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Training Partnership Egypt: Training of vocational school teachers in welding technology

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GSI mbH carried out a successful project together with Sequa gGmbH for teachers from the Egyptian Technical and Vocational Training Centers (TVET) in welding. The project was funded by the German ministry of foreign affairs and realized in the German Egyptian Welding Center (GEWC), branch of GSI. 15 teachers were successfully trained in El Obour – near Cairo – by the GEWC and they became “DVS Welding Instructors”. The final preparation for the exams and the examination itself took part in GSI SLV Bildungszentren Rhein-Ruhr in Germany.

Starting position

In Egypt the demand for skilled workers in industry is high. The need for well-trained welders at all levels cannot be met in Egypt, for example. Many branches of industry rely on welders, welding workers and welding technicians. Welding technology is particularly popular with international standards - for the EU and / or the USA - as major industries such as the automotive supply industry or the solar technology industry are strongly international and are EU/USA standard dependent companies.

Unfortunately, not enough Egyptians have the qualifications required and many young people are unemployed. Vocational training in national vocational training centers is often not practical and not geared to the needs of the industry. As a result, young people’s entry into the profession is often problematic. This project exemplifies a solution to improve vocational training by training teachers (train the trainer) in the field of welding qualifications.

The target group for further training was exclusively vocational school teachers who will function as multipliers in



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the future. Through the new, in-depth and above all, practical knowledge, they will help to improve the professional prospects of job-seeking and poorly trained young people.

Project goals

The overall project objective of the follow-up phase was to contribute to the economic stabilization in Egypt, thereby supporting a successful democratization of Egypt as well as promoting peace and security in the region.

The specific project objective was to improve the prerequisites for a practice-oriented and demand-oriented qualification of skilled workers in welding technology in the state vocational training system by the training of qualified welding teachers in Egypt.

The indicator for the success of the project was: At most 18, but at least 15 vocational school teachers had acquired the necessary theoretical, practical and didactic skills that entitle them to acquire the DVS Welding Instructor.

Project implementation

From the very beginning, the goal of the project was that the 18 best qualified participants in the preparatory pro-

ject were to complete their specialist training in the Ruhr area. It was, of course, necessary for the sequa, together with GEWC and the GSI in Cairo, to present the project to the Deputy Minister of the Ministry of Education. Subsequently, the training partnership with the Ministry of Education was initially promoted at vocational schools. The echo was relatively large. Almost 80 persons were registered. For phase 1 "Pre-selection of the participants for train the trainer", these 80 persons were divided into two groups and received theoretical and practical lessons. An examination was then carried out. Only the best 36, after passing the exam, were given the opportunity to take part in a further selection station with mainly practical content. Here, too, an examination was concluded.

Due to the number of workstations in the GEWC workshop in Cairo, a maximum of 18 participants could be admitted to the actual training as a welder according to DIN EN ISO 9606-1. This training has been held since 20.12.2014. The participants were trained intensively in the following three practical processes:

- manual metal arc welding (MMA)
- metal-active gas welding (MAG)
- tungsten inert gas welding (TIG)

GEWC's project management was extremely satisfied with the participant's performance. From the start it was a very motivated group from Egypt. In order to spread the multiplier effect as widely as possible, not only vocational school teachers from the Cairo region were recruited, but also from other provinces. Apart from the vocational school teachers from Cairo, participants from Aswan, Quina, Suhag and Luxor also took part. Therefore, the necessary costs for accommodation and meals were reimbursed.

The participants in the advanced training course were all active teachers in their vocational schools who are responsible for the training of welders. Often, these vocational schools have technically well-equipped workshops, but the teachers themselves did not have the qualifications, in particular the practical welding skills needed to teach their students practically. After the training of trainers as an internationally recognized welding master, the teachers act as multipliers, who are able to train young people better for the industry and thus increase their employability.

The training was conducted in German and Arabic language. In addition to the technical skills of a welding trainer, another component of the training was a basic course of vocational education and training. Instructors are coaches for the learning processes for their trainees.

The qualification of the vocational school teachers at international level in this project made it necessary for the train-

ing to take place in Germany for the last phase. Only here were the lecturers of the courses available for the whole period and an examination according to international standard was possible. In addition, the participants were able to gain an intensive insight into the German training structure, planning and organization and to work in workshops that were technical and labor-protective at the level required for the production of high-quality industrial products.

One main part in the train the trainer project was to learn and train the professional practical welding techniques in the three processes. The participants spent 2 months in Germany. 140 of the total of 320 teaching units in this training were reserved for practical exercises.

The training finishes with an examination. After passing the examination, all participants received the DVS® welding master's certificate from the German Association for Welding and Related Processes.

Project duration in Germany

The participants were picked up in Germany by the GSI at the airport and received a warm welcome with a welcome buffet in their accommodation.

Each participant had a single room on a single floor with a common kitchen and lounge in the hotel BfZ in Essen. The accommodation was close to the GSI education center.



In the first days the participants were given an orientation in the city of Essen. Amongst other necessary things, they were shown where they could buy food and other ingredients from their home country.

In addition to the training, excursions took place in the Ruhr area. Among these are the Kölner Dom, the World Cultural Heritage Zollverein in Essen, the museum for coal mining in Bochum and the famous Genç Osman Camii Mosque in Duisburg-Hamborn.

At the end of the training, the participants were given their certificates in a ceremony by the Lord Mayor Thomas Kufen. Mr. Kufen praised all for their very good performance and figured out "They came as strangers and they go as friends".

Project partners

sequa gGmbH, Bonn

Within the scope of the project it was foreseen that sequa gGmbH took over the professional control of the project during the consolidation phase. Sequa gGmbH is a non-profit, globally active development organization. Shareholders are the leading associations of the German economy (DIHK, ZDH, BDI, BDA) and GIZ. Sequa supports the

qualification of specialists and executives since 1991 within the framework of programs and projects of international cooperation. More than 600 projects in approximately 100 countries have successfully followed sequa. Sequa regularly cooperates closely with chambers, industry associations and educational institutions of the German economy and uses their know-how and expertise in its projects. In the present project proposal, sequa takes over the overall responsibility for the implementation of the project, including the content, organizational and financial implementation as well as monitoring, evaluation and reporting.

German Egyptian Welding Center (GEWC)

The GEWC was founded in 2007 in direct cooperation between the GSI-SLV and the Egyptian company Al Salem. Al Salem is a company that sells welders, welding consumables, materials and other products from the field of welding technology in Egypt. The GEWC is also used by other companies for further education and training. It offers - if necessary, technical support from Duisburg - training and further education according to the standards of the International Institute of Welding. The GEWC is closely networked with the local industry as well as the state vocational schools and is committed to the improvement of the state education by means of a more practical reference and contact to the relevant industry representatives and associations.

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