

Independent Terminal Evaluation

MOROCCO

TRAINING ACADEMY FOR HEAVY-DUTY INDUSTRY EQUIPMENT AND COMMERCIAL VEHICLES

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Acronyms and abbreviations

Abbreviation	Meaning
AGEVEC	Académie Engins Lourds et Véhicules Commerciaux
BTP	Bâtiment et Travaux Publics (<i>In English: Construction and Public Works</i>)
DAC	Development Assistance Committee of the Economic Cooperation and Development
DFP	Département de la Formation Professionnelle (<i>In English: Vocational Training Department/Ministry of National Education and Vocational Training</i>)
EMBTP	Ecole de formation aux Métiers du Bâtiment et des Travaux Publics (<i>In English: Building Trades and Construction Training Center</i>)
EQ	Evaluation Question
FNBTP	Fédération Nationale du Bâtiment et des Travaux Publics (<i>In English: National Federation of Building Trades and Construction</i>)
HDIECV	Heavy Duty Industry Equipment and Commercial Vehicles
ITC/ILO	International Training Centre/International Labour Organization
MA/TNA	Market Analysis/Training Needs Assessment
MENA	Middle East and North Africa region
MoNEVT	Ministry of National Education and Vocational Training
OCP Foundation	Fondation de l'Office Chérifien des Phosphates
OFPPPT	Office de la formation professionnelle et de la promotion du travail (<i>In English: Office of Vocational Training and Employment Promotion</i>)
PPDP	Public Private Development Partnership
PSC	Project Steering Committee
PTC	Project Technical Committee
SEFP	Secrétariat d'Etat chargé de la Formation Professionnelle (<i>In English: State Secretariat for Vocational Training</i>)
TNA	Training Needs Assessment
ToR	Terms of Reference
ToT	Training of Trainers
UNIDO	United Nations Industrial Development Organization
USAID	United States Agency for International Development
VET	Vocational Education and Training
VTC	Vocational Training Center

Glossary of evaluation-related terms 1

Term	Definition
Assumptions	Hypotheses about factors or risks, which could affect the progress or success of a development intervention. Necessary conditions for the achievement of results at different levels; conditions that must exist if the project is to succeed but which are outside the direct control of the project management (also called the external logic of the project because these conditions lie outside the project's accountability and can be related to laws, political commitments, political situation, financing, etc.).
Baseline	The situation prior to a development intervention against which progress can be assessed or comparisons made.
Conclusions	The factors of success and failure of the evaluated intervention, with special attention paid to the intended and unintended results and impact, and more generally to any other strength or weakness. A conclusion draws on data collection and analyses undertaken, through a transparent chain of arguments.
Effectiveness	The extent to which the development intervention's objectives were achieved, or are expected to be achieved, taking into account their relative importance.
Efficiency	Measuring how economically resources/inputs (funds, expertise, time, etc.) are converted to results.
External evaluation/review	The evaluation/review of a development intervention conducted by entities and/or individuals outside the donor and implementing organizations.
Gender mainstreaming	Strategy for making women's as well as men's concerns and experiences an integral dimension of the design, implementation, monitoring and evaluation of policies and programmes in all political, economic and societal spheres so that women and men benefit equally and inequality is not perpetuated (the ultimate goal being to achieve gender equality).
Indicator	Quantitative or qualitative factor or variable that provides a simple and reliable means to measure achievement, to reflect the changes connected to an intervention.
Impact	Positive and negative, primary and secondary long-term effects produced by a development intervention, directly or indirectly, intended or unintended.
Lessons learned	Generalizations based on evaluation that abstract from the

¹ Definition of main evaluation concepts based on OECD DAC Guidelines

Term	Definition
	specific circumstances to broader situations. Frequently, lessons highlight strengths or weaknesses in preparation, design, and implementation that affect performance, outcome, and impact.
Logical framework	Management tool used to improve the design of interventions, most often at the project level. It involves identifying strategic elements (inputs, outputs, outcomes, impact) and their causal relationships, indicators, and the assumptions or risks that may influence success and failure (thus aimed at facilitating planning, execution, monitoring and evaluation of a development intervention).
Milestones	Interim targets; points in the lifetime of a project by which certain progress should have been made, providing an early warning system and basis for monitoring the trajectory of change during the lifetime of the project.
Monitoring	A continuing function that uses systematic collection of data on specified indicators to provide management and the main stakeholders of an ongoing development intervention with indications of the extent of progress and achievement of objectives and progress in the use of allocated funds.
Outcome	The likely or achieved short-term and medium-term effects of an intervention's output(s).
Outputs	The products, capital goods and services, which result from a development intervention; changes resulting from the intervention which are relevant to the achievement of outcomes.
Recommendations	Proposals aimed at enhancing the effectiveness, quality, or efficiency of a development intervention; at redesigning the objectives; and/or at the reallocation of resources. Recommendations should be linked to conclusions.
Relevance	The extent to which the objectives of a development intervention are consistent with beneficiaries' requirements, country needs, global priorities, partners' and donors' policies. Note: Retrospectively, the question of relevance often becomes a question as to whether the objectives of an intervention or its design are still appropriate given changed circumstances.
Results	The output, outcome or impact (intended/unintended, positive/negative; direct/indirect) of a development intervention.
Review	An assessment of the performance of an intervention, periodically or on an ad hoc basis. Note: Frequently "evaluation" is used for a more comprehensive and/or more in-depth assessment than "review". Reviews tend to emphasize operational aspects.

Term	Definition
Risks	Factors that may affect the successful achievement of an intervention's objectives (often outside the scope of the project).
Sustainability	The continuation of benefits from a development intervention after major development assistance has been completed. The probability of continued long-term benefits. The resilience to risk of the net benefit flows over time.
Target	Definite ends to be achieved; specifies a particular value that an indicator should reach by a specific date in the future.
Target group	Specific individuals/organizations for whose benefit an intervention is undertaken.
Theory of Change	Assumed overarching intervention logic from outputs to impact; schematic conceptual basis of the interventions including assumptions.

Executive summary

INTRODUCTION AND METHODOLOGY

The project Training Academy for Heavy-Duty Industry Equipment and Commercial Vehicle or Académie Engins Lourds et Véhicules Commerciaux (AGEVEC) aims to support specialized skills development and was developed in the framework of a Public Private Development Partnership among the United States Agency for International Development (USAID), the Government of the Kingdom of Morocco, the VOLVO Group, the United Nations Industrial Development Organization (UNIDO) and the Fondation de l'Office Chérifien des Phosphates (OCP) Foundation.

AGEVEC aims to promote youth employability and to stimulate in the long-term economic and social development in Morocco, Cote d'Ivoire and Senegal. Its overall development objective is to contribute to the efforts of Morocco, Senegal, and Côte d'Ivoire to reduce youth unemployment by narrowing the gap between supply and demand of skilled labour.

Between 2016 and 2019, AGEVEC trained or provided support to a total of 531 young men and women in three main areas:

- Heavy Equipment Maintenance (4 promotions, 240 beneficiaries)
- Heavy Equipment Operation (2 promotions, 269 beneficiaries)
- Crane Operation (2 promotions, 21 beneficiaries)

Methodology: The evaluation applied contribution analysis and the theory of change. Mixed qualitative and quantitative methods have been used to collect data, which has been consistently triangulated, ensuring a sound evidence-base. The evaluation framework included 7 Evaluation Questions (EQ), aligned to international standard evaluation criteria and the methodology adhered to UNIDO guidelines for evaluation. A participatory approach has been applied to the evaluation process.

EVALUATION FINDINGS AND CONCLUSIONS

Impacts (EQ 1): AGEVEC opportunities for long term changes should be identified in its potential positive effects in accompanying the reform process for skills development, offering a pilot for Morocco and the Regional Vocational Education and Training (VET) systems, where demand oriented and quality training is developed in partnership with the Private Sector, rather than in the number of graduates (quite contained compared to the overall market offer and demand). Satisfactory employment rates (above 70%) are achieved for the Heavy Equipment Maintenance course, initially planned as the only training under the project. In 2017 the Project was requested to support also training courses for Heavy Equipment Operation and Crane Operation. Several factors, including limited AGEVEC contributions, absence of trainers and unfavourable supervision ratios and lack of stringent trainee's selection criteria, did not allow achieving satisfactory employment rates for the two additional courses. (EQ 1.1 and 1.2).

AGEVEC partners have taken important steps in developing a replicable VET model for Morocco and the Region. AGEVEC provides as well potential to develop a global UNIDO VET strategy with significant opportunities of replication. The evaluation evidences show, however, several factors contributing to replicability still need to be consolidated. (EQ 1.3).

The intervention has the potential to generate a number of positive impacts, ranging from widening the offer of quality VET services to positive influence on the sector's ability to innovate. On the negative side, the low employment rates of students of the Equipment and Crane Operation courses (only partially supported by AGEVEC) have generated a significant amount of unemployed trained youth and may reflect negatively on AGEVEC brand (EQ 1.4).

Quality of design (EQ 2): Notwithstanding significant merits in the preparatory process and design strategic choices, the evaluation found that several aspects of AGEVEC design deserve to be strengthened, including specification of results, measurability and the building up of a credible Theory of Change.

Amongst positive aspects of the preparatory process, first and foremost, are the definition of strategic choices for achieving project goals, including the definition of sound mechanisms for the Public Private Development Partnership (PPDP), specification of roles and responsibilities of the players, and the articulation of the regional dimension of the project. (EQ2.1)

Light design favoured a hands-on and flexible approach where problems would be pragmatically addressed during implementation. The evaluation found, however, that several aspects of AGEVEC design deserved to be strengthened to support sustainability, effectiveness, performances, and impacts (EQ2.1).

The process of design would also have benefitted of an accrued participation of national counterparts, namely Office de la formation professionnelle et de la promotion du travail (OFPPT) and Fédération Nationale du Bâtiment et des Travaux Publics (FNBPT) (EQ2.1).

The Project logic mode was based on the simplified assumption that the three expected results would have sufficed to achieve the goal of sustainable production of 150 graduates per year. The intervention logic failed to internalize important complementary changes required to achieve sustainability (EQ 5.2). A number of sustainability factors were not taken into account during preparation, including policy, legislative and regulatory framework, OFPPT institutional development, Training Academy management capacities, market absorption capacities, and financial sustainability of the Academy (EQ 2.2).

Although measurability was inbuilt by the project design, result orientation would have benefitted from additional insights about labour market requirements, absorption capacities and an accrued specification of results, quantifying needs in term of equipment (result 1), curricula and teachers' training (result 2) and linkages of the school and graduates with the labour market (result 3), spelling clearly the transformation process linking financial resources to activities, activities to outputs and outputs to outcomes (EQ 2.3).

Relevance (EQ 3): The evaluation found that the project is relevant to needs and priorities of beneficiaries and stakeholders. The project is well aligned to the national vocational training strategies in Morocco, Senegal, and Ivory Coast (EQ3.1); the Heavy Equipment Maintenance course bears a strong relevance to the labour market as well as to the needs and the expectations of the youth in the three participating countries (EQ 3.2).

Heavy Equipment Operation and Crane Operation courses, which had limited AGEVEC inputs, were less relevant to graduates' and private companies' needs, as the set of skills provided were not aligned to labour market requirements and graduates expressed low level of satisfaction for these trainings. (EQ3.2).

Although both Market Analysis and Training Need Assessment are assessed as good practices, the depth of these studies is not adequate to guide the design of the training courses. (EQ3.3)

AGEVEC matches well UNIDO priorities even though the organization's strategic orientations for VET are not yet structured into an explicit strategy. (EQ3.4)

AGEVEC is well aligned to West Africa and the Sahel Regions needs for skills development and youth employment. Skills training and youth employment are highly placed in the international agenda and AGEVEC is part of a new generation of projects spearheading innovative approaches to Vocational Training in the Region (EQ3.5)

Effectiveness (EQ4): AGEVEC managed to establish a modern academy responding well to market demands for the Heavy Equipment Maintenance course, although the target of 150 persons per year could not be achieved during the project limited life span. The limited scope of AGEVEC intervention and partial contributions to Heavy Equipment and Crane operation courses did not allow the achievement of the goal for these courses. The third result, connecting the school and graduates to the private sector, has been only partially achieved.

The Training Academy was equipped, thanks to Volvo and USAID contributions, with modern equipment to support the Heavy Operation Maintenance course. Trainers and trainees expressed high satisfaction of the quantity and quality of the equipment. (EQ4.1)

Curricula were developed and trainers hired and trained. Between 2016 and 2019, 593 students enrolled (148 students per year) in the different training modalities. AGEVEC training programme on Heavy Equipment Maintenance was remarkably well prepared and delivered, receiving a very favourable assessment by private companies and recording high satisfaction rates of trainees. Graduates surveyed by the evaluation confirmed high satisfaction of the training programme. Its very satisfactory employment rates (70 to 83% of graduates finding a formal employment) confirm the alignment of trainings to the industry demand. (EQ4.2)

Heavy Equipment Operation and Crane Operation trainings were not assessed as favourably. The level of satisfaction expressed by graduates has been much lower, given the lack of employment opportunities after the training. (EQ4.2)

For Result 3 (Career service points established linking youth with labour market), activities are in progress and a Career Centre has been established at the Mohammed VI School. However, the expected change of establishing links between youth and the labour market, is not yet achieved. Current activities do not achieve a comprehensive and systematic linkage with private sector companies, with limited effectiveness in supporting transition from the School to the labour market. In Senegal and Ivory Coast all graduates found employment, a positive outcome attributing to the balance between limited offer and significant demand. (EQ4.3)

Efficiency (EQ 5): Overall, the project has been performing well and has been implemented according to plans and budget. Some components, particularly the

establishment of effective Career service points, linking youth with the labour market, have been only partially achieved. The evaluation evidenced as well how AGEVEC implementation period was too short (48 months) to achieve transformational changes required. The budget structure indicates a well-thought financial partnership, with balanced and complementary contributions. The apparently complex set up has proved to be working well, orchestrated by the well-performing implementation of UNIDO. (EQ 5.1)

The analysis of the Return on Investment points to an overall positive cost benefit ratio of the project, including the opportunity for an economic recovery of accrued costs in less than two years. (EQ 5.2) Effective and efficient management arrangements have been achieved thanks to: i) decentralisation, ii) human resources shared across several programmes and iii) good coordination arrangements. Project level responsibilities were well defined although the separation of roles and activities (Technical Assistance and School staff) did not consistently support sustainability, with several project activities not fully internalized by the Training School; this is to be imputed to a significant extent to a chronic shortage of School staff. (EQ 5.2)

OFPPT, FNBPT and the Training School vigorously contributed to AGEVEC with financial, human resources and administrative support. Limited partners' capacities diluted however the incisiveness in supporting the Project. AGEVEC worked as a laboratory to demonstrate management constraints to achieve high quality and demand oriented training, working within OFPPT institutional context. (EQ 5.3)

The project management team of AGEVEC put in place remarkable monitoring tools. There is however need for stronger review and lesson learning mechanism particularly in consideration of the pilot nature of the project. M&E mechanisms have limited School and partners' ownership, also in consideration for lack of dedicated staff. The evaluation evidences the need to reinforce capacities and resources for the follow up after the end of the project. (EQ 5.4)

AGEVEC partially applied a result-based management approach, with close follow up of performances indicators and adjusting for improved performances. This is one of the best practices evidenced by the evaluation for AGEVEC management. This approach could not be extended to courses for Heavy Equipment and Crane Operation. Career Service Point needs to strengthen its monitoring system and capacities. Management by results mechanisms and capacities need to be further developed at level of OFPPT, FNBPT and the School. (EQ 5.5)

The evaluation team observed an excellent role of UNIDO facilitating coordination and communication across actors. Particularly UNIDO facilitated the building of trust across institutional and private sector stakeholders. (EQ 5.6)

Sustainability (EQ 6): AGEVEC did make major progress to establish durable mechanisms. However, the limited time and the partial scope of the intervention have not allowed establishing full conditions for sustainability at the completion of the project. (EQ 6.1)

While AGEVEC business plan is a significant output in the right direction, as it identifies opportunities for income generation, the document per se does not provide conditions for achieving financial sustainability. (EQ 6.2)

Gender emerged as an important AGEVEC concern throughout the cycle of the intervention, including design, implementation, monitoring, and evaluation. The project

organised a pilot campaign for women enrolment. All women trainees were successful in finding relevant jobs. Such high level of concern on gender did not affect significantly the percentage of women finding employment amongst AGEVEC graduates, compared to the national share.

Reasons underlying the limited participation of women in the sector of heavy-duty industry equipment and vehicles (below 5%) include inherent risks and challenges as well as cultural norms. Nevertheless, AGEVEC contributed to plant the seed for a change, building the foundation for significant future potential impacts on women participation in the construction and public work industry. (EQ 6.3)

AGEVEC positions itself as a “pilot project”, testing on a relatively small-scale the concept of a demand oriented, and high quality VET training for Construction and Public Work sector in Morocco. Design and implementation contributed to address a number of drivers that will promote long-term goals. Several barriers, however, could not be addressed, as for instance variables related to small and medium scale enterprises, limited demand for improved skills, cultural norms, institutional set up, legislative and policy framework, regulations, limited trust across public and private sectors, and a range of capacities not yet in place, evidencing the necessity of continued work and support to achieve the full-scale sustainability and reliability of the pilot. (EQ 6.4)

Performance of Partners (EQ 7): The assessment of partners’ performances and commitment is overall very satisfactory.

UNIDO performed remarkably well in its role of project implementer. One aspect that stakeholders particularly appreciated is UNIDO capacity to act as a “federating agent”. Several actors expressed their concern that, with the end of the project and UNIDO support, this function will be missed, with a significant risk that synergies promoted by the private-public partnership might lose their edge. (EQ 7.1) Financial and in-kind support from USAID, Volvo, OCP Foundation and OFFPT were, broadly, delivered well and in accordance with the planned timeline. (EQ 7.2)

AGEVEC achievements wouldn’t have been possible without the contributions of private sector partners. Both FNBPT and VOLVO played a key role in building the “labour market orientation” planned for AGEVEC training. However, due to the partial scope of the market assessment and to the limited capacity of FNBPT to represent and bring forward the interests of the whole industry, only a segment of the Construction and Public Work Industry has been associated to the project. (EQ 7.3)

The project has been partially integrated to the organization and management structure of the school through its whole life. The evaluation evidenced several strengths of the institutional and management set up. On the other hand, significant gaps were identified in terms of appropriation, allocation of resources and partial sustainability of AGEVEC results and tasks. (EQ 7.4)

RECOMMENDATIONS

The evaluation recommendations have been grouped in two clusters:

- a) Recommendations aimed at the consolidation of AGEVEC results;
- b) Recommendations supporting future VET strategies and plan.

A – Short-medium term recommendations to consolidate AGEVEC results:

- R1 Identify mechanisms for follow up support to AGEVEC, consolidating the pilot, completing results and addressing sustainability factors;
- R2 Support for AGEVEC graduates who have not found employment; It is very important to continue to lend support to the AGEVEC graduates with job
- R3 Develop a Sustainability Plan for AGEVEC and strengthen sustainability mechanisms
- R4 Continue strengthening the capacities of the School;
- R5 Strengthen the relevance of training programmes;
- R6 Reorientation of the Career Centre to a "School-Business Department"
- R7 Strengthen private sector awareness of benefits related to the recruitment of skilled technicians

B – Medium term recommendations for replicability and upscaling

- R8 Future interventions should be supported by robust design, well aligned to international cooperation best practices;
- R9 Identify mechanisms to capitalize on AGEVEC lessons and establish a model to spearhead the new Strategy and Road map for VET in Morocco. AGEVEC experience should also support the building up of a comprehensive UNIDO strategy for skills development.

1. INTRODUCTION AND METHODOLOGY

1.1. Evaluation objective and scope

The purpose of the terminal evaluation of AGEVEC is to provide an external and independent assessment of the intervention with two specific objectives:

- (i) Assess the project performance in terms of relevance, effectiveness, efficiency, sustainability, and progress to impact;
- (ii) Develop a series of findings, lessons, and recommendations for ongoing and future projects implementation, supporting the replicability of successful experiences.

The evaluation supports both accountability and lesson learning.

The objective of the intervention is to establish “ a modern training academy, able to provide labour-market oriented training programs in maintenance of heavy-duty vehicles to an overall yearly intake of 150 young men and women from Morocco, Senegal and Côte d’Ivoire” and was developed in the framework of a Public Private Development Partnership among the United States Agency for International Development (USAID), the Government of the Kingdom of Morocco, the VOLVO Group, the United Nations Industrial Development Organization (UNIDO) and the OCP Foundation.

The temporal scope of the terminal evaluation embraces the whole duration of the project from its starting date on 1 November 2014 to the completion date on 31 October 2019. The evaluation looks at the projects’ life-span as a whole, including issues of initial project design, implementation, lessons learnt, good practices, replicability/scaling-up, and recommendations for future programmes.

The analytical scope includes the levels of achievement of expected outputs and outcomes.

The Juridical scope is set by the partnership agreements established by UNIDO with National Education institutions, USAID, OCP and Volvo. The evaluation process is guided by a set of evaluation questions and sub-questions (see evaluation framework in **Annex 2**) taking into account evaluation criteria and key issues raised by the terms of reference.

1.2. Overview of vocational training sector and construction and public work context

Vocational Training Overview

In 1984, the State initiated a reform of vocational training aimed at organizing training courses and diploma courses around three levels (specialization for primary school entrants, qualification for college trainees and technician for secondary school trainees) and the participation of professional organizations in identifying skills needs and mobilizing the teaching staff.

This system resulted in a) a weak structuring of continuous training and b) several limitations at the level of initial training, including: skill shortages in trades of worker

and skilled worker level, low reactivity in the creation of new highly demanded sectors and in updating or deleting old ones required by changes in the job market, lack of equipment renewal, low attractiveness of trainers with up-to-date profiles of changes in different trades, low proportion of apprenticeship or work-study training courses . Redundancies in the training offer are also observed, due to weak inter-departmental coordination. Overall, at the end of the training, graduates are largely left on their own and the proportion of those benefiting from the support of ANAPEC or of those with a successful professional integration has remained weak.

For the 2019-2020 school year, the vocational training system offers 408,038 places, of which 82% (335,013) in diploma training and 18% (73,023) in qualifying training, offered by 377 vocational training establishments in 230 courses. Almost 37% of initial training is carried out on a work-study basis, i.e. 92,537 trainees in 2019-2020, 93% of whom are hosted by private companies. Almost two-thirds of trainees are hosted in very small companies (64%) and only 12% in large companies.

Two recent laws may lead to major potential effects on the vocational training system

1. Organic law 111-14 has allocated wide prerogatives to the Regions to contribute to the supply of vocational training, thereby translating the desire of the legislator to ensure that the supply matches the needs of the territories.
2. Law No. 6017 on continuing training promulgated on May 2, 2019 intends to serve the objective of lifelong training open to all workers. This law, supported by the professional world, opens up new perspectives. Its implementation, and in particular its financial component, is currently under negotiation

Adopted in 2019, the **professional training roadmap** embodies orientations of the 2016-2021 professional training strategy:

- Upgrading of the training offer, associating within institutionalized sectoral committees, public and private stakeholders in the management of vocational training establishments, professional federations and resource persons mobilized by companies;
- Creation of vocational training centres intended to promote a new concept of professional, multi-sectoral and participative establishment, comprising documentation centres, digital resource centres, career centres, fablab, foreign language centres, in a logic of support for innovative trades;
- Development of a professionalization project for young players in the informal economy
- Project to renew teaching methods, particularly in the area of Soft Skills.

These orientations, still unevenly advanced, are the subject of intensive investment by public officials and professional federations.

Additional analysis of the context of Vocational Training in Morocco is provided in Annex 9.

Construction and Public Work context

The active population engaged in the building and civil engineering sector in Morocco is characterized as a whole by a fairly low level of education and training. In 2014, 49% of the employed were without a diploma, 34% had a basic education diploma and 7.4% the

bac or higher². It is important to note that 9.2% of the active population in the construction industry had a vocational training diploma.

According to the study "*Technical Assistance for Identifying the Skills Needs of the Construction and Public Work Sector*", for the year 2016, the total workforce in the construction sector was 1,061,318³.

The survey work conducted by the study identified 44 trades / job functions corresponding to 510,723 employees. Maneuvers account for nearly 36% of jobs. With the maneuvers, five other trades cover three-quarters of the jobs.

These five occupations and their weight in the sector's employment are as follows: woodworking formers 12.6%, masons 7.9%, machinery operators 7.2%, electricians, 5.8%, and scrapers 5%. The vocational training system dedicated to the construction sector offers 73,780 teaching places over 7 levels of training. There are diploma courses at the level of Specialized Technician, Technician, Professional Baccalaureate, Qualification, Specialization and professional career in addition to a series of training at the college level.

In all, the training offering provided by 207 vocational training institutions in Morocco covers 68 training programmes, including 30 diploma programmes. Of the 207 vocational training establishments, 14 establishments are completely dedicated to the construction sector. Out of these 207 establishments, the "*Office de la Formation Professionnelle et de la Promotion du Travail* » (OFPPT) mobilizes 1279 trainers, 500 of whom with professional experience. The Training Institute for Equipment and Road Maintenance is a state-run autonomous service (S.E.G.M.A), which is part of the Maintenance and Road Maintenance Division of the Roads Directorate. Its trainings benefit the agents of the State.

The OFPPT has a Skills Development Centre completely dedicated to the construction sector. The creation of the training school "*Ecole de formation aux Métiers du Bâtiment et des Travaux Publics* » (EMFMBTP) Mohamed VI⁴ (2016), aims at establish a reference centre for vocational training in the Construction and Public Work sector (Batiment and Travaux Public in French or BPT). Its current total capacity is 2000 trainees. At the beginning of 2018-2019, the school hosted nearly 1100 trainees in its various training programs, more than 100 of which come from countries in sub-Saharan Africa.

1.3. Overview of the project

The Project "*Training Academy for Heavy-Duty Industry Equipment and Commercial Vehicles*" or "*Académie Gros Engins et Véhicules Commerciaux*" (AGEVEC),⁵ aims at setting up "a modern training academy, able to provide labour-market oriented training programs in maintenance of heavy-duty vehicles to an overall yearly intake of 150 young men and women from Morocco, Senegal and Côte d'Ivoire". The training academy is set within the School Mohamed VI The Project builds a partnership with the Government of the Kingdom of Morocco, the Volvo Group, the United States Agency for

²Source: RGPH-HCP.

³ The CNSS reported for the same year a workforce of 428,636.

⁴ Further referred to as "Training Academy" in this report.

⁵ In the context of this report, further referred to as "The Project" or its French acronym "AGEVEC", to stay compliant with current stakeholders' designation.

International Development (USAID), the Fondation de l'Office Chérifien des Phosphates (OCP Foundation), and the United Nations Industrial Development Organization (UNIDO). The Training Academy aimed to offer courses in maintenance of heavy duty industrial equipment and commercial vehicles ⁶, providing a yearly intake of 150 students with the skills needed to find employment in the heavy duty industry equipment and commercial vehicles business.

The School Mohamed VI is located in Settat and is run by the Office of Vocational Training and Employment Promotion (OFPPT). The Training Academy does not only target students from Morocco, but also from Côte d'Ivoire and Senegal in order to foster regional cooperation in skills development within North and West Africa.

The Training Academy is supported by a Public Private Partnerships (PPP), where national institutions operating in the vocational education and training,⁷ partner with business represented by Volvo, SMT, and the National Federation Construction and Public Works Federation (Federation Nationale BTP in French or FNBTP⁸).

Project partners, including USAID, OCP Foundation, and UNIDO have agreed to work together to develop and implement a technical and professional skills development training programme combining a theoretical and practical learning, and internships at partner companies.

AGEVEC aims to promote youth employability and to stimulate in the long-term economic and social development in Morocco, Cote d'Ivoire and Senegal. The overall development objective of this project is *to contribute to the efforts of Morocco, Senegal, and Côte d'Ivoire to reduce youth unemployment by narrowing the gap between supply and demand of skilled labour.*

Between 2016 and 2019 AGEVEC trained or provided support to a total of 531 young men and women in three main areas:

- Heavy Equipment Maintenance (4 promotions, 240 beneficiaries)
- Heavy Equipment Operation (2 promotions, 269 beneficiaries)
- Crane Operation (2 promotions, 21 beneficiaries)

In 2017 the project was requested to support Heavy Equipment Operation and Crane Operation' training courses, not part of the project formulation, with the aim to increase the number of graduates per year and align it to the project t specific purpose (150 graduate per year). However, contributions to these two courses were limited and evaluation findings can be only partially attributed to the project.

The large majority of project beneficiaries (517, i.e. 95 %) were men and only 14 women.

⁹

⁶ The scope of the Training Academy, initially focused on Heavy Equipment Maintenance, was, in 2017, broadened to the Heavy Equipment Operation and Crane Operation.

⁷ Ministry of National Education and Vocational Training, Vocational Training and Employment Promotion Office.

⁸ The National Federation will be further referred in this report as FEBTP.

⁹ This gender distribution reflects the Building and Public Transport sector prevailing rate, traditionally a man trade, providing few employment opportunities to women. The limited access of women is due to issues of security, challenging work conditions and cultural factors.

According to their provenience, graduates were from Morocco (453), Senegal (37), Cote d'Ivoire (39), and Djibouti (2).

1.4. Theory of change

The Theory of Change is a heuristic approach ¹⁰ to help clarify the links between project activities and long-term objectives. Key in the development of a Theory of Change is the identification of the conditions likely to bring about the behavioural changes required to achieve the long-term goal of the project ¹¹ typically referred to as system transformations. Given the complex nature of the interactions of human behaviour and the environment, and the unpredictability of outcomes of these interactions, it is also critical to identify the key assumptions made during project design and the ways project management adapted to unexpected circumstances during implementation ¹².

The Theory of Change is an important tool that supported stakeholders better understanding of the processes that project sought to influence. It has been instrumental, in the context of this evaluation, to assess sustainability and provide lessons and recommendations. AGEVEC project did not explicit in its preparation process a full Theory of Change. In order to exemplify the transformation process, the evaluation has developed two models of the Theory of Change: a) Faithful, based on the transformation process as defined by the project document and b) Reconstructed, based on evaluators' improved understanding of the variables affecting changes.

a) **Faithful Theory of Change**; representing the transformation process defined by the project document (see figure 1). It is a simplified theory, assuming that with the delivery of three key outputs (school equipped, programmes delivered and career service points established) and the concurrence of very few external factors, the project objective could be achieved. The initial hypothesis, stated by the Project Document, included:

- "If young people have the right skill sets, they will be able to find employment"
- Stable political situation in the three Countries
- Ministry commitment to develop the Training Academy
- Adequate number of applications

The crucial limitation of this simplified model is that it doesn't take in consideration a number of essential variables (additional outcomes and conditions to be in place) needed in order to achieve the objective and contributing to a **sustainable flow of benefits**.

b) **Reconstructed Theory of Change**; built on the evaluation improved understanding of the transformation process.

The evaluation process evidenced that while the project document' few assumptions have been, by and large, concurring positively, a number of other factors had to be in place in order to build sustainability, strengthen impact opportunities, and develop replicability of the model. The evaluation process helped to uncover several of these complementary conditions needed to achieve quality and demand orientation of

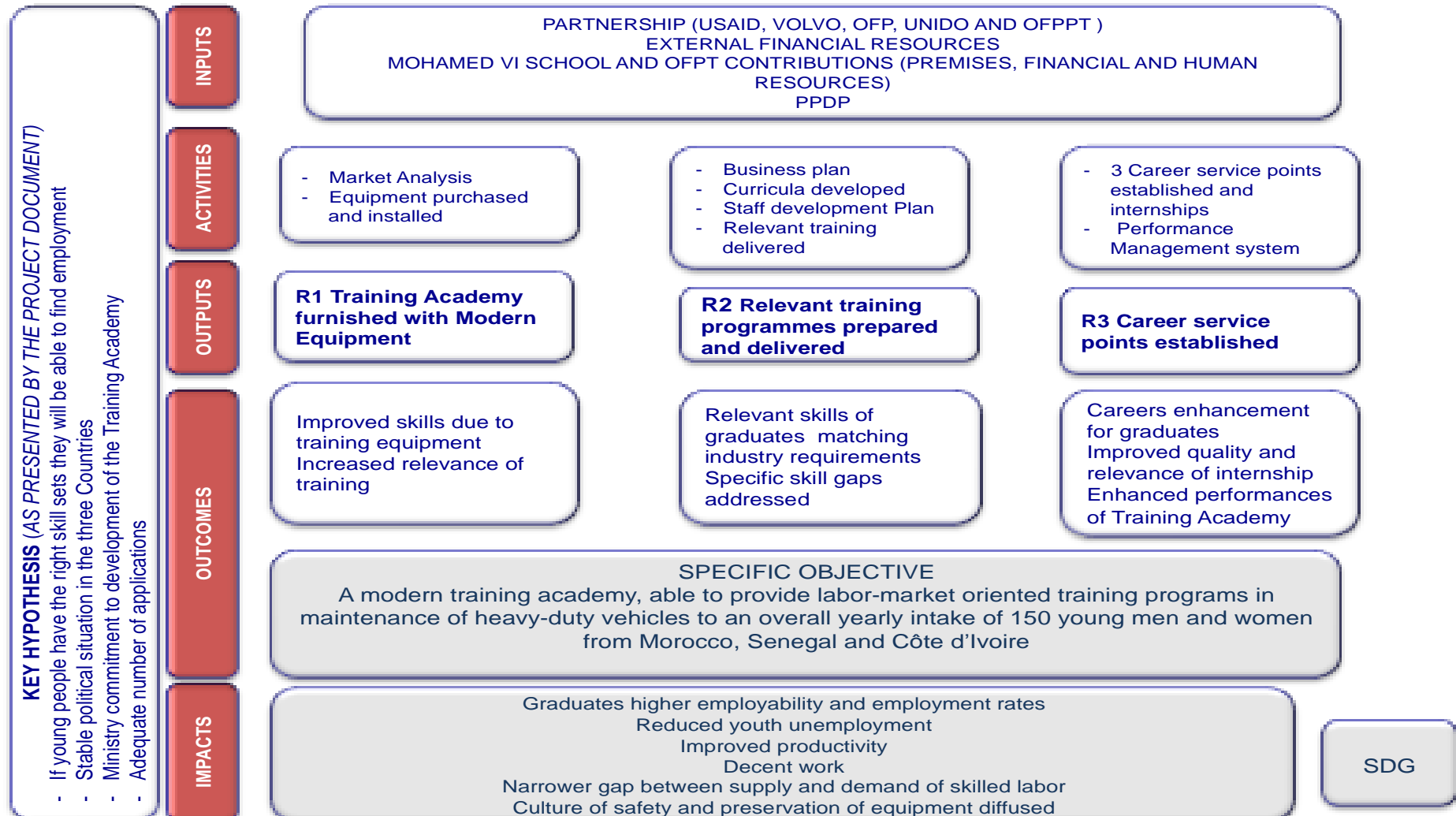
¹⁰ Heuristic is an approach to problem solving that employs a practical method that is not guaranteed to be optimal, perfect or rational, but which is nevertheless sufficient for reaching an immediate and short-term goal.

¹¹ Chen 1990; Mayne 2008.

¹² Folke et al. 2002; Levin 2003.

training. These variables have been integrated ex-post to a more elaborated model of the Theory of Change.

AGEVEC TERMINAL PROJECT EVALUATION
FIGURE 1 – AGEVEC FAITHFUL THEORY OF CHANGE



The following table summarizes key variables interacting with the different levels of the result chain, expressing the increased level of complexity of the Theory of Change, when these factors are taken into account.

Table 1 External factors applying to the different levels of the intervention logic

From Inputs to Deliverables	From Deliverables to Outcomes	From Outcomes to Impacts
<ul style="list-style-type: none"> • OFPPT will have the flexibility and resources to support the implementation of the Training Academy • FNBPT has capacity and resources to adequately link businesses with the School and support demand orientation of courses • Adequate incentives are provided to School Trainers and Management • Adequate numbers of applicants for AGEVEC courses • Preparation of additional AGEVEC courses will be guided by in depth Market Analysis and Training Need Assessment. 	<ul style="list-style-type: none"> • Full ownership of process and results by national stakeholders including OFPPT and private sector • Improved policies, legislation and regulatory framework for construction training • Capacity and proactivity of public institutions to take over and sustain the results achieved • Management, monitoring and evaluation capacities, and mechanisms in place in the School • Performing governing bodies and processes established across institutional partners and private sector stakeholders • Trusting partnership in place (private and public sectors) • Staff recruited by school to meet accrued human resources for Training Academy • Budget mobilized by Office, School and Private Sector to face accrued investment and operation costs • International agreements and financing mechanisms in place for the training follow up of the students from Senegal and Ivory Coast 	<ul style="list-style-type: none"> • A favourable institutional and political enabling environment is in place • A conducive environment is established to promote increased gender balance and acceptance of women in a milieu that has been traditionally an exclusive realm of men • Economic growth supports increased labour market opportunities in the three Countries • Ongoing reform of VET sector in Morocco and definition of a new road map for implementation • Change of awareness and mentality in business, particularly for medium and small enterprises • Increased demand for new technology skills and soft skills • Increased demand for health and security standards • Information about AGEVEC training standards reaches most public and private industry operators

Source: Evaluation Team Assessment of External Factors Contributing to Project Goals

For the transformation process to occur, leading to expected results and goals, these variables need to be either internalized by the project design (thus becoming “results” or changes supported by the intervention), or taken into account as “external factors” and eventually monitored and influenced for their positive concurrence.

Risks inherent to these variables should also be taken into account and eventually mitigated (internalization of risks).

1.5. Evaluation methodology and data collection

The evaluation is aligned to criteria and approaches for international development assistance,¹³ to “UN Norms and Standards for Evaluation” and UNIDO Guidelines for the evaluation of Technical Cooperation Programmes, and Projects and evaluation policies.

The evaluation has been carried out as an independent evaluation, using a participatory approach whereby all key parties associated with the project have been informed and consulted throughout the evaluation.

The evaluation applied contribution analysis and the theory of change (see section 1.3 above). Mixed qualitative and quantitative methods have been used to collect data. Data has been consistently triangulated, ensuring a sound evidence-base.

The evaluation focuses on the extent of the achievement of the expected results.

Gender mainstreaming was addressed by a specific sub-question (EQ 6.3) in accordance the UNIDO Policy on gender equality and the empowerment of women, UNIDO gender guidelines, and the UNEG guidance on evaluating gender and human rights. To the extent possible, data has been sex-disaggregated and different needs of women and men targeted by the programme have been considered throughout the evaluation process.

The following data collection methods were applied:

1. **Documentary review** (see list of documents reviewed in **Annex 3**)
2. **Review of AGEVEC monitoring data;**
3. **Interviews;** included UNIDO staff, financial partners, Institutions (OFPPT), School management and staff, AGEVEC Technical Assistance, Federation of BPT companies (FNBPT), 12 Companies in the three Countries, focus persons in Senegal and Ivory Coast, students and graduates. The list of persons met and interviewed is attached in **Annex 4**. Semi structured interview guides linked to the Evaluation Questions have been prepared during the inception phase of the mission.
4. **Focus groups;** Three focus groups were organized with:
 - i) Students
 - ii) Trainers
 - iii) GraduatesFocus group methodology and interview guides are attached in **Annex 6**.

¹³ OECD/DAC Evaluation Quality Standard.

5. **Observation and visit to the School site;**
6. **Survey of Graduates;** In consideration of the evaluation focus at level of outcomes and impacts, and the limited information available on graduate's insertion in the labour market, the evaluation included amongst the data collection tools a quantitative and qualitative survey of graduates. The survey targets a sample of 64 graduates out of the universe of 351 AGEVEC graduates who have completed the training for a period of more than 12 months. The survey questionnaire was administered via direct interviews, telephone and Skype calls, and email. The survey report is attached in **Annex 7**.

1.6. Limitations of the evaluation

Theory of Change; The theory of change has been used by the evaluators to assess the extent to which project activities correctly targeted the conditions that are likely to contribute to the long-term goals of the project. However, the use of a theory of change does not mean that AGEVEC will be held accountable for having resulted in system change as system transformations take time and rarely do they take place within the time span of the intervention.

Survey; Despite the survey being able to reveal the impacts for the individuals, its scope was significantly limited by the time span and resources allocated to the evaluation and did not cover the full range of effects associated to the AGEVEC. Examples include distributional goals, which are often hard to measure but nevertheless important. In order to capture these effects, a cost-benefit analysis should be conducted as a follow up step, widening the perspective of impact opportunities.

Control Group; An additional limitation is the absence of a control group and the possibility to establish a counterfactual, comparing outcomes and impacts with a situation without AGEVEC support.

2. EVALUATION CRITERIA: FINDINGS

2.1. Impact

EQ 1 How likely is it that AGEVEC will contribute to meet labour market needs for maintenance of heavy-duty vehicles in Morocco, Cote d'Ivoire, and Senegal at a yearly intake of 150 young men and women?

AGEVEC opportunities for long term changes should be identified, rather than in the number of graduates (quite contained compared to the overall market offer and demand) in its potential positive effects in accompanying the reform process for skills development, offering a pilot for Morocco, the Regional VET systems and Settat Training Academy Mohammed VI, where demand oriented and quality training is developed in partnership with the Private Sector.

Satisfactory employment rates (above 70%) are achieved for the Heavy Equipment Maintenance course, initially planned as the only training under the project. In 2017 the Project was requested to support also training courses for Heavy Equipment Operation and Crane Operation. Several factors, including limited AGEVEC contributions, absence of trainers and unfavourable supervision ratios and lack of stringent trainee's selection criteria, did not allow achieving satisfactory employment rates. (EQ 1.1 and 1.2)

AGEVEC partners have indeed taken important steps in developing a replicable VET model for Morocco and the Region. AGEVEC provides as well potential to develop a global UNIDO VET strategy with significant opportunities of replication. The project evidences how, however, several factors contributing to replicability still need to be consolidated. (EQ 1.3).

The intervention generated (or has the potential to generate) a number of positive impacts, ranging from widening the offer of quality VET services to positive influence the sector's ability to innovate. On the negative side, the low employment rates registered for the Equipment and Crane Operation courses have generated a significant amount of skilled-unemployed youth and may reflect negatively on AGEVEC brand (EQ 1.4).

Impacts overview ¹⁴

A quantitative and qualitative analysis of changes at impact level has been carried out for the following variables related to employment and employability:

- i) Employment situation
- ii) Relevance of employment to the training
- iii) Perceived AGEVEC contribution to access jobs
- iv) Length of search of employment and employment' duration
- v) Wages

¹⁴ The analysis of impact opportunities is supported by three main data set:

- The survey carried out on AGEVEC graduates (Annex 8)
- The Project end line survey
- Interviews with trainees, graduates (including focus group with 17 graduates), and businesses

1. Employment of AGEVEC graduates

Survey results (table 2 below) show how graduates trained in Heavy Equipment Maintenance found a job. The majority - at least two-thirds - of the three promotions is employed in a formal job. For the Equipment Operation, the survey points that 28% are looking for a job, 12.5% have returned to school or engaged in unpaid internships to improve their skills, and 12.5% have professional activities with their family. Nearly 19% work in an informal setting and only 28% have formal work.

Table 2: Percentage of AGEVEC graduate according to employment situation

Course and Promotion	Employment situation					Total
	1 Formal	2 Informal	3 Auto employment / family work	4 Training	5 Actively seeking job	
Engine Operators	28,1%	18,8%	12,5%	12,5%	28,1%	100,0%
Crane Operators-1	50,0%			16,7%	33,3%	100,0%
M1 Maintenance - 1	75,0%	25,0% ¹⁵				100,0%
M2 Maintenance- 2	83,3%	8,3%	8,3%			100,0%
M3 Maintenance-3	69,6%			4,3%	26,1%	100,0%
Total	53.3%	10,4%	6,4%	7,8%	22,1%	100,0%

Source: Evaluation Survey (Annex 7).

The following table shows the data on employment from AGEVEC end line surveys (6 months after the end of the training program) disaggregated by course, nationality, and gender. (Note: these employment figures include internships as well).

Table 3: AGEVEC employment by country and sex

Course	Morocco		Senegal		Cote d'Ivoire		Total
	M	F	M	F	M	F	
Maintenance (Promotions 1,2 and 3)	61	3	17	2	17	2	102
Crane Operation	3	0	0	0	0	0	3
Heavy Duty Operations (Promotion 1)	4	0	0	0	0	0	4
Total	68	3	17	2	17	2	109

Source: AGEVEC end line survey (Communication to Evaluation Team, October 2019).

2. Perception of relevance and adequacy of employment

For the Heavy Equipment Maintenance course graduates, 59% of respondents perceived total relevance of the employment with the training acquired at AGEVEC.

¹⁵ AGEVEC staff commented the data with the following statement : "All of them (ie the first batch of Heavy Equipment Maintenance Course" had found a formal job so there might be a confusion. "this question is sometimes misunderstood by the trainees".

35% of employed graduates feel that the job is “suitable” to their training qualifications. Only 6% perceive that their current job has no relation to the training acquired at AGEVEC.

Table 4: Percentage of AGEVEC graduates by job suitability (by course and promotion)

Course and Promotion	Current job being adequate to skills acquired in AGEVEC			Total
	1 Yes	2 Partial	3 No	
Engine Operators - 1	21.1%	10.5%	68.4%	100.0%
Crane Operators-1		33.3%	66.7%	100.0%
M1 Maintenance - 1	75.0%	25.0%		100.0%
M2 Maintenance- 2	50.0%	41.7%	8.3%	100.0%
M3 Maintenance-3	61.1%	33.3%	5.6%	100.0%
Total	43.6%	42.9%	26.8%	30.4%

Source: Evaluation Survey (Annex 7).

3. Perception of the extent of AGEVEC contribution to obtain employment

More than three-quarters of the graduates of the Equipment Maintenance course reported that their training contributed in obtaining a satisfactory job. The percentage is only of 21% for Equipment Operators and 0% for Crane Operators.

Table 5: Number and percentage of employed graduates who felt that AGEVEC training contributed positively to obtaining a satisfactory job

Course and Promotion	Yes	No	Total	Yes	No	Total
Engine Operators - 1	4	15	19	21.0%	79.0%	100.0%
Crane Operators-1	0	3	3	0.00%	100.00%	100.0%
M1 Maintenance - 1	3	1	4	75.0%	25.00%	100.0%
M2 Maintenance- 2	8	4	12	69.2%	30.8%	100.0%
M3 Maintenance-3	15	4	19	79.0%	21.0%	100.0%
Total	30	27	56	53.4%	46.6%	48.21%

Source: Evaluation Survey (Annex 7).

4. Length of search and duration of employment

On average, the graduates of the Heavy Equipment Maintenance course sought their employment for 4 months, while the graduates of the Equipment and Crane Operation averaged respectively 7 and 8 months.

The average duration of employment is longer for the graduates in the maintenance sector, who on average gain access to more favourable employment conditions.

Table 6: Length of job search, job stability and average monthly earnings for AGEVEC graduates

Course	Average number of months		Salaries dirhams	Number of graduates surveyed	
	To find job	In current job		Graduates with job	Total
1 Engine Maintenance	4	11	5,858	31	38
2 Crane Operation	8	4	2,150	2	6
3 Engine Operation	7	5	2,406	17	32
Total	5	9	4,536	50	76

Source: Evaluation Survey (Annex 7).

5. Wages

Average incomes are significantly higher for the graduates in the Heavy Equipment Maintenance course. Although figures do not allow considering averages as significant for Equipment and Crane Operators, employment conditions appear to be lower.

Table 7: Average salaries in Dirhams

	Job situation	Course			
		Equipment Maintenance	Crane Operation	Equipment Operation	Total
Monthly salary	1 Formal job	6,052	2,150	2,767	5,094
	2 Informal	3,750		2,084	2,500
Average	3 Auto employment / family			1,750	1,750
	4 searching job	2,450			2,450
	Total	5,683	2,150	2,406	4,452
Number of respondents	1 Formal job	28	2	9	39
	2 Informal	2		6	8
	3 Auto employment / family			2	2
	5 searching job	2			2
	Total	32	2	17	51

Source: Evaluation Survey (Annex 7).

Table 8: Net wages in Morocco, Ivory Coast, and Senegal (values in Dirhams)

Country	Average
Ivory Coast	10,830
Morocco	4,592
Senegal	6,459
Average	5,683

Source: Evaluation Survey (Annex 7).

Overall these figures point to positive employment rates and graduates' satisfaction for the Heavy Equipment Maintenance Course. Variables as duration of employment and wages appear as well to be encouraging.

The analysis of the following paragraphs points to the opportunity of significantly improving these figures with more effective post-training services. Conversely, indicators for courses for Heavy Equipment and Crane Operation clearly point to challenges to achieve expected impacts. These courses received only partial support by AGEVEC, lacked of adequate preparation, including an in-depth market and training assessment need. Both courses suffered as well of significant constraints during implementation (see analysis of effectiveness § 2.4).

1.1 To what extent has the project established the necessary conditions, addressed drivers and overcome barriers in order to achieve its long-term objectives of increasing the employability of the trainees in the three Countries?

The project has taken important steps to increasing trainees' employability in the three Countries. Employment rates remain modest nonetheless. The analysis in the following paragraphs evidences how drivers and barriers need to be addressed in three areas:

- i) Training Offer
- ii) Labour Market Demand
- iii) Capacity Transfer

1 Training Offer

A number of drivers, on the offer side, should be further strengthened in order to improve employability and employment for graduates:

- In depth assessment of market and training need assessment ¹⁶
- Adequate courses preparation ¹⁷
- Stringent criteria for trainees' selection, following lessons learned from Heavy Equipment Operation and Crane operation courses ¹⁸
- Building excellence of courses, starting with small numbers in first promotions, according to the model applied with Heavy Equipment Maintenance course
- Reinforcing practice and internships
- Strengthening linkages with the industry.

Career Services: An important barrier is the need to significantly strengthening linkages with the private sector and post-training services¹⁹. Result 3, aiming at establishing the link between the school, trainees and graduates and private sector companies, was only partially achieved.

The project contacted more than 100 companies in Morocco, Senegal and Cote d'Ivoire in order to better integrate AGEVEC into the industry environment and to support the sustainability of the training and services developed by the Academy. The project hired two consultants, a business developer and a specialist in partnerships with the private sector. The business developer is responsible for creating and maintaining relationships with professionals in the industry, in particular with the aim of generating internship opportunities and employment for the AGEVEC trainees. The specialist in partnerships with the private sector is responsible for facilitating partnership agreements between the EMBTP/AGEVEC and companies that have supported the project, in particular by providing internships or recruiting trainees.

¹⁶ Finding supported by low level of market insertion of Equipment and Crane Operators courses. Ministry of Education is currently implementing a thorough need assessment across sectors; however the training need assessment requires accrued specification of skills in demand by the private sector to orient skills offer and support the design of training courses.

¹⁷ Ibidem.

¹⁸ Clear and quite demanding criteria were defined for the Maintenance training program. While revising the crane and heavy equipment operation training programs, AGEVEC project recommended to update and upgrade selection criteria as well.

¹⁹ Examples of services in demand by trainees, graduates and businesses include: a) systematic coaching to all graduates supporting job quest, b) systematic screening of private sector businesses (including small and medium sized) building a comprehensive national overview of demands and establishing a database of jobs, c) coaching and sending introductory letters supporting interviews for graduates, d) continuous monitoring of graduate employment situation and businesses satisfaction, providing feedback for orientation of the training offer.

The partial achievement of Result 3 significantly influenced the transition of graduates to the labour market²⁰. Trainees in Cote d'Ivoire and Senegal (78 graduates in total) could be adequately supported by local focal points beyond training completion, reaching a 100% employment rate²¹.

Several interviewed stakeholders confirmed how career services are instrumental in linking training graduates to the labour market. The importance of such support was evidenced by the focus group with graduates. The participants expressed frustration and clear concern about their lack of opportunities in obtaining even a job interview. Several were explicit: *"we can't even cross the companies' outer fence"*. *"We are stopped at the door and we give our CVs to the security staff"*. *"We are sure that security staff will dispose CVs in the trash"*.

According to the project document, career service points *"will be established to liaise with the private sector to arrange internships, to place graduates in the heavy duty vehicle industry, and to ensure that the trainees' qualification matches company needs"*.

2 Labour market demand

AGEVEC experience holds strong potential to make the school-to-work transition easier and faster. However, through interviews, especially those with private sector representatives, the evaluators found that a good share of businesses is reluctant to hire young people whose productivity is unknown. It is also difficult for employers to fully apprehend the technical and soft skills of young jobseekers during a recruitment process. As a result, they hesitate to hire fresh graduates and instead rely on experienced (but often untrained) candidates while making hiring decisions.

Generally speaking, there is a net cost for enterprises (e.g. mentorship, productivity, etc.), which outweighs the initial contribution of young inexperienced graduates. Several studies (i.e. ILO, IADB, CINTERFOR)²² show that, over time, as new recruits learn the trade, they become more productive and the benefits for businesses on the basis of a skilled workforce far outweigh the initial investment.

Additionally, the "AGEVEC trade-mark" is still relatively unknown to businesses. In this regard, there is still room for strengthening the collaboration among AGEVEC and private sector companies in order to match business needs in terms of skilled labour force.

3 Capacity building and capacity transfer

In consideration of the School shortage of staff, UNIDO Project staff took over a significant portion of AGEVEC-related activities: selection/recruitment of trainees; training of trainers; curricula development and/or review; elaboration of training plans; overall training supervision; organization of exams; internships management and coordination with companies; soft skills training and career services provision, and monitoring / evaluation mechanisms.

²⁰ Source: Converging views of trainees, graduates, and businesses respondents. Several experiences in VET projects point to the importance of post-training career service provision to support insertion in the labour market.

²¹ Source: Interviews with Project team and School Mohammed VI staff.

²² *Apprenticeship Systems and Work-based Learning in Latin America*. Global Apprenticeship Network (GAN), Geneva, 2018.

Although the School, OFPPT, and other project partners participated in these processes, there is a widespread agreement among key stakeholders consulted on the fact that the Project did not design and implement a systematic approach to capacity building and capacity transfer to them.

There is also a general concern that with the project end and UNIDO withdrawal, these activities risk to be discontinued or decreased in quality standards (e.g. Internships management; coordination with the private sector; delivery of soft skills training; career services provision, and monitoring and evaluation).

1.2 To what extent it is likely that AGEVEC will contribute to reduce youth unemployment in the three Countries for the targeted sector?

AGEVEC impact opportunities should be identified, more than in the number of graduates (very contained compared to the overall market offer and demand), in its innovative approach and in its offering a "model for change" in Morocco and in the Regional VET systems and for Settat Training Academy, where demand oriented and quality training is developed in partnership with the Private Sector. The AGEVEC Project is a pilot initiative that aims to contribute to meet labour market needs for maintenance of heavy duty vehicles in Morocco, Cote d'Ivoire, and Senegal at a yearly intake of 150 young men and women.

As shown in the table below, during the 2016-2019 period, yearly intakes for the different courses offered at AGEVEC amounted to 593 trainees. This is an average yearly intake of 148 young students, which is very close to the project's target.

Table 9: AGEVEC yearly intakes (2016 - 2019)

	2016	2017	2018	2019	Total
Maintenance	84	84	72	62	302
Crane Operator	0	0	22	0	221
Heavy Duty Operation	0	137	72	0	209
Total	84	221	226	62	593

Source: AGEVEC, October 2019.

Taking into account these figures it is unlikely that the AGEVEC will make a difference in terms of macro unemployment rates. AGEVEC shows, however, a strong potential to fill the gap with regards to the countries' required *training efforts* related to heavy duty vehicles, as evidenced by the table below showing training needs forecasted by the FNBTP.

Table 10: Training Efforts Forecast Morocco (2019-2023)

Course	2019	2020	2021	2022	2023
Maintenance	496	521	547	575	604
Crane Operator	262	276	290	304	319
Equipment Operation	5,261	5,524	5,800	6,090	6,395

Source: Fédération Nationale du Bâtiment et des Travaux Publics, 2018.

Regarding Cote d'Ivoire and Senegal, the evaluators do not dispose of projections. In both countries, private sector company representatives interviewed had the opinion that currently there is a strong demand for skilled labour force in the Construction and Public Work Sector and that this demand will probably increase in the mid-term; as one of the interviewees expressed: "*the country is being built*".

1.3 To what extent has AGEVEC contributed to develop a “VET model” replicable in Morocco and in other countries?

AGEVEC partners have taken important steps in developing a replicable VET model. However, several factors contributing to replicability need to be yet strengthened.

AGEVEC project put in place a series of good practices (PPDP, market assessment, curricula development, Training of Trainers, internships, career services, and result oriented management supported by monitoring and evaluation) that, in the evaluators’ experience, are rare in other VET interventions implemented in developing countries, and even less so in a combined way.

Replicability in Morocco and the Region; Several key stakeholders consulted in Morocco expressed their desire for continued support from UNIDO in order to consolidate the results achieved so far and to scale-up the “AGEVEC model”. AGEVEC experience for Heavy Equipment Maintenance stands as a model for excellence in training in Morocco, and a pilot for replication under the new strategy and road map. The model aligns with and complements the National Vocational Education and Training Strategy 2021 (SNFP 2021), approved by the Moroccan Government in 2015, and interviewees in Senegal and Cote d’Ivoire underlined the potential (and need) for replicating the AGEVEC in both countries.

As described in the relevance section, youth employment and economic growth is a wide-spread policy priority within African countries. Also skills training and youth employment in West Africa and the Sahel Region are regarded by both Governments and Donors as an effective path to promote peace, stability and decreased emigration flows.

Replicability for UNIDO; Against the current background of Africa’s challenges to tackle youth employment and within a favourable international agenda, the evaluation found that there is a strong potential for UNIDO to scale-up and replicate “AGEVEC” model and develop a global long-term strategy on vocational education and training, as well as national/sub-regional programmes.²³

Globally, through multiple PPDP experiences carried out in various countries, UNIDO has acquired a unique knowledge, expertise and reputation in the VET sector. In this regard, the evaluation found that there is a strong potential for UNIDO to develop a global, high quality, integrated and coherent long-term strategy on vocational education and training, as well as national/sub-regional programmes.²⁴ AGEVEC experience evidences a number of Important aspects to be systematically integrated in future UNIDO strategies for skills development, in order to strengthen impact opportunities: (a) building and transferring capacities to national partners and stakeholders; (b) providing support services to businesses (especially to SMEs²⁵) directed at increasing

²³ The evidence for “strong potential” is based on the analysis made by the evaluation’ group of experts of numerous skills development projects in Africa over the past decade. This knowledge is supported by recent trends of international cooperation. The information consistently points that AGEVEC experiences represent, in several respects, a successful pilot for quality and demand oriented training offer, based on solid partnerships with the Private Sector. The replicability is also evidenced by the Country increasing demands in quality and inclusive technical training.

²⁴ Ibidem

²⁵ Small and Medium Enterprises

management skills, technological know-how and business development; (c) ensuring the interventions' long-term sustainability. It is also advisable to include policy advisory services. These might cover a broad range of activities, from mainstreaming VET-Youth Employment into national and regional development strategies to providing technical advice on VET reforms.

Box 1

AGEVEC experience points clearly how replicability and upscaling need to be consolidated by a number of complementary factors (see Sustainability analysis, § 2.6) including: adequate design and course preparation; in-depth market assessment; linkages with the industry; strengthening policy, legislative and regulatory environment; development of ownership and capacity transfer.

1.4 Did the project contribute to additional impacts, positive or negative?

AGEVEC generated, or has the potential to generate, a number of positive impacts, ranging from widening the offer of quality VET services to positive influence the sector's ability to innovate.

1 Positive impacts (actual and potential)

The evaluation evidenced several opportunities of AGEVEC contributions to long-term changes. Contributions to these impacts need additional work to strengthen the drivers and address barriers to sustainability.

- **Widen the offer of quality VET;** AGEVEC contributed to widen the offer of quality VET while aligning the skills demand and supply, addressing the current skills mismatch
- **School-to-work transition;** securing a first job present real challenge for young people. Employers are reluctant to hire young people whose productivity is unknown. On the other hand, the youth are usually not well equipped to seek employment. AGEVEC experience holds strong potential to make the school-to-work transition easier and faster
- **AGEVEC is a potential pathway to better jobs for young people;** AGEVEC holds a strong potential to facilitate access to more stable and better-paid jobs, as compared to other VET initiatives. It also has the potential to shorten the period of unemployment before getting a first job, having a positive effect on reducing the duration of unemployment, and improve wages
- **Contribution to an overall improved workforce and to social mobility;**
- **A stable and reliable pipeline of qualified workers;** several businesses representatives, interviewed, underlined the AGEVEC's potential to provide the private sector with a stable and reliable pipeline of qualified workers, along with the possibility to scout/check out future talent. This would be a help for companies to avoid recruitment mismatches and thus save on recruitment costs.
- **Developing a highly skilled labour force;** combined with the apprenticeships, AGEVEC is in an excellent position to help businesses develop a highly skilled labour force, and provide an opportunity to try out new talent and to train young people according to the company's philosophy. This has the potential to turn on high conversion rates, meaning that upon finishing, apprentices might be offered a contract with the company.
- **Training people in the entrepreneurial or corporate mind-set;** some business mentioned the importance of training young people in the mind-set of the company,

citing respect for their business principles, morals and ethics, punctuality, discipline, responsibility, occupational safety, and health (OSH), amongst others.

- **AGEVEC’s potential to boost innovation;** AGEVEC has the potential to positive impact the sector’s ability to innovate. Well-trained workers are more likely to understand the complexities of an enterprise’s production process, and can thus more easily identify and implement ways in which technological improvements can be made.²⁶
- **A skilled workforce helps boost productivity;** A skilled workforce has the potential to provide the abilities needed for innovation to take place, for firms to adapt and develop new technologies, and for human capital to be brought closer to firms’ needs.

Additional potential “transformational changes” supported under AGEVEC include:

- Result-oriented management approach applied to VET and promotion of quality-oriented, modernized pedagogical approaches
- Establishment of a Regional model for Vocational Training
- Security in the work environment
- Soft skills development
- Gender and promotion of women in the Construction and Public Works sector

2 Negative impacts

The evaluation team conducted a focus group discussion with 13 AGEVEC graduates; 7 (54%) were trained on Heavy Equipment Operations and Crane Operation and all are currently unemployed. During the discussions these young graduates voiced a deep sense of discomfort with their predicament, as notwithstanding the time invested in training, they cannot manage to find job. This, as they explained, keeps them in a precarious economic situation and increases their frustration and despair.

Moreover, the negative employment outcomes of some courses may tarnish the quality of the Training Academy and AGEVEC brand, affecting opportunities for scaling up and replicability.

2.2. Quality of design

EQ 2 To what extent the preparatory process and AGEVEC design supports relevance, impact opportunities, effectiveness, and a performing implementation?

Notwithstanding significant merits in the preparatory process and design strategic choices, the evaluation evidences several aspects of AGEVEC design that deserve to be strengthened, including specification of results, measurability and the definition of a credible Theory of Change.

AGEVEC preparatory process had significant merits. First and foremost, the definition of strategic choices for achieving project goals, including the definition of sound

²⁶ ILO, *Toolkit for Quality Apprenticeships*. Volume I: Guide for Policy Makers. ILO 2017

mechanisms for the PPDP, specification of roles and responsibilities of the players, and the articulation of the regional dimension of the project. (EQ2.1)

A light design favoured a hands-on and flexible approach where problems would be pragmatically addressed during implementation. The evaluation evidenced, however, how several aspects of AGEVEC design deserved to be strengthened to support sustainability, effectiveness, performances, and impacts (EQ2.1).

The process of design involved the Ministry of Education; however, the formulation of results would have benefitted of accrued contributions of OFPPT, FNBPT and the Training School including for definition of targets, resources and budget, and specification of national commitments. (EQ2.1).

The Project theory of change was based on the simplified assumption that the three expected results would have sufficed to achieve the goal of sustainable production of 150 graduates per year. The Theory of Change failed as such to internalize important complementary changes required to achieve sustainability (EQ 2.2). A number of sustainability factors were not taken into account during preparation, including policy, legislative and regulatory framework, OFPPT institutional development, Training Academy management capacities, market absorption capacities, and financial sustainability of the Academy (EQ 2.2).

Although measurability was inbuilt by the project design, result orientation would have benefitted of additional insights about labour market requirements, absorption capacities and an accrued specification of results, quantifying needs in term of equipment (result 1), curricula and teachers' training (result 2) and linkages of the school and graduates with the labour market (result 3), spelling clearly the transformation process linking financial resources to activities, activities to outputs and outputs to outcomes (EQ 2.3).

2.1 Is AGEVEC design aligned to best practices and due diligence, including full analysis of problems, assessment of alternative choices and specification of the result chain?

AGEVEC preparatory process had significant merits. First and foremost, the definition of effective strategic choices for achieving project goals, including the definition of sound mechanisms for the PPDP implementation, specification of roles and responsibilities of the key stakeholders, and the articulation of the regional dimension of the project²⁷.

The formulation process defined as well the three key results for establishing a centre of excellence for Construction and Public Work training. Design merits include a well-defined specific objective and, to a certain extent, result orientation.

The level of specification for each of the three results was, however, skimpy, lacking of adequate granularity to support detailed planning²⁸ and constrained systematic

²⁷ Sources: Interviews with UNIDO and other stakeholders and evaluation team assessment of the project document.

²⁸ The evaluation evidenced, for instance insufficient planning for important deliverables as the Career Centre and the Business Plan. Need to distinguish specific deliverables from the consultative processes that led to the final products. In the case of the career center, we could rely on a dedicated room and training material from 2016 onwards. With regard to the business

application of result-based management²⁹. The light design favoured a hands-on and flexible approach where problems would be pragmatically addressed during implementation.³⁰

The evaluation evidenced several gaps in project design, whereas a more accurate preparation would have better served project sustainability and performances:

- a) Light analysis of the Construction and Public Work sector labour demand and shallow problem analysis covering only part of problems related to a market-oriented training (among others it is mentioned that TVET system “*doesn’t meet the requirements of the private sector*” without exploring the causes of this)
- b) Superficial analysis of external factors, leading to an overly simplified intervention logic
- c) Shallow risk analysis, focused on few risks and mitigation measures; a sensitivity³¹ analysis would have helped to assess risks and define targets
- d) Insufficient specification for the three results; for instance, project formulation had the foresight to plan solid linkages with the private sector through result 3. However, this result lacked (and by the time of the evaluation is still lacking) of specification, including the how, how much, and when the result would have been achieved³²
- e) Need for an in-depth Market Analysis³³ as a pillar for building up the project design
- f) Planning of partners contributions (for instance, Volvo contributions in equipment and training inputs) deserved further specification³⁴
- g) Few design provisions about institutional set up and organizational arrangements
- h) Very limited design inputs about monitoring and evaluation of the intervention
- i) Although the budget in the project document has been structured by results, it is lacking a detailed planning of the financial flow and the specification of the

plan, more important than the actual figures is the sensitization of the school management about the need to better plan maintenance costs and investments and to generate additional revenues. Also, the preparation of the Equipment Operators’ Course could have benefitted of more detailed planning.

²⁹ Finding based on analysis of the project document and interviews with Volvo staff (Result 1), UNIDO, Training Academy and AGEVEC Technical Assistance (Result 2) and Career Centre staff (Result 3).

³⁰ Sources: Interviews with UNIDO and evaluation team assessment of the project document.

³¹ A sensitivity analysis determines how different values of an independent variable affect a particular dependent variable under a given set of assumptions.

³² The Career Centre role appears to partly address these functions and partly to provide pedagogical support to trainees for soft skills. Despite this, the mandate is not clear.

Comment from the project: “*disagree on that: this is typical US-inspired work readiness program that includes modules on professional behaviors (including soft skills) and the provision of tools to find a job*”

Also, mechanisms are not yet established to sustainably link the school and facilitate a systematic graduates’ access to the private sector.

Comment from the Project: “*The career center or the project are not an employment agency. The Project can act as a facilitator but finding a job remains a personal initiative, the students’ sole responsibility. The Project can only provide guidance and assist*”.

Evaluator response to the comment: “*The Career centre is an important result of the project. The communication with the firms and the support to the trainees for getting good internships, in collaboration with the trainers, are key functions of the Career centre. These are key conditions to achieve effectiveness and for beneficiaries’ insertion in the labour market: the quality of internships and the awareness of companies of the quality of the training given at AGEVEC are factors that effectively facilitate the insertion of trainees.*”

³³ Evaluation Team Assessment of the Market Analysis and feedback from graduates and businesses on market.

³⁴ Volvo communication to the evaluation Team, October 2019.

transformation process supported by AGEVEC, linking financial resources to activities, activities to outputs and outputs outcomes.

Box 2 AGEVEC design trade-off

The evaluation team recognizes the trade-off between the need for a detailed blueprint for the intervention and a more flexible approach, where solutions are pragmatically found during implementation, an approach favoured by AGEVEC.

However, in consideration of the intervention short timeline, a more accurate preparation, aligned to best practices and due diligence for development cooperation investments, would have strengthened the Project capacities to address several challenges met during implementation including for instance a sound design for the curricula development of all AGEVEC training courses and the set-up of effective linkages with the private sector.

A more accurate preparation would have strengthened significantly opportunities for sustainability, future upscaling and impacts.

The design process would also have benefitted of an accrued participation of OFPPT, FNBPT, and the Training Academy, supporting ownership, commitment and accountability of the national stakeholders.

Studies delivered during implementation, meant to improve the design process, did not achieve the level of depth and accuracy to support effectiveness, impact, and sustainability, including: i) Market assessment for Heavy Equipment and Crane Operators, ii) Training Need Assessment and iii) Training Academy sustainability plan and exit strategy.

2.2 To what extent the preparation took into account sustainability factors? And did the design include adequately all results needed to achieve the desired objective? ³⁵

AGEVEC preparation inbuilt important elements of sustainability, including the set-up of private – public partnerships, making use of the Training School and the already existing institutional arrangements. Similarly, the training offer for the Heavy Equipment Maintenance was based on a genuine market demand.

The evaluation, however, evidenced how the design provided insufficient consideration to several additional sustainability dimensions, i.e. elements necessary to maintain the flow of benefits after the end of external support. ³⁶

The project document theory of change was based on a simplified assumption that the three expected results were conditions sufficient to achieve sustainably the goal of training 150 graduates per year, with skills fully aligned to market demands. External

³⁵ Subquestions 5.2 (*To what extent the preparation took into account sustainability factors?*) and 5.4 (*Did the design include adequately all results?*) have been merged into one, following the consideration that they delve the same issue pointing to a common finding, as both relate to the transformation process and the finding that project design did not adequately address changes related to sustainability issues.

³⁶ Source of evidence for limited design attention to sustainability factors include: a) evaluation team assessment of AGEVEC project document, theory of change and logical framework and b) Interviews with UNIDO staff, private companies, FNBPT, AGEVEC Technical Assistance, Training Academy management and staff, Volvo management and OFPPT.

factors have been succinctly mentioned in the logical framework, but then dismissed as “issues beyond project control” de facto ignoring important complementary changes required to achieve sustainability. The following points highlight sustainability design shortfalls:

- **Market sustainability;** the market assessment was carried out only for one of the three training courses supported by AGEVEC. The Market Analysis study carried out for the Maintenance course (2016) did not provide an adequate analysis of the market segments, of the quantity, distribution of the demand (per year, per region), and risks of saturation (sensitivity analysis). The Market Analysis did not specify specific skills required by the business. Design did not foresee the development of sustainable mechanisms for follow up of market analysis and feedback from private companies.³⁷
- **Institutional sustainability;** Project design did not address issues of institutional mechanisms and capacities (at level of OFPPT and Training Academy) required to achieve project goals. ³⁸
- **Financial sustainability;** Project design did not address issues of how recurrent costs would be covered after the end of the project. A part of operation costs were taken under the wing of the project,³⁹ leaving unanswered questions on how these expenditures will be sustained in the future. Design did not foresee mechanisms to replace the Technical Assistance and carry out the work implemented by project staff.
- **Management mechanisms and capacities;** AGEVEC design supported innovative school management mechanisms, with a private sector manager sitting at the wheel of the Training Academy, supporting measurability and monitoring. However, the design did not specifically address results to strengthen the management capacities required to maintain the flow of benefits.
- **Legislative and regulatory environment;** the project design did not address “enabling environment” linked to sector policies, legislation and regulatory framework affecting the achievement of project goals
- **Design did not specify an exit strategy** accompanying the final phase of AGEVEC

According to interviewed stakeholders, the preparatory phase limited attention to sustainability issues was the result of concomitant factors:

- The contained project financial envelop and the short timeline provided the rationale for a compact design, strategically oriented at addressing few results, recognizing that AGEVEC resources were scarce to address constraints at institutional and macro levels
- Stakeholders (including UNIDO, Donors and OFPPT) were interested in setting up a practical model, focused on achieving, over a timeline of few years, tangible results

³⁷ Feedback mechanisms, were established at project level but, by the time of the evaluation, they were not internalized by OFPPT, the Training Academy and FEBPT.

³⁸ Examples of the institutional issues which required further attention: mechanisms for recruitment of qualified teachers, salary scales, and institutional capacities, including a number of transformational changes required to support the radical shift from an offer oriented VET system to demand and labour market orientation.

³⁹ Including, for instance, stage incentives and teachers’ extra hours.

- Limited availability of financial resources to be invested in project preparatory activities.

The analysis of AGEVEC sustainability is further developed under EQ 6.

2.3 To what extent design supported full measurability and result orientation?

A positive lesson to be drawn from AGEVEC design is its measurability of the three results, including the specification of key performance indicators at outcome level (i.e. number of graduates and rate of absorption by the labour market).⁴⁰

In order to further strengthen results orientation, project design should have provided better insights about labour market requirements and absorption capacities, quantifying needs in term of equipment (result 1), curricula and teachers' training (result 2), and linkages of the school and graduates with the labour market (result 3), spelling clearly the transformation process linking financial resources to activities, activities to outputs and outputs to outcomes.⁴¹

2.3. Relevance of the intervention

EQ 3 To what extent AGEVEC responded to the needs of the beneficiaries and the stakeholders in Morocco, Senegal, and Cote d'Ivoire?

The evaluation evidenced full relevance of the intervention to needs and priorities of beneficiaries and stakeholders.

The project is well aligned to the national vocational training strategies in Morocco, Senegal, and Ivory Coast (EQ3.1); the Heavy Engine Maintenance course bears a strong relevance to labour markets as well as to the needs and the expectations of the youth in the three Countries (EQ 3.2).

Heavy Equipment Operation and Crane Operation courses, which had limited AGEVEC inputs, had less relevance to graduates and private company's needs, as the set of skills provided were not aligned to labour market requirements and graduates expressed low levels of satisfaction for these trainings. (EQ3.2).

Although both Market Analysis and Training Need Assessment are assessed as good practices, the depth of above-mentioned studies is not adequate to guide the design of training courses matching the labour market demands (EQ3.3)

AGEVEC matches well UNIDO goals and priorities even though the organization strategic orientations for VET are not yet structured into an explicit sector strategy (EQ3.4)

AGEVEC is well aligned to West Africa and the Sahel Regions in terms of skills training needs and youth employment; skills training and youth employment are highly placed in the international agenda and AGEVEC is part of a new generation of projects spearheading innovative approaches to Vocational Training in the Region (EQ3.5)

⁴⁰ Finding based on the analysis of the project document and KPI defined at level of each result and project objective.

⁴¹ Ibidem.

3.1 To what extent the project is relevant to Morocco, Senegal, and Cote d'Ivoire national priorities and strategies?

AGEVEC project is fully relevant to National Policies and strategies in the three Countries.

- **Morocco;** The National Education and Training Charter “*aims to meet the skills needs of companies and to improve workers, in general, and young people, in particular, employability. Based on a new integrated approach, the vocational training strategy is based on a policy of openness and dynamic partnership involving public authorities, chambers and professional associations, social partners, and NGOs*”. AGEVEC is translating these ambitions into practice, through cooperation of Industry, Institutions and Donors. ⁴²

The relevance to Morocco national policies is further reinforced by the new strategy and road map for vocational training⁴³, aimed at establishing regional centres of excellence (Cités des Métiers et des Compétences, CMP), intended to align vocational training offer to market demands. Both quality and demand-focused training are principles fully applied by AGEVEC; the project stands as a possible model to be replicated by the new road map.

- **Senegal;** The project is relevant to Senegal sector policies and also to the legislative and strategic framework ⁴⁴ promulgating the “*sub sector modernization with ultimate goal of satisfying labour market needs in qualified human resources*”.
- **Cote d'Ivoire;** Vocational training in Côte d'Ivoire is being fully structured in order to adapt to technological and organizational changes⁴⁵. The Ministry of National Education, Technical Education, and Vocation Training confirmed ⁴⁶ that the project is also fully relevant to national strategies for Vocational Training.

3.2 To what extent AGEVEC work is relevant to the needs of the beneficiaries, the participating institutions, and to the targeted labour markets?

Training on Equipment Maintenance proved to be fully relevant to the expectations of the school students and graduates ⁴⁷. On the other hand, the set of skills provided to the graduate of Heavy Equipment Operation and Crane Operation Courses, which were supported by AGEVEC with limited inputs, were not in line with industry requirements, including for lack of adequate number of hours of equipment operation practice and insufficient skills related to precision and rapidity of operation of heavy equipment and

⁴² The relevance to Morocco national priorities has been confirmed by the evaluation team interview with OFPPT officials and the review of the “National Education and Training Charter”.

⁴³ The Roadmap for the Development of Vocational Training and the Project for the Creation of the “Cities of Trades and Skills” has been approved on April 5 2019 under the patronage of H. King Mohammed VI. (sources: i) evaluation team interviews with OFPPT and Training Academy staff, ii) National Press, Le Matin, edition April 5th 2019).

⁴⁴ *Loi d'Orientation de la Formation Technique et Professionnelle*, Senegal, 2001.

⁴⁵ *Construire un Système de Formation Professionnelle*, in L'Expérience Ivoirienne, Maninga Gbato, 2016.

⁴⁶ Skype interview, October 23, 2019.

⁴⁷ Finding confirmed by several sources including i) focus group with AGEVEC graduates, ii) interviews with students, iii) stagiaires perception survey (AGEVEC 2017), and iv) evaluation survey of sample of graduates.

cranes. Both these courses were backed by a national sector need assessment of skills needs and were launched before the involvement of AGEVEC. The limited relevance to labour market requirement of these two courses is supported by the very low rate of market insertion of graduates.

Morocco Vocational Training Institution (OFPT) and the National Federation of BPT (FNBPT) found the three courses fully relevant to their goals and priorities and supported the launch of Heavy Equipment Maintenance course in 2016 and the initiation of new courses for Equipment and Crane Operators⁴⁸ in 2017.

Between November 2016 and February 2017, the project conducted a survey among private sector companies in order to assess the relevance of the on-going maintenance course in relation to their actual needs. The study confirmed the relevance of the Maintenance Trainings delivered by the AGEVEC. Moreover, Maintenance graduates represent the highest employment rate among all AGEVEC graduates.

The evaluation team interviewed 10 Companies across the three countries and found a solid consensus about relevance of the training on Equipment Maintenance to the respective labour markets (see box).

Box 3 Relevance of Equipment Maintenance Training to sector Companies

All Companies expressed a high appreciation of the training and the quality of the trainees, pointing to the relevance to the industry needs, and in particular for the following aspects:

- Technical preparation;
- Understanding of circuits, electricity, electronics and hydraulics;
- Security;
- Soft skills and capacity to write and read.

Several respondents suggested that needs of different segments of the market, and particularly small and medium BTP enterprises, may follow different criteria, privileging often lower costs, family ties, and direct relationships rather than technical competences and soft skills.

Views of private sector operators on the relevance of training of Heavy Equipment and Crane Operators' courses varies significantly suggesting that experience and practice are a key factor for employment. The issue of the need to reinforce the relevance to market demand of the two courses is evidenced by the very low insertion rates of graduates. Limited relevance of the two courses to the market demands could be linked to a number of factors including⁴⁹:

- Need to support course design with accrued specification of BPT private sector needs (including for instance, for demands of different segments of the private sector, geographic distribution and specification of skill requirements)
- Lack of trainers and unfavourable trainer / trainees' ratio
- Quality of preparation, availability of equipment and very few hours of practice, and large number of students for the first promotions of the Heavy Equipment Operation training

⁴⁸ Relevance of courses to OFPPT and FEBPT is supported by acts of AGEVEC Steering Committee and the Training Academy' "Conseil d'Administration". The finding is confirmed by interviews of the evaluation team with management and staff of both institutions.

⁴⁹ Low insertion rates according to the evaluation findings are also related to the lack of services linking graduates to the Companies and accompanying them in the search of employment.

While employment rates among Heavy Equipment Operation graduates appear low, the Fédération Nationale du Bâtiment et des Travaux Publics (FNBTP) anticipates a substantial expansion of employment opportunities and training needs in the next years⁵⁰ (Please refer to the Impact section, § 2.1)

The crane operator' training relevance vis-à-vis the market's needs remains unclear. Interviews conducted by the evaluators among private sector representatives resulted inconclusive in this regard. Moreover, the employment rates for AGEVEC's graduates have been modest.

3.3 To what extent Market Analysis (MA) and Training Need Assessment (TNA) supported the relevance of the design of the intervention?

The three courses were supported by a comprehensive Market Analysis and Training Need Assessment carried out by FNBTP⁵¹

Needs evidenced by the Market Assessment appear to be important: for the function Heavy Equipment Operation (Conducteur d'Engins BPT) the study identifies an annual market need of 1840 operators and for Crane Operators (grutiers) an annual need of 92 operators.

The study was supported by a sound methodology and contributed to the relevance of training design.

The courses of Heavy Equipment Operation and Crane Operation were initially established by the School without the support of AGEVEC.

3.4 To what extent is the programme relevant to UNIDO's mandate and to Donors Priorities ?

The project is fully relevant to Donors and UNIDO priorities.

The analysis of relevance evidenced how the intervention is fully aligned to USAID priorities for private sector development in Morocco, to Volvo corporate priorities of supporting skills development in Morocco and in the Region as well as OCP Foundation priorities for promoting youth employment and support to skills development in neighbouring Countries.

The AGEVEC project is fully relevant to UNIDO goals, mandate, and priorities as set by Lima General Conference (2013).⁵² AGEVEC objectives of supporting employability, employment, sector modernization, and improved performances, through a vocational training aligned to market demand, hold relevance to UNIDO goal of "*Inclusive and Sustainable Industrial Development*", contributing to SDG 9 (industry innovation and infrastructure), SDG 8 (decent work and economic growth), and SDG 10 (Reduced

⁵⁰ *Assistance Technique pour l'Identification des Besoins en Compétences du Secteur du Bâtiment et Travaux Publics*, Fédération Nationale du Bâtiment et des Travaux Publics, 2018.

⁵¹ FNBTP Study "assistance technique pour l'identification des besoins en compétences du secteur du bâtiment et des travaux publics" Study implemented by Technical Assistance of CIDE

⁵² The assessment of relevance of the project to UNIDO mandate is the result of the evaluation team comparative analysis of AGEVEC goals with UNIDO mandate and priorities.

inequalities). The explicit PPDP approach (both in theory and in practice) represents as well a significant contribution to SDG 17 (Partnerships for Goals).

UNIDO is consistently applying its best practices to its vocational training projects, including aspects of PPDP, regional approach, the building of centres of excellence, and aligning VET offer to labour market demand. An explicit sector strategy is yet missing. The relevance of projects as AGEVEC to UNIDO mandate could be reinforced by structuring recent approaches, lessons, and best practices into a comprehensive organization of VET strategy.⁵³

3.5 How well the project aligns to the regional context as well as to international initiatives supporting VET development and youth employment opportunities?

The AGEVEC project is well aligned to West Africa and the Sahel Region in terms of not only skill training needs but also youth employment, both of them highly placed in the international agenda.

Unemployment and skills training in Africa

Skill development in order to enhance workers employability and facilitate economic growth is a policy priority for most, if not all, African countries. Many are the countries that are nevertheless facing a challenge: deliver high quality innovation skill development programmes aiming at bridging education and training to export growth, economic diversification, technological development, and the creation of more and better jobs. Challenges in skills development include, among others, linkages between employers and training organizations, skills mismatch, training and job creation for young people, and shortage of quality apprenticeships⁵⁴.

Investing in skills training and youth employment in West Africa and in the Sahel Region is furthermore regarded, by both Governments and Donors, as an effective tool to promote peace, stability, and decrease emigration flows.

Skills training and youth employment in the international agenda

Skills training and youth employment are currently very high on the international agenda. In this regard, VET has a prominent place in the 2030 Agenda on Sustainable Development Goals (SDGs)⁵⁵.

Moreover, large donors such as the EU, USAID, the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), the Agence Française de Développement (AFD), and the UK Department for International Development (DFID), among others, incorporate inclusive and sustainable growth and employment among their key strategic objectives considering VET a major instrument in support of youth employment.

⁵³ This function is currently supported by the “Knowledge and Learning Development Facility” (LKDF) a platform that promotes industrial skills development among young people in emerging economies.

⁵⁴ Source: ILO Youth Employment. <https://www.ilo.org/global/topics/youth-employment/lang-en/index.htm> ILO SKILLS: <https://www.ilo.org/skills/lang-en/index.htm>.

⁵⁵ VET is particularly mentioned under Goal 4 “quality education targets” 4.3, 4.4, and 4.5¹⁹) and Goal 8 “Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work” (particularly 8.6).

AGEVEC model is fully relevant to evolving regional and international priorities. The Project is part of a new generation of interventions spearheading innovative approaches to Vocational Training in Africa, including for the following aspects:

- a) Development of a training offer matching labour market demands
- b) Supporting excellence of training centres
- c) Addressing needs for last generation engines and equipment
- d) Building partnerships with the industry and the institutions
- e) Involving private sector in curricula development and training
- f) Building regional centres meeting demands of several neighbouring countries
- g) Closely linking training centres to the private sector.

These can be ascribed as “VET best practices” and are pursued by other AGEVEC partners (Volvo and USAID) and international Donors and Cooperation Agencies⁵⁶, including EU Cooperation.⁵⁷

2.4. Effectiveness

EQ 4 To what extent AGEVEC achieved its planned outputs and outcomes, contributing to its goal of establishing a modern training academy capable of training 150 persons per year responding to labour market demands?

AGEVEC managed to establish a modern academy responding well to market demands for the Heavy Equipment Maintenance course, although the target of 150 persons per year could not be achieved during the project limited life span. The limited scope of AGEVEC intervention and partial contributions to Heavy Equipment and Crane operation courses did not allow achieving the goal for these courses. The third result, linking school and graduates to the industry, has been only partially achieved.

The Training Academy was equipped, thanks to Volvo and USAID contributions, with modern equipment to support the Heavy Operation Maintenance course. Trainers and trainees expressed high satisfaction about the quantity and the quality of the equipment. (EQ4.1)

Curricula were developed and trainers hired and trained. Between 2016 and 2019, 593 students enrolled (148 students per year) in the different training modalities.

AGEVEC training programme on Heavy Equipment Operation was remarkably well prepared and delivered, registering a very favourable assessment by private companies and recording high satisfaction rates of trainees. Graduates surveyed by the evaluation confirmed high satisfaction of the training programme. Satisfactory employment rates (70% and above of formal employment for the 3 batches of Heavy Equipment Maintenance Course), support the finding of an alignment of trainings to the industry demand. (EQ4.2)

Heavy Equipment Operation and Crane Operation trainings had a limited scope of project support; the School did not provide trainers for these trainings and the supervision rate was unfavourable, not matching the optimal rate achieved under the

⁵⁶ Finding supported by 1) Evaluation Team interviews with UNIDO, USAID and Volvo, 2) Evaluation Team previous expert assessment of VET sector trends.

⁵⁷ *Vocational Education and Training for Inclusive Growth and Development Cooperation*, EU Commission, in “*Tools and methods Series*”, n. 24, March 2017”.

Maintenance Course. As a result, the outcomes for these courses were limited, with low levels of satisfaction and low rates of employment for graduates. (EQ4.2)

For Result 3 activities are in progress and a Career Centre has been established at the Mohammed VI School. However, the expected change of setting comprehensive links between youth and the labour market is not yet achieved and very limited support was provided to graduates from School Mohammed VI and AGEVEC) to facilitate the access to the labour market. In Senegal and Ivory Coast all graduates found employment, a positive outcome to be attributed to the limited offer and the significant demand. (EQ4.3)

E.Q.4.1 Was the Training Academy furnished with modern equipment, improving quality of training?

The Training Academy was equipped, thanks to Volvo and USAID contributions, with modern equipment to support the Heavy Operation Maintenance course. Trainers and trainees expressed high satisfaction about the quantity and the quality of available equipment.

Maintenance workshops are organized in an exemplary way⁵⁸ and a private company reproduced in its premises the AGEVEC workshop layout. The workshop and its equipment provide a very positive image of AGEVEC as a Centre of excellence for Construction and Public Work training. OFPPT uses routinely the Training Academy for visits of national and international delegations presenting installations and equipment as an example and national show case⁵⁹.

According to technical assistance, trainers, trainees and AGEVEC graduates, the equipment is perceived as a considerable value added for the quality of AGEVEC training. This finding is supported by the positive feedback of interviewed companies, about the sound preparation of interns and graduates in consideration of their opportunity to work with outstanding training materials.

Aspects of the equipment, which were particularly appreciated include:

- Cleanliness and organization of the working environment
- Availability of last generation equipment for training
- Availability of an adequate number of engines, for practice in small groups (up to 2 to 3 students per engine)
- Security arrangements of the working environment
- Availability of extractors and training materials
- Existence of dedicated areas for training with diesel engines, transmissions, electric equipment, electronic, hydraulic circuits.
- Very specialized and last generation equipment was brought in for electric testing of engines and circuits.

Very few observations were raised about aspects to be eventually improved:

1. All training was implemented on Volvo engines. This however was not perceived as a strong concern by trainers and by private companies, as reportedly engines from

⁵⁸ Site visits, interviews with technical assistance trainers and Volvo management

⁵⁹ Source: Interviews with OFPPT and meeting during AGEVEC visits with international delegations

other brands are similar and graduates can easily transfer their know to different type of engines;

2. Both trainers and trainees observed in some cases the limited availability of engine maintenance instructions (manuals in pdf), although this reportedly did not affect the quality of training and levels of learning.⁶⁰ Also, trainers had limited access to some specialized maintenance equipment as extractors for last generation engines (see also EQ 7).

AGEVEC received from the Steering Committee a limited mandate to support the Heavy Equipment and Crane Operation Courses. Also, the School did not make available trainers to be trained by AGEVEC. These factors did not allow achieving the same training standards as in the Heavy Equipment Maintenance Course.

Interviewed graduates expressed low levels of satisfaction for these courses, including for very few hours of equipment operation practice, quality of trainers and the perception that the set of acquired skills would not match employers' requirements and recruitment tests, focused on "*abilities of equipment handling, precision, self-confidence and rapidity of operation*"⁶¹.

E.Q. 4.2 To what extent relevant training programs were adequately designed and delivered, providing set of skills relevant and adequate to the labour market needs?

AGEVEC training programme on Heavy Equipment Maintenance was remarkably well prepared and delivered, registering a very favourable assessment by private companies and recording high satisfaction rates of trainees. Graduates surveyed by the evaluation confirmed high satisfaction of the training programme. Satisfactory employment rates confirm the alignment of trainings to the industry demands.⁶²

Heavy Equipment Operation and Crane Operation trainings could not benefit of a similar support and the level of satisfaction expressed by graduates has been much lower, also in consideration of the lack of employment opportunities.

Box 4 the assessment of the effectiveness, performances and impacts of Heavy Equipment Operation and Crane Operation courses takes into account that they received a limited support of the Project, following a specific request of the Steering Committee in 2017. The evaluation scope embraced these courses as they have contributed to achieve the Project specific objective of 150 graduates per year. However, findings related these courses can be attributed only to a minor extent to the contribution of the Project.

Changes introduced by the project to the Heavy Equipment Operation Course were applied only to 2019 intake; expected impact on quality may materialize at a later stage.

Curricula development; the project managed successfully to develop the Curriculum for the Heavy Equipment Maintenance Course, including a module of soft skills. Overall

⁶⁰ Limited availability of manuals according to trainers and trainees concerned last generation engines, for which may apply more stringent Volvo regulations on materials' circulation.

⁶¹ Graduates statements during focus group meeting held with AGEVEC graduates at Settat School with the evaluation team.

⁶² The set of skills provided by the Heavy Equipment Operation trainings had a much weaker relevance to labour market demands – Please refer to the analysis in EQ 1 and EQ 3

the quality of the Curriculum is assessed as very good and well aligned to the market demand, particularly reflecting the needs of the segment of the industry related to large and modern Construction and Public Work companies.

With the assistance of Volvo a training of trainers activity was implemented. According to interviewed trainers⁶³ their training was of high quality and very satisfactory. Also the feedback from of private sector companies, pointed to high levels of preparation and an overall high satisfaction of AGEVEC trainees of their trainers. The finding was supported by data from AGEVEC satisfaction monitoring survey (see figure 2 below).

Training delivery; Delivery of training for the different promotions worked out remarkably well. A best practice evidenced by the evaluation, has been the capacity of AGEVEC of “*learning by doing*” and progressively improve the quality of courses, as reflected by increasing rates of trainees’ satisfaction from one year to the other, as constraints and challenges were addressed. This approach was guided by the survey of trainees’ satisfaction of different modules, an outstanding tool of support to result-oriented management.

Both technical and soft skills modules have been very positively appraised.

Internships; A positive feature of AGEVEC is that it offered its trainees internships in a range of private sectors companies. On average, 89% of enrolled students were placed in internships; this percentage is well above the expected target set by the project (65%).

Table 11: AGEVEC Trainees placed in internships (2016-2018)

Course (numbers refer to promotions)	Enrolled	Placed in Internships	Enrolled/Internships (%)
Heavy equipment Maintenance (1, 2, 3)	240	233	97% ⁶⁴
Crane operation	22	22	100%
Heavy Equipment Operation (1)	131	95	72%
Total	393	350	89%

Source: AGEVEC, monitoring data October 2019

There is widespread consensus amongst informants (students and private sector representatives included) that internships provide the trainees with an excellent opportunity for learning useful and necessary skills *on-the-job*.

Several students and company representatives pointed that the duration of the internships (2 months) is too short, while separating the internships in two different one-month periods lessened the effectiveness of the learning/practice process. In this regard, several opinions were collected on the need to review the internships’ modalities. Some suggested a continued 3 months placement.

⁶³ Focus group in AGEVEC workshop, 18 October 2019

⁶⁴ The 7 students who did not join internship had dropped out from the course The internship rate for the students who completed the course was of 100% (source communication of AGEVEC team to the evaluation)

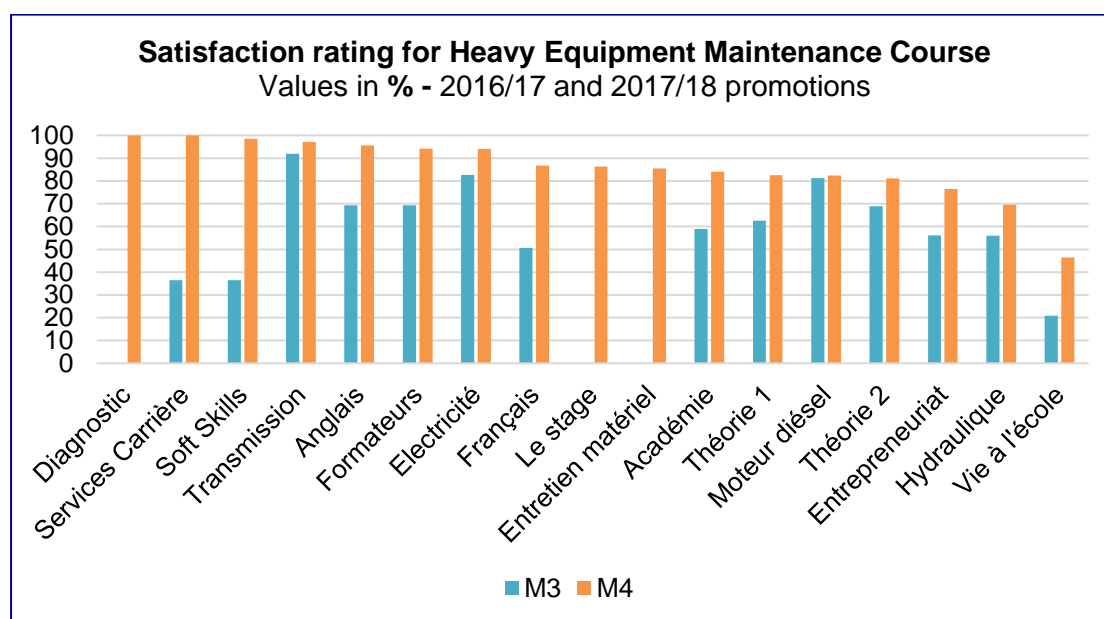
There is concern among several key stakeholders on whether School staff will be able to manage internships by the end of the project and without UNIDO assistance. By the time of the evaluation, capacities and resources needed yet to be established within the school to support and expand the internship programme.

Trainees Satisfaction; Consistently high levels of trainees’ satisfaction are well captured by AGEVEC survey on students’ satisfaction (see figure 2 below). The survey covered 17 variables related to the different modules and aspects of training. The result points at consistently high satisfaction rates, in general above 80% (between 90% to 100% for half the variables).

The survey shows as well a remarkable progression from the previous year monitoring results, evidencing a trend of conspicuous improvement of perceptions for almost all variables, an indicator of how AGEVEC and School management have been responsive to the outcomes of the satisfaction survey, in a concern to improve beneficiaries’ satisfaction.

The survey report explains how the reasons underlying a lower satisfaction in the third promotion have been addressed and how this reflects in significant improvement of the rates.

Figure 2: Trainees satisfaction rates for AGEVEC training on Heavy Equipment Maintenance



Source: AGEVEC trainees’ survey, 2019

Beneficiary’ monitoring and relevant corrective management measures are assessed as one of AGEVEC best practices and an important lesson for future experiences. The project supported the transfer to the school of beneficiary monitoring with activities of training, digitalization and simplified tools. However, capacities, mechanisms and resources required to support transformational changes need yet to be established within the School to internalize this practice.⁶⁵

⁶⁵ AGEVEC monitoring and evaluation unit is preparing a simplified procedure for beneficiaries’ satisfaction monitoring to be transferred to the School (communication of AGEVEC team to the

The evaluation finds that it would have been desirable to apply the beneficiary satisfaction survey also to the Heavy Equipment Operation Course.

Mainstreaming women’ participation in training; AGEVEC supported an innovative gender-specific promotional campaign for the enrolment of women for the Heavy Equipment Maintenance course. The low enrolment rate reflects the contextual limited participation of women to the industry, also in consideration of high risks, challenges related to the profession and cultural factors. One of the indicators associated to output refers to the development of *gender sensitive curricula*. Table 12 below evidences how during the 2016-2018 period, 14 young women enrolled in the AGEVEC courses.

Table 12: AGEVEC enrolment by sex (2016 - 2018)

Course (and promotion)	Total	Male	Female	% of females
Maintenance (1, 2, 3)	240	227	13	5.4%
Crane operation	22	22	0	0%
Equipment Operation (1 and 2)	269	268	1	0.4%
Total	531	517	14	2.6%

Source: AGEVEC Project

This represents 2.6% of the total number of students at the training Academy. 13 out of the 14 female students coursed their studies in Equipment Maintenance, none participated in the crane operation training and only 1 enrolled in Equipment Operation.

Graduates satisfaction; the survey carried out by the evaluation included one question about whether graduates felt that AGEVEC training contributed to gain a satisfactory work. Answers of Heavy Equipment Maintenance graduates were very positive (from 69 to 80%, according to the promotion), while the feedback from the other two courses proved to be quite negative (only 21% of Equipment Operators and none of the Crane Operators ⁶⁶ felt that the training had helped to gain a satisfactory employment).

Table 13: Number and percentage of graduates who felt that AGEVEC training contributed positively to obtaining a satisfactory job

Course and Year	Number		Total	%		Total
	1 Yes	2 No		1 Yes	2 No	
Equipment Operators (1)	4	15	19	21,0%	79,0%	100,0%
Crane Operators (1)	0	3	3	0,00%	100,00%	100,0%
Equipment Maintenance (1)	3	1	4	75,0%	25,00%	100,0%
Equipment Maintenance 2	8	4	12	69,2%	30,8%	100,0%
Equipment Maintenance 3	15	4	19	79,0%	21,0%	100,0%
Total	30	27	56	53,4%	46,6%	48,21%

Source Evaluation Survey, October 2019

evaluation). The evaluation finds however that the level of detail provided by the survey carried out by AGEVEC is optimal to support result-based management of the training courses and should not be reduced. Rather resources should be mobilized by the School and OFPPT, and capacities established, to support an adequate M&E system (finding supported by the evaluation team’ expertise on monitoring and evaluation and result-based management).

⁶⁶ Out of 13 students for Crane Operation Course, 7 (46%) were interviewed by the evaluation survey. The number of the survey sample is small, but representative. However the generalization of the finding needs to take into account the limited number of trainees participating to the Course

Companies' satisfaction; effectiveness of AGEVEC training could be appraised as well by the positive feedback of private sector companies. The evaluation interviewed 10 Companies and all provided an outstanding and, at times, superlative assessment.

An example of such positive appraisal was a Company manager defining AGEVEC graduates as "*Hors lot*"

Sector Companies particularly appreciated technical competences of internships and graduates, their know-how of last generation machineries, skills on circuit reading, writing skills to produce workshop reports, electronic, electricity, diagnostic, hydraulics and know-how on transmission. Soft skills have also been very positively appraised.

Amongst aspects that some Companies forwarded as possible improvements included:

- Strengthen self-assurance of graduates
- Improve skills for introductory interviews and tests
- Strengthen practical experiences through internship
- Some requests to strengthen electricity and electronic skills

Challenges; Delivery of quality training presented some challenges that had to be faced and partially addressed during AGEVEC implementation; amongst them:

- Incentives for trainers, as OFPPT salary scale does not allow to provide a minimum threshold to ensure stability to trainers and avoid the risk of losing school staff attracted by better salaries of the private sector. This is a major administrative issue that needs to be studied and addressed to support high quality training in Morocco.⁶⁷
- Increasing trainers' participation to course design and interactions with management
- Strengthening mechanisms capacities and ownership to receive feedback on courses by private companies
- Developing School ownership, capacities and resources for delivering soft skills modules. Although AGEVEC trained two trainers in soft skills training who contributed to deliver the soft skills module, interviews with trainers and project staff pointed to the need of strengthening School ownership, capacities and resources for delivering soft skills modules, currently still in part under the responsibility of AGEVEC career centre and project staff.
- Developing School capacities and resources to support, promote and adjust internships (currently internships for Heavy Equipment Maintenance Course are an important part of AGEVEC project staff responsibility. Internships for Heavy Equipment Operation have been handled by the school).

E.Q. 4.3 To what extent Career service points were established in Morocco, Senegal and Cote d'Ivoire, linking youth and training graduates in the labour market?

The third result was the establishment of service points in three Countries linking graduates to the labour market. Career support services were initiated in conjunction with the first training intake. The Career centre construction took place at a later stage, while the students started receiving post-training services in 2016. Activities are in progress and several career services have been supported; additionally, a Career Centre was established at the Mohammed VI School and is currently being managed by two

⁶⁷ Finding supported by focus group discussion with Trainers in AGEVEC, as well several interviews with OFPPT, FNBPT, AGEVEC staff, School Management and Private Companies.

career experts.⁶⁸ Several tools, including new surveys and a database, were developed to facilitate the follow up of graduates.

Before the Career Centre became operational, that is, for most of the life of the project, internships, in collaboration with the private sector, supporting to transition to employment, were provided by two project consultants.⁶⁹

The Career Centre currently provides trainees mainly with self-diagnostic tools, market information and work-readiness training (soft skills and job search skills). Also, the career centre staff does some research and networking in order to provide information to trainees regarding job opportunities. Connections with the private sector proved to be effective for the internship programme for the Heavy Equipment Maintenance course, as evinced by the number of companies interested to establish a partnership with the School and high internship rates for AGEVEC students. However, by and large, the expected change of establishing links between youth and the labour market, is not yet achieved and limited support was provided to School Mohammed VI and AGEVEC graduates to facilitate the access to the labour market.⁷⁰

AGEVEC monitoring calculated the number of graduates that found work thanks to the support of the Career Centre. The result of the analysis is summarized in the following table showing that 75 (14%) of the 531 students participating to AGEVEC courses did find a job through career centre services.⁷¹

Table 14: AGEVEC Students finding a job through career centre services

Course	Morocco		Senegal		Cote d'Ivoire		Total
	M	F	M	F	M	F	
Maintenance*	41	4	15	2	12	1	75
Crane operation	0	0	0	0	0	0	0
Heavy Duty Operations**	0	0	0	0	0	0	0
Total	41	4	15	2	12	1	75

Source: AGEVEC monitoring, communication to the Evaluation Team

* Timeline does not cover Promotion 4

** Timeline does not cover Promotion 2

⁶⁸ One recruited in August 2018 and other recruited in May 2019.

⁶⁹ In a communication to the evaluation, the AGEVEC staff clarified that “it was initially the main expert and the project coordinator’s duty to liaise with the private sector as a good understanding of the training program and the heavy equipment sector were required. At that time, soft skills training were provided by technical (maintenance) trainers.”

⁷⁰ Finding supported by interviews of the evaluation team with the Career Center staff and the focus group with AGEVEC graduates held on October 19, 2019. Particularly Heavy Equipment Operators and Crane Operators graduates complained of a lack of support by the end of the course, and declared that assistance of orientation and guidance to reach Companies and have interviews, would have helped significantly their chance to find employment.

⁷¹ The table was accompanied by the following note: *Figures have been generated by AGEVEC endline survey, based on the number of trainees who responded “the VTC helped me find me current job” during the endline survey. The Career service has helped other trainees find job since but this wasn’t documented. The figure also doesn’t include other responses, which could be considered relevant, such as “I could use the contacts I made during the training to find this job”, or “It was easy finding a job with my new skills”.*

Interviews with Companies evidenced that they perceive the importance for an accrued and updated information of School activities and graduates' availability.⁷²

The evaluation evidenced a lack of design for Result 3 and absence of a clear vision and operational plan for what career service points should do and how, and lack of backing of adequate resources. The Career Centre set up so far is more devoted to provide relevant services to the School. However, a proactive and systematic contact with businesses at national level is missing. The result was constrained by the difficult context and the challenge to interface with a high number of companies with different views and perspectives. Contributions from the Private Sector Federation (FNBPT) in linking with private sector businesses have been few and ineffective, also in consideration of weak capacities and limited representativeness.

A positive step toward establishing an effective link with private sector companies has been achieved by AGEVEC through the contacts for internship for the Heavy Equipment Maintenance course.

Activities of information and communication are existing but quite limited in scope. Although AGEVEC developed an overall strategy for communication, the document is generic and a detailed mapping of all Companies has not yet been established and a plan of how to reach them is missing. The evaluation evidenced also the need to develop awareness of small and medium enterprises about benefits and opportunities related to the recruitment of skilled technicians for Construction and Public Works.

The evaluation could not visit Career Services supported in Senegal and Cote d'Ivoire. In both Countries all graduates found employment, a positive outcome to be attributed to the limited offer and the important demand.

2.5. Efficiency

EQ 5 How efficient is AGEVEC in its implementation?

Overall, the project has been performing well and has been implemented according to plans and budget. The analysis of financial implementation shows a satisfactory absorption rate. Some components, particularly the establishment of effective Career service points, linking youth with the labour market, have been only partially achieved.

The evaluation evidenced how AGEVEC implementation period was too short (48 months) to achieve transformational changes required. The budget structure evidences a well thought financial partnership, with balanced and complementary contributions. The apparently complex set up has proved to be working well, orchestrated by the performing implementation of UNIDO. (EQ 5.1)

The analysis points to an overall very positive financial performance and satisfactory cost benefit ratio. (EQ 5.2) Effective and efficient management arrangements have been set including: i) decentralization, ii) human resources shared across several programmes and iii) good coordination arrangements. Project level responsibilities were well defined although the separation of roles and activities (Technical Assistance

⁷² Two Companies met during evaluation interviews, were actually looking for new qualified technicians for their workshops, but the information had not yet reached the School and or the Career Center.

and School staff) did not consistently support sustainability, with several project activities not fully internalized by the Training School. (EQ 5.2)

OFPPT, FNBPT and the Training School vigorously contributed to AGEVEC with financial, human resources and administrative support. Limited partners' capacities diluted however the incisiveness in supporting the Project. AGEVEC worked as a laboratory to evidence management constraints to achieve high quality and demand oriented training, working within OFPPT institutional context. (EQ 5.3)

AGEVEC put in place remarkable monitoring tools. There is however need for stronger evaluation and lesson learning mechanism particularly in consideration of the pilot nature of the project. M&E mechanisms have limited School and partners' ownership, lacking as well of capacities and resources for the follow up after the end of the project. (EQ 5.4)

AGEVEC partially applied a result-based management approach, with close follow up of performances indicators and adjusting for improved performances. This is one of the best practices evidenced by the evaluation for AGEVEC management. This approach however did not apply to result 3 and to the course for Heavy Equipment Operation. Management by results mechanisms and capacities have not been developed at level of OFPPT, FNBPT and the School. (EQ 5.5)

The evaluation team observed an excellent role of UNIDO facilitating coordination and communication across actors. Particularly UNIDO facilitated the building of trust across institutional and private sector stakeholders. (EQ 5.6)

5.1 Was the project efficiently implemented according to plans and budget?

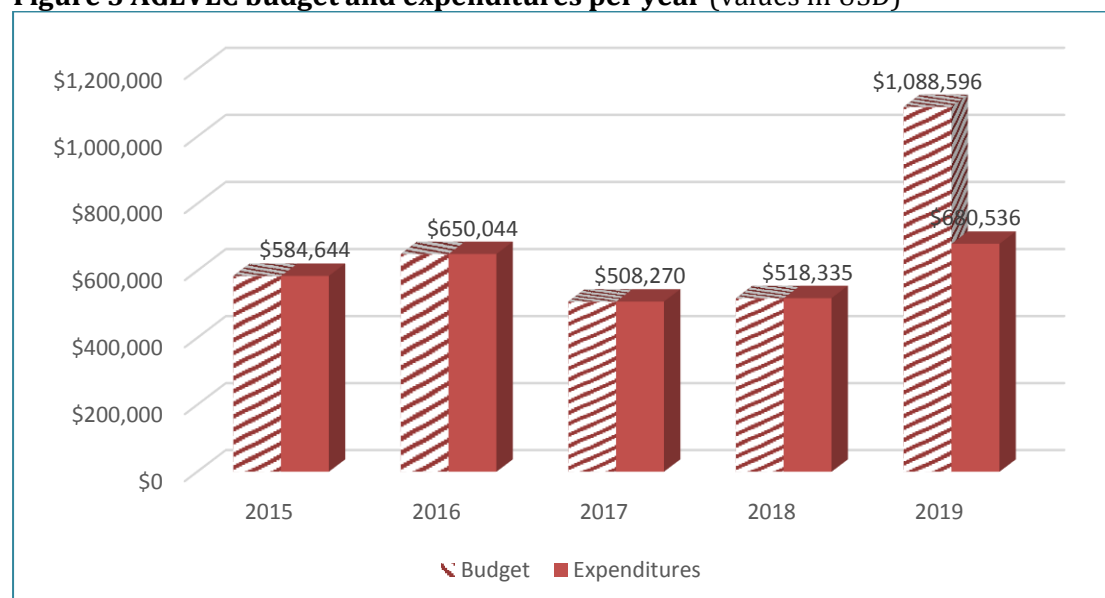
Overall, the project has been performing well and has been implemented according to plans and budget. The completion of some components, particularly result 3, has been delayed and only partially achieved.

1) Financial implementation.

AGEVEC had a budget of USD 7.2 Million. By the end of September 2019 the project had executed were USD 6.6 Million (91.2 %).

The analysis of financial implementation (see detailed budget tables, planned and executed, in Annex 8) shows a satisfactory absorption rate. Figure 3 below represents budget and expenditures over the 5 years of implementation, evidencing a steady flow of disbursements and a budget surplus for 2019.

Figure 3 AGEVEC budget and expenditures per year (values in USD)



Source: Evaluation Team elaboration of detailed budget tables provided by UNIDO (October 2019).

a) Analysis of budget per Result

Allocations and expenditures per result are summarized in table 15 and in figure 4 below.

Table 15 Planned and executed budget : allocation per results (Values in USD)

Results	Budgeted	Executed
R1 : Training academy furnished	\$3,752,291 53%	\$3,503,198 53%
R2 : Training programmes delivered	\$2,168,887 31%	\$2,177,890 33%
R3 Career service products	\$1,145,917 16%	\$888,455 14%
Total	\$7,067,095 100%	\$6,569,543 100%

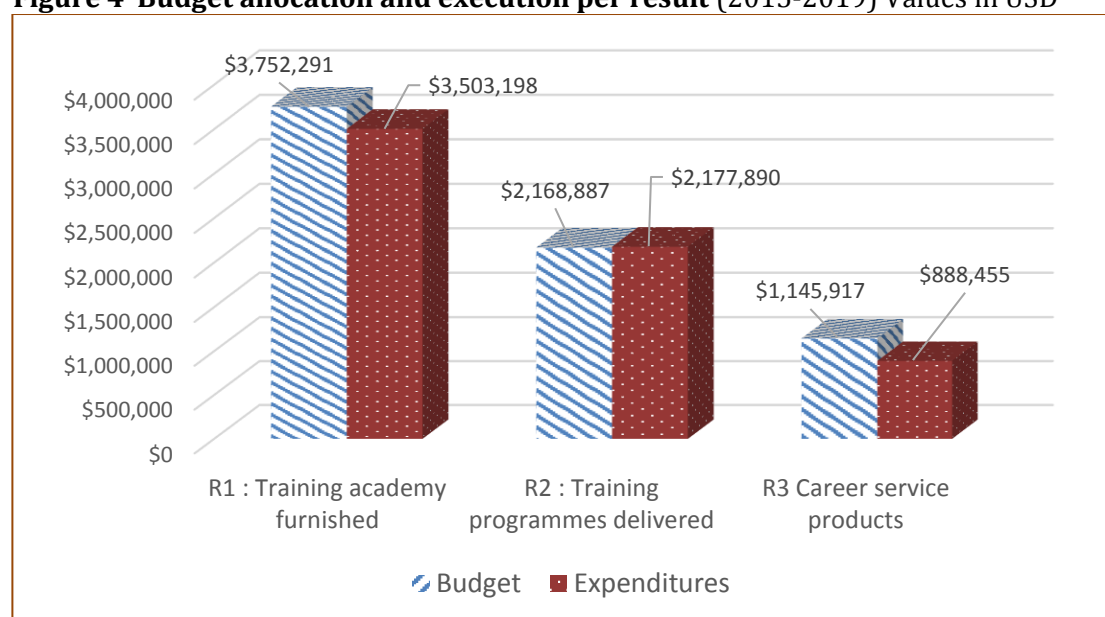
Source: Evaluation Team elaboration of detailed budget tables provided by UNIDO (October 2019).

Result 1; the first result “Training academy equipped” had an initial allocation of USD 3.7 million, 53% of the total budget. By September 2019 \$ 3.5 M were executed. The main expenditure items are i) training centre equipment and ii) training materials, manuals and simulators, mainly provided by Volvo and USAID, respectively (USD 1.85 M and USD 0.42 M).

Result 2; the second result “Training programmes developed” had an initial budget of USD 2.17 million, (31%) and represented 33% of overall financial implementation. The main expenses were dedicated to the mobilization of the technical advisors (Heavy Equipment Operation specialists), the training of the trainers and the payment of salaries and overtime of trainers, carried out respectively by the OFPPT and the OCP Foundation. Additional expenditures included studies, training trip abroad for trainers and supervisory staff, consumables for training, the certification operation of the management system of the quality for the training and the two annual meetings of the steering committee.

Result 3; The “Career service points” had a financial envelope smaller than the two previous results, with a planned budget of USD 1,15 M of which USD 0.89 M were executed. Main activities included the physical implementation of the career centre (taken in charge by the School budget), market studies for Ivory Coast, Senegal and Morocco funded by the OCP foundation and other activities mainly funded by USAID: awareness building, M&E and diverse expenses for communication and private companies’ awareness building, transport and office supplies.

Figure 4 Budget allocation and execution per result (2015-2019) Values in USD



Source: Evaluation Team elaboration of detailed budget tables provided by UNIDO (October 2019).

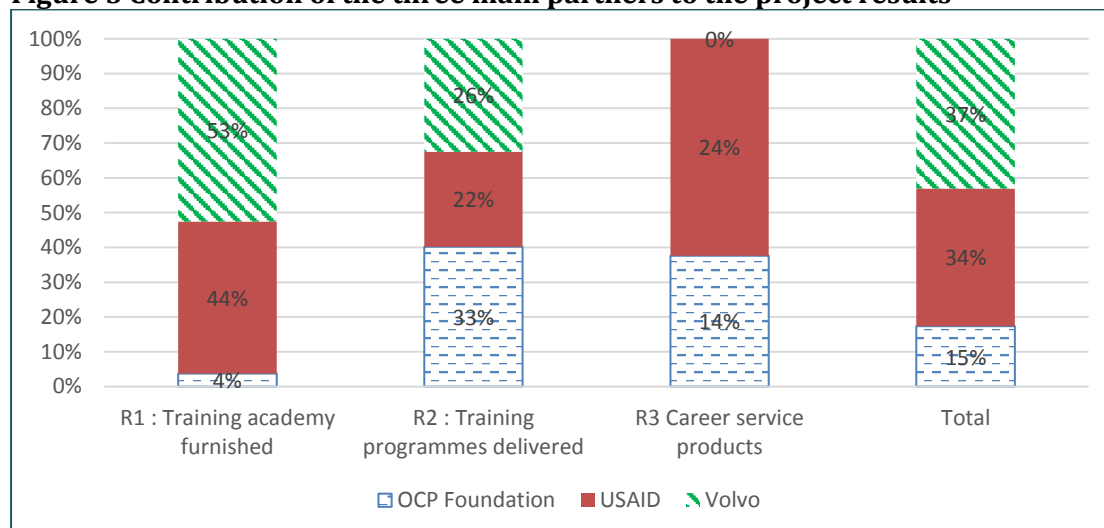
b) Analysis of AGEVEC budget (commitment and absorption) per Donor

The following figure summarizes the contribution of the three financial partners to the three results of the intervention.

Up to September 2019, the project executed 84% of OCP Foundation financial commitments, 96% of USAID 96% and 92% of Volvo:

- OCP Foundation focused its support mainly on result 2 and result 3 (14% of result 3 expenditures)
- USAID supported the three results covering 44% of the expenditures related to result 1, 22% of result 2 and 24% of result 3.
- VOLVO focused its in-kind support on the equipment and the training of the school trainers, mainly contributing to results 1 and 2. Volvo was also the main donor for the result 1.

Figure 5 Contribution of the three main partners to the project results



Source: *Evaluation Team elaboration of detailed budget tables provided by UNIDO (October 2019).*

The execution of the budget shows very satisfactory financial performances and by the end of the Project only a minor share of the budget is still to be spent.

The structure of Donors' contributions and expenditures is in line with their initial commitment.

The budget structure evidences a well-thought financial partnership, with balanced and complementary contributions. The apparently complex set up has proved to be working well, orchestrated by the performing implementation of UNIDO. This financial set up and mechanism of co-financing results should be considered as a good practice and evidenced by AGEVEC lessons.

2) Analysis of timeliness of delivery

The successful implementation of training courses relied on the availability of equipment and the preparation of training programs well aligned to market needs. These conditions were achieved for the Heavy Equipment Maintenance course thanks to a reliable financial flow.

UNIDO project team showed an outstanding capacity to flexibly manage the project budget in order to make the most of the contribution of the project partners, while respecting their different procedures and meeting expectations.

The evaluation evidenced as well how AGEVEC implementation period was too short (48 months) to achieve transformational changes required to support sustainable results in Construction and Public Work training.

Result 3 was only partially achieved during implementation and before the entry of the graduates into the labour market.⁷³

⁷³ It is noted that 100% of the participants to the first course of Heavy Equipment Maintenance course found a job.

The evaluation evidenced the importance to face expenditures, which might not be eligible under OFPPT mechanisms and regulations as for instance the provision of adequate incentive mechanisms for trainers and expenditures for internships supervision visits.⁷⁴

AGEVEC managed to address some of these financial challenges for instance with the practice of remuneration of trainees at real cost.

The assessment of efficiency evidenced positive performances for delivery of equipment and training programs for the Heavy Equipment Maintenance course. Difficulties in the implementation for training of Heavy Equipment and Crane Operation came from the lack of available/qualified trainers, which caused delays, jeopardizing the quality of training for the first cohort of trainees.

The evaluation pointed as well to the importance of addressing and strengthening the School and Academy financial mechanisms. The principal of the school is not an employee of OFPPT. Put at the disposal of the school by the FNBTP, he is not supported by mechanisms to pay directly school suppliers. This has resulted in management difficulties revealed for instance by fuel shortages at the start of the training of Heavy Equipment Operation course. OFPPT, supported by the Project, revealed abilities to fix these challenges, without however alleviating their main cause: the Principal of the school still needs to refer to OFPPT HQ for any budgetary adjustment of current expenditures with often incurring in significant delays.

3) Quantity / quality ratio

AGEVEC was a pilot intervention aiming at excellence and high-quality standards, proposing an alternative model to mainstream OFPPT training offer, currently privileging quantity to quality.

However, the ambitious targets set by the design (a total of 450 graduates in 4 year) brought a tension between quantity and quality for Construction and Public Work training; the inverse correlation between quantity and quality was well reflected by AGEVEC outcomes as the Heavy Equipment Maintenance training, privileged quality over quantity, with a slow and progressive building of numbers, achieving positive outcomes and impact opportunities (see EQ 1 and 2).

This was not the case for the training of Heavy Equipment and Crane Operation, as the school' "*Conseil d'Administration*" approved large numbers of trainees without in-depth analysis of market demands and without availability of staff and adequate preparation of training courses. These two courses may be considered as a counterfactual whereas AGEVEC quality standard are only partially applied.

This finding is an important lesson to be drawn from AGEVEC experience.

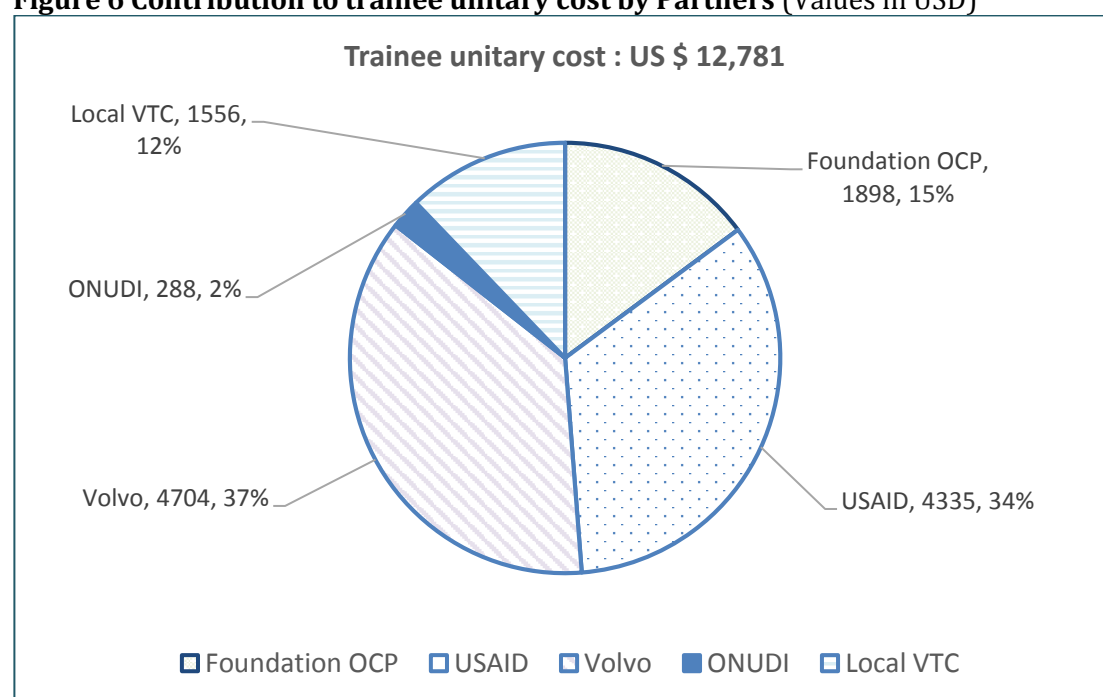
⁷⁴ For instance according to OFPPT procedures supervision visits of internships in companies, which represent a key dimension of the vocational training system, is remunerated at a fixed rate of 50 DH per trainee. This allowance covers transport costs and the additional time required for the in situ visit of the companies hosting the trainees. While such a method of remuneration may prove suitable for occupations concentrating several trainees in the same industrial workshop, in the building and public work sector, it seems unsuitable in the case of AGEVEC for the significant geographical dispersion and the small number of trainees in the same place.

4) AGEVEC Value for Money

To assess financial performances the evaluation has calculated the ratio of project cost per graduate. For the 514 beneficiaries who have successfully completed the AGEVEC training cycle, the average expenditure per beneficiary, from launch to completion of the project, was USD 12,781⁷⁵ (see figure 4 below).

This ratio does not fully express the value for money of the intervention, as the majority of costs represent investments (in equipment, training, follow up services) and testing of a new training model. A full cost benefit analysis should compare costs with tangible and intangible benefits achieved by AGEVEC (see also analysis of effectiveness and impact criteria), and benefits should include also graduates for a number of years beyond the duration of the project who will benefit in the future of the investment.

Figure 6 Contribution to trainee unitary cost by Partners (Values in USD)



Source: *Evaluation Team elaboration of detailed budget tables provided by UNIDO (October 2019).*

The analysis of cost per beneficiary, extended to the end of 2023 and thus doubling the number of graduates, evidences a **cost per graduate of USD 5,113**⁷⁶.

⁷⁵ This cost is based on a number of 514 graduates, and a total project cost from 2015 to 2019 of USD 6,569,543. The average cost per trainee during the five years implementation is \$ 12.781, shared between equipment cost (\$ 6816), training programmes (\$ 4237) and career services cost (\$ 1729)

⁷⁶ The cost of training, for the next 4 years (2020 thru 2023) can be reduced by several costs incurred at the start of training:

- Cost of management and international consultants, USD 846,168;
- Market Research and Expertise, USD 476,458;
- Equipment, USD 2,65,497;
- Training of trainers, USD 353,314;

All of these costs for a 4-year period totaled USD 3,941,436.

Assuming insertion rates of 70%, the cost per job created would amount to USD 7,304⁷⁷. Assuming that training generates average salary gains of 36,000 dirhams per year, the unit cost of training per job would be depreciated over a period of 22 months.

However, value for money assessment cannot be narrowed to a direct benefit ratio as AGEVEC is a pilot project with important investments aiming at establishing a new approach and replicable models for Morocco and the regional training offer.

Additional benefits to be taken into account into a full-fledged cost-benefit analysis⁷⁸ include:

- Model of private public development partnership established
- Modernization of the industry, with indirect effects of a more secure, competitive and performing environment of Construction and Public Work businesses
- Contributions to Regional Integration.

The analysis of Return on Investment, points to an overall project very positive financial performance and satisfactory cost benefit ratio, including the opportunity for an economic recovery of accrued costs related to quality training in less than two years.

5.2 Was the project management adequate, with appropriate level of decentralization and well-defined roles, responsibilities and accountabilities?

Effective and efficient management arrangements have been set for AGEVEC implementation; positive management arrangements evidenced by the evaluation include:

- decentralisation,
- human resources shared across several programmes,
- good coordination arrangements

Project level responsibilities were well defined although the separation of roles and activities (Technical Assistance and Training Centre staff) did not consistently support sustainability, with several project activities designed as an “add-on” without mechanisms for these functions to be fully internalized by the Training Centre.

The evaluation evidences as well scope for strengthening OFPPT, School and Training Academy’ management support mechanisms, reinforcing sustainability (see §2.6).

Measurability and transparency supported to a certain extent accountability although the evaluation evidenced that accountability was not fully established particularly for some unachieved results, as for the instance of the Heavy Equipment Operation course,

Keeping the same number of 514 trainees for the 4 next years, the cost per trainee would be USD 5,113. It will be lower by USD 7,668 than the observed one for 2015-2019: USD 12,781.

⁷⁷ During the next four years (2020-2023), the unit cost per beneficiary of the training will be \$ 5113. If, for an insertion rate of 70%, 30% of the graduates do not find a job, the cost of training will obviously be higher. An additional cost of USD 2191 should be accounted and the unit cost per successful graduate in the labour market to take in account should be USD 7,304 .

⁷⁸ A full cost benefit analysis would be helpful. However, it would need to be consistent in determining the productivity gains and effects in terms of accelerating the growth of income and employment of the sector, taking into account direct jobs and induced jobs. Such an exercise, in spite of its obvious interest, cannot be considered in a project limited to five years and applied to a single vocational training centre. Similarly, the assessment of efficiency should be supported by a counterfactual, including the cost of similar training in a number of countries with production standards comparable to those promoted by AGEVEC.

which failed to meet market demand expectations. In this case responsibilities and accountability have been diluted across layered decision-making and stakeholders.

The Project had the capacities to address with flexibility several financial and implementation constraints, particularly linked to OFPPT procedures. These challenges included:

- Payment of appropriate financial incentives to trainers
- Payment of supervisory visits for internships
- Addressing expenditures not included in the School annual budget plan
- Recruitment of staff

While the project proved to have good problem-solving capacities, yet it did not address, as not within the scope of its mandate, institutional mechanisms and capacities to overcome management challenges.

5.3 Did the project receive adequate political, technical and administrative support from its national partners?

OFPPT and the Training School vigorously supported AGEVEC with financial and human resources and administrative support. The evaluation gathered evidence that additional changes at policy, regulatory and procedural levels would have strengthened AGEVEC performances, increasing for instance its capacity to recruit trainers and to face urgent recurrent expenditures. Also the FNBPT provided full support to the intervention.

Limited partners' capacities diluted however the incisiveness in supporting the Project.

AGEVEC worked as a laboratory to evidence management constraints to achieve high quality and demand oriented training, working within OFPPT institutional context.

5.4 Was AGEVEC supported by adequate monitoring and lesson learning tools?

GEVEC put in place remarkable monitoring tools, including:

- Indicators system (the finalization of the indicator and M&E system occurred quite late during project implementation, in 2018)
- Business survey
- Beneficiary satisfaction monitoring
- Baseline and end line data for graduates.

A best practice evidenced by the evaluation has been the implementation of trainees' satisfaction surveys, to support management and improvement of training modules. The tool unfortunately was not applied to the Heavy Equipment Operation course.

There is a need for stronger evaluation and lesson learning mechanisms, particularly in consideration of the pilot nature of the project. AGEVEC did not benefit of a mid-term evaluation, which might have significantly supported the learning process.

The evaluation observed how M&E mechanisms have limited School and partners' ownership, lacking as well of capacities and resources for the follow up after the end of the project.

5.5 Did implementation apply a management focused on results?

AGEVEC partially applied a result-based management approach, with close follow up of performances indicators and adjusting for improved performances. This is one of the best practices evidenced by the evaluation for AGEVEC management. Particularly the evaluation appreciated the capacity to improve training programmes and performances in response to the beneficiary satisfaction survey.

This approach however did not apply to result 3 and to the trainings for Heavy Equipment Operation.

Another point to be strengthened is the limited capacity to monitor sector needs to inform the design and implementation of training courses⁷⁹; till now the capacity to build a private sector comprehensive feedback on training programmes and skills of graduates is limited.

To the effects of sustainability and replicability, management by results mechanisms and capacities should be built up as well at level of OFPPT, FNBPT and the School.

5.6 Were adequate coordination and consultation mechanisms established?

The evaluation team observed an excellent role of UNIDO facilitating coordination and communication across actors. Particularly UNIDO facilitated the building of trust across institutional and private sector stakeholders.

Stakeholders express their concern that with the end of the project and UNIDO support, the smooth functioning of the public – private partnership might face challenges.

Limited day-to-day communication across key players (Volvo, USAID, OCP, OFPPT) did not affect implementation due to functioning of Steering Committee and the active work of communication of UNIDO.

The co-ordination and follow-up part of the courses should receive more attention for the training of Heavy Equipment and Crane Operators.

2.6. Sustainability

EQ 6 To what extent AGEVEC outputs and outcomes are likely to be sustained in the long term?

AGEVEC did make major progress to establish durable mechanisms. However, the limited time and the partial scope of the intervention have not allowed establishing full conditions for sustainability at the completion of the project. (EQ6.1)

⁷⁹ The Ministry of Education carried out a comprehensive Market and Training Need Assessment for the Construction Sector supporting Vocational Training strategic choices – Courses need as well to be further supported by the feedback and contributions from the industry for their design and continuous adjustments – Such need is exemplified by the Heavy Equipment and Crane Operation courses – prepared with the inputs of the market assessment but producing set of skills not in line with the demands of the industry

While AGEVEC business plan is a significant output in the right direction, as it identifies opportunities for income generation, the document per se does not provide conditions for achieving financial sustainability. (EQ6.2)

Gender emerged as an important AGEVEC concern throughout the cycle of the intervention, across design, implementation, monitoring, and evaluation. Such high level of concern on gender equality and women empowerment did not alter the share of women finding jobs within the industry However AGEVEC contributed to plant the seed for a change and a significant indirect impact. (EQ6.3)

AGEVEC positions itself as a “pilot project”, testing on a relatively small-scale the concept of a demand oriented, and high-quality VET training for BTP sector in Morocco. Design and implementation contributed to address a number of drivers that will promote long-term goals. Several barriers, however, could not be addressed, as for instance variables related to small and medium scale enterprises limited demand for improved skills, cultural norms, institutional set up, legislative and policy framework, regulations, limited trust across public and private sectors, and a range of capacities not yet in place, evidencing the necessity of continued work and support to achieve the full-scale sustainability and replicability of the pilot. (EQ6.4)

6.1 What are the key factors that will affect (negatively or positively) the sustainability of the project’s results and of the Training Academy? ⁸⁰

The evaluation identified several factors contributing positively to AGEVEC sustainability⁸¹:

1. Building of School Mohammed VI ownership of training courses and of the “AGEVEC brand”;
2. Partial reliance on existing institutional set up and budgetary mechanisms for the implementation of the Training Academy;
3. School Board of Directors, with representation of both Institutions and Private Sector (Conseil d’Administration) overseeing Training Academy trainings;
4. Training School mechanisms and capacities, partially supported by AGEVEC;
5. Favourable ongoing political and policy environment aiming at the improvement of quality and demand oriented vocational training;
6. Memorandum of Understanding being set between OFPPT and FNBPT. The agreement, according to both organizations, will be soon finalized and should specify a number of activities to be outsourced, from OFPPT to FNBPT, overcoming as such some OFPPT procedural constraints that have limited the implementation of AGEVEC (see EQ 6 on performances);
7. Memorandum of understanding between the Training Academy and the Private Sector (Volvo Company) for continued support to training of trainers.

Also, the recent ISO certification (conformity to norms NM ISO 29993-2018, awarded on 21 November 2019 to AGEVEC, for the course on “Heavy Vehicles Maintenance”) reflects the progress of the project’ ownership by the school and the fact that AGEVEC is now fully embedded into the school environment. Recent training sessions on M&E and

⁸⁰ To improve the narrative of the sustainability question, the order of presentation of EQ 3.1 and EQ 3.2 proposed by the evaluation framework (see inception report), has been inversed, providing first an introduction of factors affecting sustainability.

⁸¹ Evidence on sustainability factors is provided by interviews with stakeholders, particularly Training Academy staff, Private Sector Companies, FEBPT, and OFPPT officials.

communication are meant to consolidate the school capacities to handle the Academy's activities.

Notwithstanding these positive factors, the evaluation evidenced as well that a number of conditions, not yet in place, is likely to affect negatively the sustainability of the intervention:

- a) Policy, legislative and regulatory environment for Construction and Public Work training could not be addressed by the intervention, posing a number of constraints to implement demand oriented and quality training;
- b) Mechanisms and capacities have yet to be set up to achieve financial sustainability and meet future accrued investment and operation costs;⁸²
- c) Several dimensions of capacities and ownership of the Training Academy need yet to be strengthened, including for aspects of result-based management, monitoring of performances, marketing, liaising with industry and adjustment of curricula according to labour market demands;
- d) Capacities of OFPPT and FNBPT (including capacities of both organizations and their members) need to be reinforced, as well as the functioning of the partnership for the governance of the Training Academy;
- e) Result 3, related to linkages of the Training Academy and graduates with private sector companies, need yet to be completed in its design and implementation;
- f) Market analysis should strengthen the granularity of the picture of the industry demand, specifying and quantifying for instance geographic distribution of the demand, type of skills required for careers, eventually adding key priority selection criteria for employers. Different segments of the market should also be explored, including informal, small and medium sized businesses. Sensitivity analysis should be applied on expected market saturation rates.
- g) Also, the feedback from private sector companies need to be reinforced;
- h) Construction and Public Work enterprises (particularly family led businesses and small and medium size companies), have yet to strengthen their awareness of the importance of skilled technicians for competitiveness and the future of their business;
- i) Mechanisms defining number of trainees for each course, also considering that the level of preparation of courses are yet to be set up, as pointed by the experience of the Heavy Equipment Operation training launched with high number of trainees (150 for promotion one) while several arrangements needed yet to be put in place;
- j) Mechanisms (organizational and financial) to continue and upscale Regional Cooperation yet to be identified and developed.

To conclude, while the AGEVEC Project have taken important steps to establish durable mechanisms, by the end of the intervention, limited time and the partial scope of the intervention have not allowed establishing full conditions for sustainability.

6.2 To what extent VTC business plan provided a sound basis for sustainability?

The business plan is an important step addressing the financial sustainability of the activities supported by AGEVEC Project within Mohammed VI Training School. While the "business plan" is a significant output in the right direction, as it identifies opportunities for income generation, the document per se does not provide all conditions required for reaching financial sustainability:

⁸² See also sustainability of the VTC Plan, section 3.2 below.

- Project designers were aware of the risk posed by the financial functioning of the school, in particular with regard to the attractiveness of the school and the stabilization of the trainers. A study was commissioned to identify the possibilities for improving the financial margin available to school administrators to mitigate these risks, knowing that its management remains in accordance with the standards applied to OFPPT schools. The study supports the identification of options for financial sustainability, but cannot be defined as a “business plan.”⁸³
- A full-fledged business plan, with operational solutions and road maps for financial sustainability, and a relevant implementation plan, should have been developed much earlier, possibly already during the design phase and endorsed both by OFPPT and FNBPT (see EQ 2).
- The study has been implemented by the project and lacks of the quintessential element for a business plan to succeed: full “entrepreneur” ownership.
- In the case of the Training Centre the figure of “entrepreneur”⁸⁴ is still missing.
- While the document structure follows the requirements for a formal business plan, the depth of analysis is inadequate to prove the financial feasibility of the venture:
 - The study does not provide a detailed analysis of the market of “training services” for Construction and Public Work businesses, including a survey of enterprises, full mapping of existing services and the detailed analysis of costs for existing services;
 - The “product” (i.e. training services) lacks of specification and design;
 - The plan proposes an approximate projection of revenues but is altogether lacking the analysis of costs;
 - No risk and sensitivity analysis have been developed (sensitivity analysis could be applied to variables as: i) number of hours, ii) revenue per hour) and iii) changing level of demand;
 - Absence of analysis of institutional arrangements;
 - The important risk of distracting the attention of BTP trainers and school management from their primary goal (i.e. provide high quality training to the Academy trainees), is not accounted for;
 - The important issue of the governance of revenues is not covered, with all related risks of inadequate financial management and possibility of non-transparent deals;
 - The detailed cash flow projected over an adequate period (at least 5 years) is missing.

Through the project, OFPPT and FNBPT set up a sound venture to provide training services. However, the partnership is new and still fragile and additional conditions should be set to embrace as well business activities. The project did not support essential capacities for such business, including:

- Entrepreneurship and business vision
- Business management capacities
- Financial administration capacities
- Marketing capacities

⁸³ Business Plan definition: “A written document describing the nature of the business, the sales and marketing strategy, and the financial background, and containing a projected profit and loss statement. A business plan is also a road map that provides directions so a business can plan its future and helps it avoid bumps in the road”; source: [www.entrepreneur.com › encyclopedia › business-plan](http://www.entrepreneur.com/encyclopedia/business-plan)

⁸⁴ Defined in the context of the evaluation report as “a person who sets up a business, taking on financial risks in the hope of profit”.

- Quality control and client satisfaction services have been ~~partially~~ supported by the ISO certification and the development of satisfaction review tools. However, this result needs strengthening also in view of the issues of quality and satisfaction raised by courses on Heavy Equipment Operation and Crane Operation. The issues of quality of these trainings have not been adequately detected and addressed by quality control and School governance and management mechanisms.
- Recruitment of new staff (to be noted that the project shared job descriptions/profiles for key new recruitment processes relevant to project activities (e.g. trainers' recruitment).
- Adjustments of the training academy
- Fiscal obligations and administrative procedures ⁸⁵
- Adjustment of trainers' schedule to take into account additional workload
- Monitoring, evaluation and audit mechanisms and capacities

Proving the feasibility for the business and setting conditions and capacities for its implementation may require continued support over a medium-term horizon, to achieve necessary transformation changes for OFPPT and Training Academy management and staff.

The evaluation evidences as well that beyond the limitations of the business plan the Training Academy is yet lacking of a full sustainability strategy. That is a plan that specifies what is to be sustained, a well-defined time-line, the responsibilities, as well as an analysis regarding the human, technical and financial resources necessary in order to ensure the future continuation of the expected results. Such plan should have been based on a thorough analysis of the project assets as well as the status of the "enabling environment" including institutional capacities, available resources, ownership, and political commitment.

6.3 To what extent were gender dimensions incorporated within project design and delivery?

Gender emerged as important AGEVEC concern throughout the cycle of the intervention, including through phases of design, implementation, monitoring and evaluation.

- **Design;** The project document addresses well gender concerns, including the development of a specific section on gender (chapter 6), with detailed analysis of context and plans to integrate gender perspective into "the baseline study, market analysis, training needs assessment, curriculum development, training of trainers, follow-up study, performance management and surveys of employers". A specific communication strategy is devised, building from experiences with SCANIA and in Iraq, aiming to overcome gender stereotypes.
- **Implementation;** Gender equality plans have been faithfully translated into implementation and the evaluation could find sound evidence of AGEVEC constant attention to gender equality through its work, including recruitment,

⁸⁵ It is noted that AGEVEC business plan is not incompatible with the recruitment of new trainers, since the funding of their salary as permanent or temporary workers is made possible by revenues related to continuing education. There is no constraint on the funding of continuing education, since this can be organized by the "GIAC-BTP" within the framework of special training contracts. The FNBTP could offer a fully mobilized framework to organize continuing training under the same conditions as it proposed the director of the EMBTP of Settat.

communication and curriculum development. Female graduates have been followed up individually and successful cases have been championed by the project.

- **Monitoring;** Monitoring data have ⁸⁶been consistently disaggregated by gender and situation of women (both trainees and graduates) have been followed up closely.
- **Evaluation;** Although terms of reference did not specifically raise the issue of gender, UNIDO evaluation manual details the importance of gender dimension and provides detailed guideline for its assessment. ⁸⁷ The evaluation carefully mainstreamed gender attention throughout the evaluation process and developed a specific gender-focused sub question; data collection systematically gathered information related on how AGEVEC has been supporting women. Specific questions about gender equality and women empowerment have been raised during interviews with trainees, graduates and private companies.

Stakeholders ⁸⁸ agreed that Construction and Public Work industry is a men' world, in consideration of several factual constraints affecting women opportunities of employment (challenges of working with heavy duty machinery, long hours and safety issues in construction sites) as well as cultural norms. Women represented only 2,6 % of trainees and graduates (a total of 14, see table 3); all of them found employment.

Such high level of concern on gender equality and women empowerment, although did not alter the share of women finding jobs within the industry, contributed to plant the seed for change, a significant AGEVEC indirect impact.

Companies, trainers and beneficiaries, including female trainees and graduates, expressed positive appreciation for AGEVEC gender approach, agreeing that the experience contributed to strengthen the acceptance that women can work in the milieu of operation and maintenance of heavy-duty equipment.

Interviewed stakeholders pointed how AGEVEC experience evidenced additional opportunities for future expansion of opportunities of women in the Construction and Public Work sector ⁸⁹:

- Supporting vocational training courses for niches where women may have a comparative advantage (for instance store keeping, computer operators, data entry and administration jobs)
- Further develop gender orientation in training materials and soft skills development
- Support gender orientation through businesses awareness building and communication
- Strengthen specific post-training services for women

6.4 To what extent the project helped to put in place conditions to address drivers and overcome barriers to achieve its long-term objectives?

Design and implementation contributed to address a number of drivers that will promote long-term goals, amongst others:

- Testing a private-public partnership for improvement of vocational training ⁹⁰

⁸⁶ AGEVEC Project document, analysis of context, 2016.

⁸⁷ Evaluation Manual, Office of Evaluation and Internal Oversight, Independent Evaluation Division.

⁸⁸ Including Training Center staff, Trainees, Graduates and Businesses.

⁸⁹ These opportunities were already evidenced by AGEVEC Project Document.

- Piloting mechanisms for demand-oriented high quality training ⁹¹
- Supporting improved performances and modernization of Construction and Public Work sector through specific skills development ^{92 93}
- Promoting Occupational Safety and Health in industry ⁹⁴
- Promoting gender equality and women empowerment in the sector
- Establish result-based management approach to training
- Open up to a regional dimension of quality training. ⁹⁵

While AGEVEC succeeded in positively testing these important drivers of change, several barriers, could not be addressed. ⁹⁶ These barriers included variables as labour market, cultural norms, institutional set up, legislative and policy framework, regulations, limited trust across public and private sectors and capacities, evidencing need for continued work, and support from UNIDO and the donor community before achieving full-scale sustainability and replicability of the pilot. ⁹⁷

2.7. Performances of partners

EQ 7 To what extent AGEVEC partners implemented the project efficiently?

The assessment of partners' performances and commitment is overall very satisfactory.

UNIDO performed remarkably well in its role of project implementer. One aspect that stakeholders particularly appreciated is UNIDO capacity to act as a "*federating agent*". Several actors expressed their concern that, with the end of the project and UNIDO support, this function will be missed, with a significant risk that synergies promoted by the private-public partnership might lose their edge. (EQ 7.1)

Financial and in-kind support from USAID, Volvo, OCP Foundation and OFFPT were, broadly, delivered well and in accordance with the planned timeline. (EQ 7.2)

AGEVEC achievements wouldn't have been possible without the contributions of private sector partners. Both FNBPT and VOLVO played a key role building the "labour market orientation" planned for AGEVEC training. However, due to the partial scope of the market assessment and to the limited capacity of FNBPT to represent and bring forward the interests of the whole industry, only a segment of the Construction and Public Work Industry has been associated to the project. (EQ 7.3)

⁹⁰ Interviewed Companies, Businesses, OFPPT, Training Academy staff and financial partners (including USAID and VOLVO) agreed to consider the partnership as an important driver contributing to long term goals.

⁹¹ Private companies satisfaction as well positive feedback from graduates (course of Engine Motorists) are the main sources for this finding.

⁹² Ibidem.

⁹³ Additional sources include trainers and trainees feedback.

⁹⁴ Ibidem.

⁹⁵ Sources include evaluation interviews with OCP, stakeholders in Ivory Coast and Senegal and selected international businesses in Morocco (ie Volvo).

⁹⁶ These variables are discussed in detail in section 3.1 (factors affecting the sustainability of the results).

⁹⁷ The analysis of barriers to long term changes is also presented in EQ 3.1.

The project has been partially integrated to the organization and management structure of the school through its whole life. The evaluation evidenced several strengths of the institutional and management set up. On the other side, significant gaps were identified in terms of appropriation, allocation of resources and partial sustainability of AGEVEC results and tasks (EQ 7.4)

7.1 How efficient has UNIDO been supporting the implementation of AGEVEC?

Stakeholders consistently agreed on UNIDO extremely positive performance as project implementer⁹⁸. The aspect most appreciated is UNIDO capacity to act as a “*federating agent*”, managing to bring together a variety of stakeholders with different corporate cultures and perspectives. Several actors⁹⁹ expressed the concern that with the end of the project and UNIDO support, this function will be missed, with a significant risk that synergies promoted by the private-public partnership might lose their edge.

Additional elements that have been positively appreciated about UNIDO implementation include¹⁰⁰ :

- Quality of management and technical assistance
- UNIDO pro-activity and flexibility
- Result orientation
- Regional reach and capacity to work across the three Countries
- Involvement for the project durability: preparation of framework convention between the AGEVEC and partnering enterprises.
- Study for the identification of additional resources enabling the School self-financing and facilitating incentives for trainers.

7.2 To what extent Donors have been efficiently supporting the project?

Financial and in-kind support from USAID, Volvo, OCP Foundation and OFFPT were, in general, delivered well and in accordance with the planned timeline¹⁰¹.

In consideration of burdening regulations and procedures, OFPPT has in some case been slow to react to specific demands of AGEVEC and of the School, a constraint that significantly affected, by way of example, the quality of training courses for Heavy Equipment’ Operation (promotions 2017/18 and 2018/19).¹⁰²

Volvo contributions, in equipment and training inputs, have been highly appreciated by the Training Academy. Particularly appreciated was the delivery of last generation

⁹⁸ Interviews with partners and institutional stakeholders included a question about UNIDO performances. All interviewed parties expressed full appreciation for UNIDO role and support provided to the intervention.

⁹⁹ The concern about the end of the project and UNIDO mandate was a recurrent theme in the interviews held by the evaluation with stakeholders, here included the private sector stakeholders.

¹⁰⁰ Sources include: Evidence of result oriented management and monitoring, partners’ perceptions (including interviews with Senegal and Ivory Coast), interviews with training academy trainers and management about the quality of the TA support.

¹⁰¹ Finding based on a comparative analysis of commitments made by partners in the project document and performances a) as observed by the evaluation team and b) as perceived by partners.

¹⁰² Source: Interviews with OFPPT, FNBPT, Training Academy and UNIDO / AGEVEC staff.

equipment, as well as pedagogical tools. Trainers and students pointed to a few suggestions for Volvo support to better meet their expectations: ¹⁰³

- Increased availability for trainers of specialized instructions, pdf manuals and maintenance equipment (i.e. extractors) to support trainings ¹⁰⁴
- Accurate planning of Volvo instructors' contributions, to match their demanding agenda and tune to school needs.

Interactions across Donors have been relatively scarce. In retrospect, a financial partner recognized that an increased level of dialogue would have been beneficial. However, overall Donors coordination has been working satisfactorily due both to UNIDO capacity to establish an effective communication and also thanks to the Steering Committee, the governance mechanism that helped to put together Donors, Institutions and private sector stakeholders for AGEVEC guidance and decision making.

7.3 To what extent Private Sector Partners, particularly Volvo Group and FNBTP, have been supporting AGEVEC in achieving its goals?

AGEVEC achievements wouldn't have been possible without the contributions of private sector partners. Both FNBPT and VOLVO played a key role building the "labour market orientation" planned for AGEVEC training. ¹⁰⁵

Both Partners have complied with their commitments and, also very important, maintain now their availability to continue supporting the Training Academy after the end of the project through the subscription of specific Agreements. Evaluation findings point out how only a segment of the Construction and Public Work Industry has been associated to the project in terms of knowledge, ownership, contributions to market assessment, orientations for courses, and employment of trainees. A group of large and medium enterprises¹⁰⁶ have backed the intervention and contributed actively to organize internships and recruit graduates. However, these companies represent only a small fraction of the overall industry, which universe embraces as well a large number of medium sized and small companies.

According to the businesses interviewed by the evaluation¹⁰⁷, smaller enterprises might be less interested in recruiting AGEVEC graduates. Their selection criteria may privilege variables as lower cost, higher experience and relationship rather than technical skills. Many small companies may likewise be interested to different set of skills as their equipment is often timeworn and AGEVEC specialization on last generation equipment might not be perceived as an advantage.

¹⁰³ Source: Focus group with Trainers and interviews with Training ACADEMY / AGEVEC staff, confirmed by interviews with Volvo Management (Casablanca and Gottenburg).

¹⁰⁴ The evaluation Team enquired with Volvo about these perceived limitations to equipment and instructions access. Volvo offered the explanation of a restriction applying only to most recent generation of engines. This restriction should not hinder the quality of training and is meant to safeguard the Company.

¹⁰⁵ Finding supported by several interviews held with UNIDO / AGEVEC staff, FNBPT and Companies.

¹⁰⁶ About 30 companies figure as AGEVEC private sector partners (information provided by AGEVEC, see Annex 4).

¹⁰⁷ See list in Annex.

The limited AGEVEC reach to the Construction and Public Work Industry universe is due largely to the limited human resources in liaison with the private sector,¹⁰⁸ lack of a strategy and measurable plan for linking and communicating with the private sector, and the limited capacity of FNBPT to represent and bring forward the interests of the whole industry.

This important constraint needs to be evidenced as a lesson and to be taken into account in future.

7.4 How the Training School managed the integration of AGEVEC as specific unit within the school? What were the managerial and institutional main strengths and challenges?

AGEVEC was developed as a unit within Mohamed VI Training School, dedicated to specific activities, meant to achieve a common goal for the Project and the School. Through the whole project life, this unit has been only partially integrated to the organization and management structure of the school.

The evaluation evidenced several strengths of the institutional and management set up:¹⁰⁹

- The Project was “grafted” as a branch of the School a feature that supported ownership and sustainability
- Positive working relationship across Mohammed VI School staff and the project staff which have been working as a team for common goals over a period of 4 years
- Well integrated budgetary mechanisms where the project would reach for several expenditures not easily manageable by the School
- Common management and governance mechanisms applying both to the project and the School.

While the School and its management claim a certain amount of “ownership” of AGEVEC, several clues point to the fact that, by and large, AGEVEC was operated as a relatively independent “Project Unit”, with only partial appropriation by the Training School, OFPPT, and FNBPT partners. In particular, the evaluation evidenced gaps in appropriation and allocation of resources related to several AGEVEC tasks:¹¹⁰

- AGEVEC staff has been operating as a project, with strong interactions but limited ownership of the Training School; AGEVEC team of experts has been working as complementary staff to the Mohammed VI School. In some case, the staff recruited by the School was trained by the project (for example Trainers for Heavy Equipment Maintenance course). In several other instances, the School did not manage to recruit staff to substitute functions carried out by the Project Team.
- AGEVEC funded several recurrent expenditures (see EQ 6, performances), evidencing limitations to address some operation costs through OFPPT budget
- The Training School had a shallow participation in AGEVEC preparatory study, including the initial market analysis for the Heavy Equipment’ Maintenance course

¹⁰⁸ Only two human resources, also responsible for soft skills training and management of the Career Centre within the School.

¹⁰⁹ Findings are supported by review of project reports, evaluation team assessment of AGEVEC studies, and interviews with the Training Academy staff, AGEVEC Technical Assistance and Partners.

¹¹⁰ Ibidem.

- The School had a partial endorsement of the “high quality approach” as demonstrated by the issues of quality and market insertion for the courses of Heavy Equipment and Crane Operators
- Absence of a comprehensive strategy and plan for capacity transfer to the School
- Soft Skills development have been largely managed by project staff with limited capacities established within the School ¹¹¹
- Limited School ownership and resources allocation for monitoring, evaluation mechanisms, and management by results
- Issues of School ownership and commitment of resources for AGEVEC Result 3 and the Career Centre, with current very limited capacities of linking the school with the private sector
- Limited capacities established within the School for marketing and communication.

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¹¹¹ It is noted that through AGEVEC technical trainers were trained to deliver soft skills training and several school staff were trained by the Career Center programme.

¹¹² In order to expand these capacities AGEVEC carried out a training on M&E in November 2019 and one on communication in December 2019.

3. OVERARCHING ASSESSMENT AND RATING TABLES

3.1. Overarching assessment

AGEVEC has been successfully implemented, establishing a model for demand-oriented quality training for the Construction and Public Work sector. The Project strengths include a powerful potential for replicability, an outstanding private-public partnership and a regional dimension. The evaluation evidenced positive outcomes and impact opportunities for the Heavy Equipment Operation Course, here including high satisfaction of the private sector and good employment rates for graduates. Design embraced ambitious targets and a short timeline, privileging support to three results. The design was light and deserved accrued specification, especially in consideration of the pilot nature of the intervention. The Project was successful to deliver Results 1 and 2 for the Heavy Equipment Maintenance Course. Result 3 and linkages with the private sector need yet to be broadened in scope and strengthened. Partial contributions to new courses since 2017 did not allow the achieving of satisfactory outcomes for Equipment and Crane Operation courses. While several arrangements contribute positively to sustainability, several additional and important dimensions of sustainability need yet to be consolidated. UNIDO performed remarkably well as implementing agency, bringing stakeholders together and managing with efficiency, flexibility, proactivity and result orientation. Partners have been compliant to their commitments.

3.2. Evaluation ratings

The following table summarizes the evaluation ratings according to UNIDO evaluation guidelines and instructions for rating. Scores vary between 1 (minimum) and 6 (maximum), according to the evaluation rating scale defined in table 16 below.

The range 1 to 3 is defined as “unsatisfactory” and the range 3 to 6 as “satisfactory” (see UNIDO evaluation rating scale, table 17).

Table 16: Summary of the evaluation ratings

#	Evaluation criteria	Summary assessment	Rating
A	Progress towards impact		4
1	<ul style="list-style-type: none"> Impact 	Successful pilot, establishing best practices for quality and demand oriented skills development, applied to construction and public work sector. Long terms positive contributions also for PPDP approach, gender mainstreaming, security, workshop organization and soft skills development. Opportunities to further strengthen impacts with the development of adequate school – market linkages, addressing gaps of sustainability and of heavy equipment and crane operation courses.	4
B	Project design		3
1	<ul style="list-style-type: none"> Overall design 	Positive design elements (strategy, PPP, regional approach, result orientation). Shallow specification of results and lack of design for Result 3. Inadequate attention to sustainability factors.	3

#	Evaluation criteria	Summary assessment	Rating
		Light business plan.	
2	<ul style="list-style-type: none"> Logframe 	Sound but simplified theory of change, with very limited consideration to external factors	3
C	Project performance		4
1	<ul style="list-style-type: none"> Relevance 	Overall high relevance to strategies and labour markets of the 3 Countries (including Morocco new road map for training). High relevance of the Equipment Maintenance Course to beneficiaries and to the Industry. Relevance of Equipment and Crane Operation course needs to be strengthened, as graduates could not access to the labour market and expressed low satisfaction rates.	5
2	<ul style="list-style-type: none"> Effectiveness 	Highly satisfactory for R 1 and 2 (specifically for Heavy Equipment Maintenance). Need to strengthen considerably support to Heavy Equipment and Crane Operation courses and Result 3	4
3	<ul style="list-style-type: none"> Efficiency 	Highly satisfactory implementation mechanisms set up, including partnerships, coordination, management and monitoring. Overall positive financial and physical performances. Delays in the achievement of result 3.	4
4	<ul style="list-style-type: none"> Sustainability of benefits 	Organizational, Institutional; Elements in place, including transfer of management skills. However, OFPPT and School requiring additional support for capacity development Framework, Governance; Elements in place (Conseil d'Administration, Steering Committee), but sustainability of governance mechanisms needed further support and strengthened capacities. Needed support of policy, regulatory and legislative framework. Technical Sustainability; Overall satisfactory. Agreement with Volvo and Private Sector supporting future technical sustainability. Additional support being required. Issue of trainers' lack incentive system. Financial Sustainability; OFPPT support and preparation of an Agreement with FNBPT are very positive, but partial mechanisms. Lack of a sustainability strategy and a plan to face accrued investment and recurrent costs. Several operation costs paid by AGEVEC and no clear exit strategy.	3
D	Cross-cutting performance criteria		
1	<ul style="list-style-type: none"> Gender mainstreaming 	Full attention to gender throughout the project cycle	6
2	<ul style="list-style-type: none"> M&E: ✓ M&E design ✓ M&E implementation 	Sound and result-oriented M&E mechanisms would have helped a mid-term evaluation supporting the learning of the pilot experience. AGEVEC Monitoring includes several "best practices" including assessment of trainees' satisfaction,	5

#	Evaluation criteria	Summary assessment	Rating
		businesses satisfaction, follow up of internship and graduates. Limited school M&E capacities and ownership. Adequate M&E resources, although the pilot nature of AGEVEC would have deserved an expanded scope and additional funding	
3	<ul style="list-style-type: none"> Results-based Management (RBM) 	RBM applied to management and improvement of course. Measurability of outcomes and impacts RBM capacities need to yet to be strengthened within the School.	5
E	Performance of partners		
1	<ul style="list-style-type: none"> UNIDO 	Outstanding performances (coordination, management, linking stakeholders, approach)	6
2	<ul style="list-style-type: none"> National counterparts 	Very satisfactory commitment and performances (Foundation, OFPPT, FNBTP) Limited FNBTP capacities constrained the reach to private sector businesses	5
3	<ul style="list-style-type: none"> Donor 	Timely and very positive contributions of Donors (USAID, OCP and Volvo)	6
F	Overall assessment	AGEVEC is an outstanding pilot for demand-oriented quality training. AGEVEC proved to achieve positive outcomes and good employment rates for the Heavy Equipment Operation Course. The intervention offers a strong potential for replicability. Result 3 and several dimensions of sustainability still need to be consolidated.	4

Table 17: UNIDO evaluation rating scale

Score		Definition	Category
6	Highly Satisfactory	Level of achievement presents no shortcomings (90% - 100%) achievement rate of planned expectations	SATISFACTORY
5	Satisfactory	Minor shortcomings (70% - 89%) achievement rate of planned expectations and targets	
4	Moderately Satisfactory	Moderate shortcomings (50% - 69%) achievement rate of planned expectations and targets	
3	Moderately Unsatisfactory	Some significant shortcomings (30% - 49%) achievement rate of planned expectations and targets	UNSATISFACTORY
2	Unsatisfactory	Major shortcomings (10% - 29%) achievement rate of planned expectations and targets	
1	Highly Unsatisfactory	Severe shortcomings (% - 9%) achievement rate of planned expectations and targets	

Source: UNIDO evaluation Manual, 2018

4. CONCLUSIONS, LESSONS LEARNED AND RECOMMENDATIONS

4.1. Conclusions

C 1 Relevance: AGEVEC project, financed by a partnership of USAID, Volvo and OCP Foundation, with a budget of USD 7,385,215, managed to establish a replicable model of demand-oriented Vocational Training applied to the Construction and Public Work sector, set up within Mohammed VI Training School in Settat.

The intervention is fully relevant to Morocco, Ivory Coast, and Senegal national strategies and the needs of the industry. Beneficiaries (students and graduates from the three Countries) and private companies expressed a strong relevance of the Heavy Equipment Maintenance course to their needs.

C 2 Design: AGEVEC design had the merit to support demand orientation and to focus the limited financial envelop on three important results (Centre equipped, Training Programmes prepared and Career Service Points set up). Targets have been ambitious and the four-year span proved to be too short to consolidate transformational changes.

Design was light and deserved additional specification including for the market and training need assessment. A pragmatic approach privileged flexibility and *enroute* adjustments to challenges. The assessment concludes that effectiveness, impact opportunities and sustainability would have been better served by a stronger design, particularly in consideration of the pilot nature of the intervention.

C 3 Achievement of results: The project made positive progress toward the achievement of its three results:

- **Result 1** was fully achieved thanks to Volvo contributions in equipment supply. Quality of supplies has been positively supporting the high standard of the training with high satisfaction expressed by trainees, trainers and Companies. Equipment allowed a remarkable ratio of few students (as few as 3-4) per maintenance exercise. Last generation equipment was also supplied, supporting the quality of training.
- **Result 2** was also satisfactorily achieved for the Heavy Equipment Maintenance Course; a conclusion supported by the evidence of high satisfaction rates both from the Industry and trainees / graduates. Sector Companies particularly appreciated technical skills of interns and graduates, their know-how of last generation machinery, skills on circuit reading, electronic, electricity and hydraulics. Soft skills have also been positively appraised.

Ancillary conclusions for result 2 include:

- a) One of the strengths of the Heavy Equipment Maintenance course has been the high number of applications and the tight selection procedures for School acceptance. 1 out of 7 candidates would be selected, ensuring an average level of high preparation and qualification of trainees.
- b) Courses should be always be supported by in-depth market analysis studies and training need assessment carefully adjusted to labour market demands.
- c) Project support to courses should be designed through a phased approach, starting in small numbers and privileging quality of preparation to high number of trainees, a precondition to achieve positive outcomes.
- d) Need of continuously reinforcing the relevance of training programmes.

- e) Need to develop a system of incentives to enrol and maintain the best trainers available in the market
 - f) Importance of strengthening the internship mechanisms (including longer periods of stage).
- **Result 3** has been only partially set up and, by the end of the project, a systematic liaison with the private sector is still missing. The evaluation evidenced how Result 3 is essential to support adequate market absorption of graduates and good internship programmes. Result 3 scope should be broadened to an improved and systematic communication with companies. The evaluation pointed as well to the need to strengthen the demand of small and medium businesses through awareness building and capillary information. The liaison with the private sector needs accrued specification of design with enhanced vision, a strategy and an implementation plan. Scope of the Career Centre, its resources, and sustainability mechanisms need to be clearly defined. Soft skill development is not necessarily of pertinence to this result.

Overall, the Project managed to establish, with the Heavy Equipment Maintenance Course, a centre of excellence for training in the Construction and Public Work sector.

C 4 Employment and impact opportunities: Satisfactory employment rates (over 70%) were achieved for graduates of the Heavy Equipment Maintenance course. With the existing market demand, employment rates could have been significantly higher if a systematic and effective liaison service with the private sector could have been established since the early years of implementation.

Much lower employment rates were attained for Heavy Equipment and Crane Operation courses, supporting the following conclusions:

- Need for an in-depth appraisal of labour market and its segments and full alignment of skills development to market demand
- Slow start of new courses, with improved programmes preparation and a number of graduates compatible with high quality of training
- Provision of strong support services to graduates and companies.

The mandate to support Heavy Equipment Operation and Crane Operation courses was contained, according to Steering Committee orientations. The outcomes of these two courses proved much less satisfactory, with low satisfaction expressed by graduates, skills not fully aligned to labour market demands and low employment rates.

Additional impact opportunities have been evidenced by the evaluation for the following achievements:

- The establishment of a model for quality and demand oriented training. AGEVEC provides a model of excellence for the new Morocco VET strategy and Road Map
- Gender mainstreaming in the Construction and Public Work industry
- Piloting a workable partnership across private and public sectors supporting demand-oriented training
- Support to the modernization of the industry, here included the security of the work environment
- Supporting expansion of last generation vehicles
- Meeting labour market demands from Senegal and Ivory Coast and supporting regional integration
- Development of important lessons with a view to support future interventions.

C 5 Gender mainstreaming: AGEVEC has consistently supported, throughout the project cycle, an increased participation of women in the Construction and Public Work sector and women have been participating to training courses (5%) with 100% employment outcomes. The evaluation gathered evidence that trainers, students and companies have positively appraised the effort. The evaluation evidences the scope of additional work, beyond the mandate of AGEVEC, to overcome cultural barriers of this sector.

C 6 Implementation and performances: AGEVEC success is largely based on full partners' contributions and commitment. UNIDO performed remarkably well as implementing agency and acted as an effective federating agent, building trust across stakeholders, applying result-oriented management, and supporting the project with flexibility and pro-activity.

Financial implementation has been performing well, thanks to financial partners commitments and UNIDO capacity to adjust to different procedures and expectations.

The project represented good value for money for the different sponsors. Overall good performances contributed to a positive image of the Project, AGEVEC brand, and UNIDO's work.

Result-based mechanisms were developed including sound monitoring and evaluation mechanisms.

The project features an exemplary public-private partnership applied to development cooperation and vocational training. The mechanism has a potential to be sustainably continued although the capacities of the partners and governance need to be strengthened.

C 7 Capacity development and ownership: although AGEVEC supported considerably the capacities for training programmes, institutional capacity development was not part of the project' results. The evaluation evidenced an accrued scope for the capacity development, including the strengthening of management mechanisms, capacities of partners (OFPPT and FNBPT) and of the School. This would have contributed positively to AGEVEC goals, increasing project sustainability and replicability. Although the project was well grafted within the school, the evaluation evidenced the need to strengthen School' ownership for several tasks and responsibilities of the project.

C 8 Sustainability: Design and implementation addressed only partially external factors. The evaluation evidenced a number of complementary conditions required for sustainability, including: financial sustainability; the strengthening of policy and legislative and regulatory framework, and sustainable mechanisms linking the School to the private sector.

C 9 Regional approach: The regional dimension of AGEVEC has been working particularly well. The project addressed relevant demands from Morocco, Senegal and Ivory Coast contributing to regional integration.

C 10 Replicability and upscaling: AGEVEC, with its Heavy Equipment Maintenance Course, sets a high standard for quality and demand oriented training, a guide for future experiences in Morocco and at Regional level.

The Training Academy could provide important lessons supporting the implementation of new Morocco national VET strategy and roadmap.

AGEVEC successful experience provides a good foundation for the development of UNIDO strategy and action plan for the VET sector.

Positive achievements need now consolidation. The partners and all stakeholders express concern for the end of UNIDO support and the closing of external financial assistance.

Replicability and upscaling need to be supported by increased attention to sustainability.

4.2. Lessons learned

The evaluation evidenced important lessons, to be drawn from the project, driven both by challenges and by positive achievements:

- The project design followed a top-down approach and national stakeholders were not adequately consulted. This contributed to some initial lack of understanding/ownership of national stakeholders and less involvement during the project's initial stages by some national stakeholders. The lesson learned is that participatory approaches to project design and consultations with relevant national stakeholders have the potential to increase national ownership, relevance, effectiveness, impacts, and sustainability.
- Interventions, geared toward creating high quality and market-oriented training models, require complex processes. These processes need extended periods of time to be developed and consolidated, and therefore, it is important to carefully outline mid to long-term implementation schedules and to take into account possible delays (which are likely to occur in complex interventions and/or challenging contexts) as well.
- The design of VET interventions must take into account national and local contexts. Elements such as the political, economic, and social environment, the characteristics of the labour market; the capacities of the public and private sectors, the profile and expectations of young people and gender stereotypes are fundamental when tackling this type of training model.
- AGEVEC exists within the context and the institutional framework of Morocco's public vocational training system. It is important to take into account strengths and challenges of such a context and its institutions. It is also important not only to define clear and systematic strategies for strengthening and transferring skills that are adapted to the different institutions and organizations (FNBTP, OFPPT) but also to have sufficient human and financial resources to carry out institutional capacity-building and advocacy activities in order to positively influence policies. Deficiencies in any of these aspects can be a barrier to the effective transfer of knowledge and skills.
- Conducting thorough and sound labour market studies is essential for vocational training programmes. These studies are indispensable for effectively linking the training offer with actual market demand, and thus, with employment opportunities. Analysing the labour market, including its key characteristics, structure, jobs quality, job creation potential, and capacity to absorb skilled labour, is essential to support VET interventions.

- The project's efforts and goals are geared towards reinforcing *employability*. This is considered a good approach as *employment* outcomes depend on several factors that are beyond the project's reach: macroeconomic dynamics; labour market conditions; economic growth; private sector; regional/local contexts; "labour market orientation/responsiveness"; etc. Employability is, however, difficult to define and even more so to measure, since an internationally agreed upon definition does not exist. Moreover, "employability" would very much depend on different national contexts and labour market characteristics.
- Internships are an excellent way to acquire experience with real market demands and to gain first-hand knowledge of market needs and opportunities. Apprenticeships serve as a great complement to technical training (theory) since they give trainees the chance to apply the abilities acquired and to test them against the demands of their chosen trade. In general, this increases their motivation to learn and become more proficient. Several private sector operators are in favour of an accrued duration of internships in order to build the practical experience required by the sector's companies.
- Within the Project context, high quality training (technical and soft skills) is necessary, but not sufficient on its own to improve labour opportunities. Decisive support measures aimed at accompanying young graduates in their labour integration process are essential. Furthermore, a systematic approach to capacity building and capacity transfer to national partners is indispensable.
- Providing support to small and medium enterprises could be important to improve educational attainment and remove the entry barriers for the youth and women.

Good Practices

- *Building on past experiences and achievements.* The AGEVEC project was developed building on the UNIDO-SIDA PPDP as well as on the Learning and Knowledge Development Facility's (LKDF) past experiences and achievements.
- *Partnering with private and public stakeholders* such as the Government of the Kingdom of Morocco, the Volvo Group, the USAID, the OCP Foundation, the Ministry of Education/OFPPT and the FNBTP has been instrumental to the project's achievements.
- The AGEVEC training offer was based and designed on the results of the *Market Needs and Training Needs Assessment*. This is considered a good practice as the project aims at reducing the gap between supply and demand of skilled labour. In other words, the training offer intends to be *demand oriented*.
- The *training of trainers offered by AGEVEC* is another aspect that is considered as a good practice as it provides trainers with the necessary pedagogical skills, complementing their technical knowledge and improving their teaching abilities. Sound technical and pedagogical skills are intimately linked to the quality of the training delivered.
- *The inclusion of "soft-skills" in the curricula.* Stakeholders (from companies, public and private training institutions) confirmed that, across-the board, there is a lack of soft skills among young applicants. These gaps represent an important bottleneck to finding appropriate human resources for companies. Additionally, weak soft-skills

represent an obstacle to young graduates' ability to obtain gainful employment. In this regard, the soft-skills training provided by the AGEVEC is considered a good practice.

- Because of their common struggle with high youth unemployment, the AGEVEC is designed to train *students from Morocco, Ivory Coast and Senegal*. This is a very distinctive feature of the AGEVEC Project. Furthermore, arrangements have been made to support project beneficiaries' placement in all countries after training completion in Morocco.
- *Career support services* are essential to facilitate a smooth school-to-work transition for young trainees. Despite the challenges, establishing a Career Centre at the School Mohammed VI, is considered a good practice.
- *Internships* are a central tool in: enhancing labour market opportunities for youth; strengthening the current workforce through the provision of training opportunities that allow for learning the necessary skills; providing opportunities aimed at preparing the future labour force, and providing young workers with the required skills and aptitudes for life-long learning.
- *The project has a full result orientation, effective monitoring and evaluation tools and a dedicated M&E Officer*. This is considered a good practice as it ensures that sound M&E processes are put in place that allow to collect data not only on Key performance Indicators (KPI), in order to report back to the donor, but also on key indicators linked to training and employment results/outcomes. The project regularly conducts satisfaction surveys among trainees, trainers and private companies.
- *Certification* is very important as it proves that trainees have followed a quality instruction process to learn a trade. Certification can also give future employers the guarantee that trainees have the required abilities to take on a job. Finally, certified students will improve their chances of obtaining better jobs.

4.3. Recommendations

The following recommendations are derived from evaluation findings and conclusions. Recommendations have been clustered in two groups:

- a) Short- and medium-term recommendations to consolidate AGEVEC results (Recommendations 1 to 7)
- b) Medium term recommendations for replicability and upscaling (Recommendations 8 to 9)

A – Short- and medium-term recommendations to consolidate AGEVEC results

R1 - Identify mechanisms for follow up support to AGEVEC, consolidating the pilot, completing results and addressing sustainability factors.

AGEVEC project was highly relevant and its execution was conducted with effectiveness and efficiency, generating significant results. Project partners, as well as stakeholders from Morocco, Cote d'Ivoire, and Senegal who have been consulted during the evaluation requested further assistance from UNIDO and the donor community in order to strengthen the results attained so far and to increase the AGEVEC project's effectiveness, impact and sustainability.

<i>Recommendation based on all Conclusions</i>
<i>Priority: HIGH, Importance HIGH</i>
<i>Recommendation addressed to: UNIDO, USAID, OCP, OFPPT, FNBPT and Volvo</i>

R 2 Support for AGEVEC graduates who have not found employment.

It is very important to continue to lend support to the AGEVEC graduates with job-related difficulties in order to enhance their employment opportunities. For this, it would be useful to (i) identify those who continue to be unemployed; (ii) undertake intensive action with companies in the construction and public work sector in order to identify their labour needs and employment opportunities; and (iii) provide support to these graduates in their contact with companies that offer employment opportunities. Additional training should be provided to participants of the Heavy Equipment Operation and Crane Operation Courses, which may not have acquired skills required by the market.

<i>Recommendation based on Conclusion 3</i>
<i>Priority: HIGH, Importance HIGH</i>
<i>Recommendation addressed to: UNIDO, OFPPT, FNBPT and School Mohammed VI</i>

R 3 Develop a sustainability plan for AGEVEC and strengthen significantly sustainability mechanisms.

UNIDO should facilitate to OFPPT, FNBPT and Mohammed VI School the development and the implementation of a sustainability strategy and plan. The plan should take into account the results achieved thus far as well as the challenges to be faced ahead and the status of the “enabling environment”, including: institutional capacities, available resources, ownership, and political commitment. The plan should describe what is to be sustained in a well-defined time-line. The Plan should take into account results such as performance changes; specific interventions; systems or procedures that were developed and established; the responsible for sustaining such results, and an explanation as to where the resources would come from to ensure sustainability. Sustainability mechanisms to be supported include:

- Sustainable financial mechanisms to meet investment costs (for new courses) and operation costs
- Mechanisms and procedures to provide adequate incentives to trainers and expenditures for internships
- Mechanisms to support and expand the scope of the Regional dimension of AGEVEC
- Support to the enabling environment for VET reform (including policy, legislative and regulatory framework)
- Mechanisms to strengthen the public-private partnership and governance mechanisms.

<i>Recommendation based on Conclusion 7 and 8</i>
<i>Priority: HIGH, Importance HIGH</i>
<i>Recommendation addressed to: UNIDO, OFPPT, FNBPT and School Mohammed VI, financial partners</i>

R 4 Continue strengthening the capacities of the School.

Additional efforts are required to ensure that Training Academy is able to own, design, lead, implement and support the training-employment process. For this, UNIDO and AGEVEC Project must continue to strengthen its capacities with a view to sustainability. This could be achieved in a systematic and sustained way, through a capacity building and continuous training plan. This plan should be designed based on a needs assessment and should include a capacity development strategy to attend to specific

gaps while defining objectives and results to be achieved as well as the necessary support actions and the monitoring and evaluation processes.

Strengthened capacities should include result-based management supported by effective M&E tools. Result orientation should aim to optimize employment and employability indicators as well as satisfaction monitoring from businesses, graduates and trainees.

<i>Recommendation based on Conclusion 6, 7 and 8</i>
<i>Priority: Medium, Importance HIGH</i>
<i>Recommendation addressed to: UNIDO, OFPPT, and School Mohammed VI</i>

R 5 Strengthen the relevance of training programmes. The main criterion for adapting the offer of the market-oriented training courses should always be the relevance of their content with regards to market opportunities. To satisfy this requirement and improve the interaction with the labour market, it is important to have better knowledge of the market's present and future needs and adjust the training offer accordingly. Activities should include: in-depth market assessment with full mapping and analysis of market segments; strengthened mechanisms for private sector feedback to training programmes and strengthened internships.

<i>Recommendation based on Conclusion 4</i>
<i>Priority: HIGH, Importance HIGH</i>
<i>Recommendation addressed to: UNIDO, OFPPT, FNBPT and School Mohammed VI</i>

R 6 Reorientation of the Career Centre to a "School-Business Department".

The mission of such a "School-Business Department" would be to guide and inform trainees, and to support, monitor and manage their integration in the labour market, as well as facilitate contact with companies and with the industry. More specifically, the functions of the School-Business Department would be: (a) to establish systematic and consolidated relationships with the companies within the sector; (b) facilitate and manage internships; (c) guide and assist students in finding employment according to existing opportunities; (d) implement referral, placement and job search mechanisms; (b) collaborate in adapting the technical training offered to the needs of the labour market, based on feedback from companies. The implementation will require a specific study, specification of results, with well defined performance indicators and targets, definition of resources, budget and sustainability plan.

<i>Recommendation based on Conclusion C3 (Result 3)</i>
<i>Priority: MEDIUM, Importance HIGH</i>
<i>Recommendation addressed to: UNIDO, OFPPT, FNBPT and School Mohammed VI</i>

R 7 Strengthen private sector awareness of benefits related to the recruitment of skilled technicians.

A communication campaign, supported by awareness building and targeted capacity building should be implemented to strengthen the demand, particularly of small and medium enterprises and family businesses, about short- and long-term benefits of recruiting well-trained technicians.

<i>Recommendation based on Conclusion C3 and C4</i>
<i>Priority: MEDIUM, Importance HIGH</i>
<i>Recommendation addressed to: UNIDO, OFPPT, FNBPT and School Mohammed VI</i>

B – Medium term recommendations for replicability and upscaling

R 8 Future interventions should be supported by robust design, well aligned to international cooperation best practices

<i>Recommendation based on Conclusion 2</i>
<i>Priority: HIGH, Importance HIGH</i>
<i>Recommendation addressed to: UNIDO and USAID</i>

R 9 Identify mechanisms to capitalize on AGEVEC lessons and establish a model to spearhead the new Strategy and Road map for VET in Morocco.

AGEVEC experience should catalyze a national/regional debate on high-quality, demand-oriented training, supported by PPDP mechanisms.

Mohammed VI School and the Training Academy should be provided with visibility and promote the debate, informing national dialogue and policies for the implementation of the Road Map.

AGEVEC experience should support as well the building up of a comprehensive UNIDO strategy for skills development.

<i>Recommendation based on all Conclusions</i>
<i>Priority: HIGH, Importance HIGH</i>
<i>Recommendation addressed to: National Institutions, UNIDO, Financial Partners</i>