to embrace a universal system of outcomes-based education and training, quality assured unit standards and qualifications embracing all education, training and VET at all eight levels, both in and for the workplace and in learning institutions by recognising prior learning (RPL).</p> <p>Recognising the dire need to improve the VET system, South Africa ratified in 1998 the Skills Development Act which defined a new stakeholder-driven cooperative governance structure for the VET system, called the Sector Training and Education Authorities (SETAs). The SETAs are stakeholder-driven statutory bodies and led by employers, trade unions and professional bodies from appropriate industries. In March 2000, the Minister of Labour established 25 SETAs, each with its own clearly defined economic sector. One of the primary objectives of the SETAs was to collect skills levies from enterprises and organisations within each economic sector.</p>

FIGURE GN3.2 Modernising traditional apprenticeships

Source: Bird and Heitmann, 2009.

ACTIONS TAKEN

The financing of the cooperative VET system is based on the so called **levy-grant scheme**, regulated in the Skills Development Levies Act of 1999. Every employer, who is not generally exempt by the Act and whose total employee payroll as calculated by PAYE (Pay as You Earn) is to exceed R 500 000 per year, has to pay a skills levy of 1 % of the total employee payroll. The levy is collected through the South African Revenue Service (SARS). **20 % of the levy** is allocated to the National Skills Fund (NSF) and the **remaining 80 % is paid to all existing SETAs**. In addition, certain discretionary grants for pursuing relevant VET initiatives can be obtained by employers or VET providers.

LESSONS LEARNED

- The restructuring of the South African VET system meant a more **open and active social partnership** between public authorities and the **associated stakeholders, particularly employer organisations and trade unions**.
- The establishment of **Sector Education and training Authorities (SETAs)** as an instrument for meeting the demands for a trained workforce in different industry sectors has been done this by bringing together all stakeholders.
- The ministries stepped back from taking all the decisions as suppliers of VET programmes. By the same token, the **stakeholder-driven SETAs have had to assume responsibilities** that previously were left to the government.
- The **different culture and identity of stakeholders** in schooling, higher education and work-based learning **were not explicitly conducive to the idea of having a fully integrated NQF** in place.
- Government acknowledged the weaknesses and proposed the establishment of **new quality assurance councils**, one for Higher Education Qualifications (HEQC), one for General and Further Education Qualifications (UMALUSI) and one for Occupational Qualifications (QCTO).

Source: Bird and Heitmann, 2009.

GUIDANCE NOTE 4

Promoting funding for VET systems

Topic overview

This note aims at providing European Union (EU) staff with practical guidance to define objectives, engagement with national counterparts and adoption of a **realistic tailored approach to promoting vocational education and training (VET) funding systems**. A VET funding system basically consists of the four following key components:

- Mechanisms for **collecting** financial resources,
- Mechanisms for **allocation** of funds,
- Institutional structures for **management of funds** and
- Regulations of **control mechanisms**.

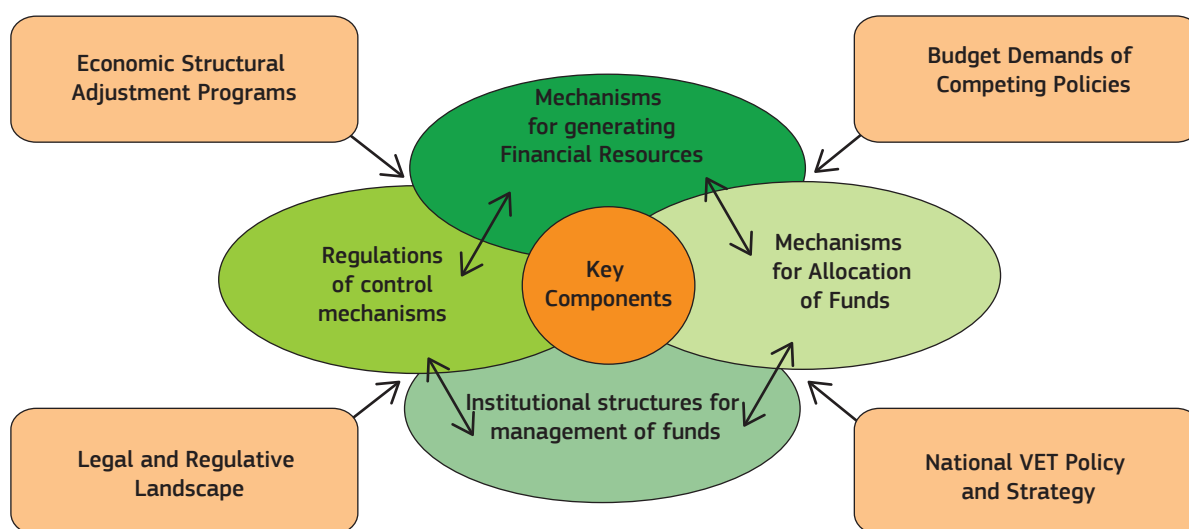
The relationship between the four components can be configured with each other through **different functional mechanisms**. For several years, a decline in public government funding for national VET systems in developing countries is largely attributable to economic structural adjustment programmes and rising budget demands of competing policies. The answer is often sought in **greater diversification of financing**, e.g. in alternative or additional sources of funding for publicly funded VET programmes. **Larger cost recovery** and **cost sharing** in the design and implementation of reformed financial systems is sought. However, public funds in most VET systems will still play a dominant role for the foreseeable future (see Figure GN4.1).

The **striving for more effective and more efficient use** of existing, scarce resources by VET providers is

SUMMARY OF KEY ASPECTS

- The government alone cannot finance all necessary VET courses countrywide, additional financial resources in the framework of diversified funding mechanisms need to be raised. Therefore, new funding allocation mechanisms are increasingly the focus of VET reforms.
- The aim of VET reforms is that those who benefit decisively from VET programmes must participate in the costs incurred in relation to the benefits they incur.
- There are two main dimensions of national VET funding models, namely the degree of centralisation versus decentralisation and the level of output versus performance orientation of the allocation of funds.
- The final key component in the construction of a VET funding system is the existence of a legislative and regulatory framework for the governance of VET funds. Use of funds and financial flows must be subject to constant monitoring or independent and transparent auditing processes.
- Engaging in a reform exercise of VET funding systems is not an easy task as the process generally refers to a quantitative and evidence-based review of the existing situation, which does not seem to be easily achievable in many developing countries.

increasingly on the forefront. Effective institutions and clearly defined and efficient business processes within and between VET institutions, which, inter alia, contain the criteria of allocation of funds, is a prerequisite

FIGURE GN4.1 Key components of VET funding systems

for the functioning of these funding mechanisms. Effective funding of VET systems can only be guaranteed if the **design of all four components is taken into account**.

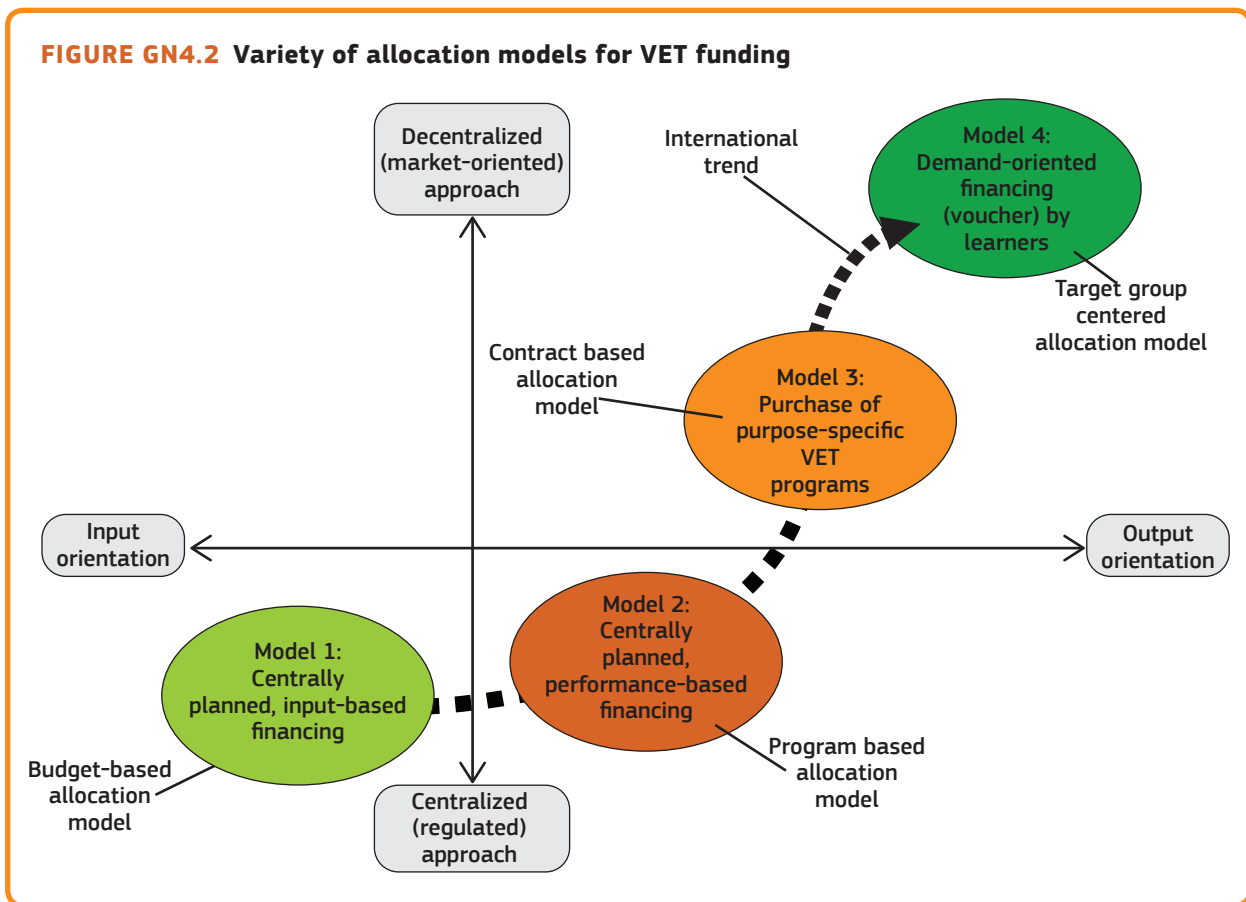
In particular, in a highly-corrupt environment, the implementation of these mechanisms is much more difficult or even impossible sometimes. Hence, funding mechanisms cannot be regarded as instruments for an end in themselves, but are often used to effect a contribution to the achievement of the national VET policy. Basically, the aim is that those who **benefit decisively from the VET programmes must participate in the costs incurred** in relation to the benefits they incur. Accordingly, the question of who is responsible for financing and how this should be done, is crucial for the VET funding policy, especially with regard to the design of the four central components of VET funding.

Practical questions about funding choices and tools on how to mobilise resources for VET systems serve as an entry point:

- How to increase the **State contribution**?
- How to reconcile **cost-sharing and equity**?
- How to make that the **private sector** contributes more?

Normally, government bears the brunt of financing the VET system, using funds collected from the country's taxpayers. As the government alone cannot finance all necessary VET programmes countrywide, additional financial resources in the framework of **diversified financing mechanisms** need to be raised. This can be implemented in principle separately or in combination. The national VET budgets can be increased by **introducing an additional VET levy**, which is collected from companies and organisations. As a rule, these are a legally defined percentage of usually 1-2 % determined by the employer's salary bill, which is paid to the government each month.

The mechanisms by which the government allocates funds to VET providers influence to a large extent the provision of incentives and also the behaviour of VET providers with a view to an effective and efficient use of funds. Therefore, **new allocation mechanisms are increasingly the focus of VET reforms** and will be displayed at this point briefly in their basic forms and core features. It makes sense, to categorise the two main dimensions of publicly funded VET funding models, namely the degree of centralisation versus decentralisation and the level of output versus performance orientation of the allocation of funds. On this basis a total of **four basic types of allocation mechanisms** can be distinguished (see Figure GN4.2).

FIGURE GN4.2 Variety of allocation models for VET funding

The various financial allocation mechanisms are suitable for use under the framework of development cooperation, where appropriate combinations thereof and/or mixed forms are possible. The precarious state of public finances in many developing countries makes necessary tightly controlled allocation processes. Input-based allocation models are often **supply-driven and do not cause VET provider to work efficiently**. Allocation mechanisms should therefore ensure an appropriate combination of necessary regulatory and incentive-based systems so that a VET provider remains competitive and viable in an environment of competing training markets.

In most developing countries the institutional structures of the VET funding system are mainly characterised by the **public finance management (PFM) arrangements governing them**. Often, one or more competent ministries or agencies are assigned by the National Treasury to spend the earmarked state budget for VET. The allocation of funds to the individual VET provider is then centralised and often purely input-based. The final key component in the

construction of a VET funding system is the **existence of a legislative and regulatory framework** for the governance of VET funds.

The design of control mechanisms in VET funding systems is highly sensitive, particularly on issues of funding. Use of funds and **financial flows must be subject to constant monitoring or independent and transparent auditing processes**. This is especially true for the appropriate use of funds particularly from the perspective of VET levy paying companies and organisations. In publicly funded VET systems, the control mechanisms are based on the statutory provisions of the respective Public Finance Management (PFM) Law at hand.

Procedure

As earlier already outlined, the competition for public funds pushes VET stakeholders to justify the **role of the government** operating the VET system, and encourages the involvement of additional VET stakeholders with

whom the costs for the VET system could be potentially shared. This **principle of the stakeholder-driven VET governance model** provides for broader input and responsibility in the VET system. However, this requires the documentation of two central aspects:

- **Evaluation of the costs;**
- **Benefits** for the various VET stakeholders.

A comparative analysis of this information would help to identify future options for sources of funding and leads to a factoring of costs and funding considerations as key parameters (see Box GN4.1) within the political decision-making process of the various policy options.

BOX GN4.1 Funding considerations as key parameters for VET financing policy

A study by the Association for the Development of Education in Africa (ADEA) and Agence Française de Développement (AFD) on financing VET concludes with a set of recommendations to public authorities and technical and financial partners that support VET funds in developing countries:

- The primary purpose of VET funds is to respond properly and effectively to the **skills needs of companies and the labour market** (continuing VET programmes and apprenticeship).
- This targeting does not **exclude the 'equity' function**, which VET funds fulfil when they develop the skills of entrepreneurs in the informal sector and support apprenticeships to promote the job prospects of young people who leave school without having acquired a minimum level of knowledge and skills.
- **The equity function must primarily be fulfilled by public authorities**, whose task is to provide skills development for groups that are the most vulnerable and excluded from education and employment.
- VET funds may, if necessary, have a remedial role, but only after having done everything **to avoid situations where remedial training is necessary**.

Source: Walther and Uhder, 2014.

STEP 1: Describe the VET system from a quantitative and financial perspective

This initial mapping exercise provides the baseline for further analysis and reasoning through an **identification of the various VET sub-sectors** (e.g. initial VET, continuous VET; apprenticeship schemes, etc.,) and relating them to the target VET policies. The assessment includes the identification of the economic and social objectives assigned to the VET system. These objectives form the reference points against which to assess the effectiveness of the VET policy. It should be possible to complete step 1 reasonably within a two-day collective workshop or similar exercise, where a national working group representing the various VET stakeholders has been created in advance. This approach implies the **official appointment of professionals** to represent the various VET institutions and services, in order to ensure the consistency, continuity and consequent effectiveness of the exercise. Ideally, the following structures should be represented or at least promptly mobilised (dependent upon the individual institutional configuration) (see Box GN4.2).

BOX GN4.2 Examples of membership in national working group

- Ministry responsible for VET (Labour, Employment or Education) — services in charge of learning courses, training of VET and trainers, human resource management, equipment and financial affairs to name a few;
- Ministry of Finance — services in charge of finance law, sector budget allocations;
- National Institute of Statistics;
- Key institutions of labour market actors expected to participate in the policymaking process, as the funding exercise is expected to inform this sector (professional entities, etc.) — not participating in all of the technical processes but to be empowered by the overall process and regularly updated.

STEP 2: Analyse costs and current funding

The second step uses the results of the mapping completed during the previous step to **retrieve and analyse the costs required by the various VET sub-sectors** and the current **funding sources**. This step allows for an understanding of the main elements associated with the current spending and an assessment of the **relevance of the cost structure** in relation to the resources. This helps to understand who currently covers these costs. Small group work in parallel (possibly groups divided by type of the VET sub-sector is recommended in order to maximise the use of time).

STEP 3: Approach benefit assessment

This step explores the **measurable benefits** expected from the identified VET sub-sectors (see step 1). Each of these VET sub-sectors will be screened against the various dimensions of **economic and social impact**, a process that will also permit the identification of possible added value. It seems possible that tracer studies can provide important feedback, especially in terms of such elements as how many VET graduates obtain a job, the types of jobs they obtain, the level of pay they receive, and how their pay compares with that of their untrained peers.

STEP 4: Explore policy options on the basis of cost-effectiveness analysis

This step moves from the retrospective perspective of assessing existing VET sub-sectors towards a prospective approach in order to consolidate the outcomes of steps 2 and 3 through a **cost-benefit analysis that fosters the exploration of alternative policy options**. Consequently, the first task is to check the strengths and weaknesses of the various VET sub-sectors against their respective costs (see Box GN4.3).

The various policy options conceived will be adapted to produce a range of possible policy mixes, which will **constitute different scenarios**. Consolidated assessment of the various VET sub-sectors and

BOX GN4.3 Guidance questions for the formulation of policy options for VET financing

The European Training Foundation (ETF) recommends three leading priority questions to help to formulate the elements of policy options derived from a multi-criteria assessment:

- To what extent is it relevant to extend **coverage of VET services** and for what types of population?
- What **VET sub-sector** should be given a higher or lower priority in the future (with the possibility that some VET sub-sectors be discontinued, while some others may be added)?
- What **adjustments** should be considered appropriate to this or that VET sub-sectors to make service delivery more efficient?

Source: ETF, 2015.

potential combinations will provide the materials for building new VET system development scenarios (see [Guidance Note 3](#)). **Cost-effectiveness and VET relevance** should be promoted such as incentives for quality VET programmes in public and private structures; promote company training; reflect on the degree of school autonomy as well as VET financing should be closely related to other key VET policy areas. As the exercise may be considered comparatively technical and complex, the cost-benefit analysis should be completed by a small team of national and international experts. The outputs of the discussions will be formulated into a **concise policy note**, including financial estimates for the various policy options.

STEP 5: Planning and budgeting of preferred scenarios

The final step works on the details of a **selected number of preferred scenarios** for future expansion or improvement of the VET system, focusing on planning and budgeting within a mid-to long-term perspective. The practical question of how to manage the VET financing chain is the guiding principal here:

- How to secure the **collection and use** of funds for VET in coherence with policy objectives?
- How to use VET financing as a vehicle to enhance the **steering capacity of government**?
- How to improve data availability, reliability and use for **VET policy decision-making**.

The aim is to **transfer VET policy decision** (or options) into a **planning and budgeting phase** in order to realistically plan and prepare for implementation.

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Case study: Learner-centred voucher disbursement VET funding approach in Georgia

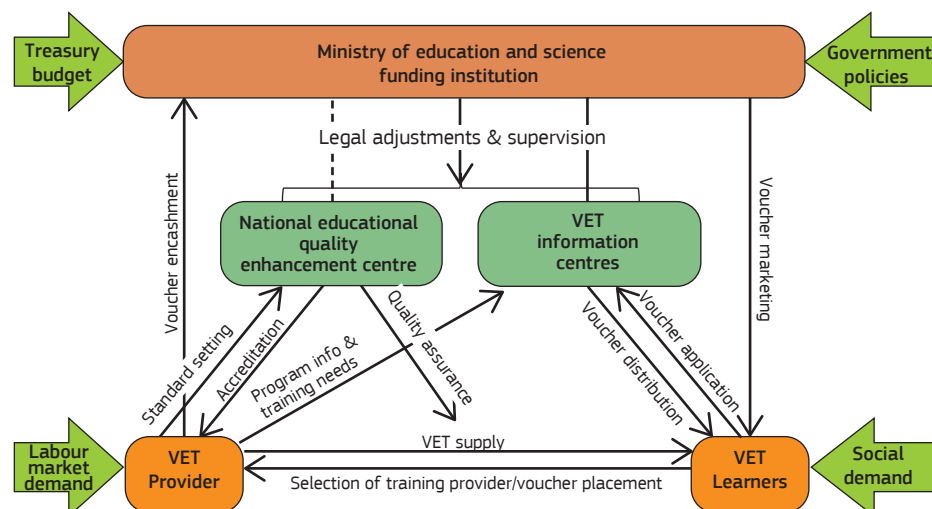
CONTEXT

The Georgian government has kick-started in 2012 the **change of the VET funding paradigm** towards a learner-oriented VET voucher disbursement approach that would allow the government to **finance a learner per capita versus financing a VET provider**. The introduction of the new VET voucher system is backed by Chapter VIII (Article 35) of the Georgian Law on Professional Education (2010) mentioning that the Ministry of Education and Science (MoES) is authorised to finance VET providers by VET vouchers, calculated for one learner's financial normative. Government funding for learners in VET levels I — III is provided under Government Decree N°96, 2012. It is the government and partly the self-paying students, rather than the enterprises/employers that bear the major burden in the funding of the present VET system.

CHALLENGES AND OPPORTUNITIES

During the past, the **availability of limited funds** has led to a tendency towards **underrating administrative and maintenance costs**, particularly maintenance of premises. While designing realistic cost structures, particular attention should be paid to administrative and operational costs in order to reduce requests from VET provider to the MoES for additional funds as this is **creating a high level of bureaucracy**. The assessment of realistic costs should be used as a calculation base for future VET voucher financing.

FIGURE GN4.3 Structure of learner-centred voucher funding approach



Source: MoES of Georgia and GIZ, 2012.

The new voucher-based VET funding allocation raised **consensual concerns by experts, VET providers and organisations** alike, in the sense that its non-differentiated nature and low face value is likely to affect the quality of training, particularly in the technical occupational areas, commonly requiring costlier inputs and processes such as equipment and materials. The mono VET voucher of 1 000 GEL leads to winners and losers at VET provider level. Public and private VET provider which are offering VET programmes with a high proportion of practical and material needs, are forced to reduce training content and training time significantly, since the value of the mono VET vouchers does not fully cover the cost of training. It is recommended that the present approach of the mono VET voucher should be replaced by an approach with differential and targeted VET vouchers based on realistic training costs incurred by VET programmes activities at different levels and diverse occupations.

ACTIONS TAKEN	<p>The developed VET funding approach can be seen as a combined voucher/grant mechanism and is rather a mixture between a target group-centred allocation and a programme-based allocation model. It can be classified as a specific Georgian VET funding allocation model. The voucher participation in the levels I — III of the VET system increased dramatically in 2012, as the number of admitted learners increased by 58 % compared with the figures of 2011. Sustainability of this growing participation in the public VET system will require predictable levels of additional public funding and measures to improve quality of VET providers and relevance of demand-driven VET programmes. The overall institutional capacity of the VET system has expanded in quantitative terms to 120 VET providers, due to the purposeful diversification of VET provision as stipulated in the amended VET Law (2010).</p>
LESSONS LEARNED	<ul style="list-style-type: none"> • The current level of financing of VET programmes through the combined voucher/grant mechanism is not on a par with the labour market demand in terms of competitiveness and jobs. This is particularly true for Georgia, which devotes only a small share of public expenditure on VET programmes. • The VET voucher financing model is learner demand-driven only. The VET learner decides which VET provider to select and what VET programme to enrol in. The VET providers look after the quality of their teaching and their supply of VET programmes, because unattractive VET programmes will not receive a sufficient number of vouchers. • The selection of areas and levels of VET programmes eligible for voucher financing are not corresponding to an objective market demand and/or social criteria, since the list of priority training occupations has been decided in an administrative manner. • The indispensable ‘up-skilling’ of the rural population will require substantial efforts of the relevant authorities to expand vouchers to rural areas and relevant training and information services.

Source: MoES of Georgia and GIZ, 2012.

GUIDANCE NOTE 5

Promoting labour market information systems

Topic overview

According to Skills Panorama⁽¹⁾, a labour market information system (LMIS) consists of systems, mechanisms or processes for **gathering, organising, providing and analysing information** about the state of the labour market, occupations and jobs, including key changes taking place within employment, jobs and occupations. Emphasis could be put on strong coordination and regular cooperation among the relevant institutions which produce labour market information. The aims of an LMIS are:

- matching **labour supply and labour demand**;
- supporting **decision-making and evaluation** of employment policy.

A 2012 survey of experts on the major challenges faced by youth in labour markets found that 54 % of 36 African countries cited a mismatch of skills between what job seekers have to offer and what employers require as a major obstacle (AfDB, OECD, UNDP, UNECA, 2012). Skills mismatches point up a poor quality of vocational education and training (VET) programmes and the **absence of linkages between VET systems and employers**.

The **LMIS helps reduce the information deficit on the labour market** and is aimed to reduce (or avoid) skills mismatch. On the other hand, if people do not have information about employment openings, they may remain unemployed. Similarly, if people do not have information about occupations, they may

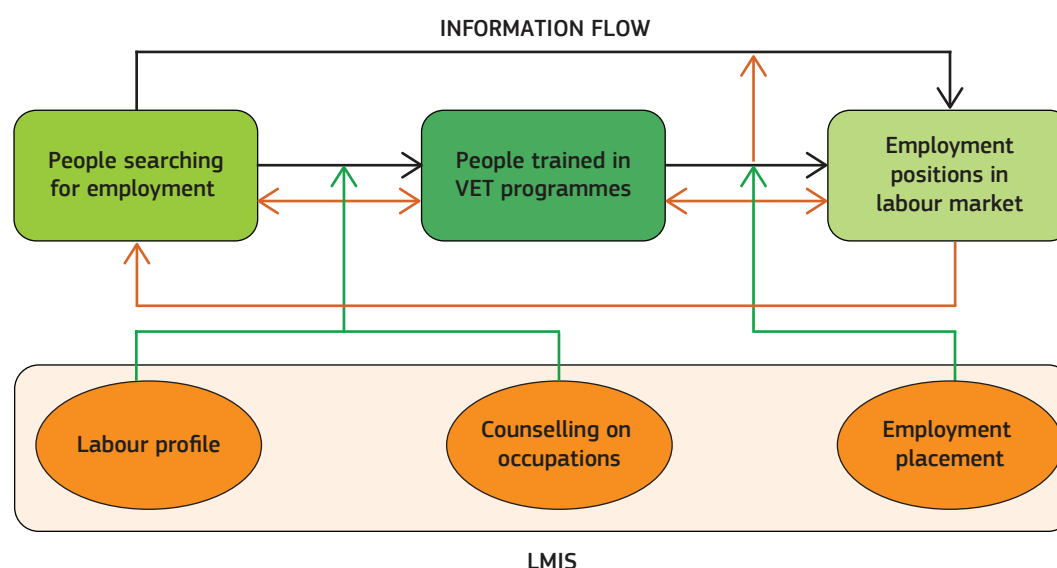
SUMMARY OF KEY ASPECTS

- The LMIS is a labour market policy instrument to improve information flow in the labour market. It can inform policies to better anticipate and match supply and demand and can reduce (or avoid) skills mismatch by providing timely information to employers, VET providers, students and job seekers.
- Skills anticipation and matching is defined as a strategic and systematic process by which labour market actors identify and prepare for future skill needs, thus helping avoid potential gaps between skills demand and supply.
- Skills anticipation should not be assumed to mean interventions by governments and public institutions on the supply side alone.
- The information on what is required in understanding technologies and markets at the detailed economic sector level requires the involvement of employer and worker representatives at that level.

choose an occupation where there is no demand for workers. Individuals seeking employment, companies offering employment and VET providers that have to make decisions about the kinds of VET programmes for the future workforce all need to assess future prospects carefully — looking to fill information deficits and avoid future imbalances and mismatches (see Figure GN6.1).

LMIS is necessary for **skills anticipation**, which is defined as a strategic and systematic process by which labour market actors identify and prepare for future skills needs, thus helping avoid potential gaps

⁽¹⁾ For a description of Skills Panorama, see <http://skillspanorama.cedefop.europa.eu/en/content/our-mission>.

FIGURE GN5.1 LMIS generic structure

Source: GIZ, 2012.

between skills demand and supply. To help advise constituents on the various means of forecasting skills needs, the European Training Foundation (ETF) has developed a practical guide on anticipating and matching skills demand and supply (ETF, 2012).

However, skills anticipation should not be assumed to mean interventions by governments and public institutions on the supply side alone. Rather, national **strategies for development, employment, industry and innovation can have significant impacts on the demand side** when accompanied by financial incentives. An example is the promotion of renewable energies, which will have an important impact on green skills demand (see [Guidance Note 13](#)). In such a case, national employment services might need to step in to support companies to better anticipate their skills needs.

Another means of improving the potential for companies and VET providers is through the **development of sectoral strategies**; this includes the establishment of sector skills councils (see the case study in [Guidance Note 3](#)). The rationale for taking a sectoral approach towards skills anticipation and matching is that different economic sectors have very different skills needs. The information on what is required in understanding technologies and markets at the

detailed economic sector level requires the involvement of employer and worker representatives at that level (see Box GN5.1).

According to an International Labour Office policy brief (ILO, 2011), an analysis of current LMIS practices has shown that developing countries that have succeeded in linking VET systems development to improved employability, productivity and employment growth have directed their VET policies towards meeting three objectives:

- matching **demand and supply** of skills;
- maintaining the **employability of workers** and the sustainability of enterprises;
- sustaining a **dynamic process** of development.

Procedure

The general approach for the promotion of LMIS is focused on **understanding the current situation in developing countries with regard to the collection of labour market information and how it is used**. Overlaid on this is the rich international experience of how European countries establish an LMIS. Of

BOX GN5.1 Anticipating and matching skills demand and supply in Bangladesh

The Technical and Vocational Education and Training Reform project (2008–2012) in Bangladesh, funded by the International Labour Organization and the European Union, is primarily focused on **skills development in the manufacturing and information technology sectors**. Initial stages of the project included mapping of relevant economic sub-sectors, with analysis of growth and employment potentials in each sub-sector and identification of future skills needs through a small-scale enterprise survey; these fed into the development of sectoral strategic plans.

Through the establishment and operation of five **industry skills councils** — made up of the key enterprises in the sector as well as government and worker representatives — the information developed on skills demand is translated into VET programmes in the identified fields at VET providers and improved placement of VET graduates, including through work-based apprenticeship programmes. Work experience components are included in VET programmes, so learners can practice their skills in a real work setting.

Source: ILO, 2008.

course, many of these countries have a mature LMIS. Even where systems are less advanced, there is no single approach that can be applied to another country as contexts such as employment policy, institutions and conventions all differ. It should be noted that the labour markets in developing countries show a high concentration towards informal economies and therefore deviate significantly from conditions in Europe. However, regardless of whatever practice is chosen, it is vital that the LMIS be appropriate for the country in question and be accepted by and meet the needs of all key players.

STEP 1: Identify and engage with key LMIS players

Key LMIS players are those who are connected to current LMIS activities in the country in question. An essential point is the interdependence of LMIS key

players and what kind of labour market information they produce. For example, **effective employer surveys need to have a good database of businesses** from which to draw a sample. Thus, a regular business survey, typically carried out by the ministry of economy, is a prerequisite and supported by timely and good quality information input from cooperative parties. The checklist in Table GN5.1 clarifies where information gaps need to be closed, and provides an initial overview.

STEP 2: Carry out an inventory of labour market information sources

The output of Step 1 will show that the collection of labour market information is fragmented, with **many organisations involved**, each with its own interest in using the information in their activities. In many developing countries, the social partners in the form of employer organisations and trade unions are interested in the potential use of an LMIS but contribute little to the LMIS due to capacity constraints. The research community is normally underdeveloped and so there are no centres e.g. in universities, studying labour market information and making analyses. Common questions to be addressed when formulating the inventory are as follows.

- How can up-to-date **information on labour demand** be obtained?
- How can the **quality of labour market information** be improved?
- How can **information on required occupations** be improved?
- How can **self-employment** be supported?
- How can employment in **specific sectors** be promoted?

STEP 3: Analyse the key weaknesses of the current LMIS

Step 2 will demonstrate that there are a number of LMIS activities in the country. Many developing countries do not have a workable LMIS yet, though some of

TABLE GN5.1 Example of relevant LMIS key players

GOVERNMENT AGENCIES	<ul style="list-style-type: none"> • National statistics offices • Ministries (labour, education, economics, finance, etc.) • Public employment services • Regional development agencies • Regional and local governments
EDUCATIONAL INSTITUTIONS	<ul style="list-style-type: none"> • Public and private schools (all types) • Centres for further education and training • Higher education institutions • Other training providers
EMPLOYER BODIES	<ul style="list-style-type: none"> • Federations of industry • Chambers of commerce • Sector training bodies
EMPLOYEE BODIES	<ul style="list-style-type: none"> • Confederation of trade unions • Trade unions without membership in an umbrella organisation • Small business organisations/informal trade associations
RESEARCH COMMUNITY	<ul style="list-style-type: none"> • Higher education research bodies • Research centres/institutions
OTHER ORGANISATIONS ACTIVE IN THE LABOUR MARKET	<ul style="list-style-type: none"> • Employers without membership in an umbrella organisation (public and private sectors) • Private employment broker • Non-governmental organisations by means of various projects

the basic ingredients are in place and this could provide a useful foundation for further development. The starting point for the analysis might be the following list of **common weaknesses** which can be observed in many countries:

- **lack of confidence** in some of the main sources of LMIS (e.g. labour force data not regularly published);
- **lack of information technology infrastructure**, e.g. manually collected data are not computerised and thus limit opportunities for analysis;
- **limited resources** in employment services restrict the extent and quality of employer interaction;
- no **systematic assessment** of employer VET needs across all economic sectors;
- weak **structural mechanisms** linking policy practice with movements in the labour market;
- **no forward-looking** labour market analysis.

STEP 4: Explore policy options on organisational forms of information channels

Job seekers are not a homogeneous group, and **every individual may need different types of information**. Some job seekers are already well informed and are only looking for vacancies. Others need more profound counselling. Some information channels are less accessible for certain groups of job seekers, especially when special skills like computer knowledge are required to perform the job search; sometimes, even reading skills may be a barrier.

Countries providing an LMIS therefore usually offer **different channels of information** to be able to serve the various needs of job seekers, employers and government institutions. An already widely used and further expanding information channel is access to electronic job market databases. Access is very often organised, for instance, by offices of the national statistical agency and/or job centres of the national employment service. A computer-based LMIS may provide information on the labour market itself as

well as on VET programmes offered. Under-emphasis of labour market information related to the analysis/dialogue/policy action aspects should be avoided.

The main target group for a **computer-based LMIS** is job seekers with a recent work history and good skills who are very likely to find a new job quite easily. Common questions to be addressed when formulating policy options include the following.

- Are there any **job vacancies**?
- What **kind of unemployment** is prevailing?
- Can the **unemployed be reached**?
- What are the **organisational structures** that can be used for installing an LMIS?
- How can the LMIS be **funded**?

National employment and training observatories (also known as labour market observatories) can be found at the sectoral (industry), local, national, regional or international levels. They often consist of employment services; education planners; training providers; career counsellors; small and medium-sized enterprises (SMEs); employer and employee organisations; non-governmental organisations; and civil society groups involved in human resources development, skills formation and employment issues. Observatories work hand in hand with national training organisations and vocational training centres (ILO, 2003).

STEP 5: Planning and budgeting of preferred LMIS scenarios

The final step works out the details of a selected number of **preferred scenarios for future expansion or improvement of the LMIS**, focusing on planning and budgeting within a mid- to long-term perspective. The aim is to transfer the policy decision (or options) into a planning and budgeting phase in order to realistically plan and prepare for LMIS implementation. The ideas to be presented under Step 5 offer a first attempt at developing an action plan for an LMIS that meets the current needs of the country and responds

to the need to set up an LMIS that will develop over a reasonable time frame. It builds on the current LMIS foundation and enhances some existing methods of information collection that would offer some relatively quick results.

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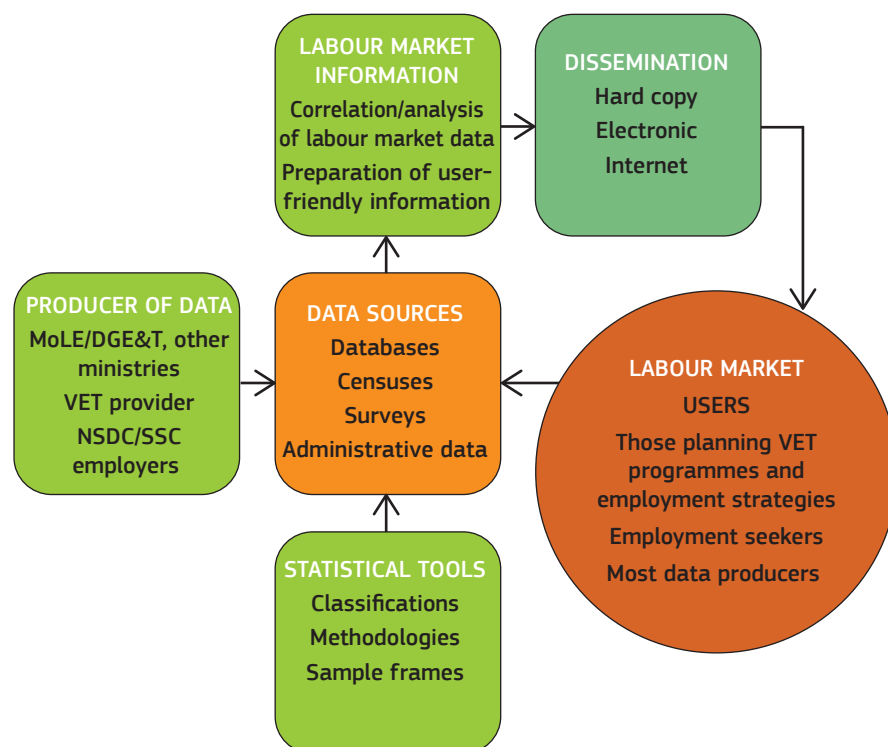
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Case study: Pilot project for LMIS in India

The **India-EU Skills Development Project** is meant to support key stakeholders in implementing selected aspects of the Indian VET policy. Component 3 of the project aims to enhance an LMIS and analysis practices at the national level and at the state/industrial cluster level on a pilot basis. More specifically, with regard to labour market information available at the state/cluster level, it was planned to pilot new or amended methods of implementing a sector LMIS (see Figure GN5.2), drawing on resources allocated by stakeholder-driven sector skills councils (SSCs). The first sector LMIS has been tested with the stakeholder-driven Automotive Skills Development Council in the state of Maharashtra.

FIGURE GN5.2 LMIS conceptual framework



Source: India-EU Skills Development Project, 2013.

Note: MoLE/DGE&T = Ministry of Labour and Employment/Directorate General of Employment and Training; NSDC = National Skills Development Corporation.

CHALLENGES AND OPPORTUNITIES

Given the current Indian policy agenda of having to capacitate large numbers of people, the purpose of collecting qualitative and evidence-based labour market information seems out of sync with the key players' **focus on large numbers and quick results** — which does not match the pilot project's focus on the qualitative aspects of the LMIS. From the start, there have been different expectations on planned outcomes, and the expectations of key players have always exceeded what can actually be achieved by a limited pilot project with a focus on quality rather than quantity.

ACTIONS TAKEN	<p>A survey methodology and tool has been developed consisting of an enterprise questionnaire; this was piloted with enterprises in New Delhi and amended based on their feedback. A criteria-based selection process of identification of enterprises in Maharashtra has been used taking into consideration different sub-sectors and company sizes, and addressing both the organised and unorganised (informal) sectors.</p> <p>The project attempted to eliminate as many inconsistencies and mistakes as possible prior to implementation of the survey. However, some lessons were learned during this stage of the LMIS. The questionnaire needs to be piloted, and there should be enough time allocated prior to the survey for a thorough review and adaptation of the survey instrument. Future surveys might also involve the chamber of industry and commerce at the district level and/or any other employers' organisations with a good local network prior to implementation.</p>
LESSONS LEARNED	<ul style="list-style-type: none"> • The design of any LMIS requires time and effort be spent on agreeing on objectives which are realistic and linked to achievable results. • The SSCs in particular need to make a firm commitment to the LMIS in terms of time, staff, information and networks, and should continuously involve themselves to improve knowledge and build their own capacity. • The method of using random sampling of companies is only feasible if there is an up-to-date database of employers made available to the survey team, preferably including contact details of human resources development and training managers. • The questionnaire as the main analysis tool for a qualitative LMIS cannot be standardised for all economic sectors and has to be adjusted to the specific purpose and objectives. It must address the different features of the organised and unorganised sectors. • Implementation of an LMIS requires appropriate and ongoing administrative and management support.

Source: India-EU Skills Development Project, 2013; The Development of Labour Market Information Systems; <http://www.india-euskills.com>.

GUIDANCE NOTE 6

Promoting national qualifications frameworks

Topic overview

The European Qualifications Framework (EQF) is a common European reference framework, linking countries' qualifications systems/frameworks. It covers qualifications at all levels and in all sub-systems of education and training — general and adult education, vocational education and training (VET) and higher education. Its main role is to **make qualifications more readable and understandable across different countries and systems**. The EQF's main components are a set of eight reference levels described in terms of learning outcomes (a combination of knowledge, skills and/or competences) and mechanisms and principles for voluntary cooperation. The eight levels cover the entire span of qualifications from those recognising basic knowledge, skills and competences to those awarded at the highest level of academic and professional VET.

By 2015, national qualifications frameworks (NQFs) had been introduced in all 39 European countries cooperating in the EQF⁽¹⁾. However, the **development of NQFs is not limited to Europe**. According to the 2015 *Global Inventory of Regional and National Qualifications Frameworks*, more than 150 countries and territories are currently involved in the development and implementation of NQFs (UIL, ETF and Cedefop, 2015). Raffe (2009) places NQF development on a continuum stretching from communication to transformational frameworks (see Figure GN6.1).

However, rather than categorise NQFs as either communication or transformation (or reform) frameworks, it is evident that NQFs can **combine communication**

SUMMARY OF KEY ASPECTS

- The NQF is a social partner-driven policy instrument for the education and training system to improve the quality and transparency of nationally recognised learning outcomes-based qualifications.
- The NVQF is a sub-framework of broader NQF development, supporting lifelong learning and the inclusion of non-formal and informal learning. There is no universal definition or model for NVQFs; each is country specific.
- The multi-stakeholder dialogue needed to develop an NQF is in itself a positive result, as it can contribute to improving communication, trust and shared responsibility for education, training and employability among different actors.
- The social partner should take a leading role in NQF development. However, this may not be realistic in many countries, where the private sector lacks coordination and representation structures.
- Competence- (or learning outcome-) based training is a teaching/learning method which both ensures performance at work and enables definition of VET qualifications.

and transformation functions and roles in different ways, reflecting the particular national situation and context. This flexibility, which grows more apparent as NQFs mature and become operational, creates the opportunity for more targeted strategies in which NQFs are used as reform tools in particular areas and as communication tools in other areas and sectors.

⁽¹⁾ EU member states, candidate countries, Liechtenstein and Norway.

FIGURE GN6.1 Continuum of NQF development frameworks

COMMUNICATION	TRANSFORMATION
Starts from existing education and training system	Starts from a vision of future education and training system
Incremental change	Reform and transformation
Tool for change	Driver of change
Bottom up	Top down
Voluntary	Statutory/regulatory
Providers have central role	Providers included among stakeholders
Loose	Tight

Source: Raffe, 2009.

This targeted strategy requires **NQFs to be firmly embedded in the national political and institutional setting**. In cases where NQFs are taken forward as isolated initiatives outside regulatory systems and their day-to-day operation, their ability to make a difference is seriously reduced. In some countries, NQFs have become important agents of change and have taken on communication and reforming roles — e.g. concerning the shift to learning outcomes.

These various roles and processes are illustrated in Table GN6.1.

NQF development involves important questions about the **most effective way to establish VET standards**, frame the curriculum and assessment procedure, and recognise the knowledge and skills that learners have already acquired in the workplace and community through prior learning. International reviews of NQF reforms differ in their assessment of their relevance and successes.

International experience in designing and implementing NQFs suggests the need to ensure that the NQF system developed is fit for both purpose and context. Fitness of purpose is ensured by constructing the NQF on the basis of a **careful analysis of the needs and aspirations of the societies** in question, and in ways that encourage ownership by national stakeholders.

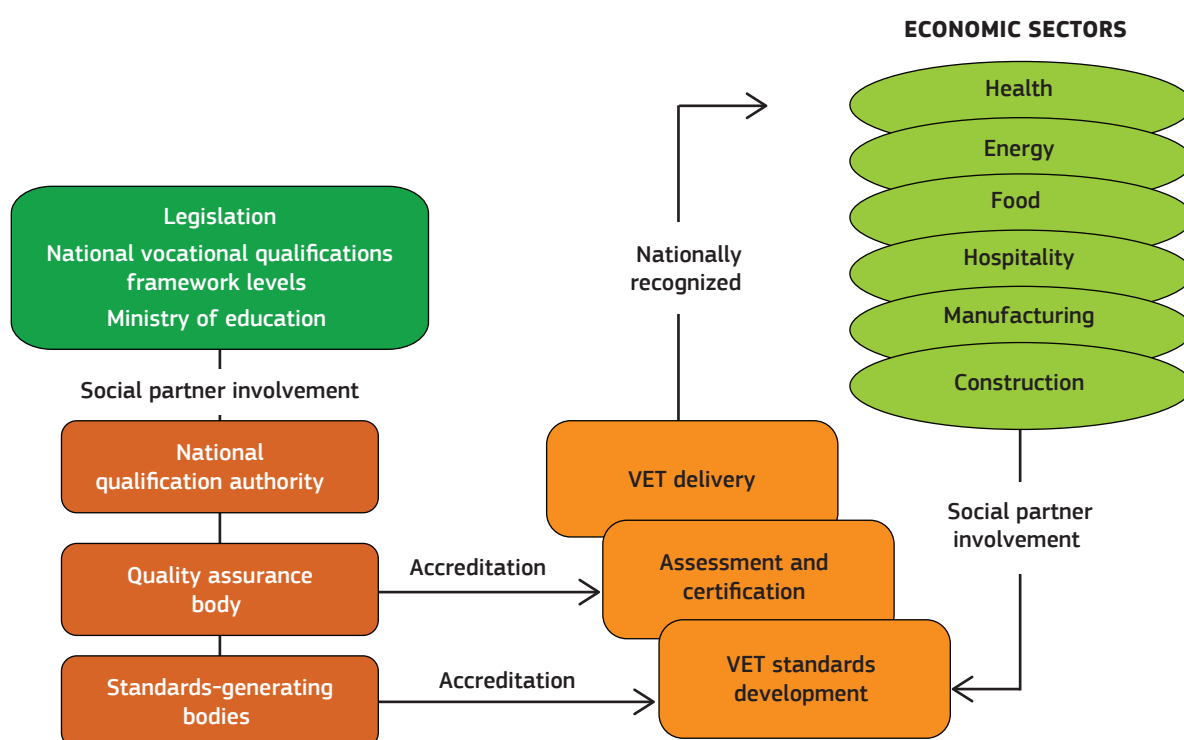
Although there is no single international model, most NQFs share some broad common elements, as shown in Figure GN6.2. They are based on **identification of learning outcomes** in all economic sectors that define levels and often types of qualifications, registered at a respective national qualification authority. The levels are distinguished in an approximate way through criteria such as knowledge, skills, aptitudes, attitudes and competences. Different qualifications and types of qualification are attached to these

TABLE GN6.1 NQF communication role and processes vis-à-vis formal recognition of qualifications

STARTS FROM PRESENT EDUCATION AND TRAINING SYSTEM	NQFs can support existing arrangements for recognition at the international, national and institutional levels by providing transparency and improved documentation on qualifications
INCREMENTAL CHANGE	NQFs can facilitate recognition on a longer-term basis by strengthening mutual trust and thus removing obstacles to recognition; this can only happen on an incremental basis and over time
TOOL FOR CHANGE	NQFs stand out as one tool among several supporting and facilitating recognition
BOTTOM UP	As important decisions on recognition will be taken at local institution level, NQF impact depends on their ability to strengthen transparency among end users
VOLUNTARY TOOL	As tools for communication, NQFs need to be trusted as high-quality information sources and to play a role
CENTRAL ROLE OF PROVIDERS	Providers play a key role in recognising the need for further learning and will therefore play a key role in NQF application for this purpose

Source: UIL, ETF and Cedefop, 2015.

FIGURE GN6.2 Elements of NQFs



levels using learning outcomes and competence criteria rather than the traditional duration or location of courses.

For the past two decades, **competency-based training (CBT) models** of curriculum development and instruction have been introduced in numerous countries with the aim of:

- identifying the practical skills that comprise different VET profiles and the standards of performance required for successful employment;
- in recent years, incorporation into NQFs that provided mechanisms to standardise and update the different qualifications profiles required by the workplaces.

CBT is viewed as being **VET training that is focused on the outcomes** of the process rather than on its inputs: in other words, the attained competences. It uses workplace-oriented competency standards as the basis for VET curriculum development, and is geared towards developing skills to the standards employers

will recognise. CBT is often modular in structure, and includes both on-the-job and off-job components.

It is worth mentioning that long-time existing NQFs, such as the Scottish Qualifications Authority (SQA) took over 30 years to develop and is the culmination — and not the beginning — of a reform process that lasted decades. NQFs can contribute to making qualifications comparable by providing a certain structure, standards and assessment criteria. If conducted in an inclusive manner, the **multi-stakeholder dialogue needed to develop an NQF** is per se a positive result, as it can contribute to improving communication, trust and shared of responsibility for education, training and employability among the relevant actors (see Box GN6.1).

Quality assurance arrangements are included to support NQF management and ensure the quality of NQF procedures. Some NQFs cover all qualifications, while others are related to sub-frameworks such as national vocational qualifications frameworks (NVQFs) alone. Quality assurance of VET programmes is recognised as important in countries as diverse as Australia,

BOX GN6.1 The NQF in Mauritius

The development, implementation and maintenance of the Mauritian NQF was entrusted to the Mauritius Qualifications Authority (MQA), under the terms of the Mauritius Qualifications Authority Act 2001 (No. 42). The NQF was created to play two distinct roles:

- to organise qualifications across the three main sectors of the education and training system — primary and secondary education, technical and VET/workplace, and tertiary education;
- to be a mechanism for designing new outcomes-based qualifications and reforming educational provision in the VET/workplace sector.

The Mauritian NQF has enjoyed some success as an organising framework — that is, relationships between qualifications do appear to be more explicit and better understood. However, it appears to have enjoyed very limited success as mechanism for designing new qualifications and reforming delivery.

It has been suggested that some of the objectives of the Mauritian NQF were unrealistic and that it has become embedded in, but has not solved, institutional problems. The MQA is responsible for establishing representative committees to generate new qualifications. These qualifications are made up of unit standards which specify the outcomes and assessment criteria the learner must meet in order to achieve the qualification.

Source: Marock, 2011.

Egypt, Ghana, Jordan, Malawi, Pakistan, South Africa and Turkey, to name a few.

Oversight authorities have been established to regulate quality assurance such as the South African Quality Council for Trades and Occupations (QCTO). Typically, these authorities have an overall responsibility for improving dialogue among stakeholders, quality, access, etc., but do not take over the detailed administrative responsibilities of relevant ministries. Usually these authorities are responsible for developing and implementing quality assurance procedures and, at times, for developing policy tools such as qualifications frameworks. Some examples of these authorities are

Ghana's Council of Technical and Vocational Education and Training (COTVET), Egypt's National Agency for Quality Assurance and Accreditation (NAQAA) and the Malaysian Qualifications Authority, which is also responsible for quality assurance of higher education and vocational education.

NQFs can also be used as a platform to assist in the creation of representative bodies for employers and employees or build the capacity of existing organisations. VET policy reform processes always affect a **range of stakeholders with potentially conflicting interests**. The role of the state is to ensure that the potentially conflicting interests of the different stakeholders are balanced out. This is important throughout the entire NQF reform process: from setting out the objectives at the beginning to its design through implementation and financing. The reform process — and, if deemed pertinent, the NQF — needs to be developed with the inclusion of as many relevant stakeholders as possible such as national and international enterprises; employers' associations, unions, VET providers, and public administration involved in VET and labour market-related issues, and civil society.

Workplace representatives should take a leading role in NQF development. Their role is important to the success of a developmental NQF approach. The intrinsic logic of the **NQF needs to be aligned with the labour market**. In many countries, the initial task of designing and developing NQFs has brought stakeholders who do not ordinarily cooperate with or speak to each other (see Box GN6.2).

Where NQFs are created under time pressure, they have no **space in which to evolve and become mature**. During the second half of the 1990s, the Government of South Africa thought that a comprehensive and ambitious NQF could be created within a couple of years. Non-delivery, for various reasons, is probably the most worrisome failure of emerging NQFs. The often propagated short cut of taking another country's NQF as a blueprint and quickly adopting and adapting the imported national occupational standards and instruments can easily lead to lack of know-how, lack of local ownership and a new dependence on the exporting country.

BOX GN6.2 NQF development in Kazakhstan

In terms of qualitative matching, major developments have been initiated and partially implemented. An NQF was adopted, and sector frameworks are under development. Within three years, 350 vocational standards have been developed which consider employer requirements, and VET curricula revision is under preparation. In addition, independent certification of qualifications, under the responsibility of employers and sector associations, is being explored via the establishment of centres for six key economic sectors. It is not yet known whether such centres can handle all skills certification or whether this will partially remain with the Republican Scientific Methodological Centre, which currently performs this function for VET graduates, though with a more academic approach. VET qualifications have been developed at the system level mostly with employers — notably since 2013, via the involvement of the Chamber of Entrepreneurs, an organisation representing employers at the national and regional levels.

Despite these positive developments, the involvement of employers — and especially the small and medium-sized enterprise sector — remains an important challenge. The experience of large-scale reform of the qualification system has led to the identification of further issues to be addressed, such as a review of the classifier for VET. The key priority, however, is stronger involvement of employers.

Source: ETF, 2015.

Assessment seems to be the weakest point in many NQFs. In many developing countries, the development of VET quality assurance procedures and mechanisms is a work in progress. If this issue is neglected because the system is compromised, then the NQF as a whole will be undermined.

Procedure

Many developing countries are seeking to bridge the gap between educational institutions and labour markets, in some instances to improve on previous supply-driven VET systems. The International Labour Office in 2009 examined the implementation and impact of

NQFs in 17 countries around the world. The ILO study found very limited positive evidence in favour of NQFs. While in many cases this could have been because of the early stage of their development, considerable evidence of numerous difficulties was also found. A **central difficulty was employer involvement**: in nearly all cases, employers did not participate in structures designed for them to lead, despite the desire of policymakers for employer leadership.

STEP 1: Describe the current state of NQF development

Step 1 provides the baseline for further analysis and reasoning through a **quantitative mapping of the current status of the NQF**. This step aims to build a shared diagnostic assessment of the current NQF as a basis for identification of its key functional parameters. Given past worldwide experience with low social partner involvement, it is recommended that a stakeholder-driven national working group be established capable of designing new NQF policy options. This working group must be convinced of the need for such a process, with trust being built in particular between representatives of the public and private sectors through this concrete exercise.

STEP 2: Analyse the involvement of social partners

Step 2 uses the mapping completed in Step 1 to determine and analyse the involvement of social partners required for the development of a system for demand-driven VET qualifications in which VET qualifications and certification are quality assured and recognised nationally. This step will enable understanding of the main elements associated with the development of the NVQF as a sub-qualification framework of broader NQF development. Following this analysis, the development of a stakeholder-driven NVQF could be shared between the public and private sectors to some extent.

STEP 3: Approach labour market benefit assessment

Step 3 explores the **measurable benefits expected from the demand-driven VET qualifications**

described under Step 1. A word of caution is required here, as all of the qualifications identified must be measurable in terms of learning outcomes. Many NQF reforms take place over a long time span, meaning that their benefits mostly refer to long-term impacts on the labour market, leaving little opportunity for measurement of short-term results.

STEP 4: Explore policy options on the basis of social partner involvement

Step 4 consolidates the results of Steps 2 and 3 through a **social partner involvement analysis** that fosters the exploration of other NQF policy options. The adoption of such a forward-looking perspective is made possible through use of the key functional parameters identified in Step 1, thereby converting these into levers for change to move from a retrospective perspective of assessing current VET qualifications to a prospective perspective exploring alternative VET policies or measures to improve the relevance of VET programmes offered.

STEP 5: Planning and budgeting preferred NQF scenarios

Step 5 looks at the details of a limited number of **preferred scenarios for future expansion/improvement of the VET system**, focusing on planning and budgeting within a mid- to long-term perspective. The aim of Step 5 is to transfer the policy decision (or options) into a planning and budgeting phase in order to realistically prepare for implementation. These NQF scenarios will be designed to anticipate any evolution in the NQF from the baseline year to the horizon for an NQF reform on a year-by-year basis. If any substantial changes are expected, a medium-term horizon (e.g. 10 years) would generally be a preferable reference

term in order to provide a more realistic overview of the rate of change.

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Case study: Uganda's Vocational Qualifications Framework

CONTEXT

In Uganda, the majority of workers are in the informal economy, and some 70 % of the Ugandan workforce continues to work in agriculture. Employment in the non-agricultural informal sector (comprising mainly micro-enterprises, own account workers and unpaid family workers) accounts for 18 % of total employment. The Ugandan Vocational Qualifications Framework (UVQF) was officially introduced through the Business, Technical and Vocational Training (BTVET) Act of 2008. The act's objective is, among other concerns, to provide relevant knowledge, values and skills for purposes of academic progression and employment in the labour market as well as to enhance the **productivity capabilities of individuals for employment and self-employment**. The UVQF initiative was originally led by the Ministry of Education and Science. Conceptualisation and piloting was intended to be a meso-level approach involving industry associations, trade unions and the Association of Private Training Providers (UGAPRIVI). However, the Ugandan government has changed the implementation process into a government-driven top-down approach.

CHALLENGES AND OPPORTUNITIES

Establishment of the UVQF was triggered by a number of issues such as **lack of employment relevance of existing VET programmes**, hampering the productivity of industries and businesses, provision of access to vocational qualifications and — in turn — employment for some 800 000 school leavers annually.

Furthermore, **reductions in the cost of training programmes** was expected through the introduction of modular training and the encouragement of on-the-job training in the private sector. The four proposed competency levels envisaged (see Figure GN6.3) begin with an entry level and go up to UVQF Level 4, which is seen as the equivalent of a national diploma. However, whether this will materialise is uncertain, because the National Council for Higher Education (NCHE) has always claimed that the national diploma belongs to higher education and should therefore be under its jurisdiction.

FIGURE GN6.3 The Ugandan Vocational Qualifications Framework

Virtual NQF	General education GEQF	Higher education HEQF	VET UVQF
NQF 8		HE 4	
NQF 7		HE 3	
NQF 6		HE 2	
NQF 5		HE 1	UVQF 4
NQF 4	GE 4		UVQF 3
NQF 3	GE 3		UVQF 2
NQF 2	GE 2		UVQF 1
NQF 1	GE 1		

Source: Heitmann, 2012.

Note: The educational sub-sectors of general education, higher education and VET are self-contained, with no or marginal interfaces between them, resulting in a virtual NQF.

ACTIONS TAKEN	<ul style="list-style-type: none"> • The Developing a Curriculum (DACUM) job analysis approach has been used for national occupational standards development. Working groups consisting of industry experts and school instructors develop test item banks and training modules. Performance criteria are included in performance test items. Assessment standards in the form of criterion-referenced practical/performance test items and written test items for theory and understanding are mandatory. Overarching criteria exist and are used during item development, test paper composition and test conduct. In some cases, the performance assessment has to be conducted at workplaces (e.g. in restaurants for waiters/waitresses). • The BTVET Act envisages assessment of prior learning (APL). Mechanisms to allow a transfer from the UVQF to other sub-sector qualifications frameworks are stated in the BTVET Act in principle, but are neither conceptualised nor regulated yet. Many stakeholders wish to have upward mobility to higher education regulated.
LESSONS LEARNED	<ul style="list-style-type: none"> • The BTVET Act makes provision for the assessment of prior learning (APL) against the UVQF. • Learners from VET providers who have acquired skills in the informal economy will have the chance to rejoin the system of formal VET programmes. The UVQF does not per se guarantee good quality teaching and learning outcomes. • The UVQF development process is highly donor driven. The national government was heavily involved, represented by a varying combination of ministries (education, labour, finance, etc.), but other stakeholders such as the private sector were not always and permanently involved. • Considerable resources have been dedicated from donors to the design of a highly complex UVQF system. This can be an exhausting process for all actors involved and draws attention away from practical aspects of implementation.

Source: Heitmann, 2012.

GUIDANCE NOTE 7

Implementing an efficient and effective VET delivery cycle

Topic overview

The development and formulation of effective vocational education and training (VET) policies is a difficult task (see Guidance Notes 1, 2, 3, 4, 5 and 6), but successful implementation of these VET policies can be even more difficult. One of the major goals of a reformed VET system is to produce graduates who show work readiness and employability. To move towards this overall goal, it is necessary to **strengthen the internal efficiency of operations as well as external effectiveness** at the VET provider level. Both dimensions constitute the VET performance matrix (see Figure GN7.1), comprising four basic performance models reflecting different performance levels. For the analysis of VET provider performance, two central questions need to be applied.

- How do key factors of the VET delivery cycle affect the internal efficiency of operations?
- How do key factors of the VET delivery cycle affect external effectiveness??

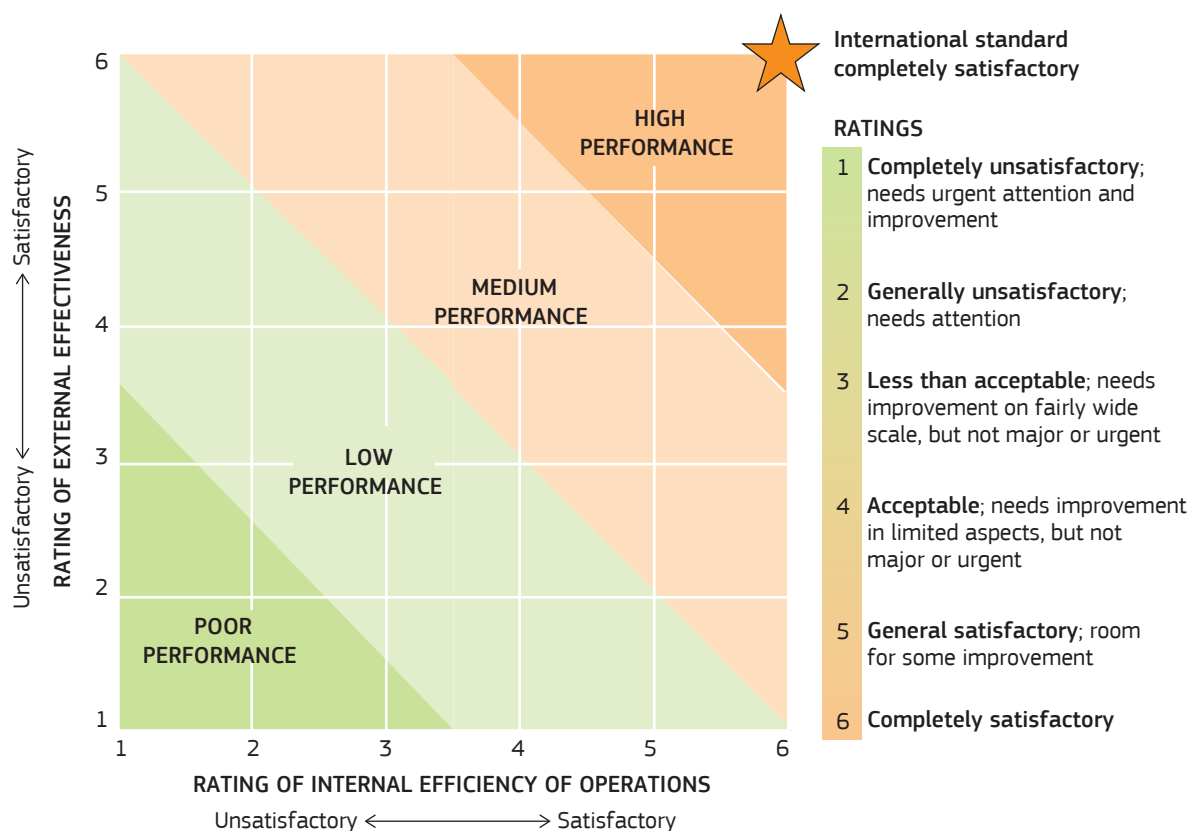
The VET performance matrix can be used as a conceptual framework to visualise the four basic performance models of VET providers.

Diagnosing the **internal efficiency** of VET provider operations — and, in particular, identifying inefficiencies and their causes — requires both qualitative and quantitative analysis. An assessment format is needed for systematically recording subjective judgements on the following five key benchmarks:

- quality and **content of VET programmes** and short-term courses;

SUMMARY OF KEY ASPECTS

- The aim of internal efficiency is to show the state of operational health of a VET provider with respect to each key factor so that deficiencies can be identified and the scope and nature of remedial action determined.
- External effectiveness measures how well VET providers are meeting labour market demands and, consequently, contributing to increase employment.
- VET providers can achieve a high internal efficiency but have low external effectiveness. This happens, e.g. when a VET provider spends its resources efficiently teaching the wrong thing in terms of graduates' employment needs.
- To enable the assessment of key benchmarks, a suitable instrument must be designed to collect the necessary information covering the qualitative and quantitative aspects of the VET delivery cycle.
- Based on the results of the VET provider performance matrix, the analysis allows selection of options to obtain a best-fit option leading to the recommended overall project intervention strategy.
- After planning implementation, a project overview plan should be detailed to include operational planning. As described here, a project overview plan is a harmonised and comprehensive document that identifies all the key options, necessary decisions and activities for implementing the long-term intervention strategy.

FIGURE GN7.1 Basic VET performance matrix

Source: ETF and GIZ Albania, 2014.

- selection and **admission of learners**;
- staffing and **staffing development**;
- condition of **facilities and equipment**;
- **organisation and management** in VET provider operations.

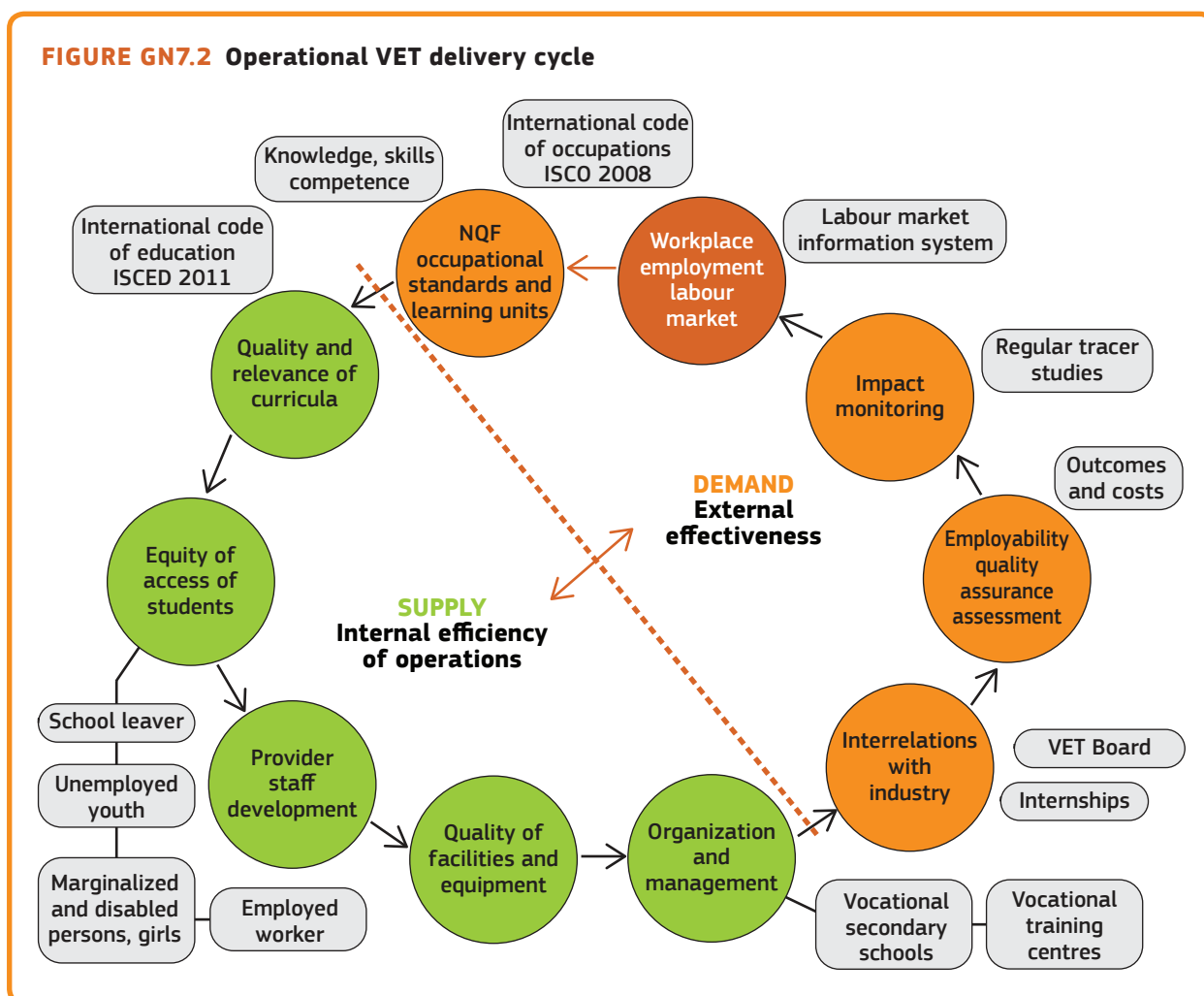
External effectiveness measures how well VET providers are meeting labour market demands and, consequently, contributing to increase employment. It calls for information on these five key benchmarks:

- formal **links and interrelationships** with local industry;
- employability and **work readiness**;
- training **costs and outputs** in order to establish

the basis for an assessment of VET provider fulfilment of its purpose;

- **training in a real-life work environment** and work exposure of vocational teachers and instructors;
- linkages with **occupational standards**.

The 10 listed key benchmarks constitute the **operational VET delivery cycle** (see Figure GN7.2) and describe the quality level of the provision of efficient and effective services rendered by the VET provider. The level of performance delivered by the provider is visualised using the VET performance matrix and subsequently assigned to one of the four basic performance models after successful assessment of all 10 key benchmarks. The aim is to show the state of operational health of the VET provider with respect to each benchmark so that deficiencies can be identified and

FIGURE GN7.2 Operational VET delivery cycle

the **scope and nature of remedial action** determined for a planned VET delivery project; this might be a single project intervention or part of a broader sector project.

Paradoxically, a VET provider can achieve a **high internal efficiency but show low external effectiveness**. This happens, for example, when a VET provider spends its resources efficiently teaching the wrong thing in terms of graduates' employment needs. Or a VET provider can turn out far too many expensively trained graduates of certain types and too few of other types relative to labour market needs and employment opportunities. The first set of graduates may have been well trained, but if too few jobs are available in that field, the investment in their training is likely to produce few benefits.

Procedure

The procedure presented here is a model of project implementation for a post-secondary VET delivery cycle.

STEP 1: Define the form and content of a VET delivery project

Information has to be collected to enable **assessment of the key benchmarks** covering internal efficiency and external effectiveness. The assessment is based on a six-point rating scale, with values ranging from 1 for completely unsatisfactory to 6 for completely satisfactory performance. The two major results of the summative assessment are then used for positioning VET providers in the VET provider performance matrix (see Figure GN7.1). The analysis allows discussion of

options to obtain a best-fit option that leads to the recommended model for post-secondary VET programmes (see Box GN7.1).

STEP 2: Ranking of economic sectors for project implementation

Comparative assessment of 12 economic sectors can be done in order to prepare recommendations and conclusions for decision making at the stakeholder level. The following three criteria are used during the ranking process and contextualised to the project at hand.

- **Responding to an urgent labour market demand.** To what extent is the future post-secondary VET programme able to rectify the skills needs of the enterprises based in the given economic sector?

BOX GN7.1 Options for post-secondary VET programmes — example

- **Model 1.** Post-secondary VET programmes with a strong focus on **academic** knowledge would be the domain of professional colleges at universities. Typical post-secondary VET programmes are here offered for health associate professionals as well as business and administration associate professionals, to name a few.
- **Model 2.** Post-secondary VET programmes with a **mixed** ratio of knowledge and practical workplace-based skills would be the domain for cooperation between professional colleges at universities and workplaces at companies and/or vocational education schools and vocational training centres. Typical post-secondary VET programmes are here offered for information and communications technicians as well as science associate professionals, to name a few.
- **Model 3.** Post-secondary VET programmes with a strong focus on **vocational** basic skills as a precondition for post-secondary VET programmes would be the domain of multifunctional VET centres. Typical post-secondary VET programmes are here offered for engineering and mechanics technicians, to name a few.

- **Reducing a systemic VET deficit.** To what extent will the identified post-secondary VET programmes show an exemplary and systemic impact for overall VET provision?
- **Contributing to the introduction of new innovative technologies.** To what extent is the identified post-secondary VET programme contributing to the introduction of new technologies?

The ranking of the 12 economic sectors shows mixed results, as shown in Table GN7.1.

STEP 3: Plan the project implementation

The implementation process of an efficient and effective post-secondary VET delivery cycle has to be based on an integrated work package (result areas) to improve the relevance and quality of post-secondary VET programmes. This should target the following.

- **Regulatory framework.** Clarification of responsibilities and development of regulations in close cooperation with experts from the higher education and VET sector.
- **Vocational standard development.** Generation of professional competency-based standards in close cooperation with field experts from enterprises for four post-secondary VET programmes.
- **Curriculum development and teaching materials.** Design and implementation of competency-based, demand-responsive curricula for four post-secondary VET programmes.
- **Industrial attachments or dual-form post-secondary VET programmes.** Develop and implement practical internships, industrial attachment or dual-form post-secondary VET programmes to promote students' hands-on experience in and exposure to a relevant work environment.
- **Quality assurance and assessment.** Design and implement competency-based training process assessments and summative assessments of learners in order to meet industry standards.

TABLE GN7.1 Comparative ranking of economic sectors — example

ECONOMIC SECTOR	CRITERIA 1: LABOUR MARKET DEMAND	CRITERIA 2: SYSTEMIC VET DEFICIT	CRITERIA 3: NEW INNOVATIVE TECHNOLOGIES	RANKING
Agri-food processing	+++	++	+++	1
Agri-technology and production	++	+	+++	5
Agri-management	+	+	+	12
Renewable energies, energy consumption and saving	++	+	+++	6
Environmental technology (green skills)	+	+	+++	9
Textile and leather design and production	+++	++	+++	2
Mechatronics fitter	++	+	+++	7
Landscaping & gardening	+++	++	+	8
Construction electronics	++	+	++	10
Automotive mechatronics	+++	++	+++	3
Vocational practice instructor	+++	+++	+	4
Health and safety management	++	++	+	11

■ **Infrastructure**, furniture, equipment and materials. Infrastructure rehabilitation and construction, provision of furniture, equipment and materials (including consumables).

■ **Training of vocational teachers and instructors**. Design and delivery of training to upgrade existing trainers and train new teachers and instructors on technical; pedagogical; information and communications technology; communication; and foreign language skills as per the new competency-based curricula.

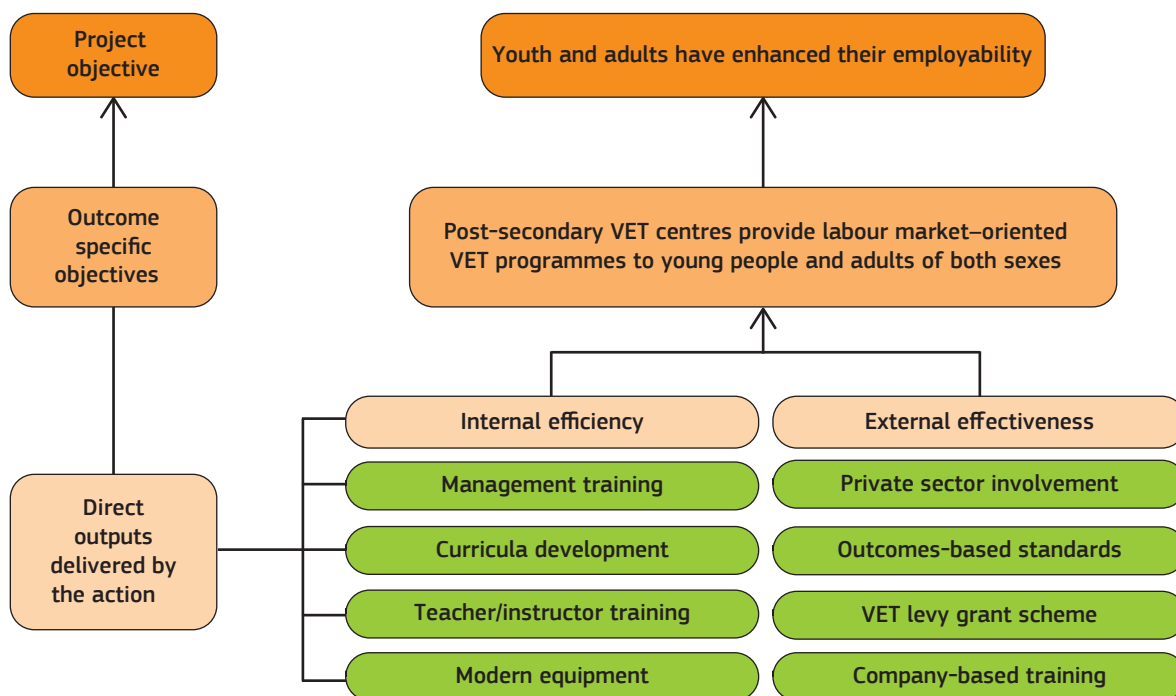
■ **Outcomes-based financing scheme**. Clarification of responsibilities and development of regulations in close cooperation with the government and representatives of the private sector.

STEP 4: Develop a project overview plan

After planning implementation, a project overview plan should be outlined in more detail. A project overview

plan is a harmonised and comprehensive document that **identifies all key options, necessary decisions and activities** for implementing the intervention strategy. The plan visualises and combines several levels. How detailed a given project overview plan will be depends on the purpose and time frame of the VET delivery cycle project in question (see Figure GN7.3). It should include the following elements:

- **intervention strategy** as well as overall and specific objectives;
- **expected results** of the VET project;
- **critical aspects** for project success, risks and alternative plans;
- **indicators** to measure achievement of overall and specific objectives.

FIGURE GN7.3 Intervention strategy for a VET delivery cycle project – example

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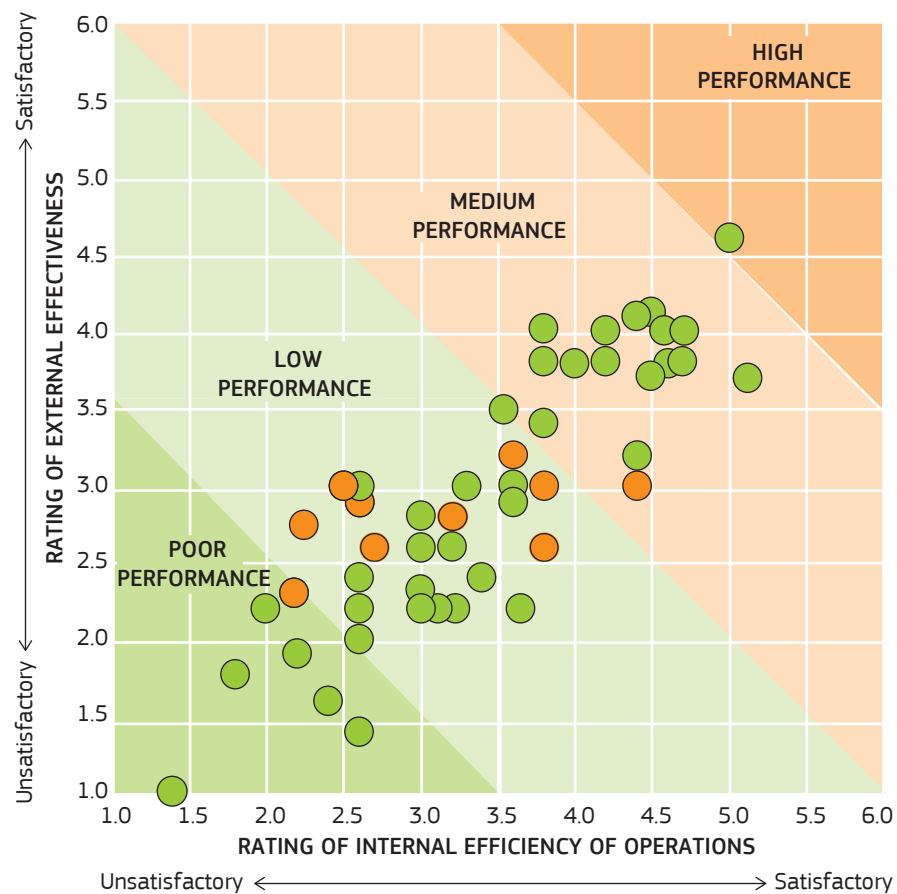
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Case study: Performance survey of Albania's public VET providers

CONTEXT	<p>The Albanian Ministry of Social Welfare and Youth, with the assistance of the European Training Foundation (ETF) and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), undertook a baseline survey of all public VET providers. The survey covered 52 public VET providers, including 42 vocational secondary schools and 10 vocational training centres. The baseline study was implemented across all 12 regions of Albania. The objectives set for this baseline study were to provide comprehensive background information about the performance of all public VET providers, to enable planning of their future development as well as to build competence in the fields of methodology, planning and implementation of assessing VET provider performance and conducting future evaluations in the VET sector.</p>
CHALLENGES AND OPPORTUNITIES	<p>The performance survey shows that the VET curriculum is not producing graduates with the essential knowledge, skills and occupational competence for entry to training-relevant positions in the workplace. In most cases, this is due to a neglect of practical skills training, which hardly occurs in most of the VET providers visited. As a rule, practice classes are limited to demonstrations with scant and outdated equipment.</p> <p>Current VET legislation is characterised by scattered and overlapping responsibilities for VET programmes among central and local-level institutions with regard to funding, human resources, building maintenance, scholarships and accountability.</p>
ACTIONS TAKEN	<p>A methodology was developed to assess or benchmark VET providers, in line with the following dimensions derived from the VET delivery cycle: internal efficiency of operations and external effectiveness. Each dimension was described by a set of key factors. Research instruments — basic information sheets and a field questionnaire — were designed to gather the necessary information to enable assessment of the key factors covering qualitative as well as quantitative aspects. A criteria-based assessment rating structure allowed application of the same assessment standards to all VET providers. The two results of the summative assessment were used to position and visualise each VET provider in the VET provider performance matrix (see Figure GN7.4).</p> <p>All 52 public VET providers were asked to fill in information sheets prior to the field visits. Three research teams, consisting of one national expert and two officials from the Ministry of Social Welfare and Youth or the National Agency for VET and Qualifications, were formed to undertake one-day visits to all public VET providers. The research teams documented their findings and observations from interviews with key staff and assigned benchmarks using the assessment instruments.</p>

FIGURE GN7.4 Performance matrix of all public VET providers in Albania

Source: Ministry of Social Welfare and Youth, ETF and GIZ, 2014.

Note: ● = formal vocational secondary schools; ● = informal vocational training centres.

LESSONS LEARNED

- The majority (50 %) of all public VET providers were correlated with the low-performance level. This cluster is characterised by a generally unsatisfactory performance level to a less than acceptable performance level and **indicates an urgent need for major improvement on a fairly wide scale**.
- The current VET curriculum is not fully aligned with labour market needs and **over-emphasises academic** as well as vocational theory subjects, which goes hand in hand with neglect of practical training. Most VET providers rarely offer regular practical skills training lessons. Curriculum hours earmarked for practical instruction are reduced to demonstrations.
- The quality and quantity of managerial and teaching staff are a major concern within the VET system. Especially for public VET providers, it is very difficult to attract and retain an adequate number of VET teachers and instructors, due to the **unattractive working conditions in the VET system**. Lack of pedagogical and didactic competences is seen as a major impediment in the sector and needs urgent attention. A significant proportion of the teaching and management staff needs to upgrade their skills and to gain more senior teaching and management experience.

Source: ETF and GIZ Albania, 2014.

GUIDANCE NOTE 8

Implementing work-based learning

Topic overview

An international trend towards the **relevance of work-based learning (WBL)** in vocational education and training (VET) systems can be observed⁽¹⁾. A European Commission communication, 'Rethinking education: Investing in skills for better socio-economic outcomes' (EC, 2012), emphasises the importance of WBL, focusing on the need to foster cooperation between VET and the private sector. However, a universally accepted definition or common understanding of WBL does not exist. Notions of WBL vary between and within countries, and there are overlaps between a number of concepts (see Figure GN8.1).

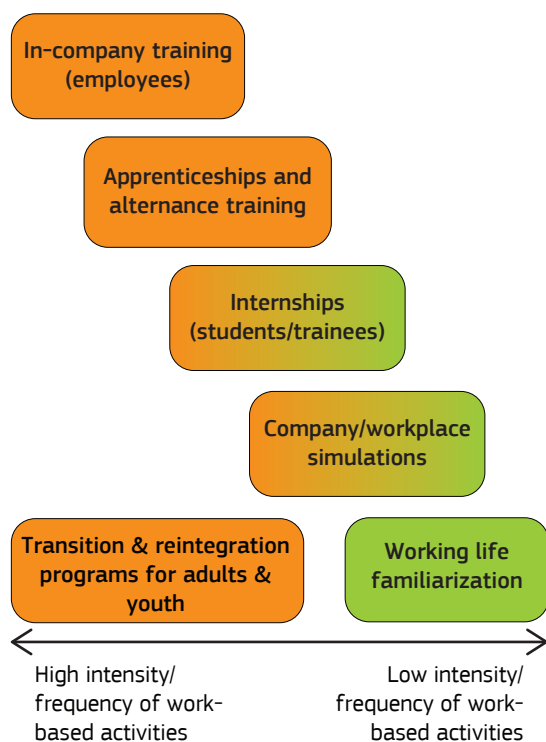
The WBL Sub-Working Group of the Inter-Agency Working Group on Technical and Vocational Education and Training (IAG-TVET) conducts work in three areas⁽²⁾: (i) creating a **common understanding of WBL**; (ii) creating a **policy framework**, by conducting a mapping which will clarify the different agencies' policy messages on WBL; and (iii) creating an **advocacy tool** to support the development of quality WBL. The European Commission's Directorate-General for Employment, Social Affairs and Inclusion (DG EMPL) is

⁽¹⁾ A number of sources can be consulted for additional information on WBL policy and good practice in implementing WBL programmes, e.g. Cedefop (2015), EC (2013a, 2013b), and ETF (2014).

⁽²⁾ The IAG-TVET was established in 2009 with the aim of coordinating activities of the agencies active in the field of TVET — i.e. the Asian Development Bank, the European Commission, the European Training Foundation, the International Labour Organization, the Organisation for Economic Co-operation and Development, the United Nations Educational, Scientific and Cultural Organization, and the World Bank.

SUMMARY OF KEY ASPECTS

- An international trend towards the relevance of WBL schemes in VET systems can be witnessed. The integration of WBL, in addition to apprenticeship, in the broader education and training system is a first condition of success.
- WBL refers to learning that occurs through undertaking real work, through the production of goods and services, whether this work is paid or unpaid. Informal apprenticeship systems are widespread in many developing countries.
- WBL also refers to combinations of classroom-based learning and learning in the workplace. Companies are engaged as providers of practical training periods, together with VET vocational secondary schools or vocational training centres.
- WBL helps learners build key competences (e.g. communication, teamwork, customer relations and problem-solving skills) in which they constantly learn new skills and new ways of doing things. They tend to be more productive and more profitable as well as more innovative.
- WBL connects learners more directly to the world of work. It can improve learners' job prospects by giving them more relevant work skills and by connecting them to employers who may offer them employment after they graduate. This can be an important way of expanding opportunities and increasing social inclusion among target groups that are disadvantaged in the labour market.

FIGURE GN8.1 Different types of WBL

Source: ETF, 2013b.

also working on this subject; a study is forthcoming on VET teachers and trainers in WBL/apprenticeships⁽³⁾.

In a broad definition, WBL refers to **combinations of classroom-based learning and learning in the workplace**, as is the case in the typical central European dual apprenticeship schemes. WBL refers practical learning whereby a young apprentice acquires the skills for a trade or craft in a micro, small or medium-sized enterprise (MSME) working side by side with an experienced master craftsperson. This work can be paid or unpaid, but it must be real work that leads to the production of goods and services. The integration of WBL — and not only apprenticeship — in the broader education and training system is a first condition of success (see Box GN8.1).

In many developing countries around the world, large sections of the economy experience **difficulties in**

BOX GN8.1 General models of WBL in initial VET in Europe

- **Alternance training schemes or apprenticeships** are typically known in Austria and Germany as the 'dual system'. These are fundamentally based on the integration of companies as training providers together with VET schools or other education/training institutes. In these programmes, learners spend a significant time training in companies.
- **School-based VET** includes on-the-job training periods in companies. On-the-job training periods typically cover internships, work placements or traineeships that are incorporated as a compulsory or optional element of VET programmes leading to formal qualification.
- WBL can be integrated in a school-based VET programme through on-site labs, workshops, kitchens, restaurants, junior or practice firms, simulations or real business/industry project assignments. The aim is to create **real-life work environments**, establish contacts and/or cooperation with real companies or clients, and develop entrepreneurship competences.

Many European countries combine these three general models of WBL. Terminology and definitions vary, and even a single term such as apprenticeship may have different connotations and underlying concepts.

Source: EC, 2013b.

recruiting workers with the appropriate knowledge, skills and occupational competences. The World Bank publication 'Skills, Not Just Diplomas: The Path for Education Reforms in ECA' concisely describes the dilemma many VET systems in developing countries face today (Murthi and Sondergaard, 2010). The publication highlights the fact that a large number of students complete upper secondary and tertiary education, but too many of them graduate without the right skills needed by industry. In order to pass skills from one generation to the next, low-revenue societies have developed informal apprenticeship systems that are purely workplace based.

⁽³⁾ This study is under the aegis of DG EMPL Unit E3, VET, Apprenticeships and Adult Learning.

In such cases, apprenticeship agreements are mostly oral, yet they are embedded in societal customs, norms and traditions (ILO, 2012). **Informal apprenticeship systems are widespread** in many developing countries. They are considered by far the most important source of skills training in Africa and South Asia. Informal apprenticeship is believed to be responsible for the majority of all skills development in Ghana, and accounts for almost 90 % of all training for trades in Benin, Cameroon and Senegal (see Box GN8.2).

BOX GN8.2 Informal and traditional apprenticeships in developing countries

Traditional apprenticeship is understood as the system by which skills are transmitted from a father or mother to one of their children, or between close family or clan members. Traditional apprenticeship systems have, in many regions of the world, evolved into informal apprenticeship systems which are open to apprentices from outside the family or kin group.

Source: ILO, 2011.

WBL is the acquisition of knowledge, skills and occupational competence through **carrying out — and reflecting on — tasks in a real occupational context**, either at the workplace or in a VET provider facility. It is a very effective modality for developing expertise and the kind of knowledge, skills and competence that are highly relevant to a particular occupation and a specific workplace. Because of the close relationship between learning and real-life work, as well as the nature of learning by observing and doing, the development of skills and knowledge goes hand in hand with the acquisition of procedural knowledge in any employment position, whether academic or non-academic.

WBL is an excellent way to acquire a broad range of knowledge, soft skills and occupational competences and behaviours through VET courses for secondary and post-secondary learners to achieve **employment-related competences in the workplace**. Many of these are difficult to develop outside of a real workplace — e.g. attitudes towards work, including taking responsibility, meeting deadlines and knowing how to

act in a given situation. Key competences (e.g. communication, teamwork, customer relations skills, project planning and problem-solving skills) are becoming increasingly important in today's labour market.

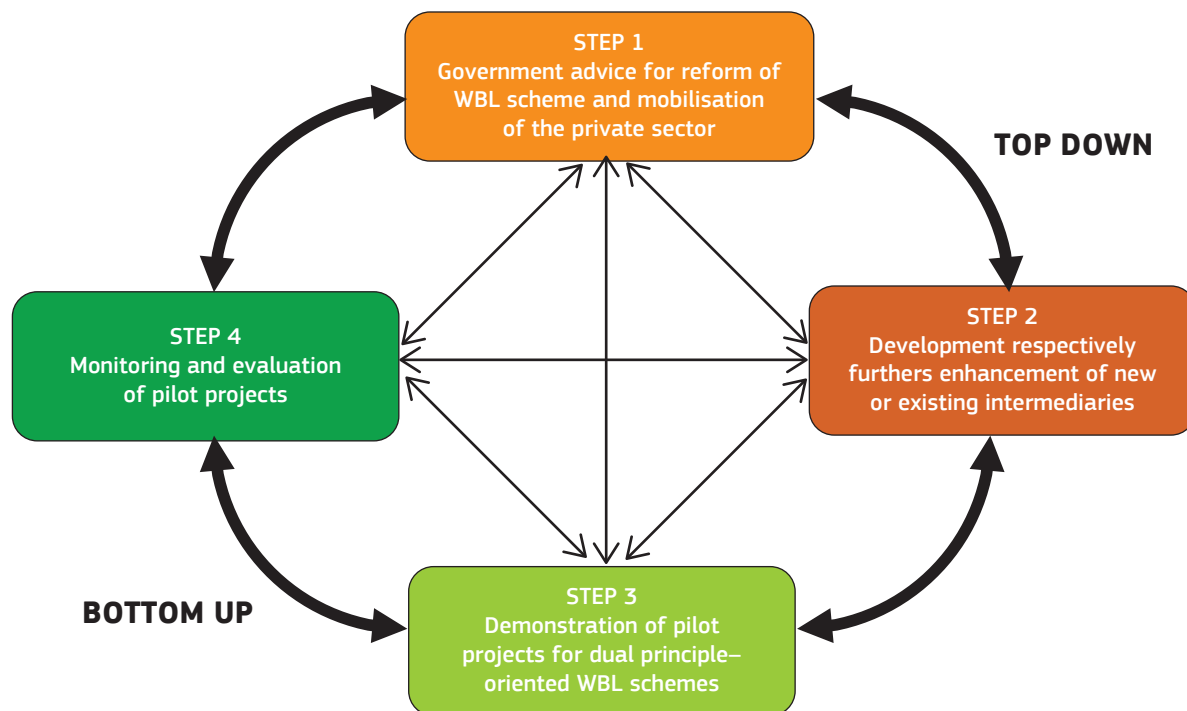
The effects of WBL on **self-confidence, self-efficacy and learner motivation** have been well documented. From the companies' point of view, workplaces in which apprentices constantly learn new skills and new ways of doing things tend to be more productive and more profitable. They tend to be more innovative, and better at using employee knowledge to improve product quality and customer service.

Preparing young people for the world of work through **real work experience improves their employability**. It can be a double asset in the transition from school to work and in competition for employment. On the one hand, learners obtain certain skills and competences more effectively through WBL; on the other hand, they already have a presence in the labour market since employers tend to recruit the best candidates from their own work-based VET programmes. In Australia, Belgium, France, Germany and the Netherlands, a high percentage of VET graduates find employment immediately after they complete their apprenticeship.

Procedure

Given the complexity of the formal and informal economies in developing countries and based on a different socio-economic and cultural value orientation, a direct transfer of European WBL schemes to developing countries seems impossible. However, a dual combination of practice-oriented learning at workplaces in companies with knowledge-based learning at classrooms in public or private VET providers can be proposed. To support the relevant partner organisations at the macro, meso and micro levels to build capacity for the development of WBL schemes, the use of a systemic multi-level approach is suggested based on a circular bottom-up approach combined with a top-down approach (see Figure GN8.2).

Partner organisations at the micro level are supported to **develop, test and evaluate** innovative dual principle-oriented WBL approaches. Different

FIGURE GN8.2 Methodological approach

conditions of the various labour market segments in the selected economic sectors must be respected. A reduction of pilot projects to only one labour market segment and one self-governing structure is considered inappropriate.

STEP 1: Conceptualise development frameworks of WBL schemes

The development of WBL schemes is conceptually, administratively and politically complex. A **strategic, contextual and structural re-organisation** of current forms of WBL schemes is needed as well as mobilisation of the private sector (e.g. through hearings, road shows, financial incentives, tax reductions, etc.) to offer training places in companies for apprentices. Addressees of the consultancy services are primarily the ministries with political leadership for WBL. Central areas of support requested from stakeholders include the design of policy and reform strategies with relevant regulations and the systematic relationships and dialogue structure between government, the private sector and civil society. Further areas of support are given to the development or adaptation of conceptual

frameworks for the development of national occupational standards, professional profiles and funding formula for WBL schemes.

STEP 2: Mobilise the private sector or social partner-driven intermediaries

Active participation of the private sector is essential for the implementation of WBL schemes. The modernisation of WBL schemes requires a more open and active social partnership between public authorities and the associated stakeholders, particularly employer organisations and unions. Many countries have begun to establish social partner-driven intermediaries such as sector skills councils. In India, the National Skills Development Corporation (NSDC) has been leading the establishment of sector skills councils as an instrument for meeting the demands for a trained workforce in different industry sectors since 2009. It has done this by bringing together all the stakeholders: industry, labour and VET providers.

The intermediaries are expected to participate in the establishment of standards-generating bodies

for the development of national occupational standards and framework curricula for WBL schemes. In a range of settings, these sector skills councils have become **major vehicles for employer involvement** in setting occupational skills standards, often within national qualifications frameworks (NQFs). Another intervention is the establishment of quality assurance bodies for the assessment and certification of WBL schemes at the regional or local level. Furthermore, both financial and non-financial incentives are crucial for starting WBL, and more needs to be known about how to get companies on board.

For example, in Algeria, the national, regional and provincial chambers of commerce and industry, agriculture, and arts and crafts have a role in **promoting work-based apprenticeships** (see Box GN8.3). Local apprenticeship commissions are responsible for gathering offers of apprenticeship places from employers and applications for apprenticeships from potential apprentices. Teachers from vocational schools play a role in ensuring that employers and apprenticeship masters deliver appropriate training. However, ongoing assessment of apprentices' skills and learning outcomes is generally regarded as an area in which further development work is needed.

STEP 3: Develop tools and processes of WBL implementation

Public authorities, stakeholders and VET providers have developed a range of tools and processes that can be used to **support the quality of WBL**; these include the following:

- overarching guidelines to integrate WBL into VET programmes;
- external quality assurance measures/tools;
- process and tools to support planning and implementation of WBL in practice;
- assessment and recording achievement approaches;
- measures to match learners and placements;

BOX GN8.3 Starting and expanding of work-based apprenticeships in Algeria

There is a long tradition of apprenticeship in Algeria. Following the country's independence, formal training through apprenticeships was established for the first time in 1975, when legislation was passed giving apprenticeship a legal basis. VET by way of apprenticeship was further institutionalised by law in 1981 — through legislation that defined the scope, mission and role of each party involved, their rights and obligations, the entry conditions for apprentices and the conduct of the training. Following this, apprenticeship saw a remarkable expansion and rise in popularity during the 1980s. The number of apprentices in Algeria increased from 40 000 in 1981 to 250 000 in 2011, accounting for approximately 40 % of all vocational trainees in the country.

Nevertheless, experience has revealed a number of inadequacies and difficulties, including poor human, material and financial resources for the monitoring of apprentices; weaknesses in teaching and training programmes and teaching methods; inadequate regular contact between VET providers and employers; and the lack of a mechanism to motivate and stimulate those directly involved in apprenticeships. This experience has resulted in a number of legislative and regulatory changes in 1990 and 2000 to address the problems identified. Financing issues relating to employer participation incentives were addressed in 1997 legislation that established a national apprenticeship tax.

Source: ETF, 2014.

- measures to ensure student health and safety in the workplace.

STEP 4: Demonstrate innovative pilot projects of WBL leading to up-scaling

The **implementation of innovative pilot projects** shows how WBL schemes are going to function before nation-wide up-scaling takes place. The initial project phase is followed by an action plan for up-scaling of successful projects, programmes or policies and

expanding, adapting and sustaining them in different ways over time for greater development impact. The pilot projects develop, test and evaluate organisational structures for assessment and certification in selected economic sectors. The private sector has a central role in planning and implementation of practical company-based training phases.

WBL includes costs to enterprises, namely through the **loss of productive working time** by those conducting the instruction within the WBL schemes. If there is no recognition of these costs, employers may be unwilling to take part in up-scaling WBL schemes. At the same time, if enterprises do not know about WBL schemes, they are unlikely to participate. This highlights the importance of awareness raising, marketing and communication — in which employer organisations, trade unions and governments should all be involved. Marketing of WBL schemes to MSMEs, which are the least likely to know about WBL schemes, is particularly important.

STEP 5: Monitor and evaluate the impact of up-scaling

The creation of WBL schemes suited to the needs of the labour market is the basis for the development, test and evaluation of pilot projects, followed by up-scaling measures as well as subsequent impact monitoring for the purpose of **describing experiences and lessons learned** for the horizontal and vertical distribution of best practices. A final step is to support the establishment of a monitoring and evaluation system as a whole for the overall WBL scheme to allow more evidence-based decisions on the political-strategic level.

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Case study: Work-based apprenticeship scheme in Egypt

CONTEXT	<p>Like other developing and industrialised countries, Egypt in the 1990s faced the challenge of improving the transition from school to work for its youth. The youth unemployment rate was five to seven times that of adult rates — signalling that youth aged 16–24 faced considerable difficulty in moving from school to work. While producing economic growth and jobs with good macro-economic policies was one of the solutions to this problem, for youth the problem often went deeper to structural issues involving whether the skills they obtained in schools matched the needs of the labour market and how they searched for work and the expectations they held for employment and wages.</p> <p>The Mubarak-Kohl Initiative Dual System (MKI-DS) began in 1994. Although Germany supplied essential funding and know-how, the MKI-DS had the support of the Egyptian Government, which was willing to work closely with industry leaders and share decision-making power. Apprentices attend formal schooling at technical secondary schools under the Ministry of Education twice a week, plus work and learn in the workplace four days a week. This is now a fully and sustainably integrated work-based training scheme within the Egyptian VET system under public-private-partnerships (PPPs). The MKI-DS training system is governed by Law No. 62/2007 and legally integrated at the Ministry of Education, Decree Nr. 361 of 10.11.2008, with a regular budget. Government and the private sector are cooperating in regional and sectoral coverage, occupational profiles and curricula.</p>
CHALLENGES AND OPPORTUNITIES	<p>In better times, Egypt guaranteed public employment to young graduates of technical and higher education, but by the close of the 1980s, the policy ended and youth unemployment began to rise. Young women were especially affected by the loss of public sector jobs, as they were clustered in these jobs. The MKI-DS work-based training scheme was introduced to provide an alternative to general secondary and traditional technical secondary schools. These technical secondary schools were under-funded, suffering from outdated curricula and equipment, and focused on theory taught by teachers with inadequate industrial experience. The MKI-DS, with its engagement of the private sector and promise of improved quality and relevance of WBL provided an opportunity to test a different approach to preparing youth for employment.</p> <p>The MKI-DS employed the principles of the German dual-oriented work-based apprenticeship system, but adapted this system to the institutional context of Egypt. Duality involved sharing the responsibility for training between technical secondary schools and employers. These principles were built into the MKI-DS, along with the introduction of new institutions in the private sector. Since 2010, the number of MKI-DS enrolments, related technical secondary schools and companies has risen steadily.</p>
ACTIONS TAKEN	<p>A PPP conceptual framework offered the MKI-DS a wide range of opportunities and accommodates the realities of various sectors, regions and industries. The pivotal aspect of it is that the private sector and the Ministry of Education both engage in the design of the learning and assume joint responsibility for the learning outcomes.</p>

**LESSONS
LEARNED**

- VET policies that support a combination of work and learning for youth hold the potential to improve pathways to adulthood, **deliver economic and labour market benefits**, improve pedagogy, and reduce costs and increase capacity within the VET system.
- A 2001 study by the International Labour Office called MKI-DS an innovative apprenticeship programme and acknowledged its potential to provide preferably **modern segments of the economy with skills**, but noted its limitations in reaching the informal economy.
- As one successful form of WBL, apprenticeships ease the **transition from education and training to work**; evidence from the MKI-DS suggests that countries with an innovative apprenticeship system will have lower levels of youth unemployment in the future.
- Apprenticeships formally combine and alternate company-based training with school-based education and lead to **nationally recognised qualification upon successful completion**. Most often there is a contractual relationship between the employer and the apprentice.
- Companies providing apprenticeships are likely to benefit from a **net profit on their investment**, either during the apprenticeship or soon after by employing a fully trained worker. At the same time, apprentices learn valuable workplace skills in a professional environment, ensuring a greater degree of future employability. It is a win-win scheme for all: the company, the learner and society as a whole.
- Employers highlight the benefit of having a greater voice in education policy that the MKI-DS has given them. Credit was given to the government which opened the door to a **dialogue in social partnership**.

Source: Adams, 2010.

GUIDANCE NOTE 9

Implementing VET staff development

Topic overview

Recent reforms in vocational education and training (VET) teacher and trainer education — especially to ensure better initial pre-service training or continual professional development, more relevant curricula, and dynamic teaching methods for better learning outcomes — represent major challenges to better delivery of VET programmes. The development of effective **policies for the improvement and professionalism of VET provider staff** is highlighted in the Shanghai Consensus 2012 as essential in efforts to expand access to and improve the quality of VET systems in general (UNESCO, 2012). The Shanghai Consensus strongly advocates the development of policies and frameworks for professionalising VET staff. To this end, the international scientific VET community, in cooperation with the United Nations Educational Scientific and Cultural Organization International Centre for Technical and Vocational Education and Training (UNESCO-UNEVOC), has drawn up a catalogue establishing major disciplines of VET staff qualifications (Bünning and Zhao, 2006). The variety of settings corresponds to the conditions and traditions of the VET system in these countries.

As VET staff play a significant role as **agents of change** for the next generation, the professionalism of VET decision makers, managers, teachers and trainers as well as of VET staff educators is widely regarded as a crucial issue touching on the effectiveness and quality of any VET system worldwide. Although many variables affect the success of VET programmes, it is the nature of the **interaction between VET teachers and trainers and those being capacitated** that has the greatest impact on the quality of VET graduates to be achieved. However, in many developing countries,

SUMMARY OF KEY ASPECTS

- The Shanghai Consensus strongly advocates the development of policies and frameworks for increasing the professionalism of VET staff.
- The variety of VET staff development settings corresponds to the conditions and traditions of the VET system in these countries.
- The best way to meet demands for flexibility in VET staff development is through a modular structuring of learning units.
- VET staff have to demonstrate sound experience and knowledge in a particular occupational field as well as having a good command of the skills required for doing the typical jobs and tasks in this field.
- VET teachers and trainers working within the VET system need to have a full skill set, including a good technical understanding of the subject area.
- Teaching skills based on appropriate pedagogy, practical work experience and related theoretical knowledge are indispensable for VET staff.
- Efforts to strengthen VET teacher/trainer training should incorporate both the pre- and in-service phases.

VET has a low standing compared to general education and university studies — sometimes to the point of stigmatisation. In other countries, including Austria, Denmark, France, Germany and the Netherlands, the high level of professionalism of VET staff qualification

contributes considerably to the quality and social standing of VET systems.

One of the main objectives of VET staff education is to find new or improved ways to **increase quality in VET systems**. In planning training for VET staff for developing countries, the demands arising from globalisation and modern production must be taken into account, while not neglecting the particular demands rooted in traditional forms of work and production. This wide range of challenges can only be overcome by a very flexible, highly differentiated and cost-effective qualifications framework for VET staff. The 2005 UNESCO-UNEVOC [Hangzhou Declaration](#) on increasing the profile and professionalism of VET staff education, and the formation of an international network to develop and implement standards for a VET master's degree, are milestones in the history of VET staff development. Since the adoption of the Hangzhou Declaration, the qualifications framework for VET staff includes four qualification levels ranging from 4 to 7 (see Figure GN9.1).

VET staff must be acquainted with the content and form of work organisation in the respective country. In addition, neither rural/urban, remote/industrialised or traditional/modern sectors should be neglected or preferred. The best way to meet these demands for flexibility in VET staff training is through a **modular structuring of learning units**. This goes hand in hand with shifting VET curriculum design away from traditional long programmes with learner assessment at the end to VET programmes consisting of

sequences of short modules with assessment at the end of each module — thus providing more flexibility for learners with sequences tailored to their particular requirements.

It is highly recommended that VET staff demonstrate **sound practical experience and knowledge** in a particular occupational field, and have a command of the skills required for doing the typical jobs and tasks in this field. This kind of experience and know-how can only be acquired by practical situations in companies where professional standards for good performance have to be met. From this point of view, teaching skills based on appropriate pedagogy, practical work experience and related theoretical knowledge are indispensable for VET staff.

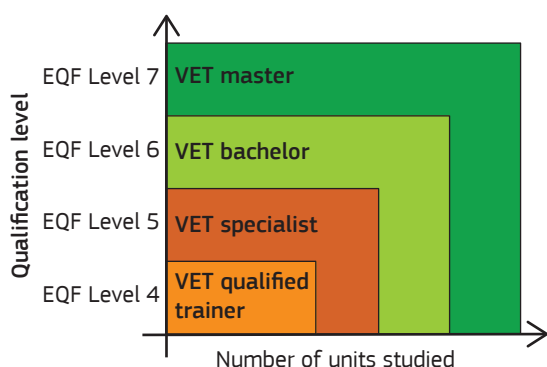
In some developing countries, a few fragmented policy and strategy documents already exist which, directly or indirectly, stress the importance of an education system for VET teachers and trainers. Such systems may be implemented as an initial programme and organised as a short-term programme (see Box GN9.1). In their short-term versions, they can usually be very cost-effective and are an efficient tool to promote VET personnel human resource development at regular intervals.

Procedure

Many VET teachers and trainers enter VET providers **without the benefit of a practical work background**, often lacking the opportunity to experience the world of work. Efforts to strengthen VET staff education must therefore adopt a dual focus, incorporating both the academic/theoretical part as well as the practical work-based part. Consequently, all VET staff working within the VET system need to have a full skill set, including a good understanding of vocational and related academic subject areas. They need to be skilled in pedagogical methods, industrial experience, and deal with the necessary local and foreign language and entrepreneurial skills.

To ensure that VET staff education programmes are relevant to industry needs, VET staff should be provided with **practical experience** according to specific country requirements. Developing linkages with the workplaces during initial pre-service VET staff

FIGURE GN9.1 Qualification levels of VET staff



BOX GN9.1 Reform of VET teacher and trainer education in Serbia

In recent years, the Serbian Ministry of Education — in close collaboration with the European Union's Community Assistance for Reconstruction, Development and Stabilisation (CARDS) project and other bilateral partners — has undertaken a reform of the country's VET teacher education programme. Traditionally, preparation for future VET teachers and trainers to serve in the country's more than 300 VET providers has been a heavy university-based technical and pedagogical programme with little or no non-academic work experience. The reforms included introducing a new system of in-service teacher education, which was only offered sporadically up to 2000. In 2006 and 2007, a comprehensive in-service VET teacher and trainer education programme was set up in three economic sectors (wood processing, catering and tourism, and information technology) and eight occupationally specific VET programmes consisting of general modules on vocational pedagogy and didactics, sector-specific training for VET trainers (instructors) and organised internships for VET teachers and trainers in those three economic sectors.

The reforms focused on new and better VET teaching methods, greater attention to innovation, fundraising, improving communications and relations between VET providers and their clients (e.g. local businesses, local municipalities, labour market offices and employment services, parents, students and other regional stakeholders). Job placement, job guidance (including tracer studies), skills and training needs analysis and regional labour market analysis were also part of the reform approach.

More than 1 000 VET teachers and trainers out of a total of about 15 000 in Serbia have been trained under this programme, based on a package of 27 in-service training days. These were jointly developed and carried out by more than 40 master trainers who now serve as a pool of experienced VET teacher/trainer educators and work very closely with the ministry and the national VET centre.

Source: Ministry of Education, Republic of Serbia, 2010.

preparation programmes is needed. It is recommended realising the importance of workplace experience for all VET staff by suggesting an Industrial attachment programme while working as a VET staff. Traditional monolithic VET programmes lasting from two to four years are proving increasingly inadequate for the needs of today's labour market.

Hence, there are various reasons for **modularisation within the VET sector**. Modules may be either independent or part of a wider VET programme or learning environment that leads to vocational qualification. VET staff have to be prepared to apply methods of modularisation in their professional work as well as to use blended training methods to deliver training: computer-based training, virtual reality, books and study materials, etc. To support the relevant partner organisations at the macro, meso and micro levels to build capacity of professional VET staff, a systemic multi-level approach is suggested. Implementation of a national system for professional VET staff supported by the European Union can include the following steps.

STEP 1: Build capacity of professional VET staff in partner organisations

VET staff have a central role in strengthening VET system capacities to undertake successful VET reforms. The **role of VET staff in VET reforms and their developing professionalism** are issues that require more research and careful policy attention. This applies to both initial pre-service VET staff education, and continuing in-service VET staff development as well as capacity-building programmes — all of which are needed to support and implement successful VET reforms. There are essentially four areas of responsibility for which VET staff have to prepare themselves during their academic studies:

- **occupations** and corresponding subjects of the vocational domain;
- analysis, design and organisation of **professional work processes**;
- the **subject of professional work**;
- analysis, design and evaluation of **training processes**.

STEP 2: Demonstrate the development of professional VET staff modules

Support the development and/or improvement of VET staff education modules aligned to the respective national qualifications framework (NQF), according to needs of the partner organisation and based on consultations with the private sector. A **competence framework for VET staff** is a generic description of the skills, knowledge and wider competences VET staff have to possess to promote improvement in the provision of VET programmes. This sub-framework of the NQF can help policymakers identify the important aspects of reform and content needed for the initial and continuing education of VET staff:

- cooperation with **selected industry associations** in regard to VET staff development needs in selected economic sectors;
- demonstration of developed VET staff education modules in a number of **pilot projects**;
- execution of **training and assessment** sessions for VET staff education modules as well as lessons on evaluation tools;
- development of mechanisms to **attract girls and women** to become VET teachers and trainers as well as in-company instructors.

STEP 3: Implement a new VET master programme

The identification of a number of **academic VET disciplines** is the first step towards increasing the education and professionalism of VET staff. However, this holds only if these academic VET disciplines can successfully be filled with substantial content. In this regard, quite a number of university institutes and VET researchers have presented excellent examples of international best practice and pioneering studies.

A 10-year joint project between the Chinese Tongji University, the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and several German universities including the Institut für Technik und Bildung (ITB) of the University of Bremen have undertaken first

steps towards establishing a modern **VET master's programme for the academic VET disciplines** and occupational fields of electrical engineering and information technology, mechanical engineering, construction, and business and administration. In addition to the regular VET staff programmes, a selected VET education provider (in most cases, a university) annually organises skill-upgrading and knowledge-updating short courses, seminars and workshops at the national and international levels for existing VET staff.

STEP 4: Develop quality assurance processes

The setting of training standards, regulation and quality assurance processes for a VET staff development system is of paramount importance for reliable VET staff development programmes. The quality assurance process can include the following:

- advise on establishing and monitoring a structured **industrial attachment programme** for VET staff;
- support the improvement and, where necessary, development of methods for evaluation, results-based monitoring and **quality management** of VET staff development programmes;
- support the development and coordination of existing mechanisms for **tracing VET staff**;
- support the **development of career pathways** for VET staff.

STEP 5: Monitor and evaluate the impact of pilot projects

The value of the development approach proposed in the previous steps depends to some extent on the data and information available. While it can come from many sources, including research, the **systematic development of a knowledge and information base** can be helpful for developing countries to identify weaknesses and strengths of the VET staff education system. Too often, discussions of strategic interventions into VET staff development policy are constrained by a lack of reliable monitoring and

evaluation evidence on the impacts of reform programmes. Therefore, the final step supports establishment of a monitoring and evaluation system as a whole for the VET staff development system to allow more evidence-based decisions at the strategic level.

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Case study: Multiplier Training System of VET staff in Lao PDR

CONTEXT	<p>An urgent need for pedagogic and didactic training for more than 1 000 VET staff members was identified in Lao PDR in 2000. This led to the establishment of a Multiplier Training System (MTS) in response to the shortcomings in VET staff qualifications — a reflection of the fact that, in the late 1990s, no systematic qualification system for VET staff existed. At the time, further training of VET staff was undertaken on an ad hoc basis, leaving the pedagogical knowledge and skills of VET staff at an especially low level.</p> <p>MTS is a well-known model of three-level VET staff training. Experienced VET staff have been trained and prepared as senior multipliers in order to train less experienced VET staff as junior multipliers, who will assist the senior multipliers and subsequently act independently. After being trained and certified as multipliers, these personnel train VET staff employed at VET providers based on the MTS concept.</p> <p>The introduction of MTS was meant to bridge the gap until a future initial pre-service VET staff training system could be realised at the university level. The second objective of MTS was for it to become a recognised permanent in-service system for VET staff. Since its initiation, a total of 1 850 VET teachers and trainers have participated in MTS programmes.</p>
CHALLENGES AND OPPORTUNITIES	<p>The MTS concept offers not only content on vocational pedagogical subjects but also a methodical approach on how to transfer content from occupational subjects to learners. Special attention has been given to the multiplier effect, which is based on the assumption that VET staff capacitated by MTS are able to act as multipliers within their work environment (VET providers, enterprises, etc.) and to transfer their knowledge to other less qualified and experienced VET staff.</p> <p>MTS was introduced under the supervision of the Lao PDR Ministry of Education and Sports (MoES) and implemented by an MTS task force of the Vocational Education Development Centre in all public VET providers and, later, other private institutions (e.g. the Lao Handicraft Association). MTS provided essential pedagogical and didactic knowledge to VET staff. Nevertheless, it was not sufficiently integrated into the MoES comprehensive vocational teacher training system and relied heavily on financing from donors due to lack of a budget for an in-service training system for VET staff.</p>
ACTIONS TAKEN	<p>A 2013 evaluation study confirms the high relevance of the MTS and the high level of satisfaction of VET staff with its content and quality of training. The MoES plans to substantially increase the number of VET staff in the VET system annually.</p> <p>In general, MTS programmes only took place when financial support from donors was available. During the evaluation study, a total of 441 persons in 12 VET providers were interviewed. The majority of the interviewees were VET staff; a small number were teachers of general subjects (e.g. math, physics) or managers of VET providers. Interestingly, the number of ‘theory’ teachers (72 %) is significantly higher than the number of ‘practical’ teachers and trainers. It seems the present VET curriculum is focused more on vocational and academic theory than on work processes and practical experience.</p>

LESSONS LEARNED

- MTS was established and introduced as a system for **continuing training of VET staff**. The MTS concept offers not only the content of vocational pedagogical subjects but also a methodical approach on how to transfer content of vocational subjects from VET staff to learners. MTS can be seen as an excellent approach for developing countries where no adequate training opportunities for VET staff exist.
- MTS in its current shape is a useful and highly appropriate tool to provide essential **pedagogic and didactic knowledge to existing VET staff**. It partially served to bridge the gap in providing pedagogical knowledge and skills to VET teachers and trainers until graduates from academic university-based VET teacher and trainer education became available.
- Special attention has been given to the multiplier effect, which is based on the assumption that VET staff trained by MTS become capable of **acting as multipliers within their work environment** (schools, enterprises) and to pass on their knowledge to other less qualified and experienced VET staff. The quality and skills of senior and junior multipliers in general have very positive rating, indicating that the preparation of multipliers was adequate.
- Considering the increasing demand for VET staff and call for new occupational subjects from VET providers, the need to further expand MTS is obvious. However, it is suggested to **link an expanded MTS with the upcoming pre-service training system** at the National University of Laos, based on legally binding decisions of the MoES which also address the issue of MTS financing.

Source: MoES and GIZ, 2013.

GUIDANCE NOTE 10

Implementing VET in the informal economy

Topic overview

For many people living in developing countries, the informal economy is the only prospect they have of **access to productive employment and a living wage** (see Figure GN10.1). Therefore, the European Commission's (EC's) concept note on development cooperation calls for vocational education and training (VET) reform focusing on 'the requirements of the informal sector' (EC, 2014).

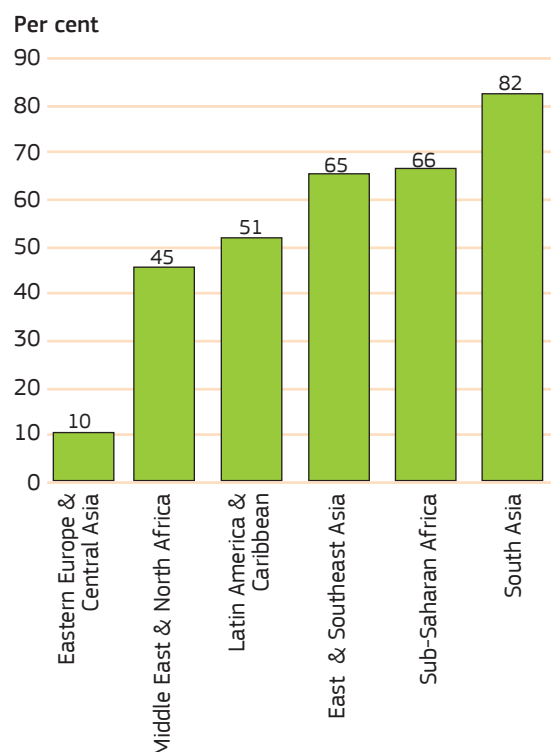
In three out of six world regions plus urban China, **informal employment is a greater source of non-agricultural employment for women than for men**: South Asia, Sub-Saharan Africa, and Latin America and the Caribbean. In East and Southeast Asia (excluding China), the percentage is roughly the same. Only in the Middle East and North Africa is informal employment a greater source of employment for men than for women. However, because there are more men in employment than women, men generally comprise a greater share of informal non-agricultural employment than do women. Figures reported by the International Labour Office (ILO) are of the same magnitude (ILO, 2002). A recent study of the World Bank (Adams et al., 2013) on improving skills development in the informal sector confirms the strong link between education and different labour market opportunities.

Informal apprenticeship schemes are commonly understood as a route to employment in the informal economy. The primary effect appears to be opening access to off-farm employment and allowing some to find employment in the formal sector (see Adams et al., 2013). Informal apprenticeships clearly play a dynamic role in efforts to alleviate poverty and

SUMMARY OF KEY ASPECTS

- The informal economy is the only prospect for many people in developing countries to access productive employment and a living wage.
- Informal apprenticeship schemes are a major route towards work in the informal economy. They appear to provide access to off-farm employment and enable some to find employment in the formal sector.
- Informal apprenticeships clearly play a dynamic role in efforts to alleviate poverty and promote economic growth in countries with the lowest incomes.
- The wide-ranging problems and differing conditions in individual countries make it virtually impossible to develop and formulate standardised conceptual frameworks for informal apprenticeships.
- Scale-up for country-wide implementation should be a major criterion in developing an innovative approach supporting implementation of informal apprenticeships.
- Informal trade associations as well as local, regional and national governance structures should be included in implementation wherever possible.
- The situation of the target group should be taken into account in determining how the provision of informal apprenticeships is financed.

FIGURE GN10.1 Informal employment as a percentage of total non-agricultural employment, 2004–2010



Source: Women in Informal Employment: Globalizing and Organizing (WIEGO), <http://www.wiego.org/>.

promote economic growth in countries with the lowest incomes.

A comprehensive strategy to improve productivity and incomes in the small and household enterprises of the informal economy needs to weigh a number of factors. The wide-ranging problems and differing conditions in individual countries make it virtually impossible to **develop and formulate standardised conceptual frameworks for informal apprenticeships**. This common working/learning approach refers to a system by which a young learner (the apprentice) acquires the skills for a trade or craft in a micro, small or medium-sized enterprise (MSME), learning and working side by side with an experienced master craftsman (see Box GN10.1). Apprentice and master craftsman conclude an apprenticeship agreement that is embedded in local norms and traditions of a given society. Costs of training are normally shared between apprentice and master craftsman (see ILO, 2012).

BOX GN10.1 Informal apprenticeships in Tanzania

A survey conducted in southern Tanzania analysed the practices, institutions and labour market outcomes of informal apprenticeships in automotive mechanics, electricity services, tailoring, carpentry, plumbing, local arts and food processing. The study found the informal apprenticeship system to be widespread and well established in the various craft sectors. Training is based mostly on unwritten contracts between master craftsmen and apprentices, and typically lasts one to two years. Unlike the situation in many West African countries, the average age of apprentices was quite high at 23.5 years, especially considering that most apprentices have only completed primary education. Master craftsmen had more education on average, although most learned the skills of their trade in informal apprenticeships as well.

Skills recognition is mostly informal, through social networks and based on the reputation of the master craftsman in the community. The skills acquired through apprenticeships are mostly technical; acquisition of theoretical or business skills is less frequent. Apprenticeships lead to employability, with most apprentices starting their own enterprises.

Very few apprentices took the skills tests offered by the Tanzanian Vocational Education and Training Authority (VETA). Among the reasons for not seeking formal recognition were the high cost of preparatory courses, language barriers (higher-level tests require knowledge of English), and VETA's low reputation among craftspeople.

Source: Nübler, Hofmann, and Greiner, 2009.

The capacity of formal VET systems — for instance, in Africa — is limited due to inadequate training infrastructure and the relatively high costs of full-time, school- or centre-based training. Improving the technical and pedagogical skills of master craftsmen and opening pathways to recognise the occupational qualifications of master craftsmen strengthens informal apprenticeship schemes and enhances the effectiveness of this delivery mode for MSMEs operating in the informal economy. The quality and effectiveness of informal apprenticeships can be enhanced

by providing modernised training modules for apprenticeships, work tools and certification or recognition of prior learning systems.

Informal trade associations represent another way to confront training constraints in MSMEs of the informal economy. These associations are able to provide **specialised knowledge of training needs to member enterprises**, advocate for the benefits of training, set training standards, create a market for VET providers through competitive procurement of services, and organise training for members to take advantage of economies of scale. Strengthening the capacity of small informal trade associations to play a larger role in informal apprenticeships for their members can open the door to better, more affordable training services for enterprises in the informal economy (see Box GN10.2).

Private VET providers are viewed as being more responsive to the skills needs of the informal economy than public VET providers. Thus, **encouraging private VET providers to work with the informal economy** is essential. Experience in Kenya with the Technical and Vocational Vouchers Programme (TVVP) illustrates how demand-side financing with market information can improve choice of training services and help build a private supply response to meet the needs of the people (World Bank, 2011). The Kenyan programme has examined whether information on the earnings associated with different trades makes a difference in training choices.

Providing market information is a tool for quality assurance and market development that could help MSMEs and learners operating in the informal economy distinguish among public and private VET providers. Market information is especially important to voucher and other demand-driven VET programmes where enterprises and learners as consumers need information to make distinctions by quality, cost and outcomes among the choices of VET providers available. Requiring public and private VET providers to conduct and publish tracer studies that account for the placement record and starting salaries of people completing their informal apprenticeship schemes can furnish useful information.

Generally speaking, the market for information about VET providers in developing countries is

BOX GN10.2 Strengthening business associations in Niger

One of the objectives of the Continuous Vocational Training and Apprenticeship Support Programme implemented by the International Labour Organization (ILO) in Niger was to strengthen the membership base of the National Crafts Association (Federation National des Artisans du Niger, FNAN). In order to reinforce organisational capacity, FNAN assigned roles within the association more clearly, organised its structure by occupation, developed regional and local branches, and spread information about the benefits of organising by word of mouth. From 1999 to 2009, FNAN's membership base more than quadrupled, growing from 18 000 to 70 000 members. This includes a rise in member organisations from 99 to 527 of a total of 820 crafts associations at the national level — or 64 % of the organised crafts sector.

Today, FNAN is recognised as an important voice of the crafts sector in Niger and participates in national tripartite political structures. This process has enabled the close involvement of business associations in debates about upgrading informal apprenticeships. FNAN plays a major role in monitoring and quality assurance of a pilot project of structured dual apprenticeship.

Source: ILO, 2012.

underdeveloped. **Information on costs, quality and outcomes associated with training schemes** is rarely available for non-formal VET programmes and missing altogether for informal apprenticeships. The simple inclusion of informal apprenticeship trades in current assessment and certification systems would provide a tool for comparing knowledge, skills and occupational competences among different VET providers and improve the portability of these competences.

National VET training funds can be effective in responding to the needs of informal MSMEs by providing the specialised skills needed to conduct training needs assessments and design or deliver informal apprenticeships on a scale suitable to the needs of these enterprises in the informal economy. National

VET training funds are used widely throughout Sub-Saharan Africa and other regions and typically are financed by payroll levies and external funding agencies.

In many developing countries, private VET providers show a willingness to innovate in a manner that addresses financing constraints and costs for training in MSMEs in the informal economy. **Demand-side financing instruments** such as vouchers or grants by VET funds to small enterprises for training can help promote this private market by creating new purchasing power for enterprises and stimulating a supply response to the need for training by MSMEs. Opening capital markets and improving financial services to enterprises in the informal economy also has the potential to encourage private investment in VET programmes.

Many of the trades and occupations that have developed informal apprenticeship systems over generations are male-dominated. **Breaking existing gender barriers** is crucial in increasing the participation of young women in informal apprenticeships and improving the access of both young men and women to trades and occupations (see Box GN10.3). This can be achieved by encouraging youth to apply for apprenticeships commonly associated with the other sex, and by raising awareness among master craftspersons to change attitudes and break stereotyped gender roles.

Procedure

When informal apprenticeships as an innovative approach to capacitating target groups surviving in the informal economy is implemented through a development cooperation project, and proves to be successful, the question automatically arises of how this best practice or experience can be utilised on a broader basis and **elevated to an overall systemic level**. When developing an innovative approach to support the implementation of informal apprenticeships, scaling-up therefore has to be considered as a criterion — especially with respect to selecting partners for scaling-up and in obtaining the financial and human resources to sustain the innovation.

BOX GN10.3 Strengthening informal women entrepreneurs

The emergence and growth of women entrepreneurs is a global trend, with many developing countries working to stimulate women's entrepreneurship development in the informal economy as a means to enhance gender equality. The ILO has built expertise in women-specific enterprise activities over the past 10 years through its technical cooperation portfolio on Women's Entrepreneurship Development and Gender Equality (WEDGE) projects. These projects support the creation of an environment conducive to women's entrepreneurship development by identifying and removing obstacles, building institutional capacity and developing tools and support services for women entrepreneurs. The initiative ensures that all entrepreneurship education tools used in training programmes are gender sensitive. Its success lies in providing practical guidance for women starting, formalising and developing their enterprises.

Source: ILO, 2009.

There are some lessons to be learned from EU-funded Investing in People (IiP) projects. The most significant examples are (i) Technical and Vocational Education and Training for Young People in the Informal Economy and (ii) Skills for Unemployed and Underemployed Labour (SkillFUL): Promoting Sustainable Training in the Informal Economy for Poverty Reduction in Bangladesh. These projects adopted training schemes to address a total of 10 000 unemployed youths or the underemployed in the informal economy, involving public and private training providers, specialised non-governmental organisations (NGOs), formal and informal business associations and individual employers.

STEP 1: Identification of target groups

The informal economy is a persistent feature of the economic landscape in many developing countries. The principle of target group orientation requires that target groups be identified and their **learning needs and living conditions** in the informal economy be understood. Target groups may include, among others:

- members of marginalised groups such as refugees and ethnic minorities;
- family members working in informal small businesses;
- domestic workers;
- people with disabilities.

Some target groups live in rural and peri-urban areas. For this reason, it is important to find **suitable information channels** for making people aware particularly of provision of informal apprenticeships. Information can be provided through cooperation arrangements with local NGOs, interest groups, professional organisations such as informal trade associations within the informal economy, and other multipliers.

STEP 2: Fixing the starting points

Next, reflect on and consider which are the **relevant components when planning the implementing phase** of the informal apprenticeship project. The following questions can be helpful in this context.

- Which is the major key issue for successful implementation of informal apprenticeships?
- What risks are inherent in the implementation of informal apprenticeships?
- What alternative steps would be conceivable should certain risks materialise?

Experience shows that it is often helpful to link with and build on existing practice and structures in informal apprenticeships. The ILO's resource guide for upgrading informal apprenticeships in Africa (ILO, 2012) might be helpful in this respect.

STEP 3: Setting up cooperation structures

Partners must be selected on the basis of their core competences for communication, knowledge

management, advocacy, policy advice in the field of informal apprenticeships and so on. The informal apprenticeship project needs an **internal and external stakeholder analysis** that extends well beyond the internal project structure. Informal trade associations as well as local and regional governance structures should be included in the implementation process wherever possible.

STEP 4: Operational planning

As part of a multi-level approach, it is recommended that an appropriate **policy for informal apprenticeships** be formulated at the macro level. In order to place delivery of informal apprenticeships on a sustainable footing, it is helpful to embed an informal apprenticeship project at the meso level in the work of social movements and to create institutional structures. At the micro level, it is often necessary to link informal apprenticeships with other measures such as mentoring, tools, capital, job placement and advisory services for business start-ups to ensure long-term effectiveness. The following questions can be helpful in this context.

- **How should delivery of informal apprenticeships be organised?** Because of their precarious income situation, those working in the informal economy are generally unable to spend long periods of time away from work. Under these circumstances, the time and duration of training measures should be tailored to the time available to the target group.
- **How should learning objectives and content be set?** Learning provision should relate to the work and learning situations of the target group so participants can put their newly acquired skills into practice as quickly as possible.
- **Which learning methods are appropriate for the informal economy?** The learning habits of the target groups, such as learning by doing, should be taken into account when selecting training methods. Developing key skills and personal traits usually requires active learning focused on the learner rather than on the curriculum or instructor.

- **How should qualifications be recognised and certified?** Certification and formal recognition of skills acquired in informal and non-formal contexts appeals to many of the target groups. These processes open up prospects for further learning in the formal education system and for obtaining better employment — including in the formal economy — and require an appropriate legislative and institutional framework.
- **How should informal apprenticeships be financed?** The situation of the target group should be taken into account in determining how the provision of informal apprenticeships is financed. Some apprentices can be expected to contribute financially to their apprenticeship; this may even increase their motivation.

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Case study: Strengthening informal apprenticeships in Ghana

CONTEXT

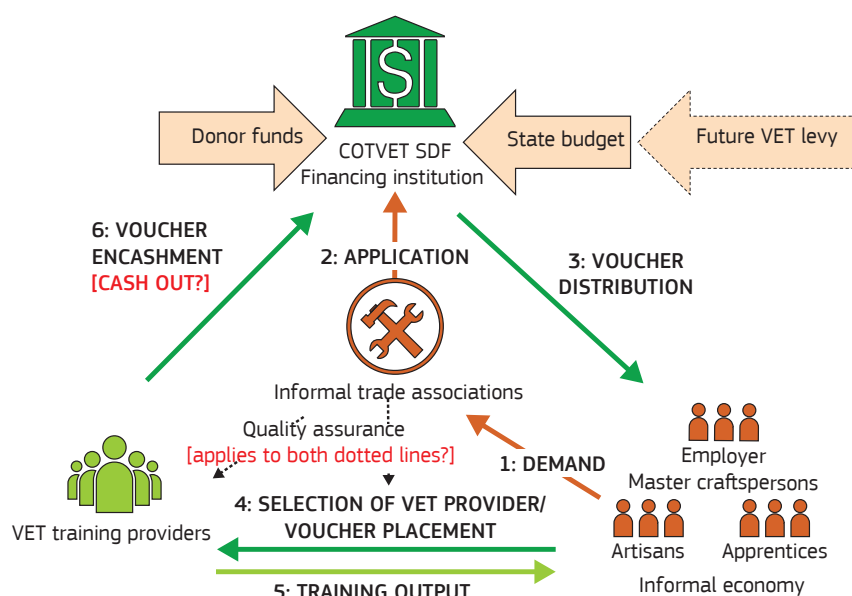
Informal apprenticeships have long been a neglected area of national training policies.

Nevertheless, over 80 % of Ghana's working population are employed informally. The majority of young people in Ghana undertake training in the form of informal apprenticeships — i.e. outside the country's formal VET system. Informal apprenticeships last three years on average and are based on an oral or written arrangement between the apprentice and master craftsperson. In general, there are no entry requirements such as a general school education. Apprentices must pay a training fee to the master craftsperson. Often, they receive subsistence costs and sometimes support with travel or accommodation expenses. The master craftsperson decides on the completion of training, often with the involvement of the relevant informal trade association. In the past, informal apprenticeships were not subject to any official training standards.

CHALLENGES AND OPPORTUNITIES

The project promotes the employability of apprentices and those who work in the informal economy. Its aim is to **improve the quality of informal apprenticeships** by strengthening the involved VET institutions and their staff, creating a link to the formal VET system. Improved competences among apprentices broaden development possibilities for engagement in MSMEs.

FIGURE GN10.2 Modernising traditional apprenticeships



Source: COTVET of Ghana and KfW, 2011.

The future funding of informal apprenticeships is to be guaranteed through a **national VET voucher system**. Donor funds provide start-up funding. The project promotes cooperation between informal apprenticeships in MSMEs in the informal economy and private and public VET providers.

ACTIONS TAKEN	<p>The training modules are in line with national competency-based training standards and are certified accordingly. They comprise occupational and general education modules (mathematics and science; English; information, communication and technology; entrepreneurship; and interpersonal skills). With cooperative training, both learning sites — informal MSMEs and vocational schools — comply with the (appropriately differentiated) national occupational standards. The project advises informal trade associations in the informal economy on how to strengthen their role as mediators between VET providers and MSMEs, as well as in terms of quality control for informal apprenticeships, and how to improve their training offerings for members.</p> <p>Informal trade associations are already contributing to developing occupational standards that are valid for training in both the formal and informal economies. At the same time, this improves the know-how of selected VET providers with regard to school management and teacher training so as to provide the target group from the informal economy with modernised informal apprenticeships. To this end, the national VET agency — the Council for Technical and Vocational Education Training (COTVET) — is to implement reforms to improve links between enterprises in the informal economy and the formal VET system. A new cooperative training model in the informal apprenticeship system and needs-based short-term VET programmes have been introduced on a pilot basis beginning in 2014 in 3 of Ghana's 10 regions. A monitoring process will be established to check whether the approach can also be scaled up and rolled out nationwide.</p>
LESSONS LEARNED	<ul style="list-style-type: none"> • Representatives of informal trade associations at a wide variety of levels have declared their interest in modernised informal apprenticeships and further training for master craftspersons, artisans and apprentices; they are demonstrating this through solid commitment to the project in all its aspects. • As with most VET reform initiatives, stakeholders have a decisive role to play. For this reason, it is particularly important to promote ownership on the part of the partners, in addition to ongoing capacity development for key figures in the institutions involved. • Informal trade associations and VET providers must be capable of lobbying for the modernisation of the informal apprentice system at the political level. • Reform initiatives should be fed into the relevant national strategy papers (national VET policy, VET implementation strategy, gender strategy, VET national qualifications framework, etc.). This is a necessary condition to develop and establish sustainable appropriate mechanisms to promote this form of skills development and, in particular, to ensure its compatibility with the formal VET system.

Source: COTVET of Ghana and KfW, 2011.

GUIDANCE NOTE 11

Implementing VET in post-conflict and fragile countries

Topic overview

There is no internationally uniform definition for the term ‘post-conflict’. In the so-called early warning system, countries are said to be in a post-conflict phase at least one year after a violent conflict has been ended by a cease fire or peace treaty. It is generally accepted that a post-conflict phase lasts for a maximum of 10 years after the end of violent conflict. The Organisation for Economic Co-operation and Development (OECD) report, *States of Fragility 2015*, offers a new tool for assessing fragility which is more comprehensive than the traditional single categorisation of fragile states, and recognises the diversity of risks and vulnerabilities that lead to fragility (OECD, 2015). It identifies countries which are most vulnerable based on five dimensions of risk and vulnerability linked to fragility, and asks how likely they are to achieve the United Nations Open Working Group’s post-2015 goals and targets in those five dimensions (see Box GN11.1).

A European Commission (EC) communication on response to situations of fragility outlines that weak or failing structures and situations are responsible for broken social contracts due to the **state’s incapacity or unwillingness** to deal with its basic functions such as service delivery, management of resources and rule of law (EC, 2007).

The **Do-No-Harm approach**, developed and propagated by Mary B. Anderson in the 1990s, has been accepted as a foundation for conflict-sensitive aid and development interventions by international humanitarian and development actors. This means that the design of interventions and operative aspects in vocational education and training (VET) project implementation need to be closely analysed and monitored for

SUMMARY OF KEY ASPECTS

- To support development practitioners in designing conflict-sensitive projects in the field of education and VET, the EC has developed *Operating in situations of conflict and fragility: EU staff handbook*.
- Situations of conflict and fragility host a growing number of the world’s poor. Around 43 % of people who survive on less than USD 1.25 per day live in countries considered fragile.
- The OECD offers a tool for assessing fragility that recognises the diversity of risks and vulnerabilities that lead to fragility.
- The Do-No-Harm approach has been accepted as a foundation for conflict-sensitive aid and development interventions by international humanitarian and development actors.
- The integrated employability and life skills approach aims to strengthen a person’s cognitive, personality-related and social competences in order to facilitate appropriate dealings with other people and with the problems and stresses of everyday life.

assessment of conflict relevance, conflict risks and actual effects of the interventions. In fragile and conflict-affected countries, the provision of basic services — including education and VET opportunities — is seriously undermined, as can be seen by the Iraqi example in Box GN11.2.

Conflict-sensitive **VET provision should avoid reinforcing patterns of exclusion** and should seek to

BOX GN11.1 *States of Fragility 2015: Meeting Post-2015 Ambitions*

States of Fragility 2015 embraces a concept of fragility that includes many facets and dimensions.

- **Fragility can affect developing and high-income countries** alike.
- Reducing poverty post-2015 will require addressing fragility, in particular, **building resilient institutions**. Of all people living on less than USD 1.25 per day, 43 % live in countries considered fragile.
- **Aid to fragile environments in unequally distributed**. Afghanistan and Iraq receive the lion's share, while 10 fragile states are aid orphans: Bangladesh, Chad, The Gambia, Guinea, Madagascar, Malawi, Nepal, Niger, Sierra Leone and Togo.
- Only 1.4 % of official development assistance (ODA) to fragile states is spent on security; 3 % on justice, and 4 % on inclusive politics, although these are international priorities agreed in the New Deal endorsed in Busan in 2011; 46 % of ODA is **not aligned to peacebuilding and statebuilding goals**.
- Smarter and more **innovative use of aid in fragile environments** is needed, including financial instruments such as pooling funds, budget support and matching funds, as well as South-South or regional cooperation.

Source: OECD, 2015.

base decisions on criteria that can be defended as fair, and communicated clearly to both governments and recipient populations. Employment initiatives for young people can be an important contribution from a conflict-sensitivity perspective, potentially reducing the risk of young men in particular being drawn into violence. The provision of VET programmes is an important aspect of promoting inclusive economic growth in fragile contexts. In order to support development practitioners in designing conflict-sensitive projects in the field of VET, the EC has developed and made available an EU conflict sensitivity resource pack, which is included as Annex 2 of *Operating in situations of conflict and fragility: EU staff handbook* (EC, 2014).

BOX GN11.2 *Current status of VET in Iraq*

One of Iraq's current main development challenges is youth unemployment, which is currently at around 18 % for ages 15–29. A large number of Iraqi youth are seeking jobs in the public sector, which has limited capacity for job creation. Instead, Iraq has to depend on the private sector as the nation's future chief employer. The events of 1991 and the recent armed conflict have led to heavy damage of infrastructure and a general dislocation of the entire education and training system. The situation has undoubtedly deteriorated further as a result of the 2003 conflict and its aftermath. The still ongoing conflict between Sunni, Shiite and Kurdish populations impedes further development of the VET system.

Empirical evidence suggests that many VET providers suffered considerably due to the war, with many dysfunctional or only functioning sporadically. A major problem of the current VET environment is its fragmentation and the uncoordinated management of each sub-system. There is no institutional framework to organise, regulate and ensure the quality of VET programmes. This often leads to duplication of efforts and ineffective use of scarce resources. In addition, the centralised decision-making structure in the VET system — coupled with generally weak management capacity at the school level — contributes to an inefficient use of resources.

VET provision is being enhanced in all public VET structures with a short-cycle Skills for Work programme, consisting of modular training in selected vocational skills that are in high demand in the labour market, in order to achieve quick impact in terms of youth employment and self-employment. Most donor organisations are working to reconstruct the infrastructure and build the capacity of the Foundation of Technical Education.

Source: UNESCO-UNEVOC, 2014.

Participation in employment-driven VET programmes is greatly desired by young people in fragile situations, because it offers the chance to work and employability — which leads to income generation. However, **employable skills must be taught alongside other subjects such as life skills**, which are equally

important for young people to conduct a proper life. The integrated employability and life skills approach aims to strengthen a person's cognitive, personality-related and social competences in order to facilitate appropriate dealings with other people and with the problems and stresses of everyday life (see Box GN11.3).

The aim is to give individuals — and particularly young people — the **opportunity to develop self-esteem and courage** so they can lead active, creative lives and overcome difficult periods. Contemporary approaches to VET stress the need to adapt and adjust training programmes to best meet the needs of the target group. In this regard, young people from post-conflict settings can be seen as a special, albeit diverse, target group. It appears that young people from any marginalised situation gain the most when VET programmes are comprehensive and include non-occupational components — such as sharing food, playing sports, working together in groups, helping those who are worse off. All of these components have been shown to contribute

to community re-integration and have been successfully incorporated into VET (UNESCO-UNEVOC, 2012).

VET programmes for ex-combatants represent a special case. Even if ex-combatants had prior technical skills before embracing military life, skills refreshment and psychological preparation are needed to support transition from combat to civilian work. For some people, the transition back to civilian life is neither fast nor easy. Military culture is strong and tends to emphasise particular values and activities. During armed conflicts, combatants frequently live in camps, constantly (even exclusively) in the company of comrades, and units are usually characterised by an extreme group cohesion that overrides individualism. Coming back into the labour market can be very threatening for people who have been away from mainstream civilian life for some years. Previous experiences may not fit or may be out of date.

A number of soft skills/life skills need to be taught to encourage ex-combatants to adapt to new environments. VET programmes have the potential to **help all members of conflict-affected communities repair the social fabric of communities** as well as repair physical infrastructure and economic activity. The focus has to be on youths, not only since young people represent such a high proportion of the population of post-conflict societies but also because they are very vulnerable due to the physical and emotional changes they experience. The findings of a tracer study conducted in 2012 in Somalia at the EU-funded project for Developing Vocational Training for the Informal Economy confirms that the project met its objective of improving employment opportunities of disadvantaged youths and providing alternative income sources through the provision of demand-driven skills training (see Box GN11.4).

BOX GN11.3 Components of VET programmes in fragile states

- **Occupational knowledge, skills and competence geared to labour market realities.** This topic must be at the core of any VET programme.
- **Life skills.** In developing countries, VET programmes too often remain narrowly focused on the occupational part alone. Peacebuilding as well as more common skills such as problem solving, teamwork and communication can be incorporated into VET programmes.
- **Entrepreneurial skills.** Tight labour markets and economies that have been severely disrupted by conflict or disaster cannot absorb all VET graduates. Preparing people for self-employment by including basic entrepreneurial and micro-business skills is very useful.
- **Catch-up learning.** War and disaster cause significant upheaval in people's lives, and basic education is often disrupted to some extent. In such cases, VET programmes offer the opportunity for catch-up literacy, numeracy and general education.

Procedure

Development of VET projects in fragile countries faces major challenges in one way or another: the central VET actors in the partner country are either unable or unwilling to invest in VET programmes. According to a recent study on VET in fragile contexts in 12 projects (Global Public Policy Institute, 2013),

BOX GN11.4 Developing Vocational Training for the Informal Economy in Somalia (DVTIES)

The DVTIES project pilots VET programmes for youths, dropouts and illiterate adults (50 % female), integrating basic literacy with technical skills and leading to a vocational qualifications framework based on occupational skills standards and competency-based training. The programmes are offered by upgraded training centres, where VET staff have been trained on competency-based modular training approaches. The project's overall objective is to **improve the employment opportunities of disadvantaged Somali youth** across the country. Its specific objective is to strengthen the VET system and training delivery methods to foster employment promotion in three Somalian states.

The project targets three results areas: (i) expanding access to **employment-driven VET programmes**, (ii) building the **capacity of VET providers** (training administrators and instructors) and (iii) enhancing **carrier progression** and trainee competency by developing a vocational qualification framework for the three lowest levels of vocational training.

The project's primary target groups are youth, aged 16–24, comprising persons with disabilities, youth including school dropouts, unemployed school leavers, untrained internally displaced youth and returnees, ex-militia, and socially and economically excluded minorities. About 1,900 learners have been trained at an intermediate skill level, and 2,400 learners — mainly ex-militia, minorities and people with disabilities, women and youth — have been trained in literacy and numeracy under a non-formal education component.

The study findings show that the DVTIES project has given 82 % of graduates the opportunity to attain empowering skills that have helped change their lives. The nine-month training duration engaged them in more practice, making it more convenient than traditional VET programmes. However, the graduates still request to be engaged in more practical lessons. In comparing previous and current incomes, 68 % of graduates stated that their current job offered better remuneration than their previous job.

Source: Thariki and Hajji, 2012.

four lessons arise for the successful creation of a market for VET programmes in fragile countries:

- an extensive but informal **analysis of the socio-economic and state institutions** of the fragile country is central to the success of the VET project;
- VET projects are particularly effective in fragile contexts if they **pursue an integrated employability and life skills approach** (see Box GN11.3);
- the **timing and length of the VET project** must be chosen correctly;
- the systematic and **reflected selection of partners** is important to ensure the relevance and impact of VET projects in fragile contexts.

In addition, based on EU experience in development cooperation, it can be argued that mechanisms for institutionalisation should be stabilised (e.g. apprenticeship schemes, certification, etc.).

STEP 1: Roughly define project form and content

A project in support of VET programmes in fragile states will vary depending on differences in post-conflict and post-disaster situations. Generally speaking, the VET programmes have to include **core components such as technical, life, entrepreneurial and catch-up skills**. It is therefore necessary to collect information on the situation of target groups seeking employment. As a first step, the collected information allows identification of the form and content of the VET project. From this information base, analysis allows selection of options to obtain a best fit.

STEP 2: Plan implementation

The following questions might be helpful in identifying the relevant components for a project's intervention strategy.

- Which are the major key issues to **support economic foundations** in post-conflict and

fragile states for successful implementation of VET programmes?

- How will social and economic communities **recover and rebuild** in modern post-conflict environments?
- What kind of **risks** are inherent, particularly from violence and institutions, at the implementation of the VET programme?
- What kind of **alternative steps** would be conceivable should certain risks materialise?

STEP 3: Operational planning

After planning implementation, a project overview plan should be outlined in more detail and should include operational planning. Work packages should then be detailed. The following questions could be raised.

- How are the **rough work packages** to be implemented concretely?
- Which institution will be **responsible for implementation** of the VET project?
- What **resources are available** from the fragile or donor for the individual work packages?
- When should **relevant milestones** be reached?

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Case study: Promoting youth employment in post-conflict Sierra Leone

CONTEXT	<p>One of the lasting impacts of the 11-year-long civil war in Sierra Leone is the disruption it brought to basic education and VET in the country. Over 60 % of Sierra Leonean adults cannot read or write, and a disproportionately high number of these are women. Very few people possess marketable skills and occupational work experience. Over 60 % of young people in Sierra Leone are unemployed or underemployed. The lack of prospects is still considered a major threat to peace and stability in Sierra Leone by the United Nations Peacebuilding Commission. Hence, to reduce youth unemployment and underemployment in Sierra Leone, the employability of young people must be improved through an integrated employability and life skills approach. After a decade of civil war and poor government funding, the situation of the VET system remains inadequate. Without needs-oriented training and practical work experience, it is difficult for young people in particular to find productive employment.</p>
CHALLENGES AND OPPORTUNITIES	<p>The objective of the employment promotion project is improvement of the employment and income situation for young people in rural areas of Sierra Leone. Disadvantaged youths and young adults are offered different forms of VET programmes and means for occupational qualification in a non-formal framework. The market-driven orientation of the project's VET offerings to current employment opportunities will serve to directly alleviate youth unemployment. The project has to run literacy campaigns, many involving women.</p> <p>The project works in three districts. In each of the three districts, the project selected two traditional administrative areas in which poverty was particularly acute and the potential for employment was high. At the political level, the project supports the Ministry of Labour and the Ministry of Agriculture in particular. The focus of project activities is on three agricultural product groups: coffee and cocoa, rice and livestock. In collaboration with national and international partners, the project team aims to further develop local agriculture — and in doing so, generate employment opportunities for young men and women.</p>

<p>ACTIONS TAKEN</p>	<p>To improve the knowledge, skills and occupational competence, and thus the employability of young people, the project works in the following areas.</p> <ul style="list-style-type: none"> ● Functional literacy. Given the high rates of illiteracy, the project developed a non-formal functional literacy VET programme in Krio, the lingua franca in Sierra Leone. This is a two-year-programme that combines literacy skills with a range of life skills and employment-related issues. ● VET modules. To address the low levels of knowledge, skills and occupational competence among youth and provide them with what they need to qualify for employment, the project developed VET modules that can be combined to provide comprehensive VET qualifications. ● Basic entrepreneurial skills development. Motivated young people with an interest in starting their own businesses are encouraged to learn basic entrepreneurial skills to prepare them for self-employment. ● Capacity development. To strengthen its institutional partners, the project offers specific VET programmes to staff in its partner ministries, district officials, local business associations, implementing non-governmental organisations, as well as artisans and VET instructors. <p>The activities focus on good agricultural practice, VET programmes and promoting small enterprises. The service providers capacitated young people for employment in agricultural operations along the value chains for coffee and cocoa, rice and livestock. The project enters into development partnerships with established companies, so public and private sectors work together on job creation. The project provides financial and professional support to business start-ups and for enterprise development. Advisory services, training and equipment for small businesses make it easier for entrepreneurs to earn a living from their businesses, and to expand them and create additional jobs.</p>
<p>LESSONS LEARNED</p>	<ul style="list-style-type: none"> ● Participation of over 10 000 cocoa farmers in VET programmes improved their prospects to develop their social and professional networks; obtain employment; and succeed in the world of work, communities and the wider society. ● Learners increased their social status and have improved their influence on the decision-making processes which affect their lives; 600 people have found employment in cocoa processing centres. ● Project learning opportunities support social equity and inclusion in development. Some 1 000 young people from 49 villages have come together with a view to using 450 hectares of wetlands for rice production. To prepare for this task, they took part in integrated employability and life skills programmes focusing on team building, organisation and sound agricultural practices. ● Effective opportunities to acquire skills by all learners, male and female, have been promoted; e.g. 1 000 small farmers, most of them women, are seeking to expand their goat-farming businesses. ● Organisations such as local trade associations have been capacitated and now support many project activities. Their employees have taken part in capacity development initiatives on increased production, financial management and administration.

Source: GIZ, n.d.

GUIDANCE NOTE 12

Implementing gender mainstreaming

Topic overview

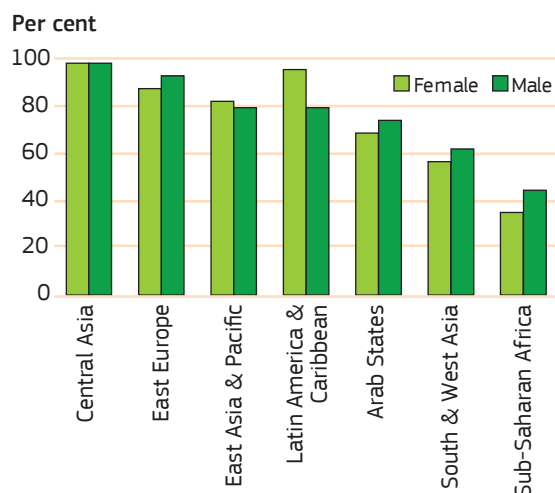
Gender equality is a goal in its own right and at the same time a key to and enabler of sustainable development. Gender equality is a principle that shapes the values and work of European development cooperation. A **careful gender analysis of the labour market** can prove useful to make vocational education and training (VET) systems more efficient and relevant to the demands for flexibility in fast-changing economic scenarios. However, implementation is still hampered, as can be seen from the level of gross secondary enrolment ratios around the world. The United Nations Educational Scientific and Cultural Organization (UNESCO) Institute for Statistics estimates the percentage of female students worldwide in vocational programmes to be 44 %. According to UNESCO, the enrolment ratio for females is distinctively lower than that for males in five regions worldwide. Only in the East Asia and the Pacific and in Latin America and the Caribbean is the female gross enrolment ratio higher than that for males (see Figure GN12.1).

Barriers that women face in terms of accessing VET programmes and/or employment primarily have a basis in socio-cultural rules. Women are severely hindered in social and economic endeavours from lack of access to viable VET programmes, and social discrimination in many different forms constrains women's active participation in the labour market. Early marriage, household responsibilities, family restrictions, conservative social mindset and stereotypes, lack of sanitary facilities and sexual harassment are some of the serious obstacles that render the VET system and work environment inappropriate for women.

SUMMARY OF KEY ASPECTS

- Gender equality is a goal in its own right and a key to and enabler of sustainable development; it is a principle that shapes the values and work of European development cooperation.
- Barriers that women face in terms of accessing VET programmes and/or employment are primarily based in socio-cultural rules and result in women being confined to a narrower range of occupations. A gender-sensitive VET system should move beyond an employment-only focus to include elements of empowerment and self-confidence building.
- Gender equality is a development objective of countries around the world, as manifested by the ratification of international instruments on the rights of women and International Labour Organization conventions.
- Many economies in developing countries are traditionally characterised by rigid gender-based occupational segregation. Women are traditionally associated with the private domestic domain of the family and community as part of their traditional reproductive or care-giver role
- The starting point to develop a conceptual framework for a gender-sensitive VET project is to undertake a gender analysis, which helps identify the different situations, interests and needs of women and men.
- A gender-sensitive VET programme must be linked with nationally recognised qualifications from the National Vocational Qualifications Framework. It must also adhere to the learning outcome based methodology endorsed by the responsible VET authority.

FIGURE GN12.1 Regional gross enrolment ratios in secondary education in 2009



Source: UNESCO, 2013.

International Labour Organization conventions such as No. 100 (Equal Remuneration), 111 (Discrimination (Employment and Occupation)) and 142 (Human Resources Development) provide the international normative **framework on improvement of gender equality and women's employment**. At the European level, a directive of the European Parliament and of the Council requires member states to take all necessary measures to ensure the effective implementation of the principle of equal opportunities and equal treatment of men and women. It is important to be aware of the existence of two key instruments: the [United Nations Convention on the Elimination of all Forms of Discrimination Against Women \(CEDAW\)](#) and the [Beijing Platform for Action \(PfA\)](#). By ratifying the CEDAW (see Article 11) and adhering to the PfA (see Critical Area for Concern: Women and the economy) countries have agreed to take concrete action and commit resources to ensure that women have equal access without discrimination to VET, among others. This is key information to consider while engaging in dialogue with partners. While the European Union (EU) promotes gender equality, it does so in a way that is fully coherent with what partner countries have also committed to do.

As laid down by the G20 Training Strategy (ILO, 2010) VET is an important means of pursuing the overall goal of equality of opportunity and treatment for

women and men in employment and occupation. **Opportunities offered by VET in the labour market** are an important means for women to achieve greater equality with men: the more skilled the female workforce is, the wider women's choices in labour markets will be, and the more likely they are to secure equal treatment.

As of January 2016, a new gender action plan — 'Gender equality and women's empowerment: Transforming the lives of girls and women through EU external relations 2016–2020' (EC, 2015) — provides guidelines for focused and coherent action to **reach gender equality objectives through EU development cooperation** with partner countries. Action will be focusing in four pivotal areas:

- ensuring girls' and women's physical and psychological integrity;
- promoting the economic and social rights/empowerment of girls and women;
- strengthening girls' and women's voice and participation;
- shifting European Commission (EC) services and the European External Action Service (EEAS) institutional culture to more effectively deliver on EU commitments.

The second pivotal area, promoting the economic and social rights/empowerment of girls and women, includes an objective for specific action regarding VET (see Table GN12.1).

A **gender-sensitive VET system** needs to be aware of the existing differences in women's and men's access to VET programmes and employment, and be capable of improving the equity outcomes of education whilst meeting the knowledge, skills and occupational competence demand. The aim of gender mainstreaming is to forge ahead with gender equality. To this end, state and non-governmental actors such as ministries and their administrative bodies have to be supported in applying gender-sensitive approaches and integrating specific gender-oriented initiatives where and when necessary, at the local, national and supra-national levels.

TABLE GN12.1 VET-related objectives, indicators and activities under the new EU gender action plan

OBJECTIVE	INDICATORS	EXAMPLES OF ACTIVITIES
13. Equal access for girls and women to all levels of quality education and vocational education and training (VET) free from discrimination	13.1 Primary completion rate for girls and boys (SDG 4.33) 13.2 Secondary completion rate for girls and boys (SDG 4.35) 13.3 Tertiary enrolment rates for women and men (SDG 4.37) 13.4 Literacy rate of 15- to 24-year-olds, women and men (SDG 4.5) 13.5 Percentage of pupils enrolled in primary and secondary schools providing drinking water, adequate sanitation and adequate hygiene services (SDG 6.4) 13.6 Personnel in research and development (per million inhabitants) (SDG 9.63) 13.7 Number of children enrolled in primary education with EU support (EURF) 13.8 Number of children enrolled in secondary education with EU support (EURF) 13.9 Number of teachers trained with EU support (EURF) 13.10 Ratio of females to males who have benefited from VET/skills development and other active labour market programmes with EU support (EURF)	<ul style="list-style-type: none"> • Support legislation and national capacity full coverage of quality and non-discriminatory education for learners of all ages • Ensure a safe, free of sexual and gender-based violence environment that responds to child protection principles • Provide education (both formal and non-formal) that addresses gender stereotypes and allows for lifelong learning • Promote gender-equal role models in the transition from education to the labour market through curricula and gender parity among teachers • Support vocational and professional training for girls and boys that enable them to be change agents

Source: EC, 2015.

Note: EURF = EU Results Framework; SDG = Sustainable Development Goal.

Rigid **gender-based occupational segregation** restricts the occupational choices of women and men to those traditionally regarded as appropriate activities for them. Occupational segregation limits and constrains employment choice and opportunities. Equal access to employment is limited by gender-based occupational segregation, with women being most disadvantaged. At a societal level, rigid labour market segregation is believed to limit societies' capacity to respond to the new economic opportunities and risks presented by the global economy (EC, 2006). The concentration of men and women in different types and levels of activity and employment normally results in a situation such that women are confined to a narrower range of occupations (see Box GN12.1) and at lower levels than men.

Gender-based occupational segregation is a common feature of labour markets at all levels of development; under all political systems; and in diverse religious, social and cultural settings. Gender-based occupational segregation is based on traditional beliefs or gender stereotypes of appropriate functions for men and women. These beliefs are based on the core reproductive roles of women and men. Women are traditionally associated with the private domestic domain of the family and community, and men with the public domain as primary breadwinners.

Work in female-dominated occupations (cleaner, salesperson, waitress, secretary, receptionist, etc.) is related to similar activities women perform in the home as part of their traditional reproductive or

BOX GN12.1 Women in Kyrgyzstan

Kyrgyzstan has been carrying out a major land reform, designed to give property rights to small farmers over the past five years. While women are in theory equally as entitled as men to their share of land, this does not always hold true in practice. Responsibility for overseeing distribution of land is usually left to tribal elders, who may ignore a young woman's property rights. The lack of opportunities in densely populated rural areas such as the Fergana Valley in the South is pushing many young people off the land. Many women when they leave do not inherit any land and do not receive any compensation. Most of them end up in the big cities looking for work.

Women are over-represented in the informal economy, which is estimated to account for over a third of the whole. More women in Kyrgyzstan finish their education than men, but this higher educational attainment does not translate into success in the jobs market. In the formal sector, women tend to cluster in certain economic sectors such as health, education and culture. There is also a large and growing pay gap between the earnings of men and women. In 2000, women earned about 32 % less than men on average; by 2003, the gap had grown to 36 %.

One positive sign is the success of women entrepreneurs. In the changed economic conditions after the collapse of the Soviet Union, many women took the initiative and set up as traders, travelling to neighbouring countries to bring goods back to Kyrgyzstan.

Source: ETF, 2010.

care-giver role. A **gender-sensitive VET system should move beyond an employment-only focus** to include elements of empowerment and self-confidence building. It should present different role models, widen women's and girls' self-perceptions on their occupational abilities and include non-formal VET programmes to support the development of women's cooperatives and employment in informal micro, small and medium enterprises (MSMEs).

In the absence of positive changes in all of these areas, the good intentions of providing VET opportunities

without discrimination so often stated in financing proposals will not be fulfilled — and consequently the **gender gap may well be widened** in terms of provision of VET programmes and consequent employment opportunities (EC, 2006). Successful VET system reforms need to address current gender-based inequalities in the economy, and ensure that both men and women have equal access to new technologies and opportunities being introduced (see Box GN12.2). A careful gender analysis of the labour market can prove useful in making VET systems more efficient, effective and relevant to the demands for flexibility in fast-changing economic scenarios.

In order to **integrate specific gender-oriented initiatives**, it is necessary to collect gender-specific data on the situation of target groups seeking employment. Furthermore, a gender analysis helps identify the different situations, interests and needs of women and men (see Box GN12.3). Finally, an analysis has to be made of the current capacity of the VET system in terms of numbers of male/female graduates produced in each occupational area.

Talking to people in the field such as VET teacher unions, trade unions, employer and women's

BOX GN12.2 Easing the transition to work for women in Bangladesh

Integrating women or men into areas of specialisation in which they were previously under-represented is important to diversifying opportunities for VET. The National Strategy for Promotion of Gender Equality in Technical and Vocational Education and Training in Bangladesh sets clear priorities and targets for breaking gender stereotypes. The strategy was developed by a Gender Working Group consisting of 15 representatives from government ministries and departments, employers, workers and civil society organisations. It provided an overview of the current status and nature of gender inequalities in VET, highlighted priority areas for action, explored a number of steps to promote equal participation of women in VET programmes, and outlined the way forward.

Source: Government of Bangladesh, 2012.

BOX GN12.3 Selected key questions for a macro-level gender analysis

- What commitments to gender equality of access to VET have been made by the government?
- Are comprehensive labour and employment policies in place which reflect commitment to equal opportunities in VET and employment, and provide equal benefits and protection for men and women?
- What other necessary measures are in place to help guarantee the effectiveness of gender-sensitive VET systems, e.g. affirmative action, specific programmes to attract women to VET, investment to modernise VET programmes in feminised occupations, incentives to employers, sensitisation of labour market institutions, credit schemes and accompanying measures to support women's entrepreneurship?
- Has an analysis been made of current female/male employment/unemployment which provides clear indications of female/male employment/unemployment by sector and by level?
- Has a similar analysis been made for current female/male unemployment?
- What information is available on women's and men's work in the informal economy?

Source: EC, 2006.

organisations is the next action in the process of developing a training model specifically for women. Consultations must be carried out over a number of months.

Another important action is the **selection of public and private VET providers**. This has to be done early to ensure that all parties are involved in the planning as well as implementation stages. When selecting partners, look for organisations that would be committed to the VET project's goals and focused on developing a sustainable VET model which could be replicated by the private sector. Special attention should be paid to actions to attract female learners to all types of VET programmes (see Table GN12.2).

Procedure

STEP 1: Identification and preparation

In VET programmes particularly, girls and women remain under-represented because **traditional perceptions of appropriate roles for women** in the workplace remain largely unchallenged. The topic of women and VET seems to have lost some of its lustre and momentum in developed countries, and is experiencing stagnation in developing countries. There is a need for revitalisation and continuous attention at all levels of discussion, research, development and policy decisions.

TABLE GN12.2 Attracting female learners to VET programmes

ASSUMPTION	Government will support the strategies to increase the overall number of learners benefiting from both formal and informal VET and give attention to unqualified youth and girls
RISK	Students (particularly female and other disadvantaged groups) do not find VET programmes attractive or useful in increasing their economic well-being and do not want to participate in a VET programme
RISK LEVEL	Low
MITIGATING MEASURE	Equitable access and new programmes will be prioritised. Guidance and counselling materials, which fully explain the various options in technical colleges, will be prepared to encourage enrolment. Initiatives that target unqualified youth will serve as examples of good practice and will be reviewed to determine successful strategies.

- Conduct an initial stocktaking. Who are the stakeholders and partner organisations? What are their activities? What is their capacity? What are their roles and needs?
- Ensure that a benchmark survey or baseline study is gender sensitive.
- Identify gender-related goals and priorities based on available information and consultation with stakeholders.
- Conduct a gender-sensitive social analysis or assessment.

It is possible that resistance will emerge to undertaking **gender equality–promoting measures**. Acknowledge this resistance and design a position to deal with it. Useful resources in this regard include the EU Gender Action Plan 2016–2020 (EC, 2015) and the [Resource Package on Gender Mainstreaming in EU Development Cooperation](#).

CHECKLIST BEFORE PRECEDING TO STEP 2

1. Have the **EU gender equality objectives** been considered (see Gender Action Plan, etc.)?
2. How will the project link with the **country's gender equality objectives** either in general (National Development Plan) or by sector (VET strategy)?
3. Have **stakeholders** who have a gender competence been identified and engaged in consultations, e.g. ministry of gender equality, civil society organisations that work on the rights of women and those with VET activities? Have women and men been consulted?
4. Has a **gender analysis** been carried out (or elements from an existing gender analysis been considered, or elements of gender analysis methodology been included in the context analysis) to identify gender equality gaps in VET?
5. Have **problems been identified** and strategies which target the identified gender gaps and problems been preliminarily considered?

For more detailed guidance and references, see *Toolkit on mainstreaming gender equality in EC development cooperation*, Section 1, [Chapter 5](#) (EC, 2009).

STEP 2: Design and appraisal

- Plan for **developing capacity to address gender issues** and to monitor and evaluate progress and outcomes.
- Set up a **monitoring and evaluation system**. Adopt a gender-sensitive logical framework or results framework; select and design gender-sensitive project performance indicators.
- Decide how to organise **reporting and feedback processes**.
- Identify who will **collect and analyse information**, who will receive it, and how it will be used to guide implementation.

Experience has shown that challenges to better participation of female cohorts in VET programmes also relate to the VET staff body — the **presence of female VET teachers**, sensitivity to gender disparities while teaching, etc. This issue usually does not emerge from analysis or in risks and assumption. Knowing the lessons learned from the sector (even beyond the country), this is an issue that needs to be considered; it is also quite important in the context of sustainability of actions of the VET programme.

STEP 3: Implementation

- Develop capacity to **integrate, monitor, and evaluate gender-related issues**.
- Monitor **progress against outcome targets** set for the period of project implementation.
- **Feed results back** into the VET system to allow for mid-term corrections.
- **Assess progress and make corrections** if needed to obtain expected gender-related outcomes.

Developing the VET programme in line with industry needs means that the **skills developed match current needs** — so not only were skill gaps filled in factories, but the probability of employment of female learners was vastly increased.

STEP 4: Completion

- Deliver the intended **gender-sensitive VET services**.
- Assess the outcomes and **impact of gender integration** in the overall context of the project.
- Derive and **share lessons learned** that can feed into overall VET system goals and objectives.
- Include **gender-differentiated results in reporting lessons** learned from implementation.

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Case study: Integrated Women's Empowerment Programme in Ethiopia

<p>CONTEXT</p>	<p>Ethiopia's total population is estimated at 90 million people and the number of illiterate adults around 20 million, with the majority residing in rural areas. Ethiopia is undergoing a structural reform of almost all the components of its educational system including a VET sector reform and massive expansion of higher education. Driven by its specific socio-demographic situation (more than 30 million persons older than 15 are illiterate), the government made adult education a priority. The strategic framework includes the National Adult Education Strategy and the draft Master Plan for Adult Education.</p> <p>This strategic framework demands a transformation of the economy, which in turn demand a literate and skilled population, particularly women, as a precondition to become competitive and achieve growth and transformation. In this context the Ministry of Education adopted the Integrated Functional Adult Education (IFAE) approach, which seeks to combine adult literacy in a functional manner with other development sectors such as health, agriculture, environment, etc. This integrated approach draws on a combination of adult literacy methodologies and seeks cooperation across sectors and tiers of governance.</p>
<p>CHALLENGES AND OPPORTUNITIES</p>	<p>The Integrated Women's Empowerment Programme (IWEP) is a pilot project of the IFAE approach implemented by the Ministry of Education and funded by the Royal Embassy of the Netherlands with support from the German Adult Education Association Regional Office of East/Horn of Africa between 2008 and 2012. IWEP promotes an integrated approach that combines three separate components:</p> <ul style="list-style-type: none"> • functional adult literacy education; • non-formal VET programme for livelihoods; • entrepreneurial support in the form of business skills training, business development support services and access to start-up capital. <p>The target groups for the programme are illiterate, poor and unskilled or semi-skilled women, in the so-called lower tier of the informal economy. The project was implemented in rural, semi-urban and urban contexts, but due to the nature of Ethiopia, the majority of the 30 000 women in the target group lived in a rural context. The non-formal VET courses provided to the target groups most often take place through the family or community and are traditional in nature. In this context, IWEP designed and tested a number of conceptual frameworks to understand the complexity of the target groups' livelihoods and their limited basic education. The aim was also to create mutual understanding amongst the multitude of partners from different economic sectors and both government and non-governmental organisations.</p>

ACTIONS TAKEN	<p>Most IWEP groups (25 women per group) started with the literacy component on topics identified during local situation analysis exercises and using either the functional adult literacy or reflect approach. The best practices of these approaches culminated in what is now called the IFAE approach. Women started saving immediately so as to build up complementary capital for the IWEP's Women Entrepreneurship Fund, which could be utilised after finishing the non-formal VET course. Facilitators have been trained and continued with literacy classes two to three times a week.</p> <p>The results of the market assessments have been shared with the women, who usually had their own pre-determined ideas on the kind of business they want to engage in. The market assessment exercise and alignment with the women's interest therefore directly determined the kind of VET course that was to be conducted. Experts liaised with other members of the district technical team to conduct the VET course that was to enable the women to start these businesses. It was therefore important to incorporate topics on basic entrepreneurial skills development. Business development support services were rendered by technical partners, who visited the women's groups on a monthly basis to follow up on the success of their businesses and identify gaps and further training needs.</p>
LESSONS LEARNED	<ul style="list-style-type: none"> • The combination of basic education (literacy and numeracy) with micro- and small enterprise development tools (including micro-finance) is very attractive, especially for women. • Prerequisites to make integrated approaches successful include well-conducted market assessments; and continuous research on and activation of new, innovative income-generating options geared to the living conditions of the target groups along all possible value chains. • Integrated functional adult education can help boost local economic development in many ways — e.g. more efficient agriculture, introducing crafts, promoting innovations, pushing proto-industrialisation processes along specific value chains in line with the locally available resource base, making decentralisation processes work. • The experience in Ethiopia, to which the new approach and policy framework for adult and non-formal education tried to respond, suggests a horizontal and vertical integration of all agencies and persons involved in the development of livelihoods in its widest sense. • The creation of literate (post-literacy) environments is essential to promote a culture of lifelong learning and to safeguard sustainability of the efforts.

Source: Belete, Laberge and Quincke, 2012.

GUIDANCE NOTE 13

Promoting VET to support a green economy

Topic overview

A set of **policy recommendations outlining the skills needed for green jobs** was developed for the G20 Development Working Group under the Human Resource Development Pillar by the Inter-Agency Working Group on Greening Technical and Vocational Education and Training and Skills Development. (2013). The challenges of greening the economy, and the implications of the process for green vocational education and training (VET) needs, vary considerably both among and within countries, depending on their economic structure and institutional arrangements as well as on their levels of development and the composition of their labour markets. Notwithstanding these variations, all countries — from the poorest to the wealthiest, and from the least to the most economically developed — now must aim for sustained growth while minimising its impact on environment. For instance, the rapid rise in renewable energy sources is a clear indicator of the growing importance of greening VET for employment (see Figure GN13.1).

Labour market and green VET policies that facilitate a smooth and just transition will thus form an essential component of green economic growth strategies. Experience in many developing countries has shown that **VET bottlenecks where supply does not meet demand can be a serious impediment to green investment and growth**. These bottlenecks can arise both where new VET skills are needed to meet the requirements of changing and newly emerging green occupations, and equally where demand increases for green VET skills in existing occupations. Particularly severe green VET skill shortages have already been evident in fast-growing sectors such as renewable energies and energy efficiency. Lack of qualified VET

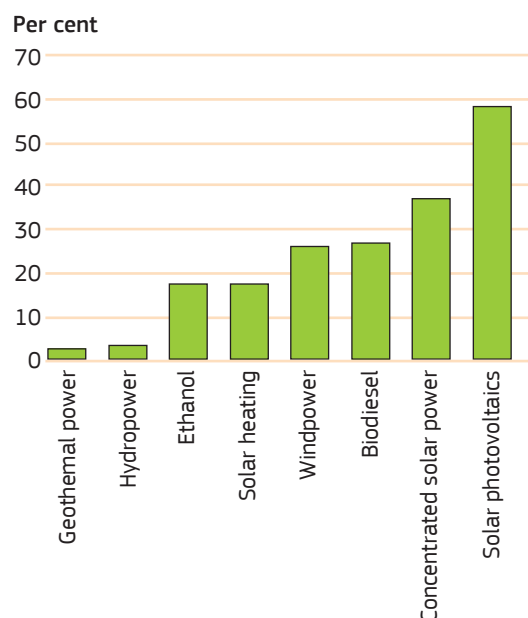
SUMMARY OF KEY ASPECTS

- The concept of a green economy has been established at the global level as the new environmental guiding principle.
- The challenges of greening the economy, and the implications of the process for greening VET programmes, vary considerably among and within countries, depending on economic structure, institutional arrangements, level of development and composition of labour markets.
- While most countries have drawn up environmental policies, few have put in place the green VET development strategies needed to implement them.
- New qualifications profiles are emerging for innovative occupations geared to environmental protection as well as for traditional occupations due to the adoption of eco-friendly industrial processes.
- Capacity building is crucial within the informal economy to enable green jobs to be created in localities where they are most needed.
- VET policies and programmes must be designed using an approach that is differentiated according to sectors and regions.

staff is widely recognised as a significant obstacle to VET development for upcoming green employment opportunities.

While most countries have drawn up environmental policies, few have **put in place the green VET development strategies needed** to implement

FIGURE GN13.1 Average capacity growth rates of renewable energies, 2006–2011



Source: Parkinson, 2013.

them. This failure is mainly attributable to weak coordination between national and/or local planning and labour policies, and between different actors and stakeholders within individual policy areas, as well as a lack of adequate resources and institutional capacity to implement strategies. Economic sectors such as mining, fossil fuel-based energy generation, manufacturing, forestry and agriculture are likely to be most seriously affected by structural change in the wake of the green transition. Conversely, new job opportunities will arise in industries that are expected to grow as economies go greener. Developing countries have the least responsibility for climate change and environmental degradation, but suffer their economic and social consequences disproportionately. Special policy recommendations that can speed up the development of green VET development strategies are listed in Box GN13.1.

These **policy recommendations can only be taken if resources are available**. It is therefore suggested that not only national governments but also international partnerships with developing countries take these recommendations into account both in

BOX GN13.1 Policy recommendations for green VET strategies

- Improve policy coordination and encourage social dialogue for greening VET
- Encourage individuals and companies to invest in VET for green growth
- Revise curricula to increase learners' adaptability to green competences
- Make retraining opportunities accessible for all, and prioritise green VET programmes for vulnerable and disadvantaged groups
- Strengthen career guidance on green jobs
- Enable VET staff to keep skills for green jobs up to date
- Improve systems for identifying and anticipating green VET skills needs
- Support VET providers as active agents for local sustainable development
- Use indicators as tools for capacity building and policy learning in greening VET
- Maximise the jobs potential of the transition to green growth
- Use green VET programmes to improve the quality of jobs

Source: Inter-Agency Working Group on Greening Technical and Vocational Education and Training and Skills Development, 2013.

environment programmes and in VET programmes. Many developing countries are endeavouring to introduce resource-efficient technologies and to expand the use of renewable energy. In countries where the vast majority of people are employed informally, a transition of this kind is only conceivable with the involvement of the informal economy. At the same time, moving towards a greener economy is creating opportunities for new technologies, investment and jobs. This is the message of the United Nations Environment Programme's *Green Jobs: Towards Decent Work in a Sustainable, Low-Carbon World* (UNEP, 2008), which estimates that efforts to tackle climate change could result in the creation of millions of new green jobs in the coming decades.

The **relationships between environmental and VET policies** are complex. Traditional top-down instruments to promote environmental standards often fail to penetrate the informal economy or can even have a detrimental effect. Some industrial countries have developed green skills frameworks for specific occupations — e.g. in the construction and energy sectors. It is essential that VET policies and programmes are designed using an approach that is differentiated according to sectors and regions. Aside from specific occupational skills, the cross-cutting VET competences listed in Box GN13.2 are necessary for a green economy.

The importance of green VET competences for workers and enterprises in developing countries is beyond question. New qualifications profiles are emerging for innovative occupations geared to environmental protection — green jobs such as solar installation technicians and energy consultants, to name a few. In almost all conventional occupations, there is further potential to operate more sustainably. This can be tapped by enabling workers to gain appropriate green qualifications. **Government intervention is crucial to support green employment creation.** Government action to reduce damage to the environment and health is often a prerequisite for developing markets for greener technologies and services. Government subsidies for research and early stage deployment can accelerate innovation and provide a signal of certainty to formal industry that it too should be co-investing in, for instance, green VET programmes.

Procedure

STEP 1: Identification and preparation

First of all, **collect necessary environmental and green-specific data on the situation of target groups** seeking employment in green jobs. The collected information enables identification of the form and content of a green-sensitive VET project. From this information base, analysis allows the selection of options to obtain a best-fit option leading to an overall project intervention strategy, definition of modes of financing, and reaching agreement on the conceptual approach and project management structures. Three fields of coordinated action have been identified:

BOX GN13.2 Cross-cutting VET competences for a green economy

- **Strategic and leadership skills** to enable policymakers and business executives to set the right incentives and create conditions conducive to green production, greener transportation, etc.
- **Adaptability and transferability skills** to enable workers to learn and apply the new technologies and processes required to green their jobs
- **Environmental awareness** and willingness to learn about sustainable development
- **Coordination, management and basic entrepreneurial skills** to facilitate holistic and interdisciplinary approaches incorporating economic, social and ecological objectives as well as to seize the opportunities of low-carbon technologies
- **Systems development and risk analysis skills** to assess, interpret and understand both the need for change and the green measures required
- **Innovation skills** to identify opportunities and create new strategies to respond to green challenges
- **Communication and negotiation skills** to discuss conflicting interests in complex green contexts
- **Marketing skills** to promote greener products and services
- **Consulting skills** to advise consumers about green solutions and to spread the use of green technologies
- **Networking, information technology and language skills** to perform in global markets for green products and services

Source: Strietska-Ilina et al., 2011.

- designing the frameworks of the experiential learning projects for green capacity development and technology transfer;
- implementing the experiential learning projects;
- mainstreaming the lessons learned and knowledge transfer.

STEP 2: Design and appraisal

Reflect on and consider which are the **relevant components when planning the implementing phase** of the selected project intervention strategy. For instance, the aim can be to improve coordination between ministries, VET providers, technology transfer institutions and companies. This is carried out in experiential learning projects in a way which is practical and replicable using hands-on training and applied technology transfer, e.g. for:

- the installation and maintenance of solar water heaters and photovoltaic systems;
- water/wastewater and waste disposal management;
- increasing energy and resource efficiency in production processes;
- increasing local content in technological components for equipment used for renewable energies.

STEP 3: Implementation

Delineate the plan. For instance, after planning implementation of the [South African Skills for Green Jobs initiative](#), a project overview plan was outlined in more detail, including operational planning. Finally, work packages were detailed, including the following.

- As part of a Green College Initiative, all public VET colleges are involved in self-defined green projects across South Africa.
- At the start of 2015, the topic of renewable energy technologies was integrated into a three-year national certificate (vocational) programme at seven VET colleges with 500 learners. Lecturers at

the VET colleges are receiving ongoing staff development in this new subject. Teaching and learning materials have been developed and are now being used.

- New occupational qualifications needed to implement experiential learning projects — including a solar water heater installer and a photovoltaic systems installer — have been approved, and experiential learning projects outlined.

References and further reading

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UNEP (United Nations Environment Programme), 2008. [Green Jobs: Towards Decent Work in a Sustainable, Low-Carbon World](#). UNEP, Nairobi.

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Case study: Promotion of green VET competences in Pakistan

CONTEXT	<p>Pakistan's rapid population growth and the corresponding expansion of the workforce are a burden on the national economy. Millions of young people enter the job market annually; they are unable to find work and do not contribute to national growth since they lack relevant knowledge, skills and occupational competence.</p> <p>Further major challenges are the various forms of pollution in the country and widespread water-borne diseases. Because only just over half of urban residents have access to sanitation, the remaining urban excreta are deposited on roadsides or into waterways. Additionally, only three major sewage treatment plants exist in the country; two of them operate intermittently. Much of the untreated sewage goes into irrigation systems, where the wastewater is reused; and into streams and rivers, which become sewage carriers at low-flow periods. Consequently, the vegetables grown from such wastewater have serious bacteriological contamination. Gastroenteritis, widely considered in medical circles to be the leading cause of death in Pakistan, is transmitted through waterborne pollutants.</p>
CHALLENGES AND OPPORTUNITIES	<p>A comprehensive VET system development programme was launched in 2011 with co-financing from the European Union, the Embassy of the Kingdom of the Netherlands, the Royal Norwegian Embassy and the German Federal Ministry for Economic Cooperation and Development (BMZ). The programme is implemented by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ). The focus of the green skills programme component is development of VET modules for ground and water protection as part of each agricultural occupation.</p> <p>The Government of Pakistan was convinced that the development of green skills will become a major topic of VET system reform. There are two entry points for promoting green skills:</p> <ul style="list-style-type: none"> • a national VET qualifications framework needs to be developed and curricula for the priority areas of agriculture, energy and services must be checked and revised; • a VET fund has been designated for project proposals for innovative VET programmes delivered through VET providers, businesses, non-governmental organisations, etc. <p>The VET fund has four innovation themes, one of which is the promotion of green VET competences. With support of the VET fund, 2 out of 12 pilot VET modules for green VET competences have been developed so far: Pest Control by Organic Means in Agriculture and Organic Vegetable Growing with the Use of Greenhouse Tunnels and Water Drop Irrigation. Further VET modules are under preparation. In addition, a learning region has been identified in Pakistan's Federally Administered Tribal Areas.</p>
ACTIONS TAKEN	<p>The pilot projects are going to be implemented to enable small farmers to use resource-efficient agriculture in order to increase their yield, stop and partly reverse soil erosion, protect groundwater and contribute to environmental protection. The main programme actions are:</p> <ul style="list-style-type: none"> • introduction and training of multipliers in organic pest control; • provision of VET programmes in organic vegetable growing and support of business start-ups; • introduction to resource-saving agriculture and training of small farmers in the pilot regions by regional trainers and managers; • documentation of impact using special software to collect socio-economic data.

LESSONS LEARNED

- **Capacity development on green skills** is at the heart of successful strategies for agriculture and improving rural livelihoods. Rural populations need not only skills which enhance their productivity but also green skills which can enhance their well-being, as part of a wider rural lifelong learning agenda.
- **Thinking on greening VET programmes** is still very new in Pakistan. Relatively little was done during the past to explore pedagogical approaches for green skills in the labour market. The project is showing lighthouse examples of innovations on greening VET programmes.
- The development of a **national VET qualifications framework** and the influence of small farmers in tribal areas on learning outcomes, together with workplace learning, have triggered new VET programmes and modules that will promote green competences in the field of agriculture, energy and services.
- The Technical Education and Vocational Training Authority (TEVTA) of the province of Punjab developed manuals for a range of agricultural occupations that support multipliers in VET provider and workplaces to **integrate green competences into their VET teaching practices**.
- The environmental needs of existing various forms of pollution and the cause of widespread waterborne diseases lead to growing **employment opportunities in new industries** such as waste management, grey water treatment and reuse, pollution prevention and control, environmental monitoring and inspection, organic farming, and forest and agricultural land rehabilitation.
- A VET fund has been used to allocate funds in accordance with provincial policies and priorities. The VET fund has been effective in **promoting social dialogue and partnership** between the state, social partners, small farmers and other stakeholders.

Source: GIZ, 2013.

ANNEXES

ANNEX 1

Glossary

Adapted from *Terminology of European education and training policy: Second edition*, by the European Centre for the Development of Vocational Training (Cedefop, 2014). Further terminology can be found in the UNESCO TVETipedia Glossary.

Access to education and training. Conditions, circumstances or requirements (such as qualifications, education level, competences or work experience) governing admittance to and participation in educational institutions or programmes.

Accreditation of an education or training programme or provider. A process of quality assurance through which a programme or provider of education or training is officially recognised and approved by the relevant legislative or professional authorities following assessment against predetermined standards.

Adult education. General or vocational education provided for adults after initial education and training for professional and/or personal purposes, and which aims to:

- provide general education for adults in topics of particular interest to them (e.g. in open universities);
- provide compensatory learning in basic skills which individuals may not have acquired earlier (such as literacy, numeracy)
- give access to qualifications not gained, for various reasons, in the initial education and training system;
- acquire, improve or update knowledge, skills or competences in a specific field: this is continuing education and training.

Alternance training. Education or training combining periods in an educational institution or training centre and in the workplace. The alternance scheme can take place on a weekly, monthly or yearly basis. Depending on the country and applicable status, participants may be contractually linked to the employer and/or receive a remuneration. The German 'dual system' is an example of alternance training.

Apprenticeship. Systematic, long-term training alternating periods at the workplace and in an educational institution or training centre. The apprentice is contractually linked to the employer and receives remuneration (wage or allowance). The employer assumes responsibility for providing the trainee with training leading to a specific occupation. In French, the term *apprentissage* relates to both apprenticeship and the process of learning; the German 'dual system' is an example of apprenticeship.

Awarding body. A body issuing qualifications (certificates, diplomas or titles) formally recognising the learning outcomes (knowledge, skills and/or competences) of an individual, following an assessment procedure.

Basic skills. The skills needed to live in contemporary society, such as listening, speaking, reading, writing and mathematics.

Compensatory learning. Learning intended to fill the gaps accumulated by individuals during education or training, mainly to enable them to take part in training.

Competence:

- ability to apply learning outcomes adequately in a defined context (education, work, personal or professional development)

- ability to use knowledge, skills and personal, social and/or methodological abilities in work or study situations and in professional and personal development.

Competence is not limited to cognitive elements (involving the use of theory, concepts or tacit knowledge); it also encompasses functional aspects (including technical skills) as well as interpersonal attributes (e.g. social or organisational skills) and ethical values.

Continuing education and training. Education or training after initial education and training — or after entry into working life — aimed at helping individuals:

- improve or update their knowledge and/or skills;
- acquire new skills for a career move or retraining;
- continue their personal or professional development.

Continuing education and training is part of lifelong learning and may encompass any kind of education (general, specialised or vocational, formal or non-formal, etc.). It is crucial for employability of individuals.

Curriculum. Inventory of activities related to the design, organisation and planning of an education or training action, including definition of learning objectives, content, methods (including assessment) and material, as well as arrangements for training teachers and trainers. The term ‘curriculum’ refers to the design, organisation and planning of learning activities; while the term ‘programme’ refers to the implementation of these activities.

Distance education and training. Education and training imparted at a distance through communication media: books, radio, TV, telephone, correspondence, computer or video.

Dropout. Withdrawal from an education or training programme before its completion. This term designates both the process (early school leaving) and the persons who fail to complete a course (early school leavers). Besides early school leavers, dropouts may also include learners who have completed education or training but failed the final examinations.

Education or training pathway. Set of related education or training programmes provided by schools, training centres, higher education institutions or vocational education and training providers, which eases the progression of individuals within or between activity sectors.

Employability. Combination of factors which enable individuals to progress towards or get into employment, to stay in employment and to progress during their careers. Employability of individuals depends on:

- personal attributes (including adequacy of knowledge and skills);
- how these personal attributes are presented on the labour market;
- environmental and social contexts (incentives and opportunities offered to update and validate their knowledge and skills);
- the economic context.

Formal learning. Learning that occurs in an organised and structured environment (such as in an education or training institution or on the job) and is explicitly designated as learning (in terms of objectives, time or resources). Formal learning is intentional from the learner’s point of view. It typically leads to certification.

Guidance and counselling/information, advice and guidance (IAG). Range of activities designed to help individuals to take educational, vocational or personal decisions and to carry them out before and after they enter the labour market. Guidance and counselling may include:

- counselling (personal or career development, educational guidance);
- assessment (psychological or competence/performance-related);
- information on learning and labour market opportunities and career management;
- consultation with peers, relatives or educators;

- vocational preparation (pinpointing skills/competences and experience for job-seeking),
- referrals (to learning and career specialists).

Guidance and counselling can be provided at schools, training centres, job centres, the workplace, the community or in other settings.

Human capital. Knowledge, skills, competences and attributes embodied in individuals that promote personal, social and economic well-being.

Informal learning. Learning resulting from daily activities related to work, family or leisure. It is not organised or structured in terms of objectives, time or learning support. Informal learning is in most cases unintentional from the learner's perspective. Informal learning outcomes may be validated and certified. Informal learning is also referred to as experiential or incidental/random learning.

Key skills/competences. Sum of skills (basic and new basic skills) needed to live in contemporary knowledge society. In its recommendation on key competences for lifelong learning, the European Commission sets out eight key competences:

- communication in the mother tongue;
- communication in foreign languages;
- competences in mathematics, science and technology;
- digital competence;
- learning to learn;
- interpersonal, intercultural and social competences, and civic competence;
- entrepreneurship;
- cultural expression.

Learning outcomes/learning attainments:

- set of knowledge, skills and/or competences an individual has acquired and/or is able to demonstrate after completion of a learning process, either formal, non-formal or informal;
- statements of what a learner knows, understands and is able to do on completion of a learning process, which are defined in terms of knowledge, skills and competence.

Lifelong learning. All learning activity undertaken throughout life, which results in improving knowledge, know-how, skills, competences and/or qualifications for personal, social and/or professional reasons.

Mentoring. Guidance and support provided in various ways to a young person or novice (someone joining a new learning community or organisation) by an experienced person who acts as a role model, guide, tutor, coach or confidante.

Non-formal learning. Learning embedded in planned activities not explicitly designated as learning (in terms of learning objectives, learning time or learning support). Non-formal learning is intentional from the learner's point of view. Non-formal learning outcomes may be validated and may lead to certification. Non-formal learning is sometimes described as semi-structured learning.

Qualification. Qualification covers different aspects.

- **Formal qualification.** The formal outcome (certificate, diploma or title) of an assessment process which is obtained when a competent body determines that an individual has achieved learning outcomes to given standards and/or possesses the necessary competence to do a job in a specific area of work. A qualification confers official recognition of the value of learning outcomes in the labour market and in education and training. A qualification can be a legal entitlement to practise a trade.
- **Job requirements.** Knowledge, aptitudes and skills required to perform specific tasks attached to a particular work position.

Qualifications framework:

- instrument for development and classification of qualifications (at national or sectoral levels) according to a set of criteria (using descriptors) applicable to specified levels of learning outcomes;
- instrument for classification of qualifications according to a set of criteria for specified levels of learning achieved, which aims to integrate and coordinate qualifications sub-systems and improve transparency, access, progression and quality of qualifications in relation to the labour market and civil society.

A qualification framework can be used to establish national standards of knowledge, skills and competences; promote quality of education; provide a system of coordination and/or integration of qualifications and enable comparison of qualifications by relating qualifications to one another; and/or promote access to learning, transfer of learning outcomes and progression in learning.

Recognition of learning outcomes:

- **Formal recognition.** Process of granting official status to knowledge, skills and competences either through:
 - validation of non-formal and informal learning;
 - grant of equivalence, credit units or waivers;
 - award of qualifications (certificates, diploma or titles).
- **Social recognition.** Acknowledgement of value of knowledge, skills and/or competences by economic and social stakeholders.

ANNEX 2

The European VET cooperation model

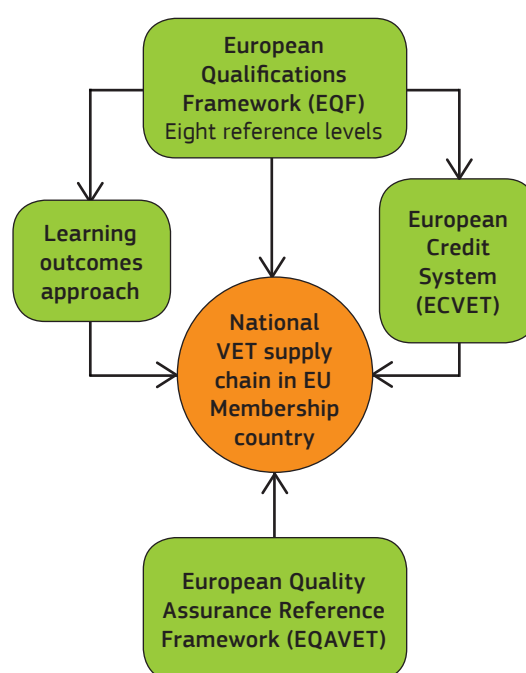
The European social model includes a **vocational education and training (VET) cooperation model** which has evolved over the years to become a structured process, initially through the Copenhagen Process and further defined based on several VET policy papers since 2009. The skills response to the challenges posed by global competition, youth employment, aging populations and large segments of low-skilled workers is articulated in Education and Training 2020 (ET 2020) — a vast body of knowledge, policies, strategies, plans and programmes forming a strategic framework for European cooperation in this sector. This framework sets the priorities for enhancing European cooperation on VET up to the year 2020 in key areas such as:

- increasing the attractiveness and fostering the excellence, quality and relevance of **initial VET**;
- enabling **flexible access** to training and qualifications;
- developing a strategic approach to **VET internationalisation** and promoting international mobility;
- fostering **innovation, creativity and entrepreneurship**;
- increasing the use of **information and communication technology**;
- ensuring **inclusiveness**;
- further improving the **governance and coordination** of European VET policy.

There are several related VET tools and instruments to help make qualifications, experiences and skills better appreciated and easier to recognise throughout the European Union (EU). The European VET model incorporates several tools and instruments as described below and shown in Figure A2.1.

In accordance with EU treaties, **VET systems are entirely subject to national member state authorities** in line with the principle of subsidiarity. Hence, as a follow-up to the Lisbon Strategy, the European Commission's option to achieve a European VET model has been to bind member states' VET systems more tightly by **facilitating convergence**,

FIGURE A2.1 European VET cooperation model



dialogue and mutual recognition. The aim is to give greater **access to learning or employment opportunities in different countries** and encourage greater mobility — for individuals, businesses and other organisations. Other initiatives relate to research, cooperation and providing expertise in the field of VET.

The purpose of the **European Qualifications Framework (EQF)** is the creation of a European translation system for the level of qualifications and general and higher education and VET programmes required for obtaining these qualifications. The EQF supports lifelong learning and mobility through a common reference framework for qualifications. It equates national qualifications obtained through general and higher education and VET. Qualifications are based on learning outcomes — i.e. what the holder of a certificate or diploma is expected to know, understand and be able to do — and not learning inputs, as well as on how long the studies took. International comparability of qualifications **promotes labour mobility within the EU.**

Learners and employers can compare levels of qualifications awarded at home and by other countries. The core element of the EQF is the description of **eight reference levels** which show what learners of a certain level should know, understand and be able to do. Such a qualifications framework contributes to increase mobility in the European labour market, between and within education and VET systems. It improves transparency and makes it easier for employers and education and VET providers to assess the competences acquired by citizens.

The development and implementation of the **European Credit System in VET (ECVET)** supports lifelong learning, the mobility of European learners and flexibility of learning pathways to achieve qualifications by making it easier for learners to build on achievements made during their VET pathways. ECVET is being developed to help the **transfer and recognition of learning experiences** in Europe, including those outside formal VET sub-sectors. Furthermore, ECVET promotes geographical and professional mobility by validating, recognising and accumulating work-related skills and knowledge acquired during a stay in different countries or situations, so that these

experiences contribute to VET qualifications. ECVET helps people make their qualifications and skills better understood and recognised throughout Europe, increasing their employment prospects. ECVET documents support mobility by helping people **communicate their knowledge, skills and competences** acquired through education, training or work experience as well as in informal settings.

The **European Quality Assurance Reference Framework for VET (EQAVET)** is a new reference instrument to help authorities of EU member countries promote and monitor improvement of their VET systems. EQAVET aims to increase the transparency, market relevance, consistency and transferability of VET qualifications across Europe. It includes a quality assurance and improvement cycle based on quality criteria and indicative descriptors applicable to both VET systems and VET providers. The principles and guidelines for identifying and validating non-formal and informal learning help adults increase the visibility of their skills, knowledge and competences.

The **principles on lifelong guidance and counselling** promote equality of access to, participation in and outcomes of lifelong learning, as well as labour market participation. The EU should enhance support for quality education and VET to give young people the knowledge and skills to be active members of an evolving society. **VET programmes for employability** should be better linked to the promotion of job creation and decent work, rights at work, social protection and social dialogue. Quality assurance can be used as a systematic approach to modernising education and training systems, especially by improving the effectiveness of VET systems. Therefore, it should underpin every policy initiative in VET.

EU member countries are invited to develop and use the EQAVET instrument on a voluntary basis. The **main users of EQAVET will be national and regional authorities as well as public and private bodies** responsible for ensuring and improving the quality of VET. As a reference instrument, the framework makes methodological suggestions that will help EU member countries assess clearly and consistently whether the measures necessary for improving the quality of their VET systems have been implemented and whether they need to be reviewed.

EQAVET promotes a **culture of quality improvement** and responsibility at all levels, i.e. at the VET system, VET provider and qualification-awarding levels. EQAVET attaches importance to systematic self-assessment. It includes **internal and external assessment mechanisms** that are to be defined by EU countries. This will allow feedback on the progress achieved. Drawing on the EQAVET framework, EU countries were asked to develop approaches for **improving their national quality assurance systems** until 2011 at the latest. All relevant stakeholders were to have been involved in this development work.

EQAVET encourages EU countries to participate actively in a **European network for quality assurance in VET**, using it as a basis for further development of common principles and **tools for quality improvement in VET systems** at national, regional and local levels. The recommendation also encourages EU countries to designate quality assurance national reference points for VET, to bring together **competent bodies and involve all relevant players at the national and regional levels**. These reference points promote the active and practical development of the framework at the national level, support EU countries' self-evaluation as well as the network's work, and disseminate related information to all relevant stakeholders.

ANNEX 3

Online resources

The **Association for the Development of Education in Africa (ADEA)** is a forum for policy dialogue. It acts as a catalyst for reforms and promising policies and practices through the pooling of ideas, experience, lessons learned and knowledge. One of its major objectives is to encourage exchanges between ministries of education and between them and development agencies. www.adeanet.org/portalv2/en/publications-and-resources

The **Agence Française de Développement (AFD)** is a financial institution and the main implementing agency for France's official development assistance to developing countries and overseas territories. The objective of AFD is to ensure improved coordination between basic education, secondary education and vocational training in sectoral programmes and projects financed by AFD, with a specific focus on cost and flow management based on economic and social demand. AFD recommends actions stemming from requests from economic environments. www.afd.fr/home/projets_afd/education/la-formation

The **Federal German Institute for Vocational Education and Training (BIBB)** is recognised as a centre of excellence for vocational research and the progressive development of vocational education and training (VET) in Germany. One of the tasks of VET research is to evaluate and observe international developments in VET. The BIBB also participates in international VET cooperation. These tasks are supported by monitoring VET systems and conducting comparative research projects. www.bibb.de/en/2347.php

The **British Council** is an executive non-departmental public body, a public corporation and a registered charity. Although the British Council receives a government

grant in aid, it is operationally independent from the UK Government. The British Council brings together experienced organisations in the UK's skills sector and one or more counterparts in other countries to develop and deliver an agreed project plan which supports national-level policy priorities. <https://www.britishcouncil.org/education/skills-employability>

The **European Commission's Directorate-General for International Cooperation and Development (DG DEVCO)** wants to raise awareness of and knowledge on the important role of employment, vocational education and training and social protection as key elements in the European Union's development policy. The creation of jobs and decent work, together with extending coverage of social protection, vocational training provision and skills development in both formal sectors and the informal economy, are essential for inclusive growth. <http://capacity4dev.ec.europa.eu/topic/employment-vet-social-protection>

The **European Centre for the Development of Vocational Training (Cedefop)** supports the development of European vocational education and training (VET) policies and contributes to their implementation. The agency is helping the European Commission, European Union member states and social partners develop the right European VET policies and contribute to their implementation. To identify and anticipate future skill needs and potential skill mismatches, Cedefop undertakes various research activities on the European level. www.cedefop.europa.eu/en/themes

The **European Training Foundation (ETF)** is a European Union (EU) agency that helps transition and developing countries harness the potential of their human capital through the reform of education, training and labour market systems in the context of

the EU's external relations policy. The development of vocational education and training policies in a lifelong learning perspective covers the design and implementation of policies in partnership with all relevant stakeholders, in particular social partners. www.etf.europa.eu/web.nsf/pages/What_we_do

The **Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)** is an agency which provides support for developing, emerging and transition countries in planning labour market-oriented vocational education and training (VET) projects on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ) as well as for international clients through its international services. GIZ supports its partners in securing and increasing productive employment through labour market-oriented VET systems development, VET for secure livelihoods and promoting employment and employment policies. www.giz.de/expertise/html/1985.html

The **International Labour Office (ILO)** helps advance the creation of decent work and the economic and working conditions which give working people and business people a stake in lasting peace, prosperity and progress. Its tripartite structure provides a unique platform for promoting decent work for all women and men. It serves its tripartite constituents — and society as a whole — in a variety of ways, including training, education and research activities. www.ilo.org/global/topics/skills-knowledge-and-employability/lang--en/index.htm

The **NORRAG Network for International Policies and Cooperation in Education and Training** is an internationally recognised, multi-stakeholder network which has been seeking to inform, challenge and influence international education and training policies and cooperation for almost 30 years. www.norrag.org/en/themes/tvettvdsd/working-group-for-international-cooperation-in-skills-development.html

The **Organisation for Economic Co-operation and Development (OECD)** pursues the goals of promoting economic growth in member states and developing countries, and contributing to spreading global trade on a multilateral basis. The OECD represents the concept of green growth. It designed a

strategy for this concept in 2011 and is among its most important promoters. www.oecd.org/education/skills-beyond-school/

The **Systems Approach for Better Education Results (SABER)** is a World Bank initiative to produce comparative data and knowledge on education policies and institutions, with the aim of helping countries systematically strengthen their education systems. SABER evaluates the quality of education policies against evidence-based global standards, using new diagnostic tools and detailed policy data collected for the initiative. <http://saber.worldbank.org/index.cfm>

The **United Nations Environment Programme (UNEP)** is the leading global environmental authority which sets the global environmental agenda, promotes coherent implementation of the environmental dimension of sustainable development within the United Nations system and serves as an authoritative advocate for the global environment. UNEP brought the Green Economy Initiative into being in 2008. www.unep.org/training/

The **United Nations Educational Scientific and Cultural Organization International Centre for Technical and Vocational Education and Training (UNESCO-UNEVOC)** is one of UNESCO's seven education institutes and supports implementation of the UN Decade of Education for Sustainable Development. The World Technical and Vocational Education and Training (TVET) Database is an online repository developed by UNESCO-UNEVOC. It aims to provide concise, reliable and up-to-date information on TVET systems worldwide in a single place. It helps TVET officials, experts and stakeholders as well as researchers and students of TVET to learn about trends and challenges. www.unevoc.unesco.org/go.php?q=World+TVET+Database

The **Institute for Lifelong Learning (UIL)** is one of United Nations Educational Scientific and Cultural Organization's (UNESCO's) seven education Institutes. The UIL supports member states in the field of lifelong learning with a focus on adult and continuing education, literacy and non-formal basic education. It pays special attention to UNESCO's Global Priority Africa and Global Priority Gender Equality. <http://www.uil.unesco.org/>

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