TVET in Africa – Status Quo, Developments and Opportunities of Continental Cooperation

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Executive Summary

This report outlines the situation of TVET in Africa (Chapter II). It also outlines the key approaches to developing TVET at national and continental levels (Chapter III). An excursion into the TVET policies of the European Union institutions shows how other supranational organisations are trying to develop TVET through international cooperation (Chapter IV). Recommendations for the direction of future approaches to the development of TVET conclude the report, with particular reference to continental cooperation activities od the African Union (Chapter V).

The report is based on analyses of available primary and secondary sources (see list of sources) as well as on conducting interviews with persons directly or indirectly involved in the SIFA TC programme.

The following figure shows the results of the report: The central political objectives in the field of TVET ("Overall TVET Policy Goals") are to combat youth unemployment, to open up educational and career opportunities for young people, and to develop skilled workers. The implementation of these goals faces many challenges ("Challenges and Weaknesses in TVET"). These challenges are met with a variety of different strategies and approaches ("National Strategies and Approaches in TVET"). Activities in continental cooperation within the framework of the African Union ("Role and Scope of International and Continental Cooperation") can support the further development of TVET as part of a long-term strategy.

For the further development of employment-oriented TVET, the expansion of the policy field of TVET is of utmost importance at the national, regional and continental levels. The role and importance of TVET must be strengthened in the perception of stakeholders. In addition to the social contribution that TVET can make to combating youth unemployment, its economic importance for development in Africa must be strengthened. Skilled labour development and skilled labour mobility should be emphasised more strongly, especially through the following strategies: Linking TVET as a policy field closely to other policy fields, in particular to the development of free trade areas (bilaterally, regionally or continentally) and mutual recognition agreements / transnational vocational education and training standards in specific sectors.

As TVET provision lags far behind general education and higher education, capacity building is also of key importance. Therefore concrete system approaches of TVET in the member states can be quite different. Employment-oriented TVET can be achieved in very different ways.

In addition, the knowledge base for decisions in the field of vocational education and training must be expanded through research and human resource development. And, last but not least, for the integration of the informal in-company qualification sector (informal apprenticeships), financing incentives must be expanded, ideally a combination of small loans with training obligations.

This report also contains a "snapshot" of SIFA TC, with a few selected insights and assessments of the approach and possibilities of the programme (Chapter VI).

Role and Scope of International and Continental Cooperation



National Strategies and Approaches in TVET



Overall TVET Policy Goals



lack between supply and demand

Knowledge Sharing on TVET: Monitoring reports, newsletters, TVET data, best practice, benchmarking Orientation for member states, innovation transfer, reform impulses, international exchange and comparison			Mutual Recognition Linkin Agreements		g TVET with other pan-African policie (mobility, trade agreements)	
				pment and Implementation of ACQF / NQF		
Cooperation with EU TVET Institutions (Cedefop, ETF, working groups etc.) and ASEAN		Develop	oing TVET expertise (HRD)	Focus on specific sectors with need for mu mobility: construction, transport, healt		
1						
Curriculum Development (modularisation, Competency-based-approach)		Qual	Qualifying teachers and trainers		Linking formal and non-forma TVET standards	
Involvement of business community for decision making on TVET		Expanding permeability		Developing and implementin NQF		
Linking TVET standards to traditional forms and informal provisions of TVET		Expansion of capacities		Financing models for apprenticeships		
Combating youth unemployment Offering (equ		ual) opportunities to connect and advance		Developing skilled workforce		
institutional fragmentation	low extent of sta	ndards	high diversification of providers and quality/ dominance non-formal and informal provisions			
predominance of the little resear informal sector		ch	Insignificance of TVET in numbers compared to general + education			
low financing resources low reputat		on	urban vs. rural st	andards	low qualified teachers and	

political instability

very heterogeneous interests

very different cultures

I. Introduction

Problem background

The further development of vocational education and training is of utmost importance for social and economic development. Vocational education and training creates prospects for young people. And vocational education and training serves to qualify skilled workers. The perception of vocational education and training as part of social and economic policy (combating youth unemployment and developing skilled workers) is growing worldwide, in industrialised countries, emerging economies, developing countries and international organisations alike.

At the same time, the successful strengthening and further development of TVET is not trivial. Traditionally, it has not been highly recognised in society (cf. Winch 2013; UNESCO-UNEVOC 2018). The policy field of TVET is relatively insignificant, even compared to general and higher education. Investment in TVET is relatively low. And TVET research also has hardly any significance in the research landscape. There is thus a discernible contradiction between the current and growing perception of TVET as a policy-making field and its traditional and actual importance.

So how can the role of TVET be strengthened in the political perception and in relation to actual political decisions? Against this background, it becomes clear what significance supranational cooperation has for strengthening TVET. And how can TVET be further developed in the countries and regions? What strategies and approaches are there? What experiences have been made? What are the particular challenges? What can be done better?

From today's point of view, the strength of TVET lies in its relationship to work and the economy - even though this very strength has traditionally also been the flaw of TVET from the point of view of many young people and parents, and higher general and university education still seems more attractive today. But in essence, TVET can develop its attractiveness primarily through its relationship to work and the economy. So how can educational processes be further developed that benefit both sides, people and the economy?

This task is a great challenge. A central and globally observable political strategy is to strengthen the role of the economy and to involve it in shaping vocational education and training. This strategy goes hand in hand with strengthening the company as a place of learning. Learning in the company and in the context of work (work-based learning) is gaining in importance. For the integration of this form of learning, apprenticeships, for example, are highly relevant, possibly also

dual apprenticeships, i.e. such approaches in which company-based learning and school-based learning alternate and are ideally related to each other.

However, the implementation of these strategies and approaches poses a great challenge. It is not easy to balance the various state and private sector interests for the purpose of vocational education and training in order to arrive at viable solutions. This study outlines the issue with a view to the situation in Africa. Important findings on the status quo and the further development of vocational education and training are presented. Of particular importance for this study is the governance of TVET and the question of supranational political cooperation in Africa. References are made to the African Union. In addition, a look is taken at the European Union and the vocational education and training policy of the European Union.

Governance of TVET and TVET Policies

The present study focuses on the governance of vocational education and training. At its core is the question of what role a continental TVET policy can play in the further development of TVET in the African Union, particularly in complementing national TVET policies in member states and regional policy efforts.

In TVET, much more than in general and higher education, the supply, structure, interests and responsibilities are very heterogeneous. This is not only the case in African countries, but also in countries where vocational education and training is traditionally much more established. Also in these countries, for instance in Europe, there are many different offers of vocational education and training, private, semi-private, state-run. The responsibilities for the various offerings lie directly or indirectly in different ministries, and the standardization of vocational education and training often takes place on the basis of very different legislative foundations.

The successful management and further development of vocational education and training therefore depends to a large extent on how the various institutions and actors function alongside one another and how the diverse interests are accepted and coordinated with one another. Education policy per se is a mixture of interests, but vocational education and training policy is even more so.

The governance of vocational education and training falls between state and private sector interests in a particular way. This is particularly the case if the intention is to relate the range of vocational education and training more closely to the qualification needs of companies, to make

the private sector more responsible for vocational education and training and to include companies as learning venues in the regulated range of vocational education and training.

Roughly speaking, vocational education and training policy brings together educational, social and economic policy interests. A look at the history of vocational education and training and at international comparisons shows how different the results of these political negotiation processes are in the field of vocational education and training.

The role of international and supranational cooperation for TVET development

Vocational education and training traditionally had a difficult time in comparison with other policy areas. This is true worldwide. In recent years, however, its importance has grown. International cooperation makes an important contribution to this. International exchange and international comparison are of paramount importance for the further development of all policy fields. The history of the further development of states is characterized by it. The international exchange and comparison serve to gain good examples, reform impulses, innovation transfers and real change. The need and willingness for development are also stimulated by performance comparisons and competition.

For the further development of vocational education and training in Africa, supranational cooperation on the continent and in the regions is important in addition to worldwide international cooperation. This supranational cooperation leads to knowledge exchange and orientation for the further development of vocational education and training in the member states of the African Union.

Furthermore, these supranational coordination processes aim at the further development of compatible and transparent systems, thus promoting mobility between the educational systems of the countries and the labor markets. As vocational education and training contributes to the integration of young people into employment and society and to the qualification of skilled workers, it is an important means to achieve social and economic goals.

For the further development of vocational education and training in the African Union, it makes sense to closely link it with economic cooperation and integration approaches, for example for trade and services. The further development of cross-national economic cooperation also requires a functioning of the mobility of workers.

There are two world regions where supranational cooperation in vocational education and training is already taking place that provide a good example, namely within the European Union (EU) and within the Association of Southeast Asean Nations (ASEAN). The EU is the focus of this study. The impact of EU TVET policy on TVET developments in member states are enormous. This is shown by many examples.

Scope of the Study

Against this background, briefly described above, the questions, approach and limits of the study are the following:

I. Main questions:

- 1. What are the main TVET functions that are currently handled on continental, regional and national level in Africa? (status quo)
- 2. What are the developments in these intervention areas in TVET resulting from regional integration processes in Africa? (=Which TVET functions will be increasingly governed and/or executed on supranational level?) (future development in Africa)
- 3. How does the European TVET system on national and regional level look like as compared to the African context? (comparison Africa-Europe)
- 4. Recommendations on need for action on different levels, anticipating future developments.
- 5. Assessment/snap shot of the progress, challenges and opportunities of SIFA

II. Research Concept

1) literature review

Review on english and german speaking documents and literature on the basis of key words and for the last five years in following data sources: Web of Science, Google Scholar, Scopus, FIS. Analysis of title and summary; if relevant analysis of full text and extraction of relevant information and data as well as using the sources for further research (snowball-technique). Review aims at developing background information on the topic as well as criteria for the analysis of the interviews.

2) Expert Interviews

Catalogue of central questions; Contacting experts / interviewees; finding appointments; Conducting of interviews; problem-based analysing of the interviews on the basis of the recordings.

3) Draft / final report

It is important to emphasize, that the scope of the study was clearly limited. First of all, mainly English language literature and research was considered. This is a clear limitation for a study about a continent with more than 50 countries. And secondly it is limited in terms of the time framework.

II. About the Status Quo of TVET in Africa

In this chapter, answers are given to the following central question from the Terms of Reference: "What are the main TVET functions that are currently handled on continental, regional and national level in Africa? (status quo)". It describes the current situation of TVET in Africa, including the main challenges. This description is based on discussions in the academic literature and on descriptions in policy documents. In addition, current assessments by experts are presented, in particular selected results of the empirical surveys in the form of expert interviews.

TVET in Africa – Significant Preconditions

For the continental vocational education and training policy of the African Union, the English-language term "TVET" (Technical Vocational Education and Training) is predominantly used: "The continental strategy of TVET uses the term TVET in its broadest sense to cover all aspects of training and skills acquisition and all types of training, whether formal, non-formal or informal. It also includes issues of demand and supply of skills, employability, capacity building, self-employment, retraining, versatility and continuous learning. TVET should be understood as cross-cutting and as extending from primary to higher education" (African Union, undated, p. 14). Also for the national vocational education and training policies in the member states and the regional approaches, the use of the term "TVET" predominates in order to address the very different manifestations of vocational education and training.

It is extremely important to emphasise that the social, political and economic conditions in the different regions of Africa are very different. In the following, a picture of the situation of vocational education and training in Africa is drawn. These descriptions are very general, but some references are made to individual countries. The situation of vocational education and training in African countries is closely linked to historical developments that are fundamentally marked by exploitation and colonial rule. This historical burden weighs heavily on further development, also in the field of vocational education and training (cf. in detail for the field of TVET: Allais 2020;

2021). Against this background, bilateral cooperation and support from international community organisations are not only necessary, but also a moral obligation.

In the countries of Africa, it is not possible to build on a tradition of vocational education and training from a time of industrialisation, as was possible in many countries in Europe, for example. In many European countries, the development of formal vocational education and training began in the 19th century. Rather informal qualification practices in companies, especially in the skilled trades, were increasingly linked to general standards over time, for example with the setting of training periods, compulsory final examinations and minimum requirements for company trainings. This model of in-company qualification could be transferred to other sectors and industries in the course of industrialisation. And where there were no further developments of incompany qualification approaches for various social and political considerations or economic reasons, vocational training increasingly took place in special schools (cf. Greinert 1999; 2005; Frommberger 2017). In many cases, these developments took place in parallel. These long-standing historical preconditions are lacking in the countries of Africa. The further development of formalised vocational training could only begin with the end of the colonial era.

But there is also a long tradition of informal apprenticeships in African countries (cf. Maldonado / Boterf 1985; Fluitman 1992; Ahadzie. 2003). These in-company qualification approaches are still of central importance today for the transfer of knowledge and skills in the context of work. Combining these traditional approaches, which often follow informal rules, with approaches of formalisation and standardisation is an important way for the further development of vocational training (cf. Palmer 2009). However, the expansion of school-based TVET institutions is also of paramount importance. And likewise the linking of apprenticeships with school-based TVET.

Supranational political cooperation through the founding of the African Union also began comparatively late on the African continent and is still characterised by great challenges today due to very different political and social developments in the member states. The field of vocational education and training has hardly played a role here so far.

However, supranational cooperation is an essential prerequisite for the further development of TVET in the member states. Cooperation within the European Union has also been able to contribute significantly to the further development of TVET in the member states, especially in connection with economic development and cooperation. Supranational bodies cannot bring about direct structural changes in the field of TVET. However, they can always emphasise the importance of vocational education and training for social and economic development.

TVET in Africa - High Heterogeneity within and between States

The countries and cultures in Africa and the levels of social and economic development are very different. And even within the many and large countries, there are many differences. Also the vocational education and training offers are very different (cf. Akoojee, 2016b). Mixed systems are very common.

In principle, vocational education and training offers are at the higher secondary level. In some cases there are overlaps with the tertiary level. Vocational education and training therefore follows general education, which in most countries comprises 9 to 10 years, but cannot be fully completed by large parts of the population.

VET provision can be divided into formal (state), non-formal (private/semi-state) and informal provision. On the whole, TVET programmes play a subordinate role in people's choice of education (cf. Baffour-Awuah / Thompson 2012). Those people who can reliably complete an educational programme prefer higher general and higher education. Those people who cannot complete higher general education and higher education often prefer - if possible - direct entry into employment, sometimes combined with informal qualification opportunities. Formal and nonformal vocational education and training opportunities are relatively insignificant in quantitative terms. State funding and resources for vocational education and training are also generally significantly lower than for general and higher education.

The following is a brief and very rough general identification of the vocational education and training offerings:

- a. Full-time school-based vocational education offers in the Vocational Colleges (Vocational Training Centers, Technical Colleges, Vocational Education Colleges, Vocational Schools, Technical and Vocational Institutes etc.) predominate. These offerings are mostly relatively general and usually have little reference to specific vocational and in-company areas.
- b. These school-based providers are very diverse, public or private, sometimes semi-private (cf. Akoojee 2016). A distinction is made here between what are known as formal and non-formal providers. The private offers can be very different in detail. Often they are maintained by religious communities (cf. COTVET 2018). Sometimes there are very specialised private offers that cooperate closely with companies.
- c. In many countries, attempts are made to combine these school-based vocational education and training programs with practical training, either in workshops and learning offices, etc.,

- or through internships in cooperative training centers. Or through internships in cooperating companies.
- d. In addition to the school-based offers, there are many different training approaches in the companies, which are organized very differently. Some of these trainings are standardized across companies, for example through financing options or examinations and certifications. The many different apprenticeships approaches also fall into this company trainings. In some apprenticeships there is a cooperation with vocational schools, private or public.
- e. These in-company training approaches are also referred to informal vocational education and training programs. Informal because they often take place in the so-called informal sector of the economy and there are informal rules. Informal also because they are relatively little regulated by supra-company or even state authorities. But the extent of standardization can vary widely. In-company trainings or apprenticeships which have a high extend of standardization, linked to regulations, are not informal but formal. In various countries there are extensive approaches to link informal apprenticeships with standards, for instance in Ghana (cf. COT-VET 2018, p. 18).

In addition to this very rough distinction of vocational education and training offers, there are many other levels of distinction, for example, with regard to the various target groups, the content-related orientations and profiles, degrees and certificates, governance in detail, financing modalities, legislations, integration of the economy in the decision-making process, etc.

The following overview provides an example of the variety of vocational offers, here for the situation in Ghana. The figure shows, among other things, how different the ministerial responsibilities are for the various areas of vocational education and training:

Responsible Ministry presently		Type of institution	Administering authority	Total students/ learners popula- tion
1	Ministry of Education Ministry of Education	Technical University / Polytechnics	National Council for Tertiary Education (NCTE)	(missing value)
		Technical Institutes	Ghana Education Service (GES)	40,000
		Secondary Technical Schools	Ghana Education Service (GES)	8,000
		Skills Training Centers	Non-formal Education Division	87,500
2	Ministry of Employment and Labour Relations	Vocational Training Centers	National Vocational Training Institute (NVTI)	4,132
		Skills Training Centers	Integrated Community Centres for Employable Skills (ICCES)	3,504
		Vocational Training Centers	Opportunity Industrialisation Centre – Ghana	(missing value)

3	Ministry of Trade	Skills Training Centers	Ghana Regional Appropriate Technology Industrial Service (GRATIS)	250	
		Rural Technology Training Center	Rural Enterprise Program (Rural Enterprise Facility)	400	
4	Ministry of Agriculture	Skills Training Centers	Colleges of Agriculture	(missing value)	
		Skills Training Centers	Farm Institutes.	500	
5	Min. Gender & Soc. Pro- tection Skills Training Center		Social Welfare.	(missing value)	
6	Ministry of Local Govt. & Rural Development	Skills Training Centers	Dept. of Community Development	(missing value)	
7	Ministry of Youth & Sports	Skills Training Centers	Youth Leadership and Skills Training Centers	1,558	
8	Ministry of Transport	Skills Training Centers	Government Tech. Training Centre	400	
9	Ministry Fisheries and Aquaculture	Fisheries Collage (cur- rently under construc- tion)	Training Department	(missing value)	
10	Ministry of Roads		Road Sector	(missing value)	
11	Ministry of Tourism	Skills College	HOTCAT	100	
12	Ministry of Lands and Forestry	Professional Training School	GSSM	96	
13	Ministry of Information School		NAFTI	400	
14	Ministry of Finance	Professional Training School	National Banking College	3,000	
SUB	SUB-TOTAL (for Public Institutions)				
		Skills Training Centers	Private Tertiary Inst.		
		Skills Training Centers	GNAVTI Institutions	30,000	
		Apprenticeship	Trade Associations (FEPTAG)	400,000	
SUB	430,000				
GRA	579,840				

Source: COTVET 2018, p. 21 (quoted from Frommberger / Jünke / Krichewsky-Wegener, 2020, p. 207)

Key challenges for the further development of TVET in Africa

The following main challenges can be summarized from literature (cf. for instance: Allais 2021, 2020; McGrath et al. 2020; Hassler et al. 2019; Kerre 2017; Oketch 2015), policy documents and statements (cf. for instance: COTVET 2018; African Union 2007, 2014, undated; UNESCO 2016) as well as on the basis of the interviews for this study:

Vocational education is under-resourced. There is too little money flowing into vocational education and training. TVET has no lobby. This does not only concern the offers of vocational education and training in the perception of the population. It also concerns the political and scientific significance. The significance for supply and educational choice is very low (cf. Arias /Evans / Santos, 2019; quoted from Gewer 2021).

The African Union (2018, p. 8; cited from Allais 2021) describes TVET in Africa as "under-re-sourced" and "obsolete" with "damaged infrastructure" and "inadequate inter-sectoral linkages".

The example of Nigeria shows this situation particularly clearly: there, over 5,100 general secondary schools are offered with almost 4.5 million pupils. These are compared to only 169 technical colleges with 44,000 students (cf. Odukoya et al. 2018; quoted from Krichewsky-Wegener / Vossiek 2020).

The role of vocational education and training alongside general and higher education is subordinate. Its standing and reputation in society is very low. Recognition of vocational education degrees is also relatively low. Employment opportunities and further education are not systematically linked to vocational education degrees: "There is a massive gulf between labour market winners and losers, and graduates are the main winners. While tertiary education numbers are very low compared to many other regions on the world, when compared with employment data, they are relatively high. This is in a context in which the informality rate is above 90% in more than half of sub-Saharan countries (...). Of the formal sector jobs, a very small number would be in mid-level or 'graduate jobs'; rising levels of graduates in the population are therefore likely to 'crowd out' TVET graduates (or the likelihood of people enrolling for TVET or aspiring to be a TVET graduate)." (Allais, 2021, p. 34)

The African Union (2018, p. 13; cited from Allais 2021) argues that "in many countries, technical and vocational education is still considered by parents, the public at large and even some politicians as a domain for less academically gifted students".

- The under-resourcing and low recognition of formal vocational education and training programs contribute to the <u>private sector's reluctance to cooperate with these programs</u>. Conversely, it is very difficult to get the business community involved in state-regulated vocational education and training.
- There is a <u>high degree of institutional fragmentation in TVET</u>. And there are large differences in provision within a country, especially between urban and rural regions. Political responsibilities are very diverse, see for example in Namibia: "Existing governance and financing arrangements, involving MHETI, the Namibia Training Authority (NTA), the Namibia Qualifications Authority (NQA), the National Training Fund (NTF) and the National Student Financial Assistance Fund (NSFAF) are complex, with five key features: non-separation of key functions, duplication and overlaps of mandates, difference between an institution's legal mandate and

actual responsibilities, lack of capacities and actions regarding the evaluation of impact of VET, and lack of autonomy of VET institutions. Meanwhile the involvement of the private sector in the VET system appears insufficient, in terms of governance, contribution to curriculum development and contribution to delivery." (UNESCO, 2016, S. 13; quoted from Gessler / Holle 2020, p. 329)

- The <u>self-organization of the business community, for example through associations and intermediary bodies, mainly involves the formal economy</u>. The dominant informal economy is rarely integrated into this association structure. As a result, there are not enough points of contact for cooperation and public-private partnerships in vocational education and training.
- The implementation of standards in vocational education is low. Legal regulations exist, but their effectiveness and acceptance is limited. In particular, companies and the business community are hardly willing to accept legal standards for training measures. The role of non-state actors is also very important for the provision of vocational training; this raises the question of how a link can be established with state standardization.
- A <u>systematic connection between company requirements and vocational education and training offers is often missing.</u> The school offers are very supply-oriented. The individual company offers are very demand-oriented. A balance is lacking. Acceptance of regulatory materials/curricula is also frequently lacking.
- Qualification in the informal sector plays a major role. There you can find offers that can
 also be called apprenticeships. However, the quality of these offers varies greatly. There is
 hardly any quality assurance based on standards and quality control. Qualification agreements are at best verbal, often the apprentices have to pay for the training.
- <u>Teachers are often not sufficiently qualified</u>. Teachers often lack professional prerequisites, for example, on the basis of a degree or relevant professional development. And the teachers also lack practical experience from the professional areas they teach.
- We hardly know anything about the concrete quality of training and teaching in vocational education. What happens in vocational education at this micro level? How is it taught and learned? What do VET learners know and are able to do, and what are their learning levels?
 There is too little research in TVET, on questions of the micro level but also on questions in the macro level. Also about the demands on the labour markets there is too little research. There is too little research and date on TVET for evidence based decision making.

Vocational education research does not exist in most countries. This is an example of how low the value of vocational education is within society. And at the same time, it will be very difficult to raise the value of VET if there is no research and no studies in this field.

The central challenges mentioned above are consistently confirmed by the experts in the <u>interviews</u>. The low value of vocational education and training ("low reputation") as well as the lack of fit between vocational training offers and the needs and competence expectations in the companies ("mismatch between supply and demand") were emphasised in the interviews. The lack of involvement and participation is also emphasised throughout ("low private sector engagement"), the "poor infrastructure and equipment" in the formal TVET sector as well as the "institutional fragmentation and low standardisation".

III. About the Future Developments of TVET in Africa

In this chapter, answers are given to the following central question from the Terms of Reference: "What are the developments in these intervention areas in TVET resulting from regional integration processes in Africa? (=Which TVET functions will be increasingly governed and/or executed on supranational level?) (future development in Africa)". Central strategies and approaches for the further development of vocational education and training in African countries as well as from a continental perspective will be discussed. This description is based on discussions in the academic literature and on descriptions in policy documents. In addition, current assessments by experts are presented, in particular selected results of the empirical surveys in the form of expert interviews.

National Strategies and Approaches for the further development of TVET in Africa

What approaches are being used to further develop vocational education and training in African countries? How is vocational training being modernized in order to make it more attractive and effective - in the long term? Central approaches are mentioned below:

Strengthening the role of vocational education and training as part of development policy:

Formal vocational education and training is of relatively little quantitative importance for the whole area of competence and skills development. The infrastructures of the formal VET system are comparatively poor. Investments in VET are needed. Strengthening TVET vis-à-vis other policy fields is a key political task. This is why international cooperation in VET is so important. Besides the function of TVET to integrate young people into work and society and to open up personal and professional perspectives, there is the direct economic benefit of TVET. Qualified people are necessary for economic development. And in the wake of international trade agreements in Africa, the mobility of workers is also gaining in importance - and with it international cooperation in TVET.

Vocational education and training is increasingly perceived as an important component of the development of education, society and the economy. TVET is becoming more and more a component of development policy.

Expansion of capacities in vocational training and development of vocational training centres:

A central approach for further development lies in the further development of capacities for vocational education and training, specifically in the establishment of vocational training institutions. Compared to general education and higher education, the importance of vocational education in terms of capacity has been very low up to now. This applies to urban areas, but especially to rural areas. Vocational education needs investment. Without these capacities, efforts to further develop the content and quality of vocational education and training and to establish relations with the private sector will come to nothing.

Linking formal TVET and non-formal provisions:

A closer link between formal TVET structures and non-formal provision is helpful for the further development of TVET. Non-formal TVET plays a major role in many African countries. The inclusion of the non-formal sector is sought through various measures. Transparent vocational qualifications, qualification frameworks and curricula play an important role. Accreditation can also play an important role; vocational training providers must be accredited before they are allowed to conduct examinations and award state educational qualifications.

Strengthening apprenticeships and dual approaches of TVET – Linking formal TVET to the informal economy:

The link between formal TVET and informal sector and skills provision takes place through the strengthening of apprenticeships and dual approaches in vocational education (cf. Gewer 2021). (Informal) Apprenticeships are a traditional approach to skills development and vocational training worldwide, including in African countries. It functions on the basis of informal rules. Up to the present day, this qualification approach is of utmost importance for the everyday transfer of knowledge and skills in everyday working life.

In order to ensure a minimum quality of these offers, a connection is made with legal or public-law standards. The introduction of final examinations and certificates plays a major role. Linking the qualification processes and examinations to competence-oriented training and examination standards also serves to standardise and ensure minimum quality ("portability of skills and access to formal labour markets require formal recognition", Nübler / Hofmann / Greiner 2009, p. 47). The inclusion of qualification development in the informal sector also takes place through instruments for the recognition of informally acquired competences. These approaches can be found in many countries, for Kenya see Baumann 2020; Mulati, Kyalo & Dimo 2019.

The approaches of apprenticeships can be very different, more or less formalised, for younger or older target groups, shorter or longer, financed internally or across companies, in cooperation with vocational schools or universities, etc. Alternatively, the combination of school-based vocational education and training with practical in-company experience also serves to further develop dual vocational education and training. And also training partnerships are gaining in importance.

Involvement of business community in making TVET policy:

In many countries in Africa, there is increasing involvement of the business community in policy-making for vocational education and training, for example through the National Vocational Training Organizations (cf. Frommberger 2015) (also "Sector Skills Councils" or "Industrial Skills Committees" or similar). The business community is thus involved in the development of standards, for example for curricula (for Botswana see Vossiek 2020; for Namibia see Gessler / Holle 2020). By involving the business community, key TVET policy decisions should be more closely aligned with the needs of the business community. In addition, the acceptance of TVET policy decisions in the economy is increased if the economy itself is significantly involved in these decisions. This can increase the willingness to participate in Technical vocational education and training in enterprises. This further development of private sector involvement only works through participa-

However, the involvement of business organisations through the National Vocational Training Organisations is largely limited to the formal economy. Since the informal economy is hardly organised, it is difficult to involve it. It might be helpful here to involve local interest groups of the business sector.

Alternative funding models:

tion, not top-down.

Formal TVET is financed by state funds. This applies in particular to school-based TVET programmes. The financing of non-formal and informal offers is mainly in private hands, in direct form for example by the participants or the companies. Indirect financing of private offers also plays a role, for example through apprentices in apprenticeships, who - perhaps even in addition to the apprenticeship fees they pay - provide a productive service for the company. Indirect financing is also conceivable through refinancing options offered to the private actors, for example through tax write-off options for the costs.

Pay-as-you-go financing approaches can serve to improve the financing possibilities for non-formal and informal offers. Pay-as-you-go financing approaches play an important role especially

for the financing of company-based education and training activities. Here, usually in relation to a specific economic sector, those enterprises that do not provide initial and continuing training also participate in the costs. As a rule, the enterprises (and often also the employees) of a sector or industry or a certain region pay into a fund. Those companies that bear the costs for education and training can refinance them through this fund (cf. on the different models Bank et al. 2016, p.76 f).

These pay-as-you-go financing approaches exist in many African countries in very different forms. They serve in particular to promote the participation of companies in education and training. In some cases, they also serve to finance cooperative or dual TVET approaches, where the costs are significantly higher. However, pay-as-you-go financing approaches often do not work as desired (cf. Johanson 2009; Müller / Behringer 2012; cf. also the examples in Bank et al. 2016, p. 88 ff).

Development and implementation of competency-based curricula:

A central factor for the establishment, further development and modernisation of TVET lies in the development and implementation of curricular standards. Internationally very popular are approaches that are called "competency based" (cf. Goncharova et al. 2021; Frommberger 2004). This approach has also become very important in African countries for general education, higher education and vocational education and training (cf. for example for Namibia: Gessler / Holle 2020; for Rwanda: van Halsema 2017).

There are many different forms of this approach. In essence, it is always about emphasising the application context of the desired learning processes through the stronger orientation of the curricula to general or vocational lifeworld references and emphasising the development of the learners' skills. At the same time, learners should be more activated for the learning processes. Another central structural feature, especially for TVET, is often modularisation. The topics, contents and desired competences are delimited and sorted by modules. And the assessment of learning performance is module-related and is primarily intended to record and evaluate the skills actually acquired.

For the further development of TVET, these competency-based standards should also increase the willingness of companies to participate. By relating the curricula to the operational areas of responsibility and the skills and abilities required for these, companies can better recognise the benefits of vocational education and training.

A central challenge lies in actually implementing the learning processes intended by the competency-based standards as desired. Another central challenge can lie in the modularisation of learning and examination processes, especially if these are very fragmented.

Development and implementation of national qualifications frameworks:

The development and implementation of national qualifications frameworks is a common strategy for the development of TVET worldwide. Qualification frameworks are used to present and compare the recognised qualifications offered in a country. A qualifications framework serves to ensure the transparency of qualifications and the comparison of qualifications from the various educational sectors (general, higher education, vocational education; sometimes formal and non-formal education). Qualification frameworks are also intended to contribute to the recognition of qualifications in order to promote transitions (permeability) between educational sectors and levels.

The different qualifications are assigned to a level. The number of educational levels distinguished by a qualifications framework can vary. The range is between six and twelve educational levels. On the one hand, the assignment to a level is linked to the traditional classification of qualifications in the national education system. On the other hand, the qualifications frameworks are based on a general competence model that distinguishes cognitive performance levels. From an international perspective, these competence models are very different.

For vocational education and training, the special purpose and advantage of the qualifications frameworks is that vocational qualifications are linked to general and higher education qualifications. This means that vocational qualifications are allocated on an equal footing with general and higher education qualifications. This approach is intended to increase the recognition and attractiveness of vocational education and training.

TVET Teachers and Trainers education and training:

A very widespread approach is the education and training of teachers and trainers. This is a very important contribution to the quality of the TVET programs (cf. European Commission 2014). There is a close connection between the quality of vocational education and training and the teachers and trainers in vocational education and training. This connection has been repeatedly demonstrated and confirmed in various national and international academic studies (cf. King Rice, 2003, Rivkin et al. 2005, cited in Grollmann 2008; Ebbinghaus et al. 2011). For the further development of TVET, the initial and continuing training of TVET staff is therefore of particular

importance. The education and training of TVET personnel has been an essential component of international TVET cooperation for decades.

Worldwide, the standards for the education and training of TVET staff vary widely. While university training for teachers at general education schools is widespread, TVET schools in most countries can recruit very different groups of people with very heterogeneous vocational and higher education education and training and experience backgrounds. Uniform standards across the country are rare. This deficit usually also applies to in-company training staff.

A particular challenge in many countries is also to establish the necessary status and prestige of teaching in vocational education and training: "In many countries the low status, the unattractive working conditions and also the limited opportunities for advancement contribute to a low motivation of school-based teaching staff and company-based training staff equally (UNESCO-UNE-VOC 2012, 6, 21; cited in Euler 2018).

The professional competence of teachers and trainers is of central importance. This is related to the theoretical knowledge and practical experience in the subject. The more demanding the vocational education and Training processes are in which teachers teach, the more important is the theoretical or scientific competence in the subject.

In addition to subject-specific competence, the pedagogical and didactic knowledge and competences of teachers and trainers are important. These are also acquired in more developed vocational training systems at colleges and universities. In addition to this academic education of pedagogical and didactic competences, teaching and school practice training processes are important.

In the expert <u>interviews</u>, the need for data collection for curriculum development was repeatedly emphasised with regard to the national strategies ("need of skills anticipation"; "meeting the demands"; "improving the methodology of curriculum development"). It is also emphasised that existing informal qualification practices should be linked to formal TVET ("connecting TVET to informal apprenticeships"). Concrete measures on how this connection could work lie in funding and in the development of standards.

Continental Strategies and Approaches for the further development of TVET in Africa

Parallel to the national development of vocational education and training, regional and continental political efforts are taking place to promote the modernizing of vocational education and

training in Africa. Vocational education and training is seen as a means of combating the high youth unemployment rate and contributing to economic development by producing the skilled workforce. There are various examples or documents in which the further development of vocational education and training is directly propagated at continental level:

The African Union has key strategies and frameworks aimed at addressing a Continental Strategy for TVET, for instance as part of CESA 2016-2025, Continental Education Strategy for Africa 2016-2025 (cf. African Union Headquarters, undated, Continental Education Strategy (...), p. 16): "The continental strategy for TVET aims to bring a paradigm shift in TVET by developing the idea that TVET prepares youth to become more of job creators than job seekers so that the public discard the idea that TVET is a refuge for those who failed in general education. The Strategy demonstrates that even the most sophisticated qualifications require prior training and this falls well within the broader framework of the Technical and Vocational Education Training (...) Expanding TVET training facilities is costly and the challenge for African governments is to prioritize this subsector as it is a key to the realization of Vision 2063 through critical generation of employment and infrastructure development."

In the strategic objectives of CESA 2016-2025, vocational education and training is explicitly mentioned (cf. African Union Headquarters, undated, p. 25): "Expand TVET opportunities at both secondary and tertiary levels and strengthen linkages between the world of work and education and training systems (...) Establish and strengthen Labor Market Information Systems to identify skills and competencies needs (...) Expand and upgrade TVET and polytechnics to attract quality trainees and provide incentives for career opportunities (...) Build win-win partnerships between tertiary and vocational training institutions and enterprises to jointly develop and implement relevant curricula and programs" etc.

The Continental strategy of TVET (Decision Assembly / Dec.525 (XXIII) sets out concrete objectives for the development of TVET in African countries, but also makes clear the continental perspective (African Union 2018, p. 10): "The mission of the strategy is to build a unified general framework that can serve as a continental platform around which AU Member States will cluster and/or be invited to build TVET coherent and integrated systems at national, regional and continental levels through the development and implementation of national and regional plans. This will be done to ensure a network enabling – genuine standardization in TVET; - recognition and harmonization of training; - mobility of players, especially trainers." The talk is of a continental strategy ("The mission of the current continental TVET strategy (…)").

The long-term strategic perspective for the further development of vocational training by the pan-African authorities is impressive. The next decades are taken into account: "The main objectives of this Plan of Action for the African Decade (2019-2028) for Technical, Professional, Entrepreneurial Training and Youth Employment are to (…) (C)ontribute to the implementation of the continental and global development agendas namely Agenda 2063 and the Sustainable Development Goals respectively" (African Union Headquarter, undated, Plan for action (…), pp. 12-13).

It becomes clear that there is a lot of overlap in terms of content between the national development goals and approaches to TVET in the Member States and the priorities of the continental body (African Union). At the general level of the policy agenda, TVET is understood from a national and continental perspective as a key lever for combating youth unemployment and developing skilled workforce. But the importance attributed to TVET in the policy documents is in contrast to the actual policy decisions by the responsible institutions. In fact, vocational education and training as a field of education and economic policy plays a clearly subordinate role in the member countries compared to general and higher education. And in the AU, too, TVET is institutionally represented only very marginally.

From the point of view of the <u>interviewed experts</u>, the <u>advantages and possibilities of a continental approach</u> for the further development of TVET lie above all in the following points:

- The importance and status of TVET can be increased if TVET plays an important role in continental policy.
- The comparative perspective on the developments in the member states offers benchmarks, monitoring and reporting and thus stimuli for national impulses and developments. A pan-African perspective offers orientation and also good models.
- If the comparative perspective is accompanied by systematic data collection and scientific information on TVET, this will lead to knowledge sharing and mutual learning between member states. At AU level, expertise should be made available for the further development of TVET ("research input"; "toolkit", "agenda setting").
- The further development of TVET can be linked with other pan-African initiatives, especially with efforts towards Free Trade Agreements. Intergovernmental coordination in the field of vocational education and training plays an important role in economic integration. Employees mobility can be promoted through the recognition of qualifications. This is important for the freedom to provide services. From a continental perspective, it would also be interesting to know in which sectors mobility is particularly important.

- Cross-national occupation profiles could also be developed, for example in the construction sector.
- At the AU level, "global skills agreements" could be developed, for example with the EU.
 These agreements could help to prevent the poaching of skilled workers.

<u>From the experts' point of view, the following limitations of a continental approach</u> for the further development of TVET are seen:

- The capacities in the pan-African institutions are too small to provide the necessary data for
 TVET and to organise the necessary negotiation and communication processes.
- The member states face very great challenges with regard to the further development of vocational education and training in their countries. A pan-African perspective based on general principles and aiming at harmonisation of approaches could be too much for the member states. This might impede the participation of the member states.
- The differences within the African Union are very great. In North Africa, the conditions for the further development of vocational education and training are much better than in West or East Africa. The proximity to the EU is also present in North Africa.

IV. European TVET system on national and regional level compared to the African context

In this chapter, answers are given to the following central question from the Terms of Reference: "How does the **European TVET system** on national and regional level look like as **compared to the African context**? (comparison Africa-Europe)". A general comparison of TVET systems and conditions in Europe and Africa is made. This is followed by a discussion of the European Union's TVET policy, including concrete instruments and measures for the further development of TVET in the Member States. This description is based on discussions in the academic literature and on descriptions in policy documents.

European TVET System compared to the African Context

In Europe, there is great diversity in vocational education and training. Just as on the African continent, school-based approaches to vocational education and training have traditionally dominated, especially in the Romance, Scandinavian and Eastern European regions.

Non-formal and informal approaches to vocational education and training and in-company training also play a very important role in Europe, basically in all member states, but especially in the Anglo-Saxon countries.

So-called cooperative or dual vocational education and training, in which learning in the company is combined with learning in the vocational school, is of great importance in only a few European countries, especially in Central Europe, specifically in Germany, Austria and Switzerland. This approach has also gained importance in the Netherlands and Denmark, for example. And in many other countries, there are regions (e.g., Lombardy in Italy) or sectors (e.g., the skilled trades) where in-company vocational education and training plays a major role (cf. also Jørgensen / Olsen / Thunqvist, 2018).

However, even in these countries and regions where cooperative or dual approaches are very important and firmly established, very successful school-based vocational qualification programs exist in parallel. Non-formal and informal offers and approaches also exist to a high extent almost everywhere, especially in the field of continuing training and in the training offers for unemployed persons. Compared to the situation in African countries, the informal qualification offers, which often take place in companies, are more strongly integrated into a formalised economic structure, linked to labour law foundations.

Compared to the countries in Africa, vocational education and training plays a much greater role in Europe. It is true that vocational education and training is usually only the second choice in European countries, and the first choice is higher general and higher education. However, the TVET pathway is of very high importance in quantitative and qualitative terms for the transition to employment or higher education. In Austria, for example, the majority of students at higher education institutions come via the VET pathway. Vocational education and training provides qualifications that are highly recognised for entry into employment and at the same time offer access to higher education.

With regard to the importance of vocational education and training programs for the educational careers of school leavers and for the qualification of skilled workers in companies, school-based approaches to vocational training continue to dominate in most EU countries. Even in Austria, where dual vocational education and training has traditionally been firmly anchored, school-based approaches are now more attractive. Apprenticeships or dual offers are comparatively less widespread in most countries. In addition, as mentioned above, there are a large number of non-formal and informal programs everywhere.

The qualitative characteristics of these various subsystems of vocational education and training can vary greatly within the EU. This applies in particular to the apprenticeships or dual approaches to vocational education and training in the member states. These offers are very a lot. In some cases, there are also significant differences within a country. Large differences can be observed especially with regard to the following characteristics of apprenticeships or dual vocational training approaches (cf. European Commission 2012; Cedefop 2018; Gessler 2019):

- Target groups: adult apprenticeship for employees versus junior apprenticeship for school leavers.
- Entry requirements: poor entry qualifications versus high entry qualifications.
- Extent of legal standardization and quality assurance: informal apprenticeships versus formal apprenticeships.
- Curriculum approaches: fragmented modularization versus no modularization; graded versus non-graded; formative evaluation versus final assessment only; competency-based versus not competency-based.
- Characteristics of learning location cooperation and the role of school-based learning: obligatory or not obligatory; the schools themselves are also diverse, some of them are vocational schools, others are universities.

- Government approaches: no direct public intervention versus public control; one ministry versus several ministries.
- Financing models: financing by individual company versus levy systems/other financing systems.
- TVET teachers and trainers: qualification standards versus no qualification standards.
- Relationship to higher education: Integration and transitions between vocational education and higher education or strict separation of vocational and higher education and training offerings.

The contents of TVET programs can also vary widely. There are very different content profiles of education and training in the various member states, even in similar industries or sectors. And even the contents of education and training profiles that bear a similar designation can in fact be very different.

Compared to Africa, political stability is much higher in Europe, economic development and diversification much more advanced, and the extent and acceptance of regulatory policy for ensuring minimum standards much more significant. Due to the higher proportion of standardized or formalized offerings, the strong infrastructure in urban and rural areas, and other framework conditions that are significantly more advanced (e.g., initial and continuing education and training of vocational training personnel and vocational training research), the quality of vocational education training offerings is significantly higher on average than in the countries of the African Union.

In general, it should be noted that the spectrum of vocational training opportunities within the European Union is extremely broad. Even in border regions, the knowledge of vocational education and training offers in the respective neighboring country and the mutual recognition of qualifications for non-regulated occupations are not self-evident.

TVET policy of the EU

The EU's vocational education and training policy is essentially aimed at enabling and further developing cross-border mobility and comparability between labor markets and vocational education and training systems and qualifications despite the major differences mentioned above. The vocational education and training policy efforts are primarily closely related to the freedom to provide services in the EU and in the context of further efforts to promote the European single market. At the same time, it is the educational policy goals in the EU that are to be further

developed with a focus on vocational education and training, in particular equal opportunities, lifelong learning, permeability, the integration of young adults and the fight against youth unemployment.

The transnational vocational education and training policy in the EU also has a much longer tradition and goes back to the 1950s of the last century, specifically to the Treaty of Rome of 1957. There have been many different strategies and approaches. For a long time, the harmonization goal was in the foreground. Since the Maastricht Treaties (1992), however, the principle of subsidiarity has once again come to the fore for vocational education and training. Legislative acts aimed at harmonizing the legal and implementing provisions of the Member State were excluded from the scope of Articles 149 and 150. Article 149 of the Treaty provided a basis for action in the field of education. Article 150 provided that the Union shall implement a vocational education and training policy which shall support and supplement the action of Member States.

Measures implemented according to these articles are carried out under the co-decision procedure and qualified majority voting in the Council (cf. Frommberger 2005, p. 15). This represents a major difference to other policy areas, e.g. agricultural policy or financial policy, where regulations intervene directly in the policies of the member states. The EU has a complementary function for the member states and cannot issue legal and administrative regulations aimed at harmonizing basic national vocational education and training structures.

Nevertheless, alongside the unrestricted and fair free movement of goods, services and capital, which has gradually been realized through the Treaties of Rome (1957), the Single European Act (1986), the Schengen Agreement (1990) up to the Maastricht Treaty and the subsequent ratifications, there are also measures to promote and enable the cross-border mobility of people. And because individual mobility is directly linked to the education and training objectives and the entitlement structures within and between the education and employment systems, the areas of education, work, employment, qualification and vocational education and training are of elementary importance for European policy.

Bohlinger (2014) sums it up as follows: "Since its birth, the overriding policy goals of the European Union have been peacekeeping, economic promotion and social cohesion, i.e. the harmonization of living conditions. The instruments of government and their permanent change and adaptation follow to this day the seemingly simple logic of the implementation of these goals (...) The cornerstones of the Union are the Treaties of Rome, which (...) regulate the free movement of goods, services, persons and capital (...). The quarantee of these four fundamental freedoms is the core of European policy and forms and its logic of

action and control. From this logic, the central steering principle of European policy becomes understandable, which directly or indirectly affects vocational education and training." (translation by the Author) In essence, the vocational education and training policy of the institutions of the European Union is about accepting the different traditions and competences of the member states - and yet pursuing supranational policy approaches in the sense of the EU. Thus, there are no "hard laws" for the policy field of vocational education and training. Vocational education and training falls within the scope of "soft laws"

Reuter (1995, p. 204; cf. Frommberger 2006, p. 13 f) refers to the distinction between 'primary' and 'secondary' legal bases as well as the sources of law in the broader sense [soft law]:

"Legal sources of European (education) law in the narrower sense are the so-called primary Community law, i.e. (...) the European Social Charter (1990) and the Maastricht EU Treaty (...) Further sources of EC education law are the legal provisions created by the EC institutions on the basis of EC treaty law (so-called secondary Community law). Primary and secondary Community law are supplemented by the case law of the European Court of Justice (ECJ). The sources of law in the broader sense (soft law) include the numerous declarations of the Community institutions, in particular the Council (and the Ministers of Education meeting within the Council) and the Commission. These are norms which are not legally binding because they are either not legally enforceable or the Community basis is doubtful or completely lacking. The boundaries between legally binding regulations of secondary Community law and these "soft" legal provisions are fluid ..." (translation by author)

Instruments of EU TVET Policy

As mentioned above, the EU's intergovernmental TVET policy relies on steering instruments for policy positioning and recommendation, scientific data collection and information, funding of mobility and other thematic programmes, and comparison.

The central strategy for the development and implementation of the EU's TVET policy objectives lies in the Open Method of Coordination. This steering strategy is relevant in policy fields that are not subject to Community law. In accordance with this method, key objectives are first formulated. Regular monitoring processes are used to compare the state of development in the member states. This creates competition between the member states, which stimulates further development in the countries. Important instruments are listed below and illustrated with examples.

Recommendations / Opinions (Empfehlungen / Stellungnahmen)

Recommendations and opinions are not binding on the member states. At the same time, the past shows how effective recommendations can be, for example with regard to the development and implementation of qualifications frameworks (European Council / European Parliament 2008). These recommendations are usually linked to action programmes in which financial resources are made available to the member states. At the same time, permanent monitoring is

carried out so that the development statuses in the member states are transparent and can be compared.

An important step for the further development of quality in TVET in the EU Member States was the "Recommendation of the European Parliament and of the Council of 18 June 2009 on the establishment of a European Quality Assurance Reference Framework for Vocational Education and Training" (EQAVET). With this recommendation, the member states were invited to use indicative descriptors and indicators to strengthen the quality of VET provision. The implementation of the Recommendation was supported by the EQAVET network, so called National Reference Points, bringing together relevant stakeholders at the national and regional level in order to conduct special measurements on quality development in TVET.

Directives (Richtlinien)

Directives are legal acts of the EU that set a target to be achieved by all member states. In order to achieve the goal, however, the member states must develop their own legal regulations.

An example that also concerns vocational education and training is the EU Directive of the Recognition of Professional Qualifications (Directive 2005/36/EC). This Directive is intended to guarantee the freedom of movement of workers and thus the freedom of establishment and freedom to provide services in the European Union (EU). Since each member state has the right to make access to and exercise of a profession dependent on certain qualifications, this directive is necessary. This is because workers from one Member State should also be able to practise their profession in another Member State. It must therefore be regulated how professional qualifications acquired in one member state can be used in another member state. However, this directive only applies to so-called regulated professions, i.e. professions whose exercise is linked to certain minimum qualifications. This is often the case in the health sector, for example. However, most of the activities that are carried out on the basis of TVET qualifications are not regulated professions.

Decisions and **regulations** that are legally binding do not play a role in the area of TVET due to the principle of subsidiarity.

Furthermore, they are **resolutions** and **declarations** of the Council of the EU that can influence the development of TVET within the EU. These are not documents with legal effect. However, they set out political commitments and positions. For vocational education and training, for example, the "Resolution on the promotion of enhanced cooperation in vocational education and

training" by the Council of Education Ministers of 2002 ("Copenhagen Declaration") should be mentioned. Guidelines were formulated for strengthening European cooperation in vocational education and training, for example to promote the transparency of qualifications or to develop instruments for the recognition of informally and non-formally acquired competences. At the follow-up declarations, these goals were further differentiated. As a result, instruments such as the qualifications frameworks, the ECVET system or the common reference framework for quality assurance in vocational education and training were developed. A current declaration, for example, is the "Osnabrück Declaration on vocational education and training as an enabler of recovery and just transition to digital and green economy" from 2020, in which currently relevant goals for vocational education and training are formulated.

The impact of these declarations can be seen in the Bologna Declaration of 1999, in which the education ministers of the member states declared their support for a common higher education area in 2010. This was followed by an agreement on concrete instruments that are now firmly anchored in the higher education systems of the member states (e.g. European Credit Transfer System, Diploma Supplements, Bachelor-Master degree structure).

The EU Commission also has instruments at its disposal to express positions. Typical of these are, for example, the so-called **Green Papers** or **White Papers**. An example with high relevance for TVET is the "White paper on education and training - Teaching and Learning - Towards the learning society".

The "European Centre for the Development of Vocational Training" (CEDEFOP) is of great importance for the further development of vocational education and training by the institutions of the European Union. Cedefop supports the European Commission, the EU Member States and the social partners with information and data on vocational education and training, which serve to underpin European policies on vocational education and training.

In summary, the European Union institutions have a significant influence on and drive developments in TVET. This is shown by the development results in many Member States. Where the transformation processes in recent decades have required orientation (for example in the Eastern European states), the EU's TVET policy has provided important guidelines. And even where there were firmly established TVET systems, EU policy has contributed significantly to further development, e.g. in Germany.

Strengthening the apprenticeship approach

The EU has been particularly active in promoting apprenticeships. Among other initiatives, it has established and supported the European Alliance for Apprenticeships. Particularly since the economic and financial crisis in 2007 and 2008, the promotion of dual TVET programs has gained strongly increasing importance for the EU's TVET policy. In 2010, the Education and Training (ET) 2020 strategic framework expanded the decisions of the Copenhagen Declaration to include the goal of increasing quality and efficiency. Work-based learning approaches were preferred for the structure of vocational education and training (Council of the European Union (2013): European alliance for apprenticeships - Council declaration. Online: https://www.consilium.europa.eu/uedocs/cms data/docs/pressdata/en/lsa/ 139011.pdf). In March 2018, the Council of the EU adopted a recommendation for a European framework for high-quality and efficient apprenticeships. In the Riga Conclusions 2015, the ministers responsible for vocational education and training committed themselves to promoting all forms of work-based learning. The publications of the Council of the EU and the European Commission positively highlight dual approaches to vocational education and training and take measures to financially support these approaches (European Commission 2013; European Commission 2012). The benefits of dual approaches for school-to-work transitions and for reducing youth unemployment are emphasised. It is also emphasised that the participation of training companies in the vocational education and training of young adults should take place under transparent rules and that the social partners should be involved in the governance of vocational training (cf. in detail Schmidt 2020).

For many decades, dual approaches to vocational education and training played a rather subordinate role in European vocational education and training policy. In the vast majority of EU member states, school-based VET systems dominate and apprenticeships in their various forms are hardly respected. The massive promotion of this company-based or dual vocational education and training approach by the EU institutions, including financial support, has led to an increase in the importance of dual vocational education and training. In fact, very different forms of dual TVET can be found in the Member States (cf. Cedefop 2018; 2020; 2021), for different target groups, in different forms of cooperation and governance structures, for different occupations and contents, with diverse curriculum models and links to other education sectors, etc. All in all and in fact, dual vocational education and training still plays a clearly subordinate role in Europe.

V. Recommendations

In this chapter, answers are given to the following central question from the Terms of Reference: "Recommendations on need for action on different levels, anticipating future developments".

TVET policy is in a dilemma. On the one hand, vocational education and training is described at national, regional and continental level as an extremely relevant policy field that serves to combat youth unemployment and to develop skilled workers for the purpose of economic development. And also in the context of international cooperation with European institutions, vocational education and training is repeatedly highlighted for cooperation with Africa. But on the other hand, the actual weighting of vocational education and training and its standing in comparison to other policy areas and also in comparison to general and higher education in the countries of Africa is still very low ("stepchild vocational education and training").

The many general political statements on the high importance and need for support of vocational education and training come up against a reality that is in great discrepancy to the political statements. In most countries, TVET is in fact a meaningless political field. The fact that there is no institutionalised research in the field of TVET is also an expression of the low status of TVET. In a society where a political topic is of high importance, research is also conducted on this topic.

For the further development of TVET in Africa, this situation needs to change. The actual political weight of TVET needs to change, specifically in terms of the financial resources that flow into the area of TVET and TVET research. TVET infrastructure needs sustained investment.

Linking TVET with other pan-African policies, such as the promotion of worker mobility and freedom to provide services under free trade agreements, can increase the importance of TVET. Not only higher education degrees need to be recognised across countries, but also vocational education and training degrees.

The anchoring of vocational education and training as a policy field at the continental level must be expanded. Vocational education and training is an equal pillar alongside general and higher education. In addition to combating youth unemployment and developing skilled workers, the function of vocational education and training is to create opportunities for young people to connect and advance. TVET serves equal opportunities and thus also has a central educational policy function. To this end, it is important to link TVET with general and higher education, i.e. to expand permeability.

The following concrete activities and measures can serve the further development of the policy field in Africa TVET, here especially with a view to the intergovernmental and continental level. These recommendations are also results from the <u>interviews</u>:

- Link TVET as a policy field closely to other intergovernmental and continental policy fields, for example the development of free trade areas, bilaterally, regionally or continentally.
- Intergovernmental Mutual Recognition Agreements are helpful for the further development
 of mobility between labour markets and TVET systems. To this end, the regional intergovernmental agreements should be linked.
- For the further development of TVET in the framework of regional cooperation, a focus on specific sectors would be helpful (e.g. construction sector or health sector or green skills). For TVET for these sectors, not only mutual recognition would be helpful, but also the development of transnational vocational education and training standards, where appropriate.
- Develop capacities and competences for the policy field of TVET at AU level. This includes building knowledge capacity on TVET issues.
- Strengthening the knowledge and data base for TVET in African Union countries and at the African Union level.
- In addition to this direct knowledge and data base, the development of concepts for the further development of vocational education and training is important, as is the presentation of good examples and the regular collection and presentation of development progress in vocational education and training.
- Scientific and political information on TVET must be made available on digital platforms. In this context, further specialist media in open access are important, for example regular newsletters, specialist journals, documentation series, National reports on TVET, Labour Market Information Systems, etc.
- As already indicated above, the expansion of professional capacities is of great importance
 for the further development of TVET. Further training offers, workshops, study courses etc.
 must be developed in which people who are active and responsible in the field of TVET can
 acquire knowledge and understanding of the field of TVET.
- The transfer of knowledge can take place in close cooperation with EU institutions (ETF, Cedefop, specific working groups at EU level, etc.) or with institutions in the EU member states, including universities.

- Due to the proximity of TVET to company needs, the involvement of the business community
 is of high importance. This involvement relates to TVET provision (above all through participation in education and training) as well as the involvement of business in TVET policy decisions, if possible through systematic representation and participation of business in key bodies for shaping TVET.
- At the same time, a self-administration of the economy must be further developed, which
 also includes vocational education and training. This self-administration can serve the intercompany standardisation of informal offers as well as the expansion of non-formal offers.
- In the long term, the various TVET offerings (informal, non-formal, formal) should be related to each other, e.g. through qualification frameworks, quality assurance systems (e.g. accreditation) and transparent certification and degree structures.
- In the short and medium term, however, the focus should be on the further development and expansion of all offers. Private non-formal offers are often of higher interest for companies to cooperate with, due to a higher responsiveness to the needs.
- A trend in regional cooperation can be observed worldwide. ASEAN is also an example of this.
 Vocational education and training plays a prominent role there. These examples should be examined more closely.
- In Africa, it is particularly important to link up with traditional forms of vocational training, specifically the expansion of informal apprenticeships. These are apprenticeships that take place in the informal economy in small and micro enterprises and are guided locally by longestablished traditions. The degree of formalisation is low. Standardisation is based on oral and family-based agreements.
- The following approaches can be helpful for the further development of these apprenticeships:
 - Micro-credits granted to small and micro enterprises should be linked to the requirement to train apprentices.
 - Inter-company training centres and joint training courses.
 - Promotion of diversity of apprenticeships, for school leavers and adults, including higher degrees.
 - Further formalisation on the basis of agreements in local business associations; gradual formalisation through written agreements, degrees, training periods, linking with further education courses, etc.
 - Financing mechanisms.

In summary: For the further development of employment-oriented TVET, the expansion of the policy field of TVET is of utmost importance at national, regional and continental level. The role and importance of TVET must be strengthened in the perception of the actors. In addition to the social contribution that vocational education and training can make to combating youth unemployment, its economic significance for development in Africa must therefore be strengthened. Skilled labour development and skilled labour mobility should be emphasised more strongly, especially through the following strategies: Linking TVET as a policy field closely to other policy fields, in particular to the development of free trade areas (bilaterally, regionally or continentally) and mutual recognition agreements / transnational vocational education and training standards in specific sectors.

As TVET provision lags far behind general education and higher education, capacity building is also of key importance. The concrete system approaches of TVET in the member states can be quite different. Employment-oriented TVET can be achieved in very different ways.

In addition, the knowledge base for decisions in the field of vocational education and training must be expanded through research and human resource development. And, last but not least, for the integration of the informal in-company qualification sector (informal apprenticeships), financing incentives must be developed, ideally a combination of small loans with training obligations.

VI. Snap shot of the progress, challenges and opportunities of SIFA TC

Introduction

This chapter is about a snap shot of the progress, challenges and opportunities of SIFA. This is not a systematic evaluation of the results and impacts of SIFA. Rather, it is a first impression of SIFA based on interviews with experts who are themselves actively involved in SIFA. The focus of this snap shot is on the measures and assessments of technical cooperation (TC).

The central objective of SIFA (Skills Initiative For Africa) is to improve opportunities for young people through vocational education and training, specifically through employment-oriented TVET. The Skills Initiative for Africa (SIFA) is a project implemented by the African Union Commission (AUC) and the African Union Development Agency (AUDA-NEPAD) with the support of the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), KFW, ILO, and ETF. SIFA is cofounded by BMZ and the EU.

Within the framework of SIFA, financial cooperation (FC) and technical cooperation (TC) take place. The FC activities are aimed at financing measures for the further development of employment-oriented vocational education and training in five selected countries (Tunisia, Cameroon, Nigeria, Kenya, South Africa). These measures have not yet been implemented and are not the subject of this report.

The activities in TC are aimed at the further development and implementation of a continental vocational education and training strategy and include initiatives that extend across the continent and the various regions and countries. The core aim is to strengthen the conditions for innovative and employment-oriented TVET through dialogue measures. At the political level, employment-oriented TVET is to be given greater importance. The necessary links to the private sector are to be strengthened systematically. Numerous diverse activities and measures are implemented within the framework of TC, for example the following:

- Establish and maintain digital platforms on various topics for the further development of employment-oriented TVET and for the provision of concrete information (e.g. ASPAYEE);
- Organise continental conferences and workshops on employment-oriented TVET approaches;
- Developing and implementing skills needs anticipation systems;
- Conducting studies on relevant information needs for decision-makers in TVET, including country profiles;

- Establishing and maintaining close cooperation with very different business associations and trade unions in the regions and member countries;
- Organising events to promote disadvantaged target groups in TVET;
- Developing and implementing a continental qualifications framework (ACQF);
- Permanent counselling and support of actors and institutions in vocational education and training through contact offices distributed regionally.

It is particularly worth mentioning that many planned activities and measures had to be transferred into digital formats due to the pandemic waves and the overall situation. From the point of view of the interviewees, this resulted in communication problems and challenges in detail, but in principle it was possible to implement the plans.

About the contribution of SIFA TC to the promotion of employment-oriented TVET – main results of the interviews

As mentioned above, the measures and activities in TC aim at the further development and implementation of a continental TVET strategy, especially for the promotion of employment-oriented TVET. The contribution of SIFA TC to this is highlighted by the interviewees as very important, essentially for the following reasons:

- The topic of vocational education and training ("young policy field in the AU") must be
 presented and explained in terms of its important significance for social and economic
 development. To this end, political dialogue must be expanded ("agenda setting"). Vocational education and training needs a growing reputation.
- The development and maintenance of cooperation between business and the state is highly relevant ("fight against mistrust between state and private sector"; "trust is the oil for cooperation between public and private interests"). It is important here that the development and continuous maintenance of cooperation between the different state institutions (e.g. ministries) and the different business associations is also necessary ("one voice"). In this context, it is also important to address the right state institutions (ministries) and business associations. In some cases, for example, the ministries of education are not taken into account, but they are central to the issues of vocational education and training in the countries.

- The participation of the business sector in a TVET system only works on the basis of a systematic integration of the interests of the business sector ("stakeholder involvement").
- Data and information are elementary for the participation and further development of TVET. SIFA can provide this information ("information gives trust").
- SIFA fills the gap between a continental exchange and the national contexts ("transformative impact via AU level on TVET"). It is important to consider that personal exchange is of great importance in Africa ("soft practices"). The continental perspective is to develop a common understanding of TVET development.
- The strength of SIFA also lies in developing tools and results that help to close the gap between supply and demand. Skills research and curriculum development is a crucial prerequisite for successful TVET.

The following challenges and limitations of SIFA TC are emphasised by the interviewees:

- Including the informal sector is a problem.
- Sustainable involvement of the private sector is a big challenge incentives are necessary.
- How to come to structures, how to come to binding agreements on TVET?
- There is no real impact of SIFA on the institutional level.
- Private sector needs short term training but public system offers long term courses and diplomas. The interests of private and public sector are very different.
- The perception on member states level is limited. The impacts to lead the member states are quite low.

About the contribution of SIFA TC to a continental approach for the further development of TVET in Afrika – main results of the interviews

The activities and effects of SIFA are closely related to the fundamental question of the possibilities and limitations of a continental approach for the further development of TVET in Africa. Therefore, the statements of the interviewed experts are summarised here (cf. also Chapter III). The advantages and possibilities of a continental approach for the further development of TVET lie above all in the following points:

 The importance and status of TVET can be increased if TVET plays an important role in continental policy.

- The comparative perspective on the developments in the member states offers benchmarks, monitoring and reporting and thus stimuli for national impulses and developments. A pan-African perspective offers orientation and also good models.
- If the comparative perspective is accompanied by systematic data collection and scientific
 information on TVET, this will lead to knowledge sharing and mutual learning between
 member states. At AU level, expertise should be made available for the further development of TVET ("research input"; "toolkit", "agenda setting").
- The further development of TVET can be linked with other pan-African initiatives, especially with efforts towards Free Trade Agreements ("combining TVET policy and free trade area"). Intergovernmental coordination in the field of vocational education and training plays an important role in economic integration. Employees mobility can be promoted through the recognition of qualifications. This is important for the freedom to provide services. From a continental perspective, it would also be interesting to know in which sectors mobility is particularly important.
- Cross-national occupation profiles could also be developed, for example in the construction sector.
- At the AU level, "global skills agreements" could be developed, for example with the EU.

 These agreements could help to prevent the poaching of skilled workers.

From the experts' point of view, the following limitations of a continental approach for the further development of TVET are seen:

- The capacities in the pan-African institutions are too small to provide the necessary data for TVET and to organise the necessary negotiation and communication processes.
- The member states face very great challenges with regard to the further development of
 vocational education and training in their countries. A pan-African perspective based on
 general principles and aiming at harmonisation of approaches could be too much for the
 member states. This might impede the participation of the member states.
- The differences within the African Union are very great. In North Africa, the conditions
 for the further development of vocational education and training are much better than
 in West or East Africa. The proximity to the EU is also present in North Africa.
- Countries are overburdened with system development; therefore, no harmonisation approach should be chosen.
- Dominance of the informal sector makes cooperation with the business sector difficult.

 Trade unions often oppose employment-oriented vocational education and training ("cheap labour"; "steeling labour").

Conclusions on SIFA TC

As mentioned above, the statements on SIFA TC in this report only represent a very small and supplementary part of the mandate. It is not possible to make any reliable statements on the results and impacts of SIFA TC. However, against the background of the overall study on the status and development of TVET in Africa and on the possibilities of continental cooperation in this policy field, some general conclusions can be drawn on the approach of SIFA TC:

The development and advancement of sustainable TVET structures, in which the private sector is systematically involved, is a very long-term political task that is fundamentally underestimated. This is the case very often all over the world. Many evaluation studies show that programmes and approaches for the further development of vocational education and training can be very successful in funding phases, but the sustainable continuation and structural change is a very long-term development process.

In Europe, for example, and through the policies of the institutions of the European Union, the further development of employment-oriented ("dual") TVET structures is only succeeding bit by bit. So far, this dual form of vocational education and training has in fact been of secondary importance in the member states of the European Union, even though it is very popular at the programmatic level. Particularly in the member states, where people's educational choices and the recruitment practices of companies have traditionally been shaped by general and higher education, a fundamental reorientation of TVET strategy towards employment-oriented approaches is a very difficult undertaking. But there are also successful reform approaches. France currently seems to be a good example.

Against the background of these many years of experience in other countries and regions, realistic political objectives and expectations are also important for the development of TVET in the member states of the African Union. This is the only way to ensure that the central strategic and long-term goal, the further development of employment-oriented TVET structures, is not lost sight of in the event of short-term setbacks.

The core of SIFA TC is to contribute to the knowledge, understanding and acceptance of employment-oriented TVET structures through the development and expansion of various international cooperation activities in the African Union. As part of an overall strategy, this project is a very important part for the further development of vocational education and training. Continental cooperation is more important than ever for the development of this policy field. This is also shown in other regions, for example in Europe or in the ASEAN region.

The implementation activities in SIFA TC are related to six objectives: 1) stronger continental and regional dialogue on TVET, 2) offering a knowledge base and TVET products, 3) enhancing capacities for better labour market information, in particular skills needs information, 4) establishing continental structures for promoting private sector involvement in TVET, 5) developing and validating an ACQF document, 6) strengthening internal capacities of AUC and AUDA-NEPAD for supporting and steering continental cooperation.

These objectives make sense throughout. However, whether and to what extent these objectives have been achieved cannot be assessed at this point. And I am also not aware whether there has been a qualitative review of these six objectives in addition to the quantitative benchmarks for assessing the achievement of the objectives. For example, activities to promote information on TVET and the labour market can vary greatly in quality. Are there quality benchmarks and quality assurance mechanisms, e.g. through systematic reviews of the products? From my own experience, for example, I know very well how difficult it is to obtain valid and reliable data and statements for the qualification needs on the different labour markets and to derive concrete qualification offers in vocational education and training from them.

Equally difficult are, for example, long-term binding dialogues with private-sector actors and institutions that pursue their own interests with regard to TVET (and hardly think about reducing youth unemployment). Dialogues may have taken place in numerous forms. However, this number is not necessarily positively related to the desired effects. In this respect, the development of research capacities in the field of TVET is also of great importance.

A complementary objective could be to train the people involved in the activities of SIFA TC with regard to TVET issues. My personal impression is that those who are supposed to make a political contribution to the further development of TVET should gain much more knowledge and understanding about TVET.

The interview partners assessed the shift of dialogue activities in SIFA TC to the digital space (as a consequence of the pandemic situation) as relatively problem-free. However, I personally doubt very much that these digital dialogue and communication formats will actually have the desired effects for building networks and relationships of trust. Against this backdrop, it must

also be asked to what extent the programme's objectives have actually been adapted to the pandemic situation.

The SIFA FC activities not considered further here are central to determining the extent to which investments in VET provision can be successful in the medium and long term. It is there-fore important to monitor and evaluate these supported FC activities in order to learn from them for further measures. One thing is certain: vocational training in the countries of the African Union can only have the desired effects on the social and economic development of young people if the infrastructure for planning and designing vocational education and training is promoted. As one interviewee put it: "Less standards - more providing".

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Appendix

List of intervieews

- Mary Elisabeth Nyaga GIZ 08.11.21
- Tobias Mühler GIZ 15.11.21
- Cheryl James GIZ 17.11.21
- Andreas Mayn GIZ 17.11.21
- Aklilu Desta -EU/AU 23.11.21
- Naomy Lintini ILO 07.12.21
- Patricia Kormeh Kormawa GIZ 23.11.21
- Elena Galliano GIZ -07.12.21
- Nickolas Ouma AUC 08.02.22
- Unami Mpofu AUDA-NEPAD 10.02.22