

# Female Professionals in Electronics



## A project designed to boost the number of women in technical professions

### 1) The Situation

Due to a growing middle-class and a trend towards urbanization it has become quite normal for women in Ghana to use and own electronic appliances such as smart-phones, TV-sets or audio systems.

Yet, in the supply chains for these products, in sales, installation and service, women are under-represented.

Only a small number of women is professionally engaged in the fast growing sector, even though, there is no rational reason behind this. More muscles, the biological advantage of men over women, do not help in the electronic sector...

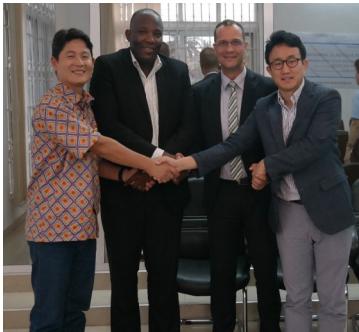


### 1) Project Concept

While much has been said about girls being under-represented in technical vocational training, communication and studies alone will not change the situation. **Action is required, affirmative action.**

We opted for targeted vocational training for girls in the electronic sector. Selected Girls Vocational Training Centers would be supported to offer *‘Electronics for Girls’* courses in addition to the ‘usual’, female dominated training fields they normally offer: catering, dress-making, hair&beauty.

The existing infrastructure of the institutes would cater for sustainability and integration into the TVET system, while the ratio of female participation in the sector would rapidly change.



From left to right: KOICA Country Rep. W. Cho, COTVET Exec. Dir. S. Deh, GIZ Country Dir. S. Leffler and SAMSUNG Bus. Man. J.Y. Goh joining hands after signature of the MoU December 16, 2014

### 3) Cooperation

There are practically no electronic manufacturers left in Europe. Since we sought private sector engagement to be essential for this project, we therefore turned ‘towards Asia’ and proposed the concept to KOICA. Country Director *Woochan Cho* was very enthusiastic about the project idea and quickly managed to engage SAMSUNG Electronics West Africa as our private partner.

Both were ready to invest US\$ 500.000 into the project, KOICA as a co-financing grant to GIZ and SAMSUNG in the form of delivery of four state-of-the-art electronics teaching labs to be installed at our partner schools.

<b>giz</b>	€ 200.000
<b>SAMSUNG</b>	€ 440.000
<b>KOICA</b> Korea International Cooperation Agency	€ 440.000
	€ 1.080.000

With a fairly low amount of only € 200.000 from the Employment for Sustainable Development E4D Fund, and a convincing concept, we managed to mobilize 1 Mill US\$

### 4) Objective

The project promotes future female professionals and technicians in sales, installation and servicing of electronic appliances by supplying them with a sound technical background and capacity through practical oriented vocational training. Through the training, the young women will gain the knowledge, technical capabilities, communication skills and the necessary self-confidence to compete in the fast growing sector and thus generate income for themselves and their families.

#### Impact:

**The number of trained female professionals in the electronics sector in Ghana is significantly raised.**

#### INDICATORS

- 1) 100 female graduates from the 4 training institutes annually (first batch after 3 years training)
- 2) The ratio of female graduates in electronics in Ghana has increased from approx. 2% in 2012 (5 female among 240 graduates) to approx. 30% in 2017 (110 female among 340 graduates)
- 3) 70% of female graduates find employment within 12 months after training

### 5) Employment Opportunities

Consumer electronics probably represent the fastest growing sector in an emerging economy such as Ghana. A growing middle-class develops a strong demand for modern electronic appliances and life-style products. Sales outlets and service stations for these devices pop-up everywhere in the country.



Yet, women do not benefit from the profits made in the sector the way they could if equipped with the necessary attitude and professionalism.



Servicing and installation of electronic equipment does not have to be a male dominated trade; women have equal chances if educated equally. Female ,informed salespersons' will find the same, if not better, employment opportunities compared to their

male competitors if they are able to prove inside technical knowledge about electronic products in the market.

Public employers, as the Armed Forces, Police or Customs, are specifically targeting women to apply for available positions. Yet, without a technical qualification, chances for women are limited. For a qualified electronics technician, however, male or female, doors are wide open.



## 5) Implementation

Four vocational training centers were selected to partner with the project. Only one, Don Bosco in Tema, was already offering electronics as a regular training subject. For the three other institutes, electronics is a new field.



*The girls at Pentecost Vocational Training Institute, Accra*

Pentecost VTI and Accra Girls VI only enroll girls while Don Bosco and CYO TVI are mixed schools.

Classes at Accra Girls, Pentecost and CYO are all-female, 28-30 students.

Don Bosco VTI runs two parallel courses, each mixed at 50% girls and 50% boys.

Most students have completed Junior High School (JHS), some are High School drop-outs.

Age ranks between 16 and 25. Currently we have 117 girls enrolled for the project.



*The girls at Accra Girls Vocational Institute, Accra*



*The girls and boys at Don Bosco Vocational Training Institute, Tema*



*The girls at CYO Technical Vocational Institute, Sovie, Volta Region*

## 7. Main Outputs

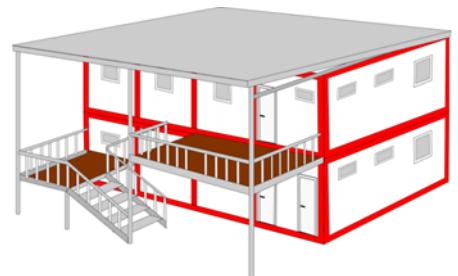
### 7.1. Provision of Infrastructure



The project provides the necessary infrastructure for the schools to offer electronic courses for girls.

SAMSUNG Electronics sets-up state-of-the-art electronic teaching labs in all four schools.

For two institutes, Accra Girls and Don Bosco, the project will provide two additional classrooms each constructed from pre-fabricated, mobile housing units.



### 7.2. Human Capacity Building



The project provides intensive teacher-training on Competency Based Training (CBT) in electronics and generic subjects for those instructors newly engaged at our partner schools.

We have also compiled state-of-the-art teaching material.



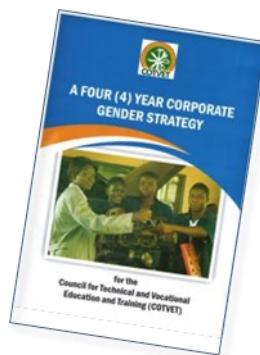
## 8) Sustainability

COTVET released its Four Year Corporate Gender Strategy in 2013 as a product of cooperation between the Council and GIZ / GSDI (Ghana Skills Development Initiative). The strategy bases on data showing that less than 2% of skilled workers in lucrative technical sectors are female and specifically calls for affirmative action in order to integrate more girls and young women through targeted vocational training into those trades.

The project is the first of its kind implementing goals and visions elaborated in COTVET's gender strategy and will therefore, now and in future, enjoy highest support.



**Council for Technical, Vocational Education and Training**



## 9) Integration

The project is implemented in close cooperation with the bilateral '*Program for Sustainable Development*' PSED (Team-leader: Torsten Schlink) which engages in the fields of financial inclusion and vocational training. The latter, the '*Ghana Skills Development Initiative*' GSDI, points at professionalizing Ghana's traditional, non-formal apprenticeship system. GSDI actively engages in the following sectors: electronics, auto-mechanics, welding and hair & cosmetics. Two of the project's partner institutes double as partner schools for GSDI (Accra Girls and Pentecost). As an important synergy effect, non-formal apprentices in electronics as targeted by GSDI, male and female, will benefit from newly established state-of-the-art electronic laboratories in those schools. Political partner for both initiatives, GSDI and FPE, is COTVET.

GSDI strongly engages for more girls and young women in technical vocational trainings; so both initiatives work hand-in-hand to make technical sectors more attractive for girls when choosing their career options.

## 10) Knowledge Management

The project will be accompanied by a comprehensive study that will focus on the learning conditions and behavioural change of girls and young women in a technical sector. We are going to compare the learning environment in all-female groups (Accra Girls, Pentecost and CYO) to those in evenly mixed male-female classes (Don Bosco) and try to find out which model represents the most conducive one for female vocational students to engage in a technical sector.

Individual interviews and scientific follow-up shall document behavioural change of our students over the duration of the project. This will include the families of selected girls and their immediate surrounding.

The study will also cover the direct impact of the project and deliver respective data by looking into the actual employment situation of graduates after project cycle

The study will be financed by KOICA independently from project funds and conducted by a team of consultants recommended by KOICA and GIZ.

## 11) Scalability

We are about to start an additional E4D project with a clear gender focus by the end of this year (2015):

### ***Female Motorcycle Mechanics and Solar Technicians for Northern Ghana***

The project follows a similar concept as FPE: motorcycles are extremely popular with women in Northern Ghana, yet they do not participate in the supply chain. The same accounts for small, off-grid solar appliances. Women are the main client group, yet they do not share employment opportunities connected. The project is going to change that by offering short term, non-formal training for women in these sectors and assist them to form small scale start-up enterprises.

