



**Enhancing the Capacity of Khartoum State in the Delivery of Pro-Poor Vocational Training Services: Vocational/Skills Training Services and Capacity Building in Youth Entrepreneurship Development (YED) for Job Creation and Poverty Alleviation in Khartoum State**



***Project Number: 9 ACP SU 1-12: EE/SUD/07/004***

***Funded by the Delegation of the European Union to the Sudan***

**END-OF-PROJECT REPORT  
March 2011**

**UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION**

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# Abbreviations

CBO	Community-based Organization
CBT	Competency-based Training
CTA	Chief Technical Adviser
EC	European Commission
EDP	Entrepreneurship Development Programme
EU	European Union
HVAC/R	Heating, Ventilation, Air Conditioning and Refrigeration
IDP	Internally Displaced Person
ITB	Invitation to Bid
KSVTA	Khartoum State Vocational Training Administration Unit
MIC	Ministry of International Cooperation
NCTTE	National Council for Technical and Technological Education
NGO	Non-Government Organization
PMU	Project Management Unit
SCVTA	Supreme Council for Vocational Training and Apprenticeship
UNIDO	United Nations Industrial Development Organization
VTC	Vocational Training Center
VTEC	Vocational Training and Entrepreneurship Center

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The PMU acknowledges and thanks the officials and the staff of the Khartoum State who have made it possible for the project to achieve its objectives:

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- H.E. Dr. Abdul Ell Rahman El Khider, Governor of Khartoum State
- Ms. Ishraga Sayd Mahmoud Salih, High Commissioner Human resources Development
- Mr. Osama Faisal El Sayed, Director External Relations
- Ms. Huda Osman – Director, Ministry of Finance
- Mr. El Sir Ali – Director General, KSVTA Unit
- Mr. Mansour Ahmed Elimam Mansour, VTEC Director, Khartoum 1
- Mr. Abdelrahim Mohamed Ahmed, VTEC Director, Kerary
- Mr. Hassan Adam Hassan, VTEC Director, Hag Yousif
- Mr. Hysman Hassan Abdel Galil, VTEC Director Halfait
- Mr. Ahmed Abdalla Osman, VTEC Director, Khartoum South

The introduction of the Competency Based Training (CBT)curricula in vocational training would not have been possible without the support of the Federal Ministry of Labour issuing the Ministerial Decree and the leadership provided by the National Council for Vocational Training and Technological Education and the support from the Supreme Council for Vocational Training and Apprenticeship and the private sector organizations.

The work in the IDP and poor areas of Khartoum was made possible with the commitment and cooperation given by the partners: international and national NGOs and the community-based organizations (CBOs).

To all those who participated and supported the project at all stages, UNIDO would like to thank you for your support.

# Introduction

This final project implementation report prepared by UNIDO is providing to both the donor agency, the Delegation of the European Union to the Sudan and the Khartoum State Government, as the project counterpart, a full scope and range of the entire implementation process and operational strategy pursued during the lifetime of the project, i.e. June 2007 to October 2010. This report has been compiled on the basis of planned project objectives, outputs, activities, results and indicators, developed at the project planning stage.

This report has been compiled with the intention to present and provide in a most detailed manner, with relevant photo material, crucial information and insights as to the steps taken in project implementation at various stages in time. The report should capture the institutional memory available from the PMU and project partners, relevant to programmes related to Entrepreneurship Development (EDP) integrated into Vocational Technical and Entrepreneurship Centers (VTECs). It should be considered a comprehensive record of the process of VTECs development. The rationale of having taken this approach in report preparation is to enable other national agencies and entities, which are planning to set up similar programmes for them to learn from this experience. Therefore, this report can be considered as a knowledge management tool for development agencies.

Section 1 of the report provides an overview of the entire project, organizational preparatory activities and implementation strategy details.

Section 2 maps out the results in detail and provides analyses for component 1 and 2 separately.

Section 3 summarizes and reviews the achievements, impacts, sustainability and recommendations at several levels per component and beneficiary groups. This section provides a synthesized assessment of information elaborated in both Component 1 and 2.

## Project Overview and Background

**Project No.** 9 ACTP SU 1-12 and EE/SUD/O7/004

**Project Title:** Enhancing the Capacity of Khartoum State in the Delivery of Pro-Poor Vocational Training Services: Vocational/Skills Training Services and Capacity Building in Youth Entrepreneurship Development (YED) for Job Creation and Poverty Alleviation in Khartoum State

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### A. Project Details

**Project Sites:** Kerary, Halfait, Hag Yousif, Khartoum South, El Fateh, Omdurman, Umbadda, Mayo all in Khartoum State, Sudan

**Implementing Partner:** Office of the Governor, Khartoum State, Sudan and Counterpart Agency

**Executing Agency:** United Nations Industrial Development Organization (UNIDO)

**Donor Agency:** Delegation of the European Commission to the Sudan, Khartoum

**Total eligible costs, including contingency and agency support cost:** €10,999,904

**Total eligible costs, excluding contingency and agency support cost:** €10,195,780

**Total contributions made by the Khartoum State:** Approximately US\$ 23,195,000

**Dates Project Agreement and Addendums signed:** 31 March 2007 (Original)  
10 September 2008 (Addendum 1)  
27 June 2010 (Addendum 2)

**Actual Starting Date:** June 2007, the month when project funds have been received on account. The Ministry of International Cooperation (Contracting Authority), the Delegation

of the European Union to the Sudan and UNIDO signed the Project Agreement on 31 March 2007. UNIDO received the first installment on June 2007.

**Project Duration:** March 2007 – 31 October 2010 (43 months). The original Project Document and Agreement of 2007 provided for an implementation period with an expected duration of 24 months. The Contracting Authority and EC approved on 10 September 2008 an upward budget revision for additional funding of €1 million and extension of the project up to June 2010 (39 months) and further approved on 27 June 2010 a no-cost extension up to 31 October 2010 (43 months).

### **Fund Disbursements**

First Pre-Financing (June 2007)	€ 5,185,328.00
Second Pre-Financing (Nov 2008)	€ 3,513,405.00
Third Pre-Financing (September 2009)	€ 1,180,280.00
Fourth Financing advanced by UNIDO (Jan 2010)	€ 822,941.37

This End-of-Project Report covers the full status of the project outputs vis-à-vis the project objectives, activities carried out to achieve outputs, project constraints, lessons learned, assessment on the impact and sustainability of the project, and recommendations.

The final financial report and the Statement of Account will be presented by UNIDO in a separate document.

## **B. Project Context and Background**

Khartoum State has seen rapid urbanisation since the 1970s, largely as the result of a mass rural-to-urban migration, caused by the combined impact of civil war, desertification and drought. An estimated two million Internally Displaced Persons (IDPs), almost 28% of the State's population, currently reside within the State. Many of them have already been integrated into the local economy, hence the distinction between the IDPs and economic migrants have become blurred.

While the population of the official IDP camps is between 300,000 and 400,000 IDPs<sup>1</sup>, the remaining 1.5 to 1.7 million IDPs are living in the squatter areas in and around the city. The general situation in these camps and squatter areas is exhibited in insecurity and poverty. One of the root causes of persistent poverty and unrest consists in already high and further growing unemployment and underemployment rates, particularly among the young population.

The Khartoum State had committed to address this challenge by improving urban poor livelihoods through vocational training support, youth entrepreneurship development and income generating activities. At the time of project inception, the Khartoum State had envisioned to build 7 new vocational training centres (VTCs) and had started building the first four VTCs. The State also recognized the need to formulate and implement an urban

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<sup>1</sup> In 1991 four main official IDP camps were assigned to southern IDPs : Wad el Bashir, Omdurman es Salam, Jebel Awlia and Mayo.

planning policy for infrastructural development that takes into consideration the most vulnerable population of the Khartoum State. It approached the EC Delegation to the Sudan for support, which agreed to provide funding.

Under the coordination of the Ministry of International Cooperation, the Khartoum State and the EC signed in November 2006 a Memorandum of Understanding (MOU) outlining the major principles that shall be respected and translated into action by the project. In line with the MOU, the Khartoum State also committed to implement the "Roadmap for Relocations".

In line with the MOU, the EC funded "Poverty Reduction in Khartoum State" Programme was to constitute two projects: Project 1 – Enhancing the Capacity of Khartoum State in the Delivery of Pro-Poor Vocational Training Services and Project 2 – Enhancing the Capacity of Khartoum State in the Formulation and Implementation of Pro-Poor Urban Planning Policies. UNIDO was to implement Project 1 and UN-Habitat, Project 2.

On 31 March 2007, the Ministry of International Cooperation (Contracting Authority), EC (donor) and UNIDO (Executing Agency) signed the Project Agreement to implement Project 1 for 24 months with funding support of €9,999,904.

The project's overall objective was to contribute to improving the livelihood of the urban poor (unemployed youth and IDPs) in Khartoum State. It aimed to provide market oriented skills and entrepreneurship training to the young urban poor; upgrade the skills of existing micro and small enterprises for greater productivity and competitiveness; and upgrade the technical skills of those in the labour market for greater employability and possibilities of self-employment.

The project sought to lay the foundation for an innovative long-term solution to urban poverty and unemployment in Khartoum State by establishing a solid and complementary link between entrepreneurship and vocational training in combating urban poverty. It sought to build the technical capacity of the Khartoum State and various agencies to be able to provide pro-poor vocational training services, and human resources development solutions.

To achieve these goals, the project had two components:

Component 1      Capacity building in vocational training centres in Khartoum State

Component 2      Support to vocational training activities and income generating activities to promote entrepreneurship in the IDP areas

## **C. Project Objectives**

### **Development Objective of the Project:**

To significantly contribute to improving the livelihood of urban poor (unemployed youth and IDPs) in Khartoum State

### **Immediate Objectives of the Project:**

#### **Component 1**

Equipment and training levels in selected VTCs in Khartoum State are matching labour market needs and productive sector demands, while training facilities are accessible to main target groups (unemployed, youth women and IDPs).

## **Component 2**

A significant share of young urban poor, particularly women, in Khartoum State's IDP areas has improved their skills for employability and entrepreneurial activities.

### **Expected End-of-Project Results**

#### **Component 1**

- Result 1 – Four new VTCs are operational, one existing VTC given new equipment, are providing the urban poor access to technical and entrepreneurial training in line with market demands, taking a gender mainstreaming approach
- Result 2 – VTC Curricula updated/developed and offered in line with market demands and integrating YED modules to increase employability of trainees and potential for self-employment along the lines of gender mainstreaming
- Result 3 – Policy Framework in partnership with the private and public sector for the promotion of vocational training in Khartoum State presented for approval

#### **Component 2**

- Result 1 – NGOs/CBOs (operating in the IDP areas) have enhanced capacities to organize, set-up, demand oriented training courses (entrepreneurial and technical) and to provide business support for job creation
- Result 2 – Increased access of the urban poor, especially the youth and women, to demand oriented vocational skills and entrepreneurship training to widen the human resources base in support of self-employment opportunities

## **D. Project Partners**

Direct Government Coordinating Agency: Governor's Office, Khartoum State

Relevant Authorities/partners in the public and private sector:

### **Overall:**

- Federal Ministry of International Cooperation
- Federal Ministry of Industry

#### **Component 1**

- National Council for Technical and Technological Education (NCTTE)
- Supreme Council for Vocational Training and Apprenticeship (SCVTA)
- Sudanese Businessmen and Employer's Federation
- Sudanese Workers General Union Federation
- Sudanese Chamber of Industries
- University of Khartoum – English Department
- Sudanese Engineering Council
- General Directorate of Civil Defense, Ministry of Interior

#### **Component 2**

- 31 partner organizations: 15 NGOs, 5 CBOs, 3 INGOs, 3 private training institutions

and 5 government agencies

## **E. Organizational and Preparatory Activities**

### **E.1. Inception Mission and Market Assessment**

UNIDO started project implementation with an Inception Mission to Khartoum from 03-29 July 2007. Five short-term experts (Annex A – Inception Mission Team) specialized in equipment needs, VTC training systems, vocational training policy for private sector development, market analysis/assessment and a site-owner engineer for procurement conducted area specific assessments and developed recommendations for project implementation. The Project Manager (PM) participated in the inception mission at the beginning and at the end.

The Inception Mission in cooperation with the Sudanese Chamber of Industries and the Businessmen Employer's Federation organized focused group discussions with representatives from key sub-sectors and selected companies in Khartoum State (food industry, leather and footwear, printing and packaging, pharmaceutical industry, edible oil and soap). The purpose of the group discussion was to (i) to inform the private sector and local industry about the project and seek their advice as to the demands for technical and entrepreneurial skills, (ii) identify market and job demands and (iii) identify what type and level of skills are most needed by the local industry.

The mission held review meetings with selected key companies in Khartoum State (DAL Group, Araak Group, Haggar Holding Company, Bee Group Company, Petronas, Golden Arrow). The purpose was to (i) inform the private sector about the project, (ii) identify private sector needs in terms of labor skills, (iii) discuss, and review possible options for public-private partnership in project implementation.

In the context of the Inception Mission, the Market Expert conducted quick market assessments. The mission used and integrated the results of the focused group discussions in the assessment. It recommended the following training programmes in the VTCs: (1) food and beverage processing, (2) building construction, (3) automobile repair/maintenance, (4) electrical work, (5) welding, (6) carpentry, (7) plumbing/sanitation, (8) leather work, (9) bio-industries sector, (10) refrigeration/air conditioning, (11) machining, (12) electronic repairs, (13) printing/design, (14) tailoring.

The Project Management Unit (PMU) conducted further rapid market assessments and consultations with the private sector. Based on these results, the PMU in consultation with the Khartoum State agreed on the following sectors and initial training course offerings of the VTCs.

### **INITIAL COURSE OFFERINGS OF THE VTCS**

(The PMU used this list as the basis for equipment procurement and development of the curricula)

#### **1. CONSTRUCTION SECTOR**

##### ***Civil Works Sub-Sector***

- Plumbing
- Construction Painting
- Carpentry – Construction
- Masonry
- Tiling



***Electrical Sub-sector***

- Residential Electrical Installation
- Electrical Machine Operation and Maintenance
- Industrial Wiring Installation

**2. AUTOMOTIVE AND HEAVY EQUIPMENT SECTOR*****Auto Engine Sub-section***

- Automotive Engine Servicing and Rebuilding
- Automotive Chassis Service
- Auto Electrical
- Auto Air Conditioning
- Autotronics
- Motorcycle and small engine repair

***Heavy Equipment Sub-section***

- Heavy Equipment Servicing

***Auto Body Sub-section***

- Auto Body Repair
- Auto Body Painting/Finishing
- Car Upholstery

**3. ICT AND ELECTRONICS SECTOR**

- Personal Computer Operations (Basic)
- Personal Computer Operations (Advance to include computer-based designing and web design)
- Computer Hardware Servicing
- Consumer Electronics Servicing

**4. METAL AND ENGINEERING SECTOR*****Welding and Sheet Metal Sub-sector***

- Gas Welding (Oxy-acetylene)
  - ✓ Gas welding carbon steel plate
  - ✓ Gas welding in alloy steel plate
- Shielded Metal Arc Welding (or Stick Welding)
  - ✓ SMAW basic
  - ✓ SMAW Advance
- Spot Welding or Resistance Welding
- Soldering and Brazing
- Gas Metal Arc Welding (GMAW or MIG)
  - ✓ Plate Welding GMAW
  - ✓ Plate Welding and Pipe Welding
  - ✓ Advance Course
- Gas Tungsten Arc Welding (GTAW or TIG)
  - ✓ GTAW basic
  - ✓ GTAW Advance
- Flux Cored Arc Welding

- ✓ FCAW basic
- ✓ FCAW intermediate
- ✓ FCAW advance

#### ***Machining Sub-sector***

- Machining Sector (Basic, Advanced)
- Machining (use of CNC machines)

### **5. HVAC/R SECTOR**

- Domestic Refrigeration, A/C and Air Cooling
- Commercial Refrigeration and AC
- Centralized air Conditioning systems
- Industrial Refrigeration/storage

### **6. FOOTWEAR AND LEATHER GOODS SECTOR**

- Footwear Making
- Leather and Allied Goods Making

### **7. HOTEL AND CATERING SECTOR**

- Food and Beverage Services
- Commercial Cooking
- Housekeeping
- Baking and Pastry
- Front Desk Operations
- Small Restaurant Management

### **8. HEALTH, SOCIAL AND COMMUNITY DEVELOPMENT SECTOR**

- Beauty Care and Hair Care

## **E.2. Project Management Unit (PMU) Established**

UNIDO established a Project Management Unit (PMU) to implement and oversee the day-to-day activities of the project. The Chief Technical Adviser (CTA) who reports directly to the Project Manager in UNIDO HQ, Vienna heads the PMU.

### **E.2.1. Staffing**

The PMU was fully staffed in November 2007 and consisted of the following:

#### **International Staff**

- 1 Chief Technical Adviser
- 1 International Expert – YED

#### **National Staff**

##### **Technical Staff**

- 1 National Project Coordinator
- 1 Finance and Administrative Officer

##### **Administrative Staff**

- 1 Secretary
- 2 Project Drivers

As the project evolved, the PMU changed its staffing pattern to respond to the requirements of the project implementation. Full- time staff by the end of the project consisted of:

**International Staff**

- 1 Chief Technical Adviser

**National Staff**

**Technical Staff**

- 1 Sr. Technical Expert – Component 1
- 1 National Site Engineer
- 1 Sr. Project Officer- Component 2
- 1 Project Officer
- 1 Project Analyst

**Administrative Staff**

- 1 Secretary
- 1 Finance and Administrative Assistant
- 2 Project Drivers

The PMU hired national and international consultants as required in the process.

In compliance with the Minimum Operating Security Standards (MOSS) of the UN, the project hired security guards to provide 24/7 security at the office premises.

Please refer to Annex B for the PMU Staff List.

### **E.2.2. PMU Office Premises and Furniture**

According to the project agreement, the Khartoum State will provide the PMU with adequate and fully functioning office space. Due to lack of available office space in existing Khartoum State buildings, the State Government requested the PMU to identify options for the new office, prepare the contract as well as get invoices for the required furniture/equipment.

Process:

- The PMU identified and recommended various options for the PMU Office to the Khartoum State, which sent a team to assess the rental cost, location and size. The PMU moved to the first office on October 2007 that was located at House 11, 1<sup>st</sup> Floor, Street 41 (Katareena), Khartoum 2. After one year, the PMU requested the Khartoum State to move to a larger office to accommodate the project activities. The State agreed. The second office building was located at Inter-section of Mohamed Nageeb Street and Street 41, Plot No. 22, Block No. 8ME, Alduom Alsharqiya, Khartoum. The Khartoum State Vocational Training Administration Unit also held its office at the same building.
- The PMU had to get from the United Nations Department of Safety and Security (UNDSS) clearance for MOSS (Minimum Operating Security Standards) compliance of the identified offices.
- The Khartoum State Ministry of Finance and the building owners sign the contract.
- The Khartoum State pays for the electricity and water bills.
- The Khartoum State provided the air-conditioners, 3-phase generator set including installation and rewiring and furniture.
- The Khartoum State provided the following furniture and equipment for the PMU to implement the project, which in the meantime have been transferred to KSVTA to sustain the project outcomes and outputs.

Qty	Items
2	Desks (1,20x75cm) plus PC extension
6	Desks (1,40x75 cm ) without PC extension
9	Office chairs (with wheels)
8	Visitors chairs (without wheels)
10	Cupboards
1	Sitting set of 1 couch and 2 arm chairs
1	Set of 3 small tables
1	Meeting table (330 cm diameter)
1	Generator (30 KVA)
4	AC (24.000 KVA)
2	Air Coolers
1	Water heater
1	Water cooler
1	Refrigerator (12 feet)

The PMU purchased the following ICT equipment and software in accordance with UNIDO local procurement procedures:

Qty	Items
8	Desk top computers with original software
2	Lap top computers with original software
1	HP Printer
1	Heavy duty photocopying machine with scan and printing capability; network ready
1	LCD projector, 2500 lumens with screen
1	Fax machine
1	Flatbed colored scanner
1	Digital camera
8	UPS for the desktop computers
4	Auto voltage regulators for the printer, fax, scanner and LCD projector
1	AVR 2000 watts for the heavy duty printer
1	Colored Printer

In accordance with UNDSS requirements, UNIDO also purchased handheld and vehicle radios:

Qty	Items
10	Standard GP380 VHF handheld radios with charger and two batteries
2	Standard GM360 VHF mobile kit
2	Standard NGT SRX HF Radio Mobile Kit (for the cars) – includes transceiver, antenna, HF, cables

The PMU purchased two project vehicles locally in accordance with UNIDO local procurement procedures:

Qty	Item and Specifications
1	Toyota Land Cruiser, diesel Model 2007
1	Toyota Hi-Lux, Double Cabin, Diesel, with canopy Model KUN25L – PRMDHV - BA

### E.3. PMU Counterpart

Ideally, a project from the start should have a direct counterpart agency. However, this

was not the case with the project. At the initial stage of implementation, the project did not have a direct counterpart agency or a main responsible official from the Khartoum State whom the PMU can coordinate with on project implementation level on a day-to-day basis. The Khartoum State institutional framework does not have a sole agency tasked to oversee vocational training activities. The State's Ministry of Education and Ministry of Finance are both involved in running vocational training. Other vocational training centers located within Khartoum State are also operating independently from the Khartoum State and reporting directly to the Supreme Council for Vocational Training.

To bridge this gap, H.E. Dr. Abdulhalim I. Almutaafi directed that the project be under the Office of the Governor of Khartoum State. He assigned Ms. Ishraga Sayd Mahmoud Salih, Adviser to the Governor, to be the focal point of the project on the government side. Through Ms. Ishraga, direct lines of communication were then opened between the PMU and the State Ministry of Finance – Development Project Division. This fully facilitated the coordination process.

As the project evolved, the Khartoum State established a Vocational Administration Unit (KSVTA) to oversee the operations of the VTCs. A Director General heads the Unit and he is directly responsible to the Adviser to the Governor. The Unit, which took over from the PMU, was still in the process of being fully established at the time the project completed its operations in October 2010.

The new Governor, Dr. Abdul El Rahman El Khider appointed Ms. Ishraga as the Khartoum State High Commissioner for Human resources Development, where the KSVTA Unit would be part of this High Commission.

The PMU coordinated all its project activities and implementation issues with the Adviser to the Governor/Khartoum State High Commissioner for Human resources Development in coordination with the KSVTA Unit.

## **F. Implementation Strategy**

### ***F.1. Component 1 Strategy***

#### **Vocational Training Courses and Market Needs**

Based on the results of the Inception Mission and Market Assessments, the PMU in coordination with the Khartoum State identified the initial course offerings that the VTECs will offer.

#### **VTEC Specialization**

The PMU and the Khartoum State had agreed that each VTEC will have an area of specialization, rather than all the VTECs offering the same courses. The rationale of this decision is based on the fact that the funds are limited and it is best to have fully equipped centres able to provide the full range of vocational training than a poorly equipped centre lacking in facilities. This will also allow the VTEC staff to hone their technical skills of specialization in line with market demands. The project envisions the VTECs to become Centres of Excellence in their respective fields in the future.

#### **Equipment Purchase**

The project purchased the bulk of the equipment through international procurement and bidding procedures in line with EU-UNIDO Agreement, UN system-wide agreed

procurement procedures and specific UNIDO Procurement/Purchasing Rules and Regulations.

The first batch of equipment purchased by the project consisted of the common items required by all the VTECs i.e. computers, desks, chairs, LCD projectors, printers, cafeteria furniture and installation of the local area network system.

UNIDO hired technical consultants to prepare the list and technical specifications of the required training machines and equipment for the identified course offerings. The PMU submitted the initial list to the Khartoum State for review and agreement. The Khartoum State organized a committee, made up of technical experts from the private sector and vocational training institutions to review and finalize the list. The PMU submitted the approved list to UNIDO HQ for the required publication for international procurement.

UNIDO reviewed the tenders received and awarded the contracts in accordance with established UN Procurement Procedures.

Based on the experience in purchasing the first batch of equipment, subsequent purchases were tendered on a lot and turn-key basis.

The project purchased consumable training materials locally in accordance with UNIDO decentralised procurement procedures. The trainers of each VTEC drew a list of additional training equipment, consumables and training materials they would require in teaching the courses. The PMU reviewed the list and finalized it together with the VTECs.

### **Curriculum Development**

The project introduced the Competency-based training (CBT) approach in vocational training based on international standards. Sudan has been using the traditional three (3) years approach.

The Khartoum State and the PMU organized a Consultative Workshop with the Private Sector to present the competency-based approach identified course offerings and enjoin the private sector to participate in the curriculum development process. The private sector requested at the workshop to include English and Work Attitudes in the curricula.

The Khartoum State established the project's formal linkage with the Supreme Council for Vocational Training and the National Council for Technical and Technological Education. As a result, the Federal Ministry of Labour issued a Ministerial Decree creating a High Committee to oversee the curriculum development of the courses that the VTECs will be offering. The High Committee consists of representatives from the Khartoum State, SCVTA, NCTTE, Sudanese Businessmen and Employers Federation, and Sudanese Workers General Union Federation.

UNIDO issued a tender document, which was put up for international bidding for a subcontract to develop the curricula, provide HRD solutions and assist in developing the administrative and financial procedures of the VTECs. An important parameter for the curricula is that it should meet the needs of the private sector and be of international standard as the VTECs are envisioned to issue internationally accredited certificates in the future. UNIDO awarded the subcontract to a consortium consisting of Castle College and ILS/English of Nottingham, United Kingdom.

Consequently, the PMU prepared the General Framework of Cooperation between the High Committee for Curriculum Development and the international subcontractor. The High Committee created a Technical Committee and Sub-sector technical committees to review the curricula prepared by Castle College/ILS English.

The PMU in coordination with the High Committee organized jointly the technical review and translation into Arabic of the CBT curricula.

### **VTEC Staffing and Operations**

The PMU prepared the proposed manual on organizational and management structure of the VTECs. The Khartoum State used this structure in recruiting the staff of the VTECs.

Castle College prepared the draft Administrative and Financial Procedures of the VTECs. The VTEC Management reviewed the draft and finalized the procedures. The project purchased for the VTECs, locally developed accounting, payroll and management information system software for their operations. The suppliers provided training on the use of the software.

The VTEC Management Staff with the assistance of the PMU prepared the Intake Policies.

### **Human resources Development**

The PMU conducted a series of training needs analyses for the VTEC management, administrative staff and trainers and developed a training plan.

The PMU organized a study exchange on Policy and Institutional Framework for Promoting Vocational Training, Technical Education and Entrepreneurship for the policy makers of Khartoum State and relevant institutions.

Castle College and ILS/English provided training to the VTEC Management and trainers in the U.K. and in Khartoum, Sudan.

The PMU organized in-country training programmes for the trainers and the administrative staff of the VTECs.

Please refer to Section 2, Result 1 for the training programmes and HRD initiatives organized by the PMU.

## ***F.2. Component 2 Strategy***

### **F.2.1. Defined Project Beneficiaries and Interventions under Component 2**

#### **Direct Beneficiaries**

The project's direct beneficiaries are the following groups among the urban poor who will benefit from the vocational skills and entrepreneurship training programmes:

- Group 1 – Existing entrepreneurs including women who are engaged in productive or service enterprises will benefit from skills upgrading and entrepreneurship training
- Group 2 - Potential entrepreneurs including women (with clear business interest) who have vocational skills (acquired from formal training or work experience) but who are unemployed will benefit from skills upgrading/improvement or re-training and entrepreneurship training
- Group 3 – Persons (mostly young men and women) who have no income and who will benefit from the provision of marketable skills and entrepreneurship training

#### **Indirect Beneficiaries**

Community Based Organizations and NGOs who will benefit from institutional capacity building activities to organize vocational, technical and entrepreneurship training

#### **F.2.2. Defined Criteria for Initial Operating Areas**

- The Khartoum State has designated the area as a relocation place for the IDPs;
- The Khartoum State has allocated plots for the IDPs;
- There are functioning CBOs in the area (duly constituted, have staff, and are implementing development activities)
- The presence of INGO/NGO already operating in the area with proven track record of being highly effective and willing to partner with the project;
- Proximity to VTCs being supported by the project;
- Infrastructure available for project implementation: accessibility by road, community center where training can take place, or where a low cost facility can be built if required;
- Presence of on-going and/or potential productive activities in the area;
- Relatively low coverage of support services to the direct beneficiaries foreseen compared to other IDP areas.

#### **F.2.3. Selection Process in Identifying Direct and Indirect Beneficiaries as well as Areas to be covered**

- Site visits made to the proposed identified areas to assess the on-going and potential productive activities;
- Discussions with the INGOs operating the IDP areas for possible collaboration and assistance in identifying CBOs and NGOs
- Follow up on initial discussions with the NGOs/CBOs, which were positively assessed, to assess opportunities for collaboration;
- Consultations with the Governor's Office of Khartoum State

#### **F.2.4. Criteria for Selection of Partner CBOs and NGOs**

- Established for at least three (3) years
- Must have an constitution and by-laws similar instrument that guides their day-to-day functioning;
- Must have a core of officers/ and strong presence on the ground;
- Demonstrated capacity to carry out development activities preferably, including managing micro credit facilitation;
- Objectives of the CBO congruent with the project objectives and UNIDO principles;
- Must have capacity for working with UNIDO as an additional partner and willing to participate in capacity building programmes

#### **F.2.5. Essence of Collaboration with the CBOs/NGOs was in the following areas:**



- Facilitate smooth contact with relevant government representatives at field level, such as popular committee or municipality officials and/or HAC;
- Share information on experience in income generating activities (IGA), vocational training and micro finance in the operational areas;
- Participate in UNIDO activities such as awareness raising workshops and CBO training programs.
- Build their capacities to be able to organize EDP and skill training programmes – to be offered as an on-going activity of their respective organizations

#### **F.2.6. Roles and Responsibilities of the NGOs/CBOs**

- Participate in the planning of training/intervention programmes for beneficiaries in the selected area;
- Publicize workshops and training programmes;
- Assist in selecting and mobilizing training participants. The final decision on the selection of trainees is vested on the PMU;
- Organize venue for the workshops and training;
- Organize logistics (e.g. snacks for the participants, rental of chairs, etc.) for the workshops/training programmes as planned with the PMU;
- Monitor the performance of graduates of the training programme;
- Assist in identifying potential community trainers

#### **F.2.7. Interventions implemented with the beneficiaries**

##### ***Preparatory Activities with Project Partners***

- Identified partner CBOs/NGOs
- Discussed with the CBOs/NGOs the general strategy framework of the project, their proposed roles and responsibilities, project inputs and implementation arrangements
- Signed letter of understanding with the CBOs/NGOs
- Assessed capacity building training needs of the NGOs/CBOs to carry out the tasks required. Discussed with the NGOs/CBOs their agreed roles and responsibilities in the project and identified training gaps and resources required.
- Prepared training plans; UNIDO trainers/staff conduct training for the NGOs/CBOs i.e. Training of Trainers; Group Leadership Training and Self-help Group Management

##### ***Preparatory Activities with the Beneficiaries***

- Created awareness among the beneficiaries to increase demand for vocational training and entrepreneurship development: Prepared promotional materials for awareness raising workshops and conducted awareness raising workshops in the operational areas together with the NGOs/CBOs. The partners organized the workshop participants according to the three groups mentioned.

- The Awareness Raising Workshops had a session where participants indicated their current skills or enterprises and their training areas of interest or need. The PMU consolidated the results and reviewed it against the market assessment made earlier.

### ***Training Plan and Strategy***

- Based on the results of the Awareness Raising Workshops, the PMU identified training that it can implement in the operational areas.
- The PMU deemed that EDP is an important training for both potential and existing entrepreneurs. The NGOs/CBOs have subscribed to continue to provide the EDP as part of their on-going services in the community even after the project.

The Awareness Raising Workshops showed quite a number of the IDPs who are illiterate or have low levels of literacy. The PMU decided to also introduce an EDP Training Programme integrated into the on-going literacy training programmes of the NGOs/CBOs, using the REFLECT Methodology.

The Workshops also showed that many of the youth had stopped schooling at 8<sup>th</sup> grade. The PMU decided to provide Pre-Vocational Training Courses covering Technical Mathematics, Introduction to Drawing and Technical English to prepare the youth for entry to the VTECs, which the Khartoum State is putting up with the assistance of the project.

- For the Skills training programmes, marketability of the skills and potential for self-employment or improvement of the existing enterprises were a primary consideration. In addition, the PMU also considered that the skills training in the operational areas should require simple tools and equipment so that the participants can immediately establish their own enterprise.

The VTECs established by the Khartoum State will conduct the traditional vocational skills training once they are operational since they are adequately equipped and would be using the CBT approach.

- For micro entrepreneurs with poorly performing businesses, the PMU focused assistance on those engaged in the leather sector and on improved product design and development using locally available materials. The Market Assessment and the PMU identified that the leather sector has a lot of potential for growth and did not require a large investment to establish an enterprise or to stay in business.

The project introduced the "Improved Marquob Programme" for the artisans making the traditional leather shoes and the "Product Design for Artisans Programme" for those producing artisan products out of locally available materials. Both programmes aimed at improving the product quality and competitiveness of the artisans.

- Training of Trainers – to increase the outreach of the project and to build the capacity of the NGOs/CBOs the project used the training of trainers approach. Together with the NGOs/CBOs, the PMU identified potential trainers willing to participate in the project. The PMU provided the TOT and Training Guides. TOTs conducted were on: EDP, EDP-REFLECT, Pre-vocational Training; Skins and Hides Improvement/Slaughtering, Metal craft Bending Equipment; Improved Marquob, and Product Design and Development.

The trainers conducted the training for the target beneficiaries in their respective sectors and communities after the TOT.

- Skills training programmes conducted in the operational areas in coordination with the NGOs/CBOs: Henna Tattoo; construction painting; construction plastering; leather handicraft; improved marqoub; skins and hides improvement; products with metal craft bending; product design and development

#### ***Synergies between Component 1 and 2***

The role of the NGOs/CBOs in disseminating the VTEC training programmes and preparing the youth for entry to the VTECs is very important since they are operating in the poor areas of Khartoum.

The PMU undertook the following activities to ensure that there is synergy embedded between the VTECs and the NGOs/CBOs:

- Workshop of the VTEC Management and the NGOs/CBOs to discuss areas of collaboration held on 8 August 2010 at Hag Yousif VTC.
- Site visits of the NGOs/CBOs to the VTECs held on 11 August 2010
- Areas of collaboration identified are as follows: preparing the youth for the intake through the Pre-Vocational Training Programmes to be conducted by the NGOs/CBOs; information dissemination; organization of skills training programmes that can be conducted by the VTECs for low or no earning community members
- VTECs conducted short-term courses for youth in IDP areas. The PMU identified the training programmes; the VTECs prepared the training plan in coordination with the PMU and the NGOs/CBOs identified the training beneficiaries among the youth in their respective areas. After the skills training, the NGOs/CBOs conducted a short course on EDP and provided the trainees with tools to start their service enterprises.
- The Khartoum State High Commissioner for Human resources Development, Ms. Ishraga met with partner CBOs/NGOs to jointly review the synergies. Continued support of Khartoum State to their activities were assured, and continued collaboration with the VTECs were encouraged. The High Commissioner visited partner CBO/NGOs, i.e. AAZA Women's Association in El Fateh and BADR Society in Souk Abu Zeid to get a close insight into the activities supported by the project.

## PRODUCTION OF RESULTS

### Immediate Objective of the project: Component 1

Equipment and training levels in selected VTCs in Khartoum State are matching labour market needs and productive sector demands, while training facilities are accessible to main target groups (unemployed, youth, women, and IDPs).

#### Result # 1

Four new VTCs are operational, one existing VTC is given new equipment, and the VTCs are providing the urban poor access to technical and entrepreneurial training in line with market demands, taking a gender mainstreaming approach.

*The following indicators included in result # 1 should be highlighted:*

- Four VTCs equipped with appropriate machinery, tools and equipment for courses offered, and one existing VTC provided with new equipment
- The human resources development base of VTCs (management, staff and trainers) recruited by the Khartoum State are trained and working in partnership with the private sector following a private sector culture with a business management focus and financial self-sustainability.
- VTCs administrative, operational and financial systems are in place and offering training programmes with equal access and opportunities for urban poor, men and women.
- A management information system for monitoring students, services provided and established at the VTCs.

### Implementation process followed, activities undertaken and current status

#### A. Equipment Procurement

1. It should be noted that the infrastructure and utilities of the VTC buildings was the responsibility of the counterpart, Khartoum State. UNIDO procured required equipment at three major stages, using tax-free modalities for purchasing training and related equipment. The first procurement consisted of teaching and student facilities (basic classroom furniture; training equipment and basic tools). The second

batch consisted of off-the-shelf workshop equipment and the third batch, purchase of special training equipment and other equipment needed by the Centres.

### Equipment Batch 1

- The first major activity of the project is the procurement of equipment batch 1. The CTA, who arrived in Sudan on 23 September 2007, the Project Manager and the Site Owner Engineer, prepared the technical specifications. On 11 October 2007, UNIDO publicized over a period of 4 weeks on its procurement website the Invitation to Bid (ITB) for the teaching and student facilities consisting of computers, LCD projectors, printers, LAN system, school/training furniture, cafeteria and the Local Area Network (LAN) system).
- Following UNIDO internal evaluation and approval procedures, UNIDO Procurement awarded the contracts in January 2008 to the following suppliers for a total purchase DDU (including transportation, insurance and assembly as required) of €1,061,022.11:

	Company	Country	Items	Amount in Euro
1	Intertrade International Services Srl	Italy	Flip chart, lockable magnetic boards, foldable heavy duty platform truck	28,739.00
2	Erreci Srl	Italy	School furniture and cabinets	382,110.00
3	A. Andrews and Co. Ltd	Hongkong	LCD projector, scanners, fax machines	120,238.27
4	Officine de Annone Srl	Italy	Coveralls, gloves, caps, first aid kits	79,850.00
5	O.K.I. General Trading	Dubai	Refrigerators, Freezers, SS tables	25,954.50
6	Planson Europe	Denmark	Photocopier and head sets	26,014.84
7	CTEQ Ltd	U.K..	Computers and Laptops	259,105.00
8	NK Global FZE	U.A.E.	Chalkboard, white boards	5,450.00
9	O.K.I General Trading	Dubai	Printers	11,122.50
10	Receptors Securty Systems Ltd	U.K..	Ethernet Network in the 4 VTCs	122,438.00

- The first batch of equipment arrived on 25<sup>th</sup> February 2008 and the last shipment arrived on 26 June 2008. Average turn-around time from the date of Purchase Order to port arrival is 64 days. Two shipments took more than 130 days as the suppliers had to manufacture the items ordered. Average delivery time of goods from Port Sudan to the VTCs was 40 days. This average is quite long since two shipments took an average of 76 delivery days. The project attributes this delay to the fact that the DDU terms for two shipments were not sufficiently specified. Otherwise, the agents delivered other shipments 26 days from arrival in Port Sudan.

No.	Supplier	Purchase Order Number	Mode of Shipment	Date of arrival in Port	Form 1 Date	Delivered to VTCs
1	Intertrade International Services	15002108CZ-15001201CZ	Sea/Surface	16/Jun/2008		13/Jul/2008
2	Erreci srl.	15001992CZ	Sea/Surface	12/Jun/2008	2/Jun/2008	17/Jul/2008
3	A. Andrews and Co. Ltd.	15001993CZ	Air/Surface	5/Jun/2008	27/May/2008	5/Jun/2008
4	Officine di Annone	15001994CZ	Air/Surface	25/Mar/2008	27/Apr/2008	3/Jun/2008
5	Receptors Security Systems Ltd.	15001995CZ	Air/Surface	7/May/2008	17/Apr/2008	22/May/2008
6	O.K.I. General Trading L.L.C.	15001996CZ	Sea/Surface		4/Mar/2008	19/Mar/2008
7	Planson Europe	15002088CZ	Air/Surface	25/Feb/2008	4/Mar/2008	6/Apr/2008
8	CTEQ Ltd.	15002096CZ	Sea/Surface	7/Mar/2008	23/Apr/2008	22/Jun/2008
9	NK Global FZE	15002107CZ	Air/Surface	15/Apr/2008	15/Apr/2008	4/May/2008
10	O.K.I. General Trading L.L.C.	15002089CZ	Sea/Surface	18/Mar/2008	4/Mar/2008	24/Mar/2008

5. The Delivered Duty Unpaid (DDU) term in the Purchase Order was subjected to open interpretation by the suppliers and clearing agents. The Terms of Reference (ToR) did not clearly specify the seller to bear the costs associated with import clearance, sea port charges and unloading. The PMU sought clarification from the Procurement Section, renegotiate with the suppliers and in most of the instances, the project paid for the clearance, seaport charges and off-loading. This was a major lesson learned from the first procurement batch.
6. The UNIDO Purchase Orders specified that the suppliers deliver all equipment in each VTC. However, the PMU and the Khartoum State agreed that the equipment that arrived in March and April 2008 were to be initially stored in Khartoum 1 VTC since the VTCs then did not yet have any security and were not fully completed yet. The PMU subsequently moved the equipment to the respective VTCs when the Khartoum State had installed security personnel.
7. Ideally, testing of the equipment should have commenced immediately upon delivery to the VTCs. However, at the time of the deliveries, there was no electrical power in all the VTCs. The only VTC that had electrical power installed in May 2008 was Hag Yousif on the ground floor. It is for this reason that the PMU decided that the supplier deliver all the computers and laptops to Hag Yousif for testing and configuration. The PMU designated the first floor as the ideal place for testing the computers, as it was an enclosed space. The PMU arranged to tap electrical power from the ground floor. The supplier had also agreed that they would transport the computers and laptops to the other VTCs, when they are ready to receive them.
8. Inspection of the shipments that did not require testing revealed that the chalkboards and the magnetic boards delivered are not up to quality standards. The PMU had rejected the shipment and informed UNIDO Procurement Section, which did not pay the order and the supplier did not pursue payment.
9. The school furniture from Erreci were delivered on 17 July 2008. However, assembly of the furniture commenced only in the second week of September 2008. The supplier's team of assemblers from Lebanon were ready to come earlier but the Sudan Embassy in Beirut required an endorsement from the Sudan Federal Ministry of foreign Affairs, which took a while to process. The UNIDO Sudan Head Office in coordination with the Federal Ministry of Industry assisted in getting the required endorsement.
10. The furniture assembly team from Lebanon hired students and instructors from Khartoum 1 VTC to assist in this task to enable them to get onto job training. The PMU supported this idea. Khartoum 1 would then have the capacity to assemble the furniture allocated to them since it was not possible for the team to assemble their furniture as they did not have the sufficient and proper rooms to put the furniture.
11. While UNIDO issued the Purchase Order to Receptors, a UK-based company for the LAN system on 11 January 2008, the suppliers sent the equipment for use in the LAN installation only in May 2008. As required by the tender, they worked with a locally based partner company. The suppliers started their installation in June 2008 and halted operations temporarily in July 2008 because of the security situation at the



project sites. During the installation, the absence of electrical power hampered their work. They had to hire generators to commence operations. Receptors completed the work in May 2009.

12. Based on the physical review on the data points installed under the first contract, 179 additional data points were still required to accommodate the local area network needs of the four new vocational training centers. The PMU was not able to identify the additional data points required at the time of the initial request of October 2007 since construction was still on-going at the sites, the offices and the classrooms in the VTCs as well as the number of ICT equipment had not been finalized. In view of this additional need, the PMU requested the Procurement Section to amend the contract of the supplier to install the additional data points required. Receptors completed the work, which the PMU/UNIDO had fully accepted and tested on 13 August 2009.
13. Batch 1 equipment consisting of the following items has been delivered to and installed in the 4 new VTCs. The same sets of equipment have been delivered to Khartoum 1 but have not yet been installed, due to pending construction of the new Khartoum 1 VTC.

QTY/VTC	Item
200	Student arm chairs
13	2-student Computer Tables
17	1-student Computer Table
43	Computer Chairs
40	Drawing Tables
40	Drawing Stools
18	Teacher's Desks
18	Arm Chairs
16	Filing Cabinets
15	Metal Cabinet for tools and small equipment
2	Hazardous liquid storage cabinet
6	Aluminium step ladder
60	Stackable chairs for the workshops
100	Lockers
4	Meeting Table
80	Office chair for meeting rooms
43	Dell Desktop Computers
10	Laptops
15	LaserJet 1022
1	LaserJet 7103 (colored printer)

QTY/VTC	Item
2	Stainless Steel Refrigerator
1	Upright Freezer
1	No-Frost Refrigerator
2	Auto Voltage Regulator 2000 KVA
4	Stainless table with under shelf
6	Flip charts
8	Lockable Notice Board
6	Foldable duty platform truck
1	Heavy Duty Photocopying Machines
1	Scanner
1	Fax machine
25	Yamaha Sound Box Set
8	Ceiling mounted video projector
3	Portable PC Projector
43	UPS
1100	Coveralls for Students
50	Welders gloves
100	Welders caps
7	First Aid Pack



EE/SUD/07/004



## Equipment Batch 2

14. As part of the procurement process of equipment batch 2, in March/April 2008 the Khartoum State organized a Technical Working Group (TWG) for Machinery and Equipment. The Working Group prepared a list of machinery, equipment and tools required for the sectors/sub-sectors in consultation with 33 national trainers and experts. To assist in the procurement of equipment batch 2, UNIDO hired two Sr. Procurement Specialists. They reviewed the list prepared by the TWG and subsequently revised and compiled a comprehensive list with technical specifications and indicative estimates of the training machinery and equipment required.
15. The PMU submitted to the Khartoum State for their review, the equipment list and budget pricing for the following sectors: Building and Construction, Automotive, ICT, Electronics, Metal and Engineering (Welding and machining), HVAC/R and Audio-Visuals.
16. The PMU informed the TWG that the list was very comprehensive as it included the training consumables and tools. However the indicative budgets of the equipment showed that the project could not provide the same type of equipment for each VTC. Training specialization was essential to provide more training options, spread over five VTCs. The PMU in consultation with the Khartoum State decided that each VTC would specialize in one or two sectors, and fully equip the VTC with the vision of making them, in the future, Centres of Excellence in their respective sectors. The PMU/Khartoum State saw this as a more rational approach so that the VTCs would be able to offer the full-range of a quality training programme. Sector specialization decided then per VTC was as follows:

VTC	Specialization
Kerary	Building and Construction; Leather, Beauty and Hair care
Hag Yousif	Automotive
Halfait El Muluk	Welding, ICT and Electronics; Hotel
Souk El Mahali (later called Khartoum South)	Machining
Khartoum 1 (Later called Gebra)	HVAC/R

17. It is within these parameters that the TWG culled out the training consumables that the Government can purchase locally; removed machinery that they deemed not critical to the training; decided on the number of tools and equipment that would optimize full utilization in each of the VTCs. After the TWG had decided the equipment for each sector, the PMU prepared the budget pricing, and submitted the list for final review and endorsement to the Khartoum State, which approved the list. The PMU submitted the list to UNIDO HQ to initiate international procurement on June 2008.



18. In preparation for the purchase of equipment batch 2, one of the Sr. Procurement Specialists visited Sudan in May 2008 to assess the conditions of the delivery sites and provided recommendations on the long-term equipment use and sustainability as well as effective total management system in the supply line. From his findings and discussions with the PMU on the experience in procuring equipment batch 1, the Sr. Procurement Specialist and the CTA prepared draft project specific terms and conditions for the international bidding exercise.
19. The UNIDO Project Manager, UNIDO Procurement Section, the CTA and the Procurement Specialist met in July 2008 to finalize the project specific terms and conditions in addition to the general bidding documents of UNIDO. Highlights of the project specific terms and conditions are the following:
- Awards will be at a Package (lot) level and will include installation, commissioning and training; but UNIDO reserves the right to award at item level
  - UNIDO recognize that the project is complex and has a high level of added value services. While UNIDO will evaluate technical compliance of the equipment and pricing, the following areas will also be evaluated in detail: Installation and Commissioning, Training and Delivery Implementation Plan (DIP)
  - DDU cost must include clearance costs (but not any taxes or customs duty), stamp duties and any sea port charges and unloading at each site into suitable storage areas or buildings designated by UNIDO. DDU must include 110% insurance cover.
  - F.O.B. seaworthy packed including one-way 20 or 40 ft. containers
  - Separate pricing for Installation and Commissioning and Training.
  - Each item of the equipment will require an agreed break-in test for acceptance. Vendors must demonstrate the safe working of all equipment delivered.
  - Vendors are invited to visit the site prior to submission of the bids so as to ascertain installation requirements.
  - All single-phase electrical plugs should be of the flat three pin type. Goods should be suitable for use in extreme climate conditions and during shipment packaged in such a way as to afford protection from extreme temperature typical of Sudan.
  - Vendors will assist in installing an asset registration system using bar code for more efficient inventory and maintenance system.
  - UNIDO reserves the right to make inspection of goods prior to shipment to ensure quality.
20. The Project Manager submitted the formal requisition for 7 packages/lots of the training equipment to the UNIDO Procurement Branch on 25 July 2008, which published the Invitations to Bid at the UNIDO website on 05 August with closing date on 19 September 2008. The seven (7) lots were equipment for the following sectors: Building and Construction; ICT/Electronics; Automotive and Heavy Equipment; Welding and Sheet Metal; Machining; HVAC/R and Audio-Visuals. The three packages (beauty and hair care, hotel and leather) were purchased at a later date. At the closing of bidding, UNIDO received thirteen (13 proposals) from the following bidders:

Bidders	Country of Incorporation
1. Greenfields	India
2. Cromwell	U.K.
3. Devotra	Netherlands
4. Eduteq	U.K.
5. O.K.I.	Dubai
6. Sotex	U.K.
7. Mediworld	U.K.
8. Sudanese Liquid Air	Sudan
9. Mech Tool Equipment	Uganda
10. Spinner	Germany
11. Audio Visual Services	Cyprus
12. Mohan Export	India
13. Sievco	Warsaw

In accordance with UNIDO bidding procedures, a UNIDO appointed committee reviewed the technical proposals for compliance. Review took place from 21 September to 11 October 2008. The committee found three of the bidders to be technically compliant and hence taken to the second step to review their financial proposals.

The UNIDO committee forwarded their recommendations to the Procurement Review Committee (PRC), which approved six of the lots on 24 October 2008; and the automotive lot on 31 October 2008. After approval by the UNIDO Committee, UNIDO issued the Purchase Orders for the amounts approved and sent to the suppliers.

	P.O. Date	P.O. Number	Supplier	Items Ordered	Amount of Contract in Euro
1	14-Nov-08	15002283T	Devotra B.V.	Building and construction equipment	435,324.91
2	14-Nov-08	15002288T	Devotra B.V.	Machining equipment	492,607.71
3	2-Dec-08	15002287T	Devotra B.V.	Welding and sheet metal equipment	957,901.04
<b>Total Contract Awarded to Devotra, Netherlands</b>					<b>1,885,833.66</b>
4	2-Dec-08	15002285T	Eduteq Ltd.	ICT	582,237.63
5	14-Nov-08	15002284T	Eduteq Ltd.	Automotive training equipment	742,092.82
6	3-Dec-08	15002286T	Eduteq Ltd.	Electronics Training Equipment	102,342.88
7	3-Dec-08	15002289T	Eduteq Ltd.	HVAC/R Equipment	377,423.72
<b>Total Contract Awarded to Eduteq, U.K.</b>					<b>1,804,097.05</b>
8	4-Dec-08	15002290T	AVS Multimedia	Audio-visual training materials	137,346.65
<b>TOTAL CONTRACTS ISSUED</b>					<b>3,827,277.36</b>

21. The bulk of equipment batch 2 arrived in Port Sudan on 17 April 2009 and was cleared and delivered to the VTCs one month after. The two suppliers (Eduteq and Devotra) had expedited their delivery one and a half month earlier upon the request of the PMU and the Khartoum State.





22. Concerning equipment related to beauty and hair care equipment, based on the needs assessment conducted, the PMU reviewed the initial equipment list of the prepared by the Procurement Specialists and noted that many items were lacking. A new final list had to be prepared and specifications identified, since there was no available expertise in Khartoum to prepare the specifications required for international tendering. UNIDO published the ITB on 28 May 2009 with closing date on 26 June 2009. Three (3) bidders submitted their proposals (SOTEX U.K., Cromwell and Greenfields). A full technical and commercial evaluation for compliance was conducted by an independent expert. The recommendations were put forward for formal approval by the PRC. UNIDO Procurement awarded the contract to Sotex U.K. as it substantially met the technical requirements of the project and had offered the lowest price (total cost: €96,298.16). UNIDO issued the Purchase Order to Sotex in November 2009.

The equipment arrived in Port Sudan on 15 June 2010. As with the other shipments, the Ministry of Foreign Affairs had issued Form 1 to bring in the equipment duty free. However, when the clearing agent went to Port Sudan, Customs to clear the goods, Customs Head Office did not forward the yellow copy. When the PMU followed it up, they were told that the project has to pay the full duty because of the nature of the equipment. The PMU informed the Office of the Governor about the situation, who liaised directly with the Customs Department. After four months of negotiation, the Khartoum State decided to pay the required taxes under protest, in order to obtain this equipment from Port Sudan for installment.

23. As to equipment needed for hotel and catering training, Khartoum State allocated two workshops in Halfait El Muluk VTC, which were to be converted for hotel training and catering. The PMU envisioned the VTC to have among others, fully equipped ensuite BADRooms, a commercial kitchen, a mock-up restaurant, a front desk and laundry area for training purposes. UNIDO hired a training consultant to provide the design specification and prepare the equipment list with technical specification and budget pricing.

The hotel consultant visited Khartoum on July 11-17, 2009, to do a site survey on the two workshops in Halfait; identify equipment needs based on the demand for skills and needs required by the hotel industry and to assess the skills of the hotel trainers. Following the visit of this mission, meetings were held with Castle College, U.K., to discuss the equipment requirements for the curricula, which were prepared for hotel and catering training. Based on these findings, the consultant finalized the list of equipment.

In order to assist the Khartoum State and to ensure that the technical specifications of UNIDO were adhered to, in November 2009, the PMU initiated the hiring of a

technical team (architect and engineers) to provide tender-ready documents consisting of technical drawings (architectural design, electrical, civil, sanitary, fire protection and air conditioning) and prepare the bill of quantities for the VTEC to make re-adjustments and design the facilities in line with international training standards. The Khartoum State was to use the documents in the bidding process of the work planned for the conversion of the two workshops. UNIDO hired the team in January 2010 who worked closely with the UNIDO International Hotel Consultant for the layout of the hotel section taking into consideration the equipment was to be installed. The PMU transmitted the documents to the Khartoum State on 19 April 2010. The State Ministry of Finance requested an Arabic version of the documents, which the PMU submitted to them in June 2010.

The Hotel training consultant finished the equipment list in September 2009. The Procurement Section published the ITB in October 2009 with the intention of closing the bid after 1 month. The prospective suppliers requested for two week extension because of the numerous training items, which were not readily available. The Procurement Section consulted the PMU, who agreed on the extension. The final closing date of the bid was extended to 16 November 2009. There were five bidders from U.K., Lebanon, Netherlands and Italy. For the technical and commercial evaluation, formal procedures in line with UNIDO's procurement policies have been followed for submission of recommendations to the PRC for approval. UNIDO awarded the contract to Sotex U.K. Total cost of the lot was €199,224.47.

The hotel equipment arrived in Port Sudan on 26 August 2009. Despite the Form 1 issued by the Ministry of Foreign Affairs to clear the shipment, the Customs office requested again that duty be paid on this consignment. As was the case of the Beauty and Hair Care training equipment, the Khartoum State decided to pay duty under protest, to release the containers. In the meantime, all training equipment for hotel and catering, as well as hair care and beauty have been installed and commissioned for use by the VTC.

24. Concerning the leather training equipment, the PMU hired a national and a regional leather expert to assess the equipment needs of the leather sector and provide a list with technical specifications. The list they provided, however, did not meet the required standards in preparing the technical specifications for international procurement as per the UNIDO Procurement Manual. Hence, the PMU requested an International Leather Expert (who was hired to provide TOT for the Marquob Artisans under Component 2 of this project) to review and finalize the list of equipment and prepare the list for international bidding.



The International Leather Expert finalized the list in July 2009. UNIDO Procurement issued the ITB in August 2009, which was posted on procurement websites. There were five bidders, which were technically evaluated on the basis of compliance, and subsequently following formal procedures, commercial evaluations were conducted. In line with UNIDO procurement policies, recommendations were submitted to the PRC for formal approval. UNIDO awarded the Purchase Order in the amount of €230,716 to Tiorelli, Italy, on 9 November 2009. Tiorelli manufactured the machines and delivered these to the Kerary VTC on 27 May 2010.

The project's International and national Leather Experts were supposed to work with the Tiorelli technicians in



laying out the equipment in Kerary. However, as timing of the schedules did not match, the International and national leather Experts finalized and designed the machines' layouts together with the PMU national site engineer and leather trainers of Kerary.

The Tiorelli technicians installed the equipment according to the layout on 14 July 2010 and trained the trainers on the use of the CAD/CAM. They returned to Khartoum in October 2010 to fully commission and test the equipment when the electrical and pneumatic lines in the workshops were fully installed. They also trained the trainers on the use of the other equipment as required in their contract.

25. At the request of the Counterpart, the Project Steering Committee agreed in its meeting of 3 November 2008, that the PMU will use the equipment project budget allocated for local purchases to buy additional training equipment from abroad. Therefore, the Khartoum State paid out of its own funds VTC equipment locally to complement equipment provided by the project funds. The rationale of this change was that the counterpart took advantage of the technical expertise, mechanisms and consultants provided by UNIDO to bring additional VTC equipment from abroad.

In view of the above, the PMU had forwarded to the Khartoum State on 11 February 2009 the list of furniture and other equipment to be purchased locally, with an estimated cost of SDG 769,090/ €265,203. The Khartoum State obligated this amount and applied their internal procurement procedures to purchase the requested items.

The PMU and the Khartoum State agreed that the additional equipment UNIDO would purchase would be to beef up the electrical section of Khartoum 1. Subsequently, Khartoum 1 reviewed and endorsed the electrical equipment list provided by the PMU. UNIDO Procurement posted on the relevant website this ITB on 28 May 2009 with closing date on 26 June 2009. UNIDO received three tenders, which a panel of experts representing the substantive office evaluated the technical compliance and subsequently the financial bids (September 2009). The Procurement Office submitted the recommendations made to the Procurement Committee. The Committee, however, directed the Procurement Office to review the recommendations again, in light of submissions made by two other bidders. A re-submission of a second set of recommendations was made, based on a second round of technical and commercial evaluation regarding requirements of the project (10 December 2009). These recommendations were accepted by the Committee.

UNIDO Procurement awarded the Purchase Order for €198,113.79 to Devotra, Netherlands, which provided the same electrical equipment for Kerary VTC electrical section.

26. Status of Equipment Batch 2 as of this report:

	Equipment	VTEC
<b>DELIVERED, INSTALLED AND COMMISSIONED</b>		
1	Building and Construction Equipment	Kerary
2	Machining Equipment	Khartoum South
3	Welding and Sheet Metal	Halfait
4	ICT for computer courses	In the 5 VTECs
5	Automotive Training Equipment	Hag Yousif
6	Electronics Training Equipment	Halfait
7	HVAC/R	Khartoum South

8	Leather Equipment	Kerary
9	Hotel	Halfait
10	Beauty and Hair Care	Halfait
<b>DELIVERED</b>		
11	Electrical Training Equipment	Khartoum 1
<b>DISTRIBUTED</b>		
12	Audio-Visual Training Materials	Available in the 5 VTECs

### Equipment Batch 3

27. After installation and commissioning of the LAN system, the PMU with the assistance of the UNIDO IT Department prepared the equipment list for the servers, UPS and related software for the servers, other accessories and interactive white boards. Each VTC was envisioned to have three servers: one each for Administration, Curricula and for internet. The PMU submitted the equipment list on 16 September 2009. UNIDO Procurement issued the ITB on 23 October 2009 with closing date on 20 November 2009. UNIDO IT Department staff made a technical evaluation of the three bids received in December 2009, followed by a commercial evaluation. Recommendations were subsequently submitted to the UNIDO Procurement Committee. UNIDO Procurement awarded the purchase order for €198,667 to Intertech-Batinorm, Lebanon, on 12 March 2010. The PMU received the equipment on 15 May 2010. The PMU commissioned a national IT expert to install the servers and the interactive white boards.

28. Component 2 of the project purchased metal craft bending equipment to be introduced in the IDP areas for product development. The equipment improves the metal craft designs and does not require any electricity. The PMU included one full set of this equipment for Halfait VTC at a cost of €15,800, to compliment welding equipment.

29. The VTCs required software for their administration, management, timetabling and financial systems. Castle College, the international subcontractor was tasked to assist in curriculum development and provide guidance for the VTC administration to prepare the technical specifications. They assisted the PMU in identifying possible international suppliers. The biggest drawback for the international procurement of the software was the language barrier, as these were in English. Through its network, the PMU learned that some of the government institutions in Khartoum are using administration and financial software locally developed and in Arabic.

The PMU decided to purchase the software locally. In accordance with local procurement rules of UNIDO, the PMU prepared Request for Quotations for the following software to include training and after sales service: (i) Administration and Financial software (ii) Personnel and Payroll and (iii) Student Registration System. Three (3) suppliers demonstrated their financial and payroll software to the VTC Directors and their Assistant Directors. The PMU evaluated the quotes received and sent these to UNIDO HQ for approval.

Following approval, the PMU purchased the Finance and Accounting software for SDG48,000; the Personnel and Payroll software for SDG 51,000 and the Student Registration System for SDG 60,000.

30. Upon the request of the PMU, Castle College sent one of their instructors in May 2010 to train the VTC trainers on how to use the LJ Didactic Equipment and Computer-based Training Modules purchased by the project in relation to the curricula that Castle College has developed. During this visit, the instructor identified



that some equipment and software was missing to fully utilize the equipment. Hence, the project through UNIDO's international bidding procedures purchased additional LJ Equipment for the autotronics and electronics section. Devotra of Netherlands was awarded the Purchase Order for €71,134.88 on the basis of recommendations accepted by the procurement review committee.

31. To augment the capacity of the Leather Section in Kerary to offer craft related leather courses, the project purchased basic leather craft training tools from Tandy Leather,U.K for €11,323.03.
32. The project also purchased technical books, interactive software, and reference materials as recommended by ILS English and Castle College: Language System Interactive Software, Pearson Books, OUP Books, ICDL Books (English and Arabic); MacMillan Books, Hospitality books, which were made available to the respective VTCs.
33. The project provided the VTCs consumable training materials and small equipment they required to start teaching the technical courses. Each VTC came up with their list of consumable items and related training materials, purchased locally. The PMU reviewed the list and finalized it together with the VTCs and proceeded with local procurement in accordance with UNIDO procedures.

#### **Internet Connectivity in the VTCs**

34. In May 2008, the UNIDO International Site Engineer provided the specifications considering the foreseen internet usage in the VTCs: Dedicated bandwidth (minimum guaranteed) 2Mbit/sec download (capable of being upgraded t 4Mbit/sec) and 0.5 Mbit/sec upload (1:4) capable of being upgraded to 1Mbit/sec. He also provided the geographical coordinates as reference for the internet providers, which are as follows:

Khartoum 1	15°36'37.20"N	32°32'43.93"E
Hag Yousif	15°38'24.25"N	32°38'9.27"E
Souk El Mahali	15°29'26.28"N	32°31'36.48"E
Halfait El Muluk	15°41'36.40"N	32°33'22.14"E
Kerary	15°45'19.66"N	32°28'55.63"E

35. The quotes received from the providers at that time entailed a monthly recurring cost of US\$4,500 per VTC to meet the recommended specifications of the internet connection. This cost was not sustainable for the VTCs, yet internet connectivity was required. The Khartoum State was able to identify a provider at a reasonable cost and had issued contract to install the internet. However, this supplier was not able to fulfil the conditions of the contract. By the close of the project in October 2010, new technologies emerged. The project installed Wi-Fi connections for the computer laboratories and the administration building. While this is not the ideal situation, this was seen as the most cost efficient means for the VTCs to have temporary internet connectivity.

#### **B. Readiness of the VTC Buildings and Installation of Equipment**

36. At the initial start of the project, one counterpart of the Khartoum State was to provide the land and the buildings of the VTCs. The State originally planned to build seven new vocational training centers, which the project would help to equip.

However, during the inception mission (July 2007), the three parties (Khartoum State, MIC/EDF/EU, and UNIDO) agreed taking into consideration the funds available that the project will assist only four new VTCs and an existing VTC that the State will rehabilitate. At that time, one of the VTCs (Kerary) was close to completion and three were in the process of being built. The Khartoum State provided the funds and organized the construction starting from the building plans to contracting out the work. The State's Ministry of Education was the main body overseeing the construction of the buildings.

The four new VTCs are located in the outskirts of Khartoum and near the poor areas of Khartoum: Kerary, Halfait, Khartoum South and Hag Yousif. At the first Project Steering Committee Meeting on 12 November 2007, the Khartoum State informed the PSC that they will rehabilitate Khartoum 1 VTC, the oldest VTC in Sudan.

37. The UNIDO Inception Mission in July 2007 visited the three on-going constructions of the VTC sites. They provided the following comments/suggestions to the Khartoum State:

- Natural light is generally poor, because of relatively small, though numerous, windows. The climate demands a low glass window ratio compared to walls (i.e. more walls than windows). However, artificial light will be extensively used also during daylight, indicating high electricity use;
- Natural air circulation has not been foreseen. Any air movement will rely on electrical equipment;
- Include 'positive atmospheric pressure' compared to the outside. This pressure not only avoids fine dust coming from outside but, if correctly modified, keeps the dust and smoke at a low level. In addition, this will contribute to a healthier environment and provides a better physical condition to students and staff. An atmospheric conditioner will require the windows to be sealed and the air outlets to be properly controlled;
- Flooding during the rainy season has to be considered as a serious risk, less for the Kerary centre than for the others. The requests involving flood counter-measures have been generic, but once completed, each VTC requires full and careful inspection, taking into account geological conditions and statistical data;
- Install adequate automatic fire-extinguishing system. A serious warning should be brought to the attention of the VTCs. Most of these systems use plain water. It is therefore advisable to stick to manual powder or foam systems;
- Security and safety needed to be evaluated upon delivery of the buildings, as changes and modifications can alter security and safety;
- Loading platforms and access ramps: unloading heavy equipment directly on the ground floor workshops will be difficult, because of steep ramps and the absence of unloading platforms and large doors. The ramps cannot be lengthened without invading the road significantly. Raising the level of the road would be a possible way to solve the problem for all ramps. This solution would also make it easier for the construction of ramps for persons with disabilities. A loading platform was however to be made available somewhere, probably at the lower end of the VTC;
- Premises needed minor changes and modifications and they had to be carried out before acceptance of the buildings.



- The VTCs were not properly connected to the main roads although in close proximity to other roads;
  - The roads were rather 'tracks' than paved roads, as is normally the case for completely new sites. However, it was recommended to make the responsible authorities, in charge of road connections, and urban planners fully aware of the pressing needs foreseen by the VTCs;
  - The Municipality was to consider the construction of sealed roads, which can connect the VTCs to the main roads, especially during the rainy season. With this facility, the overall value and utility of the VTCs would be considerably increased;
  - Transport services should be operating rather soon, either by public or private companies, taking into consideration the number of students of each VTC. For instance, Kerary VTC expected 700 to 800 students in one single shift.
  - Power supply was to be delivered by diesel generators, however a power line, even if two or three kilometres long, would be a much more sensible investment in the long term;
  - Power generation by generators were to be limited to emergencies for electricity, security, and computers/IT section, so that at least theoretical training could continue at any point in time;
  - Power supply had to be verified before formal delivery of the buildings.
38. The Project's Specialist/Site Owner Engineer undertook a second mission in May 2008 to make a further assessment of the VTC infrastructure and readiness of the VTCs. During this visit, he came up with his assessment on the electrical wiring in the VTCs and a list of works (24 points), which the Khartoum State should carry out before UNIDO will accept the premises for implementation. Some of the items had already been pointed out during the Inception Mission. The others became evident after the works in the 4 VTCs had approached the final stages and the requirements of the projects had been outlined in detail. He discussed the following with all the counterparts, including the architect consultant of the State, who supervised the construction of the VTCs. The 24 points are listed below:

- **Access road and flood related works.** Access to the VTCs is actually not properly guaranteed yet, especially in the eventuality of rain or consequent flood. Some simple measures have to be adopted in order to increase the flood-in threshold of the premises.
- **Dismantling of trusses across the road.** Although aesthetically valuable, the trusses which cross the inside road of the VTCs may hinder some trucks from approaching the proper unloading area. The parts crossing the road can be easily disassembled, leaving in place the other trusses.
- **Accessibility for disabled persons and trolleys.** The architectural features denied access to disabled persons and as such were to be eliminated by proper modifications or retrofits. Compliance with this requirement will also enable local handling of loads by means of trolleys.
- **Extra toilet near the gate for security personnel.** Near the security personnel's box, there is available space for an extra toilet, so they do not have to leave the gate unguarded.

- **Outdoor unprotected water pipes.** Some outdoor plastic water supply pipes had been left unprotected. These were to be fitted with covers that will allow maintenance and inspection, but will as well take into account that the place will be sometime crowded with young people wandering around.
- **Building and keys identification.** Building identification was to be adopted in order to manage also keys identification. UNIDO was to identify the coding system to be adopted by the counterpart in order to make use of a unified system.
- **Outside Lighting.** Carried out practical test on the external lighting. If proven not economical, the State should review and make changes.
- **Southern wall in Halfiat El Muluk.** This wall was actually missing in view of possible land extension. The wall had to be built and a gate will take care of the future extension.
- **Cage for the water tank ladder.** Water tanks are fitted with a fixed ladder. For safety, both of maintenance personal as well as of unwelcome guests, a standard ladder cage is to be added, provided with a closure that hinders any unauthorized access.
- **Grids on internal drain (workshops).** The distance between bars of the grids was not sufficient for granting an average space at least two supporting lines to provide security.
- **Dust and atmospheric conditioning.** Because of the equipment that will be installed, proper systems were to be adopted in order to prevent dust (and fine sand) to enter the premises easily. An atmosphere conditioning that supplies a positive pressure with respect to the outside will help to take care of this hazard and will provide continued proper ventilation at once.
- **Fire Fighting System.** Proper fire extinguishers were to be properly distributed and in order at all times.
- **Opening direction of doors in some VTCs.** Doors installed in the VTCs were opening to the wrong direction, not considering anti-panic measures and safety.
- **Ladies toilets.** In view of the high number of female students expected at the VTCs, ladies toilets had to be clearly marked, close to canteens and offices, while for classrooms and workshops, a practical solution was to be found. A culture of cleanliness and hygiene was brought to the attention of the management.
- **Bars on windows.** These were to be a generally adopted measure for all the buildings for security considerations.
- **Extra classrooms.** Because of the number of foreseen students and curricula, extra classrooms were calculated. These were to be placed on the same floor level of the existing ones, in the adjacent building, which is connected by a bridge in each VTC. The new classrooms required their own separate toilets for men and women.
- **Air conditioning for IT/ computer labs.** These labs cannot work without properly dimensioned air conditioning.
- **IT/ computer labs power outlets.** The number of power sockets in the PC classrooms were to be increased, adding outlets also onto the wall on the corridor side.

- **Broken windows (glass or closing mechanism).** Broken windows were to be repaired.
- **Cracks on walls and damaged ceiling (insulation).** These were to be repaired to avoid dust from coming in.
- **Electrical ground.** According to the construction plan and information from the Khartoum State architect, a proper ground connection was to be foreseen and installed. Apart from the main ground connection, pipes that carry cables should be diffusely connected to ground.
- **Electrical wiring not properly carried out internally.** Pipes were to be grounded, as mentioned above, and some pipe corners were without elbows.
- **Anti-lightning measures.** The supporting structure material of the VTC is iron. Most of this structure is exposed to the atmosphere, in some instances indoor, in some others outdoor. Anti-lightning countermeasures are essential. It is recommended that these countermeasures rely more on structure electrical insulation, rather than lightning rods.
- **Cleaning arrangements.** The premises had to be properly cleaned before any equipment installation was undertaken to avoid equipment damage.

### 39. *Electricity Supply in the 4 VTCs.*

The electricity supply in the VTCs had a great bearing on the implementation timetable for the installation and commissioning of training equipment.

During the May 2008 mission, the Specialist/Site Owner Engineer to inspect the progress of the works. During the inspection, he found out that the electrical connections were only partially finished and the connections to the main transformer still had to be arranged. The inspections also revealed improper execution of wiring. For example see figure 1 and 2:



Figure 1. The figure shows how the wires connection go from one wiring pipe to the other one, without any protection. The yellow, blue and red wires are not double insulated and are in any case supposed to run inside a pipe. The pipes are not connected to any reliable earth terminal. Every single piece of pipe should have its own connection, while the connection between each piece should be properly carried out and tested.



Figure 2. The figure shows the angle connection with interrupted pipes, i.e. without a curved joint that guarantees the continuity of the pipe itself.

The consultant discussed with the State Ministry of Finance – Development Projects Division and the State's consultant architect the 24 points stated above and the unsafe and weak electrical connections. By the time the IT equipment of batch 1 arrived, there was still no electricity in the VTCs.

40. Prior to the arrival of equipment batch 2, the suppliers Devotra and Eduteq sent their joint technical team to Khartoum from 28 March – 3 April 2009. They were to start preparations of the workshops for the final layout of the machines to be installed; assess health and safety issues and to coordinate the work on the electricity load requirements. Major findings and recommendations of the team confirmed previous recommendations raised by the PMU, already in May 2008.

**Electrical Defects identified by the technical team:**

Typical Single phase power socket installation



Sharp pipe edges not filed smooth, screws in low quality mortar



Twisted Pairs



Smooth nails into poor quality mortar to fix box



Internal Circuit Breaker fitted on external wall –  
NOT WATERPROOF

Conduit around an angled corner –possible damage to cables inside



Internal type switches fitted on external wall – NOT WATERPROOF



Method of bonding conduit and covering joint



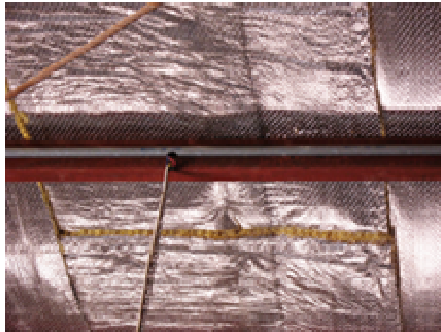
Method of bonding conduit and covering joint



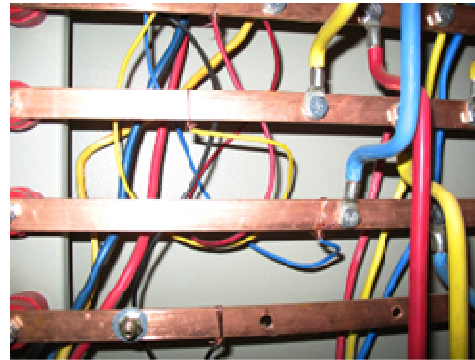
Ceiling Fan Connection



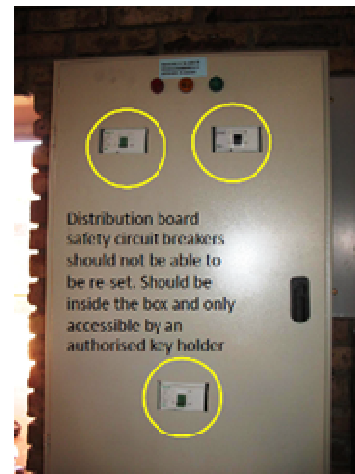
Fluorescent Light Fitting Connection



Connection method inside Main Distribution Board



Connections to Main Distribution Board





Connection to external security light – sharp edges, tight cable bend, not waterproof



Possibility of interference of data transmission as LAN lines cross conduits



Ceiling fan switches fixed directly to wall without backing board



Sharp edges, acute bends in cable, 'bonding', possible data EMF interference



Pipe cut too short to screw into connecting nipple



### Structural Defects identified by the team:

Drain Cover slats too wide apart. Modification has many sharp edges



Major dust ingress into all buildings



Poor quality windows have gaps in frames allowing dust or rain to enter



Security bars only held in by short wood screws. Badly fitted Brickwork badly pointed, very crumbly mortar





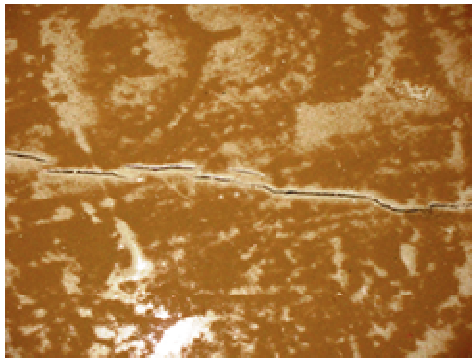
Poor quality window frame already distorted



Roof support joists do not rest on structural steel – attempt made to weld them in place



Cracking seen in numerous workshop floors – up to 3.5 cm deep



Large (4cm+) gaps at bottoms and tops of exit doors



Daylight seen through the corner of a workshop



Corner brickworks not interleaved



Mortar washed out from brickwork at wall plate level



Cables designed to tension the building steel frame are already slack in places



Walls poorly pointed. Would be better plaster or concrete skin finish and painted white to reflect the small amount of available daylight



#### **Major recommendations of the Team**

The technical team met with H.E. the Governor of Khartoum State Dr. Almutaafi. Present also at the meeting were Ms. Ishraga Sayed Mahmoud, Advisor to the Governor, Architect Hayder, Khartoum State Consultant and the PMU staff. The technical team relayed their concerns and His Excellency directed his Advisor to address the following in addition to the issues requiring rectification:

- Electrical installation safety on the single phase wiring has to be addressed;
- Proper installation of windows and doors to ensure dust prevention; proper lock mechanisms to be in placed;
- Plastering of brick walls in computer labs and classrooms to brighten up the rooms since natural lighting is not properly utilized; this is also to prevent dust accumulation in the brick walls.
- Providing of three-phase to be readily available for the commissioning of machines with proper earth system

41. The Khartoum State directed its contractors who started to repair the VTCs' electrical defects, replace windows/door locking mechanisms, install window grills and address dust prevention measures.
42. Devotra and Eduteq engineers arrived in Khartoum, last week of May 2009, to receive the goods delivered and installed the equipment. At the envisioned time of installation, the required 3-phase power was not yet also available at the VTCs. On the 14<sup>th</sup> of June 2009, however, the Engineer of Eduteq filed a dangerous incident report stating that the metal pipes encasing the electrical cables were carrying live current. Since this posed a grave threat to safety of everyone in the VTC, the installation team informed the PMU that unless the correct safety standards had been met, they would not commence with the installation.

The PMU immediately informed the Khartoum State of the incident and requested them to address the problem. The PMU also proposed that the electrical connections had to be properly commissioned and accepted according to international safety and health standards and Laws, Rules and Regulations of Sudan; and further recommended that the Khartoum State employ an independent electrical contractor who was to act as the "Clerk of Works" to be responsible for overseeing all the electrical works and the final acceptance.

43. The PMU presented the electrical safety issue at the Project Steering Committee meeting held on 16 July 2009. H.E. the Governor, Dr. El Kider, directed his staff to address the issue immediately. All members of the PSC (Khartoum State, EU, Ministry of International Cooperation, Ministry of Industry and UNIDO) agreed that safety will not be compromised.

The Adviser to the Governor requested three (3) independent bodies to make an assessment of the electrical installation in the VTCs (August/September 2009). All came to the same conclusion and concurred with earlier assessments. To move forward on this issue, the PMU offered to provide technical assistance to the Khartoum State, which was accepted. UNIDO went through the process of identifying an international consultant to undertake the job but had difficulty identifying a suitably qualified person familiar with Sudan to do the required tasks. The PMU therefore decided to hire an independent national consultant reputable in the electrical field.

UNIDO/PMU therefore decided to hire the services of an independent national consultant reputable in the electrical installation field. The consultant was to provide the required electrical technical drawings and bills of quantities for the upgrading and rehabilitation of the electrical works in the 4 VTCS including the installation of the 3-phase power required in the workshops. He was also tasked to monitor the work of the Khartoum State contractors; test and commission the work and issue the final acceptance. The consultant and his team worked with the VTC trainers in closely monitoring the work as part of their capacity building in knowing how to assess safety standards for electrical installations. This successfully done.

44. The Khartoum State addressed the electrical safety wiring and the other infrastructure defects in November 2009. The State had to allocate additional funds for this purpose. Khartoum State initially commissioned contractors to provide civil works required i.e. for additional 6 classrooms, plastering and painting of the classrooms, repairing toilets; dust control, fix the leaking roofs, and others. The electrical works started after receiving the technical drawings from the consultant.

WIS UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION (UNIDO)  
KHARTOUM - SUDAN,

RE:- ELECTRICAL ENGINEERING CONSULTING SERVICES CONTRACT  
AL HAJ YOUSUF VOCATIONAL CENTRE PROJECT - KHARTOUM.

Dear Sir,

Reference subject above, we are pleased to inform you that the upgrading & maintenance of the electrical installation in AL HAJ YOUSUF Vocational Centre carried out by the Contractor MRS Basim Engineering Consultation & Trading Co Ltd are now completed as prescribed in the Contract with Khartoum State Government & up to our satisfaction.

The executed works have been inspected & passed successfully at the tests as stated in the attached handover report sheets.

We hereby assure you that operational safety of the electrical system in AL HAJ YOUSUF Vocational Centre will meet your requirements.

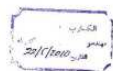
Attached copy of the preliminary handover certificate issued to the Contractor upon completion of the contracted works.

Assuring you of our technical competence, we thank you and remain Sir.

Sincerely Yours

A.M. AL-Karib

Manager



The Consultant issued the Approval Certificates for Electrical Safety on the following dates: 19 May 2010 for Khartoum South; 22 May 2010 for Hag Yousif; 8 July 2010 for Kerary and 18 July 2010 for Halfait. The equipment suppliers resumed full installation and commissioning only after receiving the Certificates of Safety.

**Xx The problems identified have been resolved to ensure full functioning of the VTCs. Xx**

### Hotel Training Section in Halfait VTC

45. As of the close of the project on 31 October 2010, renovation of the two workshops of Halfait into a mock-up hotel training centre had not been completed. The Khartoum State, however, has allocated the resources and tendered the work. As of the final report preparation, the hotel training and catering facility within the VTC has been established and the equipment installed by the supplier and commissioned.



### Beauty and Hair Care Section in Halfait VTC

46. As was the case with the hotel training section, UNIDO also had to hire the services of an architectural firm to professionally prepare the technical drawings and tender-ready documents to execute the 3D design prepared by the equipment suppliers for hair care and beauty. As of the close of the project, modelling of the training section to convert one of the workshops into a mock-up beauty salon was not completed. As of the final report preparation, the beauty and hair care section has been established and equipment installed by the supplier and commissioned by UNIDO.



### **New Building and Site for Khartoum 1 VTC**

47. Khartoum 1 is the 5<sup>th</sup> VTC assisted by the project. The Khartoum State had planned to rehabilitate Khartoum 1. The PMU had recommended that the Khartoum State prepare a Master Plan for the development of the VTC so the rehabilitation can be done in stages based on the availability of funds. At the 4<sup>th</sup> PSC Meeting on 16 July 2009, the new Governor of Khartoum State informed the PSC that the State will not proceed with the rehabilitation of Khartoum 1 but would transfer the Centre to a new location, and build a new one. Khartoum State created a committee to identify suitable areas. Khartoum 1 is located in a prime location in Khartoum, which the State had to consider in its urban and zoning plans.
48. The Khartoum State had decided that the new Khartoum 1 will be located in Gebra, one of the semi-urban outskirts which needs to be developed. They had proceeded to commission the technical drawings for the buildings and tendered the work. The PMU provided recommendations for the new Khartoum 1 taking into consideration the lessons learned from the 4 VTCs. As to the close of the project, the State had issued the contract for construction. Equipment purchased by the project has been stored in the current Khartoum 1.

### **C. Human resources development base of the VTCs**

49. In December 2007, UNIDO hired two senior national experts to work with the CTA in preparing the organizational and management structure of the VTCs based on the specialization and course offerings of the VTCs. The team used the following guidelines and principles in developing the organizational and management structure:
- The primary aim of the VTCs is to contribute to the goal of the Khartoum State to provide demand-oriented skills for employment and self-employment for poverty alleviation, responding to the needs of their target population groups.
  - The VTCs will have a professional management and, competent and dedicated staff with an entrepreneurial mindset.
  - Courses offered in each VTC will be dynamic. VTCs will have the capacity to respond to the needs of the industry and to help modernize the economy with job creation.
  - Each of the VTCs will prepare a business and strategic plan to market its services and course offerings. VTCs should be able to draw-in some income to help sustain its operations and provide additional incentives to the staff.

- An entrepreneurship culture will be embedded in the day-to-day operations of the VTCs, which should also translate into the management of all the VTCs resources.

50. On 19 January 2008, the PMU submitted the proposed VTC Organizational Structure and Framework to the Khartoum State. The document provided the staffing needs, patterns and job description of the posts. The Khartoum State used the document as a basis for making their budget allocation and recruitment of staff. The proposed staffing pattern was as follows:

**PROPOSED STAFFING PATTERN FOR VTC MANAGEMENT  
AND ADMINISTRATION PERSONNEL**

Post	No.
VTC Director	1
Asst. Director Vocational Training and Entrepreneurship	1
Asst. Director HRD, Finance and Administration	1
Marketing and Project Development Officer	1
Liaison for Certification and Testing	1
Administrative Asst./Secretary to the VTC Director	1
HRD Officer	1
Student Affairs Adviser	1
Staff Training Coordinator	1
Personnel Clerk	1
Finance Officer	1
Receivables Clerk	1
Payments Clerk	1
Cashier	1
Admin and Facilities Maintenance Officer	1
Procurement and Purchasing Clerk	1
Stores Clerk	1
Drivers	2
<b>Total Management and Administration Personnel</b>	<b>19</b>

**PROPOSED STAFFING PATTERN VTC TRAINERS**

VTC	Sr.Trainer	Trainer 1	Trainers	Asst. Trainers	Pool	Total	Total Permanent Staff
Kerary	5	4	17	12	5	43	38
Hag Yousif	4	5	11	8	8	36	28
Halfait El Muluk	7	5	17	12	11	52	41
Souk El Mahali	3	5	8	5	4	25	21
Khartoum 1	3	3	6	2	5	19	14
<b>Total Trainers</b>	<b>22</b>	<b>22</b>	<b>59</b>	<b>39</b>	<b>33</b>	<b>175</b>	<b>142</b>

51. The Khartoum State initially recruited the 4 VTC Directors in July 2008. Despite the higher salary structures for the personnel of the VTCs, the State faced difficulties in

recruiting suitably qualified staff. As of the close of the project, the Khartoum State had recruited the required staffing except for the Beauty and Hair Care Section of Halfait since there were no suitable applicants. The Khartoum State is exploring possibilities of hiring Beauty and Hair Care trainers initially from Arabic speaking countries (e.g. Egypt) and at the same time continue identifying trainers (ToTs) who are now working in the beauty and hair care sector in Khartoum.

## **HUMAN RESOURCES DEVELOPMENT FOR THE VTC MANAGEMENT, STAFF AND TRAINERS**

As part of the capacity building outputs for the Khartoum State, the VTC management, staff and trainers, the PMU organized a series of international study exchanges, fellowship training in the U.K. and a series of on-the-job training.

## **STUDY EXCHANGES AND TRAINING PROGRAMMES ABROAD**

### **52. Study exchange on Policy and Institutional Framework for Vocational Training and Entrepreneurship**

The traditional vocational training programmes with the Ministry of Labour and the Ministry of Education in Sudan are generally for three-years, with the last year spent on apprenticeship. These VTCs are offering curricula developed 30 years ago, which had not been updated to meet the market and industrial needs. Moreover, the vocational training system is generally not linked to the promotion of small and medium enterprises and to industrial development.

The project strategy has put forward that there is a need to update and realign the National Vocational Qualifications Standards to meet the emerging needs of Sudan in light of the rapid technological and economic changes in the country.

The project introduced innovations in the new curricula by using the competency-based training (CBT) approach and introducing entrepreneurship in vocational training. Although the project was targeted for the Khartoum State, any innovations introduced in this area has implications on the vocational training policies of Sudan as a whole.

Against this background, the PMU organized a study exchange for officials and managers involved in vocational training policies to expose them to the processes and institutional framework that the United Kingdom, Bahrain and Malaysia have adopted to improve their system of vocational training and technical education. The first study exchange to demonstrate a new way of thinking was conducted from 26 July – 08 August 2008.

The delegation consisted of the following officials:

#### **From the Khartoum State:**

- Ms. Ishraga Sayd Mahmoud Salih, Adviser to the Governor/Head of Delegation
- Ms. Osama Faisal El Sayed, Director International Cooperation
- Ms. Huda Osman, Director, Development Projects, Ministry of Finance
- Mr. El Sir Ali Mohamed, Acting General Directors VTCs
- Mr. Mansour El Imam, Director Khartoum 1

#### **Other Project Partners**

- Mr. Mohamed Ahmed Rasmi, Secretary General, Supreme Council for Vocational Training



- Mr. Abdul Mahmoud Usman Mansur, Secretary General, National Council for Technical Education and Technology
- Mr. Omer Abdin, Vice-chairperson, Sudanese Council of Engineering
- Mr. Mahmoud Khogali, Director, Ikhbary Vocational Training Center
- Mr. Mohamed Awad Ali Shrara, Assistant to the Undersecretary of Industry/in-charge of Vocational Training, Federal Ministry of Industry
- Ms. Jovita Culaton Viray, Chief Technical Adviser, UNIDO
- Ms. Inez Wijngaarde, Project Manager EE/SUD/07/004 (joined delegation in UK)

The delegation visited the following institutions:

#### United Kingdom

- Castle College, Nottingham
- Djanogly City Academy, Nottingham
- ILS English
- Wastesavers Resource Center
- Refgas Ltd.
- Scotland Colleges International
- Scottish Qualifications Agency
- Maritime



#### Middle East

- Bahrain Training Institute
- Sheikh Khalifa Institute of Technology
- UNIDO Industrial Trade Promotion Office
- Edexcel International, Middle East

#### Malaysia

- Department of Skills Development, Ministry of Human resources
- Center for Instructors and Advanced Skills Training (CIASST)
- Penang Skills Development Center

The delegation learned from the study exchange that developments observed were attributed to the concept of investing and introducing innovations in human resources development, specifically in the vocational training area. This resulted in the following policy-related recommendations put forward to the Council of Ministers of Sudan:

- Raise public-awareness on the importance of vocational training through the various media coverage. Concerned parties should also adapt a mechanism for providing incentives to private sector/beneficiaries – in such a way guaranteeing their sustainability, as is in the case of Malaysia.
- Develop an explicit strategy that review the educational system and specify the standards of the national vocational training for awarding Sudanese vocational certificates through the changes made in the working environment at the vocational training centers. Provide motivation and incentives that will encourage students to enroll in this type of education and training.



- Set up a plan of action to incorporate the different levels of vocational training, based on a multi-vocational training approach that responds to the dynamics of the labour force and the demand of the Sudan labour market in accordance with the internationally recognized standards.
- Establish a central bureau that links, accredits and develops the vocational training levels with the relevant international institutions, such as (SQA), (MQA), with a view to internationally and regionally recognizing their role.
- Commit the private sector to contribute in such activity in accordance with the rules and regulations set forth by the concerned parties. This is in line with the established rules and regulations set forth in the countries visited by the delegation during the study exchange.
- The Khartoum State Vocational Training and Entrepreneurship Development Project is considered as a flagship to promote this type of activity on the national and state levels - to apply the minimum of the recommendations on the level of the different Sudan States in support of the goals of the National Strategy set forth.
- Introduction of a quality assurance system in training and education using appropriate parameters as implemented by the countries visited to guarantee the worthiness of the qualification and effectiveness of the educational and training programmes.
- Encourage the private sector to establish training, technical and technological education institutes, as is in the case of the countries visited by the delegation, in collaboration with the affiliated international and regional organisations.
- Incorporate ILS programmes (a system of technical English literacy) into the vocational and technical training syllabi to graduate better-qualified trainees;
- Establish, with immediate effect, a Code or rules and regulations for vocational training, to encourage interested individuals to engage in this area of industry, thereby decrease the imported labour, a major step towards the right track to promote employment linked to education and training.
- Identify, in due course, the qualified human cadres of trainers and instructors through establishing institutes for training of trainers, as in the case of Kingdom of Bahrain and Malaysia (BIT – CIAST), provided that the exchange of national expertise with the relevant institutes should be undertaken at length, in a form of agreements or memoranda of understanding.
- Appoint technical directors for the management of the national and state vocational training centers and put in place targeted measures to help them implement their functions.
- Incorporate in the syllabi of the vocational and institution levels training programmes aimed at upgrading the capacities of small-scale entrepreneurs.
- Undertake a feasibility study to establish a vocational university such as the one proposed in Malaysia to support vocational training and the staff.
- Provide the necessary financing for installing the standard equipment and tools required for a developed vocational and technological training, in line of what the



delegation has witnessed during their envisaged study exchange. (Training budget).

- Put in place gender parity measures to facilitate the active role of women and their interest in this important training sector.

### 53. Second Study Exchange: BETT Exhibition and Visit to Centres of Excellence

ICT is an essential tool for modern learning. The project had introduced the use of ICT as a teaching and learning tool in the VTCs. The PMU arranged a second study exchange to the United Kingdom for the 5 VTC Directors to attend the British Education and Training Technology (BETT) show and to visit two colleges of vocational excellence (COVE): East Berkshire College, Windsor, U.K. COVE for motor-vehicle and Brooklands College, Surrey COVE for core-engineering. The Directors saw some of the equipment purchased by the project for the VTCs in use in these COVEs. The tour was from 14 -21 January 2009. Linesman U.K. organized the visits and provided logistical support to the group.



The VTC Directors who went on a Study exchange were as follows:

- Mr. Mansour Ahmed Elimam Mansour, VTC Director Khartoum 1
- Mr. Abdelrahim Mohamed Ahmed, VTC Director, Kerary
- Mr. Hassan Adam Hassan, VTC Director, Hag Yousif
- Mr. Hysam Hassan Abdel Galil, VTC Director Halfait
- Mr. Ahmed Abdalla Osman, VTC Director, Khartoum South (Souk El Mahali)

At the end of the Study exchange, the PMU expected the VTC Directors to be able to:

- Assess the different ICT (software and products) that the project is introducing to the VTCs and able to recommend other software and hardware that can be introduced
- Identify the value of the use of ICT in vocational education and management and be able to apply it in their vocational centers
- Establish a benchmark to set up their respective centers as Centers of Excellence



The VTC Directors/ Managers made the following recommendations to the Khartoum State after the Study exchange:

***Recommendations***

- Adopt and implement health, safety and security standards. (Example: shown in picture taken during the visit to the COVE)
- Ensure international construction and safety standards for electrical connection and wiring by using insulated metal pipes, proper bonding, fixed roof tube lights and high quality sockets.



- Arrange training tools for smooth handling, as shown in the photo taken from the visited COVE.



- VTC should follow standard hand cleaning procedures for health and safety of staff and students.



- Establish partnerships between the VTC centres and the visited colleges of vocational excellence and knowledge management.
- Continues and periodical training for the staff (Technical & Admin) and keeping trainers and instructors up-to-date especially in computer operation and internet services.
- Apply and adopt a system in Khartoum State to establish the new VTCs as Centres of Excellence.
- Adapt a management system for registration, attendance and assessment of the trainees.
- The use of software timetable will increase the utilization of center's resources (instructors, classrooms, workshops)
- The annual VTC budget allocated should be in accordance with the number of students enrolled and its capacity.
- Applied Sciences (Physics and Applied Mechanics) should be included as one of the courses as it is a basic requirement for any technical training.
- Establish the VTCs to meet the standard requirements to achieve vocational excellence level.
- The VTCs should have a reception area to control the flow of students and visitors and for security purposes.



- The Khartoum State and the project should explore the International Diploma in Project Management [IDPM] offered by the University of Cambridge as part of the human resources development programme of the VTCs Directors and management.

After the study exchange, the PMU observed a remarkable change in the mind-set of the VTC Directors/ Managers in terms of their understanding of the concept of health and safety in their respective VTCs, importance and use of ICT in education and modern day management. They also had developed self-confidence in managing the VTCs.

#### 54. **Intensive English Language Course with ILS English and VTC Management Course with Castle College, U.K.**

One deliverable of the subcontract with Castle College/ILS English is to provide Leadership Management and Administration Training for the Senior Managers of the VTCs. Before the management training, ILS/English provided a two-week intensive English Language course for the participants to improve their language skills.

Objectives of the Intensive Language Programme are:

- To improve ability in General English (reading, writing, speaking & listening)
- To improve emails, telephone techniques
- To improve business writing skills
- To participate effectively in meetings
- To communicate with confidence in social situations
- To enhance presentation skills
- To help prepare participants for Castle College training programme

The one-month Leadership and Management Training covered the following topics they need to know in managing the VTCs:

- Management Development
- Leadership
- Business and Strategic Management
- Entrepreneurship
- Administration and Finance
- Resources & Asset Management
- Marketing
- Human resources
- Project Management
- Quality Assurance
- Curriculum Design
- Timetabling
- Data Management
- Enrolment process



The English language course took place from 20 June – 5 July 2009 and the management training from 06 July -15 August 2009.



The following VTC management staff attended the training programme:

	Name	Gender	Post
1.	El Sir Ali Mohamed	Male	Acting Director General, KSVTA
2.	Mansour Ahmed Elimam Mansour	Male	VTC Director, Khartoum 1
3.	Abdelrahim Mohamed Ahmed	Male	VTC Director, Kerary
4.	Hassan Adam Hassan	Male	VTC Director, Hag Yousif
5.	Hysam Hassn Abdel Galil	Male	VTC Director, Halfait
6.	Ahmed Abdalla Osman	Male	VTC Director, Khartoum South
7.	Babiker Ali Al Mubarak	Male	Asst. Dir. Tech –Hag Yousif
8.	El Gasim Hassan Abdalla Ali	Male	Asst. Dir. Tech – Kerary
9.	Hasab Elrsoul Ali Ibrahim Ahmed	Male	Asst. Dir. Tech – Khartoum South
10.	Fathi Omer Fadlemoula	Male	Asst. Dir. Tech – Halfait
11.	Ibrahim Mohamed Ahmed El Hussein	Male	Asst. Dir. Tech – Khartoum 1
12.	Babiker Karrar Balla Mohamed	Male	Asst. Dir. Finance – Khartoum 1
13.	Wafaa Abdelgadir Ahmed	Female	Asst. Dir. Finance – Hag Yousif
14.	Fatima Ahmed Ali	Female	Asst. Dir. Finance- Khartoum South
15.	Babiker Abdelmalik Albadawi	Male	Asst. Dir. Finance - Kerary
16.	Ibrahim Abdelrazi Ibrahim	Male	Asst. Dir. Finance – Halfait



After their return to Sudan, the participants were to have prepared their VTC Business Operational Plans with online coaching by Castle College. However, they were not able to prepare their plans during the envisioned time as when they came back they had to address pressing infrastructural needs at the VTCs, recruitment and putting all the organizational and administrative arrangements in place.

**55. Intensive English Language and Train the Trainer Programme for the English Trainers (Batch 1): Conducted by ILS/English U.K.**

Each VTC should have 2 fully qualified English trainers. However, at the time of the scheduled training, the State had only recruited 5 trainers in total. ILS/English agreed to hold the training into two batches.

The first batch of 5 English trainers went through a two week intensive English Language Course and a 4 week Train the Trainer Programme covering Basic English as a Foreign Language (EFL) methodology, EFL administration and management and ICFT for EFL.



The modules of the teacher training programme covered the following:

- Continued language awareness
- Classroom skills and techniques
- Classroom management
- Planning of courses, lessons and activities
- Management, Administration and Course Records
- Materials development for General English
- Materials development for Technical English
- CBT approach
- Resources and Technology
- ICT materials development
- Train the Trainers

Based on the performance of the participants during the course, ILS/English recommended that the second batch should go through a one-month intensive language course instead of only two-weeks.

The English Teachers who attended the first training held from 27 June- 8 August 2009 are:

	Name	Gender	Post
1.	Ameen Ali Aahmed Ali	Male	English Teacher, Halfait
2.	Montasir Sidahmed Eljack Hussein	Male	English Teacher, Khartoum 1
3.	Majdoleen Elsayeed	Female	English Teacher, Khartoum South
4.	Yahia Ibrahim Suleiman	Male	English Teacher, Hag Yousif
5.	Abdel Wahid Ali Habib Allah	Male	English Teacher, Kerary

Major concern raised by ILS is that the communicative methodology used in the training was in stark contrast with the way the trainers had previously taught. Thus, a great deal of time was taken up explaining and demonstrating basic methodological points, such as lesson structure and using resources and visuals. The trainers may not be able to fully implement the communicative methodology exactly as they had observed and been taught in the UK due to cultural differences. Any change in this area would take time. ILS recommended that full support from their

colleagues and management staff in the VTCs was required for them to fully implement the new methodology.

To address this issue, the PMU and the VTC Management organized for the 5 English teachers to give English lessons to their colleagues in the VTCs in order to practice the new methodology and at the same time enhance the English language capacities of the trainers who have been recruited at that time.

#### **56. Intensive English Language Course and TOT (Using CBT) for the Delivery of the Technical Curricula for the Senior Trainers and 3 Asst. Directors**

ILS provided a four week training (12 October- 5 November 2009) in Technical English to 22 VTC Senior Trainers and 3 Assistant Directors. The objectives of the Technical English programme were for the participants to be able:

- To increase their technical vocabulary
- To describe processes, functions and procedures
- To give and receive instructions
- To communicate clearly and safely
- To discuss technical diagrams
- To prepare themselves for the Castle College training programme

The ILS report on the English training of the Sr. Trainers showed that the trainees had different levels of English. After assessment, ILS divided the group into two classes: one intermediate and the other pre-intermediate, which worked well.

Most of the Senior Trainers lacked basic ICT skills, which hindered the training progress in this area. ILS had to take them back to basics and practice using keyboards and demonstrate how to enter web addresses and other basic functions. They made reasonably good progress in improving their ICT skills.

ILS also reported that the trainers came with very positive attitude to the lessons and they had excellent attendance. They all worked very hard and they saw the value of the lessons. Most of the participants had an excellent passive knowledge of the English language.

Although the course was only for only for a month, the participants were able to improve their confidence and were provided the necessary skills and vocabulary they needed for their time at Castle College.

Castle College provided a 6-week Training of Trainers for the Delivery of the CBT Curriculum (07 November – 19 December 2009). The training programme included the following topics:

- Modern Teaching Methods
- Curriculum Design and Implementation
- Curriculum Familiarisation
- Course Structure and Design
- Course Planning





- Session Planning
- Apprenticeship Work
- Portfolio Building
- Learning Styles (how learners learn)
- Assessing Work and Observation; Assignments
- Delivery Styles
- Administration/Course Management
- Resources Management
- Health Safety
- Equality and Diversity
- Child Protection



The Senior Trainers also spent time with various sections of Castle College for exposure on the delivery of the curricula using the CBT methodology. Many of the Senior Trainers sent to the U.K. were newly recruited by the Khartoum State. At that time, they had very little idea on the project and the CBT approach that the project was introducing. They had different expectations on the training programme thinking that it would be a technical skills upgrading. Castle College levelled their training expectations at the start of the training programme. The Assistant Directors who participated have been assigned to the KSVTA Unit, which is currently further managing the VTC programme within Khartoum State, the Agricultural Vocational Training Centre and the TOT Centre for Vocational Training, which is currently being established by Khartoum State. The Participants who attended the ILS English Course and the TOT in Castle College are the following:

#### **PARTICIPANTS TO THE TRAINING PROGRAMME**

	<b>Name</b>	<b>Gender</b>
1.	Hassan Ahmed Eltom	Male
2.	Magdi Ibrahim Mustafa Mumin	Male
3.	Elmahdi Bashir Hamed	Male
4.	Mohamed Saeed Hassan	Male
5.	Hassan Mohamed Adam	Male
6.	Yasser Ibrahim	Male
7.	Khider Idris	Male
8.	Yousif Mohamed Maghoub Khalid	Male
9.	Isameldeen Khalifa	Male
10.	Hussein Mohamed Zein Ali Khalifa	Male
11.	Hashim Elfaki Mohammed Elshakh	Male
12.	Sedig Mohamed Osman	Male
13.	Salih Mohamed Salih	Male
14.	Eadital Ahmed Abdalla	Female
15.	Failsal Kamaledin Abdelrahim	Male
16.	Obeidalla Sulaiman Adam	Male
17.	Abdelrahem Hassan Ktir	Male
18.	Majdi Yousif Mahmoud Yousif	Male
19.	Abdalla Marzoug	Male
20.	Ibrahim Hamza Alshaikh	Male
21.	Noureldin Bokhari	Male
22.	Hussein Abdalhalim Bushara	Male
23.	Hussein Mohamed Merailsil Elsafi	Male
24.	Manal Abbas Mohamed	Female
25.	Osman Khalil Abdalla Mohamed	Male



### 57. Study exchange/Hotel Training at the Tourism School of HLF Krems, Austria

In line with the market demands analysed, the newly established vocational training centre in Halfait El Muluk, Khartoum has been prepared to offer hotel and catering courses. The Hotel & Catering section of the VTC shall serve to train groups of 16 persons each in the areas 'commercial kitchen', 'bakery and pastry', 'restaurant service', 'hotel housekeeping services including laundry' and 'guest reception'.

The intention is to provide practical hands-on training according to current international standards in this professional area. It must be noted that the facilities will not be used commercially and guests will not be accommodated in this VTC. The facilities will all be fully functional but will serve for demonstration purposes only.

The Halfait VTC had appointed 4 trainers to manage the facility (1 Senior Trainer, 1 Trainer and 2 Assistant Trainers). As part of the human resources development intervention of the project, UNIDO had made arrangements to provide training to the staff of Halfait with the objective of enhancing and providing them with additional skills on how to run and manage a hotel training centre including organizing and delivering training programmes.

With the assistance of the International Hotel Consultant, UNIDO made arrangements with WIFI (International Know-How Transfer) of the Austrian Federal Economic Chamber, which organized the 3-week training with the HLF Krems School of Tourism, Austria. The training took place from 8-31 March 2010. Participants in this training programme were:

	Name	Gender
1.	Osman Khalil Abdalla Mohamed	Male
2.	Awad Sayed Abd Elfath	Male
3.	Tahani Karamalla Salman	Female
4.	Hadeir Abdalla Abbas	Female



### 58. Footwear and Leather Craft Training at the Leather and Leather Products Institute, Ethiopia, Addis Ababa

Based on the demands analysed by the leather sector, the VTC Kerary will be offering courses in leather products and footwear.

It had appointed 4 trainers to manage the section. While they are all leather technicians, these trainers did not have hands-on and practical experience in shoe-making or manufacturing. This had to be addressed, if this VTC is to deliver qualified graduates. The international leather expert recommended in addition to sending the trainers for practical training, that the VTC can hire shoemakers to form part of the training pool. The vision is to establish Kerary as the leading center in Sudan to provide training for the leather sector (footwear and leather products).

The PMU liaised with the Leather and Leather Products Institute (LLPTI) in Addis Ababa, Ethiopia, for the possibility of a 3 month tailor-made training programme for the trainers. LLPTI submitted a solid training plan that the PMU accepted. Training took place on 5 April to 25 June 2010. Participants in this training programme were:

	Name	Gender
1.	Yasmeen Awad Mohammed Ali	Female
2.	Sarra Ibrahim Elaaz Ibrahim	Female
3.	Asmahan Abdelnabey Mohammed Ali	Female
4.	Alzein Idriss Adam Musa	Male

#### **59. Intensive English Language and Train the Trainer Programme for the English Trainers (Batch 2)**

The Khartoum State was able to recruit the 5 additional English teachers in the first quarter of 2010. PMU agreed with ILS that this training was to start on 12 April to end on 5 June 2010. However, not all the participants received their visas on time and ILS agreed to run the programme from 19 April. Unfortunately, the teachers were unable to travel due to the problem of the volcanic ash from Iceland, which stopped all international travel to the UK. The actual training commenced on 26 April and ended on 11 June 2010. As part of the training, this group returned to Sudan to work with the ILS Staff in planning the English lessons with the first batch of English trainers on site.

ILS evaluations indicated that this batch of English teachers have a higher level of English than the previous group and that these were also more experienced in teaching English as a foreign language.

The second batch of English teachers who attended the training programme:

Name	Gender	Post
Osama Mohamed Osman Mohamed	Male	English Teacher, Khartoum South
Elawad Bakhit Ahmed	Male	English Teacher, Kerary
Hasim Ali Abu Zaid El Tigani	Male	English Teacher, Halfait
Altegane Ibrahim Abdelrahman Abousita	Male	English Teacher, Khartoum 1
Tarig Mohamed Abu Elgasim	Male	English Teacher, Hag Yousif

#### **60. Study exchange LLPTI for Managers and Khartoum State Staff (new name: LIDI – Leather Industry Development Institute), Addis Ababa**

It should be noted that the leather workshop of Kerary VTC has currently all the required equipment for footwear and leather products training.

The study exchange participants developed the insight that the LLPTI in Addis Ababa, as one of the primary training institutions in Africa, is fully supporting the leather industry by providing a skilled work force through Skill Development Training

Programmes and by upgrading the employees of this sector through Upgrading Training Programmes.

The Khartoum State delegation of this study exchange to LLPTI was fully exposed to the set up and management of the LLPTI, which helped to benchmark for the evolution of the leather section of VTC Kerary as a primary center for providing training to help develop the leather sector in Sudan. The study exchange took place from 03 – 8 October 2010 and focused on the following:

- How LLPTI is organized in responding to the needs of the leather industry
- LLPTI management structure
- Programmes and services offered
- Funding mechanisms
- Linkage with the private sector
- Curriculum development process
- Methodologies of promoting training programmes among the youth and industry

For the delegation to have a complete overview of the state of the leather industry in Ethiopia, LLPTI arranged visits to various factories and tanneries. The delegation gathered that the reason the leather industry is flourishing in Ethiopia is the conducive policy environment and the pro-active stance of government to invest. The Ethiopian government created LLPTI/ LIDI for the leather industry as it has been identified as an industrial priority sector.

The Head of the Mission, Ms. Ishraga in her capacity as the High Commissioner for Human resources Development and Vocational Training proposed during the courtesy call with the Minister of Industry discussed a Memorandum of Understanding between the Khartoum State and LIDI for mutual support and collaboration. The Minister welcomed the idea, as Ethiopia is looking at Sudan as a major source of wet blue for their leather manufacturing industries. It should be noted that the Kerary VTC will not be involved in the processing of wet blue. Both parties saw it as a win-win situation. The Khartoum State and LIDI signed a Memorandum of Understanding last December 2010.

Members of the delegation for the study exchange:

Name	Gender	Post
Ms. Ishraga Sayd Mahmoud Salih	Female	High Commissioner, Human Resource Development and Vocational Training, Khartoum State (Head of the Mission)
El Sir Ali Mohamed	Male	Director General, Khartoum State Vocational Training and Administration Unit
Abdel Rahim Mohamed Ahmed	Male	VTEC Kerary Director
Elgasim Hassan Abd Alla	Male	Asst. Dir. Technical and Entrepreneurship
Huda Osman	Female	Director Project Development Division, Khartoum State Ministry of Finance
Salah Salim Salah	Male	Chairperson Leather Sector, Sudanese Chamber of Industries
Hassan Zeinebadin Omer Ishag	Male	Asst. General Manager, Industrial Research and Consultancy Center, Ministry of Industry
Jovita Culaton Viray	Female	Chief Technical Adviser, UNIDO

## 61. Summary of Overseas/ Study exchanges/Training Programmes

Study Tours/Training Programmes	Dates/Location/Institution	For Whom	Number
Study Tour: Policy and Institutional Framework for Promoting Vocational Training and Technical Education	July 26 - 08 August 2008 England, Wales, Scotland, Bahrain, Malaysia	Khartoum State Officials, NCTTE, Supreme Council, Min. of Industry, Private Sector	10
Study Tour: BETT Exhibition and visit to Centers of Vocational Excellence	January 14-21, 2009 London, UK	VTEC Directors	5
Intensive English Language Course and VTC Management Course	June 27 - Aug 22, 2009; ILS English and Castle College, UK	Sr. VTEC Management Staff and Director of the KSVTA Unit	16
Intensive English Language Training and TOT to teach the English Language Course	June 27 - Aug 8, 2009 ILS English UK	English Teachers	5
Intensive English Language Course and TOT (Using CBT) for the Delivery of the Technical Curricula	Oct 12 - 19 Dec 2009; ILS English and Castle College, UK	Sr. Trainers and 3 Asst. Directors	25
Hotel Training (arranged through the WIFI, Austrian Economic Chamber)	March 8-31, 2010 Tourism School, HLF Krems, Austria	Hotel trainers, Halfait	4
Footwear and Leathercraft Training	April 5 - June 25, 2009 LLPTI, Addis Ababa, Ethiopia	Leather Trainers of Kerary	4
Intensive English Language Training and TOT to Teach the English Language Course	April 26 - June 11, 2010; ILS English UK	English Teachers	5
Study Tour: LLPTI (benchmark for the development of Kerary Leather Section to evolve as a primary training center for Leather)	Oct 3 - 8, 2010, LLPTI, Addis Ababa, Ethiopia	Khartoum State Officials, Min. of Industry, Chamber of Industries	7

## IN-COUNTRY TRAINING PROGRAMMES

### 62. Orientation Programme for New VTC Directors on Vocational Training Center Operations

As part of the capacity building process of the management of the VTCs, the PMU organized an orientation programme for the new VTC Directors, which was found to be beneficial to their portfolio. The programme was a joint cooperation with the Supreme Council for Vocational Training and Apprenticeship (SCVTA) and four VTCs, i.e. Khartoum 2, Khartoum 3, Sudanese-Korean Centre and Sudanese-Chinese Friendship Centre. It was held from 28-31 December 2008.

On the first day, the SCVTA briefed the directors on the Council covering the following topics: mandate, organizational chart, synergy with the National Council for Technical and Technological Education; curriculum development and approval process, and testing and certification process.

On the 2<sup>nd</sup> and 3<sup>rd</sup> days, the PMU assigned the Directors to the VTCs operating in Khartoum. Areas covered during these two days were as follows:



- General Orientation on the Organizational Structure of the VTC including the roles, authority and accountability of the VTC Management Board and the VTC Director
- Presentation of the courses offered by the VTC; How do they market their training programmes to the youth and the private sector?
- Visit to the sections: different tools and equipment that the VTC is using; number of enrollees; different training materials used; curriculum/course content; reference materials; safety procedures in place;
- Visit the Stores: inventory management and controls systems in place; methods of procurement of training materials
- Discussion with the Admission Office: entry requirements; the process of enrolment; what forms or papers are required?
- Discussion with Finance Office: What type of posts are required in the Finance Office? What are their functions? How do they develop the budget for the VTC? How are they monitoring their budgets; how payments and salaries are made; what financial controls are in place; who has approving authority for expenses; incentive schemes used by the VTC for the trainers, etc.
- Wrap-up Discussions with the VTC Management

The Directors spent the final day at the PMU office where the staff briefed them on Component 2 of the project; and they shared amongst themselves what they learned from their respective visits. During the discussions, they discussed the differences between their own organizational chart and the existing structures of the VTCs; their own terms of reference with the VTC Directors visited; and the challenges they face.

### 63. Basic Computer Operations (In-house)

The project introduced intensive use of ICT as a training tool within the VTCs. It is a requirement that all staff and trainers must be computer literate. The PMU found out that majority were not familiar with basic computer operations, i.e. not IT literate. Since the computers have been delivered and the ICT trainers of each VTC had been recruited, the PMU and the Khartoum State organized a one month in-house Basic Computer Operations Training for the 77 staff and trainers recruited at that time. A training took place in each VTC from 21 April – 21 May 2009. A refresher on the job training took place at several occasions, during installations of IT equipment.

### 64. Competency-based Training (CBT) Workshop and Launching of the CBT Curriculum Development Process

Before the introduction by the Project, the CBT approach was a new concept in Sudan. The Project has introduced the CBT approach as an innovation for the new curricula and training approach of the VTCs in partnership with the NCTTE, SCVTA and the private sector. All the parties have agreed to a General Framework of Cooperation in the development of the curricula.

As this concept was unknown to Sudan, hence, there was a need to equip the key players and partners with thorough knowledge



and skills on how to proceed with the CBT curriculum development process and review the given tasks as laid out in the General Framework of Cooperation and Partnership.

As part of the steps taken by the Project with Castle College, a 3-day workshop on CBT training was held at the Zakat Institute for Higher Sciences, Khartoum from 11-13 August 2009. International experts



from Castle College, U.K. and national experts provided the technical inputs to the workshop. Sixty members of the technical and sub-technical committees working on the curricula with the project attended this training.

On the 17<sup>th</sup> of August 2009, H.E. the Vice-President of Sudan launched the Development of the Curricula for the VTCs at the Friendship Hall in Khartoum and gave the certificates of attendance to the workshop participants.

#### **65. Intensive English Language Course (in-house)**

Majority of the staff and the trainers are not well versed with the English language. Since technical materials are mostly written in English, it was important that they learn to understand, speak and read the language. The PMU and the Khartoum State organized Intensive English Language Courses for the 77 recruited staff and trainers at that time. The first batch of English teachers conducted the course. This was also a good opportunity for them to practice the communicative teaching methodology they learned from ILS/English in UK. Training was spread over 3 months, i.e. October – December 2009.

#### **66. ICDL Course**

The European Computer Driving License (ECDL) also known as ICDL is the global standard in end-user computers skills, offering candidates an internationally recognised certification. The ECDL Foundation is the governing body and licensing authority for ECDL and ICDL. The Foundation has a set of standards and quality guidelines to ensure that the ICDL concept is operated in a consistent fashion in all member countries through adherence to these common quality standards. They conduct regular audit process. It has a network of national or regional Licensees administering the ECDL/ICDL concept. UNESCO Cairo is the licensee covering Sudan.

The project envisions that the 5 VTCs would in the future be able to issue computer students an internationally accredited certificate. The PMU had initiated contacts with UNESCO Sudan and Cairo for the accreditation of the 5 VTCs as an ICDL Testing and Training Centre. One of the requirements is that all trainers have to have an ICDL Certificate. The VTCs are able to meet the other requirements in terms of hardware, software and other facilities and the foreseen internet connectivity.

The PMU sent the 14 ICT trainers to undergo the ICDL training programme conducted by the company Computerman, an accredited training and testing center in Sudan. Training was held from 20 July – 25 August 2009 in Khartoum. All the 14 trainers passed the on-line testing and are now certified ICDL trainers.

As of the close of the project, the VTCs did not yet have full internet connectivity hence, the PMU was not able to submit the application for accreditation. The VTEC Director of Halfait will pursue the application as soon as internet is available in the VTECs.

#### 67. **Training of Trainers (conducted by the TOT Institute of the Supreme Council for Vocational Training)**

In August of 2009, the Khartoum State had recruited half of the teaching staff required in the VTCs. While the profile of the teaching staff shows that they have the required academic background, they did not have any formal training in the pedagogy of teaching at a vocational training center nor knowledge and skills in competency-based training.

The PMU approached the Training of Trainers Institute of the Supreme Council for Vocational Training and Apprenticeship (SCVTA), which is an authorized government institution to issue Teacher's Training Certificates for vocational trainers.

The PMU worked with the TOT management to develop a tailor-made training programme and agreed on the content and methodology. It had four modules:

Module	Training Objectives	Number of Hours/days Per Group
I – Introductory	At the end of the module, the participants will be able to: Explain the context of the Khartoum State vocational training project within the general policy framework of the SVCTA and industrial development of the country; explain the CBT concept and difference with the 3 year apprenticeship programme	16 hours/2 days
II – Training Tools and Methodologies	Demonstrate pedagogical skills required in vocational training.	50 hours/10 days
III – Practice Teaching	Demonstrate the knowledge and skills they have acquired to deliver vocational training	25 hours/5 days
IV - Role of a Vocational Trainer	Clarify and explain their roles as vocational trainers	5 hours/1 day

The training was for 96 contact hours spread over the period 11 October – 09 November 2009. H.E. The Governor, Dr. Abdul El Rahman El Khider and the Federal Minister of Labour closed the training programme and awarded the certificates to the 81 trainers.

#### 68. **Training of Trainers: Marquob Development (conducted by Andreas Daxbacher, Int. Footwear Leather Expert)**

The four leather trainers of Kerary joined the TOT for Marquob Development, a training programme organized by the PMU under Component 2. (Please see Component 2 for more information on this training). The Marquob traditional Sudanese footwear. The project considered the need for orthopaedic innovations. The training was held at the National Leather Research Center from 27 June – 7 July 2009.





**69. Footwear Technology Course (conducted by Mr. Moneim Younis, national leather consultant)**

The international leather footwear expert assessed that although the 4 leather trainers of Kerary have the technical background on leather technology, they require further practical experience in footwear and leather products. To prepare the trainers for the 3 month course with LLPTI, Addis Ababa the PMU organized an intensive Footwear Technology Course, prior to their training overseas. Mr. Abdul Moneim Younis, national leather consultant conducted the course, in Khartoum from 07 December 2009 – 4 January 2010.

**70. Basic Analogue and Digital Electronics Training (conducted by the Sudan Atomic Energy Commission – Instrumentation Department)**

Halfait VTC in coordination with the PMU approached the Atomic Energy Commission – Instrumentation Department to provide training on basic analogue and digital electronics to hone the technical skills of the four electronic trainers assigned in Halfiat. The training took place from 3 January – 3 February 2010, and was well received.

**71. Strategic Planning Workshop**

The PMU organized and facilitated a Strategic Planning Workshop for the management of the VTCs (Directors and Assistant Directors Technical and Finance and Administration) in preparation for the intake of the students and short-term and medium term planning of operations. It was held in Kenana, Sudan from 14-18 March 2010.

The workshop covered the following topics:

- Vision and mission of the Vocational Training and Entrepreneurship Centres (VTECs) of the Khartoum State (The name change was proposed from VTC to VTEC)
- Vision and mission of the Khartoum State Vocational Training Administration Unit (KSVTA Unit) vis-a-vis the vision and mission of the VTECs
- Effective functioning of the VTECs
- Performance as management staff of the VTECs and necessary measures to improve leadership performance
- Review of the Competency Based Training Approach
- Strategic and Operational plan to achieve the vision and mission



Following the above workshop, the Castle College Team reviewed together with the VTEC management the Strategic and Operational Plans they prepared during the Castle College visit to Khartoum in 08-13 May 2010.

**72. Product Design for Artisans Training Programme (conducted by International consultant Ms. Lidwina Dox)**

The four leather trainers of Kerary joined the Product Design for Artisans Training Programme conducted under Component 2. (Please refer to Component 2 for discussion on the programme). The PMU deemed that this training programme would be good for the Kerary leather trainers as they would also be conducting in the future design leather craft short-term courses. The training was held at the Ustratuna Vocational Training Center from 21-30 March 2010.



**73. Practical Skills Training on the Use of CNC machines (conducted by Yormouk at their Complex)**

Yormouk Complex offered to train two machining trainers of Khartoum South on the use of CNC machines. This was at no cost to the project. They conducted the training at their complex where they have very advanced CNC machines. The training took place from 29 March to 8 April 2010.

**74. Follow-up Training on Timetabling and Course Content**

Castle College conducted capacity-building follow-up training on timetabling and course content in Khartoum from 8-13 May 2010. They met initially with all the VTEC Directors and Assistant Directors (Technical and Finance) to discuss: General operational procedures and management, trainee intake model (timetable schedule) and curriculum content and format for levels 1 and 2. After the general review, the consultants, Messrs. Arnie Hattersely, Bruce Ford and Nick Hammond had one-on-one sessions with the VTECs. Prior to their departure, an evaluation meeting was conducted with the PMU, the Directors and Asst. Directors and the KSVTA Unit Director-General.



#### **75. Technical Skills Training on the use of LJ Equipment as related to the Curricula Developed by Castle College**

UNIDO purchased LJ Equipment for the Classroom Management System of the VTEC computer laboratories and the Autotronics Laboratory of Hag Yousif. This was the first time for the trainers to use such software and system. Since Castle College is using the same equipment, the PMU requested Castle College to send a trainer to teach the trainers on how to use the equipment as related to the curricula developed by Castle College.

Fourteen (14) ICT and Autotronics trainers joined the workshop conducted by Mr. Davey Yates of Castle College. He started with the basics of setting up the systems. It was during this time that Mr. Yates discovered that VTECs Halfait and Hag Yousif required additional LJ equipment and software to maximise the use of the equipment. As a result, the PMU initiated purchase of the additional equipment. Training was held from 8-13 May 2010.

#### **76. Practical/Hands-on Technical Skills Training for the Trainers**

Part of the HRD programme for the VTECs is in-service training for the trainers. The skills training needs assessment revealed that the trainers need a great deal of practical training (hands-on activities). The PMU in coordination with the KSVTA Unit organized a Practical Technical Skills Training Programme for all sections/subsections of the training field in the four VTECs.

The training programme consisted of the following:

- Health and safety at the workshop and on the work site
- Practical skills (hands-on-activity) on the relevant competencies required per section/sub-section of the training specialization
- Preparation, use and operation of hardware and software for the delivery of their practical training sessions and under-pinning knowledge

The PMU hired national trainers in the automotive, civil works, electrical, welding, plumbing, carpentry, and refrigeration sections to provide 100 training hours over the period May – June 2010. Sixty-seven (67) technical trainers participated in the training programme.

#### **77. Training of Trainers – Introduction to Entrepreneurship**

The project had introduced the CBT curricula which considered three stages: preparatory course, level 1 and level 2. The Preparatory Course, which is mandatory for all trainees involved 240 training hours consisting of the following courses: Induction Programme, Introduction to Computer/IT, Basic English, Introductory Technical Drawing; Technical Mathematics and Introduction to Entrepreneurship/ Entrepreneurial Thinking (EDP). The Introductory Entrepreneurship Course consists of 11 modules of two hours each.

To prepare the VTECs to deliver the EDP Preparatory Course Curricula developed by the PMU, the PMU conducted a 5 day Training of Trainers for the EDP Trainers, Senior Trainers – Preparatory Course and Marketing Officers of the VTECs. The training was held at VTEC Khartoum South from 30 June-4 July 2010. The training

taught the participants the EDP course content and how to teach the EDP Preparatory course, which is given to the entry level trainees of the VTECS.

#### **78. Practical skills training on welding and sheet metal**

Part of the equipment supplier's contract was to provide training to the VTECs on how to operate and maintain the machines. Yormok, the local subcontractor of Devotra provided a 5-day practical skills training on how to operate the welding and sheet metal machines. Ten trainers attended this workshop that was held from 6-11 July 2010.

#### **79. Training on the Operations and Maintenance of the CNC Machines (conducted by Yormouk on behalf of equipment supplier, Devotra)**

Yormouk, the local subcontractor of Devotra provided a second training, i.e. a 4-day training on how to operate and maintain the CNC machines purchased by the project. Seven trainers assigned in the machine shop section attended the training from 6-9 July 2010.

#### **80. Fire Fighting and Safety Training Course conducted by the Directorate of Civil Defense, Ministry of Interior, Sudan**

Fire fighting safety practices is an essential activity to enhance the safety environment sustainability within the VTECS. The majority of the trainers and staff recruited for the VTECs were not familiar with the techniques and practices for operations and uses of fire fighting equipment and materials. There was also a need to develop fire safety procedures within each VTEC.

In response to this need and as part of the capacity building plan for the VTECS, the PMU in coordination with the KSVTA Unit organized four 30-hours training programmes on Fire Fighting and Safety. The PMU had requested the services of the Directorate of Civil Defence, Ministry of Interior of Sudan, which is the official body authorized to conduct such training and to issue certificates. Training was held in August 2010. Eighty seven (87) staff and management of the VTECs participated in the programme.

The course was divided into two parts covering the following topics:

Theoretical part: (14 hours)

- Composition of the Fire Brigade and their respective responsibilities
- Fire Action Plan and Emergency Evacuation Plan
- Fire chemistry, types of fires, types of fire extinguishers and fire prevention

Practical part: (16 hours)

- Fire Risk Assessment
- Use of fire extinguishers and reel hose
- First Aid
- Emergency evacuation procedures

At the end of the training, each VTEC formed their Fire Brigade of 20 members and had developed their fire emergency evacuation plan.

#### **81. Different kinds of Welding Techniques (On the Job training)**

Yourmuk offered the PMU to provide for free, a five day on-the-job training (OJB) on the different kinds of welding techniques for welding trainers. Yourmuk is one of the most highly advanced and well-equipped institution in Sudan, hence PMU accepted the offer. The training took place at their complex from 9 – 13 August 2010.

#### **82. Training Support by the English Department of the University of Khartoum to VTEC English Teachers to teach Technical English (On the Job training)**

ILS/English recommended during their final visit to the project that the team of English teachers will require on-going support if the English language programmes are to be successful. ILS also recommended support to be sought from a local EFL (English as a Foreign Language) expert or the British Council in Khartoum. The PMU approached the British Council, which recommended the English Department of the University of Khartoum.

At the request of the PMU, the English Department the possibility for them to provide a tailor-made on-the-job training and to support to the English teachers of the 5 VTECs in terms of delivery of the Technical English Courses, professional development of the English teachers and to ensure the quality of the delivery of the training. The agreed period of engagement was from September – October 31, 2010.

The programme guided the English teachers in developing their course materials for the technical English for levels 1 and 2. Using the Tech Talk and other reference materials purchased by the project; and guidance of the English Department staff the following materials were developed:

- English for Building Construction
- English for Leather Industry
- English for Automotive Industry
- English for Welding
- English for ICT
- English for Hotel and Catering
- English for Beauty and Hair Care
- English for Machinery
- English for Electrical Industry

The PMU provided the following parameters and technical criteria for the materials:

- The materials should be designed to enable the VTEC students to be able to communicate in the work place and meet the needs of the labour market.
- The materials for Level 1 should concentrate on receptive skills with emphasis on the vocabulary for the specific level.
- Level 2 materials should concentrate on productive skills with emphasis on vocabulary of the sub-sections of the specific field.

The English department also provided 45 training hours for the English teachers to prepare them to take the TKT Test, which would give them an international accreditation in teaching English (Cambridge ESOL).

### **83. Deliver Technical Curricula Levels 1 and 2 (On the job training)**

The CBT curricula introduced by the project have been divided into three parts: Preparatory Course (240 hours); Level 1 (320hours) and Level 2 (420 hours). This was the first time the trainers would be teaching the new curricula using the CBT approach for Levels 1 and 2. Hence, the PMU in coordination with the KSVTA Unit and the VTECs, organized training and technical assistance to deliver the courses.

The PMU hired national training experts to guide and work with the trainers to achieve the following tasks within the engagement period 22 September-26 October 2010:

- ✓ Review the technical curricula for levels 1 and 2
- ✓ Develop the strategy/training plan in delivering the course
- ✓ Prepare the timetable for level 1
- ✓ Prepare and identify hand tools, devices, equipment and measuring instruments required to implement the course competencies
- ✓ Practice the practical competencies of the course contents
- ✓ Prepare training aids, use of software and hardware for the delivery of the underpinning knowledge competency required for levels 1 and 2 technical curricula
- ✓ Develop timetable for Level 2 course
- ✓ Develop a protocol and assessment methods to be adapted by the trainers for Levels 1 and 2

### **84. TOT Basic Entrepreneurship Development Programme Course**

As per curricula, the VTECs will conduct the Basic Entrepreneurship course when the trainees reach the level 2 technical training. The Basic EDP course is for 80 hours.

The PMU hired the services of a national EDP trainer (trained under Component 2) to conduct the TOT for the EDP trainers and Marketing Officers. Eighteen (18) participants attended the course. The trainer demonstrated how to deliver the course using the Training Guide and Curricula developed by the project. It should be noted that building an entrepreneurial mindset has been a major focus of this course. The training was held at Khartoum 1, from 03-14 October 2010.

### **85. TOT Leather Craft Training**

The Kerary VTEC leather section will be offering courses on footwear and leather and allied products. The leather and allied products workshop have machines and tools that are both for the modern factory setting and craft development. The leather section trainers have also been trained on the modern production techniques using machines.

The PMU and the Kerary VTEC Management envision that the leather section will also be offering short-term demand driven courses in leather craft for those that do not want to go through the formal vocational training path. The TOT Leather Craft was organized to establish this capacity within Kerary VTEC. The Component 2 experience showed that with a short-term training, the trainees are able to develop leather craft skills; able to produce marketable products and became a new source of additional income and/or self-employment.

The national expert/trainer developed four training plans in Arabic for short-term courses on leather craft for a range of products e.g. bags and wallets, sandals, as well as fashion accessories. He demonstrated to the trainers how to implement and conduct the short-term courses. As part of this training, he also exposed the participants to the different suppliers of raw materials and accessories. The training was held at the Kerary Leather Section from 03-21 October 2010.

#### **86. TOT Pedagogy of Teaching and CBT approach in VTECs**

The Khartoum State had recruited additional 52 trainers as of 31 August 2010. As with the first set of trainers, the profile of the newly recruited trainers shows that they have the required academic background but do not have any formal training in the pedagogy/didactics of teaching at a vocational training center and CBT training approach.

The PMU organized a Training of Trainers course for the new batch. The PMU approached the Friendship Training Centre who conducted the training for the first batch but were not in a position to do the training. Hence, Elasima Training Centre, who has a pool of qualified trainers, conducted the training from 10-14 October 2010. Elasima is recognized by the Ministry of Labour to issue certificates for TOTs.

#### **87. Wrap-Up and Forward Planning Workshop**

In preparation for the closing of the project last 31 October 2010, the PMU, KSVTA Unit and the VTEC Management held a wrap-up workshop to discuss the way forward to achieve sustainability and exit strategy of the project. The workshop was held in Wad Medani from 15-17 October 2010.

The participants went through the outstanding issues that still needed to be addressed by the Khartoum State; the activities and tasks that need to be further managed by the Khartoum State after project closure.

As part of the exit strategy, on the second day, the Khartoum State Commissioner of Human resources Development, Ms. Ishraga presented the initial plans to set-up the Council for Vocational Training and Technical Education, which will be the entity managing the VTECs, which have been assisted by the project. The participants provided suggestions to improve the proposed set-up, which were accepted.

During the workshop, the Commissioner also directed the transfer of the financial matters from the KSVTA Unit to the VTECs.



## 88. Summary of the in-country training programmes/workshops

Training Programmes/Study Tours/Workshops	Dates/Location	For whom	Number
Orientation Workshop for the new VTEC Directors (organized by the PMU in cooperation with the Supreme Council for Vocational Training)	December 28-31, 2008; Khartoum	New VTEC Directors	4
Basic Computer Operations (in-house training)	April 21- May 21, 2009 Khartoum	Newly recruited trainers and staff	77
Competency-Based Training Workshop (conducted by Castle College in conjunction with NCTTE and Supreme Council)	Aug 11-13, 2009 Khartoum	Members of the Curriculum Technical and Sector Committees	60
Intensive English Language Course (in-house training conducted by the English Teachers)	October - Dec 2009; Khartoum	Newly recruited trainers and staff	77
ICDL Course (conducted by Computerman)	July 20 - 25 Aug 2009; Khartoum	ICT Trainers	14
Training of Trainers (conducted by the Training of Trainers Institute, Supreme Council for Vocational Training)	Oct 11- Nov 9, 2009; Khartoum	Trainers	81
Training of Trainers: Marquob Development (conducted by UNIDO International Leather Footwear Expert under Component 2)	June 27 - July 7, 2009; Khartoum	Leather Trainers of Kerary	4
Footwear Technology Course (In preparation for 3 months training with LLPTI) - organized by the PMU and conducted by national expert)	Dec 7 - Jan 4, 2010; Khartoum	Leather Trainers of Kerary	4
Basic Analogue and Digital Electronics Training (conducted by the Sudan Atomic Energy Commission- Instrumentation Department)	Jan 3 - Feb 3, 2010, Khartoum	Electronics Trainers	4
Strategic Planning Workshop (organized and conducted by the PMU)	March 14-18, 2010; Kenana	VTEC/KSVTA Unit Management	22
Product Design for Artisans Training Programme (organized by PMU for Component 2 and conducted by International Design Expert)	March 21-30, 2010, Khartoum	Leather Trainers of Kerary	4
Training Programmes/Study Tours/Workshops	Dates/Location	For whom	Number
Practical Skills Training on CNC machines (conducted by Yormouk at their Complex)	March 29 - April 8, 2010;Khartoum	Machining trainers	2
Capacity Building Follow-up Training on Timetabling and Curricula Contents (conducted by Castle College)	May 8 -13, 2010; Khartoum	VTEC Management and Sr.Trainers	30
Technical Skills Training on the use of the LJ Equipment as related to the Curricula Developed (Conducted by Castle College)	May 8-13, 2010; Khartoum	ICT Trainers and Trainers for the Automotive Section	15
Practical/Hand-on Technical Skills Training for Trainers	May - June 2010; Khartoum	Technical trainers	67
TOT - Introduction to Entrepreneurship	June 30 - July 4, 2010, Khartoum	EDP Trainers	18
Practical Skills Training on Welding and Sheet Metal (conducted by Yormouk in behalf of equipment supplier, Devotra)	July 6 - 11, 2010, Khartoum	Welding and sheet metal technical trainers	10
Training on the operations and maintenance of the CNC Mechanical (conducted by Yormouk on behalf of the equipment supplier, DEVOTRA)	July 6-9, 2010 Khartoum	Machining trainers	7
Fire Fighting Training conducted by the Directorate of Civil Defense, Ministry of Interior, Sudan	August 2009, Khartoum	Fire Brigade Staff of each VTEC	87
OJT on different kinds of welding techniques ( conducted Yorkmouk)	August 9-13, 2010 Khartoum	Welding trainer	1
OJT Training Support for the VTEC English Teachers to teach Technical English for Levels 1 and 2	September - October 30, 2010	English Teachers	9
OJT to Deliver Technical Curricula Levels 1 and 2	September - October 30, 2010, Khartoum	Technical Trainers	67
Training of Trainers: Basic Entrepreneurship Development Programme	Oct 3 - 14, 2010, Khartoum	EDP Trainers, Marketing Officers, Sr. Trainers - Preparatory Course	18
TOT: Leather Craft Training	Oct 3 - 21, 2010	Leather Trainers of Kerary	4
Training of Trainers: Pedagogy of teaching in a VTC	October 10-14, 2010, Khartoum	Newly recruited trainers	52
Final Strategic Planning Workshop	October 15 - 17,2010, Wad Medani	KSVTA Unit and VTEC Mgmt	25

## **D. VTEC Administrative, Operational and Financial Systems**

### **89. VTEC Intake Policies**

As part of the exit strategy of the project, the PMU established in its last year of project implementation, a close working relationship with the KSVTA Unit. This Unit has developed, with the technical assistance from the PMU, the Intake Policy for the VTECs. The Intake Policy ensures that the intended beneficiaries (young persons including women) will be able to enter the VTECs. Basic entry qualifications are as follows: ability to read and write in Arabic; ability to perform basic mathematical calculations; at least 6 years of formal schooling; 17-25 years old.

During the wrap-up workshop in 2010, the VTEC management and the PMU reviewed the experience of the first intake. The minimum 6 years of formal schooling seemed very low. Because of the low level of education of the many trainees, many of them had difficulty coping with the preparatory course. However, rather than drastically adjusting the required years of formal schooling for entry, the KSVTA Unit reviewed the assessments tests given during the intake and revised it to enable the VTECs to make a realistic assessment of trainees and their capability to absorb the lessons and complete the training required by the VTECs.

The working group prepared a new assessment test to assess numeracy, spatial ability, related reading and writing, reading comprehension (Arabic) and simple English. Minimum knowledge of English can be accepted.

### **90. Timetabling and Intake Capacity**

Based on the existing facilities, trainers in the VTECs and the curriculum contents, the VTECs have the capacity built for three intakes per year. Each intake could cover 200 trainees for two shifts (100 trainees per shift). Maximum number of trainees per VTEC at any point in time during full operations would therefore be estimated at 600 trainees per year. The five VTECs have the capacity to graduate 3,000 fully qualified trainees every 15 months (with 3 months break), using the CBT approach.

The CBT curricula time allocation is as follows: Preparatory Course is 240 hours; Level 1 is 320 hours and Level 2 is 480 hours.

### **91. VTEC Administration and Operational Policies of the VTECs**

Castle College prepared a proposed Administration and Operational policy document for the VTECs. The VTEC Assistant Directors for Administration and Finance under the guidance of the PMU reviewed the policies and adjusted them according to the needs of the VTECs. The group submitted the draft policies as revised/improved to the KSVTA Unit and the Directors who also reviewed these.

The Administration and Operational Policies included the following:

- Marketing
- HR Policies
- Financial Policies
- Employer Engagement
- Estates and Estate Management
- Health and Safety

- Student Welfare and Support
- Quality Improvement
- Quality Assurance
- Self-assessment Reporting

One of the major policy recommendations of Castle College is the decentralization of the management of the VTECs to the VTEC Management Boards including management of funds and accountability. The VTEC Management support the move but there seemed initial reluctance on the part of the KSVTA Unit to decentralize specially on fund management.

H.E. the Governor of Khartoum State had approved the decentralization of the financial and administrative matters to the VTECs. This is to streamline activities; lessen bureaucracy and to enable the VTECs to immediately respond to their respective needs.

To fast track the process, the group at the Wrap-up workshop (see paragraph 87) discussed the issue and agreed on the following:

***Key principles to decentralization that the VTECs have to maintain:***

- Transparency
- Accountability
- Value for money to the Khartoum tax payer
- Adherence to Khartoum State financial rules and procedures

***Decentralization: General Financial Procedures Proposed***

- KSVTA Unit will handle payments for Chapter 1 and Chapter 3
- Salaries of staff should be transferred through the bank (ATM) to safe guard cash transfer for record keeping and for greater efficiency.
- At the end of the month, the KSVTA Unit will transfer the monthly budget under Chapter 2 to each VTEC, based on estimates submitted.
- Each VTEC will then handle their respective payments in accordance with government procedures.
- Each VTEC will prepare a monthly financial report of the expenditures incurred against the advance given.

***Opening of the VTEC Bank Accounts***

*With the assistance of the PMU, the following was agreed upon:*

- The Asst. Directors Finance and Administration will prepare the draft letter/memo to the Ministry of Finance for the opening of the bank accounts of each VTEC
- The Draft letter will contain the Account Name of the VTECs and the designated signatories. There will be three (3) signatories, two of which will need to effect a transaction. The VTEC Director will approve all transactions above SDG 100 while the Asst. Director – Finance and Administration can approve all transaction below SDG 100 and payment from the petty cash.

### ***Software for the Administration and Accounting System***

Castle College recommended that the project purchase a general accounting and financial system to assist the VTECs. UNIDO purchased three types of software which are interlinked: a General Accounting System, Personnel and Payroll Software and a Student Registration System.

*The softwares have the following general features:*

- Platform for the software is Windows Server 2003 on the server side and Windows Vista on the clients' side
- Arabic and English interface
- High degree of security
- Must function on both LAN and WAN
- Interlinked throughout each of the individual centers with the prospect for intra-center linkage with minor adjustment
- Ability to accommodate future change in data volume and trends
- Customizable and user friendly
- Designed using Oracle Database and Oracle Forms
- Full compatibility with Khartoum State government financial systems

*The General Accounting Software has the ability to perform/show:*

- Balanced credit
- Audit balance
- Information on a specific account. (banks ,treasury, etc)
- Specific sums
- Budget management
- Treasury fund expenses
- Treasury revenues
- General and assistant ledger reports
- Final treasury fund settlement
- Summary of expenditure on a particular item
- Details of expenditure on a particular item
- Details of monthly expenditure on a particular item
- Expenditure on approval basis
- Expenditure on monthly basis
- Expenditure per department
- Details of departmental expenditure
- Deposit reports
- Final bank account settlement
- Ability to add any other requested Reports
- Ability to send Reports via e-mail

The Personnel and Payroll software has the ability to perform/show

Payroll

- Salary certificate for a specific employee
- Account balance for a specific employee
- Account balance for a specific department

- Gross account balance
- Individual employee loans
- Total loan payment
- Payroll
- Gross employee salary
- Gross allowance and deduction
- Allowance balance per employee per item
- Ability to deliver report via e-mail
- Able to add other customized reports as requested.

#### Personnel

- Personal data of specific employee
- Service record for a specific employee
- Leave certificates and details of leave
- Classified performance reports
- Promotion and raises
- Intra-departmental staff loaning and transfer
- Tracking of files
- Vital employee documents
- Report delivery via email
- Other customized reports as required (i.e. number of teaching hours; subjects handled, etc)
- Linked to Payroll System and automatically reflect any alteration within employee status (promotion, transfer, leave certificate into payroll system bringing it up to date)

The Student Registration System has the ability to perform/show:

- Personal data of specific students
- Attendance records
- Results of examinations
- Tracking of files
- Vital student documents
- Report delivery via email
- Other customized reports as required
- Linked to Badge Maker 6400 Professional ID system and General Accounting System to reflect payment of tuition fees and other fees

To enable the VTECs to monitor their graduates as part of the Management Information System, each trainee/ student will have his/her own email address, which will make it easy for the VTECs to contact them.

The Student Registration System is also able to do timetabling of the courses.

The suppliers have installed the software; provided training to the staff of the VTECs on how to use the system and provided a user's manual in Arabic. The software has a one-year full warranty and free addition and customization within the one-year warranty period.

## 92. First Intake

The VTECs took their first intake on 11 July 2010. Enrollment per VTEC was as follows:

VTEC	Boys	Girls	Total
Kerary	112	10	122
Hag Yousif	195	1	196
Halfait	100	2	102
Khartoum South	130	4	134
<b>Totals</b>	<b>537</b>	<b>17</b>	<b>554</b>

The initial intake of each VTEC was still below the envisaged 200 per intake as of end of October 2010. Only 3% of those enrolled are girls. Major issues identified during the wrap-up workshop are the following: increased advertisement in several forums and information and awareness campaigns in the communities in Khartoum. The communities and the public at large would need to be given a positive image and exposure to the benefits of VTECs. As a way forward, the VTEC Managers have agreed to do the following:

- Marketing Officers will help develop an intensive on-going information campaign on the VTECs. Information will include courses offered; short-term training periods with an open architecture for further training through CBT; tuition fees; availability of excellent facilities; and certificates that are compatible with labor market needs. They will also prepare information campaign targeting young girls to enroll.
- Mobilize the NGO/CBO partners (who participated in component two) to be included in the information mobilization campaign in the localities since they are now familiar with the courses and facilities of the VTECs.

## 93. Experience in the Preparatory Course of the First Intake

The initial experience showed that the allocated time for each subject in the Preparatory Course is sufficient. However, the following lessons where there must be increased practical work for the trainees/ students be reduced from 2 hours to 1 hour per meeting but still maintaining the number of hours required for the course.

Course/Subject	Proposed
Math	1 hour/meeting
English	1 hour/meeting
EDP	1 hour/meeting
Coping Skills	1 hour/meeting

The KSVTA Unit had taken up the proposed adjustment with the Technical Committee for Curriculum Development for adjustment in the curricula.

The participants at the wrap-up meeting in October 2010, had also agreed to review the assessment contained in the Preparatory Curricula so that all the VTECs implement the same kind of assessment.

#### 94. Inauguration of the VTECs

The project is considered a flagship undertaking of the Khartoum State Government.

The official inauguration of the VTECs have been presided over Sudan's highest level of officials. Their support for the project and the innovations introduced, such as the use of the CBT approach to vocational training, the demand orientation of the training sections prioritized with major focus in the training programmes should be acknowledged.

H.E. the President of Sudan, Omar Hassan Al Bashir visited Kerary VTEC in December 2009. H.E. the Vice-President of Sudan Ali Osman Taha inaugurated Hag Yousif on 14 February 2010; Halfait VTEC in January 2011 and Khartoum South last 10 February 2011.

These special occasions were all highly appreciated with the attendance of beneficiaries from the communities, IDP areas, further beneficiaries and staff of the VTECs, government officials and the Delegation of the European Union to the Sudan. (see annex on press release)







## 95. Summary note on the status of Result 1

The project has delivered and installed the equipment envisioned for the VTECs. On its part, the Khartoum State Government has shown its full commitment to priorities set by the project by continuing to provide full budgetary support for the VTEC operational costs. The Government has put in additional resources to ensure additional safety and security of the working environment and has refurbished three workshops to accommodate the beauty and hair care and hotel training and catering training sections in Halfait VTEC. Khartoum 1 is still in the process of construction, although works are on the way.

The VTECs are well equipped to be able offer courses from the basic level to the level of technicians with the complete set of equipment purchased by the project for the CBT curricula. The biggest challenge is sustaining the culture of maintenance and cleanliness of the VTECs, among the staff and the trainees/ students to ensure that this equipment will be properly maintained and serviced.

The human resources base at all levels of the VTECs would need continuous guidance in implementing the competency based training approach/curricula and further keep upgrading their technical skills in order to be up-to-date with their technical knowledge. The PMU had addressed this issue by providing on the job training for the technical trainers to prepare them to teach technical levels 1 and 2. It is recommended that the Khartoum State should embark on a full-scale technical capacity building (both abroad and in-country) for the managers, trainers and staff of the VTECs.

Entrepreneurial competencies and thinking are also new among the staff and trainers. The KSVTA Unit needs to be encouraged and supported to nurture the entrepreneurial spirit, which the trainees can emulate.

**Overall Assessment of progress made in implementation of activities, with an estimated percentage of completion: 98%**

## Result 2

VTC Curricula updated/developed and offered in line with market demands and integrating YED modules to increase employability of trainees and potential for self-employment along the lines of gender mainstreaming

### Indicators

- Number of VTC competency-based curricula with YED modules, offered by the VTCs and certified by the competent authorities
- Number of special skills-upgrading courses developed for industry offered by the VTCs and certified by the competent authorities
- National vocational qualifications and system of certification for courses offered in the VTCs established by the National Council for Technological and Technical Education and the Supreme Council for Vocational Training
- Number of trainers/instructors (disaggregated by gender) trained for new curricula and operations of new training equipment
- Number of trainees (at least 6,000 – disaggregated by gender) provide UNIT certificates for CBT courses completed

## Process, Major Activities and Status

### 96. Consultative Workshop for Curriculum Development for Khartoum State, Public-private sector Partnership

The project aimed at building the management, technical capacities of the five VTCs to provide market oriented technical skills, and entrepreneurship training for employment and self-employment. One of the major activities of these efforts was to update and revise the existing curricula for vocational training to meet the employers (private and public sector) and industry needs. This is in line with the Khartoum State's efforts aimed at private sector development and alleviating poverty.

To ensure that the supply of vocational skills from the VTCs matches the demand and needs, a close consultation process was put in place with employers representing the demand side for vocational skills must take place. It is in this context that the PMU in coordination with the Khartoum State organized a consultative workshop with the private sector, at an early stage. It was held on 8 May 2008 at the Rotana Hotel.

The workshop aimed at briefing the participants on the Khartoum State initiatives to support private sector development and addressing poverty issues through vocational training and to inform the participants on the issues and process related to curriculum development, instilling in them the value of their inputs in developing relevant curricula.

There were 99 registered participants from the private and public sectors. The participants represented public and private training institutions; public and private employers of large and medium size, relevant government agencies and institutions,



different workers' trade unions and employers federations in addition to private and public consultancy firms and centers.

Mr. Jorge Pereiro Pinon, First Secretary, Delegation of the European Commission to the Sudan and Mr. Cheikh Sakho, UNIDO Officer-in-Charge gave the opening remarks. H.E. the Khartoum State Governor Dr. Abdullhalim I. Almutaafi gave the keynote address.

There were four papers presented at the workshop. The topics revolved around competency-based curricula development, private sector development and vocational training.

Presenters	Topics
Dr. Abdelgani Abdelgalil Hassan, Director International Cooperation, Federal Ministry of Industry	Vocational Training, its importance and its implication to private sector development and industrial modernization
Mr. Nasr el Din Omer el Yas, Sudanese Businessmen and Employers Federation	Vocational Training and the need for an employable workforce
Dr. Omer El Tuhami , National Council for Technical and Technological Education	Curriculum Development Process – why the need for consultation
Mrs. Jovita Culaton Viray, UNIDO Project's Chief Technical Advisor (CTA)	Brief on Competency-Based Training Role/Terms of Reference of the Consultative Groups



During the open forum, the participants strongly recommended that the project introduce English as a full-fledged course in the VTCs. All groups called for promoting increased women participation in vocational training programmes. Women involvement at all levels should be encouraged. The trend has been to foster women involvement as recipients of vocational training. The groups called for women to be involved in the provision of training, the management and administration of the training programmes and

the policy-making process for vocational training.

## 97. International Subcontract for Curriculum Development and HRD Solutions and VTC Administration

UNIDO issued in November 2008 through international competitive bidding and procurement procedures, a Request for Proposals (RFP) to provide HRD Solutions and to assist in curriculum development. Offers were not to exceed the amount of €650,000. Closing of the bid was on 09 January 2009.

Five (5) companies submitted their proposal on time: Devotra (Netherlands); Castle College and ILS English Language Training as consortia (U.K.); Joint Efforts Group (Jordan) and Construction Management Consultant (Lebanon).

Following a technical evaluation on compliance, a short list was prepared with a subsequent commercial evaluation. The recommendations were sent to the procurement review committee.

UNIDO's procurement committee awarded to the consortia of Castle College and ILS English Language Training of U.K. The technical proposal of this consortium was the



closest to meeting the project requirements. Their financial proposal was also closest to the limit of €650,000 established in the RFP. Total cost of the contract issued to the consortia was €651,788.

In terms of the curriculum development, Castle College/ILS tasks were as follows:

- a. Review the competency requirements sectors as gathered by the PMU and hold discussions as required with the consultative groups, industry representatives and other stakeholders
- b. Hold discussions with the National Council for Technical and Technological Education, Supreme Council and the Governor's Office of the Khartoum State to agree on the principles, activities and processes to be taken in developing the curriculum and quality standards; and issuing of national certificates
- c. Provide training to the national curriculum development experts, staff of the Supreme Council and NCTTE on curriculum design and development using the CBT approach.
- d. Adapt to Khartoum – Sudan existing curricula or develop an original curriculum for the initial course offerings. Present curricula in various training formats and media as deemed necessary.
- e. Provide trainer's guides and student workbooks for each curriculum developed.
- f. Provide implementation support services such as training of the trainers and pilot teaching the curriculum
- g. Provide assistance to the VTC Management in timetabling of the course sessions developed
- h. Establish curriculum development functions such as post-training evaluations and staff training records.
- i. Establish quality assurance procedures for delivery of the curricula
- j. Provide assistance to the Khartoum State Council for Vocational Training Unit to work closely with an international accreditation body for the VTCs' accreditation

As required in the RFP, the awardee was to undertake a scoping visit. The aim of the scoping visit was to visit the new VTECs and determine whether the centres were fit for purpose, clarify a number of issues related to the project deliverables, agree on the deliverables and timescale. The visit also aimed at conducting initial needs analysis of VTCs staff, gathering data on curriculum development, obtaining examples of local current practices, building relationship with the project Stakeholders and undertaking primary research that will inform the development of the Project Implementation Plan (PIP). The Scoping team composed of Dr. Siddig Omer, Ms. Anna Dragun and Mr. Jonathan Dunn of Castle/ILS visited Khartoum on 3-13 May 2009.

Overview of meetings and activities held during the visit are as follows:

Activities	Objectives
Meeting at the PMU Office (in attendance: Mr. El Sir Director, Khartoum State, Mr. Mahmoud Khogali, Sr. Tech Expert Comp 1; Mr. Tigani, National Site Engineer, Ms. Viray, CTA	Brief on the project; agree on the objectives and outputs of the scoping visit; provide reading and background materials
Visit the four new VTCs and Khartoum 1	See the VTC sites and facilities available
Courtesy call on Ms. Ishraga Sayed Mahmoud, Adviser to the Governor and in-charged of the Project ; Debriefing meeting	Briefing on the scoping objective and contract outputs with Castle; discussion of the findings and way forward
Meeting with VTC Directors and Assistant Directors	Make initial assessment on how they perceive their job responsibilities and training needs; discussion
Visit the four new VTCs and Khartoum 1	See the VTC sites and facilities available
Courtesy call on Ms. Ishraga Sayed Mahmoud, Adviser to the Governor and in-charged of the Project	Briefing on the scoping objective and contract outputs with Castle; discussion of the findings and
Meeting with VTC Directors and Assistant Directors	Make initial assessment on how they perceive their job responsibilities and training needs; discussion on possible inputs of Castle College/ILS
Visit Khartoum 1: discussions with Administration and Finance Departments with VTC Director Khartoum 1	See current administration and financial processes including budget support from Khartoum State and other sources; trainee enrollment/registration procedures; student support facilities, etc.
Meeting with Ms. Huda Osman, Director of Project Development, State Ministry of Finance and other relevant officers	Discussion on VTC funding; budget procedures and financial procedures;



Activities	Objectives
Visit the Sudan University of Science and Technology Administration Department	Identify other currently in placed administration systems and policies; identify issues of Sharia law applied to the educational sector in Khartoum; gather examples of best practice and potential pitfalls; identify rules and regulations in place in the education sector that may affect the project and VTCs; identify possible progression of VTC graduates
Courtesy Call to Mr. Cheikh Sakho, UNIDO Representative	Brief the UNIDO Representative on the scoping visit
Meeting with the Employers Association	Discuss technical manpower requirements
Visit to Petronas (Teaching Training School)	Discuss on HRD issues for VTC trainers; programmes and training offered
Visit Chinese VTC Omdurman: Mr. Salih Imam, Director	Identify other currently in placed administration systems and policies; gather examples of best practice and potential pitfalls; identify programmes and training offered
Meeting with British Council	Inform British Council of the Project and explore possibilities of future collaboration for teaching English language as a course
Meeting with the English Teachers assigned to the VTCs, Head of the Preparatory Sections; Mr. El Sir and the VTC Directors	Make initial assessment on English language training needs; discuss possible inputs from Castle/ILS
Briefing/Meeting with the Secretary General of the Supreme Council for Vocational Training and Apprenticeship	Discuss curriculum development process of the Supreme Council; existing standards; quality assurance procedures; certificates; linkage with NCTTE;
Briefing/Meeting with the Secretary General of the National Council for Technical and Technological Education	Discuss technical and technological education framework and plans;
Meeting with Curricula Development Technical Committee	Discuss the General Framework of Cooperation; timelines; CBT Training and Occupational Survey
Wrap-up meeting with PMU to discuss general presentation of findings, proposed timetable; way forward; oversight items	Draft general agreement on the project implementation plan - activities; outputs and deliverables; oversight items; timeframe and way forward

As seen from the schedule above, the scoping team held a number of meetings with stakeholders including, the PMU, SCVTA, NCTTE, workers association, Khartoum State and discussions took place on project deliverables and time lines. The consortia reflected issues highlighted during the scoping visit in the PIP.

The team's discussions with the PMU and the curriculum technical committees lead Castle/ILS to change a number of deliverables from what was originally proposed and clarified. In addition, prior to and during the scoping visit, Castle College recommended a number of key items for purchase. These items include software for timetabling, administration/registration and finance system, which are essential for planning, opening and managing of the VTCs as well as providing resource/technology specific training for VTC staff members.

Castle College and ILS/English submitted their draft Project Implementation Plan (PIP) on 23 June 2009. UNIDO and the PMU reviewed the draft and came to an agreement on 28 July 2009, after the Sudan Mission. The PIP document mapped out the key deliverables, timelines, locations, risks and assumptions and key personnel of the consortia involved in the delivery of the project based on the scoping visit and discussions with the PMU.

UNIDO and the consortia agreed that the PIP is a 'live working document', where both parties can make adjustments based on the implementation needs and progress but set within the contractually agreed terms. Castle College/ILS incorporated adjustments in the PIP to accommodate the needs of the project, where costs allowed e.g. having the TOT English Course in two batches since the Khartoum State had only recruited 5 people; increasing the number of trainers to be sent to U.K.; number of in-country training.

#### **98. Framework of Cooperation for the Curricula of the VTCs**

UNIDO and the Khartoum State in partnership with the National Council for Technical and Technological Education (NCTTE) and Supreme Council for Vocational Training and Apprenticeship (SCVTA) worked together to address the need for new curricula. All stakeholders have agreed to the UNIDO proposal to use the Competency-based Training (CBT) in developing the new curricula, as this is the most suitable approach to Sudan's rapidly changing economy. The NCTTE, SCVTA and the Vice-President of Sudan had declared this as an overall policy.

As mentioned earlier, CBT is a new concept in Sudan, whereby the project has provided the take-off point and a model for updating the curricula and introducing entrepreneurship in vocational training and in establishing the national qualifications standards.

To formalize the process, the Minister of Labour, Public Services and Human resources Development issued Ministerial Decree No. 35 for the year 2008 creating a High Committee for Curriculum Development composed of the following persons:



Name	Designation in High Committee	Position in and Organization Represented
1. Mr. Abdelmahoud Osman Mansour	Chairman	Secretary General NCTTE
2. Eng. Mohamed Ahmed Rasmi	Vice-Chairperson	Secretary General SCVTA
3. Ms. Ishraga Sayed Mahmoud	Member	Advisor to the Governor of the Khartoum State
4. Dr. Eng. Omar Ahmed El Tohami	Member as Chairperson of the Technical Committee	Consultant NCTTE
5. Dr. El Fatih Abbas Al Gorashi	Member	Sudanese Businessmen and Employers Federation
6. Mr. Mustafa Osman Alsheik	Member	Sudanese Businessmen and Employers Federation
7. Mr. Ismail Alzahari	Member	Director, SCVTA
8. Mr. Atta Almannan A. Atta Almannan	Member	Sudanese Workers General Union Federation
9. Mr. Alfatih Waheed Alshareef	Member	NCTTE
10. Mr. Elsir Al Mohamed	Member	Director, Khartoum State Vocational Training Unit

The PMU developed the following general framework of cooperation to operationalize the linkages and working arrangements between UNIDO/Khartoum State and the High Committee as per Ministerial Decree No. 35 in developing the curricula and in reference to the tasks of the subcontractor.

The High Committee has approved the proposed curriculum development process and the general framework of cooperation as described in the next page.

## THE CURRICULA DEVELOPMENT PROCESS AND FRAMEWORK OF COOPERATION AND PARTNERSHIP

FINAL OUTPUT	TASKS	BY WHOM
Format for CBT Curricula and Training Regulations	Agree on the Format to be adapted for the Competency-based Curricula and Training Regulations	Technical Committee with Inputs from UNIDO through Castle College  Final approval by the High Committee
Curricula and Training Regulations for the Preparatory Courses in the VTCs	Review and agree on the proposed preparatory courses, which all students of the VTCs should take to enable them to cope with the vocational training, function in the workplace and find employment or self-employment after graduation	Technical Committee and UNIDO/Castle College  Final approval by the High Committee
	Agree on the minimum level of competencies the students should have for each course	
	Prepare the draft contents of the curricula and training regulations for the preparatory courses as per agreed minimum level of competencies and format	UNIDO (Castle College)
	Review the contents of the draft curricula and training regulations prepared by Castle College	Technical Committee
	Approve the curricula and training regulations as endorsed by the Technical Committee	High Committee
	Translate the curricula into Arabic	As approved by the High Committee, the authorized government body to translate government documents where such body will work in consultation with the Technical Committee and UNIDO
	Endorsement for official approval of the curricula and training regulations	High Committee
	Official approval of the preparatory courses curricula and training regulation	Chairman of the SCVTA (Minister of Labor, Public Services and Human resources Development)
Enhanced capacities of curriculum developers	Organization and implementation of "Training on Curriculum Design and the CBT Approach"	Technical Committee with inputs from UNIDO (Castle College/ILS)

Competency Map of the Sectors	Design and conduct occupational survey	Technical Committee
	Review results of the occupational survey; prepare report for each sector identifying the tasks performed, required knowledge, skills and behavior; different occupational levels and minimum education entry levels	Sub-technical Committee
	Review of Existing Competency Map prepared by the PMU	Technical Committee, sub-committees and UNIDO (Castle College)
	Finalize the competency map; identify the different levels of competencies and standards per level of occupation; standards should adhere to internationally or regionally accepted level	Sub-committees Technical committee UNIDO (Castle College)
	Approve levels of occupations and standards as proposed per sector	High Committee coordinating with the Supreme Council for Vocational Training
Curricula for the different courses/sector per level	Develop the contents of the draft curricula and training regulations taking into consideration the agreed competency map, standards and levels and the available equipment purchased by the project	UNIDO (Castle College/ILS)
	Review the draft content of the curricula and training regulations; propose required changes if any;	Sub-technical committees Technical Committee
	Prepare final draft of the curricula and training regulations as reviewed by the Technical Committee and sub-committees	UNIDO (Castle College)
	Review final draft of the above and endorse for approval	Sub-technical Committee (reviewing for their sector) Overall review by the Technical Committee
	Approve proposed curricula and training regulations endorsed by the Technical Committee	High Committee
	Translate the curricula, training regulations and training guides into Arabic	Authorized government body to translate government documents as coordinated by the High Committee in consultation with the Technical Committee and UNIDO
	Endorsement for official approval of the curricula and training regulations	High Committee
	Official approval of the curricula and training regulation	Chairman of the SCVTA

## **Operational Working Arrangements and Creation of the Curriculum Technical Committee and the Sub-committees**

99. Under the General Framework of Cooperation, Operational Working Arrangements were as follows:

### ***Operational Working Arrangements with the High Committee***

- Approve the general cooperation and partnership framework in developing the curricula for the VTCs as proposed in this paper.
- Approve the composition of the sub-technical committees and its designated members as proposed by the Technical Committee.
- Approve the format of the CBT Curriculum and training regulations as proposed by the Technical Committee.
- Approve the proposed preparatory courses and the minimum level of competence, which all students of the VTCs should have to enable them to cope up with the vocational training, function in the workplace and find employment or self-employment after graduation.
- Approve the Preparatory Training Courses curricula and training regulations as endorsed by the Technical Committee.
- Monitor implementation of the Curriculum Development Training organized and conducted in Khartoum by the Technical Committee and UNIDO/Castle College
- Monitor the implementation of the occupational survey conducted by the Technical Committee to finalize the competency map.
- Approve the competency maps of each sector and the proposed levels of occupation and standards as finalized by the Technical Committee and Castle College. .
- Approve the proposed curricula and training regulations per sector per level as prepared as prepared by Castle College after review and inputs by the Technical Committee and it sub-committees.
- Coordinate with the appropriate and authorized government body to translate into Arabic the curricula and training regulations and ensure that this body coordinates with the Technical Committee and UNIDO in the translation process.
- Coordinate with the Supreme Council for Vocational Training and Apprenticeship for the official approval by the Minister of the curricula and training regulations prepared.

### **100. *Meetings***

To achieve the above tasks, the High Committee met at least 30 times within the duration of the project. The High Committee met after regular office hours as the members had their own respective responsibilities with their own organizations.

### ***The Technical Committee and Working Arrangements***

101. The High Committee had established the Technical Committee for the curriculum development. NCTTE, SCVTA, UNIDO, Sudanese Businessmen Employer's Federation and private sector companies were represented the Technical Committee.

#### **Operational Working Arrangements with the Technical Committee were as follows:**

- Together with UNIDO (Castle College)
  - ⇒ Develop the CBT Curricula and Training Regulations format to be adapted.
  - ⇒ Review the proposed preparatory courses that all students should study prior to taking the technical vocational skills training to enable them to cope with the vocational training, function in the workplace and find employment/self-employment after they graduate
  - ⇒ Identify the minimum level of competencies required in the preparatory courses
  - ⇒ Organize and conduct training on curriculum design and competency-based training
- Endorse to the High Committee for their approval the format of the CBT Curricula and Training Regulations to be adapted.
- Endorse to the High Committee for their approval the preparatory courses and the minimum level of competencies for each of the courses.
- Review the Preparatory Courses draft curricula and training regulations prepared by UNIDO/Castle College in close coordination with the sub-technical committees and endorse the same for approval by the High Committee.
- Recommend to the High Committee, members of the sub-technical committees taking into consideration representation from all stakeholders including the private sector, academe, the employer's union, and the labour sector.
- Organize and conduct the Occupational Survey; review the competency maps prepared by the sub-technical committees using inputs from the survey including proposed levels for each sector and standards. Recommend levels of occupations and standards to the High Committee for approval.
- Monitor quality of required outputs from the sub-technical committees in their review of the curricula and training regulations prepared by UNIDO/Castle College.
- Recommend for approval by the High Committee the final draft of the curricula developed per sector per level as reviewed and endorsed by the sub-technical committees.
- Provide required inputs to the authorized government body requisitioned to translate into Arabic the curricula and training regulations; review the final translated version.
- Provide technical assistance to the High Committee in getting the official approval of all developed curricula and training regulations from the Chairman of the Supreme Council for Vocational Training.

102. **Meetings**

To achieve the above tasks and outputs the Technical Committee met at least 55 times within the duration of the project. The Technical Committee met after regular office hours as the members have their own respective responsibilities within their own organization.

**Sub-technical Committees and Working Arrangements**

103. The High Committee also established sub-technical committees covering the sectors/sub-sectors: electrical, civil works, HVAC/R, automotive, machining, welding, electronics, leather, beauty and hair care, and hotel. Composition of the sub-technical committees was as follows:

Designation in the Sub-Committee	Organization Represented
1. Chairperson	Technical Committee Member
2. Member	Private Sector Representing small and medium scale industries with relevance to the sector
3. Member	Private sector representing large industries with relevance to the sector
4. Member	Representative from the academe, university or technical colleges
5. Member	Representative of the Trade Union
6. Member	Senior Trainer - Vocational Training Center

**Operational Working Arrangements for each Sub-Committee**

- Participate in the occupational survey planning and assist to identify respondents in their respective sectors to participate in the occupational survey.
- Review results of the occupational survey and prepare the report for the sector identifying the tasks performed, required knowledge, skills and behavior; different occupational levels and minimum education entry levels
- Review Competency Map of the sector prepared by the PMU
- Finalize the competency map considering the outcomes of the occupational survey; identify the different levels of competencies and standards per level of occupation. Standards should adhere to internationally or regionally accepted levels.
- Review the draft content of the curricula and training regulations prepared by UNIDO/Castle College and propose required changes if any;
- Review the final draft of the curricula and training regulations; recommend to the Technical Committee for their endorsement of the same to the High Committee

104. **Meetings**

To achieve the above tasks and outputs, the Sub-technical Committees met after office hours and were given the number of the meetings to discuss:

- Building and Construction – 41 meetings

- Automotive and Heavy Equipment – 45 meetings
- Metal and Engineering – 35 meetings
- HVAC/R – 24 meetings
- ICT/Electronics – 17 meetings
- Leather Sector – 15 meetings
- Hotel – 24 meetings
- Beauty and Hair Care – 17 meetings

## **CBT Curricula Prepared**

With the above General Framework of Cooperation and Partnership, the following curricula had been developed, reviewed and translated into Arabic; and approved by the High Committee for endorsement to the SCVTA:

### **A. Preparatory Courses**

105. The Preparatory Programme has been designed for young people entering Vocational Training Centres and preparing to progress to employment. The programme emphasise the personal skills, qualities and attitudes required by employers across vocational sectors.

The aims of these qualifications are to:

- Meet the needs of the candidates who wish to seek, gain and retain employment or progress to further learning;
- Allow candidates to learn, develop and practice the skills required for employment
- Acquire the appropriate skills and knowledge to progress to the technical curriculum

#### **Trainees entry requirements**

- Centres must ensure that trainees have the potential and opportunity to succeed on the programme.
- Candidates applying for the programme must meet the minimum requirements in maths and communications although the ability to speak English will not be a requirement of the programme.
- Assessment will be through interview and aptitude tests.

#### **Progression to the Technical Curriculum**

Progression to the Technical Curriculum will depend on the successful completion of the preparatory curriculum. To graduate a trainee must

- achieve Level 1 in maths (70% of the end test)
- achieve the basic level of English language
- achieve the competency statements in all other units
- achieve an 80% attendance rate

Individual Technical areas may also be set higher or additional requirements for particular courses.



## Course Structure

106. The VTECs offer the curriculum over a three-month period (12 weeks), which will give a minim of 240 guided learning hours (12 weeks \* 20 hours/week).



Induction will take place on the first week and will include activities that allow the learners to become familiar with the VTEC and its resources; get to know staff and other learners; and learn more about the qualifications they will be working towards.

During induction week, the Induction unit will form the major part of the curriculum. The units will guide trainees through a process of reviewing their strengths and areas for development and will result in an action plan covering their time at the VTEC. The trainers can use the action plan in tutorial/mentoring sessions to monitor progress and agree on new targets.



Following the induction period, learners will then start the preparatory curriculum that will include the following.

- Effective Skills, Qualities and Attitudes for Learning and Work
- Coping in the Work Place (including Health and Safety)
- Introduction to Entrepreneurship
- Introduction to ICT
- Math
- English
- Technical Drawing

## B. Technical Curricula

107. After the Preparatory Courses, the trainees will undergo the technical curricula. Depending on the specialization, the technical curriculum generally has two levels: Level 1 (320 hours) and Level 2 (480 hours). Since the VTECs will be using the CBT approach, trainees who have taken the Preparatory Course and Level 1 Courses can opt to go out of the school and get a job. They can go back to the VTEC to study Level 2 at a later point in time.

108. The Technical Curricula prepared by Castle College is of international standards (City and Guilds). The computer curriculum is ICDL, which is also international standard. This is in keeping with the vision that the VTECs in the future should be able to apply for international accreditation for the courses offered.

109. Each technical course has basic mandatory technical units including computer operations. They will also study Technical English in Levels 1 and 2. The trainees will study the Basic Entrepreneurship Development Course in Level 2 to prepare the trainees for possibility of self-employment after graduation.

110. Technical Curricula developed are as follows:

- Construction (Levels 1 and 2)
  - ⇒ Timber
  - ⇒ Trowel Vocations
  - ⇒ Painting and Decorating
  - ⇒ Plumbing
  - ⇒ Refrigeration and Air Conditioning
  - ⇒ Electrical Installation
- Automotive (Levels 1 and 2)
  - ⇒ Light vehicle, heavy vehicle, motorcycle
  - ⇒ Auto body Repair and Upholstery
- Engineering (Levels 1 and 2 unless indicated)
  - ⇒ Turning
  - ⇒ Milling
  - ⇒ Making Components
  - ⇒ CNC Milling (Level 2)
  - ⇒ CNC Turning (Level 2)
  - ⇒ Sheet metal
  - ⇒ MMA
  - ⇒ TIG
  - ⇒ MIG
  - ⇒ Gas Welding
- ICDL
- Beauty and Hair Care (Levels 1 and 2)
  - ⇒ Beauty Therapy
  - ⇒ Hair Dressing
- Hotel (Levels 1 and 2)
  - ⇒ Accommodation Operations and Services
  - ⇒ Food and Beverage Service
  - ⇒ Food Preparation
  - ⇒ Reception Services and Operations
- Footwear – Level 2 (There is no level 1 course for footwear)

### **C. Delivery Support for the Curricula**

111. All the Curricula developed have a corresponding Instructor's Handbook and Student Workbook. The PMU had also these handbooks translated into Arabic.

**Summary note on the status of Result 2:**

112. The Ministerial Decree creating the High Committee for the Curricula Development for the Khartoum State Government laid the solid ground and provided a break-through for the introduction of the CBT approach in Sudan. This is a major milestone for the project as the CBT approach will considerably contribute to the overall industrial and private sector development of Sudan and in Khartoum in particular, thus responding to the need to modernize the economy.

The two foremost national government institutions overseeing vocational training, the NCTTE and the SCVTA fully supported the project's approach to vocational training. Their support was through the able leadership of the Adviser to the Governor and the close linkage forged by the PMU with her office and the said institutions.

Ideally, the project should have tested also the technical curricula developed (at least Level 1 Curricula). However, it was not possible to do this because of the delayed opening of the VTECs as discussed in the Section covering Result 1.

**Assessment of progress made in implementation of activities, with an estimated percentage of completion: 90%**

## Result 3

Policy framework in partnership with the private and public sector for the promotion of vocational training in Khartoum State presented for approval.

### *Indicator*

- Khartoum State established an institutional base for development and implementing vocational training policies for the State based on public-private partnerships, to instill a private sector culture

## **Process, Major Activities and Status**

### **A. Creation of the Khartoum State Vocational Training and Administration Unit (KSVTA)**

113. In the early part of 2008, the Khartoum State had wanted to establish a Council for Vocational Training. However, due to budgetary constraints, it did not establish the Council. Instead, it had established an Administration Unit to oversee the VTECs assisted by the project. The State appointed a Director-General to head the Unit in July 2008. It was only in the last quarter of 2009 that the State started to recruit additional staff. At the time of project closure, the finance and administrative staff were on board.

As part of project exit strategy, the PMU had provided technical inputs to the Khartoum State in terms of the functions of the Unit and the staffing pattern. The PMU emphasized the supportive and facilitating function of the KSVTA Unit rather than a control function.

In the first quarter of January 2010, the KSVTA Unit moved in the same office building of the Project Management Unit for better coordination, which served as a transitional period to continue with the support to the VTECs without interruption.

There is need to further strengthen the leadership, management, strategic thinking and technical skills of the KSVTA Unit so that the Unit can effectively lead and monitor the operations of the VTECs, instilling within the Centres, a private sector culture.

### **B. Creation of the Council for Vocational Training and Technical Education**

114. After the local elections in May 2010, the incumbent Khartoum State Governor, Dr. Abdul Rahman El Khider created the post of the High Commissioner for Human resources Development, which he filled with the appointment of Ms. Ishraga Sayd Mahmoud Salih, the Adviser to the Governor and the focal point of the project, embedded in a Commission for Human resources Development (HRD). Under this Commission, the Council for Vocational Training and Technical Education is to be set up. It is envisaged that the existing KSVTA Unit would serve as the secretariat of this Council. Council membership would include both public and private sector.

At the wrap-up workshop in October 2010, the VTEC Managers and the PMU gave recommendations to the High Commissioner on the organizational set-up of the Council and the role of the KSVTA Unit.

**Summary note on the status of Result 3:**

115. The PMU has closely worked with the Government on the policy framework to institutionalize changes and innovations implemented by the project. The Khartoum State has, in turn, ensured the sustainability at several levels of and commitment to the project by establishing the Council for Vocational Training and Technological Education and the KSVTA Unit. This can be considered the institutional basis for the development and implementation of vocational training policies with public-private sector partnerships.

**Assessment of progress made in implementation of activities, with an estimated percentage of completion: 95%**

## **Immediate Objective of the project: Component 2**

116. A significant share of young urban poor, particularly women, in Khartoum State's IDP areas has improved their skills for employability and entrepreneurial activities.

### **Result 1**

117. NGOs/CBOs (operating in the IDP areas) have enhanced capacities to organise, set-up demand oriented training courses (entrepreneurship and technical) and to provide business support for job creation.

#### *Indicators*

- Number of partner organizations (minimum of 20) that are cooperating with the project.
- Number of NGO/CBO staff and entrepreneur advisers trained (minimum of 100) in conducting and/or organizing technical/vocational training and entrepreneurship development courses through Training of Trainers (TOTs) with a private sector focus as well as organizational and management skills, including Results-Based Management and environmental awareness.
- Workable linkages for micro finance established with CBOs/NGOs and/or other micro finance providers.
- At least 90 tailor-made short courses in technical/vocational skills, which are complementary to the VTC programmes organized by CBOs/NGOs
- At least 45 entrepreneurship training courses offered by partner organizations
- Four partner organizations establish a pool of entrepreneurs to provide basic business support services to trainees/start-ups who have undergone EDP and/or technical training
- Institutional sustainability of partner CBOs/NGOs to continue providing training services established

### **Process, Major Activities and Status**

#### **1. Awareness Raising and Training Needs Assessment (TNA) Workshops**

118. Within the context of Component 2, the PMU in cooperation with partner NGOs/CBOs conducted a series of awareness raising and training needs assessment (TNA) workshops in the project operational areas<sup>2</sup> with the following objectives:

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<sup>2</sup> Wedelbashir, Alsalam, Alfateh, Haj Yousif and Mayo.

### **Training Needs Assessment Objectives**

- Inform the community about the project
- Raise the awareness among the target beneficiaries about vocational training and entrepreneurship as a means to improve their incomes
- Identify the entrepreneurial and technical/vocational training needs of the target beneficiaries
- Establish a database for developing and implementing activities in the operational areas

### **TNA Participants**

119. Based on the Strategy Framework, the TNA targeted the three groups of direct beneficiaries of Component 2

- Group 1 - Entrepreneurs who are engaged in productive or service enterprises who will benefit from skills upgrading and entrepreneurship training
- Group 2 – Potential entrepreneurs (with clear business interest) who have vocational skills (acquired from formal training or work experience) but who are unemployed and will benefit from skills upgrading/improvement or re-training and entrepreneurship training
- Group 3 – Persons (mostly youth) who have no skills and who will benefit from the provision of marketable skills and entrepreneurship training

### **Project Partners**

120. To implement the project in the IDP areas, the PMU forged partnerships with international and national NGOs and community-based organizations in line with the criteria established by the project.<sup>3</sup> Initial project partners were as follows: Fellowship for African Relief (FAR), CRS, Enfant de Monde, Peace and Development, Wad-El Basheer Development Association, Azza Women's Association, Integrated Community Action Sudan, Bilal Bin Rabah and SENAD.

The first activity of the partnership was the TNA workshops. All parties agreed to the implementation framework, administrative and financial arrangements.

### **Arrangements and Methodology**

121. The project adopted the participatory approach and used questionnaires to conduct the TNA. The PMU prepared the draft questionnaires and presented it to the project partners for their additional inputs. The questionnaire was divided into two sections: the first section focused on the personal profile and the second on their

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<sup>3</sup> Established for at least three years; must have an article of association or similar instrument that guides their day-to-day functioning; must have a core of officers/ and strong field presence on the ground; demonstrated capacity to carry out development activities; objectives of the CBO congruent with the project objectives and UNIDO principles; must have capacity for working with UNIDO as an additional partners

technical and entrepreneurial training needs. The PMU prepared tailored made questions for the second part according to the group and the enterprises.

The PMU and the partner international NGOs trained the CBO facilitators how to assist the participants in filling in the questionnaire.

### TNA Workshops Conducted

122. The PMU conducted 17 TNA workshops attended by 1,878 participants over the period January – July 2008.



	Date	Group	Location	Locality	Partner NGO/CBO	Number of Participants		
						Male	Female	Total
1	13/1/2008	1	Al-Salam	Umbadda	P & D	81	58	139
2	16/1/2008	1	Wedel-Bashir	Umbadda	WEBDA	53	94	147
3	20/1/2008	2	Al-Salam	Umbadda	P & D	57	27	84
4	25/1/2008	2	Wedel-Bashir	Umbadda	WEBDA	57	35	92
5	27/1/2008	3	Al-Salam	Umbadda	P & D	79	21	100
6	30/1/2008	3	Wedel-Bashir	Umbadda	WEBDA	83	34	117
7	10/3/2008	3	Alfateh 1	Kerary	AZZA	60	34	94
8	12/3/2008	3	Alfateh 2	Kerary	AZZA	63	38	101
9	13/3/2008	3	Alfateh 3	Kerary	AZZA	62	61	123
10	24/3/2008	3	Takamul	East Nile	ICAS	87	29	116
11	26/3/2008	3	Tawedat	East Nile	ICAS	96	31	127
12	27/3/2008	3	Dar-Alsalam	East Nile	ICAS	124	42	166
13	25/6/2008	1 & 2	Alfateh 2	Kerary	AZZA	52	22	74
14	26/6/2008	1 & 2	Dar-Alsalam	East Nile	ICAS	39	17	56
15	8/7/2008	1	Mayo	Jebalawlia	SENAD	83	17	100
16	9/7/2008	2	Mayo	Jebalawlia	SENAD	68	0	68
17	10/7/2008	3	Mayo	Jebalawlia	SENAD	130	44	174
<b>TOTAL</b>						<b>1,274</b>	<b>604</b>	<b>1,878</b>
						<b>68%</b>	<b>32%</b>	<b>100%</b>

### General Profile of the Participants

123. Thirty-two percent (32%) of those who attended the TNA workshops are women and girls. Average age of the participants was 28 years old. Almost half of the participants (46%) have been living in Khartoum for 16 years or longer.

As to the place of origin, 31% were from South Kordofan, 24% from Darfur and 18% from South Sudan. The 14% are from the younger generation who were born in Khartoum.



## Highlights of the TNA Findings

124. The profile compiled from the TNA findings for the three groups are as follows:

### Group 1 – Entrepreneurs

- Illiteracy rate among entrepreneurs is very high (19%). Drop-out rate from primary school reaches is 37%. Only 10% completed secondary school.
- Almost 60% of the entrepreneurs are engaged in a trading business. This is not surprising as trade is usually the entry point into business for micro entrepreneurs. A majority of them are women.
- Popular sub-sectors are food processing, saloon, welding and electronics. Women entrepreneurs were found in food processing, handicrafts and saloon, while men were spread over many more sub-sectors.
- Most entrepreneurs went into business to feed their families. Their average capital investment was SDG 1,900 and they sold their products mostly within the community.
- Majority of the entrepreneurs did not see the need to upgrade their theoretical technical knowledge to improve their businesses.
- In terms of business skills training marketing, product development and finance were key topics they want to know.



### Group two – semi-skilled labourers

- Illiteracy rate (14%) and drop-out rate from primary school (28%) remain high. 20% have completed secondary school.
- Handicraft is the sub-sector in which most of the participants of group two are employed. All of them are women. Other popular sub-sectors in group two are masonry, automotive and food processing.
- Many of the participants with backgrounds in automotive, electrical, food processing, electronics and masonry were also unemployed.
- This group put equal importance to theoretical and practical skills training.
- All semi-skilled labourers showed interest in the idea of establishing their own business. They identified the following as most important training topics: marketing, customers' satisfaction, and product costing.



### Group three – the youth

- Among the youth the literacy rate is relatively high. Most of them completed primary school and many even finished secondary school. Yet, 27% of these youngsters dropped out from primary school.

- Most youngsters, including a significant share of women, want to be trained in computer operations. Other popular sectors are: electrical installation, repairing computers, cell phone repair, heavy equipment, salon and hotel service.
- 63% of the young women and men intended to establish their own business in the long-run.



## Implications of TNA Findings

125. Based on the findings of the TNA workshops, the project envisaged to develop the following training courses to meet the needs of the target group, which should be considered to be synergetic with the activities undertaken in Component 1.

### • **Preparatory Vocational Training Courses**

Given the low educational background of all three groups, the project developed a preparatory vocational training course. The purpose of this course was to acquaint the trainees with basic concepts to enable them to fully benefit from the vocational/technical training courses.

Based on the needs identified, the course included three subjects: Technical English, Technical Math, and Introduction to Technical Drawing.

The project developed a training guide for the three subjects (English and Arabic) including hand-outs given to the participants. The project trained trainers from the CBOs/NGOs to conduct the courses in their respective areas.

Basic requirements to enrol in this course are basic literacy skills or completion of primary school as well as a strong interest vocational training.

### • **Literacy classes with integrated entrepreneurship modules**

The literacy levels of groups 1 and 2 were found to be relatively low. The project in close cooperation with partner organizations offering literacy courses in the IDP/poor areas of Khartoum, provided EDP courses integrated in the literacy training programmes. The project developed an EDP and Literacy Training Guide using the REFLECT Methodology (Regenerated Freirean Literacy through

Empowering Community Techniques. The objective is to provide those with low levels of literacy to acquire skills on how to establish their income generating activities while at the same time learning the “Rs”. The project trained literacy trainers on how to use the Training Guide with the EDP modules.

- **Entrepreneurship Development (Existing and Potential Entrepreneurs)**

The demand for EDP training was high among the three groups. Existing entrepreneurs wanted to improve their businesses; semi-skilled labourers showed interest in establishing their own business; and a high percentage of young women and men want to establish their own business in the long run.

In line with the results of the survey, the PMU developed an EDP Training Guide in Arabic and English and trained trainers from the NGOs/CBOs to conduct the course at the project sites.

- **Vocational/Skills Training with Integrated Entrepreneurship Development**

All vocational/skills training programmes developed by the project based on the market needs integrated EDP modules to develop the business mind and entrepreneurial thinking among the trainees.

It is worthwhile to note that Fellowship for African Relief (FAR) and Enfante de Monde, used the results of the TNA workshops in implementing their respective projects, which were also funded by the EU.

## **2. Partner NGOs/CBOs**

126. The project forged partnerships with 14 NGOs, 2 artisan societies, 6 CBOs, 3 private training centers, 3 international NGOs and 6 government institutions as a major strategy to reach out to the target beneficiaries in the IDP/poor areas of Khartoum. Note that one of the partner NGOs (Don Bosco Vocational Training Center) is located in Wau, Southern Sudan. They requested the project for technical support to introduce EDP training in their VTC.

	Cooperating Partners	Areas of Cooperation undertaken with the Project	Operational Areas
	<b>Non-government Organizations (NGOs)</b>		
1	Usratuna	Vocational and entrepreneurship training for the disabled; pre-vocational training; EDP; product design and recycling; capacity building	Omdurman
2	Sudanese Association for Best Action (SABA)	Organization of vocational/skills training; pre-vocational training; capacity building	Mayo and Soba
3	Integrated Community Action (ICAS)	Organization of vocational/skills training; EDP; pre-vocational training; capacity building	Haj Yousif
4	Sudanese Development Association (CAFA)	Organization of vocational/skills training; EDP; EDP-REFLECT; capacity building	Umbadda and Salam Camp
5	SENAD	Organization of vocational/skills training; EDP; EDP-REFLECT; Pre-vocational training; capacity building	Mayo, Soba and Jebel Awlia
6	Azza (focusing on women's groups)	Organization of vocational/skills training; EDP; EDP-REFLECT; capacity building	El Fateh
7	Sudanese Organization for Culture and Development (SOCD)	Organization of vocational/skills training; EDP; EDP-REFLECT; Pre-vocational training; capacity building	Haj Yousif
8	RANA Vocational Training Center for Girls	EDP, capacity building	Halfait Khartoum North
9	Mass for Development and Relief	Vocational/skills training; pre-vocational training; EDP; capacity building	Salam Camp
10	ESSU Development Organization	Vocational/skills training; pr-vocational training; EDP; capacity building	Soba, Mayo, Jebel Awlia
11	Sudanese Plastic Artist Union	Product Design for Artisans Programme	All areas
12	St. Joseph Vocational Training Center	EDP, Pre-vocational training; capacity building	All areas
13	St.Vincent Vocational Training Center	EDP, Pre-vocational training; skills training; capacity building	Mayo and Umbadda
14	Don Bosco Vocational Training Center	EDP	Wau
	<b>Artisan Societies</b>		
1	Omdurman Guild	Training for Artisans in leather footwear; pre-vocational training, EDP; product design for artisans	Omdurman
2	BADR Charity Society for Leather Products	Training for Artisans in leather footwear; pre-vocational training, EDP; product design for artisans	Souk Abu Zeid
	<b>Community-based Organizations</b>		
1	Women Empowerment Society (WES)	Organization of vocational/skills training; EDP; EDP-REFLECT; Pre-vocational training; capacity building	Jebel Awlia, Mayo and Soba
2	Women Association for Qualification and Development (WAQD)	Organization of vocational/skills training; EDP; EDP-REFLECT; Pre-vocational training; capacity building	Soba
3	WEBDA	Organization of vocational/skills training; EDP; Pre-vocational training; capacity building	Was El Basheer, Omdurman
4	Bilal Ibn Rabah	EDP	Al Salam Camp
5	PDA	Organization of vocational/skills training; EDP; Pre-vocational training; capacity building	Al Salam Camp
6	Facilitators of Family, Education and Development (FFDA)	REFLECT-EDP	Soba Aradi

	Cooperating Partners	Areas of Cooperation undertaken with the Project	Operational Areas
	<b>Other Private Training Centers</b>		
1	Mehun International - Women Training Center	Henna Tattoo Skills Training	All areas
2	Mofarih for Leather Works	Training for leather artisans (covering also other States with support from Zakkat)	Operating in Khartoum and other States
3	Ikhbary Vocational Training Center	TOT Pre-vocational training programme	Khartoum
	<b>International Non-government Organizations</b>		
1	Fellowship for African Relief (FAR)	TNA workshops; CBO capacity building, vocational/skills training; EDP; livelihood awareness raising; micro-finance	Dar Es Salaam and Wad El Basheer
2	Catholic Relief Services (CRS)	Capacity building of CBOs; livelihood awareness; micro finance	All IDP areas of Khartoum State
3	Enfant de Monde	TNA workshops; livelihood support; capacity building for CBOs; EDP	El Fateh
	<b>Government Institutions</b>		
1	High Institute for Sciences (ZAKKAT)	Support for civil societies in skills training i.e. leather	Khartoum and other states of Sudan
2	Friendship Vocational Training Center (Sudan-Chinese)	Skills training in painting and plastering	All areas
3	National Leather Research Technology Center	Training for artisans in leather footwear - marquob	All areas
4	Incubator for the Development of the Leather Industry	Training for artisans in leather footwear - marquob	All areas
5	National Centre of Hides and Skins Improvement	Training for butchery and skins and hides improvement	All reas
6	Sudan Central Bank Micro Finance Facility	Provision of micro finance services to partner CBOs/NGOs	All areas

### 3. Technical Capacity Building Activities

127. The project built the technical capacities of the partner NGOs and CBOs to provide and/or to organize vocational/skills and entrepreneurship training through Training of Trainers (TOT). Participants to the TOTs were their own staff, volunteers or members. The objective was for the partner NGOs/CBOs to offer the training services to the community in which they operate.

Component 2 trained 246 partner NGOs/CBOs staff through Training of Trainers (TOT) in the areas of: Entrepreneurship Development Programme; Pre-Vocational Training; REFLECT-EDP, Essentials of Managing an Association, Marquob Improvement, Slaughtering/Skins and Hides Improvement, Metal Craft and Product Design & Development for Artisans(PDA). The table below shows the TOT programmes and the total number of participants disaggregated by gender:

Training of Trainers (TOT) Programme	Male	Female	Total
1. Entrepreneurship Development	24	21	45
2. Pre-Vocational	13	8	21
3. Entrepreneurship Development -REFLECT	3	18	21
4. Marquob Improvement	13	5	18
5. Essentials of Managing Association	30	46	76
6. Slaughtering and Hides and Skins Improvement	13	0	13
7. MetalCraft	19	0	19
8. Product Design for Artisans Programme	23	10	33
<b>Total</b>	<b>138</b>	<b>108</b>	<b>246</b>
	<b>56.10%</b>	<b>43.90%</b>	<b>100%</b>



### 3.1. TOT - Entrepreneurship Development

128. Entrepreneurship development among the IDPs was one of the important project interventions for Component 2. The PMU developed the concept to implement a Training of Trainers (TOT) on Entrepreneurship Development with trainers coming from the partner CBOs and NGOs.

Primary considerations for the selection of the participants to be trained as trainers for the project were those who have relevant experience as trainers, preferably with disadvantaged groups and were willing and able to work with the project. In addition, they had to meet the following criteria:

- Successfully completed Sudan Secondary Certificate
- High commitment to train IDPs upon completion of TOT
- Entrepreneurial thinking
- Be committed to conduct EDP training in the IDP areas upon completion of the training
- Availability to attend the 10 days TOT
- Basic English skills

The process of selection to identify and select participants was as follows:

- Prepared the Call for Trainers, which spelled the criteria and the expectations from the trainers and the support from the project
- Discussed the concept and Call for Trainers with the partner NGOs/CBOs
- Partners nominated 3-5 candidates using the Nomination Form
- PMU reviewed the nomination forms
- Applicants went through a written test and interview given by the PMU
- PMU made the final decision on the candidates joining the TOT

The ten-day TOT – EDP Training Programme taught the trainers how to demonstrate the different participatory training techniques in imparting the principles of entrepreneurship and how to establish a micro/small enterprise. The TOT course had six modules, which the trainers delivered in Arabic and in English:

- Module 1: Training Techniques
- Module 2: Entrepreneurial Self-Awareness
- Module 3: Marketing Planning and Management
- Module 4: Production Planning and Management
- Module 5: Management and Administration
- Module 6: Financial Planning and Management

For this course, the PMU prepared a Training Guide that was adapted from UNIDO Entrepreneurship Training materials to the Sudan setting. Each participant received a training guide after the TOT.

#### First TOT-EDP

129. The PMU issued a Call for Trainers among the partners



who recommended 50 candidates; interviewed the candidates and selected 27 participants based on the criteria established. The PMU conducted the TOT on May 12-22, 2008 at Etisalat Academy in Khartoum.

### **Second TOT-EDP**

130. After the first TOT-EDP in May 2008, Component 2 had identified seven (7) new partner NGOs/CBOs, which also required training to teach EDP to their beneficiaries, clients or members. Some of the original NGO/CBO partners have also expressed interest to have more EDP trainers. It is in this context that the project organized the second Training of Trainers (TOT) in EDP.

The PMU issued a Call for Trainers among the partners who recommended 41 candidates; interviewed the candidates and selected 18 participants based on the criteria established.

Component 2 conducted the second TOT – EDP at the PMU Office Training Hall from 26 April – 06 May 2009.

### **The TOT EDP Trainers were profiled as follows:**

- Gender distribution: Out of the 45 participants, 21 were females (47%) and 24 were males (53%).
- Age Range: The participant's age ranged from 23 to 49 years old. Two thirds of the participants were within the age bracket 25 – 45 years old.
- Marital Status: 23 were married (51%); 19 were single (42%) and 3 were widowed (7%)
- Highest level of education reached: 18 of the participants had secondary education (40%); 2 participants had a technical or vocational diploma (4.4%); 23 participants have a BA (51%) and 2 participants had a masters degree (4.4%).
- Work Experience: 37% of the participants have 1-6 years of work experience; 25% for 7 -9 years while 38% had work experience for more than 10 years.

### **The EDP Trainers (Batch 1 and 2)**

	<b>Trainer Name</b>	<b>Organization</b>
1	Muna A/AI-Moutal Qurashi Mohammed	Sudanese Development Association - CAFA
2	Sabah Alhadi Hashim Mohammed	Sudanese Development Association - CAFA
3	Hameeda Alhadi Hashim	Sudanese Development Association - CAFA
4	Hager Ibrahim Hamady Haron	Mass and Development for Relief - MDR
5	Yasmin Omer Ahmed Elhaj	Mass and Development for Relief - MDR
6	Simon John Chol Gouk	St. Vincent De Paul Society
7	Diing Kuj Diing Ayier	St. Vincent VTC
8	Hussain Albino Monku	St. Vincent VTC
9	Jovan Odera Jino	St. Joseph VTC/CRS
10	Mathew David Dmwouy	St. Joseph VTC

	Trainer Name	Organization
11	Patrick Ezekiel Bugwa Ndukpo	EASU Development Organization - EDO
12	Simon Samuel Baabangbe Yanga	EASU Development Organization - EDO
13	Asunta Bernadino Erwa	Integrated Community Action Sudan - ICAS
14	Martin Ajugo Frederick	ICAS
15	Salwa Saeed El Sheikh	Women Association for Qualification & Development - WAQD
16	Shadia Ebrahim Hamid Babekir	Women Association for Qualification & Development - WAQD
17	Casimiro Guy Ibrahim	Wed El Bashir Development Association - WEBDA
18	Sarah Anduwa Ezibai	Wed El Bashir Development Association - WEBDA
19	Eisa Omer Koko	Wed El Bashir Development Association - WEBDA
20	Ahmed Koko Kounda	Sudanese Association for Best Action - SABA
21	El Tahir Badereldien Khalid Fadel Ala	Sudanese Association for Best Action - SABA
22	Remaz Mohamed Osman Wanny	Sudanese Association for Best Action - SABA
23	Ammar Ahmmed Omer Ahmmed	Badr Charity Society for Leather Products
24	Yousif Abdalrahim Khamis Omer	Badr Charity Society for Leather Products
25	Mohamed Musa Ibrahim Adam	Badr Charity Society for Leather Products
26	Zeinab Mohammad Suliman	Azza
27	Tayba Osman Abdelgadir	Azza
28	Mawahib Mohammed Said	Azza
29	Dina Rupent Juma	SHORD/SENAD
30	James Maring Alison Dumo	FFEDA/SENAD
31	Silas Sworo Jojo	KIMU/SENAD
32	Lamees Zahir Abul-Qasm	Rania VTC
33	Khadiga Elyass Mohammed	Rania VTC
34	Amir Hamza Abdelhamed	Omdurman Guild
35	Alfatih Abdalla Alsadiq	Omdurman Guild
36	Abd Alhamed Jar Anpiy Omer	Omdurman Guild
37	Lilian Rudolf Jocondo	FAR
38	Salah Eldin Nasr Baraka	FAR
39	Cizarina Atti Geri Abdallah	PDA
40	Ibrahim Bakhit Elsheikh	PDA
41	Ambrose Kon Lual	PDA
42	Gazafi Mnhal Juma	Bilal Bin Rabah
43	Intiser Mohamed Abdualrahmmen	Bilal Bin Rabah
44	Abir Abdulhameed Hilali	Usratuna
45	Randa Jafar Altahir Ahmed	Usratuna

**TOT EDP: PARTNERSHIP WITH VIS SUDAN/ST. JOSEPH'S VOCATIONAL TRAINING CENTER AND DON BOSCO VOCATIONAL TRAINING CENTER IN WAU**



131. The Project Management Unit forged an agreement with VIS Sudan Country Office to implement the following EDP Training Programmes for the St. Joseph Vocational Training Center in Khartoum:

- EDP – Training of Trainers for the VTC Staff from December 2009 – February 2010
- EDP Training Course for the second year students (March – May 2010)

In this arrangement, the PMU provided the EDP Trainer, who was trained by the project (Ms. Hameeda Alhadi Hasheem) to conduct the course. Ms. Hameeda graduated from the first TOT EDP course. VIS, through funding support from an EC project covered all the costs of the training programme. Ms. Hameeda trained 40 participants: (20) VTC trainers and twenty (20) students.

After the EDP TOT for St. Joseph, Don Bosco Wau also requested the PMU for an EDP TOT for their staff under the same arrangements with VIS. EDP training was conducted in Wau on 17 – 24 February 2010. Twenty-four participants attended the training (11 staff and 13 3<sup>rd</sup> and 4<sup>th</sup> year students).

The PMU closely monitored the quality and delivery of the training programmes conducted by the trainer and issued the certificates based on the criteria established by the PMU.

### **3.2. TOT: Pre-Vocational Training Course**

132. The TNA revealed the need to thoroughly prepare the target beneficiaries for vocational training. The PMU developed a Pre-vocational training package to train trainers to conduct the programme, which consists of three subjects: technical math, technical English and introduction to technical drawing.

Two national consultants (Mr. Mahmoud Khogali and Mr. Abdelmoniem Fadlalla) from Ikhbari for Engineering Training and Information Technology developed the syllabi, training guides, handouts and conducted the TOT. The CTA provided technical assistance to the consultants. Component 2 staff ( Messrs. Shibeika Izzeldin Mekki and Salih Suliman) finalized the training guide.

The consultants conducted the training in English and Arabic as the participants come from both North and Southern Sudan.



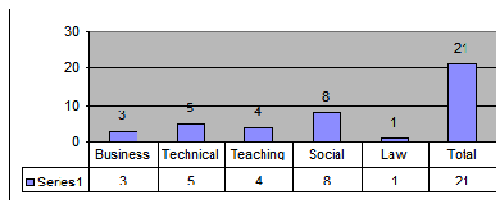
As with all the TOTs, the PMU issued a Call for Trainers among its project partners. Forty candidates submitted their nomination forms endorsed by their respective organisations. The PMU reviewed the applications and short-listed 30 candidates for written test and interview. Twenty-one candidates successfully passed and participated in the TOT.

The participants represented 13 different partner organisations: 1 international NGO, 6 national NGOs and 6 CBOs.

Type of organisation	Name of organisation	No. of participants
Int. NGOs	FAR	1
National NGOs	Omdurman Guild / VTC	2
	Integrated Community Action Sudan (ICAS)	2
	Usratuna / VTC	2
	St. Vincent de Paul / VTC	2
	St. Joseph / VTC / CRS	1
	Azza Women Association	3
CBOs	Peace and Development Association (PDA)	2
	Jebel Awlia-Women Empowerment Society (WES)	2
	Wad el Bashir Development Association (WEBDA)	1
	DPI - Sudanese Education Network And Development (SENAD)	1
	FFEDA - Sudanese Education Network And Development (SENAD)	1
	CAFA / CRS	1
<b>Total</b>	<b>13 organisations / 21 Participants</b>	<b>21</b>

#### Profile of the TOT EDP Trainers for pre-vocational training

- Gender distribution: Out of the 21 participants, eight were females (38%) and 13 are males (62%).
- Age Range: The participant's age ranged from 25 to 45 years old. Forty-three percent (43%) were within the age bracket 26 – 35 years old.
- Marital Status: 10 were married (48%); 10 are single (48%) and 1 was widowed (4%)
- Highest level of education reached: 10 out of 21 have a BA or are university graduates; 5 were high school graduates; 2 reached senior year in high school; 1 has a post graduate degree and 1 went to a Teacher's High Institute of Learning. Major field of study is shown in the graph.
- Work Experience: Almost half of the participants (11) had working experience ranging from 1 – 6 years; 5 had been working for less than a year and 4 of them had been employed for more than 10 years.
- Current Work: The majority of the participants were working (17 out of 21); 2 not working while 2 participants were university students. For those that were working, 4 were working as instructors in VTCs; 11 with NGOs and CBOs and 2 participants had their own business.
- Previous Experience in Training: 9 of the participants have conducted a training programme while the rest have not conducted any training programmes.



- Place of work or domicile: Almost all participants either live or are working in IDP areas (i.e. Wad El Bashir, Al Salam and Alfateh in Omdurman; Haj Yousif in Khartoum North; Mayo, Soba Aradi and Jebel Awlia in Khartoum)

**The Pre-Voc Trainers are listed below:**

	<b>Name of Trainer</b>	<b>Organization</b>
1	Emmanuel Lukudo Festo	St. Vincent
2	David Iokudo Enosa	St. Vincent
3	Hameeda Alhadi Hashim	CAFA- CRS
4	Majok Majok Ajons	St. Joseph CRS
5	Altayb Mohammed Elzaki	Usratuna
6	Manahel Abullah Mohamed	Usratuna
7	Florence Sadia Tonic	WEBDA
8	Mafer Mou Joli	WES
9	Paulo Jacob Dafalla	WES
10	Amir Hamza Abd-Elhamid	Omdurman-Guild
11	Waleed Said Suliman	Omdurman-Guild
12	Santino Joseph Tifano Deng	SENAD
13	Nancy Haggana Abdu-Alrasul	SENAD
14	Sammuel Lazru Amol Ngor	PDA
15	Ajing Atak Angong Ajing	PDA
16	Jamila Abd-Allah Abd-Elgawi	AZZA
17	Sharf Eldin Moha. Sharf Eldin	AZZA
18	Kawthar Ibrahim Maleek	AZZA
19	Hind Hussain Omer	FAR
20	Emmanuel Sekwat Henery	ICAS
21	Asunta Baranadino	ICAS

### **3.3. TOT: Entrepreneurship Development – REFLECT Approach**

133. The target beneficiaries represented a mixture of different tribes from different areas of Sudan. There were a number of participants with low literacy levels (especially women) or have very low literacy levels (youth who are dropped out of schools) and lack basic life skills. They were not able to compete for better jobs and thus had to accept a living as casual labor in the main town.

The project has developed and adapted to the Sudan setting, the UNIDO Entrepreneurship Development Programs that teach skills on how to establish a business/livelihood activity.

In order for those with low literacy levels to benefit from these courses, Component 2 integrated the EDP Training Guide using the Reflect Approach, which the literacy programmes in Sudan are using. The PMU envisioned the EDP-REFLECT Training to provide illiterate/low literate beneficiaries with skills to enable them to start-up a business or an income generating activity.

A national consultant (Ms. Leila Bashir) developed the syllabi, EDP-REFLECT Training Guide, handouts and conducted the TOT using the REFLECT methodology. The PMU provided supervision.

### **Overview of the REFLECT Methodology and Integration of EDP concepts**

134. REFLECT (Regenerated Freirean Literacy through Empowering Community Techniques) is an innovative approach to adult learning that fuses the theory pedagogy of the oppressed of the Brazilian educator Paulo Freire with the methodology of Participatory Rural Appraisal (PRA).

Based on participatory principles, the REFLECT results in being very flexible in its implementation, being able to adapt to different circumstances. It is, in fact, an empty framework whose contents are determined by its beneficiaries (participants) based on their needs.

In a REFLECT program, there is no textbook, no literacy primer, and no pre-printed materials except for a manual for literacy facilitators (teachers). This manual is based on the data collected through a socio-economic survey conducted in the target community prior to the start of the program. Each literacy circle (class) develops its own learning materials using visual tools such as maps, matrices, calendars and diagrams. These graphs are representations of local realities based on the existing knowledge of participants and serve to encourage the discussion/analysis of community issues.

Different topics on entrepreneurship development programs can be the focused during the learning sessions. The trainees can develop different graphs e.g. social maps, resource maps; calendars, income-expenditure trees and matrices to analyze their real situation. The facilitators will use the graphs to stimulate discussions, participant-generated writing, numeracy exercises and action plans to improve trainers' skills, ways of thinking and knowledge and attitudes required in entrepreneurship.



The facilitator can bring EDP concepts forward using other participatory approaches used in REFLECT such as the use of role plays, vocational training, theatre, songs, dance, storytelling, sayings and proverbs, participatory videos and photography, broadcasting radio programs.

### **Component 2 Strategy**

135. The PMU implemented the following strategy to institutionalize the REFLECT EDP Training in the IDP Areas:

- Developed the draft EDP Reflect Facilitator's Training Guide/ Manual drawing EDP concepts and topics from the UNIDO EDP Training materials; the topics provide trainees with knowledge and skills to establish and manage a business/income generating activity. The training guide (Arabic and English) shows the step-by-step process using the REFLECT methodology to impart the knowledge and skills. The PMU hired a consultant conversant with the REFLECT Methodology and EDP Training Programmes and supervised the adaptations made.

- Conducted a 15-day TOT for 21 literacy trainers in the IDP areas using the draft Training Guide; during the TOT, the participants reviewed the draft guide and provided additional inputs to enhance it. The consultant integrated all the additional inputs into the final draft-training guide, which the literacy trainers used in conducting the course in their respective areas.
- The PMU identified who among the CBO/NGO partners are implementing literacy classes in their respective areas. It also identified new CBO/NGO partners conducting literacy classes. The PMU called potential partners in this undertaking for a one-day orientation to explain the project approach, modalities and conditions for proposed partnership. CBOs/NGOs who have given their commitment to integrate the Reflect-EDP in their literacy classes submitted 3 – 4 candidates for the TOT. Basic criteria for the candidates are that they should have undergone training on Reflect Methodology.
- The PMU and the consultant assessed the candidates through an interview process; the PMU informed the successful candidates their respective CBOs/NGOs.
- As a result of the TOT, the participants prepared their action plan to implement the training in their respective IDP areas.
- The PMU assisted the CBOs/NGOs in organizing their first learning circles using the EDP Reflect Approach by giving training materials. The consultant monitored the training programme to assess the methodology.
- After six months, the facilitators held a 3-day workshop to review the experience. The consultant took the experience into consideration and additional inputs from the facilitators to finalize the Training Guide.

#### The Call for REFLECT EDP Trainers

136. Forty candidates endorsed by their respective organizations applied for the TOT. The PMU shortlisted 30 candidates for interview; 21 candidates passed and joined the training programme. The successful candidates were from 9 different organizations (2 NGOs and 7 CBOs).

Type of organisation	Name of organisation	No. of participants
National NGOs	Azza Women Association (AWA)	2
	CAFA Sudanese Community Development Association	3
CBOs	Hara 40 Women Society	1
	Women Empowerment Society (WES)	2
	Victory Women Development Association (VWDA)	3
	Rabi Akhdar Society (RAS)	3
	Sahwa Islamic Association (SIA)	2
	Facilitators Charity Association (FCA)	4
	Nahda Association (NAHDA)	1
<b>Total</b>	<b>9 organisations / 21 Participants</b>	<b>21</b>

**The TOT EDP Trainers were profiled as follows:**

- 137. Gender distribution: Out of the 21 participants, 18 are female (86%) and 3 were males (14%).
- Age Range: The participant's age ranged from 25 to 55 years old. 46.7% of the participants were within the 36-45 years age bracket.
- Marital Status: 16 were married (76%); 4 were single (19%) and 1 was widowed.
- Highest level of education reached: 10 out of the 21 participants were high school graduates; 8 university graduates and 3 have a masters degree. The field of study of participants showed that 14 of them studied social work and 7 studied education.
- Work Experience: All of the participants had working experience ranging from 1 to 7 years as teachers or volunteer teachers with their respective NGOs/CBOs. All the participants have undergone training on Reflect Methodology.

**The Training Programme for EDP REFLECT**

138. The TOT was held at the PMU Training Hall from from 07 – 25 June 2009 and was organised along the following sections:

- Concepts, methods and training techniques
- Principles of Adult Education
- Facilitator
- Importance of literacy and numerical skills to the entrepreneurs
- What is entrepreneurship? Why is it important to me?
- How do I become an entrepreneur? What are the characteristics of a good entrepreneur? How can I have or develop these characteristics?
- What business should I start?
- How do I plan to start my business?
- Marketing Concepts: What is my product? Who are my customers? Who else are selling my products? How much should I sell my product? How will I compete?
- Production Concepts: What machines and materials will I need to produce my product? How much will these cost? What skills do I need to produce my product? Can I produce the products from my home; or do I need to rent a place?
- Finance Concepts: How much capital will I need for the business? How much does it take to produce my product? How much money will I earn from my business? What should I do so that I can make my business grow?

139. The TOT used the Reflect methodology and was highly participatory entailing extensive group work/discussions, exercises and presentation by the participants. A field trip was organized, where literacy circle activities were conducted for practical training purposes.







All the 21 registered participants (see below) successfully passed the TOT and received a certificate of attendance and completion.

No.	Name of Facilitator	Organization
1	Kawthar Ibrahim Malik	AZZA
2	Rawia Mohammed Suliman	Hara 40. W.S
3	Um Gumaa Rechard Makoi	WES
4	Sabah Al-Hadi Hashim	CAFA
5	Kaltoum Abd-Alrahman Mohammed	CAFA
6	Mubarak Hassan Harban	CAFA
7	Awad Suliman Bakheit	WES
8	Fatima Dawad Mohamed	RAS
9	Halima Mustafa Eldai	VWDA
10	Mawahib Abdalla Ali	VWDA
11	Mateera Ibrahim Hasaballah	VWDA
12	Ballala Mahjoub Ahmed	NAHDA
13	Mariam Mahmoud Abdalla	RAS
14	Awatif Mohammed Abdalla	RAS
15	Magboola Hamid Mohammed	SIA
16	Magda Ahmed Ibrahim	FCA
17	Mahdia Abdalla Adam	FCA
18	Kaltoum Mahmoud Adam	FCA
19	Omima Bushra Bshier	AZZA
20	Ebtsam Farah EL-Khidir	FCA
21	Adam Ali Ahmed	FCA

### 3.4. TOT: For Marquob artisan producers ( related to market positioning)

140. Component 2 assisted the IDPs and the urban poor to have access to employment and/or to improve their incomes and livelihood by providing skills and entrepreneurship training. Interventions were through and by working with community-based organizations (CBOs) and NGOs.

BADR Society for Leather Works located in Abu Ziad Market, near Umbada is a CBO comprising of 127 registered and about 170 affiliated micro and small-scale footwear producer. Majority of them live in the IDP areas. Every workshop consists of 2-3 employees and/or apprentices, which amounts to a group of 1,000 – 1,200 individuals involved in shoe production. They produce the customary Sudanese leather shoes (called Marquob) using their traditional skills and simple tools. While they continue to benefit from the steady domestic demand from their products, their businesses have not grown. These artisans have not benefited from any entrepreneurship or business management training or technical skills training geared for their specific needs and circumstances.



The plight of BADR Society is a microcosm of the thousands of artisan footwear makers in the whole of Sudan. They are now facing competition with cheaper and better products from abroad. Far Eastern footwear producers have penetrated most areas of shoes sold in the region. There are indications that first attempts to copy and produce the marquob for the greater Arabic region, with its hundreds of millions of consumers are taking place. If outside producers succeed to penetrate this market in Sudan, thousands of artisan shoemakers will be put out of business or will lose their jobs, if they are not competitive.



In this regard, the project conceived to develop and implement a technical skills training programme for BADR artisans to help them improve the quality and competitiveness of their products using the existing skills and tools available to them. The project created awareness on competitiveness and complemented the technical skills training with entrepreneurship development and capacity building for the Society, to provide them a cushion. In addition, the project considered that by building these capacities within BADR, the youth who are now working with the artisans as apprentices would have better learning and business opportunities when they eventually establish their own businesses.

For greater outreach of the training programme, the project implemented the training through a Training of Trainers approach to enhance institutional capacity in Sudan to train artisans. Key project partners identified in this process were the Incubator for the Development of the Leather Industry, the National Leather



Research Center, Zakat and VTC-Kerary, where the project established a training section for leather. Entrepreneurs/shoemakers from current partner CBOs/artisan societies (BADR and Omdurman Guild) participated in the training to build in-house capacities to train entrepreneurs.

In order to support the competitiveness training of the leather sector, the project commissioned the services of an international footwear expert (Mr. Andreas Daxbacher, Austrian) to undertake a scoping visit to assess the training needs and to review the different institutional support systems available to the artisans (i.e. training providers, raw material suppliers, market system).

### **Market Positioning of the Marquob**

141. Findings of the scoping visit showed that for the artisans to be competitive, the technical skills training need to position the marquob in the domestic market.

Sudanese men wear the marquob mainly combined with Jalabiya, the traditional men garb. Artisans produce the shoes with wooden lasts from Egypt. Made with traditional leather sole, the shoe is entirely made of Sudanese materials except for sewing thread and adhesives. Non-leather soles are made of EVA (Czech original and of reasonable quality) or Chinese origin (inferior). What makes the Marquob special is its lightness and comfortable shape, which fits perfectly with the climate in Sudan. The Marquob can be used cross-generational, which is why the introduction of new designs could lead to a stronger appeal on the young population.

The production of a more durable and appealing Marquob could interest other potential customers. The ability to vary and incorporate other designs and styles could make the artisans expand their markets. The following market segmentation is as follows:

- The “up-market” Marquob: with leather sole, welt and stiffener in heel and toe; this product will be made of finest materials and workmanship.
- The “day to day” Marquob: with softer heel and toe stiffener and PVC compact sole; A durable and casual Marquob for every-day use.
- The “leisure” Marquob: affordable with EVA welts and improved finishing



### **Supplies and Quality of Materials**

142. As the focus of this project is on artisans in the leather sector, their chances of sourcing and importing raw materials themselves are limited. The expert visited suppliers of raw materials to the artisans in the Omdurman market and other parts of Khartoum. The materials found were Asian, Egyptian and few of European origin.

The leather found in Omdurman was of low quality from small-scale tanneries. The leather available from the Khartoum Tannery has a big variety, is of good quality and is accessible for all entrepreneurs.

Apart from leather, soles are the second most important material input to develop the Marqoub and the leather sector. Normally recycled PVC of collected old soles and recycled PVC cable insulations are used to mould and satisfy demand of local shoemakers. Soles of such compound are prone to break after 3-6 months due to their stiffness. The main reason why only recycled materials are used is that the artisans do not want or cannot spend money on raw materials. However, considering the source of materials, the producers use patterns to come up with the best possible sole, using simple means.



The moulds seen during the mission are of poor quality or worn out and recycled in combination with a compound of a rather unattractive and low quality. The variety of locally produced soles is limited to about 10-15 styles. With the right moulds, supplied by the project and locally available virgin PVC compound the local PVC sole producers are fit to produce high quality soles for local producers.



Not as vital but of added advantage is the local last production. The project has set up linkages with the Chairman of the Chamber of Leather and Shoemaking, Mr. Siddig Abdelaziz, who imported a last copying machine in April 2009 and is operating in the Omdurman Industrial Area.



As to the cutting dies for the clicking press, the leather Incubator as well as Saria Shoe Factory produce cutting dies on demand. The availability of locally produced cutting dies adds to the essential supplies for the sector.

### **Sole Presses**

143. A necessity for all levels of shoemaking is to have a sole press at hand, which can apply an even pressure on the sole surface for proper connection of sole and upper. Through the project, the Kerary VTEC has been provided with a sole press in their machine set-up as a common training facility. The materials for soles used in the Marquob production do not necessarily require a sole press, but the usage would definitely improve the quality of the sole bonding. The simple sole presses will also open a new dimension of shoe making for the rural and urban small-scale artisan entrepreneurs as it allows them to produce heavy duty and durable street footwear.

## Expert Recommendations Implemented

144. The following essential inputs in to the training programme were made:

- A 
  - The EVA soles used in combination with non-existing finishing capacities is affecting the image of the Marquob and is to be replaced by PVC or TR compact soles produced in Sudan with professional aluminum moulds supplied by the project.
- To be able to produce a variety of styles, the design abilities were addressed in the TOT.
- The Expert established a set of standards to ensure quality of the “new and improved” Marquob such as usage of leather for upper and insole and use of modernized lasts for better fitting and assurance of size compatibility for example. The standards were presented during the TOT.
- For marketing purposes, the sole will indicate the name Marquob with other details. Steel stamps to imprint “Marquob” onto the sock lining will be designed and purchased. Branding and registration were reviewed. The newly designed soles with modern lasts is to make the production more efficient and improve the quality.

It was apparent from the findings and recommendations of the international expert, that in order to develop marquob, technical skills is not the only requirement. The supply and production chain need to be developed such as availability of improved lasts, production of marquob soles using TR material, introducing sole press operation (sole press machine), availability of the scouring machines, and others. To address the issues, the project had commissioned the services of a national footwear consultant (Mr. Abdulmoneim Younis) to undertake the follow-through activities of the TOT Marquob Training. This consultant worked with the BADR Society and the Kerary VTC Leather Section. Close cooperation was maintained with the IRCC.



### **The Call for Trainers (ToT Leather Sector)**

145. Component 2 invited the identified project partners to send nominations of participants who met the following criteria: experience in shoemaking; good communications skills and the ability to train; and willing to share their knowledge with others.

The PMU requested nominating institutions to organize at least one training programme for the artisans immediately after the course utilizing their own resources; and make trainers available upon request.

The institutions sent the following 18 participants:

<b>Trainers from:</b>	<b>No.</b>	<b>%</b>
Karari VTC - Leather Section	4	22%
Incubator for the Development of Leather Industry	2	11%
National Leather Research Center	2	11%
Badr Charity Society	4	22%
Omdurman Guild	1	6%
Mofarih Training Centre	2	11%
Higher Institute of Zakat Sciences	3	17%
<b>Total</b>	<b>18</b>	<b>100%</b>

146. It should be noted that the Mofarih Training Center is a private training institution conducting training programmes in Khartoum and other States in Sudan. Zakat for Higher Sciences sent three (3) participants from North and South Kordofan. Zakat had requested Mofarih Training Center to train 150 artisan from River Nile, Blue Nile, North Darfu, North and South Kordofan immediately after the TOT. Zakat covered all costs including tool box for every participant.

### **Second Training of Trainers for Marquob production at NLRC**

147. The international leather footwear expert conducted the 10-day training programme from 27 June – 7 July 2009 at the National Leather Research Centre (NLRC). This was the only institution that had an appropriate venue and facilities. The Kerary VTEC Leather section was at that time not yet ready when this training took place.

The training content centered on the production of at least three different pairs of Marquob shoes, with each trainee given a marketing segment. The trainer introduced a simple but efficient designing technique to enhance the variety of styles in the market. The participants visited the Incubator, National Leather Research Center facilities, and the Khartoum Tannery for them to see the variety of support institutions available to the leather sector.



Even though the number of participants was rather high and some participants had very little previous training in footwear production (Kerary trainers), the outcome of the training was remarkable. The ToT reached the goal of acquiring a simple way to design every creative idea on the shoemakers mind including patterns. The trainer taught and asked the participants to practice the way to develop basic parts such as counter, toe puff, sandwich insole, bottom filling materials, and use pre-fabricated soles. They were also taught lasting and sole setting, which most of them mastered, but the trainer recommended further practice since they produced only three pairs of new Marquob designs.

A Marquob Training Manual was prepared by the international consultant and translated into Arabic, which the participants used during the training sessions. The project gave every participant a set of tools. The sets are the property of the organization, which they represented and as such should be returned to the organizations.

#### **Profile of the TOT Marquob Trainers**

- 148. Gender distribution: Out of the 18 participants, 5 are female (28%) and 15 are males (72%).
- Age Range: The participant's age ranged were from 25 to 56 years old. 72% of the participants were within the 26-35 years age bracket; 1 participant was 56 years old.
- Marital / Family Status: 6 were married (33%); 11 were single (61%) and 1 was divorced.
- Highest level of education reached: 11 of the participants have a BA or university degree; 4 have a secondary certificate and 3 did not give any response.
- Work experience: 7 participants (39%) have their own business in marquob making; 5 participants (28%) are working with government research and training institutions; 4 participants (22%) are trainers of Kerary VTEC and 2 (11%) were trainers of a private VTEC. 11 participants (61%) have working experience of more than 7 years while the rest of the participants have working experience ranging from 1 year to 6 years.

## The Marquob Trainers

149. The project awarded a Certificate of Attendance to the following participants who had completed the course:

	Trainer Name	Institution Represented
1	Alzein Idriss Adam Musa	Karari Vocational Training Centre
2	Asmhan Abdelnabey Mohammed Ali	Karari Vocational Training Centre
3	Yasmin Awad Mohammed Ali	Karari Vocational Training Centre
4	Sarra Ibrahim Elaaz Ibrahim	Karari Vocational Training Centre
5	Abd Almonim Mergany Ali	Leather Incubator
6	Mohammed Hussein Abdalla	Leather Incubator
7	Taj Eldeen Yaseen Mukhtar	National Leather Technology Centre
8	Ameer Hamad El Nil Salim	National Leather Technology Centre
9	Mohamed Musa Ibrahim Adam	Badr Charity Society for Leather Products
10	Yousif Abdulrahim Khamis Omer	Badr Charity Society for Leather Products
11	Mohammed Bushara Abdelrahman	Badr Charity Society for Leather Products
12	Abdelaziz Mohammed Adam Abakar	Badr Charity Society for Leather Products
13	Abdelazim Mahjoub Hassan Hussein	Omdurman Guild
14	Dina Mohammed Sa'ad	Mofarih Training Centre for Leather Products
15	Ibrahim Mohammed Almahadi Bakheit	Mofarih Training Centre for Leather Products
16	Mayouna Mohammed Ahmed	High Institute of Zakat Sciences
17	Fardous Musa Ushar	High Institute of Zakat Sciences
18	Yasin Boush Adam	High Institute of Zakat Sciences

### 3.5. TOT: Slaughtering/ skins and hides improvement

150. In order to help the community to develop the value chain of the leather sector, the PMU identified the need for skills related to animal slaughtering as a big potential for income earning and self-employment opportunities for the poor in the IDP areas. Having the appropriate skills, an amount of only SDG 150 as small capital is required to start the livelihood activity. Depending on the kind of animal slaughtered, one can earn a minimum of SDG 30 per day (SDG 20 for the slaughtering and SDG10 for the skin, which they get to keep. In the training, awareness has been created as to keeping the skins in good condition and of high quality, which in turn will increase better prices.

As such, the PMU explored possibilities with the National Centre of Hides and Skins Improvement (NCHSI) to conduct a training programme on slaughtering using the halal practice. The training covered practice on and preservation of hides and skins to obtain better prices in the market.

The PMU worked with the Center to develop an appropriate curriculum for integrating entrepreneurial concepts and to improve their existing curricula to achieve the project objectives and to enable the Centre to have a programme on a continuous basis.



For a greater outreach, the project trained 13 trainers who have been engaged in slaughtering to enhance their skills with the view to train young men and women in slaughtering, skins and hides preservation for self-employment. With the TOT approach, the project did not only upgrade the existing skills of the participants but also created a pool of trainers for training services.



For this purpose, the project used the services of Dr. Salaheldin Mohamed Mukhtar of the National Center for Hides and Skins Improvement to develop the syllabi, training guide, prepare and conduct the slaughtering/skins and hides improvement training. The PMU and the Centre, jointly conducted the TOT, entrepreneurial subjects and the Action Planning.

#### Call for Trainers from NGOs and CBOs

151. The project worked closely with the following partner organizations:

- Azza Women Association – El Fateh
- Wad El Bashir Development Association – Wad El Bashir
- Peace and Development – Al Salam
- Integrated Community Action Sudan – Haj Yousif
- Sudanese Education Network and Development – Mayo and Soba Aradi

The PMU circulated the “Call for Trainers” and concept note among the partners, who were asked to nominate a maximum of 5 candidates. Nineteen (19) candidates endorsed by their respective organization applied. Component 2 staff reviewed the applications based on the established criteria i.e. i) have been in slaughtering business for at least; ii) agree to train others and share knowledge and experience; iii) have reasonable reading and writing skills; and iv) exhibit a degree of self-confidence to be able to conduct training. The PMU selected thirteen (13) candidates who showed potential to join the TOT. They come from two national NGOs and two CBOs:

Type of organisation	Name of organisation	No. of participants
National NGOs	Azza Women Association	4
	Integrated Community Action Sudan (ICAS)	2
CBOs	Peace and Development Association (PDA)	4
	Wad el Bashir Development Association (WEBDA)	3
<b>Total</b>	<b>4 organisations / 13 Participants</b>	<b>13</b>

## THE TRAINING OF TRAINERS FOR HIDES AND SKINS

152. The PMU held the 13-day training from 5 – 21 October 2009 at three different venues:

- National Centre for Hides and Skins Improvement, Omdurman – for the theoretical sessions
- Abattoirs in Omdurman locality – for the practice sessions
- PMU Training Room – for the teaching techniques



The training comprised of 25% theory and 75% practical skills training. The training content was as follows:

COMPETENCIES	TOPICS	SUB-TOPICS
Knowledge on animal wealth sector in Sudan	Introduction to food animal and leather sector in Sudan	<ul style="list-style-type: none"> <li>Food animal and leather value chains;</li> <li>Mapping market system of food animal and leather in Sudan</li> </ul>
Knowledge on income earning opportunities in slaughtering	Slaughtering as a business	<ul style="list-style-type: none"> <li>Income earning opportunities in slaughtering</li> <li>Entrepreneurial characteristics of a good provider of slaughtering services</li> <li>Customer orientation</li> </ul>
Knowledge on types of food animals and nature of hides and skins	Introduction to food animals - hides and skins	<ul style="list-style-type: none"> <li>Structure of meat;</li> <li>appropriate techniques of slaughtering and meat cutting;</li> <li>meat utilization and by-products;</li> <li>Structure of hides and skins;</li> <li>appropriate techniques of flaying process;</li> <li>leather utilization</li> </ul>
Knowledge on application of hygiene and safe work practices	Hygiene and safe work practices	<ul style="list-style-type: none"> <li>Health regulations in the production of meat/hides &amp; skins;</li> <li>safe work practices and cleaning;</li> <li>hygiene practices in slaughtering and meat cutting;</li> <li>hygiene practices in flaying/ hides and skins</li> </ul>
Identify tools and equipment being used in slaughtering and meat cutting	Appropriate tools and equipment in slaughtering and meat cutting	<ul style="list-style-type: none"> <li>Personal tools for different food animal;</li> <li>Tool sharpening</li> </ul>



Familiarization on the treatment of hides and skins	Treatment of hides and skins	<ul style="list-style-type: none"> <li>Purpose and classification of hides and skins;</li> <li>defects/bad practices in hides and skins;</li> <li>quality production/best practices of hides and skins</li> </ul>
Knowledge and skills on hygienic slaughtering, flaying/preservation of hides and skins	Slaughtering of cows and small ruminants, flaying/preservation of hides and skins	<ul style="list-style-type: none"> <li>Procedure of slaughtering cows and small ruminants (sheep and goat); safe work practices</li> <li>Practical application of slaughtering cows and small ruminants;</li> <li>Practical application of preserving hides and skins and environmental considerations</li> <li>Cleaning practices</li> </ul>
Knowledge and skills in training	Training of Trainers	<ul style="list-style-type: none"> <li>Training Needs of those going into slaughtering services (new entrants and existing)</li> <li>Establishing training objectives</li> <li>Teaching techniques</li> <li>How to organize a training programme</li> <li>Practice teaching</li> </ul>

#### Profile of the TOT slaughtering/skins and hides improvement trainers

- 153. Gender distribution: All the 13 participants are male.
- Age Range: The participant's age ranged from 27 to 55 years old. 62% of the participants were within the 26-35 years age bracket; 2 participants fall in the age range of 36-45 years.
- Marital Status: 10 were married (77%); 2 were single (15%) and 1 (8%) was a widower.
- Highest level of education reached: 4 the participants have reached grade 4; 1 finished grade 8; while 7 participants (54%) have attended secondary education.
- Work experience: 11 participants (85%) have their own business in slaughtering, while the other two have no business in slaughtering. Five participants have a slaughtering work experience for more than 10 years; 5 for 4-6 years; 1 for 1-3 years and two participants with no experience.

**The Slaughtering/Skins and Hides Improvement Trainers who completed the course were as following:**

The project awarded a Certificate of Attendance to the following participants who had completed the course:

	Trainer Name	Organization Represented
1	Abdelshams Mustafa Salah Jildo	Integrated Community Action Sudan - ICAS
2	Deng Reng Reng	Integrated Community Action Sudan - ICAS
3	Jamal Mugaddam Mahmoud Bashir	Wed El Bashir Development Association - WEBDA
4	Hamza Alnur Salih	Wed El Bashir Development Association - WEBDA
5	Alrashid Ali Hamdan	Wed El Bashir Development Association - WEBDA
6	Omer Musa Mohammed Musa	Azza Women Association
7	Mohammed osman Ali Adam	Azza Women Association
8	Muhielidin Abdelbagi Abdalla	Azza Women Association
9	Muhammad Abdulhakim Abdulhakim Makawe	Azza Women Association
10	Hassan Tuman Alradi Alyas	Peace and Development Association
11	Soba Samr Gulam	Peace and Development Association
12	Gazafi Ali Tawer Gaydoon	Peace and Development Association
13	Nimairi Alfaki Asoum	Peace and Development Association

### 3.6. TOT: Metal Craft Bending Equipment

154. In the project operational areas, a number of entrepreneurs are traditionally and culturally engaged in metal fabrication and welding producing the same range of products: doors, window grills and household furniture like tables, beds and chairs. The TNA results showed that the metal fabrication and welding shops hire 2-3 employees and/or apprentices. It is therefore one of the manufacturing sectors that generate employment. However, the PMU observation is that these products produced by the entrepreneurs are all the same; there is not product differentiation to make them competitive. They are also limited to traditional designs, product range and processes, with little product innovation introduced.

For them to compete with the high quality imported goods (e.g. steel furniture, doors and windows) with attractive designs, the local metal fabrication/welding entrepreneurs need to improve their designs, quality and diversify their products to respond to the needs of the customer/market. This will improve and sustain their business.

The PMU in the International Trade Fair Show (2009) had identified an affordable set of equipment and tools for metal craft (Eisenkraft Equipment) that does not require electricity but has the capability to produce quality designs and products. It does not also require sophisticated skills from the operator. The PMU decided to purchase the set of equipment and give it to the partner VTCs and CBOs, who can use the equipment to train artisans and entrepreneurs as we as use it as a common facility for the entrepreneurs in the operation areas. The purchase of this equipment comes with a training package and professional trainers to reach the operators.

With this concept in mind, Component 2 implemented the Metal Craft Training and Support to Artisans Programme. Part of this is a TOT on "Introducing and Using the Eisenkraft Equipment" for sustainability and greater outreach.

#### EisenKraft metal bending equipment

155. This equipment consists of shaping and bending tools for wrought iron and metal ornamentals and furniture production. The tools are hand operated and do not require any electrical power and can do the following: cutting, punching, riveting, angle bending, scroll forming, bar twisting and rolling. One can use these tools to produce a wide range of designs and products such as gates, fences, grills, doors, windows, tables, beds, stands displays and general metalwork fabrication, which are products in demand in Sudan.



#### Call for Trainers for Metal Craft Bending

156. The PMU issued the "Call for Trainers" among the identified partner institutions. The training targeted 16 participants who met most of the following criteria:

- Nomination by their respective institutions and fill in the CV Nomination Form
- Experience metal fabricator/welders for at least 10 years
- Experience in metal fabrication/welding business for at least 5 years
- Minimum Craftsman Certificate (as applicable)

- Willing to abide by the terms and conditions of the UNIDO Project
- Availability to attend the full training course
- Must have good oral communication skills and have the ability to train others
- Willing to share knowledge with others
- Must be able to understand and speak Basic English

The following 19 participants were selected and the distribution was as follows:

<b>VOCATIONAL TRAINING CENTERS</b>	
Halfait Al-Molouk Vocational Training Centre	3
Kerary Vocational Training Centre	1
St. Vincent de Paul Society	2
St. Joseph Vocational Training Center	2
Ikhbari Vocational Training Center	1
<b>NGOs/CBOS</b>	
Integrated Community Action Sudan - ICAS	2
EASU Development Organization (EDO)	2
Wed El Bashir Development Association - WEBDA	2
Azza Women Association (AWA)	1
<b>Total (9 organizations/16 participants)</b>	<b>16</b>

#### The Training of Trainers for Metal Bending

157. The training consisted of two parts. The first part is the technical/practical 4 days training that explained the "Eisenkraft" tools for cutting, bending and forming (i.e. practical set, master set and embossing/different molding and its accessories). It focused on using different tools and functions in addition to different product designs. The training guided participants from the introduction phase through to finished designs and products. Each training day consisted of 8 hours with three practical sessions.



The second part of the training (2 days) covered the setting-up of a common facility center within the participating organizations or self-help group of metal fabrication/welding entrepreneurs in the IDP areas, with a facility to provide training, introduce the use of metal craft equipment for production.

Mr. Siegfried Sauerschnig, Technical Director of EisenKraft facilitated the first part of the training programme while the PMU covered the second part. The project conducted the training at the Halfait VTEC in February 2010.



### Profile of the Trainers for Metal bending

- 158. Gender distribution: All the 16 participants were male.
- Age Range: The participant's age ranged from 26 to 49 years old. 75% of the participants were within the 26-45 years age bracket; 3 participants fall in the age range of 46 -55 years old.
- Marital Status: 11 were married (69%); and 5 were single (31%).
- Highest level of education reached: 6 of the participants were engineering/technical university graduates; 5 had vocational training diplomas and 5 had secondary certificates.
- Work experience in metal craft/welding: 3 of the participants had practical experience for more than 21 years; 6 had 11-20 years' experience; 2 had 6-10 years; 3 had 1-5 years' experience and 2 had less than 1 year.
- Ten (10) participants (62%) had their own business in metal craft or welding with five of them having been in business for more than 10 years.



The project awarded a Certificate of Attendance to the following participants who had completed the course:

	Trainer Name	Organization/Institution Represented
1	Japhet Onzi Gabriel Paul	Integrated Community Action Sudan - ICAS
2	Rizik Zulkifli Shabaan	Integrated Community Action Sudan - ICAS
3	Simon Samuel Baabangbe	EASU Development Organization (EDO)
4	Awad Adam Babikir	EASU Development Organization (EDO)
5	Gabriel Paul Majok	St. Vincent De Paul Society
6	James Kuyu Francis	St. Vincent De Paul Society
7	Yousif Abdalla Musa Dahia	Wed El Bashir Development Association - WEBDA
8	Alsadiq Suliman Is'hag Ibrahim	Wed El Bashir Development Association - WEBDA
9	Jovan Odera Jino Lorym	St. Joseph Vocational Training Centre
10	Badwi Ojar Komi	St. Joseph Vocational Training Centre
11	Hassaballa Hamid Hassaballa	Halfait Al-Molouk Vocational Training Centre
3.7. 12	X Mohammed Ali Ahmed Ali	Halfait Al-Molouk Vocational Training Centre
13	Mohamed Tom Hago Abd Algader	Halfait Al-Molouk Vocational Training Centre
3.8. 14	X Isam Eldeen Hussian Khalifa	Kerary Vocational Training Centre
3.9. 15	X Sharaf Eldeen Mohamed Sharaf Eldeen	Azza Women Association (AWA)
16	Abdalla Abdelrahim Sabour	Ikhbari Vocational Training Centre

### **3.7. TOT: Product Design and Development**

159. Target beneficiaries of Component 2 are existing entrepreneurs from the IDP and poor areas of Khartoum to benefit from business and technical training and advisory services. The project has been working with two artisan societies. BADR – Society of Leather Works located in Abu Ziad Market, near Umbada is composed of 300 artisans producing footwear and leather goods. The members come from the IDP areas. The Heritage Guild of Artisans and Handicraft established in 2006 with the assistance of the International Volunteers Welfare Group (IVWG) have 200 members (micro and small-scale entrepreneurs) engaged in different crafts: wood, leather, tie and dye, silver and goldsmith. Their basic aim is to preserve the traditional crafts of high quality of Sudan while at the same time creating livelihoods for themselves.

Like other micro entrepreneurs in Sudan, their businesses have not grown because of the inherent firm and institutional level constraints. One firm level constraint is their inability to position their products in the market. They lack knowledge on market trends and product design. For instance, leather products producers consider only folkloric designs without taking into consideration the functionality of the product and market trends. The “copycat” mentality on product design is prevalent among the artisans hence there is no product differentiation to make them more competitive. Entrepreneurs lack the capacity to conceptualize designs for product improvement, quality and innovation.

In Sudan, particularly Khartoum, there are no service providers addressing the entrepreneur’s needs for product design. To address this need, the project established the “Product Design for Artisans Programme” (PDA Programme). The Programme developed a pool and a network of product design advisers, who would be providing design consultancy services to micro entrepreneurs and artisans at affordable fees. The project drew the pool from the unemployed and under-employed fine arts graduates in Khartoum with the view that the skills they obtain from the Programme will allow them to have a source of income and at the same time training micro entrepreneurs to develop.

#### **Services Offered by the PDA Programme**

160. The network of product designers trained by the programme has developed a capacity to provide the following services to the micro entrepreneurs and artisans for improved and innovated products and services for the following:

- Improved product design for their existing products
- Develop new products and new designs – enlarge product range
- Conversion of “waste” into products that have a market
- Train entrepreneurs in the concept of product design

## **Institutional Framework for the PDA programme**

161. Component 2 linked up with the Sudanese Plastic Artist Union, which is an association of artists in Sudan. The Union has agreed to house and manage the PDA programme to support the artisans.

As the implementing organization of the PDA Programme, the Union will support business support modalities to entrepreneurs:

- Offer design services to artisans, micro and small-scale entrepreneurs using the pool of product designers trained by the PMU at affordable fees established by the programme.
- The designers will give a pre-agreed percentage of their fees to the Union to help pay for the coordination function for financial sustainability purposes.
- A coordinator is to be assigned to link clients to the designers.

## **The Process of Establishing the Programme**

162. The PMU prepared the concept note for the Product Design for Artisans Programme. UNIDO hired Ms. Lidwina Dox, International Consultant for Design and Product Development to help develop the details and technical inputs/training required. To start this process, the consultant undertook an assessment mission from 5 – 11 December 2009. During this mission, the consultant visited several workshops of artisans including Omdurman Guild, BADR and Ustratuna VTC; and the handicraft markets. Major findings are as follows:

### ***Products and Produce Design Needs***

163. Most artisanal products on the market are poorly designed and are mostly copies; and sold at a very high price to the market. There is lack of product variety and authentic creative solutions in the different existing categories with poor finishing. In addition, producers use very expensive raw materials because of tradition. This makes the price even more expensive.

- In the wood sector, the candleholder is one of the most popular items made by the local crafts men who combine it with ivory (which is illegal) or bones. The prices are high for that specific type of product. One can hardly find any other interesting wood products, except for the wooden statues, which traders mostly import from Kenya.
- The traditional textile sector is poorly developed. Women are into "tie-dye" which was probably introduced to them long time ago through other projects. These textiles products have a poor market.
- The leather crafts men use many different skins from snakes and crocodiles - most bags and purses look to folkloristic to attract the market. Though the leather crafts people at Suq- Abu Zaid, work under very difficult conditions they come up with products of much higher potential. They are producing for example traditional leather bags to transport food and goods with camels.

### ***Artisans Market***

164. The artisans are only selling to the local market and they have not positioned themselves. The PMU found that none of the artisan associations have a well-designed display area to attract customers or a demonstration workshop. Basic enterprise and business development skills are required by the crafters.

### **Priorities for Improved Design Services to attract a Market**

165. The PMU and the consultant agreed to focus the design services on several sector in order to create as strong design and product development basis to be applied to other sectors. The training was conducted for one month with the following objectives:

- Provide design consultancy services at affordable fees
- Sell their designs also at affordable fees
- Develop cooperation and business together with the entrepreneurs
- Provide marketing support
- Develop innovative design basis for Sudanese crafts

### **Call for Trainers/PDA Designers**

166. The PMU issued the call for trainers/designers to the partner artisan associations, the Khartoum State University – Fine Arts Department, Kerary –VTEC, and the Sudanese Plastic Artist Union. Qualifications required were as follows:

#### ***Qualifications of the Product Design Advisers***

**Education:** Having a minimum qualification diploma in Fine Arts or related course

Thirty-six designers/artisans applied. The PMU and the consultant interviewed the applicants and selected twenty-one (21) participants to attend the 4-week training programme. The four trainers of Kerary VTEC leather section joined the second half of the training. The PMU also selected additional eight (8) to join the training on recycling.

### **The PDA Training Programme**

167. The core-training programme was for 4 weeks divided into two parts. The first part was a Basic Introductory Course on Design and Product Development. The second part was applying the knowledge gained in the first part into actual products/product development and recycling. In between the training programmes, the PMU conducted a one-week training for the participants on entrepreneurship, marketing and design extension services.



The consultant conducted the training in February 2010. The PDA course include the following:

- Theory on Design and Product Development
- Design exercises/creativity processes/and creativity rules
- Identity for a holistic view on design and product development
- Development of supportive “work” lists with team work
- Prototyping to translate practical exercises into designs and products

The second workshop was held from 21 -31 March 2010. The 10-day training was divided into the following parts: A) Reviewing, analysing, upgrading and redesigning the prototypes from the first workshop; B) Recycling (all kinds of materials and paper recycling; C) Additional exercises (on-the-job training and design of display area layout). The training focused on the translation of the learned and discussed theories from the Part 1 training into actual design, product development, functional products, free experimentation in recycling and into other general activities supporting their future work as advisors.



### **A. Reviewing, Analysing, Upgrading and Redesigning of Prototypes (1 week)**

168. The idea behind this first week exercise was to create the awareness that good design and product development does not automatically lead to a well-functioning product. There is always the need to raise the questions: Does it work? How to continue? Many factors can influence and decide if a product works or not such as: price and availability of raw materials, production costs, personal abilities, available tools, function, durability, safety, aesthetics, market needs, and others. Design and product development needs to be an on-going, never ending process to assure good results and to make craftspeople good and successful players on the market; especially if one has to compete with Chinese, Kenyan and second hand products.

## B. Recycling

169. The second week focused on waste and recycling products. Due to the expensive raw materials in Khartoum, alternative possibilities need to be developed. The mentality of the craftsmen is driven by the attitude that traditionally waste material (plastic, containers, canes, bottles, tyres, clothes, jute, leather waste and others) is not being used for production in Sudan. Discussions and experimentation with other materials had to take place for them to start accepting alternative ways of thinking and slowly to become ready to see waste and other free materials as potential raw materials as an input for new products. Two groups were formed: 1) the general recycling group with variety of materials and 2) the paper recycling group.



Interesting prototypes were the following:

- ⇒ Bags and sandals made out of the interior of tyres
- ⇒ Old plastic bags sewn together to make floor cushions
- ⇒ Printing of recycled plastics and made into place mats
- ⇒ Seats made out of tyres and old jute bags
- ⇒ Electric cooling system out of all kinds of garbage
- ⇒ Seats developed out of drift wood from the Nile



The participants were motivated with regard to creativity and productivity. Some stated, "It took us 5 days to understand the strength of alternative raw materials, even garbage, now we need more time to learn more and better how to translate this into products. We need to start to change our way of thinking". The team took pride in the concepts/products produced and understood the market potential. Press coverage was given by the Alsharg A TV documentary institution.

## Paper Making

170. The PMU invited Genet Alemu, a paper artist from Ethiopia to support the project on paper making techniques for 5 days. Trainers and trainees from Ustratuna VTEC and workshop participants joined the training, which focused on basic introduction into different types of making paper and small objects. This training was seen as a starting point in designing products out of recycled paper (e.g. interior objects, books, fashion accessories, packaging). Participants started making paper products by following professional methods to produce higher quality and potentially better designs than the ones they used to make before training. They managed to incorporate the country's cultural and artistic heritage in the design process, and were able to produce stronger paper combining fibre with recycled paper.



## Product Exhibition and launching of the PDA Programme

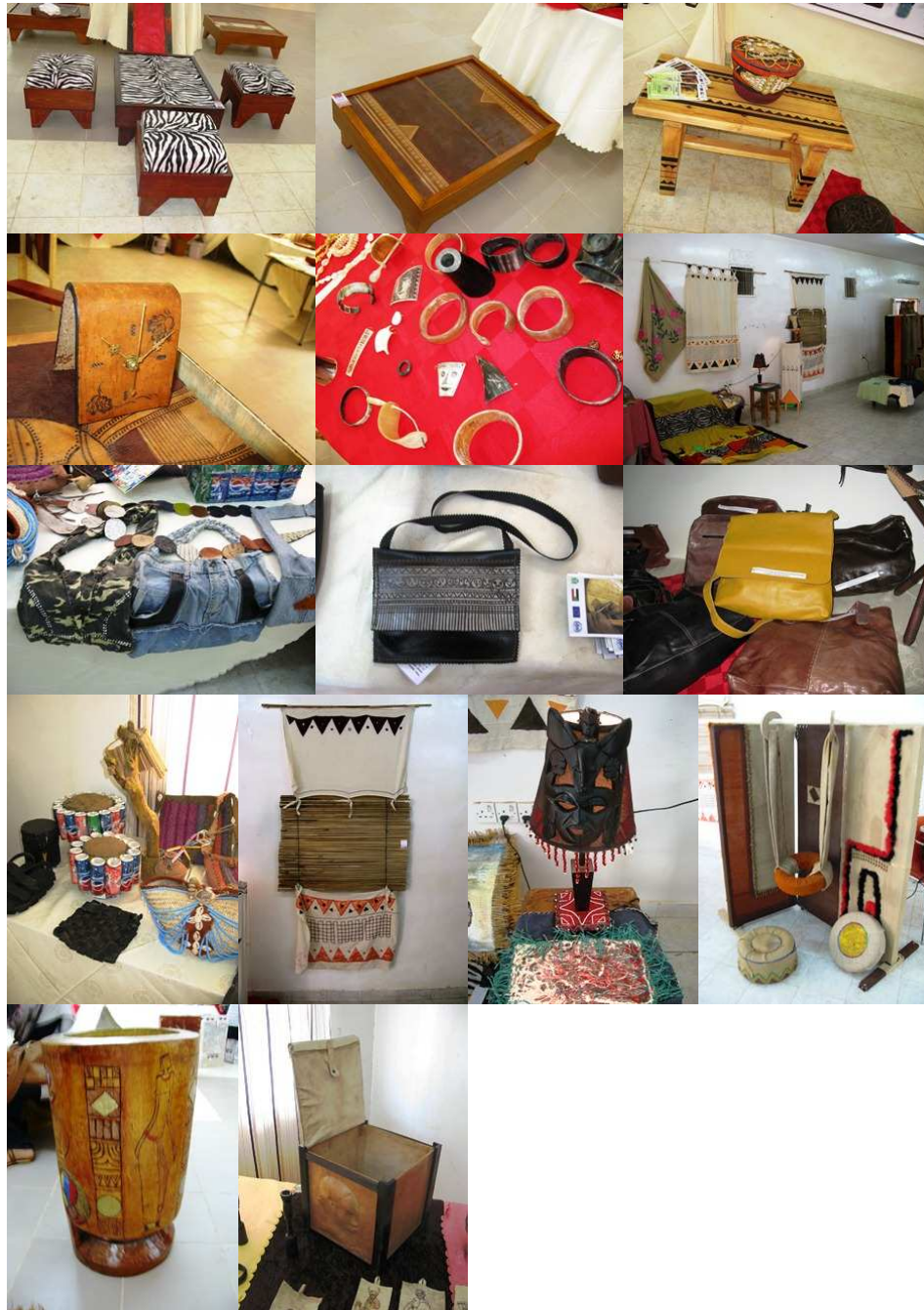
171. Following the training, the PMU organized the launching of the PDA Programme with an exhibition to showcase the product prototypes developed by the PDA advisers together with artisans and trainees. The objective was to send out the message of the importance of product design in marketing as well as to promote the Business Development Services offered by the PDA Programme. The exhibition was held at the Ustratuna Vocational Training Center on 5-7 August 2010. The first day was the opening of the exhibit where the PMU also awarded the training certificates to the Advisers. The Director General of the Khartoum State Vocational Training Center launched the programme in behalf of the Khartoum State High Commissioner for HRD, which also saw the participation of Government officials, Agency Representatives, VTEC Directors, artisans, and entrepreneurs.

### 172. Overview of items exhibited:











173. The PMU awarded certificates to the following participants who attended the PDA Programmes:

No	Name	No	Name
	<b>Core Design Advisers</b>		<b>Paper Recycling Group</b>
1	Khalid Elbakheit	1	Tayba Adam Osman
2	Walid Alssayed Suliman	2	Nwar A/Almalik A/Allah
3	Tayba Adam Osman	3	Shama Alhag Mohamed
4	Mohamed Bashir A/Gibril	4	Fatima Fateh-Alrahman
5	Sidig Ahmed Elbadawi	5	Iham Fadul Musa
6	Mohamed Ebaid Fadl-Allah	6	Fayha Sayed Osman
7	Azza Sir Elkhatim	7	Rizg Allah A/Allah
8	Taiseer A/Al-Gadir Salim	8	Sara Nor-Aldaiem
9	A/Al-Moniem A Hamza		
10	Amani Zain-Alaabideen		
11	Inas Ibrahim Mohamed		
12	Salah Gad Allah		
13	Fatima Hassan Ibaaof		
14	Yasir Idris Mohamed		
15	Rabab Mohamed Hassan		
16	Abdul-Hamid A/Allah Eisa		
17	Isam-Aldin Alaagib Alkhidir		
18	Salih Kamal Hamad		
19	Ahmed Elsharif Aboud		
20	Ahmed Rumba		
21	Said Baraka		
22	Yasmin Awad Mohamed Ali		
23	Alzain Idris Adam		
24	Asmahan A/Alnabi		
25	Sara Ibrahim		



### 3.8. Organizational Capacity Building and Training Facility Support to NGOs/ CBOs

174. The PMU, in its analysis concluded that that building the technical training capacity of the project partners is not sufficient. Hence, in January 2009, the PMU conducted a workshop with the 21 partners to assess their organizational capacity training needs for them to better manage their organizations, thereby also ensuring the sustainability of the training services. The workshop focused on issues such as organizational effectiveness. General needs identified were the following:

Leadership, Governance & Strategy	Financial Issues	Administration & Human resources	Project Design & Management
Strategic Planning	Computerized accounting	Human resources Mgmt.	Monitoring and Evaluation
leadership skills	Financial Management	Managing Volunteers	Project Management
Facilitation skills	Fund Raising	Office Management	Log-frame
	Resource Mobilization	Information Documentation	Proposal Writing
	Bookkeeping	Data Analysis	Report writing
			Project rapid appraisal
			How to prepare budgets
			Fund raising

Managing Facilities and Equipment	Networking & Advocacy	Community Ownership & Accountability
Office equipment and furniture	Partnership outreach	Community mobilization
Tables and chairs for training	Advocacy	Gender awareness
Computers	Negotiation skills	Behaviour and attitude of development practitioners
Training room		

#### 3.8.1. Training Programme on Essentials for managing an association

175. Targeting the training needs, the PMU organized a training programme on Essentials of Managing an Association (EMA) for 16 partner NGOs/CBOs during the period 14 June – 15 July 2009.

The PMU trainers divided the organizations into four groups according to the language and the nature of work of each organization. The PMU invited the Executive Committee members of the following organizations to attend the workshop and seventy-six (76) participants (42% Females and 58% males) attended the training.

- Azza Women Association (**AWA**)
- Peace and Development Association (**PDA**)
- Women Empowerment Society (**WES**)
- CAFA Sudanese Community Development Association (**CAFA**)
- Sudanese Education Network and Development (**SENAD**)
- Integrated Community Action Sudan (**ICAS**)
- Ustratuna Sudanese Association for Disabled Children (**USRATUNA**)



- The Heritage Guild of Artisans and Handcraft, (**Omdurman Guild**)
- Wed Al-Beshir Development Association (**WEBDA**)
- Bilal Bin Rabah Development Association (**BBR**)
- Badr Charity Society for Leather Products (**BADR**)
- EASU Development Organization (**EDO**)
- Women Association for Qualification & Development ( **WAQD**)
- Sudanese Association for Child and Mother (**SABA**)
- Mass and Development for Relief ( **MASS**)
- St. Vincent De Paul Society (**SVDP**)

Group 1	Group 2	Group 3	Group 4
WEBDA	WES	BADR	EDO
SENAD	WAQD	Omdurman Guild	PDA
ICAS	SABA	USRATUNA	SVDP
CAFA	MASS	AZZA	BBR

176. The PMU conducted the training on the following premises and inclusive dates:

Group	Venue	Dates
1	USRATUNA	14-17 June 2009
2	Zakat	21-24 June 2009
3	USRATUNA	5 -8 July 2009
4	Zakat	12- 15 July 2009

#### The EMA Training Programme

177. The main objective of the training was to help the NGOs/ CBOs to internalize the basic concepts of managing an association to enhance their capacities to sustain development and training services to members and beneficiaries within their respective communities of operation. The training programme should enable CBO/NGOs to:

- ✓ Position their agency in the development of their community, State and the country
- ✓ Internalize the essential elements for an effective functioning NGO/CBO
- ✓ Analyse their own performance as leaders and take necessary measures to improve their performance
- ✓ Understand the different steps in planning and implementing an association project
- ✓ Identify steps needed as Executive Committee members in improving the overall functioning of their CBOs/NGOs as well as steps needed to sustain entrepreneurship and technical skills training services.



The training programme was based on the UNIDO training manual "Essentials of Managing an Association", while the PMU adapted the manual to the Sudanese context, with a translated training guide in Arabic.

### ***Training Contents***

178. The training programme was divided into four modules, with the following themes as illustrated in the table below:

<b>Module</b>	<b>Contents</b>
Module 1:  Role of NGOs/CBOs in the development of the community, the Khartoum State and Sudan	<ul style="list-style-type: none"> <li>• Development and Change</li> <li>• Role of NGOs/CBOs in Economic Development</li> <li>• Participatory Approach to Development through associations</li> <li>• Self-Awareness and Sharing</li> <li>• Value Auctioning Game</li> <li>• Building from Our Resources Game</li> </ul>
Module 2: Functioning Of an Association	<ul style="list-style-type: none"> <li>• Puzzle Game</li> <li>• Situations that call for group decision making</li> <li>• Problem Identification</li> <li>• Determining the Cause of the Problem</li> <li>• Choosing the Solution</li> <li>• Implementing the solution</li> <li>• Group Conflict Situations</li> <li>• Conflicts</li> <li>• Roots of Interpersonal Conflicts</li> <li>• Blind Fold Exercise</li> <li>• Completing a Task Game</li> <li>• Role of leaders and members</li> <li>• Choosing Appropriate Leadership Behavior</li> <li>• Group Leadership Qualities and Behavior</li> <li>• Preparatory Activities</li> <li>• Preparing the Agenda</li> <li>• Conducting the Meeting</li> </ul>
Module 3: Introduction to Project Planning and Implementation	<ul style="list-style-type: none"> <li>• Project development cycle</li> <li>• Identifying Training Needs</li> <li>• Setting Training Objectives</li> <li>• Training Content</li> <li>• Target Group</li> <li>• Training Cost</li> <li>• Calculating the break-even number of participants and training fees</li> <li>• Organizing the training programme</li> <li>• Concept of self-help groups</li> <li>• Projects they can do as self-help groups</li> <li>• Examples of group projects that solve common enterprise problems</li> </ul>

Module 4 Functioning of the NGOs/CBOs Executive committees	<ul style="list-style-type: none"> <li>• Visioning Exercise</li> <li>• NGOS/CBOS 's goals and objectives</li> <li>• Strategic Activities to achieve the objectives</li> <li>• Role of the Office Bearers</li> <li>• Role of the Members</li> <li>• The Executive Management Committee</li> <li>• Action Plan Format</li> </ul>
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### 3.8.2. Training on managing and identifying facilities

179. During the needs assessment workshop, some partner organizations expressed a need for a “training shelter” in their respective localities where they can continue to provide training as well as hold community meetings. The PMU had confirmed this need during the visits to the IDP areas. It was agreed that in addition to providing the partners with capacity building knowledge, including training packages, it should also include infrastructural support to implement training and entrepreneurship programmes in their communities.

The PMU developed the following criteria for partners to qualify for the support:

- Officially registered with HAC
- Have on-going activities in the IDP areas
- Non-availability of training or community centers in their operational areas
- They have a legal right to the land where the training center will be built (i.e. owned or rented; and if rented
- Proven need for training requirements and interest to use the training center

Prior to putting up the training shelters, selected CBOs/NGOs had to meet the legal requirements, for the construction of the shelter (e.g. construction permit), including notifying the local village council. The CBO/NGO submitted the following documents:

- ✓ Copy of legal documents as to the land where the training shelter is built or copy of their lease agreement with the landlord and consent to build a training shelter
- ✓ Endorsement from the local or village council to build the training shelter

180. A participatory approach was followed for the building of the training shelter, whereby the CBO/NGO undertook the following:

- ✓ Mobilization of the community members to help in putting up the training shelters
- ✓ Ensuring the safety of the construction materials against theft and pilferage
- ✓ Supervision of the work done by the contractor

## Description of the Training Shelter

181. Each training shelter has a total area of 72 square meters (9 sq.m. x 8 sq.m.). It is a semi-permanent structure but erected with the concept of easy dismantling and portability were needed for transfer of the training shelter to other areas. The design also took into consideration ventilation and use of natural light. The PMU equipped each center with desks, chairs, and white/chalk board. A total of 15 shelters have been set up.



TRAINING EQUIPMENT AND SUPPORT FACILITIES TO PARTNER CBOs/NGOS						
NAME OF NGO/CBO	Location of Training Shelters	Desks & Chairs	White Board	Flip Chart stand	Fling Cabinet	Containers for Storage
<b>A. WITH TRAINING CENTERS TO BE BUILT</b>		12 for each				
1.Mass and Development for Relief - MDR	Peace Camp	yes	yes	yes	yes	yes
2.EASU Development Organization - EDO	Abu-Aadam	yes	yes	yes	yes	yes
3.Women Association for Qualification & Development - WAQD	Mayo	yes	yes	yes	yes	yes
4.Badr Charity Society for Leather Products	Umbada	yes	yes	yes	yes	yes
5.Azza Women Association	El Fateh	yes		no	no	yes
<b>B.OTHERS</b>						
6. CAFA Sudanese Community Development Association		no	no	yes	no	yes
7. Integrated Community Action Sudan - ICAS		yes	yes	yes	yes	yes
8. Wed El Bashir Development Association - WEBDA		yes	yes	yes	yes	yes
9. Sudanese Association for Child and Mother - SABA		yes	yes	yes	yes	yes
10. SENAD (Sudanese Education Network & Dev.)		yes	yes	yes	yes	yes
11. Bilal Bin Rabah		yes	yes	yes	yes	yes
12. Women Empowerment Society		yes	yes	yes	yes	yes
13. Peace and Development Association (PDA)		yes	yes	yes	yes	yes
14. Ustratuna Sudanese Association		no	no	no	no	yes
15. Omdurman Guild		yes	yes	yes	yes	yes
<b>Total</b>		<b>156</b>	<b>12</b>	<b>13</b>	<b>12</b>	<b>15</b>

#### 4. Building a Sustainable Linkage and Synergy between Partner NGOs/CBOs and the Khartoum State VTECs

182. To establish a sustainable linkage and synergy between Components 1 and 2 and as part of the project's exit strategy, the PMU organized a Coordination Workshop for the CBOs/NGOs and the VTECs on 09 August 2010 at the Halfait VTEC.



The workshop aimed on the part of the VTECs:

- To introduce the CBOs/NGOs operating in the poor/IDP areas of Khartoum State and the initiatives they take
- To familiarize the VTECs on the important and potential role of the CBOs/NGOs in disseminating information to the target beneficiaries on the courses offered by each VTEC and in preparing prospective trainees through the pre-vocational training programmes/

183. On the part of the management of VTECs, the workshop aimed to achieve the following:

- To familiarize the NGOs/CBOs on the courses offered by the VTECs, the intake policies and procedures for enrollment
- To inform the NGOs/CBOs about the VTEC facilities and training programmes it can offer to their clients

184. Sixteen NGO/CBO partners, the 5 VTEC Directors and the 5 VTEC Marketing Officers attended the workshop facilitated by the PMU staff.

The Director-General of the KSVTA Unit opened the workshop. Each NGO/CBO introduced their respective organizations. The VTEC Managers presented the course offerings and discussed the intake policy and procedures of enrollment.

After the introductions, the PMU divided the NGOs/CBOs according to their proximity of their operational areas to the VTECs. They discussed and agreed on possible areas of collaboration and methodology of communications.

On 11 August 2010, the PMU took the NGOs/CBOs to visit the facilities of the 4 VTECs. The VTEC Directors organized the briefings.



On 26 August 2010, the Khartoum State High Commissioner for HRD met with the NGOs/CBOs at her office. She enjoined them to continue liaising with the Khartoum State and the VTECs and assured them of the continued support from the State of the activities started by the project. The High Commissioner recognized the important role of the NGOs/CBOs in reaching out to the urban poor/ IDPs of the State.

## **Summary note on the status of Result 1**

185. The project inputs and results under this component have provided Khartoum State with a cohesive group of CBOs/NGOs who have the capacity to implement EDP training programmes and to organize vocational/skills training programmes in an informal setting. The majority of the NGOs/CBOs, however, have the attitude that they cannot implement training activities without outside funding. The PMU has tried to address this issue at the EMA Training as follows: Training should have a self-financing approach to be taken by the CBO/NGO, while different methodologies such as: charging a token fee, and organizing training programmes three times a week on a two-hour basis or integrating training during community meetings.

The training shelters established in the five areas are providing a facility not just for training but also for other community activities in the area and have a broad based purpose, which is well appreciated by the beneficiaries.

Communication linkages have been opened between the NGOs/CBOs, the Khartoum State and the VTECs which is the first step towards building sustainable collaboration among all the actors for intended project beneficiaries, for them to have access for vocational training services. The pre-voc programme is contributing to these linkages.

**Assessment of progress made in implementation of activities (percentage of completion): 100%**

## Result 2

186. Increased access of the urban poor, especially the youth and women, to demand oriented vocational skills and entrepreneurship training to widen the human resources base in support of self-employment opportunities

### *Indicators*

- Number of beneficiaries from the IDP areas (at least 1,000 – disaggregated by gender) endorsed by NGOs/CBOs trained by the VTCs)
- Number of beneficiaries (at least 1,800 in technical areas and 900 in EDP – disaggregated by gender) from the IDP communities trained by partner CBOs/NGOs
- One-third of the beneficiaries have found employment and 15% have established or improved their business after completion of training;
- Increased sales and net worth because of the improvement in the product and business operations of existing micro entrepreneurs trained.

### **Process, Major Activities and Status**

#### **5. Institutional sustainability of partner NGOs/CBOs to continue providing training services established**

187. To achieve this, Component 2 had established the following mechanisms:

- Partner NGOs/CBOs participating in the TOT programmes agreed to conduct the training as part of the services they offer in the community, while using their own resources. The Project did not provide any direct financial support; it only provided training stationery, training materials and tools required by the training.
- Pilot training programmes after the TOT was on a cost-sharing basis with the NGOs/CBOs where they provided in-kind contribution such as use of the training venue, time of the members in publicizing the training programme, recruitment of beneficiaries, and monitoring of trainees.
- The partner NGOs/CBOs were encouraged, although not fully adopting this approach to charge nominal fees from the trainees to cover some of their overhead expenses in conducting the training programme. This is following the principle that when people see the value of the training programme, they will be willing to pay for it.
- Partner NGOs/CBOs were encouraged to split the training sessions and modules into 2-3 hour training sessions spread over the week for cost-effective purposes and to conduct training according to the time availability of the trainees.
- For the Reflect EDP, Component 2 invited only NGOs/CBOs that are conducting literacy courses. The project envisioned that the REFLECT-EDP would be an additional tool to conduct literacy courses while at the same time teaching their participants skills to establish livelihood activities, thus preparing them for entrepreneurship.



## 6. Training Programmes and Interventions Implemented for the Direct Beneficiaries

### Training on Entrepreneurship Development (EDP)

#### 6.6. EDP Pilot Training TOT

188. After the first TOT-EDP, the PMU in collaboration with the partner NGOs/CBOs organized an EDP pilot training. The idea behind the pilot training was to expose the trainers on how to organize and conduct the EDP training. The 27 trainers conducted six (6) pilot EDP training programmes attended by 144 beneficiaries (50 female and 64 male). The PMU divided the trainers into 4 groups where they assigned a lead CBO/NGO to facilitate the process. They agreed on the criteria for selection, disseminated the training in their respective areas, conducted the selection process, planned the training programme and agreed on the modules/sessions each one will handle.

EDP-Pilot Training

	Lead CBO/NGO		Start - End	# participants			Venue
				female	male	total	
1	Peace & Development Association	PDA	13 - 24 Aug, 2008	5	15	20	PDA centre, Al Salam Camp
2	Wedal Bashir Development Association	WEBDA	14 - 25 Aug, 2008	9	11	20	WEBDA centre, Wedal Bashir Camp
3	Ustratuna Sudanese Association for Disabled Children	USADC	18 - 28 Aug, 2008	11	7	18	USADC Vocational Training Centre, near Ahfad University
4	Ustratuna Sudanese Association for Disabled Children	USADC	20 - 30 Aug, 2008	11	7	18	
5	Sudanese Education Network & Development	SENAD	20 - 31 Aug, 2008	6	12	18	St. Joseph Vocational Training Centre, old Industrial Area
6	Ranna Charitable Organisation	Ranna	21 - 31 Aug, 2008	8	12	20	Ranna Vocational Centre, Halfayet Al Muluk
Totals				50	64	114	
Percentage Distribution				44%	56%	100%	

189. During the training, the participants identified the businesses they want to establish, did a market study and prepared their draft business plan. The trainers helped the beneficiaries finalize their business plans.

Pilot Training: Simulated Exercise on Risk Taking



Graduates of EDP Pilot Training PDA Group



#### 6.7. **EDP Training conducted by the partner NGOs/CBOs**

190. Eleven partner NGOs/CBOs conducted in total 45 EDP training courses attended by 886 beneficiaries, 429 (48%) of whom are female over the period November 2008 – July 2010.

- Bilal Bin Rabah operating in Al Salam trained 107 beneficiaries (45 females and 62 males) over the period May - October 2009.
- WAQD from Mayo trained 30 females in June 2009. In November 2008, St. Vincent trained 2 females and 7 males, total of 9 in Soba Araddi.
- Azza Women Association trained 107 individuals (91 females and 16 males) over the period July – November 2009.
- Sudanese Organization for Culture and Development (SOCD) trained 66 individuals (17 females and 49 males) over the period March – July 2010.
- Usratuna Vocational Training Center for the disabled had trained 38 of their graduating students in EDP. They also conducted EDP training for 19 disabled beneficiaries (9 female and 10 male) whom Mofarih Training Center had previously trained on leather craft. Zakat for Higher Sciences, through the intervention of the PMU funded the EDP training for the disabled.
- SENAD and CAFA jointly delivered EDP training courses for 207 participants in the IDP areas (96 female and 111 male). Oxfam and CRS hired these two NGOs to provide the EDP training services.

# EDP CONDUCTED BY PARTNER NGOS/CBOs

NGO/CBO	Date	# of Participants			Venue
		F	M	Total	
Bilal Bin Rabah	May 2009 (3)	24	38	<b>62</b>	Al Salam
	Aug 2009 (1)	14	3	<b>17</b>	Al Salam
	Sep 2009 (1)	5	14	<b>19</b>	Al Salam
	Oct 2009 (1)	2	7	<b>9</b>	Al Salam
WAQD	Jun 2009 (1)	30	0	<b>30</b>	Mayo
St Vincent	Nov 2008 (1)	2	5	<b>7</b>	Soba Araddi
St. Joseph	Dec 2008 (5)	40	80	<b>120</b>	St. Joseph VTC
WEBDA & PDA	Feb – Apr 2009 (8)	84	101	<b>185</b>	Wedelbashir & Al Salam
Usratuna	Mar 2009 (2)	15	23	<b>38</b>	Usratuna VTC-Omdurman
	June 2009 (1)	9	10	<b>19</b>	Usratuna VTC-Omdurman
SENAD & CAFA	Oct 2008 (1)	20	0	<b>20</b>	Soba Araddi/for Oxfam
	Jan 2009 (1)	8	12	<b>20</b>	Umbadda/for Abrar Org.
	Feb – June 2009 (8)	68	99	<b>167</b>	Jebelawlia/for CRS
AZZA	Jul 2009 (1)	15	3	<b>18</b>	Alfateh
	Aug 2009 (2)	23	11	<b>34</b>	Alfateh
	Sep 2009 (1)	10	1	<b>11</b>	Alfateh
	Oct 2009 (1)	14	1	<b>15</b>	Alfateh
	Nov 2009 (2)	29	0	<b>29</b>	Alfateh
SOCD	Mar 2010 (1)	6	14	<b>20</b>	Haj Yousif
	Apr 2010 (2)	6	26	<b>32</b>	Haj Yousif
	Jul 2010 (1)	5	9	<b>14</b>	Haj Yousif
		<b>429</b>	<b>457</b>	<b>886</b>	
		<b>48%</b>	<b>52%</b>	<b>100%</b>	

## 7. Pre-Vocational Training Programme

### 7.6. Pre-Voc Pilot Training

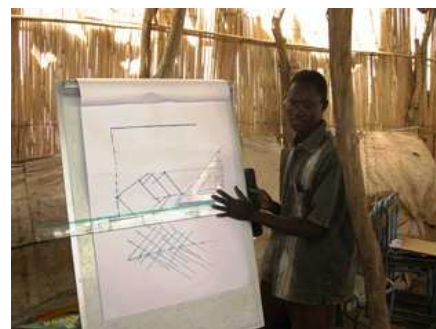
191. As part of the TOT process, in order to provide new opportunities to the youth, each participating NGO/CBO partner conducted pilot –pre-vocational training programmes in their respective regions in February/March 2009. One hundred eighty two (182) young boys and girls attended the training (75% male and 25% female). Details are as follows:

	NGO/CBO	Date	# of Participants			Venue
			F	M	Total	
1	WES	22/02-01/03, 2009	1	19	20	WES centre-Jebelawlia
2	CAFA	22/02-01/03, 2009	6	12	18	CAFA centre-Umbadda
3	Omduran Guild	23/02-02/03, 2009	5	16	21	Omdurman Guild Centre Omdurman
4	Usratuna	01/03-07/03, 2009	9	12	21	Usratuna VTC-Omdurman
5	SENAD	24/02-02/03, 2009	1	19	20	SENAD centre-Mayo
6	AZZA	24/02-05/03, 2009	5	17	22	Women centre-Alfateh
7	WEBDA	25/02-04/03, 2009	9	11	20	WEBDA centre-Wedelbashir
8	PDA	01/03-07/03, 2009	9	11	20	PDA centre-Al Salam
9	ICAS	01/03-07/03, 2009	1	19	20	ICAS centre-Haj Yousif
<b>Total</b>			<b>46</b>	<b>136</b>	<b>182</b>	
			<b>25%</b>	<b>75%</b>	<b>100%</b>	



## 7.7. Pre-Voc Training Conducted by Partner NGOs/CBOs

192. Eight (8) Partner NGOs/CBOs conducted 30 Pre-Voc training courses mobilizing their own resources. They trained 802 beneficiaries 457 (57%) of whom were female. The high percentage of female participation is attributed to Azza Women's Association as out of the 500 beneficiaries they trained, 369 were female.



193. The table below shows the summary of the Pre-Voc training conducted by the NGOs/CBO over the period February 2009 – June 2010.

	NGO/CBO	Date / # of training courses	# of Participants			Venue
			F	M	Total	
1	AZZA	Feb 2009 (2)	17	31	48	Women centre-Alfateh
		Apr 2009 (2)	52	0	52	Women centre-Alfateh
		May 2009 (1)	22	3	25	Women centre-Alfateh
		Jun 2009 (1)	26	0	26	Women centre-Alfateh
		Jul 2009 (1)	26	0	26	Women centre-Alfateh
		Aug 2009-Apr 2010 (9)	221	50	271	Women centre-Alfateh
		May 2010 (2)	5	47	52	Women centre-Alfateh
2	CAFA	05/05-10/06, 2010 (2)	12	47	59	CAFA centre-Umbadda
3	WES	09/05-27/05, 2010 (2)	19	28	47	WES centre-Jebelawia
4	S OCD	02/05-27/05, 2010 (2)	21	40	61	Haj Yousif
5	MASS	06/05-12/05, 2010 (1)	15	14	29	Mass centre-Darassalam
6	WEBDA	15/05-10/06, 2010 (2)	11	32	43	WEBDA centre-Wedelbashir
7	PDA	08/06-15/06, 2010 (1)	9	20	29	PDA centre-AI Salam
8	ICAS	23/05-02/06, 2010 (2)	1	33	34	ICAS centre-Haj Yousif
<b>Total</b>			<b>457</b>	<b>345</b>	<b>802</b>	
			<b>57%</b>	<b>43%</b>	<b>100%</b>	



## 8. EDP-REFLECT Training Programmes (Literacy Circles)

194. Immediately after theTOT EDP-REFLECT, the facilitators from 9 partner NGOs/CBOs conducted a 6 month training for 14 literacy training circles made up of 365 participants, all of them women. This training was also a review of the final EDP-Reflect Training Manual.

The table below shows the summary of the EDP-Literacy Circles trained by the NGOs/CBOs.



	NGO/CBO	No. of Literacy Circles Trained	No. of Women	Location
1	WES	2	55	WES centre-Jebelawlia
2	Hara 40 Women Society	1	30	Umbadda
3	Victory Women Development Association	3	75	Soba
4	Rabi Akhdar Society	3	65	Soba
5	Sahwa Islamic Association	1	30	Salama
6	Nahda Association	1	25	Dar Alsalam
7	WAQD	1	30	Mayo
8	AZZA	1	30	Alfateh
9	CAFA	1	25	Dar Alsalam
<b>Total</b>		<b>14</b>	<b>365</b>	

## 9. Technical skills training programmes in the IDP areas

195. Based on the Training Needs Assessment (TNA) conducted by Component 2, the PMU decided to be selective with the technical skills training courses it will conduct in the IDP areas. The PMU concluded that it would promote training that the Khartoum State VTECs (Component 1) cannot offer as their training facilities are too technologically advanced. Hence, Component 2 identified "soft skills" training, for which there is a market demand. The technical skills training should provide a basis for trainees to start a new business or income generating activity, which requires a small capital. Training in the IDP areas was conducted in a relatively short period (10 – 15 days).

The following describes the technical skills training programmes conducted in the IDP areas in collaboration with partner NGOs/CBOs and related training institutions.



## 9.6. Henna Tattoo Training

196. The Training Needs Assessment (TNA) conducted by the project in the IDP areas in Khartoum showed a significant number of women who were interested to have skills in the field of beauty care with henna tattoo topping the list.

Henna Tattoo is a traditional service that allows easy entry for anyone with artistic skills. It does not require large capital outlay as the person can provide the service in the homes of the customers. There is a high market demand among Sudanese women for this service. Initial capital is less than SDG 30. One henna tattoo service ranges from SDG 30 – SDG 600. The potential for income earning possibilities is very high, as was proven by the beneficiaries trained.

In this context, Component 2 developed a training programme on Henna Tattoo targeting women in the IDP areas to provide them a source of livelihood. Ms. Afaf Abdel Rahman Talha Alnojoumi, a professional Henna Tattoo freelance consultant affiliated with Mehun Training Center for Women, conducted the training programme. The training was conducted for 15 days and had two parts: theoretical and practical. The PMU and the consultant developed the course outline, while integrating entrepreneurship and hygiene within the training course.

The theoretical part introduced the following:

- History of Henna Tattoo in the Sudanese culture of beauty
- Excellence of Customer's Services
- Ethics of profession
- Occupational health
- Work place hygiene

The practical training consisted of the following:

- Sketch & drawing
- Creativity and innovation of the beautiful designs
- Techniques and practices of henna tattoo
- Drawing skills of HT
- Field visits to the gold market, blacksmith and textile market (to get design ideas)
- Production of participants portfolio

The result of the first training was very encouraging. The trainees received their certificates and soon after went into self-employment (100 women in total, who participated in 4 training programmes of 25 trainees each). The NGOs/CBOs requested for a second training round. Component 2 therefore conducted eight (8) henna tattoo training programmes with 8 partner NGOs/CBOs.





	Coordinating NGO/CBO	Date	No. of Women Trained	Venue
1	AZZA	28/04-12/05, 2009	25	Women centre- Alfateh
2	ICAS	16/05-30/05, 2009	25	ICAS centre-Haj Yousif
3	WEBDA	01/06-15/06, 2009	25	WEBDA centre- Wedelbashir
4	SENAD	20/06-02/07, 2009	25	SENAD centre-Mayo & Soba
5	EDO	06/12-19/12, 2009	25	EDO VTC-Abu Adam
6	SABA	20/12/09-03/01/10	25	SABA centre- Umbadda
7	WAQD	09/01-23/01, 2010	25	WAQD centre-Mayo
8	WES	24/01-07/02, 2010	25	WES centre- Jebelawlia
<b>Total</b>			<b>200</b>	
<b>Percentage of Women</b>			<b>100%</b>	



## 9.7. Construction Plastering

197. A rapid market assessment conducted by the project showed that construction is a growth sector in Khartoum. The TNA conducted by Component 2 showed that in Group 3, a significant number of the youth showed interest in this sector. Construction plastering is a skill that allows easy entry for jobs and/or income generation. It does not require large capital outlay and the demand can come from within the community or nearby areas.

Component 2 developed a training programme on basic plastering in the IDP areas to provide the out of school youth a source of livelihood. The PMU contracted the Friendship Vocational Training Centre in Omdurman to conduct the training programme, as the Khartoum State VTECs were not yet operational at this time. To allow maximum learning, each programme had only a maximum of 16 trainees. The training programme covered only 100 contact hours over a period of 20 days covering the following topics:

- Introduction to plastering as business opportunity
- Introduction on occupational safety
- Introduction on plastering and relevant material, selection criteria and utilization
- Basic training in plastering tools and equipment, selection criteria and utilization
- Basic training in measurements and related tools
- Basic training in technical drawings and designs
- Basic training in methodology of repair and maintenance of walls
- Basic training in interior plastering
- Basic training in the outer plastering
- Basic training in recess plastering
- Basic training in arch plastering
- Planning a small business

198. The project conducted four construction plastering training programmes in collaboration with four partner NGOs/CBOs; 56 male trainees attended the programme, as per table below:

	Coordinating NGO/CBO	Date	# of Participants			Venue
			F	M	total	
1	AZZA	05/12-27/12, 2009	0	14	14	School-Alfateh
2	WEBDA	05/12-27/12, 2009	0	10	10	WEBDA centre- Wedelbashir
3	EDO	11/01-02/02, 2010	0	16	16	EDO VTC-Abu Adam
4	ICAS	17/01-08/02, 2010	0	16	16	School-Haj Yousif
<b>Total</b>			<b>0</b>	<b>56</b>	<b>56</b>	
			<b>0%</b>	<b>100%</b>	<b>100%</b>	

9.8.

199. The trainees practiced their plastering skills either at home or at the NGO/CBO office in the operational area. Trainees were allowed to keep the tools as a start-up kit, which they used during the training to help them in starting their own micro businesses.



### 5.3. Construction Painting

200. As with Construction Plastering, Construction Painting was also one of the soft skills that have a market demand, require little capital outlay, and allows easy entry for jobs or income generating activity.

Component 2 therefore developed a training programme in Construction Painting in collaboration with the Friendship Vocational Training Centre. The training is 100 hours over a period of 20 days of 5 hours/day covering the following topics:

- Introduction to painting as business opportunity
- Introduction on occupational safety
- Introduction on painting and relevant materials, selection criteria and utilization
- Basic Training with painting tools and equipment, selection criteria and utilization
- Basic Training with measurements and related tools
- Basic Training in technical drawings and designs
- Practical exercises on using lime brushes
- Practical exercises on using *pomastic* brushes
- Practical exercises on using painting brushes
- Practical exercises on using emery (sandpaper)
- Planning their small businesses

The trainees practiced construction painting in either one of the homes or the school in the community. This group was also allowed to keep the tools they used during the training for their own use to start their livelihood activity.



The project had conducted four construction plastering training programmes in collaboration with four partner NGOs/CBOs; 60 trainees attended the programme, only three of whom were female, as tabled below:

**9.9.**

	Coordinating NGO/CBO	Date	# of Participants			Venue
			F	M	total	
1	AZZA	05/12-27/12, 2009	0	15	15	School-Alfateh
2	WEBDA	05/12-27/12, 2009	3	10	13	WEBDA centre- Wedelbashir
3	EDO	11/01-02/02, 2010	0	16	16	EDO VTC-Abu Adam
4	ICAS	17/01-08/02, 2010	0	16	16	School-Haj Yousif
<b>Total</b>			<b>3</b>	<b>57</b>	<b>60</b>	
			<b>5%</b>	<b>95%</b>	<b>100%</b>	

#### **5.4. Metal Craft Training conducted by the NGOs/CBOs**

201. One condition for the NGOs/CBOs to qualify for 1 set of the Eisenkraft Equipment is that they have to prepare their plans on how to use the equipment as a common facility and be able to conduct at least one training programme without any financial support from the project.

The following submitted their proposals for the common facility and conducted training for 40 participants (all male). They charged a token fee from the trainees. The trainees brought their own materials to use in the training programme.

NGO/CBO	Token Fee Charged	No. of participants	Location
EDO	SDG 65	14	Jebel Awlia
ICAS	SDG 30	6	Mayo
Azza	SDG 50	5	El Fateh
WEBDA	SDG 25	5	Wad El Bashir
VTEC Kerary	SDG 75	10	Kerary
<b>Total</b>		<b>40</b>	

#### **9.10. Slaughtering/Skinning and Hides and Skins Preservation**

202. Component 2 identified the skills for animal slaughtering/skinning and hides & skins preservation as a potential for income earning and self-employment opportunities in the IDP areas. With the appropriate skills, a small business only requires only SDG 150 capital to start the livelihood activity, based on the estimates made by the PMU. Depending on the kind of animal slaughtered, one can earn a minimum of SDG 30 per day (SDG 20 for the slaughtering and SDG10 for the skin, which they get to keep). The skins fetch better prices if these are professionally treated.

As a follow-up of the TOT: Slaughtering and Skins and Hides Preservation, the PMU in collaboration with the National Centre for Hides and Skins Improvement (NCHSI) and partner organizations, organized additional 4 pilot training programmes in the IDP areas for the youth. NCHSI guided the trainers on how to organize and conduct the training programme. Sixty participants (all male) attended the training 9-day training programme, which covered the following topics:

- Slaughtering/skinning and hides and skins preservation as a possible self-employment possibility
- Context of animal slaughtering/skinning and hides and skins preservation within the value chain of the leather and meat industry
- Demonstrate how to provide good customer service taking into consideration occupational health, hygiene and safety
- Improved practices and techniques for slaughtering, skinning and preserving hides and skins
- How to start your own business providing slaughtering/skinning services

NGO/CBO training programmes held were as follows:

	Coordinating NGO/CBO	Date	# of Participants			Venue
			F	M	total	
1	ICAS	13/05-22/05, 2010	0	15	15	Abattoir Hag Yousif
2	WEBDA	20/05-29/05, 2010	0	15	15	Abattoir Wedelbashir
3	PDA	26/05-05/06, 2010	0	15	15	Abattoir Al Salam
4	AZZA	21/06-29/06, 2010	0	15	15	Abattoir Alfateh
<b>Total</b>			<b>0</b>	<b>60</b>	<b>60</b>	
			<b>0%</b>	<b>100%</b>	<b>100%</b>	

### 9.11. Technical Skills Training: Leather Products

203. In line with the Product Design for Artisans Programme (PDA), the PMU used the services of Mr. Mohamed Bashir, one of the best PDA designers specializing in leather products to train 100 artisans from BADR and their apprentices. The idea was to expand the product line of the artisans making marquob to come up with new leather products and at the same time introduce the concepts and importance of product design and quality in developing their markets.

There were five training programmes with 20 participants per training. The 30-hour training was over a period of five days held in





May 2010 at the training center established by the project for BADR. One hundred artisans/apprentices joined the training programme; 20 were females.

The training programme covered the following topics:

- How to improve leather products
- Principles of design and simple decoration
- How to make proper pattern based on design and use the pattern to make a good prototype
- How to make new and different small leather items
- Waste management and environmental awareness; translate the idea into waste utilization for additional income



## **9.12. Training by NGOs/CBOs for beginners in Leather craft**

204. The PMU identified leather craft as a skill having a large potential for self-employment, while it does not necessarily require huge investment in machinery and equipment. One can make good leather products with simple tools and good skills. This is also considering that Sudan has a major comparative advantage in raw materials required by the leather sector as Sudan has one of the largest livestock production in Africa and the 20<sup>th</sup> largest in the world.

The project in partnership with the Sudanese Organization for Development and Culture (SODC) and Azza Women Association (AWA) implemented a Leather Training Course for Beginners targeting the youth in the operational areas of the two partners. Mr. Mohamed Bashir conducted the training, which sixty youth attended, 39 of whom were young girls.

The objective of the training was to provide livelihood opportunities for the school leavers by training them in leather craft. The course was to train them how to prepare a simple business plan and how to produce marketable products such as men and women's bags, wallets, CD jackets, mobile phone holders and other small items.

The Basic Training Course was for 54 hours spread over a period of 9 days at 6 hours per day. SODC, which handled two groups of 20 held the training at its training hall, while AWA held the training at the community center provided by the project.

The course introduced the use of simple and available tools in the market and hand-made techniques to produce leather craft goods. This was to demonstrate to the trainees that they could produce good quality, functional and marketable products if they master using these tools, provided that they were properly trained. The trainees kept the tools they used during the training to help them start their income generating activities.

The training demonstrated the idea of waste management and utilization for income generation; and raised their environmental and safety awareness.

The major techniques applied in this course were cutting, drawing, coloring, stitching and leather thread cutting and the basic principles of design, simple decoration.

### **Course content for a 9-day Training:**

#### **Day 1**

- Introduction, Scouting, Diagnosing design strength and weakness, evaluation, decision
- Why Leather
- How design is necessary in improving the quality of the products



#### Day 2

- Scouting: who can draw or paint
- Beginning of making a design (pencils, paper)
- Pattern cutting (paper, cardboard, scissors)
- Prototyping (paper, cutter, using rotate holer to make straight and uniform holes)
- Finishing first prototype (paper)
- Comments, discussion and evaluation

#### Day 3

- Practice cutting paper and leather; use of metal rulers
- New pattern, emphasizing proper cutting
- New prototype, finishing
- Beginning of cutting leather, emphasizing holding and trimming
- Simple decoration using different techniques
- Scratching and burning (tools, needles and cutters)



#### Day 4

- Continue prototyping (small products like mobile holder, wallets)
- Mixing color (coloring using different methods)
- Raw edge treatment (sand paper, lining)
- Leather thread cutting for stitching

#### Day 5

- Finishing first prototype
- Using shoe polish
- Liquid polish and varnish



#### Day 6

- Making new prototypes
- Making paper pattern
- Simple drawing and exact measurement
- Cutting leather and making simple decoration
- Coloring – shoe polish as fixer
- Using sandpaper to treat raw edges and lining
- Assembling the parts by glue and stitching



#### Day 7

- Finishing prototype
- Using liquid polish as fixer and shine
- Using last finish polish
- Preparing simple record sheet to know the real cost of material and time

#### Day 8

- Characteristics of successful entrepreneur
- Introduction to business plan
- Marketing
- Estimating start-up capital



Day 9

- Filling in Simple Business Plan
- Course Evaluation
- Awarding of Certificates

Distribution of trainees per NGO:

	Coordinating NGO/CBO	Date/No. of Training	# of Participants			Venue
			F	M	total	
1	AZZA	June 2010 (1)	18	2	20	Women centre- Alfateh
2	SOCD	July 2010 (2)	21	19	40	Haj Yousif
<b>Total</b>			<b>39</b>	<b>21</b>	<b>60</b>	
			<b>37%</b>	<b>63%</b>	<b>100%</b>	

## **10. Technical skills training conducted by the Khartoum State VTECs (Component 1) for NGOs/ CBOs**

205. With the project extension up to 31 October 2010, Component 2 was able to utilize the services of two VTECs established in Component I as by this time the two VTECs were ready to conduct skills training programmes. This was also to enhance the synergies between the two components.

The PMU requested Kerary VTEC to conduct tailor-made short-term training programmes in brick-laying, plumbing, tiling and laying electrical wires. Azza Women Association was the coordinating NGO/CBO as they cover Kerary and El Fateh areas and had trained 500 beneficiaries in pre-vocational training.

The PMU also requested Hag Yousif VTEC to conduct tailor-made short-term training programmes in radiator maintenance service, greasing and oil change, brake maintenance and services, battery maintenance services, A/C coolant drain and refilling, and tyre repair services. Three NGOs/CBOs (SODAC, WAQD and ICAS) coordinated the training since their operational areas are near Hag Yousif.

The PMU provided the technical inputs to the two VTECs in developing their respective training plans. After the technical training, the coordinating NGOs/CBOs conducted EDP classes for the participants. This was a pre-requisite for the participants to receive the tools provided by the project to enable them to start their income generating activities. The VTECs conducted these training programmes between August – October 2010.

### **6.1. Technical Skills Training - Plumbing, Tiling, and Laying Electrical Wiring**

#### **Employment Possibilities**

206. There has been a steady growth of the construction industry in Sudan and in Khartoum State in particular. This is one of the sectors that has shown potential for employment. The PMU identified the different types of work involved in the construction industry that will require minimal training requirements to acquire integrated skills required for the job. Bricklaying, plumbing, tiling and laying and electrical wiring are areas in the construction sector that allow ease of employment with minimum technical skills training.

#### **The Training Programme**

##### **Learning Outcomes for Employment Options:**

Using the competency-based training approach (CBT), the learning outcomes for results of the training programme for each skills training are as follows:

- **Bricklaying**

1. State health and safety requirements
2. To set out building lines



3. To build corner, pillar, pier and cavity wall
4. Identify types of bonds in brick-laying (e.g. English bonds)
5. Estimate quantities of required materials

Possible Employment: Asst. bricklayer; bricklayer

## • Plumbing

1. State health and safety requirements
2. Identify tools and equipments of Plumbing
3. Identify used material and their mixing procedures
4. Measuring, cutting and threading galvanized pipes
5. Install plumbing pipes
6. Apply welding of PVC and PPR pipes
7. Estimate of required materials
8. Install of water supply pipes

Possible Employment: Asst. Plumber



## • Tiling

1. State health and safety requirements
2. Prepare floor and wall to receive tiles
3. Fix straight and check for level
4. Apply adhesives
5. Fix tiles
6. Apply grouting
7. Clean tools and equipment
8. Give reasons for level and straight edges
9. Identify types of tiles

Possible employment: Asst. tiler



## • Laying Electrical wire

1. State health and safety requirements
2. Identify tools and equipment used in electrical works
3. Used material specifications
4. Identify and recognize electrical symbols for residential lighting circuits
5. Fix the basic contents of simple electrical circuits and its function
6. Estimate the required materials
7. Prepare the electrical wire for work
8. Apply series and parallel connection for electrical circuits



**Number of Training hours and Duration**

207.30 training hours spread over a period of 10 days; 3 training hours per day taking into consideration the heat during the summer months when the training was conducted.

**Number of Participants:**

208.The four skills training programme had fifteen trainees per batch. Each training programme had two batches. There were 120 participants, in total, in this Programme. 10% of the participants were female. This training was successfully concluded.

**6.2. Technical Skills Training – Radiator Maintenance Service; Greasing and Oil Change, Brake Maintenance and Services; Battery Maintenance Services; A/C coolant Drain and Refilling; Tyre Services and Repair**

**Employment Possibilities**

209.The automotive sector in Sudan and Khartoum State in particular had seen a steady growth. This is one of the sectors that has shown potential for employment and/or self-employment. The PMU identified the different types of work/services involved in the automotive sector industry that will require minimal training requirements to acquire the skill required for the job. Radiator maintenance service, greasing and oil change, brake maintenance and services; battery maintenance services, A/C coolant drain and refilling, tyre repair are areas in the automotive sector that allow ease of (self)/employment with minimum technical skills training.

**The Training Programme**

**Learning Outcomes for Employment Options:**

210.Using the competency-based training approach (CBT), the learning outcomes of the training programme for each skills training are as follows:

- **Radiator maintenance serve**

1. State health and safety requirements
2. Describe safety practices to follow when testing & servicing radiator.
3. Visually inspect radiator obvious problems.
4. Know the importance of the radiator for the vehicle.
5. Testing & servicing radiator.
6. Perform leaking radiator test.
7. Perform radiator welding.
8. Repair & maintain radiator.

Possible (Self) - Employment: Radiator maintenance service provider

- **Greasing and Oil Change**

1. State health and safety requirements
2. Demonstrate safe practices while working with vehicle fluid.
3. Check car fluid levels.

4. Locate fluid leaks.
5. Replace engine oil & filter.
6. Perform a grease job.
7. Explain the importance of vehicle maintenance.

Possible (Self) -Employment: Grease and Oil changer/service provider

- **Brake maintenance**

1. State health and safety requirements
2. Identify the main components of the brake system.
3. Define the basic functions of the main components.
4. Describe the operation of the brake system.
5. Diagnose common brake system problems.
6. Inspect & maintain brake system.
7. Describe basic procedures for servicing a master cylinder& brake booster.
8. Describe the procedures for manual bleeding of brake system.

Possible (self) -employment: Asst. Brake maintenance helper

- **Battery maintenance services**

1. State health and safety requirements
2. Visually inspect battery obvious problems.
3. Clean battery case & terminals.
4. Demonstrate hydrometer check,
5. Demonstrate how to check battery electrolyte level.
6. Demonstrate how to charge battery.
7. Perform common battery tests.

Possible (self) -employment: Battery maintenance service provider

- **AC coolant and drain refilling**

1. State health and safety requirements
2. Principles and parts function of refrigeration.
3. Know high and low pressure of A/C system.
4. Identify Common A/C problems.
5. Locate A/C system leaks.
6. Demonstrate general procedures for evacuating charging A/C system.

Possible (self) -employment: Auto Aircon maintenance provider

- **Tyre repair services**

1. State health and safety requirements
2. Measure tire pressure.
3. Describe tire inflation & rotation procedures.
4. Tire puncture repair.
5. Mounting & dismounting tire.
6. Diagnose common tire problems.

Possible (self) -employment: Tyre repair service provider

#### **Number of Training hours and Duration**

211.The training covered in total 20 training hours spread over a period of 5 days; 4 training hours per day taking into consideration the heat during the summer months.

#### **Number of Participants:**

212.The six skills training programmes had fifteen (15) trainees per batch for more effective learning. Hence, there were 90 participants (all male). This training was successfully concluded.

## **11.Other Activities by NGOs/ CBOs**

### **7.1. Community Mobilization and Information Drive on Vocational Training**

213.FAR, an international NGO and project partner initiated the idea to conduct an Information Drive in the IDP areas. The PMU provided technical support in terms of the content of the Information drive and delivery of the topics. Objectives of the drive were as follows:

- To provide a new perspective on vocational training
- To give information on the new vocational training centers being established by the Khartoum State with the project and the specialization of each and their locations
- To inform the participants about the new approach of the VTECs using the competency-based training and the new trends toward vocational training
- To encourage parents and motivate the youth to see the future in terms of employment and self-employment of a vocationally skilled person

FAR and the UNIDO/PMU jointly conducted the Information Drive in 2 IDP Areas (Dar El Salaam on 19 May 2009 and in Wadel Basheer Camp on 20 May 2009). An estimated 1,500 people (parents, youth, elders, traditional leaders, and local village councils) attended the meeting.



### **7.2. Preparatory activities for a business development network: Study Visit to the Master Crafts Programme in Uganda**

214.One output of Component 2 is to establish a Business Development Network. UNIDO in 2001 established a network of coaches in Uganda under the Master Crafts Programme (MCP) where UNIDO trained 102 MCPs and 60% are still active with no



outside support. It had proven to be sustainable along the principles of self-help initiatives.

The PMU sent three of its project staff from Component 2 to visit the MCP in Uganda to learn from the experience in order to develop adaptations for Khartoum State. The visit took place on 28 March – 03 April 2009. Staff who visited Uganda were Messrs. Shibeika Mekki Shiebika, Salih Suliman and Mohamed Elamin Gasim.

The concepts, principles and methodologies observed from the MCP in Uganda, were adapted in the Product Design for Artisan (PDA) Programme, a network of designers to coach entrepreneurs on product design.

### **7.3. Linkages with Micro Finance Institutions**

215. Component 2 held discussions with the Micro Finance Programme of the Central Bank of Sudan and the Sudan Development Foundation and was able to link the partner CBOs with these institutions, to open up credit options for entrepreneurs trained under the programme.

The partnership forged with FAR in their operational areas (Wadel Bashir and Umbadda) was for Component 2 to provide the entrepreneurial and technical training to the beneficiaries. FAR would fund start-up businesses from the micro finance facility they have in operation in these areas.

### **Summary note on the status of Result 1**

216. The PMU has been able to build capacities within the CBOs/NGOs to enable them to organize technical skills training programmes. However, such kind of training programmes requires financial support in terms of hiring trainers, training materials and provision of tools. Hence, the CBOs/NGOs should step up their efforts to identify their funding support and self-financing options to continue the activities implemented within the project, with PMU support. Token fees from the trainees within the IDP areas will not be sufficient to cover the training expenses.

The project was able to lay the foundation for the Marquob Development Programme and the Product Design for Artisans Programme. These two programmes if implemented in full could have a big impact on the business potential and livelihoods of the artisans who are mostly from the IDP and poor areas of Khartoum. The artisans have a big potential for growth and creating employment in Khartoum, provided that business development support services will continue with the assistance of associations, NGOs/ CBOs. It would be eminent that the Khartoum State closely monitors, together with the NGOs/ CBOs, after a period of 12 months, the job options created for those trainees, who were trained by the project.

The PMU encourages the Khartoum State and the KSVTA to continue the development of the approach of using short-term tailor-made skills training programmes used by Component 2 in collaboration with the VTECs and NGOs/CBOs to provide demand-oriented marketable skills for the youth, including women, over a short period. This will be required in addition to the regular CBT curricula offered in the VTECs. Training materials, approaches and tools, as well as equipment should be made available by the project and should be used to the fullest.

**Overall Assessment of progress made in implementation of activities, with an estimated percentage of completion: 100%**

## **Impact Indicators, Sustainability and Recommendations**

### **IMPACT INDICATORS/ASSESSMENT**

#### **Component I**

##### **EQUIPMENT:**

217. The project had achieved its overall objectives in equipping the four VTECs with appropriate machinery, tools and equipment for the courses offered and has provided new equipment to Khartoum 1, which is under construction. The training equipment purchased by UNIDO was made in direct consultation with the Khartoum State that mobilized a committee of 33 national experts and vocational trainers to review the recommended list from UNIDO. The equipment in each VTEC would allow them to have the flexibility to offer vocational training from the most basic to technical level. It should be noted that procurement and commissioning of the technical equipment was a major logistical undertaking of the project and provided relevant on-the-job training to both management and staff of the VTECs. Due to the civil war, Sudan has been more than 30 years behind in terms of the quality of technical and technological education and technology transfer to be made. The equipment provided by the project would allow Sudan (Khartoum) to have a quantum leap in terms of equipping its citizens with demand-oriented skills required for modern technologies. As a benchmark, the vocational training centers in the Middle East are using the same or similar types of equipment, provided by the project.

The project had also provided administrative and financial systems, IT solutions and software for the efficient management of the VTECs. The impact of these inputs can only be realized if the Khartoum State would ensure that the systems are being used and the recommendations of the project to decentralize financial operations are put into full operations.

##### **CURRICULUM DEVELOPMENT:**

218. The biggest legacy that the project left in Sudan is the use of the Competency-based Training (CBT) Approach for vocational training, with training programmes and tools to support the sectors prioritized within the "specialized" VTECS, and the introduction and integration of entrepreneurship in vocational training. Sudan has been using the traditional three-year apprenticeship programme for vocational training and a curricula, which are more than 30 years old. Vocational training centers in most part of the world, where the economy and industry are getting a boost, are using the CBT approach.

The Ministerial Decree creating the High Committee for the Curricula Development for the Khartoum State laid the solid ground and break-through for the introduction of the CBT approach in Sudan. This is a major milestone for innovation made by the project as the CBT approach will considerably contribute to the overall industrial and private sector development of Sudan and in Khartoum State in particular.

The public-private partnership, involving the Supreme Council for Vocational Training, the National Council for Technical and Technological Education, Businessmen Employers Federation and the Sudanese Workers General Union Federation and other institutions, such as the Khartoum State, including Industry in the development of the VTEC curricula, involving more than 60 professionals. This has shown a broad-based high quality consultation on the curricula introduced by the project.

The Vice-President of Sudan had also given his support to the CBT approach and had directed that Sudan as a country should overall take this approach.

The curricula introduced to the VTECs and partner agencies by the project are of international standards. This would allow the VTECs in the future to apply for international accreditation to issue internationally recognized certificates. This would give an edge to the VTEC graduates in terms of business and employment possibilities.

#### **POLICY FRAMEWORK FOR THE VTECS ESTABLISHED IN KHARTOUM STATE:**

219. The Khartoum State had established the Khartoum State for Vocational Training Unit (KSVTA) to manage and logistically support the VTECs established by the project. As of October 2010, the Khartoum State was in the process of creating the Council for Vocational Training and Technological Education where the KSVTA would be the secretariat to the council.

#### **HUMAN RESOURCES DEVELOPMENT:**

220. The project provided HRD solutions address the need for modern management and technical competencies of the staff and trainers of the VTECs. However, the inputs provided would need to be increased with refresher management training on a regular basis. In addition, they need further technical training and guidance as the equipment and the CBT approach and curricula are very new to them. Moreover, the staff and the trainers have to learn to imbibe entrepreneurial thinking and an entrepreneurship culture in the day-to-day management of the VTECs. This can only be achieved with a management and staff, who are committed and consistent over a period of time.

#### **IMPACT ON THE INTENDED BENEFICIARIES:**

221. As to the closure of the project, the VTECs had only implemented two intakes of trainees. The first intake had gone through the introductory courses and are now studying Level 1 courses. The second intake are now studying the introductory courses. The impact of the training and curricula on the beneficiaries in terms of self/employment should be closely monitored by the KSVTA and overall by the Khartoum State Government.

In terms of the potential outreach, the VTECs once fully operational and having all the course "shifts" in place, can be graduating 3,000 fully qualified trainees every 15 months.

## Component 2

### Institutional Capacity Building

222. Component 2 built a cohesion among the service providers in the EDP areas. The PMU trained 159 partner NGOs/CBOs staff through Training of Trainers (TOT) in the areas of: Entrepreneurship Development Programme; Pre-Vocational Training; REFLECT-EDP, Marquob Improvement, Slaughtering, Metal Craft and Product Design & Development (PDA). It also trained 76 Executive Committee members of the NGOs/CBOs on the Essentials of Managing an Association. The table below shows the extent of training programmes provided and the total number of participants disaggregated by gender:

	Male	Female	Total
<b>Training of Trainers (TOT) Programme</b>			
Entrepreneurship Development Programme	24	21	45
Pre-Vocational Training	13	8	21
EDP - REFLECT	3	18	21
Marquob Improvement	13	5	18
Slaughtering/Skins and Hides Improvement	13		13
Metalcraft	19	0	19
Product Design for Artisans	23	10	22
<b>Total Trainers</b>	<b>108</b>	<b>62</b>	<b>159</b>
<b>Training for Executive Committee Members</b>			
Essentials of Managing an Association	30	46	76
<b>Total</b>	<b>138</b>	<b>108</b>	<b>235</b>

### EDP Training Capacity Built

223. The project has provided twenty-one (21) national NGOs and community-based organizations the capacity to provide entrepreneurship training and to integrate this component in the project. This has been the first time for these NGOs/CBOs to have EDP training. A training guide in Arabic and English was provided. All of these NGOs/CBOs have conducted EDP training for their beneficiaries. Currently, there are eleven (11) NGOs/CBOs which have conducted EDP training using their own or mobilized resources. These NGOs/CBOs have trained in total 886 beneficiaries from the IDP areas.

The project has built capacities of nine (9) NGOs/CBOs to provide EDP training to their beneficiaries who are undergoing literacy training through the EDP-REFLECT training programme. As a result, 365 women in literacy circles have been provided training on how to establish their income generating activity.

**Pre-Vocational Training Capacity Built:**

224. The project trained 9 NGOs/CBOs to conduct the Pre-Vocational Training Courses. Eight of these organizations conducted pre-vocational training courses to their beneficiaries using their own or mobilized resources. They trained 802 beneficiaries.

**Marquob Development Programme:**

225. The project has laid the foundation for the BADR Society and the primary training institutions in Khartoum for the development of the marquob. It had provided the full-package of intervention from technical skills training to putting in place the channels for getting the proper inputs and raw materials. The impact of this intervention can only be assessed after a time.

**Product Design for Artisan Programme:**

226. The project had developed a pool of designers for the artisans and micro entrepreneurs in Khartoum. The success and institutionalization of this PDA programme would depend on the Plastic Artist Union and the designers to provide BDS to entrepreneurs.

As an impact indicator, there has been enthusiasm and commitment shown by the artists, entrepreneurs and journalists during the training programme and the exhibition. More than 400 people came to view the exhibition. One of the exhibitors was a client assisted by one of the advisers. The PDA designer/ advisor taught her how to recycle containers into pots for plants. Her sales had more than doubled as a result.

**Vocational/Skills Training:**

227. The project has built the capacity of the NGOs/CBOs to organize skills training programmes in collaboration with vocational training institutions and trainers. The vocational training programmes conducted by the project such as the henna tattoo, construction plastering and painting, basic leather training, and the skills training with Kerary and Hag Yousif VTEC would not have been possible without the cooperation and commitment of the partner CBOs/NGOs.

**Project Outreach**

228. As a preparatory activity, Component 2 conducted 17 Training Needs Assessment Workshops in the operational areas attended by 1,878 participants over the period January – July 2008. Together with FAR, a partner international NGO, this Component conducted two information drives on vocational training in 2 IDP areas (Dar El Salam and Wadel Basher). An estimated 1,500 people attended the meetings.

Component 2 in cooperation with project partners has trained 3,225 beneficiaries from the IDP and poor areas of Khartoum. Below is a summary of the project outreach for training programmes conducted over the project period.

**Project Outreach: of the training programmes Component 2 at direct beneficiary level:**

	Male	Female	Total
<b>A. EDP Training</b>			
EDP Training	521	479	1,000
EDP Literacy Training	0	365	365
<b>Total</b>	<b>521</b>	<b>844</b>	<b>1,365</b>
<b>Percentage</b>	<b>38.17%</b>	<b>61.83%</b>	<b>100%</b>
<b>B. Technical/Skills Training</b>			
Pre-vocational training	481	503	984
Henna Tattoo		200	200
Construction Plastering	56		56
Construction Painting	57	3	60
Slaughtering	60		60
BADR Small Leather Products	80	20	100
Training for Beginners: leathercraft	21	39	60
Metal craft	40		40
Plumbing - Kerary	27	3	30
Tiling - Kerary	22	8	30
Bricklaying - Kerary	27	3	30
Electrical Wiring	25	5	30
Radiator Maintenance Service- Hag Yousif	30		30
Greasing and Oil Change - Hag Yousif	30		30
Brake maintenance and services - Hag Yousif	30		30
Battery maintenance service	30		30
A/C Coolant drain and refilling	30		30
Tyre services and repair	30		30
<b>Total</b>	<b>1,076</b>	<b>784</b>	<b>1,860</b>
<b>Percentage</b>	<b>57.85%</b>	<b>42.15%</b>	<b>100%</b>
<b>GRAND TOTALS</b>	<b>1,597</b>	<b>1,628</b>	<b>3,225</b>
<b>Percentage Distribution</b>	<b>49.52%</b>	<b>50.48%</b>	<b>100%</b>

An analysis of the above table shows that both genders are equally represented in terms of the project outreach. Further analysis shows that there are more females trained in EDP. This is explained by the fact that 27% of those trained in EDP are women belonging to the literacy training circles. Taking out the number trained in Pre-vocational training courses, the project provided technical skills training to 876 beneficiaries, 281 female (32%) and 595



male (68%). Two hundred fifty nine (259) of these females attended the henna tattoo and the leather training. Twenty two (22) females attended the other skills training programmes that are traditionally attributed to male occupations.

## Beneficiaries

229. In September 2009, Component 2 undertook a Business Review on the performance of clients trained by the NGOs/CBOs to get an indication of the impact of the training programmes conducted. The Business Review covered the trainees of the EDP and Henna tattoo, the only skills training programme conducted by the project at this time. To get a good cross section of all the project beneficiaries, the review covered at least 50% of the total number of clients trained in these two programmes spread among the CBOs/NGOs who organized the training.

### EDP TRAINING CONDUCTED AS OF AUGUST 2009

NGO/CBO	Total Trained	Number of Sample
1. Women Association for Qualification & Development - <b>WAQD</b>	30	15
2. Integrated Community Action Sudan - <b>ICAS</b>	7	7
3. <b>CAFA</b> Sudanese Community Development Association	100	50
4. <b>Azza</b> Women Association	15	15
5. Wed El Bashir Development Association - <b>WEBDA</b>	216	108
<b>Total</b>	<b>368</b>	<b>195 (52%)</b>

### HENNA TATTOO

NGO/CBO	Total Trained	Number of Sample
Azza Women's Association	25	10
ICAS	25	10
WEBDA	25	10
SENAD	25	10
<b>Total</b>	<b>100</b>	<b>40 (40%)</b>

The business review covered the following dimensions:

- Increase in sales
- Increase in network

- Increase in working capital
- Number of employees
- Entrepreneur's Source of Debt

## Methodology

230. From the required sample size per CBO/NGO, the PMU has randomly selected from the existing data base of trainees (Client Information Sheet) who were interviewed for the Business Review. Each trainee should have completed a client information sheet prior to attending a training programme.

The PMU organized a meeting with the implementing partners to discuss a business review i.e. methodology, questionnaire, time frame and administrative and financial arrangements. Further, the PMU briefed the Data Collecting Team of each NGO/CBO on how to administer the business review.

## Highlights of the Findings

### EDP Training Beneficiaries: Already in Business during the project period

- **Monthly Average Sales**

The results showed that the respondents monthly average sales increased by SDG 138.4.

	Baseline (CIS)	Business Review	The Variance
Sales average	702.3	840.7	138.4

- **Net Worth**

231. The table below shows a remarkable increase in the net worth of the beneficiaries trained. Those who had a net worth below SDG 250 had been reduced by 56% as accounted by the increases in the other figures.

Net Worth SDG	Baseline	Business Review	Variance
0 to 250	67%	11%	-56%
251 to 500	8%	10%	2%
501 to 1000	6%	26%	20%
1001 to 1500	6%	26%	20%
1501 to 2000	9%	14%	5%
More than 2000	10%	20%	10%

- **Working Capital**

232. The table below also shows that the beneficiaries had increased their working capital, which is consistent with the increase in network.

Working Capital SDG	Baseline	Business Review	The Variance
0 to 100	71%	51%	-20%
101 to 250	7%	15%	8%
251 to 500	6%	13%	7%
501 to 1000	9%	12%	3%
More than 1000	7%	9%	2%

- **Employees**

233. The results showed that the respondents had employed more people in their businesses and they had started to pay the family members who worked for them.

	Baseline	Business Review	Variance
Non-Family Members Paid	15%	24%	9%
Non-Family Members Not-Paid	15%	13%	-2%
Family Members Paid	38%	44%	6%
Family Members Not-Paid	32%	19%	-13%

- **Entrepreneurs Debt Source**

Debts Source	Baseline	Business Review	Variance
Bank	25%	65%	40%
Money Lender	37%	15%	-22%
Relatives and friends	35%	11%	-24%
Suppliers of raw materials	3%	9%	6%

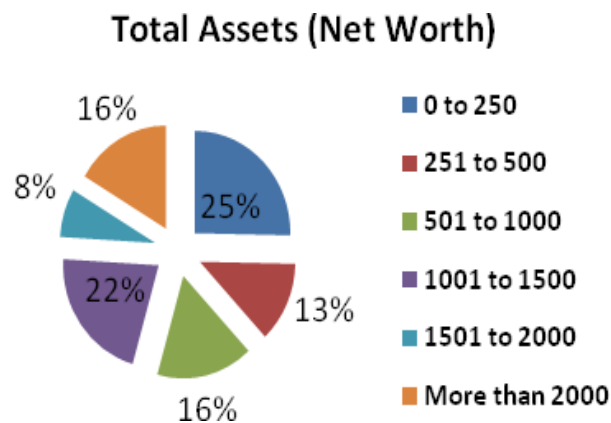
### **EDP Training Beneficiaries: Established new business**

234. Seventy (70) EDP trainees had established a new business. The Business Review showed the following data on the businesses they had established:

- **Average Monthly Sales:** Their average monthly sales was SDG 816.60

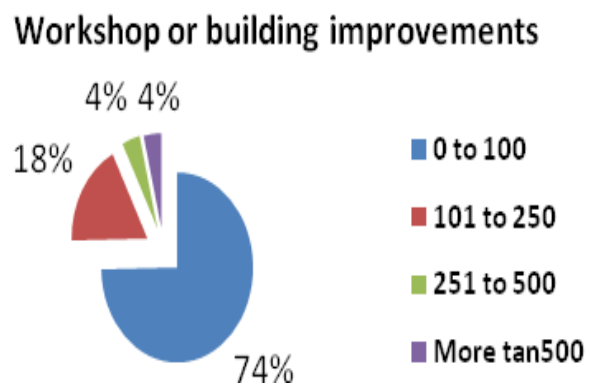
- **Net Worth:**

235. 25% of the respondents have a net worth less than SDG 250. See figure for the distribution of the results.



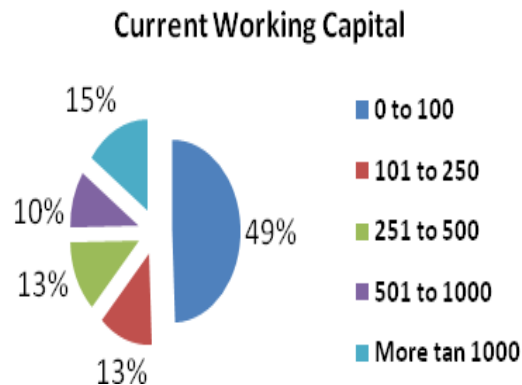
- **Workshop Improvement**

236. The results shows that 74% of the respondents who established a new business invested less than SDG 100 on the improvement of their workshop; 18% invested between SDG 100-SDG250 while 4% invested more than SDG500.



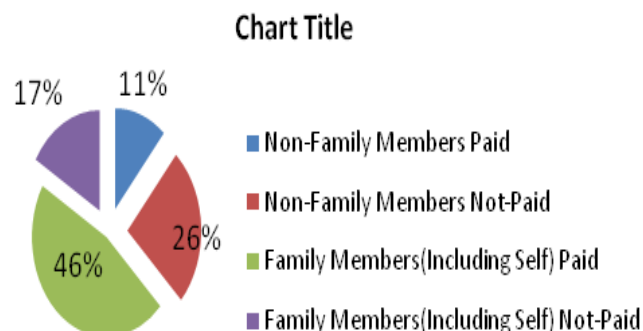
- **Working Capital**

237. 49% of the respondents had a working capital of SDG 100 or less; 13% had SDG 100 – SDG 250 and 15% had a working capital of more than SDG 1000.



- **Employees**

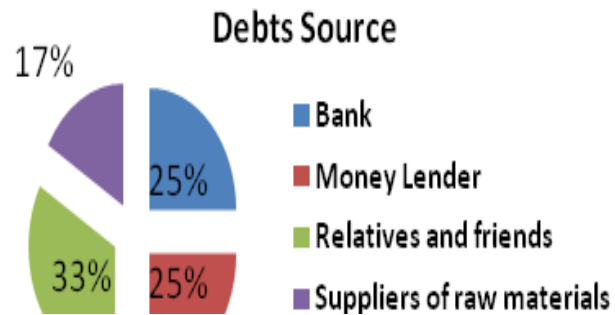
238. The results showed that 46% of those employed by the respondents were family members but were paid; and 17% paid workers were non-family members. 37% of those who worked with the new enterprise were not paid.



- **Outstanding Debts and Source of Debts**

239. 71% of the respondents stated that they do not have any debts and 29% said they have outstanding debts.

Those with outstanding debts sourced their loans from the following:



Most sourced their loans from relatives to start their business (33%) followed by the bank and moneylender (25% each).

- **Brief case studies of entrepreneurs:**

#### **SAIED'S SHOP**

Saied Ibrahim Abdullah, 45 years old, from Kadugli, South Kordofan came to Khartoum in 1990 since he lost his job in the State Council due to the war situation. He lived in Wadel Bashir an IDP area. He worked as a daily labourer in Khartoum.

WEBDA invited him to attend the Entrepreneurship Development Programme training. After the training, Saied opened a small shop in his house with working capital of SDG 156. He borrowed SDG800 from the bank and managed it intelligently. His earnings increased and was able to pay back his loan in 10 months. He took another loan of SDG 1,800 and had paid back the same. He was able to save SDG 1000, which enabled him to get married.

Saied is planning to establish a small supermarket in Wadel Bashier as he now has the trust of his customers and the bank.

#### **FATIMA'S POULTRY**

Fatima Alini Tong, forty five years old, is from the Dinka Tribe, Aweel Eastern Baharalghazal State. She came to Khartoum in 1991 after he husband died leaving her with 4 children and to escape from the civil war situation.

Fatima looked for a job to meet the needs of her children. The school near her house hired her in as a cleaner with a monthly salary of SDG 150. She continued to look for opportunity to increase her income. WEBDA selected Fatima to attend the EDP training course and it was a great opportunity to change her life.

After the training she took a loan of SDG 1000 from WEBDA association to start a poultry project, Her income for the first quarter was not much giving her only a net profit of SDG 100 per month. She was not daunted. Fatima continued to improve her business management. Her net profit had increased to SDG 200 a month.

In the future, Fatima wants to go back to Baharalghazal and establish a large poultry project.



### **ADAM'S SALES BUSINESS**

With his ten children and at 43 years old of age life was not an easy for Adam Ali Alnimair. He therefore decided to immigrate to Khartoum from North Kordofan to pursue his dream of providing good living for his family.

As luck would have it, CAFA Association selected Mr. Alnimair to attend the EDP Training. After the training he started to sell different items near a school using a mobile cart. After some time he thought of establishing a shop. He prepared a simple business plan, which he learned to do at the EDP training. Mr. Alnimair presented his business plan with CAFA that gave him a loan. He worked very hard and after a time his customers increased allowing him to have more income to raise his children and pay his loan.

In spite of the many competitors in his area selling the same products, Mr. Alnimair is confident to meet the competition as he says he has a clear strategy for marketing his products.

### **NAJWA'S FOOD PROCESSING BUSINESS**

Najwa Hejair, is 31 years old, married with six children. Her home town is Deleng but she had lived in Omdurman IDP camp since 1991 due to the war. She used to be a typical housewife. After undergoing the training on entrepreneurship development, she started producing Fassekh (food made from fish) from her home and started selling in the community. She chose this product as there is a great demand for this traditional food and there are no competitors. She had gained a reputation because of her quality product and had met special requests from customers for other products for special occasions. Najwa is exploring other marketing opportunities outside her community to expand her trade.

## HENNA TATTOO TRAINING BENEFICIARIES

240. Out of the 40 respondents trained in henna tattoo, 29 (72%) had established their income generating activity providing henna tattoo services. These women had no source of income prior to the training.

They have average monthly sales of SDG 106.6. Three respondents have a capital net worth less than SDG 100 in the business; nineteen have a capital of SDG 100 – SDG 250; six with capital of SDG 250 – SDG 500 and one with a capital of more than SDG 500.

### KAWTHER' HENNA TATTOO SERVICES

Kawther Omer Koko is a member of the Alkawalib Tribe in Damazin, Kordofan. She married at 30 years old and has one child. Kawther and her family came to Khartoum to hoping to find a job and have better income. They settled in Wadel Bashir, an IDP area. She joined WEBDA Association as a member.

She qualified to join the Henna Tattoo training, after which she continued to practice what she had learned until she became skilled. She started offering her henna tattoo services to the women in the area for SDG 10 – SDG 15. For brides she charges SDG 70. She was earning between SDG 200 – SDG 400 per month.

Kawther started to become famous in the community and her art and skill in tattooing attracted women to hire her services. Her customers increased. She started to train a girl to assist her to provide better service to the customers. After six months of hard work, she had saved SDG 1,200.

She wants to establish a beauty salon in the future when the family is finally settled in a single place.

# SUSTAINABILITY

## Component I

241. The Khartoum State has shown its commitment and ownership to the project by putting in financial resources worth US\$20 million during the lifetime of the project. This contribution added with the amount provided by European Union Delegation to the Sudan, has made a great impact on the development and innovation of the Vocational training as one of the priority projects of the State. It is setting up a Council for Vocational Training and Technological Education, which will intensify and pursue the further development of vocational training. It is envisaged that this will ensure the sustainability of what the project has started.

The National Council for Technical and Technological Education (NCTTE) and the Supreme Council for Vocational Training and Apprenticeship, two primary institutions involved in vocational training have directly supported the development of the curricula using the competency-based approach (CBT). Both institutions have looked at the project as pilot for the introduction of the CBT curricula for Sudan.

The challenge for the sustainability of Component 1 is the continued financial contributions for the operations of the VTECs including providing the required training materials for the trainees, as this is expensive. Target beneficiaries from the poor areas would not be able to pay for the full cost of the training thus, the State would have to continue subsidizing the training and place education as a priority. Note that during the study exchange to the United Kingdom, Bahrain and Malaysia, these respective governments have all been subsidizing their VTECs in one way or the other, as they have prioritized this development sector.

The VTECs, however, need to offer also their training services to large companies and enterprises that can afford to pay for the full training costs. With this private sector linkage, the VTECs can earn some extra income to help defray the running costs of the center. They should approach this with caution, as there could be a danger that they would channel more efforts to making money and forget that their reason for being established is to train the youth, including women who are coming from the poor areas of Khartoum State. Similarly, some sections have brought up the idea of the VTECs producing products and offering services (other than training) to earn extra income to cover its operation. The PMU did not support this idea, as the VTECs would be directly competing with the private sector, which they are supposed to be assisting. This also goes against the mission of encouraging the trainees to go into small businesses. Within this context, the trainees would be discouraged to set up a small business, as they would not be able to compete with the VTECs, which have all the equipment and financial resources.

## Component 2

242. The project has built the capacity of the partner NGOs/CBOs to conduct EDP training and to organize skills training programmes in cooperation with VTECs or trainers. Sustainability of the EDP would depend on the resources that the NGOs/CBOs mobilize, as their resources are often very limited. Not all the NGOs/CBOs have reached financial sustainability as they are still in their nascent stage. They rely mostly on donors and additional resources that they can mobilize from the community. Experience has shown that target beneficiaries would not be able to afford the full cost of the EDP training programme. If, however, the trainers would conduct the EDP on a voluntary basis and conduct the training on hours where they do not have to incur food expenses

for the participants then there is a possibility that the NGOs/CBOs can continue to offer the EDP training programme.

The EDP-Reflect Training has shown potential of sustainability as the EDP programme is imbedded in the literacy training programmes of the NGOs/CBOs. However, also for these programmes, donor contribution is being sought.

The NGOs/CBOs have been given management training to strengthen their operations and to continue to organize skills training programme. However, because of the tools and training materials required, skills training is relatively expensive. These organizations would still need to mobilize resources from donor agencies, while self-financing modalities would need to be pursued. Experience has shown that target beneficiaries would not be able to pay for the full cost of the skills training programme.

# RECOMMENDATIONS

## To the Khartoum State Government

- 243. Embark on a full-scale technical capacity building (both abroad and in country) for the trainers and staff of the VTECs; and for the management of the Khartoum State Government Vocational Training Administration Unit (KSVTA Unit). Recommended training areas are the following:
  - ⇒ For the KSVTA Unit Management: Vocational training and technical education policy development and direct linkage with industrial and private sector development; VTEC management; quality assurance procedures; international accreditation; competency-based curriculum development; industrial-related human resources development;
  - ⇒ For VTEC Management: human resources development; CBT curricula implementation; quality assurance; asset management; financial management; strategic planning and management; private sector development and linkages with vocational training
  - ⇒ For Technical Trainers: CBT curricula development; continuous upgrading of technical skills
- Provide adequate funds for the operational expenses of the VTECs; purchase of training materials for the training programmes; and regular maintenance and upgrading of the equipment. Ensure that the VTECs can develop a culture of maintenance, cleanliness, health and safety.
- Establish a programme under a micro-finance scheme to provide tools to the trainees who would want to establish their own businesses after their training
- Legislation to ensure that only qualified graduates can embark on trades such as electrical wiring, plumbing, automotive, air conditioning and other trades.
- Maintain the linkage with the National Council for Technical and Technological Education and the Supreme Council for the issuance of the Certificates for the graduates of the VTECs and continuous development and upgrading of the curricula.
- Build on the linkages forged by the project with the CBOs/NGOs operating in the IDP and poor areas of Khartoum. They can be a potent force in reaching out to the target beneficiaries of the VTECs as well as other micro and small enterprise programmes.
- Establish a programme for the development of micro and small enterprises (MSEs) in Khartoum State and link the programme with the VTECs. For starters, the Khartoum State can continue to provide support for the Development of the Marquob and the Product Design for Artisans Programme.
- The Khartoum State should explore technical assistance needs to strengthen the Council for Vocational Training and Technological Education and to follow through the activities started.

## To European Union Delegation to the Sudan and UNIDO

- 244. It should be noted that a VTEC- related project of this scale and intensity with several components, posed a number of challenges at several levels, ranging from logistics, infrastructure, curriculum development and human resources development. In

view of the above, a longer period of project implementation, with a minimum time of at least five years should be put forward in project planning related to VTECs in order to be able to assess the mid term impact of the new system, which the project has put in place including the new training approaches tools and curricula.

## **Federal Ministry of Industry**

- 245. Work with the Khartoum State Government in building on the Kerary VTEC Leather Section as a primary training center and facility for leather goods and footwear in Sudan. The Khartoum State had forged a Memorandum of Understanding with the Leather Industry Development Institute (LIDI), formerly known as the Leather and Leather Products Training Institute (LLPTI) Ethiopia, The partnership with LIDI could facilitate the development and networking of the leather industry in Sudan as a whole.

**ANNEX A****INCEPTION MISSION TEAM**

<b>Name</b>	<b>Expertise</b>	<b>Contract Duration</b>
1. Mr. Alan Buckle	Mission Leader, Equipment Expert	21 days over period of 8 weeks; 30 June – 25 August 2007
2. Mr. Eelco Galama	Entrepreneurship Training	21 days over a period of 8 weeks; 10 July – 10 September 2007
3. Mr. Micah Mitoko	Vocational Training Policy	21 days over a period of 8 weeks; 4 July – 04 September 2007
4. Mr. Kenneth Abeywickrama	Market Assessment	21 days over a period of 8 weeks; 4 July – 6 Aug 2007; 3-4 Sept. 2007
5. Mr. Giorgio Cieri	Procurement Expert	1 w/m over a period of 8 weeks; 7 July – 7 Sept 2007

The UNIDO Field Office in Sudan represented by Anette Hoffman, Mohamed Elsafi, Onti Dingert and Yvette Langehuizen, and the Programme Manager, Inez Wijngaarde of the UNIDO HQ Vienna supported the team.

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**PROJECT PERSONNEL – UNIDO**  
**PROJECT MANAGEMENT UNIT STAFF**

Name	Post	Gender/ Nationality	Start and end of Work
<b>A. Technical Staff</b>			
1. Jovita Culaton Viray	Chief Technical Advisor	Female, Filipino	23/9/07 – 31/10/2010
2. Mahmoud Khogali	Sr. Technical Expert – Component 1	Male, Sudanese	01/12/07 – 31/10/2010
3. Mohamed Elmustafa Tigani	National Site Engineer	Male, Sudanese	2/6/08 – 31/10/2010
4. Shibeika Mekki Shibeika	Sr. Project Officer – Component 2	Male, Sudanese	1/12/07 – 8/8/2010
5. Salih Suliman	Project Officer – Component 2	Male, Sudanese	1/15/07 – 8/8/2010
6. Seifeldin Mo. Alamin Abu Gasim	Project Analyst	Male, Sudanese	28/6/2009 – 15/10/2010
7. Alaa Mohamed Eldin	Asst. Finance	Male, Sudanese	25/4/2010 – 31/10/2010
8. Mohamed Hassan Elsafi	National Project Coordinator	Male, Sudanese	20/8/07 -4/7/08
9. Anette Hoffman	YED Expert	Female, German	5/8/07 – 4/8/08
10. Nagmledin Mohamed Abbas	Finance and Admin Officer	Male, Sudanese	7/10/07 – 15/04/2010
11. Magda Ahmed	Sr. Technical Expert – Component 2	Female, Sudanese	15/12/07 – 30/6/2008
12. Yassir Hassan	Project Analyst	Male, Sudanese	1/1/08 – 12/31/08
<b>B. Administrative Staff</b>			
13. Samira Abu Zeid	Secretary	Female, Sudanese	21/10/2007 – 30/9/2010
14. Aweedi Ali Saad El-Din	Project Driver	Male, Sudanese	10/9/2007 – 31/10/2010
15. Ashraf	Project Driver	Male, Sudanese	04/1/2009 – 31/10/2010
16. Tarig Musa Mukhatar	Project Driver	Male, Sudanese	20 Nov 2007 – 19/10/08
17. Ali Hassan Balla	Liaison Officer	Male, Sudanese	1/1/09 – 6/30/09

**EXPERTS AND TRAINERS OTHER THAN  
CASTLE COLLEGE AND ILS/ENGLISH STAFF**

	<b>Name</b>	<b>Nationality</b>	<b>Gender</b>	<b>Project Support</b>
<b>INTERNATIONAL</b>				
1.	Dr. Kevin Whitt	U.K.	Male	International Procurement Specialist
2.	Dr. Cay Graf Von Borckdorff	U.K.	Male	Procurement Specialist
3.	Joe Wirote	Thai	Male	Procurement Officer
4.	Andreas Daxbacher	Austrian	Male	Intl. Leather Footwear Expert
5.	Lidwina Dox	Austrian	Female	Intl. Product Design and Development Expert
6.	Edith Neudhart	Austrian	Female	International Hotel and Catering Expert
7.	Genet Alemu	Ethiopian	Female	Paper Recycling Trainer
8.	Mercuria Ferrera	Filipino	Female	EDP Curricula for VTECs
9.	Dr. S.M. Kiruthu	Kenyan	Male	Leather Industry Consultant
10.	Matteo Menegatti	Italian	Male	Junior Consultant
11.	Sebastiano Bagnasco	Italian	Male	Junior Consultant
12.	Ontibili Tenette Dingert	German	Female	Junior Consultant
<b>NATIONAL</b>				
1.	Dr. Abdul Mahmoud Usman Mansur	Sudanese	Male	Director General/NCTTE
2.	Lt. Gen. (Eng) Mohamed Ahmed Rasmi	Sudanese	Male	Director General,SCVTA
3.	Dr. Eng. Omer Ahmed El Tohami,	Sudanese	Male	Chairperson, Curriculum Technical Committee
4.	Abdul Moneim Fadlalla	Sudanese	Male	VTC Org Dev./Sector Leader - electronics
5.	Ahmed Abbasher Abdulmuti	Sudanese	Male	National Expert, LAN and IT Network Installation
6.	Mohamed Elamin Gasim	Sudanese	Male	EDP Expert
7.	Leila Bashir	Sudanese	Female	EDP-REFLECT Expert
8.	Hameeda Alhadi Hashim Mohamed	Sudanese	Female	EDP trainer

9.	Mohamed Bashir Abdalla Gibril	Sudanese	Male	Leather craft trainer
10.	Moneim Younis	Sudanese	Male	National Consultant - Footwear
11.	Ahmed Hassan Mofarih	Sudanese	Male	Trainer – Footwear
12.	Afaf Abdel Rahman Talha Alnojoumi	Sudanese	Female	Trainer – Henna Tattoo
13.	Nourein Hammad Korta	Sudanese	Male	Trainer – Trowel/Masonry
14.	Ali Yousif Ahmed Abuharira	Sudanese	Male	Trainer – Carpentry
15.	Mahgoub Taha Abdoun	Sudanese	Male	Trainer - Plumbing
16.	Abdel Gafour Mohamed Ahmed	Sudanese	Male	Trainer/Expert – Electrical
17.	Ibrahim Bakhiet Omer	Sudanese	Male	Trainer – Automotive Small Engines
18.	Omer Abdelgader Mohamed	Sudanese	Male	Trainer – Automotive – Engine and Auto Electrical
19.	Sharief Elalim Ramadan	Sudanese	Male	Trainer- Automotive - Autotronics
20.	Mahadi Gasim Hag Elmahey	Sudanese	Male	Trainer - Welding
21.	Shareff Idris	Sudanese	Male	Trainer – Air-conditioning and Refrigeration
22.	El Bager Ibrahim	Sudanese	Male	Asst.Trainer - Welding
23.	Ab El Wahab Elwasila	Sudanese	Male	Expert – Auto Engine
24.	Ismail Elazhari Barri	Sudanese	Male	Expert – Auto Body
25.	Hasan Mohamed Fattah Elbab	Sudanese	Male	Expert – Civil Works
26.	Amin Mohamed Sorkati	Sudanese	Male	Expert – HVAC/R industrial
27.	Mohamed Abdalla Kheiralla	Sudanese	Male	Expert – Maching
28.	Kawther Alassad	Sudanese	Female	Expert – Hair Care
29.	Dr. Salaheldin Mohamed Ahmed Mukhtar	Sudanese	Male	Trainer: Slaughtering/Skins and Hides Improvement
30.	Dr. Hago Alfadi Haroun	Sudanese	Male	Sector Leader – Leather Sector Curricula
31.	Shamma Abou Anga Nowai	Sudanese	Female	Sector leader- Hotel Sector Curricula
32.	Dr. Hala Sali Mohamed Nur	Sudanese	Female	Head Dept. of English – University of Khartoum

## Press Release on the Project Inauguration

### Report on the Inauguration of Halfait Almuluk VTEC UNIDO Sudan YED Project

#### I. Context:

UNIDO Sudan is the implementing agency of the YED Project funded by the European Union and the Khartoum State of Sudan. One of the project's outputs is to establish vocational training and entrepreneurship centres in Khartoum equipped with skills training facilities on various skills and curricula on skills and entrepreneurship development. One of the centres, Halfait was inaugurated on 5 February 2011 at 11:00 AM.

#### II. Key Attendees:

<b>Government Officials:</b>	
H.E. Ali Osman Mohammed Taha	Vice President of Sudan
H.E. Dr. Awad Ahmed Al-Jaz	Federal Minister of Industry
H.E. Kamal Abdul- Latif Abdul – Rahim	Federal Minister of Human Resources Development
H.E. Dr. Abdul – Rahman Al - Khidir	Governor, Khartoum State
H.E. Ishraga Seyd Mahmud	Secretary General of the Supreme Council for Vocational Training, Khartoum State
<b>European Union:</b>	
H.E. Ambassador Carlo De Filippi & wife	Head, European Union Delegation to Sudan
<b>UNIDO:</b>	
Mr. Kassahun Tesemma	UNIDO Representative for Sudan, Yemen & Djibouti

End of Project Report EE/SUD/07/004



There were about 400 persons who attended the ceremony from the government, business sector and the general public in addition to VTEC officers, trainers and trainees. Former UNIDO YED National experts (Tigane, Mahmoud) and staff (Aweedi & Samira) were present as well as Leosa Nanette Agdeppa of UNIDO JP: YEM Project.



#### III. Proceedings:

Ceremony started with a tour of the facility followed by the program consisting of speeches with musical rendition as intermission.



Acknowledgement to UNIDO and EU were mentioned in the speeches of the Government Officials, particularly Ms. Ishraga, H.E Governor of Khartoum and HE Minister of Industry who spoke on behalf of the Vice President. All expressed desire for continuous collaboration with UNIDO.



EU Ambassador acknowledged UNIDO as the implementing agency. He further expressed the commitment of EU to continue assisting both North and South Sudan and the willingness to establish similar facilities in other states in the North.

UNIDO Representative congratulated the stakeholders and spoke of the congruence of the project with UNIDO's thematic areas for technical cooperation with member states. He mentioned the efforts exerted by the UNIDO CTA, Peewee for the project.



#### IV. Other Pictures of the Event:

The event was covered by television and print media. Some pictures taken by the former UNIDO YED driver are shown below.





Poster  
Screenshots





UNITED NATIONS  
INDUSTRIAL DEVELOPMENT ORGANIZATION



*Designing is Good  
Business for Women Entrepreneurs*





UNITED NATIONS  
INDUSTRIAL DEVELOPMENT ORGANIZATION



*Opting for alternative employment  
through vocational and technical training*



UNITED NATIONS  
INDUSTRIAL DEVELOPMENT ORGANIZATION



*Promoting equal job  
opportunities for women in technical sectors*