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Toolkit on

Agricultural Technical Vocational Education and Training (ATVET)

Series 2

Roles and Responsibilities of Agricultural Training Centers (ATCs)

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Acknowledgement

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1.1 Background

The African Union Development Agency-NEPAD (AUDA-NEPAD) has been implementing the Agriculture Technical and Vocational Education and Training (ATVET) project as a model for agriculture education and skills improvement in Africa within the context of Agenda 2063 through the Comprehensive Africa Agriculture Development Programme (CAADP). It is currently being implemented in 12 countries as an innovative approach to improving the skills of youth, women and farmers in a bid to increase agriculture productivity and create both formal and informal jobs. The project is supported technically and financially by the German development agency, the *Deutsche Gesellschaft für Internationale Zusammenarbeit* (GIZ) as commissioned by the country's federal Ministry for Economic Eooperation and Development (BMZ).An additional project called ATVET for Women has been commissioned for implementation with a specific focus on women's access to labour market-oriented and income-enhancing (entrepreneurial) opportunities in the agri-food sector.

The pilot phase of the ATVET Project has achieved tremendous success in strengthening existing national training systems in partner countries and supporting the capacity building of actors. AUDA-NEPAD realised the importance of documenting the experiences from these countries and so commissioned the development of a series of guidelines or toolkits on key topics on the project's implementation steps, especially in the in the pilot countries and best practices from other African countries on agriculture TVET and skills development.

The series of toolkits provide the necessary advisory support to the project's main partners (Ministries of Agriculture and Education, TVET authorities, gender/women groups, professional associations, training centres, and the private sector) involved in the implementation of the reform of TVET systems (especially agriculture TVET) for accelerated agriculture development in Africa to achieve the Malabo goals

The main objective of the ATVET toolkit is to guide stakeholders through the process of upscaling the ATVET model in agriculture education and skills development. The guideline supports the formulation of coherent policy frameworks for the reform of agricultural education especially at the TVET level; provides a

framework for inclusion and the strengthening of capacity of national actors in the implementation of National Agricultural Investment Plans (NAIPs); sets out a framework for the inclusivity of agriculture in the TVET system, and guides the development and implementation of market-oriented and competency-based technical vocational training measures at national level for women, youth and farmers.

The first in the series of toolkits looked at Stakeholder Engagement and Curricula Development in the competency-based approach to ATVET. The development process involved national coordinators of the project, the technical staff of ministries of agriculture and education in the pilot countries, ATC providers and trainers, consultants and experts who were involved in the implementation of the project, trainees and farmers, and private sector industry players. Experts from other fields of ATVET in Africa and other parts of the world were co-opted to give support, advice and also share best practices from other systems to guide the toolkit. It took into account the uniqueness of each country's situation but also noted the common experiences and best practices learned in the implementation of the CAADP support project in the 12 pilot countries.

The second in the series of toolkits for ATVET implementation looks at the role of agriculture training centres (ATCs) or agriculture TVET colleges (both public and private) in ATVET reforms in Africa. It takes into consideration, among other things, their organizational capacity needs, governance and management systems, and the relationship with the private sector in delivering modern demand-driven training. The toolkit is therefore organized according to:

I. **The role of ATC's in ATVET implementation:** ATC's are central to the success of an ATVET system, not only as the entities carrying out the training, but also as the central mechanism for an effective feedback system. ATCs must be responsible for monitoring and evaluating that the curriculum meets the needs of: (i) trainees (ii) employers (of ATC graduates), and the overall contribution to national employment and agriculture productivity targets.

II. **Teaching and learning system improvement:** Focusing more on non-formal training delivery to enable rural youth and other disadvantaged groups to have access to ATVET, and linking ATCs to higher and other education systems.

III. **Developing the capacity of ATCs to be self-sustaining:** The organizational development requires institutional self-assessments for accreditation and strategic planning needs, and business models that can be applied to ensure functional and profitable ATCs.

IV. **Approaches for building the capacity of ATC managers:** How to manage a sustainable ATC, and how to implement successful ATVETs according to the CBET model.

V. **Linking and cooperating with industries and the private sector:** The important role of the private sector in training governance, design (curriculum development), and delivery (training and work experience learning).

The sub-topic of post-training support is very important and as a result will be covered in a subsequent edition of the toolkit series. This will look at the issue of developing a comprehensive ecosystem and tools to support young people who have finished their training. We believe this is necessary as, even though ATCs have a role to play in guiding students in their career paths and also keeping track of them, the support system required is beyond the scope of ATCs alone.

1.2   Methodology

Writeshop

The development this toolkit follows the same approach as the first in the series. A Writeshop, led by the knowledge management unit of AUDA-NEPAD, was held in Cotonou, Republic of Benin. It brought together   principals and headmasters, trainers, private sector industry players, the public sector, and TVET experts from the 12 countries where the project is being implemented, for knowledge exchange, experience sharing and the identification of best practices. This afforded participants and the ATVET project team the opportunity to 'download and harvest knowledge' of the processes and approaches of the ATVET model from the key actors and implementers. The writeshop helped the development of the toolkit through the collection of individual and group ideas, opinions and information about the implementation of the project. In small groups, participants were able to have in-depth conversations leading to greater understanding of how it has worked, to challenge assumptions, and share practical experience from individual countries.

Field visit

Participants experienced two-day working sessions in three ATCs in Benin. They also spent a day at the Songhai Centre, a centre of excellence of Agriculture Training in Africa accredited by the United Nations, the Africa Union and other international organizations. This experience and visits to other institutions helped participants to hear stories that may have not been shared in the individual and group activities during the writeshop.

Final editorial session

Technical consultants and experts led further research (theoretical background, benchmarking, international experiences, best practices) on key topics and supported the arrangement and consolidation of the final report.

2

Agricultural Training Centres

The Ideal Role in the Functional ATVET System

Training centres, colleges and training institutions (ATCs) play a critical role in Technical and Vocational Education and Training (TVET) delivery. Unlike universities, many of which are autonomous and design their own training delivery models, ATCs directly translate the policies and strategies of governments into teaching methods based to a large extent on a specific national agenda. In Agricultural Technical Vocational Education and Training (ATVET), this role becomes even more critical, especially given the new focus and paradigm shift on training towards 'agriprenuership'. This involves teaching people how to become entrepreneurs with the necessary skills and competencies to be employable and employers. ATCs therefore act as important agents transforming the traditional knowledge and practices of young people, women, existing farmers, and others, into skills that can be used in commercial agriculture and profitable enterprises that will help create jobs, generate income and food security within the Comprehensive Africa Agriculture Development (CAADP) framework to meet the goals set out in the Malabo Declaration.

Agriculture education and training at the TVET level is conducted with the support of agricultural colleges, farmer training centres, extension departments of ministries of agriculture, smallholder and commercial farms, value chain actors, processors, traders, financial service providers, farmer associations, and related government structures. There are also many private training institutes and trainers, local and international development agencies and NGOs involved in providing training. Target groups include school-leavers seeking training for employment, farmers, farm workers, and self-employed workers within agricultural value chains.

In only a few African countries does agriculture form part of the National Technical Vocational Education and Training (TVET) system, due mainly to the fragmented responsibilities and sometimes overlapping training and TVET mandates of the ministries of agriculture and those in charge of TVET/ education. This has become a critical challenge for ATVET affecting infrastructure development, investment, and training delivery. Instead of building harmonized systems built on shared principles and values, countries are deploying different, independent systems making it almost impossible to manage with regards to providing comparable levels of education.

Most frequently, formal ATVET training takes place in public and private training institutions. However, to reach the majority of unemployable youth, and address post-training support and mentorship challenges, ATVET in Africa should place emphasis on other learning routes, especially non-formal and informal systems. But the further development of non-formal training delivery is hampered due to the fact most countries deployed more formal systems mechanisms that systematically do not incorporate the non-formal or informal approaches. Existing formal training systems are not modularised, which makes it difficult for non-formal systems to merge or interact with them, especially when it comes to recognition of prior learning. The general institutional framework in which non-formal and informal training takes place outside the borders of the state-regulated or private education and training system makes it difficult for most ATCs to combine them with their formal training delivery orientation.

Improving ATVET delivery in Africa also requires the modernization of training providers, especially ATCs, to respond to the changing and dynamic needs of training, governance, and proving performance and attractiveness to agriculture training in achieving better value for money in investment. ATCs need to be catalysts for ATVET responsiveness to changing labour market demands, improving the match between training demand and supply, especially to the private sector. In almost all African countries, formal vocational education and training systems are geared towards starter education and training for young people, whether at secondary, post-secondary or tertiary level. The vast majority of these systems comprise full-time, classroom-based learning. A small number of countries, such as South Africa, also offer partially state-regulated apprenticeship schemes that confer state-recognized qualifications[1].

ATCs in Africa were configured to train mostly agriculture extension officers and other government officials working mainly in the public sector. Just a few, like the Farm Institutes in Ghana[2], were developed to train young people in practical agriculture. Following structural adjustment programmes and lack of investment in these ATCs, coupled with the collapse of extension services in most countries, the majority of these ATCs have been upgraded to universities. As a result, for the most part they have lost their mandate

1   Swanepoel F, Agricultural Education and Skills Improvement Framework (AESIF) 2015-2025 Revised Final Draft (Unpublished)

2   Ghana had a Farm Institute (Adidome, Asuansi, Wenchi) and five agriculture colleges. In reform processes, most of the agriculture colleges were absorbed by the university which now runs accredited diploma courses.

for lower and middle-level manpower training and now compete with other liberal arts universities to train graduates for the mass market.

In Benin, Lycée Agricole Mèdji de Sékou (LAMS) had been at the forefront of secondary training for most of the country's agriculture graduates. Like most institutes in Africa, it was designed to provide basic training particularly in crop production for agriculture engineers and public service officers. LAMS' mandate has not changed significantly even though the current curricula include entrepreneurship and more time allocated to practical training. With the near collapse of agriculture extension services in Benin and the lack of opportunities for most graduates, it is time for institutions like LAMS to reconfigure how they offer training for young people, with a greater focus on employability, creating opportunities for entrepreneurship, self-employment and private sector job offers.

The Ethiopian policy of economic liberalization, decentralization, and agricultural transformation with a focus on smallholder commercialization called for the modernization of training and the delivery of extension services. Agricultural extension delivery focus shifted to sustainable intensification for increased productivity, value addition and smallholder competitiveness for both domestic and export markets. (Tesfaye Lemma Tefera, 2015) In this respect, and in addition to existing ATCs, thousands of Farmer Training Centres (FTCs) were established as part of the strategic shift to knowledge-based smallholder training and development. The ATCs concentrated on training extension officers, renamed development advisors (DAs), to support the delivery of extension services at FTCs. As at 2014, the government had established close to 11,000 FTCs which were functionally different. It also established 25 ATCs to produce development agents with different fields of specialization to support the FTCs. In this respect, Ethiopia is one of the best examples of a government making positive reforms to ATCs in order to meet the priority needs of the country's agricultural development strategy.

Over the past 10 years, through the CAADP programme, there has been an emphasis on the development of and investment in agriculture value chains. As a result, skills development along these value chains was purposefully targeted in order to meet the human capital demands. This has required a different approach to ATC delivery with the focus on a competency-based approach to training to ensure

that it is driven by skills demand. With the increasing need for skilled workers in the private sector and entrepreneurial training, ATCs are being supported to reconfigure their training models and approach to meet the market demand. Capacity development of ATCs is therefore critical and paramount for them to meet the required interventions for the success of ATVET delivery. Capacity development within the ATCs should be holistic, flexible in order to meet changing needs, and work on strengthening agricultural value chains and investing more in workforce development. The use of technology in both training design and delivery has also become essential and ATCs should embrace it.

2.1 Challenges facing ATCs in ATVET implementation

In a self-assessment completed by 13 ATCs (in Ghana, Kenya, Namibia, Cameroon, Tunisia, Sierra Leone, Togo, Benin, Burkina Faso, Rwanda, Uganda and South Africa), the graph below shows how they rated themselves with regards to different challenges and opportunities for efficient delivery of training. The self-assessment was conducted in order to:

- Understand the current status of ATC development at country level.

- Identify key gaps and weaknesses in ATC delivery mechanisms.

- Establish key areas for targeted interventions for ATCs to establish quality training and sustainability.

- Enable ATCs to establish and undertake peer review mechanisms and set benchmarks among themselves.

- Enable ATCs to know where they can source expertise and partnerships among themselves.

Figure 1:   Self-assessment of ATCs in Africa administered and analysed by Acquaye D, Sarfo A, Mutepfa C and Agossou G at CAADP ATVET Write shop on Toolkits and Guidelines for ATVET Implementation in Africa (AUDA-NEPAD) Unpublished Draft.

Figure 2:   Self-assessment of ATCs in Rwanda, Tunisia and Togo

The analysis shows that even though countries are at different levels of their systems and approaches (as seen in Figure 2 between Tunisia, Togo and Rwanda), the ATCs recognize their common challenges. Issues like funding (resource mobilization), systems for tracer studies, sustainability, weak policies, governance and management systems were common priority for capacity building and improvement in the self-assessment and the institutes gave themselves average scores. Private sector engagement, cooperation and partnerships, and women's access to training and development were also seen as key challenges.

It is worth noting that delivery methods and new approaches to curriculum development have on average improved among the participants. It would be wrong however to assume this is the situation at ATVETs and ATCs across Africa in general. Most of the respondents are institutions that the CAADP ATVET project has been supporting in CBET curriculum development and delivery and are an attestation to the improvement being sought for ATVET in Africa. This also highlights the key challenges we need to focus on to build the capacity of ATCs to deliver as one of the critical actors in the system.

2.2 Supporting the modernization of ATCs

ATCs require continuous support in developing the capacity of their staff and trainers with regards to curriculum development, teaching methods and industry linkages to be able to meet the new focus in a demand-driven ATVET delivery approach. Supporting and modernizing ATCs should involve building their capacity to recognize that overall training delivery should be outcome based, training students to become employable, entrepreneurs and subsequently employers (3Es). The 3Es can only be achieved if ATC development focuses on new approaches to curricula development, technology, knowledge transfer methodologies and value chain targets.

Technical, vocational and entrepreneurial skills should focus on hands-on and practical approaches that focus on value chains, GlobalGAP, food safety, quality systems, simple but modern processing technologies, aggregation and distribution (logistics management), marketing, business management and the use of ICT and agri-vocational skills development.

Figure 3: Four dimensions of ATVET reform in Africa

Entrepreneurship and innovation are increasingly recognized as important drivers of economic growth, productivity and employment, and are key aspects of economic dynamism. The ultimate objective of entrepreneurship education/training systems should be to facilitate the creation of an entrepreneurial culture, which in turn will help young people in agriculture to innovate and create their own enterprises and also to identify and pursue opportunities. Training is essential to ensure that entrepreneurship is embedded in the formal educational system, and offered through partnerships with the private sector, informal training and rural and apprentice training programmes.

To achieve these objectives, ATCs should have the capacity to design and implement practical training that will empower the youth to develop an entrepreneurial spirit. One key limitation in modernizing ATCs has been teacher/trainer development. Capacity development of ATCs needs to address the low performance of existing ATVET institutions and the lack of resources for teachers and trainers. It needs to focus more on technological and practical knowledge, and skills in ATVET delivery of demand-driven training. Capacity of ATCs to design training along business models and cases (with the support of industry), work experience or industry internship, mentorship and incubation, and encouraging students to develop projects whilst in school to meet the practical approaches of trainees should be enhanced

In the short to medium term, capacity development and the outcome expected from ATVET institutions should be focused on:

• Organizational development processes applied in ATCs.

with stakeholders, including farmers and agripreneurs.

• Strategies and implementation for private sector engagement is enabled to provide cooperative training, work experience, learning and job placement.

2.3 The innovation centre business model - The future of ATCs

At the level of training, innovation centres (ICs) offer a broad range of services for different target groups such as farmers, workers in agri-business, processors, agripreneurs and start-ups. ICs can even develop non-academic ATVET programmes pitched at a higher level for specific target groups such as farm managers, supervisors in processing companies, and the like. ICs provide regular diploma and certificate programmes for rural youth and extension officers. Curricula are developed according to occupational standards and should be designed to open pathways to higher education. In particular, IC training emphasises practical skills development combined with appropriate theoretical grounding. Thus, on completion of training, graduates should be qualified as farm workers (employees), farmers (employers), or be ready for self-employment. Extension officer training programmes provide structured comprehensive instruction on issues related to technology and extension methodologies. Long-term training programmes can be delivered according to a flexible mode, affording target groups who may be employed, the opportunity to attend classes. This requires the implementation of modularized training delivery in addition to full-time delivery. Formal programme students are certified according to national regulations.

At the level of business development, ICs also provide practical and applied technology transfer and generate their own income. In particular, the value chain approach requires offering strong advisory services to value chain actors aimed at creating synergies, linkages and networking. Business services can focus on four main areas: business development services for farmers, micro-, small-, and medium-sized enterprises (MSME); value chain advisory services; consultancy on ATVET training in farm businesses, processing industry, the public sector and other ATVET institutions; and research on process development in specific areas and action research (tracer studies, OS and others), feasibility studies, and the like.

• Implementation of value chain and agripreneurial training approaches.

• Development and implementation of pre-service and in-service teacher training strategy.

• Establishment and piloting of innovation centres at least per country (the Songhai model in Benin).

• Development and implementation of innovative approaches for demand-driven formal, non-formal and informal ATVET training and business development services.

• Training of trainers and other capacity building tools to deliver competent teachers who can provide demand-driven quality training.

• Technology transfer and business development services contributing to improve business performance of ATCs for better linkages

LONG-TERM VISION

- Short-term upgrading programmes
- Modern ATVET COLLEGE
- Labour Market
- Formal and non-formal programmes
- Business Service
- Links to Universities
- Business Advisory Services
- Technology Transfer
- Income Generating Services, e.g. Production
- Certification & Diploma Programmes (10+1+2+3) Modularised non-formal programmes
- Entrepreneurial Skill training

Target Groups: Rural Youth
School dropouts
Farmers, Farm workers, AEA

Services provided upon demand
of private & public sector

Figure 4: Model for modern ATVET institution as an innovation centre (adapted from Kreucheuf, H-P and Sarfo A, Discussion in designing CAADP ATVET project). Several versions by the two have been found in various presentations and publications).

All ATVET institutions, not only ICs, should be encouraged to develop a marketing concept as well as close links with the private and public sectors, in order to be visible to its clients and to ensure its products are known. A cooperation network with institutional clients must be established and continuously improved. A monitoring and evaluation instrument will help to receive feedback on the quality of the services and the acceptance by clients. IC staff working in business advisory services and technology transfer must be trained in these areas.

3

TVET Governance and Impact on ATC Management

TVET governance in Africa and many other parts of the world is managed in a strong centralized system, with one or two ministries responsible for overall policy development and implementation. However, in some countries TVET provision is managed by many different ministries, agencies and organizations. In this case, the various TVET providers often operate as silos and do not take into account programme offerings in the broader context, resulting in overlapping courses and institutions as well as creating confusion for ATCs, students and employers.

Governance of TVET in Africa mostly follows a structure where ministries of education and training are responsible for setting up the policies and overall direction, and receive the budgetary allocation of funds for the sector. The responsible ministry varies. For example, in Malawi the ministry of labour and manpower development is responsible for all TVET, in Ghana it is the ministry of education, while in francophone West Africa they mostly have ministries dedicated to TVET. The implementation of TVET policy falls mainly to a specific agency within the ministry, he Technical and Vocational Education and Training Authority (TVETA). There may be different acronyms for the entity, depending on the country, but the mandate remains the same or similar. Its job is to regulate TVET through registration, licensing, and accreditation of institutions, programmes and trainers, and the implementation of the TVET National Quality Assurance System for the development of a competent workforce.

Some of the challenges of a strong centralised governance system affecting the management and efficient operation of ATCs include:

- Institutional fragmentation and multiplication of efforts among different ministries for control. In the case of ATCs, this is between the ministries of agriculture and education and results in them receiving little or no budget as they are seen as ministry of agriculture entities and not as organs of the TVET ministry.

- Ineffective involvement of social partners and other non-state stakeholders. Decision-making and policy development is done top-down with engagement with local and regional actors.

- Horizontal engagement is ineffective, both between ministries and social partners at the national level, and between VET providers and other actors at the local level. In horizontal engagements, the inter-sectorial consultation is weak with both the ministry of agriculture and

education operating silo projects and sometimes driving their own institutional agenda in skills development and training.

- Although the development of mechanisms for engaging TVET actors are improving due to reforms being undertaken on the continent, in some countries this has resulted in confusion over roles, responsibilities and key relationships in the decision-making processes.

In implementing the ATVET project, many complex systems of governance at the various national levels have been encountered. Some continue to undergo policy changes in governance systems which directly or indirectly affect the overall management of the ATCs, funding and investment, accreditation and certification of programmes, and the quality of assurance processes. There are many governance systems around the world for TVET and a few illustrations are outlined below:

Ghana

ATCs (formerly known as Farm Institutes) have been owned, governed and managed by the ministry of agriculture with little influence from the ministry of education and the accreditation body, the Council for Technical and Vocational Education and Training (COTVET). This fragmentation of the TVET system has had negative implications for overall governance, development and coordination to improve efficiency, and relevant training, especially for ATCs.

This has resulted in the exclusion of ATCs from the Computerised School Selection and Placement System (CSSPS) that selects and places learners from basic level education to secondary education and TVET institutions for further education, amongst other things. This means ATVET has been struck off the list of potential further training options and hence, enrolment continues to be lower than expected.

The implementation of Ghana's ATVET model saw the need for better oversight and control by COTVET for accreditation and certification. A new policy change is seeking the realignment of all TVET under the one ministry (of education) to ensure effective management, coordination and cohesion in training institutions in the country.

South Africa

The Department of Higher Education and Training (DHET) was created in 2009 as part of an overall education sector reform. Higher education was classified as any qualification above level 4 of the National Qualifications Framework (NQF), thereby including TVET colleges. Known at the time as Further Education and Training (FET) colleges, they were moved from provincial government control to the centralised system under the DHET, also absorbing most of the responsibilities of the Sector Education and Skills Authorities (SETAs) and National Skills Funds.

The mandate and vision of the DHET with respect to TVET colleges was deepened in 2013 and, according to a review by the Organisation for Economic Cooperation and Development (OECD) (Simon Field, 2014), this has strengthened the management of TVET colleges and increased pressure for further reforms to improve them.

However, agriculture TVET colleges still fall under the auspices and management of the provincial government and the Department of Agriculture, Forestry and Fisheries (DAFF). There are 10 agriculture TVET colleges under the nine provincial governments and one college under the management and control of DAFF. This affects funding, investment and a coherent approach in TVET governance. There is currently an ongoing discussion between DAFF and DHET to consolidate the governance and management of the ATCs.

TVET reforms are gaining momentum in Africa, due to changes in the labour market, youth employment and strong drives from development and social partners. Although some countries like South Africa have embraced the reforms with good governance and management systems to sustain their gains of 2009, other countries like Sierra Leone are yet to embark on the reform agenda with the county without a functional TVET policy[3]. Many actors with varied roles and functions are involved in the

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3   Interaction with the new ministry of higher education and training in Sierra Leone during the ATVET project upscaling introductory mission in Freetown, Sierra Leone, 24-28 September, 2018.

overall governance system through the horizontal and vertical structures. A nationally developed purpose governance system for TVET institutions enables relevance and responsiveness to national goals at the ATC level. A national vision of reforms to encourage quality skills development can only be realised when a clear purpose is defined at the top level and effectively implemented at ATC level.

A centralised system facilitates the capacity of education and labour ministries (in some cases), and statutory agencies to take up the reform agenda. This has a direct impact on performance at the ATC level, including that of directors, headmasters/ principals, and other partners like the private sector and value chain actors. The drive for competency-based training delivery policies has been successful in Ghana and Kenya because reforms targeted the centralised systems, piloted in a few ATCs and have been absorbed system-wide. In contrast many reforms have been slow in implementation due to lack of clarity with regards to responsibilities, especially at the horizontal level, between ministries of agriculture and education, and statutory organizations, with conflicting and sometimes duplicating efforts towards the same objectives. In supporting the ATCs, partners are confused about which institution to deal with, coupled with the many layers of bureaucracy as a result of the numerous horizontal players.

Another major challenge which impacts ATCs within centralised systems is the allocation of responsibility for several functions, including curriculum development, quality assurance, research and development, to one statutory organization. South America TVET governance show many best practices but It should be noted that for example Colombia's SENA approach, which appears to be a good example and is regarded as one of the best practices in the world, was borne out of a long history of practicing, self-correcting and innovation. In Ghana and Malawi for example, COTVET and TEVETA respectively have the mandate for curriculum development, accreditation, and quality assurance. There are not separate institutions devolved or mandated to take other autonomous responsibilities especially quality assurance. Therefore, if there is a general weakness in the overall management of these institutions, it

impacts on the different departments, which invariably affects the quality of delivery at the ATCs. Centralised governance systems, with levels of decentralisation and autonomous statutory agencies, especially for quality assurance, would help to improve the performance of ATCs. Africa TVET governance needs an increased professional and organizational autonomous agency that would enhance the development of participatory and inclusive TVET multi-level governance models.

On the side of ATVET supply, weak governance structures hinder efficient and effective institutional management. Many training centres and colleges have simply shut down, and inadequate financing, poor management, and ill-adapted organizational structures result in continued poor results. The systematic structural governance problem emanates from the ownership and control of most of these ATCs. Most of them are controlled and managed by the ministry of agriculture, while general TVET programmes and the institutions delivering them, are managed and controlled by the ministry of education and in some cases, especially in francophone West Africa, through the ministry of TVET. This leaves most ATCs outside of the general TVET system, creating parallel governance structures. While reporting to the education system for accreditation and standardization, their financing and the management of staff is mainly controlled by the ministry of agriculture.

The implications for the ATCs is that ATVET qualifications outside the National Qualification Framework include the lack of recognition or accreditation of ATCs offering ATVET courses, and the lack of qualified and experienced school management staff, including principals. In Ghana for example, ATCs are managed through the human resources department of the ministry of food and agriculture. Heads and principals of ATCs are posted to the institutions as part of the general allocation of ministry staff, without reference to capabilities and management skills. Because there is no detailed analysis of the requisite qualifications for school management and staff, turnover is high as many lacks the pedagogical and didactical approach to the management and delivery of training.

Table 1: Effective Governance Indicators for ATVET System. :Adapted from VET multilevel governance: ETF principles and indicators: Good Multilevel Governance For Vocational Education And Training. European Training Foundation.

Relevance	
Responsiveness to the needs of the economy, society and learners	Governance settings support the economic role of ATVET, e.g. by anticipating/matching skills needed and linking this to more competence-based curricula.
	Governance settings support the social equity role of ATVET, e.g. by opening up access to learning and accreditation to wider groups, especially women and the disabled.
	Governance settings support the innovative role of ATVET, e.g. by introducing sustainability skills or entrepreneurial skills and/or key competences.
	Governance settings mobilize smart, efficient financing and funding mechanisms at all levels of the TVET system.
	Governance settings respond to learner and labour market needs, e.g. by introducing more flexibility, linking formal and informal sectors and developing more outcomes-based approaches.
	Governance settings support the improvement of professional standards and the development of VET teachers and trainers across settings.
Effectiveness	
Delivering VET policies in a timely fashion, on the basis of clear objectives, assuring quality, learning from experience, and producing expected outcomes	Feedback shows that current governance systems support TVET provision and the implementation of reforms, particularly at the provider level.
	Governance supports the achievement of national development goals and a range of broader policies, at national, intermediate and provider levels.
	Goals are formulated in response to shared concerns and identified policy gaps, while taking into account the suitability of resources for implementation.
	Quality assurance mechanisms operate or are developing, and these help to improve quality and apply fit-for-purpose standards.
	Governance procedures are recognized to be efficient, in that they provide good value for money.
Subsidiarity and proportionality	
Decisions taken at the most appropriate level to support performance in VET policymaking	Decisions are taken at the most appropriate level and/or at the lowest level to optimise VET policy implementation.
	Roles and responsibilities of stakeholders do not conflict and do not leave gaps in the policymaking process.
	Both hard regulation (laws etc.) and soft regulation (recommendations, opinions etc.) apply to each stage and level in the policy cycle.

Transparency		
Open processes and sharing of information through the VET policy cycle	VET policy agenda setting, formulation, implementation and review are open processes that engage the identified stakeholders.	
	Policy dialogue is coordinated and supported by relevant documentation, reports, guidelines etc.	
	Management information systems and other data meet the governance needs of the stakeholders.	
	Formal and informal mechanisms for sharing information operate so that information is used regularly by VET stakeholders .	
Accountability		
Roles, functions and responsibilities clearly defined, and practices comply with standards	Governance practices comply with standards, regulations and procedures, and are agreed on by different stakeholders.	
	Governance responsibilities, roles and functions are defined clearly and take into account the outcomes expected by users and stakeholders.	
	Decision makers assess and respect the contributions and recommendations of the different stakeholders.	
Participation		
An inclusive approach engaging key actors and partners at vertical and horizontal levels throughout the policy chain	The appropriate range of stakeholders is engaged collaboratively throughout the VET policy cycle.	
	Different government agencies (e.g. ministries) and different levels of government (e.g. national/regional/local) are engaged actively.	
	Coordinated participation mechanisms (e.g. social dialogue, consultation, advisory bodies) enable stakeholders to participate at key points.	

4

Teaching and Learning Improvement

4.1 Context and challenges

Innovative approaches to demand-driven formal, non-formal and informal ATVET training and business development service delivery is a prerequisite for reforming and improving ATVET delivery in Africa. Informal training activities, integrated into formal and non-formal systems through recognition of prior learning should be the approach for TVET in Africa. This will open different pathways for more youth, especially in rural areas, who have limited access to formal training, to integrate into the system. In agriculture, this can be approached through outcome-based, demand-driven training modules with a focus on value chains and delivered through cooperation and partnerships with private sector actors (farmers, processing companies, marketing firms, etc.).

Training institutions have low capacity, deficient materials and equipment, and a shortage of highly qualified trainers. Fragmented and scattered technical and vocational training delivery that does not meet the needs of the fast-growing agriculture and food sectors is a consequence.

Curricula are outdated and do not correspond to the needs of the target groups, nor are they oriented to value chains and agripreneurial skills development. Teachers and trainers mostly lack technological knowledge and practical, pedagogy/didactics and methodology, advanced teaching and learning materials, and competences to develop and address advanced and complex topics (curriculum development, didactics and media development, course design, evaluation methods and tracer studies).

ATCs are facing difficulties in incorporating private sector needs into their training approach. Modern competency-based training approaches advocate for at least 60 per cent practical training delivery. However, most ATCs do not have the requisite laboratories, practical training fields and the work experience opportunities to equip trainees. On the other hand, and on the demand side of training, private sector support of training has been inadequate. There is no established framework for private sector engagement in training and most of it has been ad-hoc, sporadic and sometimes not beneficial to either of the parties.

Recognition of Prior (lifelong) Learning (RPL) has not been incorporated into the training and delivery methods of most ATCs. The most common practice for entry-level workers (apprentices, trainees, cadets and interns) is to combine or alternate learning acquired in formal off- and on-the-job training with informal learning acquired through everyday experience on the job. The key to the success of such programmes is the extended on-the-job experience obtained in a supervised environment. Even though the integration of RPL is a system approach and the challenges of implementation do not necessarily pertain to the ATVET sub-sector and sometimes are not the direct responsibility of ATCs, there are innovative approaches including 'fully-on-the-job' programmes and 'learning bays' which locate both formal and informal learning at the worksite (Misko, 2008) that ATCs can implement to support training delivery.

This also reinforces training delivery systems that incorporate especially non-formal and informal learning into the formal learning systems that are currently predominant in most ATCs. The challenge has been how curricula are designed to incorporate both formal and informal learning routes to adequately accommodate the RPL into training delivery. ATCs should recognize that skills development, especially in agriculture, should be designed to take into consideration the larger informal and rural sectors and hence delivery and training methodology and systems must include these larger parts of the marginalized group. However, as alluded to previously, this cannot be achieved without building the capacities of both ATCs and trainers. There should be systemic pre-service and in-service teacher training, especially in the competency-based training modules, to help equip trainers to meet the demand of new and innovative training deliveries

Learning theory: Current concepts

New concepts have been adopted internationally into theories of teaching and learning. These include integration of theory and practice, project-oriented learning, self-organized learning teams, blended learning, and individual learning.

Integration of theory and practice refers to the notion that curricula should ensure the proper/appropriate balance between theory and practice. The integration of theory and its practical application will bring about the required learning outcomes.

Project-oriented learning engages trainees in a project-oriented learning environment to provide them with the opportunity to make combined use of the various competences they have acquired during their training. Project work not only enables students to learn the vocational and technical aspects of their chosen profession, but also aspects that are relevant to social processes and interactions, teamwork and interdisciplinary knowledge.

Self-organized learning allows trainees to form their own learning teams and can positively influence the learning outcome of individual members, as well as the team as a whole. In companies, more innovative, adaptive and responsive teams also evolve as a result of such processes. Group cohesion is achieved more quickly and easily by self-organized teams and results in a better team dynamic, enabling them to be more readily engaged in the task at hand.

Blended learning. Learning systems should avoid the use of traditional delivery methods in their training. A variety of teaching methods, materials, equipment and educational technologies suitable for each learning situation should be available and systematically used in order to enhance the learning process. Blended learning is defined as the systematic integration of computer learning and presence learning. One of the most important issues is the availability of resources and infrastructures (such as ICT technologies), as well as the trainers' ability to effectively use and leverage them. Institutions should arrange staff development programmes in order to build pedagogic and didactic capacity, and thus enable blended learning.

Individual learning is learning that trainees do alone according to her/his preferred style and pace. Various methods can be used to encourage trainees to take part in their own learning projects within institutions, at work, or on their own, in order to strengthen their development. This practice could lead to individuals becoming more self-directed learners interested in becoming more creative and critical thinkers by reflecting on their own experience.

Figure 5: Source Adapted from Feasibility Study: Further Training and Human Resource Center of Adama University, Ethiopia DR. Ulrich Erhardt And Hans Peter Kreuchauf, For the Deutsche Gesellschaft Für Technische Zusammenarbeit (GTZ) Gmbh

How ATCs incorporate these concepts and approaches into their teaching and learning systems is very important. Current challenges in training delivery and learning systems include:

- Training institutions demonstrate low capacity, deficient materials and equipment, and a shortage of highly qualified trainers.

- The whole system is challenged by fragmented and scattered technical and vocational training delivery that does not meet the needs of the fast-growing agriculture and food sectors.

- Curricula are outdated and do not correspond to the needs of target groups, nor are they oriented to value chains and agripreneurial skills development.

- Teachers and trainers mostly lack technological knowledge and practical, pedagogy/didactics and methodology, advanced teaching and learning materials and competences to develop and address advanced and complex topics (curriculum development, didactics and media development, course design, evaluation methods and tracer studies).

- ATCs are facing difficulties in incorporating private sector needs into their training approach. Modern competency-based training approaches advocate for at least 60 per cent practical training delivery. However, most ATCs do not have the requisite laboratories, practical training fields and the work experience opportunities to equip trainees.

- On the demand side of training, private sector support of training has been inadequate. There is no established framework for private sector engagement in training and most of it has been ad-hoc, sporadic and sometimes not beneficial to either of the parties.

4.2 Informal training: Completing the loop for training delivery

Informal training differs from formal learning in that it takes place outside of the institutional education and training system. It does not require structures such as defined learning sites, curricula, teachers and trainers. Informal training often includes training undertaken by civil society or community-based organizations in the course of their programming or advocacy work. Informal training delivery has become an important component in the TVET mechanism and is even more critical in agriculture TVET because of the large informal and rural-based economies in Africa. Rural youth and women often are unable to obtain formal qualifications that can lead to employment, do not have the capacity to start their own businesses, or achieve better incomes and working conditions. It is often a vicious circle. ATVET training and learning mechanisms therefore

should recognize that the skills requirements for those employed in the informal economy are as complex and wide-ranging as the activities and forms of employment found within it. It is important to identify the challenges faced by most youth and especially women in rural areas that may include:

- Their inability generally to spend long periods of time away from work (most rural farmers) because of their precarious income or family situations; rarely have formal vocational qualifications.

- They generally have a lower level of school education that makes them unable to meet the entry requirement of the formal courses.

- Might have no access to vocational schools or to structured forms of continuing what training they may have, which further prevents the acquisition of recognized (vocational) qualifications.

ATCs should recognize the specific needs of vocational education and training by designing appropriate methods and learning systems and running non-formal training programmes targeting these disadvantaged groups. Centres should be oriented around the following types of activities:

I. **Identifying the needs of the community and non-formal learners**

- Identifying and providing relevant information to particular target groups (for example youth and women).

- Working together with actors, at different levels, to ensure participation by the target group.

- Tailoring vocational education and training interventions, materials, and pedagogical approaches to suit the needs of target groups.

- Flexible entry requirements for non-formal courses, focusing more on competency and recognition of prior experiences.

- Embedding training in the work of social movements, local organizations and the broader education system and creating institutional structures.

II. Training design and delivery

- Focus on modular approach to training where curricula along value chains are designed and delivered by occupation and in modular form to allow non-formal trainees to enter and exit at modular level appropriate for their required skills.

- Focus more on practical hands-on training rather than theoretical orientation.

- Offer training courses in technical skills; value chain-related theory; business-related skills such as accounting, workflow organization; negotiating with customers or suppliers; climate smart agriculture; skills for moving up-market where consumers can afford better quality, in order to integrate into value chains supplying larger enterprises, or to become eligible for public tender (contracting).

- In some instances, trainees may have completed formal training but still lack other fundamental entrepreneurship skills such as accounting, bookkeeping, marketing and so forth that are critical to succeed as entrepreneurs. Strengthen entrepreneurship and business skills training as key value proposition for the non-formal training delivery.

- Many non-formal trainees opt for self-employment after graduating. They will have acquired a number of important entrepreneurship skills by then: they are familiar with suppliers and buyers, the business culture, dealing with clients and some will also know how to negotiate prices.

- Where appropriate, provide certification to aid in bridging the gap to formal education or training opportunities.

III. Agripreneurial and entrepreneurial training improves the commercial performance of target groups and is critical for non-formal training delivery.

- Design a comprehensive set of training instruments that makes use of an action-oriented approach and experimental learning methods in order to develop and enhance the business management and personal competencies of the learner.

- Many concepts and experiences from non-formal training approaches are available and can be used and implemented: Competency-based Economies (CEFE), Formation of Enterprise, Farmer Business School (FBS); Farm-as-a-Business (FAB), Farmers Entrepreneurial Training (BUS).

- Create sustainable programmes for the development of youth as agripreneurs which can gather momentum and contribute to growth.

- Move to formalise some of these non-formal training deliveries and by extension, other education and training institutions will respond to their constituency's need for developing these new competences.

4.3 Linking ATCs to other higher education institutions

Agriculture Education and Training (AET) porosity and linkages are very important for the delivery of the workforce required for modern agriculture in Africa by linking science (research), Tertiary Agricultural Education (TAE), ATVET and overall ecosystem of capacity building in knowledge and learning support (Science, Education and Skills Improvement in Agriculture). The Food and Agriculture Organization (FAO, 2014) finds that the most effective commercialization of smallholder farming (SHF) systems are closely linked to education, research and extension at national levels[4] and recommend the need for an integrated agricultural innovation system

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4   Towards Impact and Resilience: Transformation Change in and through Agriculture Education and Training in Sub-Saharan Africa (Swanepoel F, Ofil Z and Stroebel A)

for productivity gains. One key issue of the AET system has been the seemingly disconnect between ATVET and the AET sub-systems; affecting image of ATVET, permeability and the porosity thereby given little hpe of ATVET graduates on progression of their educational careers.

The emergence of the *'vocationalisation'* of tertiary education to provide more hands-on practical training to students in the partnership of both sub-systems is growing. This is becoming necessary due to many factors including limited practical experience learning at the TAE level for most universities, putting into question the value of degree holders in implementing practical agriculture measures along value chains. Many employers have complained about the high cost of re-training university graduates for them to be able to add value to their acquired degrees and become employable within the job market. There is an opportunity for ATCs to take up the need for this practical training to meet the demand of the private sector.

4.3.1 Case Study: Linking universities and ATC - The Egerton University and Dairy Training Institute (DTI) model[5]

The MasterCard Foundation (MCF) conceptualised and is implementing the TAGDev project, *"Transforming African agriculture universities to meaningfully contribute to Africa's growth and development".* It seeks to pilot connecting tertiary agriculture education to rural communities (especially smallholder farmers), strengthen agribusiness/ entrepreneurship at two universities and selected ATCs, and upscale the newly developed model for agriculture education to other universities and TVET institutions. The aim is to increase collaboration and mutual learning among institutions and agencies in order to implement and influence innovative AET for rural transformation in Africa.

In implementing the project, a partnership has been built between Egerton University in Kenya and the Dairy Training Institute (DTI), Bukura College of Agriculture and Animal Health and Industrial Training Institute (AHITI).

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5   Scoping Study on Technical and Vocational Training in Selected African Countries-Transforming Africa universities to meaningfully contribute to African growth and prosperity (Daniel Acquaye) RUFORUM

Analysis showed the following results and approaches:

EGERTON STRATEGIC PARTNERSHIP WITH ATVETS

Egerton University, one the implementers of RUFORUM MasterCard Capacity building programme, is championing a new model of training worthy of replication. The uniqueness of the university's programme is summarized below:

1 The Training model and modules

Egerton has adopted a value chain and competency-based training approach. It develops comprehensive curricula using industry and academic experts. The curriculum is reviewed every five years with strong private sector engagement, looking at future strategic commodities and skills required. The value chain and competency-based training approach helps students identify occupational opportunities within the commodities. Additionally, the practical work constitutes 60 per cent of their examination mark, a totally different approach to other universities that focus mainly on theory. For practical work, students are grouped and each group is assigned to supervisors who monitor their reporting time, individual contribution to teamwork, level of skills acquired and outputs, and grade them accordingly. This model is in place throughout the four-year course. It makes Egerton graduates the most sought after by industry in all fields and brings more partnerships to the university.

2 Training infrastructure

Egerton has to some extent the requisite infrastructure needed for practical training. This includes the feed mill, greenhouse, piggery, poultry, livestock rearing, milking facilities, irrigated land for crop production and a state-of-the-art computer room for monitoring and modelling. These facilities are mostly lacked in other universities and, even where they exist, they are obsolete and students hardly use them for training.

3 Backward linkage with ATCs (ATVETs)

Contrary to most universities, Egerton has established formal partnership with three major ATCs, providing and supporting services such as curriculum development, training of their teaching staff, providing facilities for their students' training, collaborating on research, providing oversight and quality assurance. Special to this partnership is how Egerton provides academic progression for ATVET graduates to be admitted to the university. This type of progression is what is lacking with most University-TVET partnerships.

4 Strong industry networks and strategic alliances

Egerton has established strong partnerships with private sector companies especially those in the dairy Industry. These companies engage Egerton to conduct research, provide training and technical support. Egerton also benefit from industry know-how and opportunities for their students to be hired by the companies. In some instances, Egerton uses some of their Master's degree students to conduct their research with students.

EGERTON STRATEGIC PARTNERSHIP WITH ATVETS

Additionally, Egerton is implementing a number of projects that enable them to improve their infrastructure, expand their resources and get support for students' practical work.

Multiple Partnerships & Projects

5 **Making agriculture youth-attractive**

Egerton's agriculture students are proud of their course and showcase their activities to other young people. They have instituted a reality show called "Miss and Mr Agriculture". Students go through a series a selection process and eventually compete to be named Mr or Miss Agriculture. The winner becomes the voice and face of the faculty for a year, visiting private companies and high schools to promote it.

5

Accreditation Process

5.1 Context and challenges

According to UNESCO, accreditation is a process of officially recognizing an institution of vocational education or training, a programme of study, or a service, showing it has been approved by the relevant legislative and professional authorities by having met predetermined standards. These standards are defined as:

- Occupational profile/training or task profile, which describes which group of work activities must be undertaken in what manner (e.g. independently or according to instructions).

- Assessment requirements, which lay down which tasks are to be undertaken at the end or during the course, and what minimum level of knowledge and skill must be demonstrated.

- Entry requirements which stipulate which education certificate/competence must be held if one wishes to start the course (educational prerequisites).

- A curriculum and syllabus which describes the learning goals, theoretical and practical knowledge to be taught, as well as the structure and length of individual sections and the overall training course.

The European Centre for the Development of Vocational Training (CEDEFOP, 2009) defines accreditation as the formal recognition that a body or a person is competent to carry out specific tasks in compliance with predefined objectives, and permits regular examination of progress made. This focuses more on:

- Respect of the legal formalities of creation of the centre.

- Governance (human, material and financial resources).

- Implementation of adequate infrastructures: classrooms, dormitories for students.

- Number and qualification of teaching staff.

- Training of trainers.

- Educational content (theory, practice, binds with the market requirements).

- Funding (source of resources).

CEDEFOP recognizes that accreditation and certification are sometimes used interchangeably and the name and definition might vary depending on the country. However, even though both are about external verification of quality, they have a slightly different focus in scope.

Certification is about compliance with the standards, rules and criteria as defined by a methodological framework for quality assurance.

Accreditation, on the other hand, normally includes certification and requires more than just compliance with the principles of quality assurance frameworks. Since it means recognition by a public body, the accreditation process may also take into account public concerns such as the adequacy of a training programme for the national, regional or international labour market or its relevance to certain policy objectives. Going beyond certification, accreditation additionally will seek to ensure that certain policy objectives are met by the respective programme.

Accreditation is organized in different ways, reflecting not only the national, regional and sectoral traditions and structures of TVET but also the nature and current state of the relevant quality frameworks within the system. In Kenya for example, in the TVET Act "accreditation" means the process by which the board formally recognizes and confirms by certification that an institution has met and continues to meet the standards of academic, training and competency set by the board in accordance with the provisions of the Act.[6]

Accreditation provides a set of instructions to ensure all stakeholders, industry partners, technical vocational institutions and instructors, have a shared understanding of the activities to be undertaken in the registration of a training organization and the accreditation of learning programmes especially for quality assurance. For ATCs to be relevant in meeting their mandate and requirement as modernized institutions for training delivery, accreditation is a *sine qua non* in the process. It provides effective approaches and strategies of advocacy and vision building through awareness, human capital building, necessary training and learning activities, which are key to effective and efficient ATVET systems for sustainable development.

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6   Technical And Vocational Education And Training Act Subsidiary Legislation- The Technical and Vocational Education and Training Regulations, 242/2015 (Kenya)

In Africa, most ATCs are not accredited due to many factors including:

- Agriculture is not recognized and mainstreamed as part of the TVET system. This is mainly due to the pre- and post-colonial mandate of agriculture training providers to focus mainly on extension and advisory training services for ministries of agriculture. Therefore, the majority of ATCs operate outside the mandate of the accreditation and certification authorities.

- The cost of putting accreditation and certification systems together is very expensive for most rural training institutes and private training providers. Meeting the accreditation requirements involves investing in infrastructure, governance and training systems for which most of these providers do not have the money.

- The informality of most agriculture training systems. Apart from public ATCs, many agriculture training are organized through informal systems without the necessary support infrastructure to ensure quality management and are therefore difficult to accredit. This non-formal training is mostly provided by community organizations and non-governmental organizations (NGOs) and includes short courses and seminars that would not normally lead to a qualification.

- Due to the introduction of the value chain approach to curriculum development and the modular delivery mechanism, many find it difficult to fit into the rigid curriculum design processes in most countries. Most of these courses meet challenges with the accreditation bodies as they not work within the country's standard operating system. In Ghana, this challenge has been resolved and gives one of the best practices for accrediting ATC in Africa.

- Weak ATC management systems: Where most ATCs are far behind the international standards in certification and quality assurance, with their low levels of capacities to regularly update curricula and training programmes, and weaknesses in the quality, qualifications and capacity of trainers.

5.2 Importance of accreditation of ATCs in the ATVET delivery mechanism

Improved governance and management

Improving the efficiency of human resources planning and management within the mission and objectives of the ATC is paramount for sustainability. Accreditation and registration processes require ATCs to meet standardized quality criteria of which continuous improvement helps to maintain the management, operation and infrastructure to sustainably meet accreditation standards. Some of the registration requirements include:

- Compliance with the effective and successful delivery of institutional training.
- Governance and human resources management.
- Safe learning environment and infrastructure maintained.
- Curricula and learning materials available for all courses.
- Training equipment, laboratories, workshops and training materials available for practical work in curricula.
- Management of student affairs.
- Training delivered as per plan.

- Timely conduct of continuous and final assessments.

- The levels of satisfaction of students, parents and industry.

- Financial stability.

- Special and outreach programme.

The Internal quality assurance system

Quality assurance in ATC is very important for both sustainable training delivery and to meet the needs of both the labour market and agriculture productivity. The first step towards quality assurance is for ATCs to satisfy the accreditation system of the country. Providing demand-driven and quality-assured ATVETs ensures the creation of flexible pathways for learners, meets the skills needed in the labour market, and addresses the aspirations of youth.

The accreditation process strengthens the role of administrative and teaching staff, structural units (departments, faculties), students and the internal procedures to ensure the internal quality of the ATC. It helps in the development of a quality culture among the teaching and administrative staff and the students or learners. It is also a key marketing and promotion tool for ATCs to inform the public about its activities.

Teaching and learning

Many trainers think that accreditation contributes to the development of the faculty and teaching at ATCs. In particular, they believe that it helps strengthen the evaluation and motivation of the teaching staff and the practice-orientation of teaching. In addition, faculty integrity has been strengthened in most institutions through accreditation, including the development of a faculty's academic mobility and the ability to attract quality staff. It helps in the improvement of staff appraisal systems, motivation and assessment activities.

Students-centred learning

Students and learners, the key stakeholder of ATVET, are more likely to choose an institution because its accredited and therefore has a stamp of approval and are likely to be influenced favourably by such institution to the level of commitment in learning. Moreover, it stimulates the advancement of the

student support system, particularly by informing them of the educational process. It leads to student-centred learning through:

- Improvement in the procedures for informing students about the learning process.

- Strengthening the role of students in the evaluation of the quality of teaching.

- Increases students' participation in the development of educational programmes.

Accreditation provides learners with legitimacy in the certification of competencies needed at any level in all the systems of learning (formal, non-formal or informal). It helps standardize the system by defining the characteristics and value of qualifications and linkages between them. Accreditation systems and requirements helps ATCs to understand and design clear and defined learning outcomes, and ensures satisfactory performance outcomes through investment in adequate equipment, qualified and competent academic staff and arrangements for on-the-job training.

Funding

The diverse TVET management structures and sharing of supervisory responsibilities by various government bodies and ministries (especially between agriculture, education and labour) account for some of the inefficiencies in the system. This includes duplication and segmentation of training, and the absence of a common platform for developing coherent policies and joint initiatives. Accreditation helps ATCs to have a uniform benchmark with other TVET institutions and equal access to funding, especially through government subventions. It recognizes that the institute is part of the overall TVET system, hence receiving government funding, and investment from other development partners. Without registration and accreditation requirements, most governments in Africa would not be obligated to invest resources in ATCs.

5.2.1   Tool: The accreditation process

The accreditation process is system specific and may vary from country to country. But there is a general process that is common to all systems. In every country the process of accreditation, certification and licensing a training provider is vested by legislative instrument in a specific institution.

Accreditation Body

Provision of guidelines and systems for accreditation

External evaluation

Proposal for accreditation

Positive

Critical

Negative

Awarding body

ATC

Preparation for accreditation

Application for accreditation

Self-assessment/ internal quality management

Obligation/ recommendation for improvement

Quality process

Renewal of accreditation +/- 5 years

5.3 Tool: Self-assessment towards accreditation

Self-assessment is one of the most effective tools for improvement of any system. For ATCs, it has become the methodological tool for self-evaluation and its continuous application gives indications for quality management, improvement and sustainability. In some accreditation systems, self-assessment is a basic requirement for accreditation and the first step in the process. There is a standardized self-assessment questionnaire that ATCs must follow, either self-administered or through a professionally accredited person, which in some countries must be submitted before accreditation commences. In other systems, self-assessment is voluntarily and helps ATCs to prepare themselves for the accreditation process.

Self-assessment can also be used as a quality management tool to develop a strategy for improving the ATC system. It inevitably should assist ATCs in planning, implementing and reviewing ATVET programmes, resulting in the achievement of nationally or internationally recognized qualifications.

The focus areas against which ATCs can assess performance include but are not limited to:

• Training programme.

• Facilities and equipment.

• Staffing and trainers.

• Working with employers/private sector.

• Student support.

• Governance, management and sustainability.

5.3.1.1 Self-assessment: Training programme

The training programme and qualification offered should be informed by the needs of students through the support of career and employment pathways and industry workforce and market needs. However, training programmes can depend on the policy of the country or region and other related institutions and players.

Key topics for self-assessment in training programme:

Topical area	Response/remark
Did you undertake or access current labour market information and consider skills needs, locally, regionally or internationally when choosing your ATVET programmes and qualifications?	
Does your ATVET training programme and qualification provide pathway for further education and training within the national qualification system?	
Are private sector/employers engaged in the design and delivery of your ATVET course/s and/or the assessment of student competency?	
Are your qualifications/programmes certified/accredited by relevant authorities and within the national qualification framework?	
Is your training delivery within the competency-based training (CBT) mode? If not have you considered that approach?	
Are you implementing programmes in formal, informal and/or non-formal mode? Are your curricula developed to recognise of prior learning (RPL)?	
Are you using the value chain approach in curriculum development?	
How are gender transformative approaches embedded in your training programmes and delivery?	
Do you have sufficient facilities, equipment and staff available for training delivery and assessment?	

5.3.1.2 Self-assessment: Equipment and facilities

Identifying your equipment, facilities and staffing needs will help inform decisions in relation to utilising partnerships or accessing external expertise or equipment. Key topics in Self-Assessment for Equipment and Facilities include:

Topical area	Response/remark
Do you have access to the necessary facilities and equipment to deliver your ATVET course, based on the requirements of the training package qualification or accredited course?	
The school understands what equipment and facilities are required to deliver and assess the ATVET qualifications, accredited course and/or units of competency.	
If the school does not have all the necessary equipment and facilities, does it have industry-standard equipment and facilities that can be accessed by students and meet the needs identified in the ATVET qualification or accredited course?	
Are existing equipment and facilities effectively utilised for delivery and assessment of the ATVET courses?	
Staffing and trainers	
The school understands what is required to deliver and assess the ATVET qualification, accredited course and/or units of competency and prepare trainers towards these deliverables.	
Training is delivered and assessed by qualified, industry-current trainers and assessors who can interpret the requirements of a ATVET qualification and develop learning and assessment appropriate to those requirements.	
The mode of delivery and assessment arrangements, including online, meet requirements in the ATVET qualification or accredited course and school assessment and attendance requirements.	
Teachers look for opportunities for linkages between curriculum content and the 'real life' context of VET.	
Teachers have opportunities to gain a good understanding of contemporary workplaces and practices.	
If using external trainers to deliver on a school site, have you considered the requirements in your jurisdiction such as teacher registration or working with vulnerable people checks.	
Do your trainers and assessors have the skills to engage with industry partners, organize work placements, provide support to partner employers, etc.?	
Are your trainers and assessors aware of changes in their industry that may impact on skills needs in the future?	

5.3.1.3 Self-assessment: Working with employers/ private sector

Working with the private sector and industry players is a key component of preparing students for work. Collaboration and involvement from employers and industry is critical when planning for the implementation, delivery and assessment of the ATVET model. Workplace learning provides opportunities for students to better develop and align their skills to the needs of the market and acquire the requisite competencies to meet industry needs.

Key topics for self-assessment for working with employers include:

Topical area	Response/remark
Have you identified partnerships or new arrangements you will need to deliver your ATVET offerings?	
Are your partnership arrangements underpinned by appropriate quality principles (for example, shared goals and decision-making, communication, commitment and investment, and review)?	
Strategies are in place to engage with employers to support your ATC, either directly or by partnering with the national TVET authority or interested partners, including GIZ?	
You have mechanisms in place to source work placements for your students or assist them to source their own, and prepare employers for work placements to ensure the quality of learning and outcomes?	
Do you have arrangements with employers/industry players/private sector associations in the design and review of your ATVET curriculum?	
Efficient school-based apprenticeships or traineeship arrangements have been formalised with employers?	
Formal partnership arrangements have been entered into where necessary, and are underpinned by appropriate partnership principles?	
Are all students offered the opportunity to complement their ATVET course with a quality work placement aligned to the units of competency being delivered?	
Do you have sufficient facilities, equipment and staff available for training delivery and assessment?	

5.3.1.4 Self-assessment: Student support

Student support is critical for the successful implementation of the ATVET model and ATCs should have systems in place to offer pre-entry, during training, and after training support for students to benefit effectively from the training offered. It is imperative that ATCs have systems to reach out to potential ATVET learners or trainees to guide them in career and employment opportunities when pursuing ATVET courses. This should especially focus on entrepreneurship to support learners in developing business cases and projects, linking them to financial institutions and public funding sources.

One important student support is a tracer system that allows ATCs to collect data on their students/trainees, offer the necessary support for their insertion into the world of work and also provide feedback mechanism into the quality management of the ATC programmes.

Key topics for self-assessment of student support include:

Topical area	Response/remark
Do you have a student affairs unit in your ATC? Do you understand the aspirations, strengths and goals of your students?	
Do you conduct pre-counselling and assessment of students undertaking ATVET to help them determine how it fits in with their aims and career plans and aspirations?	
Have your students had the opportunity to develop skills to manage their careers and help them make decisions about their future?	
Do you have processes in place to support the individual needs of students and provide access to support services necessary for the individual learner to meet the requirements of the VET qualification or accredited course?	
The school has provided teaching and training that prepares students for work placements (e.g. dress, punctuality, customer service, work safety in field training)?	
Arrangements are in place to support student-employer relationships especially during workplace learning?	
Business development unit to support students in entrepreneurship development, access to market information and piloting of prototypes (student farms, business etc.).	
A tracer system to collect and manage after training performance of students, to give feedback to trainers and support trainees in employment and workplace development.	

5.3.1.5 Self-assessment: Governance, management and sustainability

Governance systems employed by legislative authorities and ATCs have potential for the overall success of the ATVET model. At the national level, governance influences the implementation of policies, especially with respect to agriculture TVETs where the duopoly of oversight and management between the ministries of agriculture and education sometimes creates confusion for the institutes. This self-assessment looks more at the functional governance settings within the ATC and the role of stakeholders in quality management and sustainability.

Key topics for self-assessment of governance, management and sustainability include:

Topical area	Response/remark
How is your ATC anchored in the national system? Which ministry or department has an oversight responsibility for management and quality assurance of your institute?	
Do you have a board in place and how are board members selected? Do you have private sector or industry players on your board?	
How well does your management understand reforms and policy initiatives by government and other partners in the broader context of TVET development in your country?	
How much, in your opinion, are you involved or consulted in developing new policies or reviewing existing policies that impact on the successful delivery of your training programmes?	
How do you communicate policy changes to your staff and do you offer them training and capacity building to effectively deliver on these changes?	
Do you have a strategic plan in place and how often is implementation reviewed?	
How are strategic plans developed? Internally or externally? Who are the key stakeholders involved in the strategic planning process?	
How often do you engage with employers and the private sector in your strategic planning process?	
What are your main sources of funding? As a public ATC are you allowed to retain all or part of internally generated funds or are you obliged to return them to the government?	
As a private ATC, do you receive a government subvention? If not, what are your sources of funding?	
Do you have a business development unit? Do you have a commercial marketing unit where produce is prepared for the market as additional source of funding?	
When was the last time the principal and management completed TVET management capacity building or organizational development training?	

6

Governance, Management and Sustainability

6.1 Context and challenges

The success or failure of government ATVET policies and strategies can be judged at the ATC level. The skills, competences and managerial acumen needed to successfully implement transformation policies, especially within the ATVET model, is paramount. This is particularly true within the constraints of limited autonomy in technical, financial and management systems of these ATCs. In the centralised system of TVET governance in Africa, most ATCs operate according to general or specific objectives set by the government or its agencies, with little autonomy and flexibility to manage their micro-systems. Autonomy in ATC management is considered as the ability of the institution to exercise greater control over delivery, management, horizontal and sometimes vertical collaboration and partnerships, raising and managing funding and set up independent but sustainable governance structure at their levels.

Management of ATCs has the same scope and functions as any management systems especially in public institutions. Every stakeholder (trainers, staff, learners, community members, parents, partners etc.) comes with his or her attitudes, and to harness and channel these as an important resource for commitment, responsibility, creativity and ideas not only for his or her own benefit but also for the ATC's success, should be the top priority of the ATC manager. ATVET has evolved, especially the competences of TVET professional and leaders, and

we must also look at the changes (organizational, governance and management) and see how we situate our management approach to this changing environment. ATCs and the training they offer must be renewed to correspond to the demands of a knowledge-based and networked society. The changes are global. Globalisation is a multi-layered phenomenon that has economic, political, social and cultural dimensions. It is therefore imperative that we with either fit in or become irrelevant to our learners and the community.

It is understandable that within the rigid centralised systems in which most ATCs operate in Africa, organizational change is quite slow. These changes are mostly policy driven and targeted, with little input from ATCs or other TVET institutions. Culturally, ATCs have settled into a certain way of work with a business as usual approach. However, with the new focus, change is inevitable. Like other public organizations, these institutions need to network with each other and other stakeholders in (A)TVET, and in particular with the private sector. The paradigm shift, among other things, situates educational institutions not only as places to learn but also to acquire meta-skills such as learning to learn, acquiring information, problem-solving, as well as innovative and collective ways of working. This requires that ATCs within the wider context become creative, innovative and intelligent organizations. In other words, that they renew themselves continuously, can anticipate changes, and learn quickly.[7]

Figure 6:   Factors driving changes in ATC Management -Adapted from Cort, Härkönen & Volmari). PROFF – Professionalization of VET teachers for the future. Luxembourg: Cedefop Panorama series; 104.

7   Kristiina Volmari, Seppo Helakorpi & Rasmus Frimodt (Eds), Competence Framework for VET Professions Handbook for Practitioners.

6.2 Tools for good governance in ATCs

In an ideal situation, formal powers of governance in ATCs should rest with the appointed governing body or board with the headmaster/principal or school manager a key figure in the reform agenda and directing the reform process. In theory, this should enable ATCs to make decisions as close as possible to where implementation happens, allowing them to respond swiftly to the needs of employers and the labour market and perhaps even lead to more cohesive local planning and implementation relevant to their school or locality. It is important that ATC managers are empowered to take strategic decisions, even within the constraints of a rigid centralised system, in order to be able to "move away from waiting for things to happen".

I. **Board or governing council:** Principally, good governance at ATC level should encompass policies, systems, instruments, agreements, and facilities etc. that are required for the ATC to operate successfully. The role of a board or governing council is very important in putting in place a good governance system. The board or council is paramount to instilling sound governance principles and practices throughout the ATC from the outset. These principles and practices should be embedded in effective governance policies and structures that are seen as legitimate, credible, and authoritative by all in the ATC.

II. **Representation of the board:** In most ATCs, the representation and the constitution of the management board is prescribed by an Act of government, and school management has little room to manoeuvre. Analysing some ATC management boards or governing councils prescribed by government Acts, one sees them more heavily tilted towards public sector representation, with few seats reserved for industry. It is in important that ATCs negotiate to have more representation from the private sector on their boards or governance councils.

III. **Roles and responsibilities of the board or governing council:** To achieve genuine board independence, it is crucial to carefully define what it means for directors or council members to support the governance structure of the ATC.

   • The role and processes of the board are clearly defined and understood within and outside the ATC.

   • Board or council members are provided with adequate information and sufficient time for analysis and deliberation to exercise their duties of oversight and development of the ATCs direction and strategy.

   • The board meets regularly, and observes the formalities of good practices (e.g. an agenda, minutes, quorums, voting).

IV. **Internal control environment and processes:** It is important that as an institution, the ATC establishes internal and external control measures to help them manage their processes, especially with regards to good governance and accountability. The school management should instigate proper management of finances, funding sources and the use of funds. It is the duty of the governing council or the board to have a committee to support the school principal on funding and management of funds in a proper and acceptable financial management system.

6.3 Tool for ATC leadership[8]

One key challenge of ATC management is the availability and adequacy of resources. Within the centralized system, resources are mostly controlled by the sector ministry as part of budgetary allocation. The availability of adequate and sustainable funding is a fundamental factor in achieving success in TVET, and this is an area where institutions have the least freedom. In many ATCs, government policy does not give managers the freedom to spend internally generated funds or to even decide on the size of student enrolment. This therefore calls for proper financial management practices to be able to oversee the limited resources they receive from government. ATC managers should have a clear understanding of the budgetary process as it is critical for them to be able to manage this well. Managers should understand that budgets are not just about spending money but are about a large number of management processes and functions that help relate educational needs to resources. They should be accountable in ensuring value for money in terms of resources and, more importantly, understand that cost-effectiveness for the sake of cost effectiveness will not assist the institution.

The role of ATC managers has evolved from just overseeing pedagogical, trainers' and learners' development to a more all-encompassing operation which includes supporting the development of quality management by actively involving external stakeholders such as employers, trade unions and professional organizations, communication and marketing, and networking with both internal and external TVET providers. These management functions have implications for:

• Standardization of training and qualification.

• Cost-effectiveness, quality assurance.

• Recognition of prior learning and the further education of TVET graduates.

Technically a leader is supposed to:

• Do things right.

• Seek control, create and follow the rules.

• Focus on how things should be done.

• Seek compliance.

• Value secrecy.

• Use formal authority (hierarchy).

However, in the modern approach to management, we envisage that ATVET reforms will capacitate principals to be more than just a manager or principal. They should become leaders in the development of their ATC through goals and priority setting with a course of action, and creating new ideas, visions and policies. This enhanced leadership requirement encompasses them focusing on:

• Doing the right things.

• Seeing people as great assets.

• Seeking commitment from all stakeholders.

• Focusing on outcomes.

• Objectively determining what could be done and why.

• Sharing information.

• Promoting networks.

• Becoming more entrepreneurial.

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8   Adopted from Handbook: Management of TVET Institutions published by GIZ

7

ATC Institutional Strategic Planning

7.1 Context and challenges

ATVET reforms and implementation is challenged by limited funding and rigid government policies. But at same time there is a huge expectation, by partners' and students' especially, to have a good outcome-based system that leads to the employability of graduates. ATC managers and principals therefore needs to be strategic, have a good vision and compelling mission that can be translated into measurable and implementable goals to meet the needs of the community and learners. It is important that ATC leaders understand the tools and approaches to understanding their environment, including having enough labour market intelligence, and set strategic goals and performance indicators to ensure that the institution does in fact serve their learners and communities with education for employment.

In most organizations, strategic planning is facilitated by external experts who support the management to be able to craft a good plan for the institution. AUDA-NEPAD, with the technical support of GIZ, is supporting ATCs in 12 countries to develop strategic plans for their institutions.

The objective of this part of the toolkit is to support ATC leaders to understand how to:

• Craft or reframe their institution/organization's vision and mission to inspire staff and other stakeholders, considering the level of institutional autonomy and the broader ATVET reforms.

• Better determine strategic goals and priorities that meet student, community and the policymaker's (government) needs, while maintaining room for ongoing adjustments and innovation.

• Understand how to establish realistic and relevant performance measurement indicators to monitor goal achievement, and adjust them along the way, while also meeting ministry requirements and expectations.

It is important that principals and managers of ATCs articulate an inspiring vision and strategic goals for their institutions/organizations, and communicate, own and lead them with sustainable management systems and practices that support their implementation. Leaders' management capabilities need to be enhanced with skills, systems and processes that are results-focused, that support evidence-based

Figure 7: Institutional Strategic Planning Framework (Source GIZ Capacity Works Manual)

decision-making, that foster innovation and allow for adaptation to changing demand and emerging opportunities. Their management capabilities also need to be enhanced with skills, policies, structures and processes to actively engage and mobilize stakeholders to achieve the desired outcomes of their strategic planning.

Strategic plan approach for four ATCs in Burkina Faso[9]

Four ATCs were supported to develop their strategic plan:

- Centre de Promotion Rurale de Kodougou (Région de la Boucle du Mounhoun)

- Centre de Promotion Rurale de Goundi (Région du centre ouest)

- Lycée professionnel régional Nazi Boni (Région de la Boucle du Mouhoun)

- Lycée professionnel régional Guimbi Ouattara (Région des Hauts bassins)

A. For training centres to have a strategic direction for their development as part of the ATVET project implementation in Burkina Faso, it was essential to support them to develop their strategic plans. According to the definition of the International Network of Agricultural and Rural Training (FAR): "The training centre project is a document which aims to provide a strategic orientation that indicates its objectives for a predefined period (three to five years generally). It specifies the various activities that need to be conducted (training, production, services ...) and the means or investment that will be required at the time in order to meet these objectives."

B. The strategic plan specifically focused on:

- Occupation and training road maps (initial and continuing training), investments, operations and necessary resources (human and material) for the realization of this training.

- The output expected from training and production/output of the training centre's internal services.

- Annual activities of training programmes.

- The necessary investment required to build new or improve existing infrastructure and facilities for the future development of the centre.

C. The strategic plan helped to ensure:

- The legitimacy and coherence of the training centre's actions.

- Establishment of the identity of the centre.

- Mobilization of actors and stakeholders for the implementation of the strategic plan.

- Tracking and control of the actions of the centre.

D. The methodology for the development was structured as followed:

I. Step 1: Consultant was engaged to support the ATCs to design diagnostic tool for the collection of information for the strategic plan.

- The diagnosis for each centre focused on information about human and material resources available, management and governance terms of the centre, training offered and existing partners, motivation, projects and concerns of the centre's staff.

- Diagnosis of the centre's environment: Features and socio-economic dynamic of the location/environment, missions, activities and projects of the local actors, stakeholder's support on the designs on the training of youth, and producers.

- For agriculture: Land, characteristics of local agriculture issues, typology of production systems and their development, opportunities and innovations underway, concerns and projects of farmers, improvement along value chains required.

- For agri-food transformation: Transformation units' characteristics, typology of equipment, opportunities and ongoing innovations, concerns and projects of processing units, improvement required.

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9 This case study was written by Abdoulaye Yeye, the national coordinator of the ATVET project, outlining how he and his team supported four ATCs in their strategic planning process.

- For youth and women: Sociological features, economic situation and specificity of the target audience of the centre, types of courses needed by youth, difficulties related to their training and post-training support, projects, constraints and opportunities for youth and women.

II. Step 2: The diagnostic tool was validated in workshop.

III. Step 3: The centre's managers and trainers were trained in the use of the diagnostic tool.

IV. Step 4: The different ATCs used the tool to undertake their diagnosis based on the key criteria as set out above.

V. Step 5: The results were collated, analysed and validated, together with stakeholders involved in the strategic planning. This should also highlight the human resources available and to be mobilized, curricula, topics and the necessary training required, support services to create content. These results and proposals must be validated by the actors and stakeholders of the training centre.

The centre was supported to develop a logical framework for the strategic plan, define its objectives by strategic axis and finalize the framework. Interventions were supported by defining the indicators and sources of verification and assumptions. All four centres were supported to develop an action plan for the strategic framework. This helps to set expected results and establish objectives and activities that will contribute to the achievement of each outcome, to plan these activities and the budget needed to implement the action plan.

E. Writing the content of the draft strategic plan:

A consultant supported the centre in the drafting/ structuring of a document setting out its strategic plan.

F. Validating the strategic plan:

A workshop was organized with stakeholders of each centre to validate the strategic plan.

G. Finalizing the strategic plan:

After incorporating relevant amendments identified at the validation workshop, the strategic plan was adopted for implementation.

H. The role of the CAADPT ATVET project as an external facilitator:

- Supported centres to develop the data collection tools.

- Supported the training of the ATCs management and trainers on the methodology to conduct the process (approach and data collection tools).

- Supported ATCs in the synthesis and validation of the results of diagnostics with the centre's potential partners, and in the definition of the areas of intervention, the development of the logical framework, and the action plan.

- Supporting the implementation and monitoring of the strategic plan.

I. Lessons learned:

- The strategic plan is a document owned by the ATC, and as facilitators we should not substitute our role with that of the centre but accompany the centre with training in the diagnostic tools, planning and the drafting of the strategic plan.

- It is important for the centre to identify a large number of potential partners that can help the implementation and especially the funding of the strategic plan. Therefore to accompany the centres on advocacy techniques is very important.

- The development of the strategic plan in a country is based on the legal status of the centres: the form of management allowed in public and private training centres. Analysis should be made if legally public training centres are allowed to carry out activities that generate profit, and the type organizations to set up for their management.

J. Conclusion:

Results and outcome: Four strategic plans are being developed in Burkina Faso. The participatory process used was much appreciated by the training centres and the different stakeholders. Some ATC managers said: **"Strategic plans have changed perceptions about the way we run our ATCs. Defining a vision allows you to drop the old routine day-to-day management of a centre and develop new ambitions going forward."**

7.2   Approaches for ATC strategic planning

As an ATC, the main goal in your strategic planning is to demonstrate effective systemic processes and procedures for the improvement of your institution to meet the labour market needs of your students in the dynamic socio-economic world, using both internal and external resources to achieve this goal. It is therefore important as an institution to define your own goals, visions and missions to suit your strategic planning approaches, with the view also to understand that this could come up with a radical change management process.

Figure 8:   ATC Strategic institutional planning framework - Systematized for this toolkit by Abraham Sarfo

The framework above summarises the development process of the strategic plan, taking into consideration macro- and micro-environmental factors. The macro-environmental factors focus on the bigger picture of government policy strategies that an ATC would be responding to. Mostly, in a systematised system, these policies and strategies would be unpacked at the higher level and put together as a TVET policy or strategy. It is strategically important that ATCs make efforts to align their plans with those of the TVET authority or other nationally responsible authority. This also helps ATC to identify the key strategic areas for the government and meet the need to contribute to the overall outcome expected in the country. It also helps the ATC to achieve higher level buy-in, especially in the rigid vertical TVET governance system, to support resource mobilisation and how this informs the design and implementation of the institution's programme qualification.

The micro-level strategic environment involves the ATC and its immediate community. This could be a local government or municipality, or in some cases could even become national in orientation. It is therefore imperative for the ATC to have a clear definition of their micro-level environment as their services and output, as determined by their strategic plan, will be measured by their impact on the environment. The ATC itself forms part of the micro-environment and much of the situational analysis should focus more on the ATC. The following steps set up a guide on how to undertake institutional strategic planning.

7.2.1 Tool: Environmental situational analysis

Macro-level environmental analysis

This looks at the 'bigger picture' of the overall strategies of the government for TVET, agriculture sector growth, overall youth employment in the growth and expansion of access and articulation opportunities for young people, and how ATVET fits into these policies and strategies.

For ATVET, it is imperative that this macro-level analysis takes into consideration the overall agricultural sector development plan of the country. Some of the key areas are:

- National Development Plan.

- National Agriculture Investment Programme (NAIP).

- Acts and legislation that governs TVET in the country.

- The structure and governance of the TVET system, management and leadership.

- The TVET authority's mandate and strategic focus for at least the next 5 years (if they exist):
  - High-level organizational design of the national strategic initiatives.
  - National TVET strategic goals and objectives.
  - National TVET governance model and how it impacts on the ATC.

- Key stakeholders and partners in the TVET sector.
- National level outcome and impact assessment.

- Systems capacity building strategy of the whole TVET sector.

- The National Qualification Framework (NQF).

- The projects and programmes of international organizations, development partners and their work in the country, and how this could impact on your strategic delivery (e.g. ILO, UNESCO, World Bank, Africa Development Bank, AUDA-NEPAD (CAADP programme), FAO, GIZ, USAID, DANIDA etc.

- Partnerships and linkages with industry, sectorial education and other training systems.

- It is important that ATCs consider emerging policies and documents relating to sustainable development, green economy, the economic empowerment of women and how their strategy would contribute to developing specific programmes for skills in these areas.

Micro-level environmental analysis

This speaks to elements in the immediate environment of the ATC which is sometimes defined by the geographical area it is located in and conditions that directly affect its operations. This takes into consideration:

- Where the ATC is located (province, municipalities, districts) and its linkage to the community or other communities, including campuses and other satellite sites it might have. It can also look at accessibility to other educational systems both horizontally and vertically.

- The challenges of the local economy. What drives the need for education, the training needs of the local economy and with regards to agriculture training, it is important to define the agro-economic zone it is located in, the agriculture value chains, and commodities prevalent in the area. Also what challenges the local economy faces.

- What are the main drivers of the local economy and who is likely to be the main employers of the students when they graduate. How does the ATC's plans to respond to these drivers.

- The relationship between the local authorities, local private sector or employers, and the partnership envisage for the local stakeholders and the ATC.

- Labour market studies done at the overall macro-level but also looking at those in the micro-level that directly impact on the ATC. This could also be specific to the value chains in the agro-economic zone.

- What is the situation and factors affecting entrepreneurship and self-employment in the local economy and how will the ATC support self-employment in the community.

7.2.2   Vision and mission

- **The vision** is a short statement that sets out the dreams and aspirations of the ATC and its plans for next 10 to 15 years. It is important that this is crafted in a more systematic way to reflect the changing environment and aspirations of the institution. The vision is the driving force behind the institutional strategic plan and it must articulate the ATC's long-term goals.

- **The mission statement** articulates how the vision will be achieved. It takes cognisance of the strengths and weakness of the institution and sets out the immediate environmental and institutional positioning needed to achieve the vision. In corporate and for profit organizations, the mission statement focuses on what the company does for its customers and keeps employees focused on their objectives. As an ATC, your focus is trainees and the output you envisage for them (employability and self-employment through entrepreneurship). Your mission statement should encapsulate what you do as a training provider to achieve this.

> **To be a leading college for TVET, providing quality and affordable education and training that is responsive to and focused on the needs and expectations of commerce, industry and the community of Sedibeng District.**
>
> *Sedibeng College South Africa vision statement*

7.2.3   Tool: ATC situational analysis

The situational analysis tool helps the ATC to look at its strengths and weaknesses in systemic capacity building and efficiency; institutional governance, management and leadership; monitoring and evaluation of ATC performance; and any other pertinent strategic focus for the college.

An important part of the strategic planning process is taking stock of the ATC's current situation. The situational analysis leads to the determination of the strengths, weaknesses, opportunities and threats (SWOT) identified by the ATC governance and management team.

The self-assessment tools discussed in section 5.3 are important for the ATC situational analysis. The template can be adjusted to indicate a grading system as in the example below.

Rate performance (5 Excellent; 4 Very Good; 3 Good; 2 Average; 1 Adequate; 0 Non-Existing)

Indicator	5	4	3	2	1	0	Comment
How is your ATC anchored in the national system? Which ministry or department has an oversight responsibility for management and quality assurance at your institute?							
Do you have a board in place and how are board members selected? Do you have private sector or industry players on the board?							
How well does your management understand reforms and policy initiatives by government and other partners in the broader context of TVET development in your country?							
How much, in your opinion, are you involved or consulted in developing new policies or reviewing existing policies that impact on the successful delivery of your training programmes.							
How do you communicate policy changes to your staff and do you offer them training and capacity building to effectively deliver on these changes?							
Do you have a strategic plan in place and how often is it implemented and reviewed?							
How was your strategic plan developed? Internally or externally? Who were the key stakeholders involved in the process?							
How often do you engage with employers and the private sector in your strategic planning process?							
What are your main sources of funding? As a public ATC are you allowed to retain all or part of internally generated funds or are you obliged to return them to the government?							
As a private ATC, do you receive a government subvention? If not, what are your sources of funding?							
Do you have a business development unit? Do you have a commercial marketing unit where produce is prepared for the market as additional source of funding?							
When was the last time the principal and management completed TVET management capacity building or organizational development training?							

7.2.4   Tool: SWOT

The institutional planning process starts with taking stock of or evaluating the current situation of the ATC through the situational analysis of all the external and internal factors that can impact on its success. This focuses on strengths, weaknesses, opportunities and threats (SWOT) to be identified by the ATC governance and management team.

If it is the first time an institutional strategic plan is being developed by the ATC, it should have a holistic approach and use the information gathered as the baseline data. However, if there is an existing institutional plan, no matter how rudimental it is, it is fundamentally important to review it against the current situational analysis and the vision the ATC management would wish to craft for it. The environmental and ATC situational analysis, when completed, leads to the determination the Strength, Weakness, Opportunity and Threat of the institution. SWOT analysis helps to:

- Focus on the services offered by increasing quality of training and success in terms of the academic achievement of students or trainees.

- Assess the training quality and support the alignment of training capacity and adequate infrastructure and systems that should be in place to increase access and provide effective services to students.

- Develop partnerships and maintain good stakeholder relations which will increase the number of students who are adequately prepared to enter the labour market or further and higher learning opportunities.

- Ensure continuous business excellence in terms of good corporate governance, inclusive of effective management of resources (human resources, finances and funding and infrastructure and/or facilities) as well as information and communication.

The SWOT synthesis is based on several tools, but one commonly used is summarised below:

- The policies and instruments analysis of the macro environment is done through the social, technological, economic, ecological and political systems under the so-called STEEP model. In this analysis for the SWOT exercise, reference should be made to identifying Opportunities and Threats in the SWOT framework. The operating environment, especially the TVET strategy, and the local environment are also a good source of opportunities and threats for the ATC.

- The ATC self-assessment gives it the opportunity to evaluate its strength and weaknesses. This is an internal evaluation process and for good strategic planning, it should involve all key stakeholders in the school management system.

The SWOT model for analysing the ATC environment

Tool 4

Strength

- Location of the ATC in relation to agro-ecological zone
- Capacity of trainers
- Local economic drivers support
- Trainees success and employment rate after graduation
- Value chain and CBT curriculum development capacity

Weakness

- Lack of functional governing board
- High attritiion rate of trainers
- Lack of alternative funding mechanisms
- No functional framework for private sector engagement
- Low infrastruture development

Opportunity

- SDG, Agenda 2063 and other development models focusing on TVET and bringing more focus and investment into the sector
- Recognition of the strategic importance of agriculture in the overall development agenda of SSA
- Recognition of the importance of the private sector and labour in TVET design and delivery
- The internatioal development focus on green TVET, agriculture, women economic empowerement

Threat

- Unstable policy enviroment due to politically-driven TVET system
- Lack of respect for TVET, especially agriculture
- Poor budgetary allocation from government
- Lack of proper TVET trainer system
- Rigid governce structure and poor horizontal collaboration between ministries of agricultrue and education

Figure 9:   Generic SWOT Analysis for ATC-This is for illustration purposes and should be adapted to a specific ATC after a thorough situational analysis process

7.2.5   Tool: Setting the strategic objectives

The next step in the institutional strategic planning is defining the objectives or goals of a programme or service. Objectives are defined within the specific framework of an institutional delivery mechanism and each one should answer a key question within its context.

Using the self-assessment template as a guide, the strategic objectives can be developed based on the following criteria:

- Training programme.

- Facilities and equipment.

- Staffing and trainers.

- Working with employers/private sector.

- Student support.

- Governance, management and sustainability.

If the country has a national strategic framework for TVET education, your strategic objectives should fit into it. For ATCs, it also imperative that elements relating to agriculture training within the CAADP ATVET models are included to support the design of the strategic objectives.

Some of the key questions that need to be asked in formulating the objectives are:

- To achieve our vision, how should we perform in the eyes of our key stakeholders?

- On which training programmes will we place priority, and how will they be focused to provide the best value to our students/learners/trainees?

- To support our training programmes, how and where must we excel in our internal processes?

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- In what ways must our staffing and knowledge assets be maximized to execute our training programmes?

- In what ways must we maximize our budget acquisition and funding to achieve our training programmes?

- In what ways can we partner with the private sector to achieve our training programmes?

In answering some of these key questions, you will begin to see a number of gaps between your future state (the vision of where you want to go) and your current state (where you are today). These gaps will need to be closed and this will give you your strategic objectives. Start by making a list of all of the gaps that need to be resolved and then brainstorm around each item to determine possible solutions.

- Analyse each strategic objective and formulate a clear objective statement with baseline and justifications. This should include the reason why the objective is set and, as indicated earlier, it should be linked to the vision of the overall change or reforms expected for the ATC.

- There should be intensive and collective linkage of the strategic objectives to one other in a more causal and effect mode, to determine whether these priorities will provide the driving power the ATC needs to achieve its five-year vision.

- If the collective identifies additional priority areas, these should be formulated and described in the same manner as the already established strategic focus areas with their own strategic objective, objective statement, baseline, justification and links to other plans.

- It is recommended that not more than six strategic priorities be determined in order to prevent a diluted ATC focus.

Table 2:   Strategic plan terminologies. Adapted from Developing Strategic, Annual Performance and Operational Plans for TVET Colleges (Department of Higher Education and Training, South Africa), 2016

Relevance	Explanation
Strategic goal	Strategic goals identify areas of institutional performance that are critical to the achievement of the institutional mission. These should stretch and challenge the institution, but must be realistic and achievable. A strategic goal should ideally be written as a statement of intent and should relate to the national priorities or the reforms in ATVET envisaged.
Strategic objective	Strategic objectives must state clearly what the institution intends doing to achieve its strategic goals. The objectives should generally be stated in the form of an output statement. Each objective should be written as a performance statement and must set a performance target the institution can achieve by the end of the period of the strategic plan.
Target	This is the quantifiable achievement as a result of successfully implementing the strategic objective. The institution should expect to achieve this target by the end of the strategic plan timeframe.
Means targets	Means are direct deliverables which in the main constitute the interventions envisaged for the system during the period covered by the plan.
Ends targets	Targets on outcomes (ends) represent the expected performance of the system resulting from the interventions identified as targets in the strategic plan.

7.2.6 Tool: Setting performance target

As part of operationalising the strategy, there is a need to set performance targets to link to the strategic goals or objectives. Putting performance measurement systems in place is an important way of keeping track of progress in the implementation of the strategy. The primary reason for including performance indicators is to enable stakeholders to assess the strategies adopted by the ATC, and their potential to succeed with the strategic plan. Performance measures or targets presented in isolation from strategies and objectives, or vice versa, will fail to provide the stakeholders with the level of understanding they need.

Guidelines for setting up performance targets

- It is important for management to understand and explain why they believe a performance indicator is relevant, especially to the trainers and students. In many instances this will be because it measures progress towards achieving a specific strategic objective and key stakeholders should understand it in order to support the implementation and its measurement.

- To enable stakeholders to make their own assessment of the reliability of the performance targets, it is important to identify the sources of the data and the assumptions used to set up the performance indicators. Any assumptions made in measuring performance should be explained so that stakeholders can have an informed position on the achievability or otherwise of the targets set.

- Some performance indicators are best suited to a quantification of future targets. Expectations and aims for other indicators may be better explained in commentary. Either way, a forward-looking orientation is essential for stakeholders to assess the potential for strategies to succeed, and to give them a basis against which to assess future performance.

- For example, in partnerships and linkages, especially with the private sector, performance targets could be based on actual, effective and mutually beneficial national and international benchmarks. Keep in mind that the target speaks to partnerships that assist students in getting work experience, entering the labour market (employment or starting own business) as well as further and higher learning opportunities.

7.2.7 Tool: Understanding operational planning

An operational plan describes short-term strategic planning implementation. It explains how it will be put into operation (or what portion of a strategic plan will be addressed) during a given period, normally a fiscal year. An operational plan is the basis for and justification of an annual operating budget request. Therefore, a strategic plan that has a five-year lifetime would drive five operational plans funded by five operating budgets.

The annual operational plan provides a detailed programme for the coming year. It includes the projects, activities, timelines, resources required, estimated budget, outputs, responsibility for the project and risks involved. It also involves a consideration of the source of resources and funds. The ATC can consider different ways of raising resources to implement the plan. For example, if the plan involves carrying out a teacher or trainer development in value chain analysis and the ATC does not have the internal capacity and budget to conduct such training, it may identify a development partner doing this work in the country and/or a bilateral partner to conduct the training.

Importance of operational plan

- An **operational plan** ensures that you can successfully implement your ATC strategic plan by getting your respective divisions to identify their human resource requirements, financial requirements, and timelines for the implementation of each segment or strategic objective of the plan.

- It helps the institution to use resources efficiently- to allocate scarce resources to the most critical gaps and needs, and to phase and prioritise the implementation of the strategic plan to identify critical needs areas to allocate resources.

- It helps to clearly define your capacity gaps and most critical resource requirements for the ATC and how to implement it.

Elements of the operational plan

- Relates operational plan to the strategic plan. It should restate the overall goal, priority areas of focus, core principles, and strategic objectives.

- For each strategic objective, identify the strategic issue and select strategies.

Figure 10:   A sample approach for developing operational strategy from the strategic objective

Table 3:   A sample operational plan for delivering Work Place Experience Learning

Results	Activity	Timeframe			Respon-sibility	Baseline data	Target	Strategic plan target for 2025
		T1	T2	T3				
25 students have undertaken work experience learning with a mango processing company (HPKL)	Establish MOU with the company	X			Principal	0	1 Value chain	4 Value chain companies
	TOT for trainers of ATC and HPKL staff on WPL assessment		X	X	Vice-Principal Academic	0	5	20
	Pilot assessment model with trainees		X	X	Vice-Principal Academic	0	25	250

- **For each strategic objective, design the:**
  - ► Results to be achieved in the operational plan
  - ► Corresponding activities
  - ► Timeframe
  - ► Responsible entity/unit
  - ► Baseline and target data

Costing work plans

- Indicate:
  - - Results
  - - Activities
  - - Quantity and units of inputs
  - - Unit cost
  - - Total cost
  - - Funding source
  - - Timeframe
  - - Implementing agency/responsibility
  - - Grand total cost = financing or resource requirement

Implementation and coordination of operational plan

- Need to answer the following questions:
  - ► Who are the implementers?
  - ► How are the implementers coordinated?
  - ► Who does what?
  - ► Who will track progress?
  - ► How often are we going to review progress?
  - ► What are the milestones?
  - ► What happens if we need to change our activities?
- Develop a comprehensive performance monitoring system for the operational plan.
- Mainly focused on outputs from the activities within the year.
- Should have some relationship to the longer-term objectives of the strategic plan (outcomes and impact).

7.3   Summary of strategic planning key points

The development of the strategic objective is most effective through an iterative process with management and, if possible, the support of external stakeholders.

1. Ensure that the internal and external inputs have been collected and analysed, and that a vision statement has been defined.

2. Ask a facilitator to help lead the management team through the process. Ideally, the principal does not play this role, except in situations where access to a facilitator is limited.

3. Facilitator interviews the managers to gather views related to the SWOT analysis, the vision statement, and the potential target stakeholders and clients.

4. Facilitator engages the team in a workshop to review the external and internal inputs, prioritize the issues identified in the SWOT analysis, and (optionally) assemble a change agenda. Then working together, articulate the specific reform areas based on international and national priorities and define the ATCs needs and wants. Lastly, identify the specific areas of focus to drive the reform process. These last two steps create the objectives for the ATC.

5. Managers add their opinions on what processes, people issues and financial resources should drive the reforms.

6. Facilitate a further session to review a summary of the work so far. Then, working from each strategic objective, articulate the areas for process focus, people and knowledge focus, and financial focus. Once completed for each reform area, assemble the resulting objectives into a complete strategy map. Look for opportunities to eliminate duplications and to simplify the resulting objectives.

8

Tool 5

Human Resources Management

8.1   Context and challenges

Human resource management is the effective management of all personnel in ATCs so that they contribute to the realisation of the institution's targets, goals and outcomes. In most advanced institutions of higher learning with organizational structures, human resource management is handled by personnel departments with the professional expertise to handle issues of staff development. Unfortunately, in almost all ATCs, because of the size of operations, the principal or manager combines his/her supervisory role with human resource management and other development functions. In most centralised systems, the ministry responsible for ATVET takes charge of much of the human resource functions with the ATC manager responsible for leading the staff to fulfil the organization's mandate. The principal and the heads of departments are therefore required to manage staff in the most effective manner so that they work well in the best interests of the school.

Human resource development in ATCs is the process whereby principals and heads of departments acquire and also support their staff to acquire not only skills and competency in their present job, but also capacities for future positions and circumstances at the college. This is critical for the improvement of ATVET in Africa. Many trainers are used to the old methods, but with new concepts and approaches, trainer development

is becoming an important component of school management. Trainer development and overall human resource management should depend on the vision of the ATC and be set up to support the achievement of it.

Although ATVET trainer education is diverse, the current two main sources of ATC trainers in Africa are graduates from universities and experienced members of the workforce or industry. Unfortunately, in many African countries there are few institutions that specialize in TVET trainers development, so a large number of them are newly graduated from mainstream universities with little practical teaching experience pedagogy and didactic, especially in the competency-based training methodology. It becomes the responsibility of the school management to ensure that their capacities are improved to meet the challenges of modern day ATVET delivery.

Key to the successful achievement of human resource (trainer) development and implementation is the reintegration action plan. Principals and school management need to discuss with trainer's area of improvement and development in their own workplace or industry where capacity development measures can be applied. Each plan should be shared, discussed, developed and implemented with support from all stakeholders, to ensure a successful outcome. It is the responsibility of members of the management

Figure 11:   Model of ATC improvement in human resource management and development

team (the principal, the vice-principle and heads of departments) to support the implementation of the reintegration action plan, hence they should have decision-making and management skills.

In implementing the ATVET model, some of the capacity gaps identified and for which trainers require further training and support include:

- Value chain analysis and design for skills development (Using Valuelink model).

- Preparation for competency-based training and assessment.

- Delivery competency-based training.

- Conducting competency-based assessment and participate in assessment validation.

- Assessing for recognition of existing (prior) skills and knowledge.

- Provision of leadership in training and assessment (mostly for principals and training managers).

- Developing training programmes, learning resources and assessment tools.

- Engagement of industry for learning partnerships.

- Mentoring trainers and assessors (for principals and training managers).

- Evaluating training and assessment programmes.

8.2 Tool: Human resource management

Personnel status analysis

The first step in HRM and development is for the principal or manager to design and implement a personnel status analysis. This helps the ATC to have a clear understanding of present qualifications, skills and capabilities, and also their respective quantities, for all departments of the ATC.

- Identify staff requirements for the ATC to be able to deliver the training required, based on its mandate and the strategic plan.

- Identify the qualifications, skills and capabilities of employees. This might include checking their personal records and, if possible, verifying their qualifications.

- Check that the skills and competences meet existing and planned requirements.

Design staff recruitment plan

Recruitment is seen as the first step in making relevant knowledge and skills available to students. In the centralised system, some ATCs do not have much control over the recruitment, transfer or posting of staff to their institution. In a demand-driven approach, it is imperative that principals are clear about their staff requirements and are able to communicate this to their superiors who manage the recruitment. In exceptional situations, especially in private ATCs where recruitment is managed at the school level, a recruitment plan helps to makes sure staff with the required skills and experience are engaged.

- Make a list of positions required for effective training in the institution, including their skills and experiences.

- Design qualification and job description requirements based on the potential vacancies. If existing jobs do not have qualification descriptions, it is imperative that this is designed as part of the recruitment plan.

- This helps to identify the best candidates for the position, both internally and externally, to meet the job description.

Personnel use (planning)

Trainers and staff have to be managed so as to optimise their potential and performance for the ATC. Consideration of personnel issues and planning should involve:

- A list of potential teachers and personnel: Establish a list of people who could probably work at the school in the short-term if there was suddenly the need for a substitute, for example because of a long-term illness of an employee or a maternity leave replacement.

- In the workplace experience trainee support requirement, make a list of trainers and assessors at industries and workplaces.

- In addition to this, personnel use planning has to take into consideration the further training of employees.

- Often after further training, people should be

appointed to more or even new training activities, so that the training becomes relevant.

• Further training can be used as a selective measure for ensuring personnel use fits the long-term requirements based on the dynamic development of student population and technical progress.

8.3 Tool: Human resource development and development of the reintegration plan

These tools are examples of key areas where ATC management can work with trainers to support the human resource development system of their institution. They can be used to build capacity to support management systems for the motivation and further development of their trainees. The tools recognize that some of the areas of intervention would require external expert support for actualization. The ATVET model helps some ATCs with human capacity development (HCD) and organizational development (OD) to implement some of these tools for trainer development. The tools do not go into the details of the mechanisms as we believe most of the principals will need external support to implement them. At this stage, they are used for knowledge and reference purposes.

Heads of ATCs or principals most often have qualifications for managing a department or college, but they lack qualifications and skills for leading personnel development. They should be encouraged to attend leadership and management courses that are on offer.

Appraisal interview

An appraisal interview or performance appraisal is a scientific and a systematic evaluation of the performance of an employee by his/her superior. It is a tool for discovering and analysing qualifications, skills, opinions, vision and mindset and the potentials of the trainer.

The appraisal interview is an important HRD tool and is used for a variety of purposes:

• Supplying data to ATC management on the performance of trainers, and to the individual on his/her performance.
• Creates a learning experience that motivates staff to develop themselves and improve their performance.
• It is also useful in determining the type and nature of training programmes for tutors.

The ultimate purpose of a performance appraisal is to allow employees/trainers and school managers to improve continuously and to remove barriers to ATVET success. While it is easy for principals to informally evaluate people on an ongoing basis, a special level of skill is needed to do formal appraisals effectively. School authorities without the requisite skills must engage external resources with those specific skills such as performance planning, goal setting, coaching, decision-making, interviewing and conflict resolution, to help them effectively manage their appraisal interviews.

Target agreements

Headmasters or school principals should learn how to set agreeable targets with their staff, especially trainers. In the HRD context, targets should be understood as being different to tasks. A task is a specific job that is assigned to a trainer. Performing the task helps, among other things, the trainer to achieve his target.

- Target agreement should be the outcome of an appraisal interview.

- The point of target agreements has to make sense to the trainer, so that he/she is motivated to achieve them.

- The target agreement also has to be appropriate and linked to the personal development of the trainer.

- It should be a mutual agreement, so that it can become a real commitment for the personal development of the trainer.

Feedback mechanism

Instituting a functional feedback mechanism is important for the development of both the principal/school management and the trainers. There many forms of feedback and the school can choose one that is appropriate for its management system. But the most commonly used mechanisms include individual and group or collegiate feedback.

- With respect to human resource development individual feedback shall be one of the target agreements and it can make it easier for a trainer to prepare for the appraisal interview.

- Structured feedback systems should be established in ATCs as part of HRD processes.

- Structured feedback systems should involve learners giving feedback on trainers to help school management to design areas of further training.

- Feedback, apart from in technical areas, should also cover soft skills, communication skills, interpersonal skills and the mentoring and coaching skills of the trainer.

- Principals and head of school management should always avail themselves for feedback from tutors and other staff as part of the institutionalised feedback system.

Further training

For most HRD processes, further training is the one that management normally focuses on. Understanding the systematic approach to further training and development of trainers is very important for an HRD system. It is also the most direct measure of personnel development, because it increases the knowledge and skills of teachers and can be used by the management team systematically and specifically to improve the capacity of trainers to neet the mission statement and the ATC programme.

Further training at most ATCs is generated by external partners, sometimes without a proper needs assessment and not directly linked to the school's vision and system of organizational development. As an ATC, your HRD or OD strategy should direct the further training of your staff.

- Further training is expensive and should be undertaken based on its relevance and importance to achieving the school's overall trainer development strategy.

- There should always a budget for further training and development and should be a strategic decision taken at school board or management level.

- In most instances, trainers will request further training based on information from outside the school system and their own search or personal development. Depending on budget availability and the importance and relevance to the school

vision, consideration should be given to such request as it is a good source of motivation.

- When there is a budget constraint, the school can motivate and lead the sourcing of funds from external partners to support the trainers.

- Trainers should be encouraged to acquire qualifications which enable them to offer courses themselves to obtain industry-recognized certificates.

Induction of trainers

In many instances newly, posted trainers and staff arrive at ATCs without little or no knowledge of the institution, its vision, training systems and the school environment. School managers have little time to induct these new trainers to the vision and systems of the school. Generally new teachers are highly motivated and are still in a learning process. They are not yet set in their ways, so have a special potential that has to be developed and used carefully so that their (personal) development is and will be positive for themselves and the ATC. A well-developed human resource handbook is important for their orientation.

- The new trainer has to get to know the ATC, its vision, organizational structure, existing tutors, their specific roles and responsibilities, and the school routine.

- Initially, and especially for newly trained trainers, the principal should assign an experienced trainer to mentor and work with him/her. The new trainer should get time to watch other trainers conduct their lessons and to talk to students about training, do team teaching with a colleague, and to talk about their teaching experiences.

- Feedback is important in the orientation induction of new trainers. There should be a well-defined system to give them feedback. This should be designed in such a way that it does not discourage the new trainer but rather motivates him/her. This also becomes the basis of their further training and personal development.

- As part of the new trainer development, he/she should experience socialization by working in teams, cooperating with the head of department, and also staff in the school's office. He/she should be supported in the development of a special affinity with learners built on trust and mutual respect.

Project Management

9.1 Context and challenges

Current innovative approaches and reforms in ATVET delivery call for ATC project management skills to strengthen college systems. School management needs the experience and capacity to provide project management services to both internal (national) and external (developmental partners, multilateral and bilateral organizations) stakeholders including, importantly, the private sector. Managers need to understand the dynamics, definitions and processes of project management.

Projects are the most concrete means of translating plans and policies into specific courses of action. It is a temporary management activity that ends on completion of the defined output. It requires careful planning and control and is achieved by the efficient and harmonious coordination of the skills and energies of different specialists working on it. Understanding the principles and practices of project management would definitely help further improve the planning and implementation of projects in various institutions.

One of the tasks of ATC managers is to understand problem tree analysis, objectives and solutions which will help them to design a proposal using the project log framework matrix. The application of project management tools and methodologies for managing ATVET programmes and projects is also important for resource mobilization, funding and sustainability. Adding project management tasks to the administrative work of principals can be overwhelming, but it is important that they arm themselves with basic knowledge and skills in project management, especially to manage external partners that support their institution. This involves:

- Learning the dynamics, definitions and processes in project management.

- Understanding project planning, implementation and evaluation as key phases in project management.

- Preparing project problem tree analysis, objectives and solutions.

- Designing project proposals using the project log framework matrix.

- Applying project management tools and methodologies to manage ATVET programmes and projects.

A project is defined as a unique sequence of processes, characterized by:

- A clear target which is measurable in terms of time, costs and quality.

- A clear cost specification and restricted resources specific to the project deliverables.

- A specific project organization.

- A temporal limitation (start and completion date).

A project delivers the outcomes and benefits required by the organization, its partners and other stakeholder organizations:

- Create and implement deliverables that meet agreed requirements.

- Meet time targets.

- Stay within budget.

- Involve all the right people.

- Make best use of resources in the organization and elsewhere.

- Take into account changes in the way the organization operates.

- Manage any risks that could jeopardise success

- Take into account the needs of staff and other stakeholders who will be impacted by the changes brought about by the project.

Projects are different from the normal operation of the organization in that they:

- Have specific objectives to deliver new benefits to the ATC and other key stakeholders including sponsoring and delivery partners.

- May introduce significant changes to the way the ATC operates (example the CAADP ATVET project).

- Create new outputs/deliverables that will enable benefits to be realised.

- Mostly have a specific, temporary steering or management organization and governance arrangements set up for the duration of the project.

- Are susceptible to risks not usually encountered in day-to-day operations of the ATC.

- Involve a range of stakeholders from different parts of the ATC and beyond.

- May use methods and approaches that are new or unfamiliar.

9.2   Tool: Project lifecycle

Starting a project	Initiating a project	Implementing a project	Closing a project	Benefit realisation
• Project brief	• A project initiation document	• Progress report • Risk control • Change and control	• Lesson learned • Best practices experience • Upscaling	• Post-project review and impact assessment

Table 4:   Project life cycle: Adopted from Guidelines for Managing Projects (Department of Business Innovation and Skills, London 2010)

Project life cycle	Activities
Starting a project	• Ensure the project is aligned with or contributes to your strategic plan. • Ensure it meets the overall reforms of ATVET concepts and contributes to the implementation process of the reform agenda. • Ensure the reason for the project and its TOR are defined in the project brief. • Specify, quantify and agree on the project results and outcome. • Seek approval from the ATC board and other relevant authorities before agreeing on initiation.
Initiating the project	**The project management team should:** • Plan how to deliver the required outcomes and benefits. • Decide how to manage relationships with key stakeholders. • Decide how to manage the delivery process. • Determine resource requirements and ensure they can be made available when required. • Develop business case to enable the ATC/project board to decide whether project is cost and risk justified. • Document the understanding of the project and how it will be managed within existing school programmes and projects.
Implementing the project	• Mobilize the staff and other resources needed to build the products and deliverables that will enable the required outcome. • Plan, monitor and control the work and resources of the project. • Manage risks and issues as they occur. • Maintain communications with those impacted by the project and its outcome. • Report progress and issues to ATC/project board/stakeholders. • Decide ongoing viability in the light of experience and any changes in requirements. Ensure deliverables are fit for purpose and will enable benefits to be realised.

Project life cycle	Activities
Project closure	• Plans exist for a post-project review to measure to what degree the benefits have been achieved in practice. • Evaluate the outcome of the project against the PID. • Ensure that any lessons learned are shared with those who might benefit from them. Release resources used by the project. • Review any benefits achieved by the end of the project. • Determine the need for any improvements or modifications. • Ensure that the project is handed over to a person who will deliver the outcomes.
Benefits realisation	**Ensure that:** • Post-project reviews are carried out to measure the degree to which benefits have been achieved. • The business case is updated to reflect operational reality. • Potential improvements/changes/opportunities identified in the reviews are fed into the strategic planning process for consideration.

9.3   Tool: Designing a project brief

A project brief sets out the ATC's first thoughts and steps in developing a project proposal. When properly developed, with little amendments it could serve as a project proposal. This tool is to give support to ATCs to conceptualise projects especially for funding from public and private institutions and NGOs. It is a valuable instrument for resource mobilisation. The project brief consists of:

Purpose: The project brief is an outline of what a project is expected to achieve in terms of benefits, outcomes, scope and objectives. As an ATC manager looking for support, you will use the brief as an initial document to seek approval from the relevant authorities or stakeholders. It will be used as the basis for developing the detailed programme, benefits profiles, business case, plans and governance arrangements for the future project.

Outline vision statement: This indicates the end goal of the project. A high-level description of the outcome the ATC seeks from the changes or results the project would add to its existing operations and if possible linked to objectives in the ATC strategic plan highlighting the potential benefit to the trainers and the trainees.

Benefits: A description of the outcomes and benefits that should be achieved as a result of the new project and how it will enhance the deliverables of the ATC.

Risks and issues: Any project level risks and issues that threaten achievement of the vision and the desired outcomes/benefits. Assumptions, conflicts, lack of stakeholder support and commitment should be recorded here. How it might affect the already existing programmes and projects of the ATC should be listed.

Estimated cost, effort and timescales: Estimates of cost with a brief outline of budget areas, including the effort and time needed to set up and manage the project and to deliver the required outcomes and benefits. An indication of the degree of certainty or of success should be given. Avoid spurious estimations and padding of figures. Most project sponsors have an idea of major cost areas and this could affect your project proposal.

Outline business case: Strategic context – why the project is required and how it fits into the ATC's objectives, or other strategic objectives the project will contribute towards. Also indicate other related initiatives that will run in parallel to the project and how it could create synergy with the existing project.

Adidome Farm Institute in Ghana has been using the ATVET project as a business case to leverage and also attract different partners to initiate other projects in the ATC. Partners will always want to see how their project will contribute to or build on existing initiatives.

9.4 Tool: Benefits realisation management

Many ATCs implement projects, especially those initiated by donors and development partners, without realising or measuring the benefits accrued from them. In most cases, the benefits are measured by the donor or development partner who supported the implementation with little documentation on the part of the ATCs to leverage for other support. ATCs do not have the means or tools to measure benefit; those that are tangible, like infrastructure, which is visible and definable in financial terms. This should be easily measured and quantified in all project management. Most of the benefits are intangible, including training of trainers (TOTs), capacity building, strategic planning, knowledge management and other 'soft' benefit and a system of measurement should be developed as part of the project implementation

A benefits management strategy should be developed during project definition in order to establish a tool and matrix of measuring and realising all benefits (tangible and intangible) and the framework within which this will be achieved as new capability should be implemented.

Projects: A list of other projects, work streams and activities with an indication of their sequence and timing. This should include a description of any existing projects that might be sensible to bring under the management control of the project.

Impact on current operations: An assessment of the current ATC operations (including partners/trainers/trainees) and an indication of those that are likely to be impacted by changes introduced by the project.

Benefit Management Tool

Scope of coverage: An outline of the anticipated benefits (and drawbacks) and the areas in which they are expected to occur.

Establish the project benefit framework: Define the attributes, dependencies and current/target values for all benefits and drawbacks and set the benefits profile.

Create benefits map: This shows each benefit and linkages to each other and to the project outputs, and the business changes that will enable them to be achieved. The dependency relationships in a benefits map show how project outputs ultimately lead to the achievement of strategic objectives.

Produce a benefit realisation plan: Schedule benefits measurement activities and benefits reviews to enable tracking of their realisation across the project.

Allocate responsible benefits measurement officer: The officer's responsibilities include identifying and quantifying benefits and ensuring that transition plans are designed and executed so that the enabling capability and culture is properly embedded into the ATC's business operations.

Partnership with Industry and Private Sector[10]

10   This section deals only with the private sector and training and after training delivery in partnership with ATCs. A comprehensive toolkit on private sector engagement in ATVET is being developed as the next in the series of toolkits.

10.1 Context and challenges

Recognizing the importance of the private sector in TVET delivery is critical for its success, especially in the so-called demand-driving training approach. The private sector plays a critical role in the success of ATVET development, serving as the end user, absorber and opportunity provider for the outputs of trainees by providing job opportunities for graduates. It is also through the private sector that there can be substantial networking and cooperation along the value chain. Most ATCs have focused more on the public sector as a key stakeholder without much emphasis on the private sector. The ATVET model sees the private sector as a key stakeholder and designs strategies to specifically engage them.

Many African countries, especially anglophone ones, have historically followed the skills systems practiced in the United Kingdom and the United States, whilst a few francophone ones have followed the school-based occupational system practiced in France and Sweden. The system, in most Anglophone African countries, borrowed from the traditional UK system has the state (government) taking responsibility for supporting the development of the 'general skills system', while employers are responsible for developing their own employees. The three key stakeholders (state, employer and trainee) know their roles in the system. The French system has focused more on the state fully involved in organizing and regulating the school-based vocational system, with little involvement by companies or the private sector.

Many reforms in vocational education in Africa have taken place in recent years, especially during the post-structural adjustment era. The realisation of the importance of practical skills training has resulted

in many countries reforming and modernizing their vocational education. Many different systems have been adopted, some through the influence of development partners and donors, others because of the whims and caprices of political populist decisions without a thorough and critical evidence-based approach. While some models appear to have been successful and have brought more industries in line with responsibilities for training and development, especially in vocational education, others have failed as they are not designed with the right policies, legislation, instruments and especially funding to support the training.

In a labour market-led approach to skills development and TVET, private partnerships are the glue that binds educators and educational systems with employers. Working with the private sector encompasses a range of public policies, funding systems, and curricula frameworks that have the shared goal of creating employable skills for learners and students to be able to meet the demands of the labour market and employers. The private sector also has a role in ATVET delivery, not only as the anchor to employment or as future employers, but significantly also as a trainer or a partner in competence-based training delivery. In competency-based training (CBT) delivery, the private sector becomes critical in the curriculum design. Curricula must be developed based on the skills and training needs elaborated by the private sector and labour market in order for the trained workforce to either find formal employment or, through self-employment, produce the standard of inputs or services required along the value chain. The CBT approach allows curricula to be based on the various occupations identified within a value chain (see previous note in table) and the skills gap prevailing within the industry.

According to Muriel Dunbar (Dunbar, 2013), the three most critical and fundamental framework conditions for private sector or industry engagement in skills development, and hence in ATVET, are:

I. Rigorous standards and independent quality assurance.

II. Sustainable financing mechanisms for private provision.

III. Greater information transparency and matchmaking between young people, employers and education providers (ATCs).

One key challenge for private sector engagement in skills training in Africa, and especially in agriculture,

has been a sustainable financing mechanism and the willingness of private companies to support all aspects of agriculture training. Apart from South Africa, which has functional skills councils (SETAs) for the various sectors where, through legislation, employers pay a levy used for skills development and training and hence have a greater say in all aspects of training delivery, most countries have a limited number of stakeholders in the agriculture sector, value chains, sectorial associations or chambers, who can influence policies and support training and skills development.

Strong national frameworks are needed to have a comprehensive approach to private sector inclusiveness and partnership in ATVET, especially ATCs, but local level engagement is also crucial to stimulating employer involvement in ATCs delivery

of quality and practical training. A local employer engagement strategy considers the needs of the local labour market and the importance of building good employer relationships and setting clear targets and goals. It ensures a flexible training system with a focus on quality, providing meaningful incentives and creating clear pathways for continued learning.[11]

Most ATCs are left to make their own private arrangements for cooperative training and work experience learning for their students. It should be emphasised that in the broader picture, the role of the private sector in ATVET goes beyond training provision. It also involves policy formulation, labour forecasts and demand, curricula development and quality assurance in training, on the job training, apprenticeships and employment. Within ATCs, the focus of support for (or from??) the private sector includes:

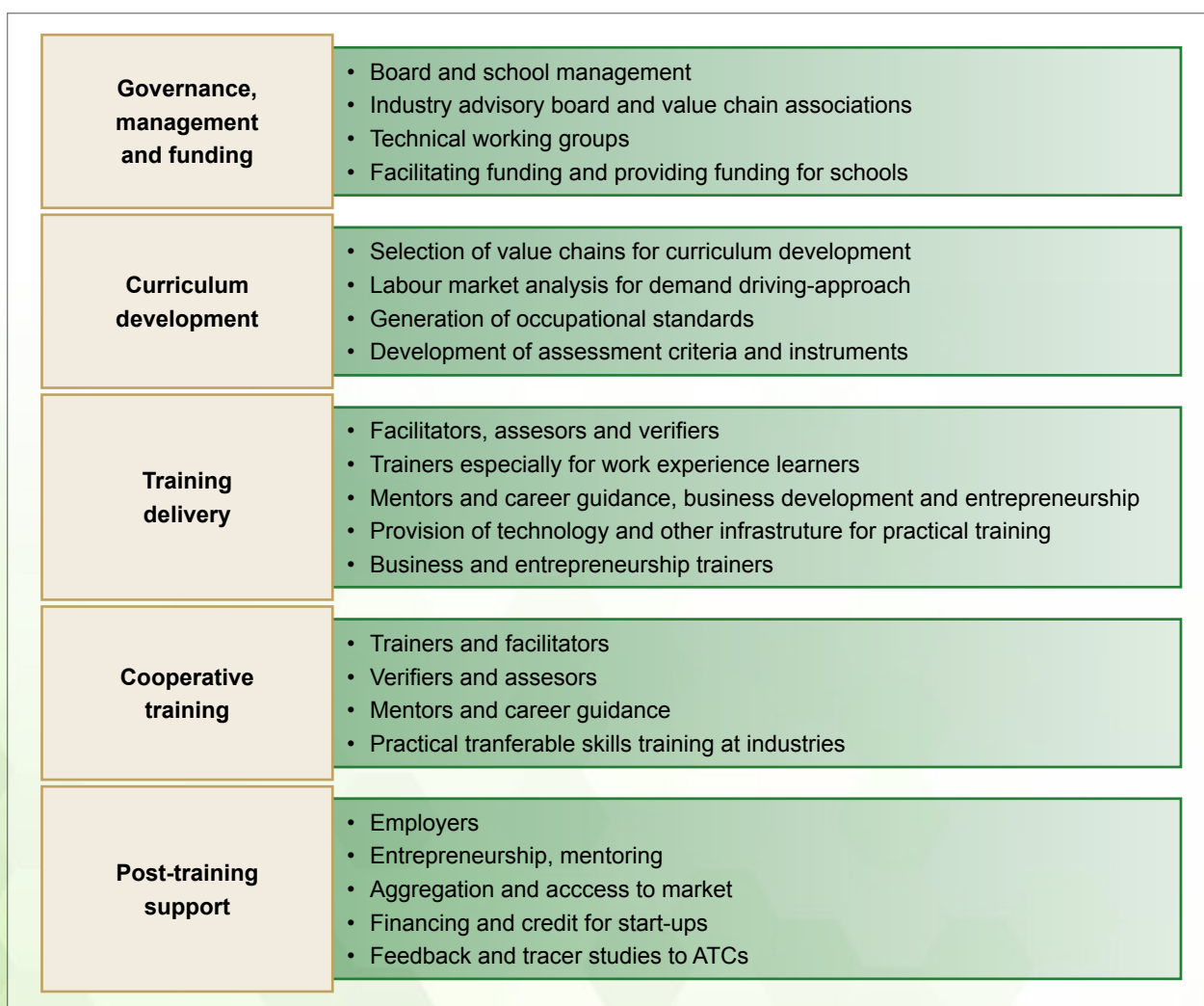| Governance, management and funding	• Board and school management • Industry advisory board and value chain associations • Technical working groups • Facilitating funding and providing funding for schools
Curriculum development	• Selection of value chains for curriculum development • Labour market analysis for demand driving-approach • Generation of occupational standards • Development of assessment criteria and instruments
Training delivery	• Facilitators, assesors and verifiers • Trainers especially for work experience learners • Mentors and career guidance, business development and entrepreneurship • Provision of technology and other infrastruture for practical training • Business and entrepreneurship trainers
Cooperative training	• Trainers and facilitators • Verifiers and assesors • Mentors and career guidance • Practical tranferable skills training at industries
Post-training support	• Employers • Entrepreneurship, mentoring • Aggregation and acccess to market • Financing and credit for start-ups • Feedback and tracer studies to ATCs

Figure 12: Framework of private sector engagement in ATVET at ATC level. A comprehensive look at private sector support for ATVET will be discussed in the next edition of the toolkit.

11   Bridging the Gap: Private Sector Role in Skills Development and Employment

Along the ATVET and private sector support or partnership spectrum, there are *'unique value chains'* to be explored by ATCs to maximise their training delivery and post-training support. ATCs cannot do everything on their own, and with most of them operating in a rigid public governance system, they should rely on private sector systems that can bring on board the critical and unique strengths and speed needed to move training to scale.

10.2 Case Study: The German dual system

The German dual system is the foundation of private sector engagement and leadership in vocational education and training. It is most ideal model for TVET education where private sector or industries are systematically involved and even lead the process. The term "dual system" describes the combination of apprenticeships in a company and vocational education at a vocational school in one course. Although "companies" and "vocational schools" are physically and legally separate entities, they work together to provide initial vocational training. The dual system recognizes that vocational training can occur in:[12]

•   Enterprises.

•   The public sector. In other words, at administra¬tive authorities and in government offices.

•   The offices of members of the liberal profes¬sions such as doctors, solicitors and architects.

•   At education providers and in schools, such as master craftsman and full-time vocation¬al schools.

As a rule, tasks to be assumed by the company and the vocational school are assigned so that the first provides practical training while the second teaches theory. However, in reality many firms also teach theory to accompany the actual occupational practice, and part-time vocational schools often supplement extended technical knowledge with practice-oriented exercises.

The Vocational Training Act provides the foundation for in-company vocational training. It empowers enterprises to conduct training and take the responsibility of hiring and training people. The law lays down the requirements and conditions for vocational training that is provided on an in-company basis. In

Germany, and under the dual system, the Vocational Training Act applies to firms in trade and industry, the public sector, to training in the liberal professions and in the skilled crafts and trades, unless otherwise provided for in a Trade and Crafts Code.

Some of the key factors behind the success of the dual systems include:

•   **Trainer aptitude and suitability of the training company:** The professional qualification of the company doing the training, the personal and professional qualifications of its trainers, and the suitability of the training premises are very important factors in the success of the dual system. The nationally applicable Vocational Training Act stipulates the requirements that must be met as proof of a company's suitability to provide in-house vocational training. In this connection, it differentiates between the training employer's (or the trainer's) personal and professional qualifications and the suitability of the training premise. The suitability of the premises is necessary in order to be able to provide quality in-company vocational training that complies with the provisions of the Vocational Training Act. It must be possible to teach skills and knowledge that belong to the particular recognized occupation during the practical in-company phase.

•   **Vocational school:** In Germany's dual vocational training system, part-time vocational schools are partners with the firms providing in-company training. Trainees learn the theoretical knowledge required for their occupa¬tion at vocational school. These are regular public schools that offer part-time instruction to trainees and could also have their own in-house training facility to offer practical training to improve understanding of the theoretical instructions.

•   **The competence of the chambers** *(chamber of industry and commerce, chamber of skilled crafts)* **and vocational training advisors:** The crafts enterprises in individual regions are or¬ganized into chambers of skilled crafts. Germany has 55 of these public corporations. They maintain a register of qualified craftspeople and enterprises. The chambers offer their 966,600 members throughout Germany a broad range of ser¬vices which range from technical, commercial and legal advice, to advisory services in the area of vocational education and training.

•   **Chambers of industry and commerce:** There are 80 chambers in Germany which are organized

regionally. They provide information and services including about tax laws, starting new businesses, and research. With regards to the dual system, they support, regulate and oversee vocational education and train¬ing. Germany's chambers of industry and commerce oversee some 270 occupations that require completion of formal vocational training. As a competent body, a chamber advises and supports the setting up of in-house industry training in the dual system.

- **Benefit over cost:** Germany's system of vocational training is a worthwhile investment in the future. The dual system has consistently shown that it is a cost-effective instru¬ment for ensuring a reservoir of young skilled labour. The industry-led training ensures a more practical skills orientation and this greatly and directly benefits enterprises, trainees and the economy as a whole.

- **Diverse learning venues:** In the course of their training, a person is exposed to different learning environments. This includes the company or industry where they work, the school environment, and various other venues where they learn how to perform different tasks assigned to them. Many larger companies have their own learning or training workshops. Such companies also have special offices or classrooms that are equipped with computers, flipcharts and other media to support the training. It is accepted that trainees cannot practise all learning steps at the workplace and so they are given the opportunity to exercise soft skills, for example how to conduct a conversation with a custom¬er, teamwork, etc., without distractions or the pressure of an emergency situation.

- **Certification:** Even though the dual system does not place much emphasis on certification as a measure of achievement, trainees receive three certificates when they pass their final examination:

i. A final certificate from the relevant chamber.
ii. A certificate from the vocational school.
iii. A training certificate from the company providing the in-house vocational training.

Even in special circumstance when there is a change of a course, a trainee is entitled to a partial certificate to indicate the duration and the competence acquired in the previous training.

- **Training Contract:** A training company signs a con¬tract with each trainee and ensures that the vocational training is conducted in accordance with government regulations and legislation. The company that signs a training contract with a trainee is called a "training employer" and they must ensure specific duties and roles for the trainees including:

i. Ensure that trainees achieve their training goals within the specified period and acquired their certification.
ii. Trainees must be assigned tasks and work specific to their vocational training programme.
iii. Trainees must be provided at no cost the tools, materials and specialized literature, as well as all other equip¬ment and materials needed for the training.
iv. They must ensure that trainees are not put at risk in the course of their training.
v. Trainees must be allowed to attend vocational schools for theoretical training at scheduled periods.
vi. Trainees must be given a record book to track their progress which should be regularly inspected and approved by trainers in the company.

10.3 Cooperative training and work experience learning

Cooperative ATVET is a mode of training delivery provided as a partnership between private sector actors (farms, processing companies, marketing firms, etc.) and ATVET institutions. The core feature of this model is the *direct* participation of the private sector in the provision of practical training on farms, in workshops, and on production lines. Cooperative ATVET schemes have, in other countries and regions, been organized as formal apprenticeship-type training, implying a work or apprenticeship contract between the trainee and the company. Practical training can however be organized in two different formats:

- As attachments during school holiday breaks and dedicated training sessions.

- As a dual model, where companies deliver practical training, and theoretical aspects are taught in ATVET institutions.

The two main advantages of cooperative models are firstly, the linking of trainees to the 'world of work', and secondly, the implied cost-sharing for training by the public and private sector.

Work experience should be central to the CAADP ATVET model. Its main objective is to develop trainees or students who are employable, can be employed, and ultimately become employers (entrepreneurs). The extent to which students or trainees are able to have workplace learning is an indicator for the assessment of the management and performance of an ATC. In most countries in Africa, the systematized approach to work experience learning (WEL) is not available, and ATCs work within the informal and formalised approach of 'apprenticeship' and 'attachments'. However, in South Africa it is part of the skills development strategy and is incorporated in the mandate of the Sector Education and Skills Authorities (SETAs.) Even in countries where the strategy or legislation may exist, it is the responsibility of the school management to ensure a successful implementation of such a project.

South Africa's Sector Education and Skills Authorities (SETA)

In attempting to place South Africa amongst this diversity of skill systems, the British model of the Sector Skills Council has been adopted as a market-led model for skills development. As employers, the business sector and enterprises need to drive the agenda, provide strategic leadership and information in the overall skills development value chain.

SETAs were established to manage skills development needs. For the purposes of planning and managing the delivery of training, the economy has been divided into 23 sectors, each of which has its own SETA. They are concerned with learnerships, internships, learning programme type matrix and unit-based skills programmes in South Africa.

Each SETA is set up by employers in the sector and their levies support its functioning. Therefore the employers have a direct mandate in the sector skills plan, and implementation and quality assurance of the training. With respect to private sector employers' leadership in vocational education, the SETAs develop and administer work experience learning and apprenticeships to support the combination of practice and theory. They also manage the skills fund and support grants to trainees during their training period.

Since it is not feasible to implement the so-called 40-60 learning model in most ATCs, cooperative training should be designed to get the best of both worlds. It is also a bridge between the dual system model in Germany and the many vocational education systems in Africa. It uses institution-based education and training where appropriate, and workplace-based practice where possible. It thus brings benefits to the student, the employer and the training institution.

For students

- It helps them to translate theoretical learning into a practical approach and simulate real work experience.

- Motivates them in their subsequent career path and choices to make about their future.

- Improves employability and, mostly, develops their entrepreneurial spirit that might have been latent during theoretical learning.

- Improved employability as some students are retained by enterprises and employers after going through practical training.

For employers

- Cost-effective labour during the period of apprenticeship of students.

- Fulfils greater part of social responsibilities and supports communities. In some countries this also serves as task incentives for the company.

- Supports the culture of learning in the institution and motivates existing staff to undertake further training and learning.

- Opportunity to influence the curricula, become part of the governance council of the institute, and support the general mechanism of skills development fit for industries.

For ATC

- Increases alignment and implementation of demand-driven training.

- Enhancement of the ATC's reputation as a high standard school of learning.

- Helps after-school support system (mentorship, entrepreneurship, tracer studies etc.).

- Improves practical knowledge of ATC trainers as they accompany students and share experiences with employers and trainers at the workplace.

- A good communication and marketing tool for the ATC.

- Enhances funding opportunities and also brings industry close to the institution in governance and management.

10.3.1 Work experience learning

Table 5:   Work experience learning terminology and concepts. Adapted from A Framework For Providing Work-Integrated Learning In Technical And Vocational Education And Training Colleges (DHET, South Africa, 2013)

Employer	The person or organization for whom people work. This could include private sector companies, government agencies or departments, one-person businesses and non-governmental organizations, value chain actors, large-scale, medium-scale and sometimes small-scale farmers, SME processors, etc.
Task book/work experience record	A combination of the description of work to be done and the record of work completed in the workplace. It is used to guide and capture the student's learning during a WPL placement. In addition to job-specific activities, task books often include research or self-study assignments about the broader business, work- environment and work-process, a journal of individual experience and reflections upon it, and other 'enrichment' elements. 'Work experience record' is a generic term for both these types of books.
Mentor	**An experienced practitioner who oversees the work of a trainee or learner. WPL often involves two kinds of mentors:** • Workplace mentors, who are themselves employees at the company hosting the trainee and who oversees his/her work and performance in that specific workplace. They should be exemplary practitioners who are able to demonstrate how the work should be done and determine when a learner's work meets relevant standards. • College mentors, who are lecturers or student support/placement/ WEP officers. They provide information about the workplace to which the student will be assigned, the programme of work to be completed and the logistical arrangements. They should also provide general information and advice about the world of work and reinforce the learning taking place through discussion and reflection on the student's actual experience.
Placement	Placing a learner/trainee into a workplace for work experience or training.
Simulated work	Work performed under all the conditions and to all the performance standards of real-life, but not in a real-life workplace. Simulation is, in effect, the imitation of all aspects of a real job. Simulated work should not be confused with practical training in which the trainee does not have to perform to real-world standards. Amongst the essential characteristics of simulated work are that: • The tasks, work processes and equipment involved must be the same as those involved in doing this work in real-life workplaces.

Simulated work *continued...*	• Work assignments and specific activities within them should not be pre-selected or sequenced by the supervisor to accommodate the limitations of the trainee but should be presented when, as, and how they would be in real life. • Work assignments should require the full range of knowledge, skills and competences that would be demanded of the worker in a real-world workplace. This includes preparatory activities such as checking customer requirements, selecting and sourcing materials and equipment, and getting any necessary authorisation; and post-completion activities such as cleaning up, returning equipment, completing required paperwork and reporting to a supervisor. • The worker must adhere to all the performance standards required of a qualified worker in an authentic workplace, including the methods adopted, sequencing of activities, materials and equipment used, amount of supervision required, quality of work product and time taken to complete a task.
Structured workplace learning	Learning that takes place by design in an authentic workplace. It is structured in the sense that the work to be done and the learning it is intended to produce are planned in advance and formally assessed. Also, the work is performed under the guidance of a workplace mentor and the resultant learning is usually reviewed by both the mentor and a college lecturer.
Workplace	A site where work is performed. For WPL purposes, this could include the premises of a small, medium or large business, or a government agency. It could be a shop, market, bank, factory, warehouse, workshop, hotel or open-air business location. Any workplace to be used for WPL should meet all the following criteria: • Offer opportunities for experience and learning related to the student's programme of study. • Be typical of the sites where this sort of work is usually performed and of the way in which it is performed (i.e. work-processes, rules and performance standards). • Offer opportunities to learn about work cycles and processes that are akin to the real-world experience. • Be safe and compliant with applicable health and safety regulations. • Comply with the workplace approval requirements of the relevant quality-assurance body of the country.

10.3.2 Types of work experience learning for ATCs

Workplace exposure (WE)

Visits to, or short periods of observation, in an industry or workplace.

- Takes place in a real workplace.
- Participants spend little or no time doing the work themselves. Instead, they watch others working at a particular job, observe systems and processes that span a number of jobs, or identify and observe technology in use.

Aimed at developing a better understanding of tasks, technology, systems and processes in the industry.

- An educational programme for students studying toward a career or occupation.
- In-service development of current practitioners, for instance college lecturers, to update or extend their knowledge and skills.

Work-based experience (WBE)

A short period of structured workplace learning (typically 5-15 days) in a real-world workplace, as part of an institution-based programme of study.

- Takes place in a real workplace rather than a simulated one (hence the phrase 'workplace- based'). However, if a real workplace cannot be found to provide the WBE, a simulated workplace can be used.
- Participants not only observe others working but also do authentic work under normal working conditions. This work may be of any level of complexity but must relate to a student's programme.

Aimed at developing basic job competence through the application in the workplace of knowledge and skills acquired in college.

- Takes place during the programme of study. Might take between 5-15 days and may include on the job training, research and an investigative assignment.

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                    ┌─────────────────────────┐          ┌─────────────────────────┐
                    │ A substantial period of │          │ Takes place in a real   │
                    │ authentic work          │          │ workplace.              │
                    │ experience which        │          └─────────────────────────┘
                    │ typically forms part of │
                    │ an institution- based   │          ┌─────────────────────────┐
  ┌────────────┐    │ programme of study.     │          │ Usually an integral     │
  │            │    └─────────────────────────┘          │ part of a programme of  │
  │ Internship │                                         │ study that is required  │
  │            │                                         │ for final certification │
  └────────────┘                                         │ or a 'license to        │
                                                         │ practise'.              │
                    ┌─────────────────────────┐          └─────────────────────────┘
                    │ Aimed at developing     │
                    │ advanced job competence │          ┌─────────────────────────┐
                    │ through repeated and    │          │ May be undertaken after │
                    │ varied application in   │          │ completion of the theory│
                    │ the workplace of        │          │ and practical components│
                    │ knowledge and skills    │          │ , or 'sandwiched'       │
                    │ acquired in college.    │          │ between two  levels.    │
                    └─────────────────────────┘          └─────────────────────────┘

                                                         ┌─────────────────────────┐
                                                         │ Typically 6-12 months in│
                                                         │ duration but may be as  │
                                                         │ long as 24 months.      │
                                                         └─────────────────────────┘
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                    ┌─────────────────────────┐          ┌─────────────────────────┐
                    │ A learnership related   │          │ Applicable exclusively  │
                    │ to an officially listed │          │ to artisan trades.      │
                    │ trade that culminates   │          │ Theory component may be │
                    │ in a trade test.        │          │ non-examinable.         │
  ┌────────────┐    └─────────────────────────┘          └─────────────────────────┘
  │Apprenticeship                                         ┌─────────────────────────┐
  │/           │                                         │ Takes place mainly in a │
  │cooperative │                                         │ real workplace, with    │
  │training    │                                         │ periods in a ATC (mostly│
  │            │                                         │ applicable for already  │
  └────────────┘                                         │ practicing farmers).    │
                                                         └─────────────────────────┘
                    ┌─────────────────────────┐
                    │ Aimed at training new   │          ┌─────────────────────────┐
                    │ artisans (in            │          │ 'On-the-job' training   │
                    │ agriculture, mostly     │          │ and mentoring must be   │
                    │ young practising        │          │ done by a qualified     │
                    │ farmers or farmhands    │          │ artisan or master       │
                    │ along the VC).          │          │ craftsman.              │
                    └─────────────────────────┘          └─────────────────────────┘

                                                         ┌─────────────────────────┐
                                                         │ Mostly initiated and    │
                                                         │ managed by the employer,│
                                                         │ not the apprentice or   │
                                                         │ training institution.   │
                                                         └─────────────────────────┘
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The diagrams above, adapted from (DHET, 2013), indicate the different levels of WPL that ATCs can engage in to support practical training for their learners. In a more structured system, these are fundamental for training delivery, and students or learners are expected to undertake the different levels of the WPL to be awarded a certificate of completion. These are flexible depending on the curriculum, the occupation being offered and the TVET system in the country, but in a more structured and progressive
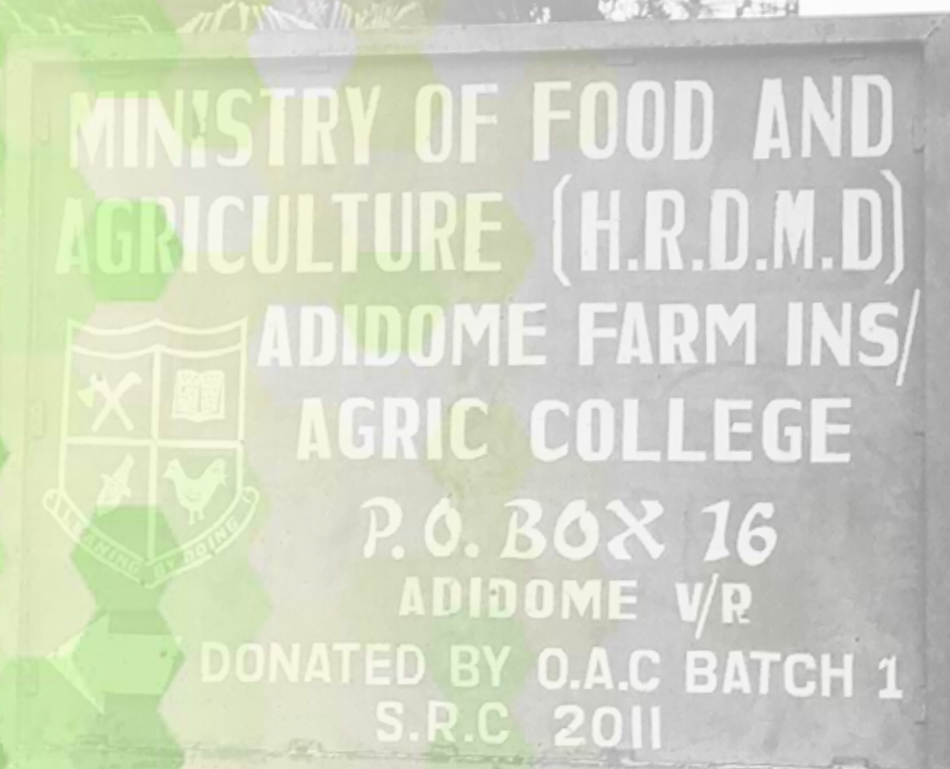
approach it is recommended that:

- **Workplace exposure (WE):** Is managed for the new entrants to the ATC. This should be done within the first year but is recommended within the first term of the school. This gives them a practical orientation and as they undertake the theoretical approach in their course, and makes them conversant with the daily work at industries, enterprises and value chain operations.

- **Workplace exposure (WE):** This is mainly for students who have covered enough theoretical training at the ATC and would be able to translate this to practical learning. It is recommended for students who have at least finished a full theoretical course in that particular occupation. For example, students who have undertaken a theoretical course in citrus seedlings preparation could be exposed to a farm where they will practice grafting of citrus. Within this short period they would be required, under the mentor, to handle the grafting process.

- **Internship:** This is much more elaborate approach to WPL and trainees spend considerable time at the industry or farm to learn all aspect of the value chain as studied at the school. It is recommended as part of the qualification process of vocational training and mostly undertaken during the school holidays before the final semester, or just after graduation from the ATC. It normally takes 4-6 weeks and gives a real-life work experience to the trainee who performs sometimes complex tasks under supervision of a mentor. Internships can also be regarded as a part of post-training work experience and thus not part of the qualification.

- **Apprenticeship:** In agriculture, apprenticeships could also be designed within the framework of cooperative training. Apprenticeships/cooperative training could be part of the formal training systems of ATCs, but mostly would be recommended as part of the non-formal ATVET delivery model where practicing farmers, young farmers and young people, who might not qualify for formal training admission, are supported under master craftsmen, master farmer, or value chain actors to undertake training within the practical environment. Theoretical training is structured and delivered in the non-formal modular system to augment the trainees' practical learning. In the ATVET system, this could be incorporated as part of a community outreach programme to target young farmers and entrepreneurs without them necessarily being admitted to the formal school system.

10.4 Framework conditions for private sector engagement with ATCs (guidelines)

A. As part of the ATC strategy, develop framework and incentives mechanisms to promote active involvement of relevant private sector/value chain actors in planning, governance, curriculum, qualification development and assessment, as well as school-enterprise cooperation and work experience learning. This could be one of the key objectives of the ATC's strategic plan.

B. Create appropriate approaches and frameworks that involve representatives of enterprises, workers, learners and civil society, including young people.

C. Make local private sectors actors that engage in your VCs and agro-ecological zones your priority. This application of sector-focus ensures direct and implicit linkages with the private sector. The key components of a local employer engagement strategy take into account the needs of the local labour market, the importance of building good employer relationships, of setting clear targets and goals, ensuring a flexible training system with a focus on quality, proving meaningful incentives, and creating clear pathways for continued learning.

D. Best results are achieved when employers are involved in the early stages of planning of new strategies or approach.

E. Employer involvement in skills development is most likely to occur in a favourable business environment with minimal bureaucracy and a fully committed government.

F. WPL depends on the continued involvement and support of employers. ATCs must therefore strive to address the skills needs of local employers and accommodate their business objectives, operating procedures, work processes, calendars, timing and managerial systems into their planning.

G. Sign MoU, contract or whatever legal or semi-legal document necessary to implement WPL in order to accommodate training, financing and expectations of employers, students and the ATC.

Case Study:
CAADP ATVET Organizational Capacity Development of Adidome Training Institute

Background

Adidome Farm Institute is one of the three farm institutes under the Human Resource Development and Management Directorate (HRDMD) of Ghana's ministry of food and agricultural. The others are the Asuansi and Wenchi Farm Institutes. Adidome Farm Institute is an ATVET institute established in 1964 to offer training to prospective and practising farmers, plus farmer- and community-based organizations, in appropriate modern farming techniques and methods to enable them establish enterprises on their own or with other agriculture-related organizations.

The institute has 25 members of staff including teachers and non-teaching personnel. There are facilities to accommodate approximately 500 learners at a time. The main programme has been a one-year Certificate in General Agriculture for the youth and practising farmers. However, it also runs a one-year practical training course for students from Ohawu Agriculture College as part of Ohawu's three-year programme. Students from the college spend the second year of their course at Adidome to learn a more practical approach. Adidome Training Institute was one of the first ATCs to benefit from the ATVET approach in organizational development and capacity building when the project was introduced in Africa in 2012.

Management system before CAADP ATVET support

The principal and deputy principal were responsible for the day-to-day administration of the Adidome Farm Institute. The management included the facilitators and the institute's secretary. The headmaster reported directly to the director of HRDMD. Financing was through government budgetary support and was supposed to be released quarterly, but this funding was not released regularly which negatively impacted on the performance of the institute. During the appraisal studies of ATVET in Ghana, the institute was rated among the worst performing ATCs in the country.

The community leadership had decided to transform the institute into a nursing training school and members of community were encroaching on and taking possession of the school's assets, including the land and farms earmarked for practical training. Facilities were rundown, lacked a demonstration farm, and had an outdated and non-functional

mechanization unit. This made the Adidome Farm institute unattractive to both young people and farmers and enrolment for technical and vocational education training in agriculture dropped to less than 25 students in 2012.

Although the institute has been a TVET establishment since its inception, none of the facilitators understood its approach to agricultural training and education. Teaching materials were not adapted to the competency-based training structure, the institute was not registered or accredited by the council in charge of TVET, and there was no linkage between the institute and industry players. Every institution is driven by a strategic plan, but it had no such document to direct its operation. As a result, staff were lacking in motivating. Adidome Farm Institute needed a paradigm shift for it to achieve its objective.

The turnaround: Building the capacity of management and trainers

After the launch of the ATVET in Ghana, the three public ATCs under the HRDMD (Adidome, Asuansi and Wenchi) and one public ATC (KITA) were selected to implement the project. A baseline study recommended key steps to be taken to position the institutes for the effective implementation of the project. It identified key strengths, weaknesses, threats and opportunities.

- The value chains of two demand-driven agricultural commodities, namely pineapple and citrus, were selected for curriculum development using the occupationally-led competency-based training (CBT) approach for teaching and learning. The curriculum development process, working with the value chain actors and private sector in the occupational standard (OS) generation, served as a capacity building exercise for all the trainers to understand key concepts, principles and objectives of technical vocational and education training and how it related to agriculture.

- Facilitators were taking through occupational standard generation, unit specification and the writing of learning material, the development of assessment instruments and marking guidelines, internal and external verification as tools for quality assurance, and the certification and graduation of learners.

- Key capacity development areas, including teamwork and management, industrial liaison management, induction or orientation of learners, lesson delivery plans, facilitation methods and work experience learning, were introduced to management and trainers.

- Alongside the capacity building, the institute was guided to develop its strategic plan. The above activities qualified Adidome Farm Institute and its facilitators to be registered and accredited as an agricultural technical vocational and educational training institute by the Council for Technical and Vocational Education (COTVET) in Ghana, for the first time since its establishment. The institute therefore has moved from farm institute under the ministry of agriculture to an accredited TVET provider, thus benefiting from the ministry of education support system and therefore ensuring sustainable and a nationally recognized certification.

- This was also achieved by working with COTVET and other accredited institutes to design the curriculum within Ghana's National Qualification Framework (NQF).

- The capacity building also included management, trainers and learners undertaking exchanges and experience-sharing at commercial farms, the processing industry, the Songhai Centre in Benin, the Latia Centre in Kenya and others, to observe good practices and the opportunities ATVET offer for skills training.

- On completion of the learning material for the citrus and pineapple value chains, the CAADP ATVET project supported the institute with key logistics for the delivery of the programme. Farm equipment needed for the specific training along these value chains has been maintained, including equipment for the establishment of demonstration farms for teaching and learning.

- Even though the school has not formally established a governing council, the formation and role of a technical working group (TWG) is assisting with the management processes of the institute.

Reaping the benefits of ATVET reform in Adidome

The Adidome Farm Institute has been reborn. Management and the staff have embraced the change, and suddenly other development partners, private sector industry players, individual farmers, and value chain actors are collaborating at various levels.

- **Collaboration with other systems:** For the first time in a long while, the institute has been receiving trainees from three major universities and a polytechnic for practical hands-on training. There are now annual field visits from the surrounding high schools to present career programmes to learners.

- **Public institution collaboration:** The institute, with support from the ministry of trade and industry's Rural Enterprise programme, has trained over 2,000 young people in selected value chains in occupationally-led and employable skills through non-formal training delivery.

- **Development partners:** The GIZ Green Innovation Centre project has used the Adidome's facilities to provide training in all forms and competences for the youth and farmers within the community. The Japanese international development, JICA is supporting training in mechanization, including tractor operation and management etc.

- The institute was able to apply and receive a grant from COTVET to construct a 12-unit piggery and infrastructure required for effective training in the piggery value chain. It was easy for the facilitators to transfer skills, knowledge and attitude learned in ATVET CBT project, strategic

plan development, and other related subjects, to win the competitive grant.

• Individuals are seeing the benefits Adidome is offering the community and are building partnerships for enterprise development. Currently two young men, through partnership with Adidome Farm Institute, have established a five-acre pineapple farm and plan to increase the scale of production. There is a private partnership with the institute for the rearing of 1,000 layers as a result of the institute's new image.

Key challenges ahead

Change often requires time and effort, especially when the status quo has existed for years. The CBT approach requires more hard work, commitment and resources (tools and equipment) and these were the challenges. We still have not fully integrated the private sector and WIL approach in our training model. Finally, there is a need to adapt all the learning material at the institute to the CBT approach and this requires time and support. There is the need to fully convert all courses offered at the institute to the competency-based approach.
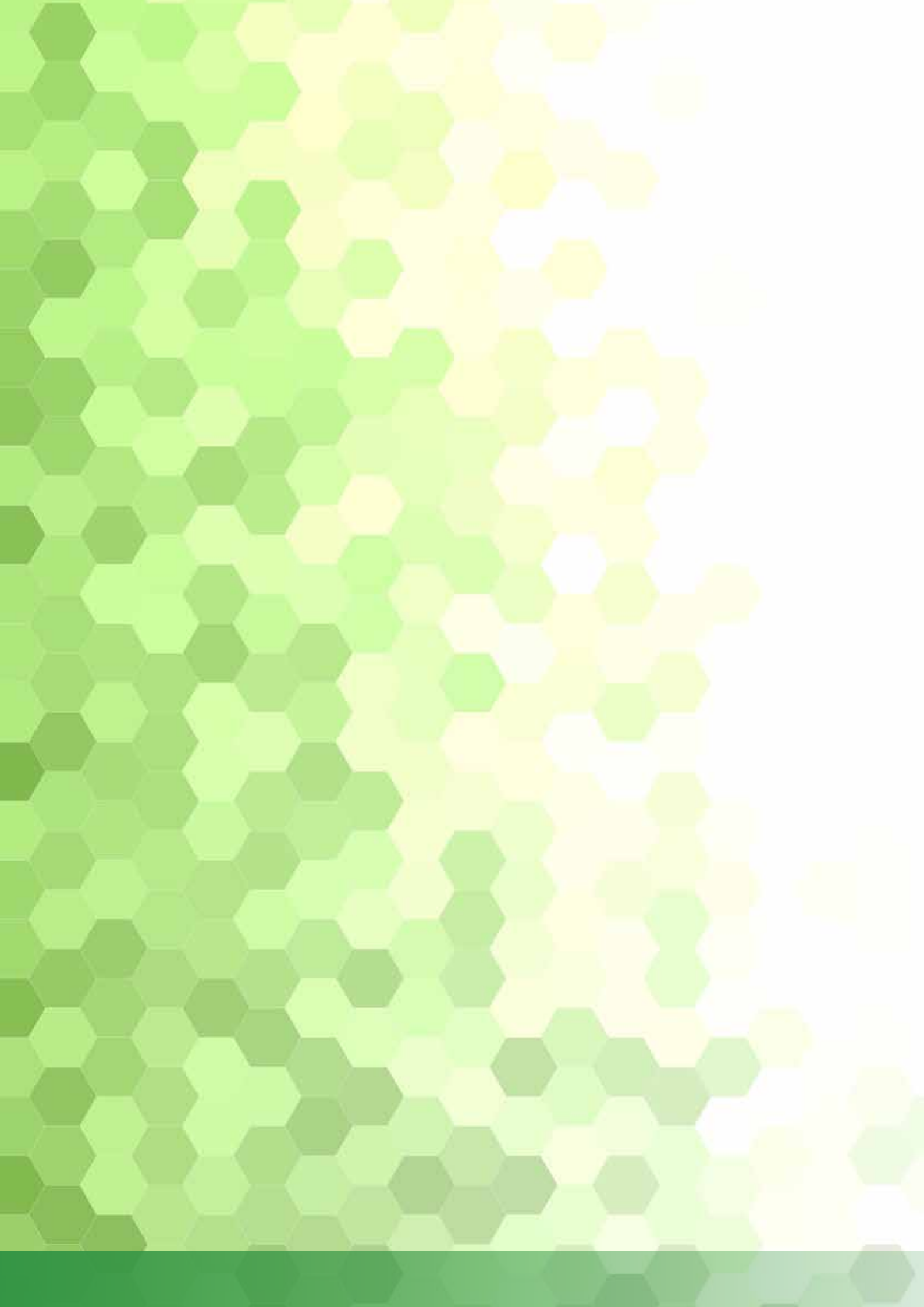
Conclusion

The general perception that young people are not interested in agriculture as a profession is wrong. Agriculture has not been made attractive to the youth. The ATVET approach ensures effective skills training for employability in trades along the value chain of selected commodities. With the requisite skills, knowledge and attitude, a farmer can be competitive in production. A professional workforce is needed to meet the ever-changing challenges in agriculture-related activities. Adidome has repositioned itself and is in the process of becoming a centre of excellence in agricultural technical vocational and educational training through the support of the ATVET project. The chief and people of Adidome have promised more land for the institute for its activities when needed. The human resource base, administrative structures (registration and accreditation of the institute and facilitators) and teaching and learning material have been developed for the implementation of ATVET. There a new Adidome Farm Institute, the best among the agricultural institutions under the Human Resource Development and Management Directorate Ghana's ministry of food and agricultural. This has been achieved through the support from the CAADP ATVET project.

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