Technical, Vocational, and Entrepreneurial Capacities in Southern Sudan:

Assessment and Opportunities



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Forward

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Working in post-conflict and post-war situations is challenging, especially for organizations relatively new to these circumstances, like Plan International (Plan). Although Plan has been working in Sudan for over 30 years, this work has been primarily in the relatively stable regions in northern and eastern Sudan. The Southern Sudan program was established in 2005 as one of the first initiatives that Plan deliberately designed to respond to the needs of children in a region emerging from years of conflict.

In this situation, one of the first challenges was to find an answer to the question: 'In a place where everything is a priority, where do you start?' A question echoed by a famous African saying: 'How do you eat an elephant?' The answer being: 'One bite at a time.' Plan decided to 'eat' this elephant by first responding to the direct request of the new government of Southern Sudan to help rebuild the Technical and Vocational Education and Training (TVET) capacity and infrastructure that was largely destroyed during 21 years of civil war. The aim was to ensure youth employment creation by responding to the needs of the returning youth and those demobilized from the Sudan People's Liberation Army and, in this way, help to bring about long term economic development. This research report is partly an outcome of this effort.

One of the key issues which has emerged from Plan's work in Southern Sudan is that, while the need for TVET is not in question, there is no clear understanding of the magnitude of the challenge or the best way to go about addressing it. Plan also realized early on that doing a good job in supporting TVET in Southern Sudan would take more skills and resources than the organization has available. It was agreed, then, that one of the roles Plan would play would be to reach out to its global network of partner organizations and friends, to encourage some of them to play a role in supporting Southern Sudan. The partnership with York University was established in this spirit.

York University is a leading interdisciplinary research and teaching university in Canada. The Centre for Refugee Studies is an organized research unit at York that has been active in Sudan for several years conducting research in partnership with Ahfad University for Women and universities in the south. This initiative with Plan builds on its partnership with Juba University and includes York's Faculty of Education, with its extensive expertise in international education.

This report is published jointly by Plan International Canada (Plan Canada) and York University's Centre for Refugee Studies. It provides a strong case for prioritizing technical and entrepreneurship skills development in Southern Sudan as one of the critical strategies for reconstruction, recovery and long-term social and economic development. The report will be useful for government, NGOs, CBOs and development agencies that may need to invest in TVET and entrepreneurship development initiatives in Southern Sudan. By largely using the direct voices of ordinary people from Southern Sudan, this report provides a powerful case for such investment.

Plan Canada and York's Centre for Refugee Studies and Faculty of Education are also pleased to make this contribution to the wider and constantly evolving debate on the value of TVET in the reconstruction and development of post-war countries.

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Acronyms

AAPA Addis Ababa Peace Agreement

AU African Union

AUC African Union Commission

BEST Basic Employability Skills Training
CAP Child and Police Foundation
CBO Community-Based Organization

CSP Country Strategic Plan

CIDA Canadian International Development Agency

CMS Church Missionary Society

CPA Comprehensive Peace Agreement

DDR Disarmament, Demobilization and Reintegration

ECS Episcopal Church of the Sudan GNU Government of National Unity

GOS Government of Sudan

GOSS Government of Southern Sudan IDP Internally Displaced Person

IGAD Inter-Governmental Authority for Development

ILO International Labour Organization

IRIN Integrated Regional Information Network

JTS Juba Technical Secondary School KTI Khartoum Technical Institute

LABS Livelihood Advanced Business Schools
LRA Lord's Resistance Army, Uganda
LVTI Lainya Vocational Training Institute
MTC Multi-Purpose Training Centre
NGO Non-Governmental Organization
NSSC National Sudan School Certificate
PCA Permanent Court of Arbitration

PDF Popular Defense Force SAF Sudan Armed Forces

SAVOT Skills and Vocational Training

SLEN Sustainable Local Enterprise Network
SMVSC St. Monica Vocational School Complex
SPLA/M Sudan People's Liberation Army/Movement

SSDDRC Southern Sudan Disarmament, Demobilization and Reintegration Commission

TTS Torit Technical School

TVET Technical and Vocational Education and Training

UN United Nations

UNDP United Nations Development Program

UNESCO United Nations Educational, Scientific and Cultural Organization

UNHCR United Nations High Commissioner for Refugees

UNICEF United Nations Children's Fund UNMIS United Nations Mission in Sudan

WFP World Food Programme WHO World Health Organization

Executive Summary

In 2006, Plan International entered into a partnership with the Government of Southern Sudan (GOSS) to support the development of Technical and Vocational Education and Training (TVET) in the region. This study reports on this work, extending a growing body of research based at the Centre for Refugee Studies, York University, and informing the work of Plan International and other organizations interested Southern Sudan's development. The study seeks to explore the benefits of, and suggest improvements to, existing plans and strategies for addressing TVET rehabilitation and development challenges and opportunities, including:

- Rehabilitation and construction of TVET facilities
- Support for the development of a comprehensive curriculum, policies and standards for TVET
- Introduction of TVET models, institutions and other opportunities to Southern Sudan

Importantly, this study seeks to identify community needs, perspectives and capacities for the development of TVET infrastructure in Southern Sudan. Traditional models of aid and development are initiated and imposed without full community participation; the history of aid in Southern Sudan is no exception. While this study does not claim to be fully participatory in nature, it engages diverse communities in Southern Sudan to systematically bring forward the concerns and desires of various community members for the purposes of informing TVET planning and development. Hence, the study examines the past, present and future challenges of TVET in Southern Sudan through the identification of broad needs, skills gaps and opportunities. Such an exploration cannot ignore the educational crisis in Southern Sudan and the impact of this crisis on the implementation of any training programmes.

Theoretical frameworks discussed include the role of TVET and enterprise in post-war contexts and the development of Sustainable Local Enterprise Networks (SLENs). This study used a qualitative approach to address the research objectives and ensure vivid and inclusive accounts of current TVET status and opportunities in Southern Sudan. Research consisted of a one-day workshop (N = 40, focus groups) to identify stakeholder needs, concerns, existing knowledge and research leads; and semi-structured in-depth interviews (N = 26) which examined current and future market needs and trends, community and stakeholder priorities, TVET challenges and gaps and potential options for addressing challenges and opportunities.

Five periods of TVET in Southern Sudan are described, divided along changes in colonial and missionary interests, as well political and military conflicts. The five periods include: the colonial and missionary period, the Anya Nya period, the Addis Ababa period, the SPLA/M period, and the Comprehensive Peace Agreement (CPA) period. Unique characteristics of each period have impacted the development of TVET in Southern Sudan. The foundation of TVET education in Southern Sudan was laid mainly by the British colonial governments, and Roman Catholic and Protestant church missionaries. The British colonial powers and the Christian missionaries used education and training to advance their own project and mission work, without engaging the entrepreneurial skills and activities of Southern Sudanese. Recently, the CPA period has seen the return, rebuilding and creation of several informal technical and vocational programs in Southern Sudan, including Juba Technical Secondary School, Lainya Vocational Training Institute, Torit Technical School and a proposed St. Monica Vocational School.

The study also uses the direct voices of respondents from Southern Sudan to describe their understanding of TVET and its role in rebuilding after war. When asked, respondents to the study defined technical capacity as "the ability of an individual to perform his or her specialized duties to earn income" while vocational capacity was viewed as "skills that can actually get you [trainee] to the job immediately". Respondents suggest that TVET can provide marginalized communities, especially

youth and ex-combatants, livelihood options for building new skills and lives rather than wartime survival options. Respondents from both the workshop and the one-on-one interviews viewed TVET as an instrument for peace building, and many believe that if youth and ex-combatants are provided with alternative livelihoods they will not think of violence. Many residents argued that the CPA should not just be the signing of an accord, but it should generate an environment conducive for (re)building the devastated region. Overall, respondents to this study postulated that the CPA has provided an opportunity for TVET to restart after several years of war as the peace has allowed people to move more freely. The study shows that there is a diverse and often misunderstood notion of the essence and role of TVET among community members.

Key TVET challenges and critical gaps identified by respondents include:

- Political will and capacity
- Few clear TVET policies
- Negative perceptions about TVET
- Lack of TVET role models
- Competition with foreign labour
- Lack of access to enterprise enablers
- Consumer preferences
- · Lack of management skills and capacity

From the one-day workshop and face-to-face interviews, participants suggested several ways to address the challenges and critical gaps discussed above. Below are some suggested solutions:

- The important role of partnerships
- Clear and relevant TVET policies
- Promotion of entrepreneurs and entrepreneurship
- Quality and sufficient training
- Need for harmonized policies
- · Access to market
- Need for security improvement
- Positive promotion of local products and TVET perceptions
- Need for ongoing evaluation, assessment and adjustment of TVET programs
- Land use planning and management
- Training qualified teachers

Due to the devastation caused by the long-running war, in Southern Sudan everything is a priority. When asked to present the key priorities for Southern Sudan that are important if communities are to feel that the dividends of the CPA are being realized, the participants listed the following:

- Food security/production
- Transportation
- Education
- Health services
- Housing

Although there are many challenges to the development of TVET in Southern Sudan, there are also many hopes and opportunities for improvement and growth. The issue of vocational education is a serious priority for development in Southern Sudan. A clear articulation of TVET with national, social, and economic goals and guidelines can create a platform for locally-rooted, supported, and fiscally viable TVET initiatives. Policymakers and stakeholders should consider developing clear and achievable short- and long-term strategies for TVET. The recommendations presented in this study should be considered in conjunction with identified market needs and priorities.

Where the discussion provides an overview of themes for building effective and inclusive TVET in Southern Sudan, the recommendations provide an outline for suggested actionable items for GOSS and its identified partners and TVET stakeholders.

The study recommends the following for the development of TVET in Southern Sudan:

- 1. Strengthen the Directorate of TVET in the Ministry of Education Science and Technology
- 2. Develop a unified curriculum, standards and certification
- 3. Secure appropriate equipment and qualified teachers
- 4. Create a TVET faculty or college
- 5. Develop two categories of TVET
- 6. Develop an information campaign (identifying role models)
- 7. Employ a SLENs and BEST approach for inclusive market participation
- 8. Promote TVET as peace-building and development
- 9. Ensure regional and international collaborations
- 10. Strengthen investment and capacity

In summary, the workshop and the in-depth interviews revealed several important issues related to TVET in Southern Sudan. While aware of the difficult challenges and obstacles facing Southern Sudan, including political ambiguity over the upcoming referendum and human resource capacity, many of the participants are optimistic and hopeful for positive change. Currently, there are significant opportunities for developing a diverse array of marketable and apprenticeable trades specific to Southern Sudan. These can contribute to the development of SLENs, sustainable development and post-war reconstruction. Many participants acknowledged the mixed historical experiences and stigma associated with TVET. At the same time, there is no doubt that TVET is crucial if the locals are to participate in nation-building and benefit from the expanding market activity in Southern Sudan.

Introduction

From 1983 to 2005, more than 2 million Sudanese died due to civil war and famine. During this time, it is estimated that more than 4 million Southern Sudanese were displaced to neighbouring states in Sudan and to countries including Uganda, Kenya and Ethiopia. A large number of refugees also resettled in North America, Australia and Europe (Global Security, 2005; US Department of State, 2006). With the signing of the Comprehensive Peace Agreement (CPA) in 2005 between the Sudan People's Liberation Army/Movement (SPLA/M) and the Government of Sudan (GOS), an estimated 2.3 million people are thought to have returned to Southern Sudan from the neighboring countries and around the world (UNHCR, 2009).

Challenges to return are many, including massive destruction by war and slow reconstruction post-CPA. Services are far below international standards in all areas of Southern Sudan. In the face of limited educational opportunities, many of the refugees and internally displaced persons (IDPs) are choosing to remain in Kenya, Uganda and even Khartoum, where they perceive opportunities to be greater – even if in refugee or IDP camps. For example, a displaced widow in Jebel Aulia¹ stated that, because of her disability and need for medicine, return to Southern Sudan "will mean death. It is better I remain here [Jebel Aulia] even if it mean South succeeding to form another country" (Garang, 2009).

In general, after the signing of the CPA the security situation has improved, but, as of 2009, insecurity is growing again in most parts of Southern Sudan. Many interviewees attribute the growing insecurity to people's frustration due to unemployment and lack of regular salaries for those working with the government. Instances of cattle raiding have also increased dramatically. The United Nations (UN) Humanitarian Coordinator has reported that more than 2,000 people have died and about 250,000 people have been displaced across Southern Sudan because of cattle raiding and tribal conflicts (UN News Service, 2009). As with much of the violence in Southern Sudan, many of the victims are innocent civilians who are caught in, or targeted by, the fighting groups. Many residents in Southern Sudan are demanding that the Government of Southern Sudan (GOSS) engage and improve the security situation through the creation of new livelihood options to supplement traditional livelihood models.

A common theme in many cities is that the Southern Sudanese people are still waiting to see the 'benefits of peace.' Government institutional capacity remains underdeveloped in Southern Sudan relative to the large responsibilities they have inherited. Visits by our research team members in 2006, 2008 and 2009 have documented a liability of newness, lack of capacity, limited investment in basic infrastructure, including schools, and allegations of corruption. As a result, many returnees and residents are frustrated with what they perceive to be limited and slow change. With regards to education, few new schools and only modest increases in the numbers and quality of teachers strains a system struggling to cope with increased enrolment.

With growing numbers of returnees and demobilized ex-combatants, technical, vocational and entrepreneurial capacity is needed for development and reconstruction in Southern Sudan. Skills acquisition is vital for an economy to compete and grow, particularly in an era of economic integration and technological change. Technical and vocational education and training (TVET) is a direct means of building capacity and providing workers with skills more relevant to the evolving market needs and demands in Southern Sudan.

1. Jebel Aulia is one of the internally displaced person (IDP) camps south of Khartoum.

In 2006, following the tragic death of John Garang², Salva Kiir became the vice President of Sudan and President of Southern Sudan. In his first 100 days speech, Kiir identified technical education as one of the solutions to the problems of rebuilding the economy and society of Southern Sudan. He specifically identified five technical and vocational training institutions, namely Torit, Juba, Lainya, Wau and Tonj, which were destroyed during the war (Kiir, 2006). There exists GOSS commitment for rebuilding these schools. However, to date, this goal has yet to be realized.

The work of leading the rebuilding of these institutions rests with the Directorate of Technical and Vocational Training under the Ministry of Education, Science and Technology, GOSS. While the Directorate has taken this role seriously, progress is hampered by the shortage of skilled personnel, funding and equipment at both the federal and state levels. The Ministry has responded by identifying and encouraging potential partners, including non-governmental organizations (NGOs), to provide support.

Plan International was one of the early partners identified. Beginning in 2006, Plan International embarked on a program to secure resources, financing, skilled staff and materials for TVET in Southern Sudan. Major accomplishments have included the rehabilitation of Juba Technical Secondary School (JTS) and Lainya Vocational Training Institute (LVTI). Plan has now completed its Country Strategic Plan (CSP) which adopts TVET as one of the key strategic objectives around which all other initiatives will be built.³

Study Purpose and Objectives

Despite this progress, Plan International realized the need to understand the contextual factors and complex dynamics relating to TVET in Southern Sudan, in order to maximize the potential long-term impact of their programming. This study was initiated to address this need and to identify community perspectives for the development of TVET infrastructure and capacity.

Traditionally, aid and development in Southern Sudan has been imposed and initiated without community participation. While this study does not claim to be fully participatory in the strict sense of the term, it does seek to bring the concerns and desires of the community forward in a systematic and rigorous way for the purpose of informing TVET planning and development in Southern Sudan.

Given this, the major objectives of this study are to:

- 1. Explore the progress that has been made on TVET programs since the 2005 CPA was signed
- Identify the critical gaps in the ability of different levels of government to lead the growth and development of technical, vocational and entrepreneurship capacity and skills provision in Southern Sudan
- 3. Examine the role of local training institutions, civil society groups, community organizations and the private sector in Southern Sudan in meeting these gaps
- 4. Examine what market opportunities and future development requirements should be considered to support and accelerate these processes
- Provide recommendations on how TVET can be successfully and sustainably implemented for interested agencies and organizations, including GOSS, the UN, donor agencies, NGOs, Community-Based Organizations (CBOs) and the private sector

^{2.} John Garang was Chairman and Commander In-Chief of the SPLA/M, and helped broker the CPA. He became the first Vice President of the Sudan and President of Southern Sudan. A few months after being sworn into office he died in a helicopter crash on July 30th 2005; many Southern Sudanese question the circumstances under which the crash took place.

^{3.} Plan Sudan - Strategic Plan for Southern Sudan Program: FY2010 - FY2015.

SECTION ONE: BACKGROUND

Population of Sudan

Sudan is the largest country in Africa and ranks 141 of 177 countries in the United Nations Human Development Index (UNDP, 2008). In 2008, the Sudanese population was estimated at 39 million, with approximately 47 percent of the total population under 17 years old (Sudan Central Bureau for Statistics, 2008). While disputes exist between GOS and GOSS regarding the census results (Vuni, 2009), estimates suggest that the population of Southern Sudan is about 21 percent of the total Sudanese population, or 8 million (Sudan Tribune, 2009; Sudan Central Bureau for Statistics, 2008).

With the present estimates, approximately 48 percent of the population in Southern Sudan is female (Sudan Central Bureau for Statistics, 2008). Due to patriarchal systems in Southern Sudanese societies, this unequal distribution of men and women will have significant impact on TVET and opportunities based on gender dynamics. Despite their number, women are generally marginalized in Southern Sudanese societies and in Sudan at large (International Republican Institute, 2003).

Civil War and the Comprehensive Peace Agreement

Since independence in 1956, Southern Sudan has been ravaged by a number of civil wars and

violent conflicts. The first civil war began in Torit, Eastern Equatoria State, Sudan, a night before the country was declared independent by the British government. After twenty six years of war, a peace agreement was procured in 1972. It lasted only 10 years until, in 1983, another civil strife started after the Khartoum government announced that Sharia, or Islamic law, would apply to all Sudanese people.

For two decades, the SPLA/M led this second war against the northern-based government. In January 2005, a peace accord called the Comprehensive Peace Agreement (CPA) was signed between the government of Khartoum and the SPLM/A. In the CPA, a "one country, two system" model was adopted, whereby the North and South



Remnants of the long-running civil war, Juba. c. Samer Abdelnour, April 2006.

will share power. In 2011, Southern Sudan will determine whether it wants to secede via a referendum.

Under the new model, the North and South share resources including vast oil wealth, much of which is located in the disputed or transitional areas of Abyei, Blue Nile State and the Nuba Mountains. These disputed regions will vote in a referendum, planned for 2011, to determine whether they will join Southern Sudan. However, one of the rich oil areas, Abyei, which was thought to be in Southern Sudan, was recently declared by the Permanent Court of Arbitration (PCA) to belong to the North (Mulumba, 2009). Although both the South and the North promised to respect the PCA ruling, adhering to it remains to be seen.

Figure 1: Map of Sudan



Adapted from UN Sudan Information Gateway, Map No. 3707 Rev. 10 April 2007.

With the CPA, both the North and South maintain separate armies in addition to a joint integrated army that they share. Although there is relative calm in the South and the North, another war in the Darfur region is receiving a lot of attention because of its humanitarian casualties (Eric, 2009). At present, Southern Sudan is in its fourth year of relative peace and stability, but the ongoing conflict in Darfur and the increasing tribal conflicts may prove to be destabilizing forces.

Militarized Communities

With several years of wars, Sudan, and Southern Sudan in particular, have become heavily militarized. In the north, regular armies and militias can be assessed, demobilized or downsized in a comparatively orderly manner. However, in Southern Sudan and other marginalized areas (including the eastern states, Darfur and the border regions like Abyei), the irregular liberation armies and related factions and militias are structurally less organized and less prepared for various waves of mobilization, demobilization and remobilization. Prolonged civil wars and tribal conflicts have meant that, in Southern Sudan, virtually every male has used or been in contact with a weapon during the various phases of war and peace. Large numbers of females have also participated in the war, either in combat or supporting roles, resulting in complex gendered dimensions of conflict (El Jack, 2007). With an inefficient military record system and multiple militia groups created by various warring factions, firearms are highly prevalent in Southern Sudan (Wakabi, 2008). In a recent disarmament exercise in Juba, the Southern Sudan Army and the police retrieved thousands of rocket-propelled grenades, PKM and Kalashnikov machine guns, pistols and even anti-aircraft weapons illegally and privately owned by individuals (Dak, 2009).

Many people have lived most of their lives using firearms as a means of livelihood. Mathew and Alden (2007) referred to some of these groups as the 'white army' – individuals who maintained an armed presence after the signing of the CPA. These individuals use the gun to defend themselves but also to earn their 'daily bread.' Many have witnessed or participated in countless atrocities.

Disarmament, Demobilization and Reintegration

The UN supported Southern Sudan Disarmament, Demobilization and Reintegration Commission (SSDDRC) is now beginning the demobilization of over 90,000 Southern fighters. Although the demobilization efforts were disrupted by the tensions around the Abyei region, in August 2009 alone over 5,600 ex-combatants earmarked for demobilization were processed by the joint North and South DDR commissions, along with UNMIS, the UNDP, WFP and the WHO are assisting in this program of reintegration (UN News Service, 2009). Demobilization efforts in the transitional states have already begun, and include former SPLA fighters as well as ex-combatants from the Sudan Armed Forces (SAF) and Popular Defense Forces (PDF).⁴

While many ex-combatants may be able to translate their war-time skills into peace-time livelihood options⁵, others will likely have challenges integrating into society and securing a meaningful livelihood for themselves and their dependents. Since the majority of the ex-combatants are well-versed in combat and the use of weaponry, a fear is that unsuccessful demobilization may result in increased banditry and other forms of criminal activity. The UN and DDR officers see the provision of useable skills for ex-combatants as one of the most important challenges for the peace process. The African Union Commission (2007) suggests that TVET can be one of the methods for creating alternative livelihood options in post-war situation like Southern Sudan.

^{4.} Based on fieldwork conducted by the second author exploring agricultural enterprise and ex-combatants in Blue Nile State, August 2008 and November 2009.

^{5.} During a study conducted between April and June 2006, the second author encountered numerous enterprising excombatants in Rumbek, Southern Sudan, who utilized their military-related skills and resources in non-military activity while 'waiting' for demobilization activities and military compensation/pensions to begin.

While there is growing enthusiasm for the role of DDR in both security and development, a lack of evidence exists as to whether or not DDR programs work as intended. Certainly, there is little proof that DDR experiences have led to improvements in human security. However, in Sudan, collective and community-centered programs offer opportunities for an important sense of ownership (Muggah, 2006). While riddled with challenges, early success with collective enterprise approaches to DDR in the Blue Nile region of Sudan has created optimism and a sense of shared ownership for excombatants and other marginalized communities (Kun, 2008).

Potential learning from the success of the blacksmith's collective in El Fasher can also provide insight for best practices for traderelated activities in Sudan (Abdelnour et al, 2008a). With the help of Practical Action Sudan (formerly known as ITDG - the Intermediate Technology Development Group), the displaced blacksmiths in the Kokabia locality of El Fasher formed a collective which helped them build capacity for their trade. As a collective, the blacksmiths produce agricultural tools that local farmers purchase. In recent years, UN agencies and NGOs have also begun to purchase their products for use in food security and development interventions. The success of the collective has changed the lives of the blacksmiths economically, socially and politically (Abdelnour and Badri, forthcoming).





Above: Blacksmiths at work, El Fasher. Below: Examples of blacksmith's work. c. Samer Abdelnour, December 2009.

However, we should note that the role of vocational training in DDR programs is overall inconclusive. In some instances, ex-combatants attribute programs for helping prepare them for civilian life, while in others, ex-combatants are left feeling exposed, vulnerable, disillusioned, and in some cases longing for their weapons (Hanson, 2007). A UNDP report acknowledges the limited success of vocational training in DDR programs in creating employment for ex-combatants (UNDP, 2002). Primary reasons for failure include weak or non-existent economic opportunities and inappropriately designed programs which are too short or over-train in particular trades creating an abundance of specific skills which local markets cannot absorb. For these reasons the development or application of TVET models that provide a clear and proven link between skills development, employability and business creation opportunities in the community is critical. The Sustainable Local Enterprise Networks (SLEN) and the Basic Employability Skills Training (BEST) models described elsewhere in this report could be good starting points.

Harnessing entrepreneurial capacity may create opportunities for some demobilized combatants in Southern Sudan. For example, in May 2006, a high concentration of combatants were awaiting the beginning of demobilization activities in the town of Rumbek and its surrounding area. Of these, many combatant youth were utilizing their skills and resources including vehicles and contacts to engage in a number of enterprising activities. These youth expressed a strong desire for entrepreneurial options post-demobilization (Abdelnour et al., 2008b).



Young entrepreneurs in Benin. Plan's experience with youth livelihood projects elsewhere in Africa is part of the organization's value-add to Southern Sudan. c. Steven Theobald, October 2007.

Gender stereotypes and the discourses propagating the victimization of women in conflict and post-war contexts limits the recognition of the role of women both during violence and preventing it. Southern Sudanese women, for example, have been found to have participated in active combat even as their male counterparts ignore their contributions, relegating women to traditional stereotypes. For DDR programs to be successful, disarmament discourse and policy should not only explore the relationship between male fighters and post-war economic activity, but must be linked to women's empowerment (El Jack, 2002; 2007).

The Gap: Needs, Challenges and Opportunities

Many returnees bring with them positive experiences from foreign nations and express a powerful desire to make a better life for themselves and their families. Peace is viewed as an opportunity to build a country of which they could be proud.

The same returnees also recognize the immense challenges for development in Southern Sudan, both for them and the communities who have struggled through, suffered with, and participated in the civil wars. The long civil wars have restricted the development of peace economies, infrastructure capacity and livelihood options for residents of Southern Sudan. Much of what had existed was either destroyed or used for war purposes. Almost 'everything' is listed as a development priority, especially for returnees accustomed to basic services.

Residents and returnees are often ill-equipped to participate in what is sometimes seen as Southern Sudan's 'cowboy economy' (Kun, 2008). With limited options for developing skills and practicing livelihood options in IDP camps, large numbers of Southern Sudanese are unable to participate in current reconstruction activities and supporting enterprise. Especially in urban centers, expatriates from neighboring countries and beyond are filling the skills void and employment opportunities. This foreign domination of jobs and opportunities is causing severe resentment among residents of Southern Sudan, and threatens to overflow into political and civil strife unless economic opportunity for local and returning residents can be stimulated. The need to create opportunities for local economic participation is great, and will offer the Southern Sudanese people a chance to participate in co-creating economic and social value, including motivation for local peace and security.

While some perceptions are grim, opportunities do exist for strengthening the rapid reconstruction of Southern Sudan, especially with regards to the role of women. Various policies have previously undermined educational and economic opportunities for women and girls in Southern Sudan – including the attempt to enforce the theocratic ethic of *Sharia* in the South (El Jack, 2007). Past systems of technical and vocational education and aid-supported training programs have provided different opportunities for males and females. These tended to exclude women beyond a small number of gender-stereotyped roles in mainly lower income industries such as embroidering and other forms of handicrafts, hairdressing and tailoring. However, with the several years of war, women have come to hold jobs in traditionally male-dominated industries including construction, transport and security, as well as community and village leadership (Abdelnour et al, 2008b). GOSS has proposed that women will be allocated 25 percent of the positions in the government - an ambitious move but one that remains unrealized (Freedom House, 2009). In response to this direction for change, the creation of a new system of TVET for Southern Sudan which does not serve to restrict or stereotype based on gender can further help to increase the participation of women in the economy.

Education Crisis in South Sudan

While still alive, Dr. John Garang articulated an ambitious vision for universal primary education in Southern Sudan within six years of the CPA. However, UNICEF (2009) reports that only 16 percent of the 2,922 schools in the region have permanent buildings, with most classrooms only having a blackboard and chalk and little or no other resources. Southern Sudan has one of the highest illiteracy percentages in the world, with a literacy rate standing at a paltry 24 percent (UNFPA, 2006). Gender discrepancies are also quite pronounced in the region compared to Northern Sudan. Literacy rates are 71 percent and 52 percent for male and females in North Sudan, respectively, while rates in the South are only 37 percent and 12 percent for males and females, respectively.

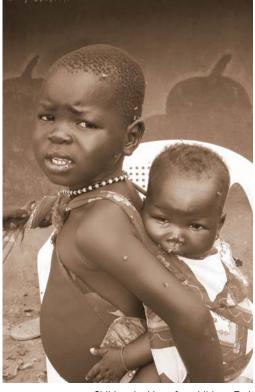


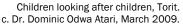


Consulting with Juba Technical High School students. Their views were an important factor in Plan's decision to focus on TVET.

c. Ndūng'ū Kahīhu, August 2006.

Due to the many years of war, the lack of facilities and capacity and the continued tribal structures of many communities in Southern Sudan, many young men and women have missed the opportunity for education. Children in many regions in Southern Sudan are still more economically valuable when they are at home rather than at school. When at home, girls fetch water, cook, clean and take care of little children and babies and boys often look after cattle (Brophy, 2003). Many of these young girls and boys have learnt how to shoot firearms but not how to read and write. When they grow-up, they will have no essential skills and capacities to live in modern society where literacy is a key component of survival.







Child looking after goats. c. Steve Theobald, October 2007.

For the very few young men and women who were able to attend 'bush schools' during the wars to complete primary education, few opportunities exist for continuing formal education. The many years of war have almost totally eradicated secondary education in Southern Sudan, together with vocational and technical education (Inter-Agency Network for Education in Emergencies, 2009).

While increasing numbers of children are attending primary schools since the signing of the CPA, access to post-primary education – including adult education, secondary, and technical or vocational education – is limited. In 2006, only 6.3 percent of communities were reported to be within walking distance of a secondary school, and only 6.8 percent of communities had access to alternative education opportunities, such as technical education (UNICEF, 2008). Southern Sudan is left with large numbers of illiterate young men and women who lack the basic skills necessary for peace-time life and post-war reconstruction efforts. Without targeted and appropriate intervention aimed at community and livelihood needs, these communities will remain vulnerable to worsening poverty and insecurity. There exists fear that large numbers of unemployed youth may create recruitment opportunities for local militias if conflict persists or escalates. Such conditions are also suspected to have created livelihoods centered on illegal activity such as petty crime, prostitution and other harmful activities (Women's Commission for Refugee Women and Children, 2007).

However, the CPA has brought some hope. A "Go To School" initiative was launched in the 2006 school year led by the Ministry of Education, Science and Technology with an aim to raise primary school enrolment levels to over two million. There has been significant progress since the plan was implemented with total enrolment currently at approximately 1.6 million, up sharply from an estimated 343,000 at the end of the war. The director of operations for UNICEF's Southern Sudan Area Program, Peter Crowley, has stated that:

"Despite this improvement in primary education, there has not been clear progress in availing alternative school opportunities for youth and ex-combatants that missed the opportunity to go to regular school during the war."

After the signing of the CPA, Juba has become a centre for returning students at both the primary and secondary levels. Recently, the university has also begun to return to Juba. Students who are returning from asylum countries, SPLM-controlled areas, as well as IDP camps in Khartoum are desperate to receive free education in government-supported schools. The overcrowding of schools and lack of well-trained teachers will affect the level of education and potential numbers of students who may seek vocational training.

Despite the desperate situation, there is room for optimism. Students are starting to move freely between areas of Southern and North Sudan in search of better educational opportunities. Returning students and teachers do bring needed skills, as well as shifting attitudes and positive role models with regards to women and girls in education.

The vast majority of returnee students from Kenya, Uganda and Ethiopia are English-speaking while most of the students coming from Khartoum speak Arabic. Before the most recent phase of the civil war, most schools in Southern Sudan used English, but due to the Arabization policies of GOS, many schools began functioning in Arabic with only a few secondary schools remaining in English (such as St. Comboni Secondary School). In addition, returnees are thought to have received better education than those who stayed during the war; as a result this has led to differences in perception and language between returnees and locals. Returnee teachers and students speak better English, while residents who stayed tend to speak better Arabic. While the different communities have much to learn from one another, the language dichotomy has generated tensions in Southern Sudan. For example, returnees from Khartoum or residents who remained in GOS-controlled regions are being labelled as *Jalaba*, or 'Arab'.6

Plan International in Southern Sudan

Established in 1937, Plan International (Plan), initially known as Foster Parents Plan, is a humanitarian, child-centered, development organization that works with over 1.3 million children, their families and communities in Africa, Asia and Central and South America. With almost 70 years of experience in development and through a network of 66 countries, including Sudan, Plan's vision is of a world in which all children realize their full potential in societies that respect people's rights and dignity. Its mission is to achieve lasting improvements in the quality of life of deprived children in developing countries.

Plan Canada was incorporated as an affiliate of Plan International in 1968. Plan Canada's Program Department supports program development and grants management in consultation with program country offices and builds the capacity of program country office staff to ensure quality programming and reporting. Plan Canada's Program Department raises most of its funding through the Canadian

6. Those who were SPLA/M regions are labeled as SPLM proper while those who were not in the movement as Jalaba.

International Development Organization (CIDA), who are also the sponsors of this study. Plan Canada has managed many CIDA -funded programs to improve the quality of primary education in war-affected areas, coupled with peace and harmonious social relations, including 'Conflict Resolution for Adolescents in Colombia' (2002-2009) which won the UNESCO award for Best Practice and 'Educational Renewal in Sierra Leone' (2003-2010). The department has expertise in health, humanitarian disasters, gender, child rights, HIV/AIDS, conflict resolution, microfinance, education, human rights, global education and youth engagement. It also participates in the development of Plan policies globally, implements a Global Education Program in Canada, manages a Canadian-based Youth Engagement Strategy and shares program and policy information with CIDA, the Canadian public and development community and other Plan staff.

During the past 23 years, Plan has implemented programs in Northern Sudan including Eastern Sudan and Darfur. In 2005, Plan set out to expand its activities in Darfur and Southern Sudan by initiating semi-independent programs. The Plan Southern Sudan program was officially registered in 2005. The first year of this Program was devoted to feasibility data collection and planning.



Girls learning in Haiti; Plan's experience working in post conflict countries is one of the key contributions to work in South Sudan c. Steven Theobald, March 2007.

In 2006, Plan entered into a partnership with GOSS with a commitment to support the development of TVET. To do this, Plan adopted a far reaching strategy that would address the major challenges of TVET on three different fronts:

- 1. Rehabilitation and construction of TVET facilities: An example is the ongoing rebuilding of Juba Technical Secondary School and Lainya Vocational Training Institute.
- Support for the development of a comprehensive curriculum, policies and standards for TVET:
 So far Plan has supported the development of an operational plan for the government TVET strategy and participated in different curriculum, standards and policy development processes. A Plan-supported effort to review the draft TVET curriculum for gender sensitivity is ongoing.
- 3. Introduction of TVET models, institutions and other opportunities to Southern Sudan that would be useful in accelerating this process: The partnership with York University is seen in this light as an effort to encourage a premier Canadian education institution to increase its engagement in Southern Sudan. Similarly, Plan has embarked on piloting the Basic Employability Skills Training (BEST)⁷ model. This is a model that aims to provide rapid employability skills to young people with limited prior education and from highly deprived backgrounds. BEST works by providing a link between the skills provided, the employment and entrepreneurship opportunities available as well the demands of existing industry and market actors. Where it has been successfully applied, this model has resulted in commendable success with job placement or business creation rates of 80% or more. Plan has successfully applied BEST in many countries, including post-conflict areas like Vietnam and Sri Lanka.

In 2008, Plan received a grant from the Government of Canada (CIDA) to support the development of TVET in Southern Sudan. This project contributes to TVET along the three main strategies summarized above. The research documented in this study is funded by CIDA as part of this TVET grant. One of the expectations of this study is that its findings will help Plan create an evidence base on which to advocate for further development of TVET in Southern Sudan. It will also help either validate the strategy Plan has adopted or enhance it by indicating ways in which it can be improved.

Based on the success of this work so far, Plan Southern Sudan has adopted TVET as a core objective of its new five year Country Strategic Plan (CSP) for Southern Sudan. TVET will be one of the central themes around which other development initiatives in basic education, health and livelihoods development will be built.

^{7.} The BEST model was developed in Hyderabad India and was disseminated under the name Livelihood Advanced Business School (LABS). Plan and its partner CAP Foundation of India have created a regional strategy to rebrand and adapt this model to the unique conditions of the East and Southern Africa region. Southern Sudan is one of the beneficiaries of this strategy.

Section 2: Literature, Frameworks and Approaches

Technical and Vocational Education and Training (TVET)

The California Industrial Technological Educators Association (CITEA, 2006) describes TVET as organized career-technical training in the form of educational programs. Instead of a baccalaureate or advanced degree, TVET is offered in sequences of courses directly related to the preparing of individuals for employment in emerging occupations. Such programs include industrial, technological and business education as well as medical and agricultural-related occupations. Instructional strategies include competency-based applied learning, occupation-specific skills, higher-order reasoning, problem-solving skills and academic knowledge for economic independence. The purpose of TVET is to assist individuals in becoming productive and contributing members of their society and also to prepare participants for secondary education and employment (CITEA, 2006).

After several years of neglect due to a change of direction and focus by the World Bank away from TVET (World Bank, 1991), TVET is being reconsidered on the human resource development agendas of many African governments (AU, 2007). In the 1990s, the World Bank had cited high training costs, poor quality of training, the mismatch between training and labour market needs and the high rate of unemployment among TVET graduates as justification to move away from encouraging and supporting school-based TVET. However, in recent years there has been fresh awareness among policy makers in many African countries and donor organizations, like Plan International, of the critical role that TVET can play in nation building and post conflict reconstruction.

The importance of TVET was renewed at the UNESCO meeting of international experts on technical and vocational education and training in 2004 when they agreed that:

"Since education is considered the key to effective development strategies, technical and vocational education and training (TVET) must be the master key that can alleviate poverty, promote peace, conserve the environment, improve the quality of life for all and help achieve sustainable development." (UNESCO, 2004, pg 1)

The African Union (2007, pg 27) highlighted the primary objective of all technical and vocational education and training programs as "the acquisition of relevant knowledge, practical skills and attitudes for gainful employment in a particular trade or occupational area."

GOSS is looking to technical education as an accelerated learning experience for those who have missed the opportunity for primary or secondary education (GOSS, 2007). In their discussion paper developed for the UNESCO-UNEVOC (2007) International Centre for TVET, the Conflict and Education Research Group (CERG) developed a holistic approach to TVET that takes into account the number of challenges facing war-affected populations. CERG (UNESCO-UNEVOC, 2007, pg. 2) defines TVET as: "a learning system in which both "soft" and "hard" skills are developed within a "joined-up", integrated development and delivery framework that seeks to improve livelihoods, promote inclusion into the world of work and that supports community and individual agency."

Child and adult soldiers, those who supported the war efforts in other roles and unemployed youth are key target groups for TVET. For Southern Sudan, TVET can play a pivotal role in improving local economic and community development. An increase in TVET may empower currently under or

unemployed individuals – including target and vulnerable groups – aiding local employment and vocational creativity and strengthening communities engaged in subsistence livelihoods (Alhaji, 2008).

TVET skills can be transferred through formal or informal training or apprenticeships. Generally, TVET emphasizes job creation in regions where the gap between market needs and available skilled labour is high. In such regions, TVET can contribute to a renewed sense of contribution and invigorate economic activity to address the economic dimensions of poverty. The African Union suggests that in post-war areas with low TVET capacity, vocational and entrepreneurial training should include a combination of enhanced basic education, literacy and livelihood skills training (AU, 2007).

Technical education can assist in creating opportunities in agriculture and small industry and also provide a platform for business and finance skills training (Ashkenazi et al., 2008) as well as traditional and non-traditional crafts, trades and services (Gaidzanwa, 2008). Consequently, TVET can aid in the acquisition of knowledge and skills, especially for those individuals with little or no formal education. These skills should come in the form of both soft and hard skills (UNEVOC, 2007).

Along with technical and vocational education, secondary education is of paramount importance for Southern Sudan. In addition to creating opportunities for girls and boys through education, secondary education can discourage early marriage, keep youth engaged in socially productive activities, prepare students for higher education and introduce skills into the local economy. Researchers have suggested that an emphasis on the UN millennium goals has negatively affected TVET, by emphasizing primary education over technical and vocational education and causing an absence of vocational training in many donor-driven poverty reduction strategies and programs (Hartl, 2009). An increased attention to basic education – including the New Economic Program for African Development (NEPAD) and many of the early national Poverty Reduction Strategy Papers (PRSPs) – further left out skills development and adult education in favour of emphasizing basic education (Williamson, 2007).

It should be emphasized that the TVET definition cuts across educational levels (intermediate, secondary, and even tertiary) and sectors (formal or school-based, non-formal or enterprise-based and informal or traditional apprenticeship). This trans-sectoral nature of TVET has created a lot of confusion and conflict between GOSS ministries including labour and education in Southern Sudan. For example, technical education in GOSS is considered as a parallel intermediate or secondary education system and is centered in 'academic' schools while the vocational training as a response to the urgent need for rapid skills is considered as non-academic. The GOSS Ministry of Education heads the academic TVET while the Ministry of Labor leads the non-academic vocational training programs. This has not only generated conflict between the two ministries but has also created a coordination nightmare for organizations that would like to help. It is therefore important to take into account the transversal and longitudinal nature of TVET in any strategic policy framework. In Sudan, Plan International focuses on both and has been pushing for dual use of the facilities they are helping to rebuild and renovate.

James Howlett (2008) emphasizes that, although the push for a more general technological education will enhance some academic skills, the rigor of a career-based education will enhance the understanding of more core subjects like mathematics, science and reading. This is reinforced by the work of Nunley (2003) who has done extensive research on the learning process and how learning is created. She has found that, especially for the male learner, hands-on learning accompanied with an appropriate instructional strategy will assist in the shifting of newly learned material from short-term memory to more permanent long-term storage for later recall and use.

Sustainable and Post-Conflict Enterprise Development

The Brundland Commission defines sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987, p. 43). With several years of war, this concept of sustainability remains foreign in Southern Sudan because many Southerners have lived one-day at a time.

Robert Chambers formulated the main approach to sustainable development and put forth the idea that development should be people-centered, holistic and dynamic and should build on strengths. In so doing, projects like macro-micro linkages should be independent of external support and resilient to external shocks and stresses in supporting livelihoods (Kollmair and Gamper, 2002). Chambers and Conway (1992, p. 3) defined a livelihood as "sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base."

Sustainable livelihoods development, then, is a holistic term encompassing economic, social, ecological and human development. It is most effective with participation of, initiation by, or direction from, the grassroots levels. Below are two development models including Sustainable Local Enterprise Networks (SLENs) and Basic Employability Skills Training (BEST) aimed at addressing sustainable livelihoods in developing countries.

Sustainable Local Enterprise Networks (SLENs)

The SLEN model was originally developed by Wheeler et al. (2005) as an applied model of business development that equates the significant and systemic changes in enterprise networks with the critical growth and sustainability of local enterprises. SLENs are collaborative, trust-based networks that deliver human, social, financial and ecological benefits for all participants. They address objectives of sustainable development and poverty alleviation, by fostering relationships and building enterprise capacity among various partners, including entrepreneurs, the development sector, investors, local training institutions, community members, sustainable local businesses and government. SLENs offers an alternative to traditional development activities that often have a narrow focus and undermine local generation of creativity, capabilities and self-reliance.

SLENs start with a range of existing assets that are then augmented by some type of external investment functioning as a catalyst for increased growth. Positive outcomes can then result in virtuous cycles of reinvestment in human, social, financial and ecological capital (Figure 2). When done right, sustainable gender-aware livelihood creation through sustainable enterprise development can assist with the reintegration of IDPs and ex-combatants into society, reducing the likelihood that they may return to combat as a survival strategy. In a post-conflict environment like Southern Sudan, this process will help in the transformation of conflict through the creation of sustainable livelihoods. The private sector is suggested to have a vital role to play in creating wealth and promoting socioeconomic development, especially in sub-Saharan Africa (UNDP, 2004). There are a large number of local and national businesses interested in the stability of Sudan and aware of their potential role in promoting peace through their operations (Abdelnour et al., 2008b).

Combined with technical education and skills, entrepreneurial capacity is seen to be an important factor for economic development in Southern Sudan (Yongo-Bure, 2007). It is important that the development of enterprise capacity in Southern Sudan reflect local approaches, knowledge, context and communities (Jackson et al., 2008). Hence, locally-embedded programs can help ensure international, regional and local agency efforts are sensitive and responsive of local realities. Importantly, taking local customs and approaches into consideration can help to reinforce cultural and communal values, local participation, community ownership (Bendick and Egan, 1995), social justice and empowerment (Beugré, 2002).

Figure 2: SLEN Development Model



Source: SLEN model from Wheeler et al. 2005

Contrary to popular portrayals of IDPs as helpless, Abdelnour et al. (2008b) found that enterprise capacity does exist among displaced communities in Sudan, especially in areas where IDPs have access to land and markets. In Southern Sudan's larger towns such as Juba, Rumbek and Malakal, an active financial sector including the emergence of Southern-based banks has shown great potential to support grassroots enterprise, although the microfinance experience in Southern Sudan has been minimal to date. The research found growing market activity as a strong indicator of enterprise potential, but cautioned too much optimism, given the inability of many local and marginalized groups to participate in the main markets. Recommendations for grassroots enterprise development included activities which could help rebuild traditional livelihoods, communities and the relationships between them. Specialized skills, such as vocational training, were recognized as crucial for reintegration efforts for IDPs, returnees, ex-combatants and the general population of Southern Sudan.

The study proposed that two main areas of consideration for grassroots enterprise development in Southern Sudan include enterprise addressing development needs and enterprise models built around traditional livelihood strategies. Enterprise addressing development needs includes those which tackle key issues such as clean water, health clinics and services such as midwives and paravets, demining, appropriate building materials, energy and communication in rural areas. As traditional livelihood strategies are widely practiced in Southern Sudan, the goal of traditional livelihood enterprises might be to enhance quality of life and opportunities for strengthening fragmented social networks, traditions and customs. A number of agriculture and livestock-centered enterprises were recommended (Abdelnour et al., 2008b).

Moreover, there are a growing number of success stories outlining the innovative and effective ways which micro-, small and large businesses have been able to contribute to crisis prevention and conflict resolution around the world, along with a supporting set of tools and resources (e.g. the International Labour Office (ILO) *Guidelines for Employment and Skills Training in Conflict-Affected*

Countries). The ILO has catalogued specific experiences and learning relating to entrepreneurship development programs for refugee and IDP women, men and children in Africa, namely in Sudan, Somalia and South Africa (ILO, 1998).

Research is beginning to shed insight into the role of conflict-entrepreneurs, who may or may not be ex-combatants and who exploit their position for economic benefit. In contrast, there also exist entrepreneurs who struggle to survive under conflict to prevent exploitation (Korf, 2005). Duffield (2001) supports this position and, using a case study of shadow coffee merchants in Southern Sudan, illustrates how "the networks that support war cannot easily be separated out and criminalized in relation to the networks that characterize peace; they are both part of a complex process of actual development" (Duffield, 2001; p.190).

Interventions which support legitimate entrepreneurs who struggle within war economies must be careful to avoid networks that also support conflict. Supporting stability-oriented economic activity may provide a platform for conflict-marginalized civilians to participate in enterprises and other activities which promote post-war reconstruction and development. Yet despite their undisputed role in driving sustainable development in war-ridden zones, foreign aid, assistance and private funds directed at enterprise development have hardly reached conflict and post-conflict areas.

Basic Employability Skills Training (BEST)

The Basic Employability Skills Training (BEST) model aims to "provide young adults from economically weak backgrounds an opportunity to assimilate into the competitive job market" (Dr. Reddy's Foundation, 2009, p1). The model was first developed as Livelihood Advanced Business School (LABS) by Dr. Reddy in Hyderabad, India through their non-profit arm, Dr. Reddy's Foundation (DRF). The program is geared towards helping youth and the most vulnerable community members obtain "the required livelihood and social skills in an environment of learning and mentoring that is responsive to the individual's emotional and development needs" (ibid). In so doing, BEST attempts to bridge the ever-widening divide between those who have access to opportunities and those who are increasingly marginalized from the new jobs and the economy. In a very simple and systematic way, BEST attempts to match market and industry demands with the potential of trainees. Hence, it provides job-oriented training courses to youth who have barely reached high school levels of formal education and prepares them for entry-level jobs or small business creation in various industrial sectors.

BEST programs normally consist of three months of in-class training followed by three months of on-the-job apprenticeship training. The success of BEST is based on its approach, focusing on offering livelihood skills to underprivileged youth of vulnerable age with the objective of 'mainstreaming' them so they can access and enjoy the benefits of the new economy. However, it is much more than a simple transfer of skills. BEST is grounded in a deep belief in human potential and the importance of engaging the whole person to realize their potential to flower and flourish. The model does not simply impart vocational training, although imparting such skills is a critical component of the process. BEST is also a positive socializing process that rescues individuals from negative life styles choices and work practices. The model seeks to ensure that families are involved and parents are trained and communities are included in this process.

What makes BEST not just an educational program, but also a social change program, is that its students and alumni set a higher standard for their community and its youth. The students become role models and mentors for others in the community. This training model also provides opportunities for alumni to get involved in the initiative in various roles including mentoring, financial contribution and new student referrals.

BEST takes its role as a pathbreaker seriously and ensures that its students get a taste of what the middle and upper class students regularly receive in their colleges through industry visits, guest lectures, campus placements and mentoring by corporate managers. This helps the students see what is on the other side. Mentorship is a key element of the model and is important at all levels. While mentorship programs are an obvious component of the facilitators' roles, mentoring by the alumni is also encouraged. Individuals working in government and corporate managers and executives in the private sector act as important mentors to newcomers and graduates in this program.

Because the model is organized around supporting a communitybased approach to learning, students are not the only ones who learn from BEST. Facilitators, who



Young woman practices gem cutting in post-tsunami Sri Lanka. This is one of the successful adaptations of the BEST model that Plan hopes to replicate in South Sudan c. Plan International image bank, October 2005.

are the key agents of delivery, are also supported through research. Those who are involved in curricular design are constantly innovating and incorporating the feedback provided by the facilitators.

Plan International has adapted the BEST model to different countries including India, Vietnam, Egypt and Sri Lanka with varying levels of success. The suggestion to pilot this model in Southern Sudan was based on the similarities in post-conflict conditions between Sudan and countries like Sri Lanka where the model has been quite successful. This piloting is being done in partnership with Child and Police (CAP) Foundation, which is headed by one of the founders of this model and process.

A presentation of the BEST model at a knowledge sharing workshop in 2007 organized by Plan South Sudan in Juba and attended by various government and NGO representatives elicited great interest. A field visit to India by a team of government, NGO and community partner representatives in 2009 has reconfirmed this interest. Plan hopes to adapt this model for use in Lainya Vocational Training Institute and to press for its adoption in other TVET facilities as an alternative education stream aimed at young people who may not have the requisite academic skills to enter the regular academic oriented technical education stream. A rapid market survey in Juba, Torit and Lainya, conducted in 2008, as a prelude to the model's inception, has shown that there is potential for BEST graduates to attain employment and business opportunities upon graduation (CAP Foundation, 2008). It is hoped that this link between market needs and training will result in a better placement of graduates than from traditional TVET programs being implemented by other NGO's.

Section Three: History of TVET in Southern Sudan

The historical foundation for education in Southern Sudan was laid mainly by the British colonial government and Roman Catholic and Protestant church missionaries. Administratively, Southern Sudan was originally divided based on the various missionaries groups, with Anglicans working mainly in Western Equatoria and Catholic missionaries mainly in Eastern Equatoria. Such administrative divisions resulted in unequal education systems between the various parts of Southern Sudan, in part because there was little interest among missionaries for promoting a unified teaching curriculum. Each missionary group promoted their own system in the hopes of maximizing conversion to their denomination.

Missionary education operated until colonial administrators began to subsidize the educational system in 1917. Missionary-run trade centres were later upgraded to Trade Technical Schools – including Torit, Juba, Lainya, Tonj and Wau technical schools. Lainya was, and continues to be, run by the Episcopal Church of the Sudan.

Changes in colonial and missionary interests, as well as political and military conflicts, led to roughly five periods of TVET in Southern Sudan: the colonial and missionary periods, the Anya Nya period, the Addis Ababa period, the SPLA/M period and the CPA period. Each of these has unique characteristics and historical aspects that have impacted the development of TVET in Southern Sudan.

Phase I: Colonial and Missionary Period

During the colonial and missionary period, the British devised a system of separate administration for the north and south of Sudan. The Closed Districts Ordinances and the Passports and Permits Ordinance of 1922 required the use of passports and permits for Sudanese wanting to travel between Khartoum and Southern Sudan. A language policy was developed and enforced in Southern Sudan in 1928, adopting English as the official language in Southern Sudan and Arabic in the North. Although Arabic was the official language in the North, missionary schools in the North taught English and Arabic to the students who were able to afford it. Missionary schools like St. Comboni, St. Francis and Unity in Khartoum continue to promote bilingualism. However, Arabic was categorically rejected in the South, which added to the separation between the North and South (Machar 1995). Hence, language differences and antagonisms have become one of the major barriers in the development and collaboration in educational systems between Northern and Southern Sudan.

The 1946 Administrative Conference held by the British in Khartoum and supported by the Egyptians advocated that Southern Sudan be handed over to the government in the North. This was in part due to the lack of capacity among Southerners to form a post-colonial nation-state. This was culminated with the Juba Conference of 1947, which asked the chiefs of Southern Sudan to vote for unity of the country. Because all of the chiefs were convinced by Northerners (without clear mandate) that unity of the country was good for all the peoples of the Sudan, unity proceeded.

In 1948, the Sudan Legislative Assembly was formed including thirteen handpicked delegates from Southern Sudan. At the 1953 Cairo Agreement, British and Khartoum officials spoke on behalf of all Sudan, requesting self-determination from the Anglo-Egyptian colonial powers. The people of Southern Sudan were deliberately excluded on the pretext that they had no political parties or organizations (Machar, 1995). As a result of the dominance of the Northern political and intellectual elite, interest in Southern Sudan waned and development, including education, suffered.

The night before Sudan gained its independence from Britain, a group of Southern fighters rebelled against the North in what is known as the Torit Rebellion. The rebellion signaled the start of a

movement denouncing the handing over of the South to the North and an attempt to draw attention to political and economic grievances that the British and the Khartoum-based government were not willing to address.

During this period, the British colonists were in strong collusion with missionary groups in Sudan as educational systems were heavily influenced by missionary educators. Not surprisingly, this period is characterized by a disproportionate educational system which favoured the North. In the South, mission schools were built and maintained with the intent to educate converts and develop the technical capacity to serve the missions. Through technical schools and seminaries, such as Okaru Seminary, missionaries trained carpenters, brick layers and other construction-related trades for promoting missionary work. Such skills were not geared for the needs of Sudan and the Southern Sudanese people, but rather to serve the expansion needs of missions. As entrepreneurial and business skills development were non-existent, most trainees did not start independent enterprises which might have served local market needs. Those trained by the missionaries often trained others (mainly their sons) through apprenticeship. Unlike in the South, the missionaries and the British in Khartoum in the north created opportunities for higher education, including Gordon College which in 1951 became the University of Khartoum (Smith and Bull, 1991).

Phase II: Anya Nya Period

The Anya Nya period is characterized by the first civil war in Sudan, occurring between 1955 and 1972. During the Colonial Period, the British government had directly and indirectly contributed to the isolation of the Southern Sudan, helping to create tensions which resulted in frustration and civil wars. The Anya Nya Period started after the Torit rebellion, when groups in the south were not willing to submit to the new "colonist" in the north – the Khartoum government. As the war intensified in the south, many of the missionary programs were closed due to insecurity.

The Anya Nya war's aim was to liberate the South from Arab-Islamic domination by creating a 'new' secular, culturally diverse country (Danforth, 2002). One of the founding fathers of Anya Nya was Reverend Father Saturnino Lohure – who had been educated by the Catholic missionaries and became a priest. Realizing lack of southern intellectuals, Fr. Lohure joined the Sudan parliament in Khartoum as a representative for Southern Sudan. With continuous isolation and lack of investment in education in Southern Sudan, during the second Sudan parliament, Fr. Lohure raised Southern Sudan's problems and concerns and proclaimed that "The South has no intention of separating from the North, for had that been the case nothing on earth would have prevented the demand for separation. The South will at any moment separate from the North if and when the North so decides, directly or indirectly, through political, social and economic subjection of the South" (Paterno, 2007). Fr. Lohure was frustrated; he abandoned the parliament and helped form the first rebel movement called the Anya Nya 1.

The Anya Nya period saw one of the major deteriorations in the educational system, especially in technical and vocational training, in Southern Sudan. The village and elementary schools that were feeding the mission technical schools (e.g., Torit and Lainya) were closed or cut-off due to instability and security concerns. However, despite the limited enrolment of students and the growing insecurity in these regions, the Khartoum government took ownership of missionary schools and upgraded them to intermediate technical schools, retaining the missionaries' administration policies. Rather than emphasizing the need for technical schools, the government in Khartoum developed Khalwas (Koranic schools) and introduced Arabic to some areas, despite the 1928 language agreement that accepted English as the official language in the South. These government changes resulted in the conversion of Juba Technical Secondary School to a military barrack. As the war intensified, Torit, Lainya, and Tonj technical schools were closed, bringing an end to TVET programs in Southern Sudan. These schools were only reopened after the Addis Ababa Agreement.

Phase III: The Addis Ababa Peace Period

This third phase from 1972 to 1983 was characterized by the peace period between the Addis Ababa Peace Agreement (AAPA) and the recent war in Sudan led by the SPLA/M. With the AAPA, "the South emerged as an island of democracy within the autocratic Sudanese state" (Ali and Mathews, 1999, p. 11). With the AAPA, there were two governments: the central government in Khartoum and the regional government of Southern Sudan based in Juba. The AAPA provided the South with an unprecedented degree of autonomy over its rich mineral and oil resources, which in turn posed a threat to the government in the North by restricting its influence in the South.

This peace period resulted in the reopening of the five technical schools and the establishment of the first university in Southern Sudan – the University of Juba – in the small town of Juba which functioned as the seat for the Southern Sudan regional government. With the AAPA, some bush schools were reopened and upgraded into primary schools and many more primary schools were built. During this time, many successful students from Southern Sudan enrolled in intermediate and secondary schools and those who were able joined the University of Juba which opened in 1973. The University of Juba became one of the first avenues for students in Southern Sudan to obtain post-secondary education. Schools during this period were better than their predecessors.

However, lack of qualified and educated people haunted development in Southern Sudan during this period. The government in Juba probably had no knowledge that TVET was essential for the development of the country and the knowledgeable Khartoum government had no interest in developing and upgrading skills in Southern Sudan. The two governments demoted intermediate technical schools to technical training centers. For example, Wau Intermediate Technical School became Wau Vocational Centre. Likewise, Lainya Intermediate Technical School was changed to Lainya Vocational Training Institute, which was then run by the Episcopal Church of Sudan.

These changes had significant impact on the implementation and development of TVET in Southern Sudan. This downgrading of TVET was partly because TVET was considered a low priority by the two governments because of the Sudanese perception of TVET as programs for "academic losers." Many people believed TVET was for school "dropouts" and people who could not cope with the regular educational system and university studies. Rather than enhance the technical and vocational schools in Southern Sudan, the regional government in the south opened a Multipurpose Training Centre (MTC) in Juba with the aim of helping government officials with badly needed skills. MTC trained government officials in construction, book keeping, store management, electrical installation, carpentry, mechanics and secretarial skills.

During this period the only functioning technical school – Torit Intermediate Technical School – was upgraded and transformed into the only technical secondary school in Southern Sudan. At Torit, junior three graduates⁹ were able to learn carpentry, bricklaying and academic subjects such as science, to graduate with a National Sudan School Certificate (NSSC). Successful candidates were allowed to join higher institutions in the north like Khartoum Technical Institute (KTI) which offered a Diploma program. However, the language differences between the north and the south became an obstacle to many southern students joining the mainly Arabic higher technical education programs in the north. With the language problems and lack of government support to Torit Technical School, very few students were able to join the Khartoum Technical Institute.

Fortunately, during the AAPA, more skilled personnel returned to Southern Sudan from Uganda as returnees after the fall of Idi Amin Dada. These individuals were often able to attain appropriate

^{8.} This is not only a Sudanese perception but it is a common belief in Sub-Saharan Africa, with historical roots in colonialism

^{9.} Junior three graduates are equivalent to the present senior one class.

technical and vocational skills during their time as refugees in Uganda and contributed to the badly needed technical and vocational skills and to the labor market in Southern Sudan.

The AAPA came to an end with the discovery of oil in the southern regions in the early 1980s. This became a major factor for the violation of the AAPA by the government in Khartoum. The military government of Jaafar Mohamed el-Nimeiri redrew the borders between the southern and northern provinces, to remove the oil fields from the south (Ali and Matthews, 1999). In addition, the government implemented Sharia, or Islamic, law throughout Sudan, resulting in non-Muslims in the south being subjected to detention, public floggings, amputations and other human rights violations (Human Rights Watch, 2003). The unfaithfulness of the government in Khartoum to keep the AAPA and the subsequent implementation of Islamic law for the non-Muslim southern communities became the catalysts for the escalation of a new war in 1983 led by the SPLA/M.

Phase IV: The SPLA/M Period

The Sudan People's Liberation Army/Movement (SPLA/M) Period was marked by the second civil war for equality in the Sudan. This second war period resulted in the militarization of the country and the military rule of the current Islamist government of Omar Hassan El-Bashir, which came to power in 1989. All segments of Sudanese society were either mobilized or forced to assume their national duty in defending the now called 'Islamic Nation.' For the first time in the history of the war, civilians in the north were mobilized and public sector employees were required to attend military training and fight in the war. Students from the south and the north were required to train in the Popular Defense Forces (PDF) before attending post-secondary education. Because of the Islamization of the war, many northerners that died in the southern war zone were celebrated as martyrs and publicly honored. Their families were financially compensated for their sacrifices. The war was promoted by Khartoum as a "holy war" against the Christian and Animists in Southern Sudan.

This period was not only characterised by the loss of many lives to war and famine, but also by the massive destruction of the entire infrastructure in Southern Sudan, including technical and vocational schools. Torit and Lainya Technical Schools were closed because the war intensified in these regions. 10 Northern armies removed the roof and equipment from these schools and sold them to traders in Khartoum. Lainva Technical School moved to Yei, and later to Uganda, while Torit



Torit Technical School. c. Dr. Dominic Odwa Atari , March 2009.

^{10.} Torit and Lainya had strategic military importance and their grounds were heavily mined. This legacy is now making it very hard and expensive to initiate development projects, including the ongoing reconstruction of Lainya Vocational Training Institute, which Plan is supporting.

Technical School moved to Juba and reinstated the opening of Juba Technical School (JTS). With the exception of the reinstated JTS, which was facing negligence and abandonment, all other technical and vocational school in Southern Sudan ceased functioning during this period, resulting in the end of TVET programs in Southern Sudan.

Phase V: The Comprehensive Peace Agreement (CPA)

Despite numerous previously failed peace agreements, one of the longest wars in Africa came to an end with the signing of the Comprehensive Peace Agreement (CPA) between the Khartoum government and the SPLM/A in Naivasha, Kenya, on January 9, 2005. The agreement was brokered by the Inter-Governmental Authority on Development (IGAD), the United States and several European countries. The co-signatories to the accord called for a permanent ceasefire.

The CPA is based on the core principles of self-determination, security arrangements, wealth sharing (including provisions for the division of oil revenues) and power-sharing. The agreement resulted into the formation of a Government of National Unity (GoNU) with a decentralized system of administration in the south called the Government of Southern Sudan (GOSS). According to the United Nations Mission in Sudan (UNMIS), the CPA constitutes a series of negotiated agreements and protocols between the Khartoum government and the SPLM and outlines a framework for long-lasting peace. Sources in the government of Khartoum stated that the agreement focused attention on the key requirements for sustainable peace in Sudan by addressing the causes of conflict, including poverty and inequality. This requires the establishment of a secure environment for rehabilitation, development and poverty reduction. With the signing of the CPA, the situation seems favorable for the reopening and development of TVET in Southern Sudan and eventually the development of sustainable livelihoods in the region.

The Current Condition of Vocational Facilities in Southern Sudan

The CPA period has seen the return, rebuilding and creation of several informal technical and vocational programs in Southern Sudan, including Juba Technical Secondary School, Torit Technical School, Lainya Vocational Training Institute and St. Monica Vocational School. Of these, Plan International is directly engaged with two: Juba and Lainya.

Torit Technical School (TTS)

The Torit Technical School (TTS) was established in the early 1950s by Roman Catholic missionaries and is located in Eastern Equatoria. After its inception, TTS had been an active centre for skills development in the region. The school started as a technical training centre, which provided skills in automotive mechanics, carpentry, building, brick-making and shoe-making. The training accommodated only a small number of students. By mid-1960s, TTS was upgraded to a junior technical school, targeting early school leavers and students with low grades who were unable to enter secondary schools.

The programs in the school were geared towards providing skills relevant to meet consumers' needs and demands. From the late 1960s, the school was closed due to war but reopened after the Addis Ababa Agreement in the mid-1970s. Between 1976 and 1979, TTS became a senior technical school re-offering its previous courses in carpentry, automotive mechanics, building and brick-making. The school was closed in 1986 after increasing military intensity.

After the CPA, GOSS proposed renovating and rebuilding the school. A company by the name of Everest was contracted in 2007 to renovate the facility, yet little had been completed by the time of

the fieldwork for this report. ¹¹ Numerous Ministry of Education officials refused to meet the research team to discuss the current state of, and future plans for, TTS.





Torit Technical School. Although affected by the civil war, many of the buildings remained fairly intact. c. Dr. Dominic Odwa Atari , March 2009.

Juba Technical Secondary School (JTS)

Juba Technical Secondary School (JTS) is located in Juba, Central Equatoria, in an area known as Buluk. JTS was established in the 1950s as an intermediate technical school. It then became a junior technical school and eventually was developed into a secondary school in the 1960s by GOS during the Anya Nya Period. It was closed in 1968 when war intensified in the region and reopened after the Addis Ababa Peace Agreement in 1972.

The operations of JTS were disturbed by the intensification of war during the SPLA/M period. During this time, Torit and Lainya were transferred to Juba and JTS worked in combination with these technical schools. In 1987, GOS renamed the school Juba Technical Senior Secondary School and, in 1992, it was renamed Juba Technical High Secondary School. Post-CPA, the school once again became JTS. It is now functioning after being renovated and retooled by Plan International.





Juba Technical, then and now. Plan hopes that this will be the standard for reconstruction of TVET facilities in South Sudan.

Left, building the perimeter fence. c. Berkeley Hacket, November 2006.

Right, the new teachers houses. c. Ndūng'ū Kahīhu, December 2009.

11. The awarding of the contract for Torit was suspected to be irregular, a fact that later was to force Plan to indefinitely postpone the work they had planned to do to support the school.

Lainya Vocational Training Institute (LVTI)

The establishment of Lainya Vocational Training Institute (LVTI) followed the historic Lainya Technical School (LTS), established by the Church Missionary Society (CMS) in 1940s. It was first closed in 1964 during the first civil war. After the Addis Ababa Peace Agreement, the Episcopal Church of the Sudan (ECS) revived LTS among other CMS schools. With a mandate to empower youth with basic skills, the school was reopened by the ECS provincial education office and renamed LVTI. Training was targeted to youth both in and outside the church community, early school leavers and Ugandan refugees who fled war in northern Uganda. The main programs offered included carpentry/joinery, appropriate



Lainya Vocational Training Institute. Unlike Torit, the original buildings in Lainya were totally destroyed during the war. c. Dr. Dominic Odwa Atari , March 2009.

technology, masonry, home economics, agriculture, English language and electrical skills.

Although affiliated with the church, government support helped to make LVTI one of the top vocational schools in the country. The institute was closed in 1987 with the SPLA presence in Lainya town. Plan International is currently renovating the building with plans to reequip the workshop and the training facilities at the school.





Rebuilding Lainya Vocational Training Institute. c. Dr. Dominic Odwa Atari , March 2009.

Proposed St. Monica Vocational School Complex (SMVSC)

The St. Monica Vocational School Complex (SMVSC) is a new establishment proposed by the local religious Sisters of the Sacred Heart of Jesus and the community members of Eastern Equatoria. The complex will be located about five kilometers south of Torit town along the Torit-Katire road. With extensive support from the local community and government, SMVSC has acquired a large plot of land (approximately two square kilometers) with varieties of natural vegetation and rich soil suitable for agricultural training and activities.

SMVSC intends to provide academic and vocational education based on Christian values for marginalized women and girls of diverse abilities, ethnic and cultural backgrounds. These women currently face an unemployment rate twice as high as men. The initiators of SMVSC intend the school

complex to offer concrete initiatives for addressing problems faced by women. The school has a mission to provide access to education and vocational training to improve the future capacity of women and girls to contribute to family and community development. Economic independence and self-reliance for women, as well as faith and community development, are primary goals of SMVSC. Vocational training and education will target young mothers, early school leavers, victims of war including surviving mothers and widows, and women and girls generally. To date, the SMVSC members have planted trees to fence and secure the property but they lack funds to start buildings and the programs.

Table 1: Comparisons of Technical and Vocational Schools

	Torit Technical School	Juba Technical Secondary School	Lainya Vocational Training Institute	St. Monica Vocational School
Location	Torit	Juba	Lainya	Torit
Funding	GOSS and Plan International	Plan International	Plan International	No funding
Progress	A contractor is on the premise but no significant progress has been achieved since 2007.	The rebuilding of the school is completed and Plan International is equipping the school.	The rebuilding is almost completed. Plan intends to equip the school in time to open in April 2010.	The founders have planted trees as a fence but no buildings have been erected due to lack of funds.
Focus	Secondary school students	Secondary school students	Any interested individuals	Single mothers; widows; family based approach (day care for children)
Administration	GOSS and Eastern Equatoria State Government	Central Equatoria State Government	Episcopal Church of the Sudan	Religious sisters and community members
Ownership	GOSS	Central Equatoria State Government	Church and community	Church and community
Current Status	Uncertain; dependent on GOSS initiative	Running TVET programs	Rebuilding; will start TVET programs	Depends on whether funders are found

Table 1 compares the four technical and vocational school projects. LVTI and SMVSC have strong community-based support and ownership. Community support was expressed in many ways for these projects. For example, upon hearing that the Lainya school would be renovated, community members cleared the school grounds of overgrowth which had spread during many years of closure. In the case of SMVSC, the support of two villages helped lobby the government to award the land to the sisters and community members to initiate the project. LVTI and SMVSC are examples where community expressions are aligned with intended educational interventions. Of the government-run projects, JTS has the support of the Central Equatoria State Government and is progressing with the assistance of Plan International. At the time of the fieldwork, the project to refurbish TTS showed little progress.

Section Four: Methodological Approach

Study Structure

This study used qualitative approaches to address the research objectives and ensure vivid and inclusive accounts of current TVET status and opportunities in Southern Sudan. The study involved a one-day workshop (focus groups) to identify stakeholder needs, concerns and research leads. Next, semi-structured in-depth interviews were conducted to examine current and future market needs and trends, community and stakeholder priorities, TVET challenges and gaps, and ideas for how these can be addressed. Figure 3 shows how the various aspects of the study were connected.

Sample Selection

In total, there were 40 participants in the one-day workshop, of which one third were female. To achieve maximum variation in residents' voices, a total of 26 participants were purposefully sampled (Patton 1990) for the in-depth interviews (Table 2). Respondents to the in-depth interviews ranged from 29 to 65 years of age.

Figure 3: Study Design

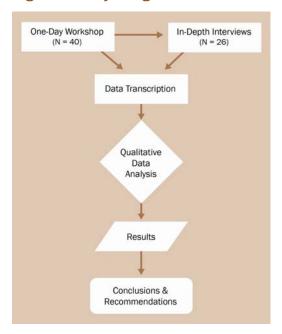


Table 2: Participant Profile

Category	Description	Workshop Participants			In-Depth Interview Participants		
		Male	Female	Total	Male	Female	Total
Government Officials	Both GOSS and state level	4	2	6	6	3	9
NGO Members	Local and international	8	3	11	2	3	5
Community Members	Community and religious groups	2	4	6	6	4	10
Job Seekers	College/university graduates seeking jobs	2	0	2	-	-	-
Entrepreneurs	Business owners	4	1	5	-	-	-
Teachers/ Lecturers	High schools and university instructors	5	0	5	2	0	2
Students	High school students	3	2	5	-	-	-
Total		28	12	40	16	10	26

Workshops

The workshop participants were asked to explore the following:

- Existing and future market needs and demands in Southern Sudan
- Priority of the stated needs
- Factors which help and/or hinder TVET program development in Southern Sudan

Participants were also asked to suggest solutions to address the gaps and obstacles to achieving effective TVET training, and potential key partners in achieving the market needs and demands. Workshop participants were grouped into five focus groups to address the objectives.



One-day workshop, Juba. c. Dr. Dominic Odwa Atari , March 2009.

In-Depth Interviews

The in-depth interviews addressed similar questions but were open-ended with guidelines that were flexible to allow new concepts to emerge (Glaser, 1992). An interview guide was developed based on themes and constructs related to TVET training opportunities, many of which were highlighted by workshop participants. The guide was open-ended to stimulate conversation. The checklist was reviewed and pre-tested several times by researchers for flow, clarity and length. Since the checklist was designed to be flexible, it allowed the interviewer to follow up on issues raised by participants that were not on the checklist. The interviews were conducted by only the first author to provide consistency. All participants were asked for their consent and were promised confidentiality. The interviews lasted between 45 – 60 minutes and were recorded for accuracy.

Analysis

Reports from the focus groups were analyzed based on what participants identified as important. The interviews were transcribed verbatim and text analysis was performed to identify key themes related to the research objectives. Thematic categories were identified through line-by-line coding, a common strategy in inductive qualitative research (Strauss and Corbin, 1990). Themes related to the objectives were indentified based on a number of criteria including: relevance to the research objectives, frequency (themes with largest number of mentions are considered important), universality (how predominant the same theme is across different research participants), differences between research participants, relative importance of the themes within interviews, and emphasis (e.g. emphatic speech). Once the key themes were identified, the relationships and differences between the various themes were examined. Low inference descriptors were also used to maintain respondents' voices in the interpretations (Baxter and Eyles, 1997).

Additional analyses included backward mapping of market needs and linkages with appropriate TVET apprenticeable trades and an analysis of TVET-related strengths, weaknesses, opportunities and threats (SWOT).

Research Limitations

Research limitations exist with any study, and can be significant depending on the nature and location of fieldwork.

A primary limitation of this study was the considerable lack of understanding with regards to technical, vocational and entrepreneurial knowledge. While an important discovery in itself, this at times prevented the researchers from engaging in useful dialogue and discussions on TVET issues and, similarly, frustrated interviewees.

A second limitation resulted from political tensions and inter-governmental competition. The researchers met with a lack of cooperation from several organizations and government offices, and in one instance were ejected from a ministry office after having previously confirmed an appointment.

Thirdly, 'insider' and 'outsider' researcher dynamics led to complex and often immeasurable limitations. The lead researcher and first author, being both Southern Sudanese and Canadian, met with complex perceptions of being foreign and local. At times this complex dynamic triggered either welcome or suspicion or both. In general, an excellent rapport was developed between field researchers and research participants; however, the complex insider-outsider dynamic will certainly have influenced how some participants answered or reacted to the research team and questions.

Finally, the research team was unable to meet with as many organizations, individuals and potential TVET partners as initially intended. This limitation was a result of both logistical and time challenges, including the unavailability of staff in some Southern Sudanese organizations to participate in the study.

Section Five: Results - TVET in Southern Sudan

The following research results are organized around the main objectives and emergent themes related to: definitions and understanding of TVET, market needs and demands, priorities, challenges and gaps to implementing TVET, and participant views on how to address these challenges and gaps. Traditional Southern Sudanese names have been used as pseudonyms to protect respondents' identities. Gender (male, female), age, and group affiliation have been provided.

Understanding of TVET

When asked to define technical, vocational, and entrepreneurial capacity, participants had a variety of responses:

Technical Capacity

Respondents defined technical capacity as the ability of an individual to perform his or her specialized duties to earn income. Participants like Wani argued that:

"Technical capacity should have no one definite definition because it affects many aspects of making things and services. Technical entails carpentry work, welding and mechanical works, bricklaying, building and other services that you don't need professional technician. It is as using your hands and the knowledge you know about making things." (Wani: male, 50, government official)

Vocational Capacity

When asked about vocational capacity, respondents defined it as "skills that can actually get you [trainee] to the job immediately". Respondents argued that vocational capacity is about having practical and handy skills that enable survival. Vocational skills could be on the job skills training (e.g. apprenticeship) without necessarily learning the theories. Participants acknowledged that vocational skills are non-formal learning achieved through doing.

Other respondents identified tailoring and hairdressing as important vocational skills for women. Such skills can help keep women around their neighborhood and homes.

"We have training of tailoring, embroidering also salon, hair dressing. So we need our girls who are drop outs to come and be trained so they can have their own skills... have the skills so they can earn a living from it. Women should just earn something [income] within the range of the house." (Akeck: female, 40, government official)



One-day workshop: Group discussion, Juba. c. Dr. Dominic Odwa Atari, March 2009.

With a long history of downplaying technical and vocational training in Southern Sudan, respondents view vocational schools as something for individuals who have not or are unable to complete academic training. The negative stigma against TVET in Southern Sudan is quite clear.

"Vocational is a term that has been used in South Sudan for a very long time. Vocational is getting skills that can actually get you to the job immediately... it's not about theories but about practical skills to be able to survive and earn a living. But the downside is that it [vocational training] has been seen as something for the failures, something for people who are not academically strong. It is a last resort. Vocational skills and training are seen as something for the weaker ones in society." (Loku: male, 32, NGO staff)

When asked to compare technical and vocational capacity, many respondents mentioned technical training as a more academic and theoretical field while vocational is practical based. In general, all participants in the workshop and in-depth interviews articulated technical and vocational training as very important skill training needed for the development of Southern Sudan because they could quickly be attained and help build capacity for the various market needs and demands.

Entrepreneurial Capacity

Few respondents were able to define entrepreneurial capacity. Several participants ignored the question entirely.

"Entrepreneurial capacities are important marketing skills that business minded people should have... it is being able to read what is lacking and what is in demand and being able to supply the demands by creating opportunities for themselves." (Juan: female, 46, government official)

Currently, most of the entrepreneurs in Torit, Juba and Lainya are foreigners from Kenya, Uganda, Ethiopia and Eritrea. Due to lack of entrepreneurial skills and training norms, many young Southern Sudanese are not able to exploit the market opportunities that have come with the signing of the CPA. Consequently, foreigners who are graduates or have been exposed to marketing skills are able to identify market opportunities and establish and operate enterprises.

With many years of war, respondents argued that people in Southern Sudan lack sufficient role models who have entrepreneurial skills. Some of the role models, like carpenters, are utilized by communities where possible. For example, the community in Lainya has one female carpenter who is helping in the reconstruction work of their local church compound and on rebuilding Lainya vocational school. However, the church and community members in Lainya argued that although many would like to follow her example, there are no facilities that could help train them. The community in Lainya hopes that, with the restarting of the LVTI, many females will join such training for what was previously considered male occupations.

During the war period, most merchants were from Northern Sudan. It is only now, after the CPA, that people are starting to realize the benefits of entrepreneurship. However, although some residents might be willing to venture in such directions, they often do not have the financial backing or managerial skills to start. For example, many residents cannot imagine why basic produce, such as tomatoes, should be brought from neighboring countries:

"Can you imagine even tomatoes are brought from Uganda when we have the Nile here we have all these in the islands here. We can actually grow tomatoes and supply for the local markets and all the hotels that are here... this is an opportunity but there are no appropriate skills... some have the skills actually to grow the tomatoes. But when you have the skills do you have the backing like a capital so you can start?" (Loku: male, 32, NGO staff)

Participants in this study argued that technical, vocational and entrepreneurial capacities are important skills that would provide livelihoods not only to the practitioners of such skills but also to their relatives and immediate family members. Study participants stressed that with no appropriate entrepreneurial skills, any financial investments will have no tangible returns.

Gender Dimensions and Differences of TVET

Respondents stated that the implementation of TVET in Southern Sudan should reflect gender dimensions and differences in the region. Participants argued that women can achieve anything in Southern Sudan if local communities and policy makers let go of gender-restrictive traditions and attitudes. The stigma that women are unable to do the technical work of mechanics, carpentry or bricklaying prevents women and girls from entering vocational trades. Participants appreciated that the CPA has brought an opportunity for both men and women to contribute to the development of Southern Sudan but there is also a need to enhance and encourage women's technical and vocational skills. Women should be provided with opportunities beyond the traditional embroidering, tailoring and cooking.

Under the Ministry of Gender Equity and Social Change at the GOSS level, the government is trying its best to advocate for girls' education. This initiative can only be realized if girls are provided with equal opportunities. Many participants argued that TVET is an excellent avenue to advance some of the badly needed skills with equal female involvement. Respondents acknowledged the significance of the CPA in providing chances for women. Many research participants argued that the CPA has brought a lot of opportunities to women in Southern Sudan.

"We [women] just need to sensitize ourselves of what we got now. In these three years we have women commissioners. We have executive ministers even if they are few, they're there. There are women in parliament. We have women as community leaders. We have commissioners. All these came because of the CPA." (Akeck: female, 40, government official)

With proper implementation, respondents argued that TVET will provide more opportunities for women to help in the reconstruction and development and become visible contributors to the society of Southern Sudan.

TVET and Livelihoods

Respondents suggested that TVET can provide marginalized communities, especially youth and excombatants, with livelihood options for building new skills and lives rather than just wartime survival options. It is suggested that residents who embrace new vocations will serve as role models for their younger sisters and brothers, as well as other community members. Challenges for re-educating older community members were also expressed. Higher demand for specific trades, such as bricklaying, carpentry, automotive mechanics, construction, and handicrafts were seen as an opportunity for encouraging wide participation in TVET programs.

"The demand for the handy skills are there because how can you get a 20 year old person to go back to school and start primary one so that he can get or earn university degree so he can get to the right kind of job? This person has to survive; this person is marrying, wants to settle down have a family like any other person." (Loku: male, 32, NGO staff).





Women crushing rocks near Juba (left), and using appropriate technology for brick-making (right).

c. Ndũng'ũ Kahĩhu, March 2007.

TVET and Peace-Building

Respondents from both the workshop and the one-on-one interviews viewed TVET as an instrument for peace building. Many believe that if young people, including ex-combatants, are provided with alternative livelihoods they will not think of violence. Respondents to this study emphasized that it is of great importance that the youth and the demobilized ex-combatants are provided with technical and vocational skills, to offer them a second chance to better their livelihoods instead of relying on the firearms that they have depended on for most of their lives.

TVET and the CPA

When asked how the current peace situation affects technical, vocational and entrepreneurial activities, many residents argued that the CPA should not just be the signing of the accord but it should generate an environment conducive for (re)building the devastated region.

"I think peace is like an environment that allows a number of things to happen. And one of these things is vocational training. I think more is needed now than ever before because the war interrupted and destroyed a lot. Technical and vocational training is actually peace itself because it provides big, big opportunities for the ex-combatants and all citizens who have lost their livelihood during the war." (Loku: male, 32, NGO staff).

Although participants in the study acknowledged the opportunities brought by the CPA, other participants blamed the CPA for bringing different, unacceptable cultures to Southern Sudan. Some of the respondents felt that the new cultures are not a positive influence because they have exploited children and are leading many youth to follow new influences. The following comment summarizes many of the concerns:

"The peace [CPA] situation is affecting us [Southern Sudan] in many ways. We have influx of people coming from outside, neighboring countries. Here people with different behaviors drawing our children. And then those people who expose the videos with the bad films. They are attracting the children in the market all the time and some children don't go to school because they want to see those things in the market." (Sadia: female, 35, government official)

Overall, respondents to this study postulated that the CPA has provided an opportunity for TVET to restart after several years of war. There is peace and people are more relaxed and can move more freely. With the CPA, investors have come to South Sudan, all with different interests and "they should be welcomed" (Sadia: female, 35, government official). Investors can also help by supporting the development of TVET programs and other services important to the community. With peace, participants articulated that investors are finding untapped markets in Southern Sudan. However, the biggest uncertainty is whether the CPA could be sustained beyond 2011 – the year of the referendum. If the CPA is not maintained, all investments in TVET will be lost.

TVET and the DDR Process

When asked about demobilized ex-combatants, participants mentioned that the demobilization process is a direct result of the CPA. As a result of the CPA, it is now possible to demobilize some of the military structures and ensure individuals are enrolled in basic education (reading, writing) and training programs. Participants argued that TVET is an essential part of peace building and reintegration.

"The DDR [disarmament, demobilization, and reintegration] is part of the CPA and is part of security arrangements and it should be implemented because it leads to downsizing of both armies [North and South]. It also leads to community security in Southern Sudan. However, if we don't do DDR properly, the CPA will not be sustained. We [Southern Sudanese] will have wars in the entire place so we can't afford that [war]. You [government and interest groups] need to provide alternatives to the demobilized ex-combatants." (Pitia: male, 60, government official)

TVET Challenges and Critical Gaps

With the signing of the CPA, many Southern Sudanese were hopeful that the peace would quickly bring about tangible progress towards prosperity, better educational opportunities and better livelihoods. However, after four years of the CPA, many Southerners are becoming restless from not seeing any substantial benefits of peace. Rather than seeing tranquility, many respondents complain of growing insecurity due to inter and intra-tribal conflicts and cattle raiding, which have killed several innocent people. Below are some key challenges and critical gaps that the respondents have outlined as major reasons for lack of significant development in TVET in Southern Sudan.

Political Will and Capacity

Workshop participants and interviewees argued that the resources of GOSS have yet to be directed towards developing TVET capacities. One example provided is the rebuilding of the Torit Technical School. In 2007, GOSS committed a budget for rebuilding the school, yet little progress has been made in its reconstruction. Only a poorly constructed fence has been erected, and it is already in disarray. Some participants stressed that, in many cases, GOSS relies on the Sudan Government in Khartoum to make peace attractive, rather than taking the initiative to ensure that the people of Southern Sudan receive the benefits of peace.

Negative Perceptions about TVET

From early TVET experiences, technical and vocational training has received a negative stigma among Southern Sudanese. Rather than viewing TVET as an ideal program for early school leavers or technically-oriented individuals, some of the interviewees suggested that the common perception is that TVET is geared towards "academic losers," "drop outs," and lower-status blue-collar jobs. In part, this negative stigma results from an education system which celebrates academic achievement over vocational trades. TVET is also seen as a training venue for men, not women. Many of the interviewees supported this, stating that technical and vocational skill development should be targeted to men.

Some participants argued that there are insufficient opportunities for early school leavers, or "dropouts." In Torit, for example, the only secondary school (Torit Day) does not have the capacity to provide education for all those who demand it.

"Torit technical needs to be renovated or built so that more of the dropouts will benefit. Because we have lots of dropouts here [in Torit], we have only one secondary school in the whole of Torit county. So all these primary school after finishing them only focus on Torit Day Secondary school¹² and if we don't have another secondary or vocational school accommodates the dropouts..." (Sadia: female, 35, government official)

Students who leave school prior to graduation are, in some cases, not well suited to the manner in which the learning has been presented. Technological education offers a unique approach to students who do not learn well in a traditional classroom setting. The negative stereotype of vocation and technical training stains the potential positive benefits of TVET. For example, some respondents stated that many who have technical and vocational training do not appreciate their skills because they are looked down upon, resulting in excessive low self-esteem.

12. Torit Day Secondary school is the only government secondary school in Eastern Equatoria State.

"If you are carpenter, please be proud. Our people have a very bad mind set. They think that technical and vocational education is not good education but that is not true. This type of education is for those who think with their head and transfer it with their hands. Therefore you should love to work with your hands. It's not cheap to sell your hands because some of the youth may like to go for white collar jobs. We are now paying a higher price because our youth are just going about [doing nothing]." (Majack: male, 40, community member)

Few Clear TVET Policies

Leaders such as Salva Kiir have mentioned the importance of technical and vocational schools to the reconstruction efforts in Southern Sudan, yet few clear policies and plans exist for TVET rehabilitation. TVET curricula, standards and certification criteria remain absent. Without clear curricula for TVET in Southern Sudan, many NGOs have embarked on individual training programs disconnected from wider development needs and priorities. Many respondents stated that people who are willing to enter technical schools are left in limbo as to what credentials they might receive upon completion of a training program.

Lack of TVET Role Models

With several years of war, Southern Sudan has insufficient role models to show young people and demobilized ex-combatants the importance of technical and vocational training. Many who have been trained in the short vocational training program in Juba, for example, have not found employment. Getting vocational training and not getting employment is a disincentive for many young people and ex-combatants to accept such training. A follow-up study conducted by SAVOT¹³ found that about 77 percent of their 244 graduates had found some form of employment (SAVOT, 2008). Some graduates did not find jobs partly because their training was insufficient to compete in the market place. These statistics overwhelmingly suggest that preexisting approaches are not sufficient. Instead of repeating patterns of failed initiatives, a new and comprehensive TVET approach should be developed and implemented.

Competition with Foreigners

Several years of war in Southern Sudan have reduced the skill level in the country to unacceptable levels. The available skilled Southern Sudanese are overwhelmed by foreigners due to unequal market competition. In certain areas, like labour, respondents argued that entrepreneurs from the neighboring countries are flooding the markets with very cheap labour.

"You can be a tailor or a mason but do you have that experience to be able to compete with the influx of masons from Uganda and Kenya. How cheap are your products? At the end of the day the consumer will want the cheap and best quality of whatever product you're going to provide and offer. These competitions push these people out of the job market. It is hard to really compete." (Loku: male, 32, NGO staff)

Though Sudan is saturated with skilled foreigners, educating local people to levels equivalent to foreigners will take years. Participants argued that, for the next ten years or so, the government must continue encouraging foreign skilled workers to come to Sudan to train the local people. However, the government must also invest in TVET programs and participants to help build local skills. Other

13. SAVOT is a Japanese organization helping Southern Sudan with technical and vocational training. They are administering the Juba Multi-Purpose Training Centre (MTC).

participants argued that foreign workers do not need to be encouraged to come to Southern Sudan; the high demand for their skills makes Southern Sudan an attractive market on its own without government encouragement.

Many respondents acknowledged the fact that, although organizations like SAVOT in MTC are providing some technical and vocational training, the trainees are not competing in the market place because their skills are not comparable with foreigners with university or college degrees. Participants like Wani argued that Southern Sudan should continue working on upgrading TVET if trainees are to effectively and successfully compete in the market place.

"We train but we are still at the beginning. And so they cannot compete with a foreigner who has a degree or a diploma and some experience ... so that matters. We can still look forward for that day that our few [TVET graduates] will compete at an equal ground with foreigners or probably do better." (Wani: male, 50, government official)

Despite the influx of foreigners, participants argued that the people of Southern Sudan are not benefiting much from skills transfer and reinvestments. Participants like Wani argued that foreigners are reducing the money that circulates in Southern Sudan.

"Part of the resources that should be used like the capital [money] is going for salaries for the foreigners and then they take them to wherever they have come from. So it affects the buying power and the paying power for services." (Wani: male, 50, government official)

When asked if knowledge transfer does happen from foreign skilled workers to Southern Sudanese, participants answered that knowledge transfer is not happening. However, they stressed that it should not continue like this for another ten or twenty years. Respondents argued for the government of Southern Sudan to encourage TVET programs.

Lack of Access to Enterprise Enablers

Many residents talked of a lack of resources to enhance business opportunities. Although there are organizations that provide micro-financing, participants like Laku argued that it is only well-to-do entrepreneurs that are able to take advantage of such opportunities. This is partly because only educated entrepreneurs can provide the type of business plans required by the microfinancers; poor youth and demobilized ex-combatants are not able to fulfill the basic requirements for a loan because they have no formal training and are illiterate. Respondents suggest the need for proper investment in TVET graduates and potential entrepreneurs in Southern Sudan. Other respondents emphasized that small scale micro-financing organizations working in and around Torit, Juba and Lainya are ineffective because they assist people to brew local alcohol or make leggemat¹⁴ rather than invest in enterprises suitable to the rehabilitation and reconstruction effort.



Brewing of local alcohol, Juba. c. Dr. Dominic Odwa Atari, March 2009.

Consumer Preferences

Participants argued that many Southern Sudanese like imported goods and services even if they are of lower quality than local products. Respondents stated that there is the notion that imported is better and local goods are frowned upon. This concept is reinforced by NGOs and governments, who tend to prefer foreign goods, such as imported furniture, over Southern Sudanese products. These perceptions create an opportunity if TVET development in Southern Sudan can be associated with quality and pride in locally produced goods and services. If such perceptions are not addressed, TVET graduates and entrepreneurs may struggle in local markets.

"People like things that are imported even if they're lower quality than the locally produced. I don't know who instilled this idea; it is so much ingrained inside us [Southerners]. People want things which are imported and no one wants to see somebody like me wearing local sandals. Someone can even buy this mutukali¹⁵ from Uganda because it's imported than buying it from Konyo Konyo [local market in Juba]. They don't care about the quality but just because these things are imported goods so they are the best." (Loku: male, 32, NGO staff)

Lack of Management Skills and Capacity

Participants argued that lack of effective management skills and capacity is a major problem inhibiting progress in Southern Sudan. Often prestigious titles are given to administrators who are unable to effectively manage their roles, responsibilities and staff. Some interviewees acknowledged that TVET programs should include management skills training, and also TVET administrators should benefit from such training.

"First of all we have problem of management and even the skills, the technical skills and expertise we have. If some of these skills are there you have somebody say oh I am the production manager I am this but doesn't know what to do. So this type of people if you just start pouring in money and without first building up their capacity that will be the end of that money because there will be no production. And we cannot rely so much on external expertise because external expertise means a lot of money being drained out of the country and until when are we going to have them [expatriates]." (Ihisa: female, 29, NGO staff)

Additionally, some residents expressed a lack of human capital in Southern Sudan.

"The human resource for us is lacking. People who really know managerial skills are very limited in Southern Sudan because most people came from war. Southern Sudan lacks the educational capacity you can use to build up an institution. It's very, very difficult. A lot of people think being in a government office is simply sitting and having computer that's it. No creativity to move program forward. That's a big challenge." (Pitia: male, 60, government official)

Often times under-qualified people work in areas for which they are not trained. Participants suggested the need for crash courses that could help build capacity quickly in areas like administration. Other participants argued that there are some skilled Southern Sudanese that can run government offices and could effectively contribute to the rebuilding of Southern Sudan but political appointments of ex-combatants have sidelined these individuals.

15. Mutukali are locally produced sandals from old car tires. They are very cheap and durable.

Addressing Challenges and Critical Gaps

Participants in the one-day workshop and face-to-face interviews suggested several ways to address the challenges and critical gaps discussed above, as follows:

The Important Role of Partnerships

In general, participants suggested that GOSS must play a key role in bringing all stakeholders to collaborate in developing relevant TVET programs. Participants identified the need to involve the Ministry of Agriculture, Forest and Animal Resources, the Ministry of Labor and the Ministry of Education. Local CBOs, NGOs and international agencies should partner with GOSS and one another to assist with developing TVET capacity. Participants specifically identified the roles that can be played by religious groups (churches, mosques), civil society groups and CBOs, and local institutions (universities, local training institutes, local and international NGOs and the government at the state, payam and boma levels) in the TVET effort. In general, partnerships work well provided partnering organizations have common goals, an awareness of their limitations, a long-term focus, well-defined milestones, trust of local communities, access to financial resources and consistent knowledgeable staff.

Clear and Relevant TVET Policies

There are no clear and relevant government policies that could promote and encourage the development of TVET in Southern Sudan. GOSS should encourage TVET education in all school levels. There is a need to introduce technical and vocational skills at all levels in the education system to help encourage interest in such training. This approach will also help address the stigma of TVET as being for losers and school drop outs.

The government should develop plans and programs that encourage employment of those who get trained in technical and vocational programs. It is only when people who are trained get jobs that other jobless youth and the ex-combatants are encouraged to get such training. The government should initiate and encourage NGOs, local governments and the civil society to partner in developing TVET programs. However, other participants argued that this will only happen if GOSS puts TVET education as a priority and allocates appropriate resources towards its development. Participants argued for better quality and sufficient training. The government should have clear policies and curricula to achieve the best TVET training in Southern Sudan.

Promotion of Entrepreneurs and Entrepreneurship

There is an urgent need for the government, local and international organizations and the civil society to encourage entrepreneurship. Participants argued that, unlike foreigners, local entrepreneurs will reinvest in the development of Southern Sudan. With the CPA, many potential Southern Sudanese entrepreneurs have returned from the Diaspora, but lack of microfinancing inhibits their chances to exploit the market opportunities. There are a lot of market needs and demands that avail business opportunities for entrepreneurs but lack of resources hinder their progress. The government and NGOs should invest in such endeavors, especially to help poor entrepreneurs. NGOs and government organizations that provide micro-financing should provide equal chances for all Southern Sudanese to compete, regardless of formal education. It is crucial that policies for supporting entrepreneurship do not dislodge those designed to generate large-scale employment.

Quality and Sufficient Training

Although numerous entrepreneurial training programs exist across Southern Sudan, these have met with limited success due to lack of qualified teachers, appropriate training or market availability. Graduates from these short-term programs often cannot compete in the market flooded with university or college graduates from the neighboring countries. There is need to upgrade technical programs if graduates are to compete in the job market.

Need for Harmonized Policies

In the last few years there have been disputes between the Ministries of Labor and Education Science and Technology about who should take control of technical and vocational training. The two ministries have been preoccupied in the dispute and no tangible plan has been completed to promote technical and vocational training in Southern Sudan. Although it is reported that the two ministries have resolved the disputes regarding TVET, no tangible change and benefits have been seen. There is strong need for the two ministries to harmonize labor and educational policies to promote TVET programs.

Access to Market

Fair market regulations should be encouraged to create opportunities for locals to compete with foreign labour and capital. One of the largest obstacles identified by workshop participants is the unequal market rules for foreigners and local workers. Many foreigners will work for very low wages, undercutting local merchants. For example, participants argued that, for a Southern Sudanese labourer, the cost of digging and building a pit latrine is approximately 1,000 Sudanese pounds (about \$500 US). Labourers from neighboring countries will often do a similar job for half the cost.

Need for Security Improvement

There is a need to improve security for individuals and businesses in Southern Sudan. Residents argued for better security if businesses and entrepreneurs are to invest in Southern Sudan. With many years of war, many people in Southern Sudan are still highly militarized. Investors will continue to be hesitant to commit to longer-term and development-oriented projects without adequate security.

Positive Promotion of Local Products and TVET Perceptions

In order to improve market opportunities for TVET graduates, government and NGOs should invest in promoting locally-produced products and services. This may help change negative perceptions of locally-produced goods and services, and also improve the overall perception of technical and vocational training. Where available, GOSS and NGOs should source products and services from local residents and TVET graduates.

Need for Ongoing Evaluation, Assessment and Adjustment of TVET Programs

TVET training in Southern Sudan must evolve in response to market needs. Thus, curricula should regularly be evaluated and modified to address changing priorities. Retraining opportunities should be provided to TVET graduates to upgrade their skills to changing market and development needs.

Land Use Planning and Management

TVET programs should reflect regional resources and market needs and demands. There is a need to develop TVET programs that exploit local natural resources. For example, areas that have a lot of cattle should have relevant TVET programs including crop production and animal husbandry. Those with access to rivers should have programs for fishing and aquaculture.

Several participants suggested the need to integrate resource awareness and planning into peace building activities. For example, during the dry season many individuals and communities fight over pasture and water resources. Alternative livelihood options should be carefully planned to help alleviate stresses leading to resource confrontation. To accomplish such tasks, alternatives such as beekeeping and lulu oil production can be encouraged where possible.

Training Qualified Teachers

Qualified technical teachers should be recruited and/or trained. Due to the shortage of qualified technical teachers in Southern Sudan, foreign teachers could be hired to train students or local teachers. Some interviewees suggested the need for TVET programs to collaborate with local universities to maximize local capacity and to use existing teaching and training facilities and staff. Many participants argued that the government has allowed entrepreneurs to invest only in hotels and bars, and not in schools. Thus, short-term market opportunities are created in hospitality rather than educational opportunities for other careers. Many of the children have to go to Kenya and other neighboring countries for education, leaving poor students to continue with the crumbling school system in Southern Sudan. Other participants mentioned that present schools are of low standards and very crowded.

Market Needs and Priorities

An analysis of market needs and priorities as expressed by the local community serves an important step for exploring TVET options. Past TVET programs often neglected the importance of adapting to changing market demands and conditions. In general, market needs and demands range from basic human needs to technical and service needs. Participants identified housing issues, food security, transportation and roads, education, health services, communication and industrial services as important things that the people of Southern Sudan need to successfully benefit from the CPA. During the fieldwork and workshop, participants expressed a frustration with market opportunities post-CPA. Rather than education and livelihood options, many pointed to increased availability and consumption of alcohol, which has created high levels of anxiety for many families in Southern Sudan.

Housing

There are housing shortages in Southern Sudan. Respondents argued that this shortage is partly due to lack of appropriate skills in construction, carpentry and masonry. The market gaps are partly met by foreigners. This has generated some tension because locals think foreigners have no intention to invest their financial gains in the region. Participants argued for skills development that could address the shortage in housing. If local skills are not developed, the tensions might become uncontrollable.

Food and Food Security

Food availability was another market need that many of the participants highlighted. Many residents in Southern Sudan are frustrated that they import all basic food stuff from Uganda and Kenya. Towns including Torit, Juba and Lainya are increasingly dependent on basic consumer goods from these

neighboring countries. Although subsistence farming is still practiced in some of the villages, many Southern Sudanese cannot afford to bring their produce to local markets due to transportation costs and market competition.

With heavy dependence on neighboring countries for basic goods, any disruption to the supply chain will adversely affect the people in Southern Sudan. Hence, the participants argued for TVET to enhance the local people's skills in agricultural production and entrepreneurship. The market need for agricultural products is unlimited and continues to grow.

Transportation and Transportation Infrastructure

Transportation and reliable roads are paramount to support the movement of goods and services to the various parts of Southern Sudan. Although GOSS has improved some of the roads connecting various villages and towns, these roads remain seasonal and are not accessible during the rainy seasons. Many participants argued that farmers in rural areas could not bring their harvest to towns and other markets because the roads are inaccessible. The available roads have crumbling bridges. Hence, regions which depend for basic services (e.g. food) from big cities will always be deprived. Respondents emphasized that it is important that the government invest in roads and transportation to facilitate the movement of essential commodities like food. Participants in this study argued that accessible roads will help rural people remain in their villages.

"I visit those counties particular in Yei county and Morobo they tell me the same thing... They say that they have grown so many cabbages and bananas, so many things. But to bring to the market is problem because they don't have the means of transport and the roads are bad. It's very expensive they cannot manage to bring these produce to Juba." (Akeck: female, 40, government official)

Education

For many of the participants, the availability of educational opportunities is a top priority which GOSS has not accomplished. There are no basic educational facilities that provide adequate education. With the increase in the population of Torit, Juba, and Lainya, there are insufficient schools established in the areas. Consequently, many of the more affluent residents take their children to boarding schools in Uganda and Kenya. Many people are prepared and willing to pay to send their children to private schools, but there are no private schools available in Southern Sudan. Several participants see this as a market opportunity, but due to the lack of entrepreneurial skills, Southerners are unable to address this market demand for education.

"They are saying yea the war is over. The CPA is here but all what you see here are hotels and bars and bars. Not even a single private school. Our children have to go to Uganda and Kenya and other countries. What about the poor? They [businesses who build hotels] can also build good private school because they have money." (Lodulae: male, 65, government official)

Health Services

With the influx of returnees into Torit, Juba, Lainya and other parts of Southern Sudan, the available health services are not sufficient. Respondents in this study see the need for training health service providers. TVET could graduate individuals with such highly needed skills.

Industry

Participants argued for industrial opportunities in the South to help absorb TVET trainees. Such industries should include ones that can use local resources, including, for example, timber and lumber. Although there are a few industries established in Juba, respondents were disappointed that one of the first relatively large industries to establish in Southern Sudan was for brewing beer. The people of Southern Sudan, respondents stressed, are dying of alcoholism because of idleness. Unfortunately, the government is allowing such destructive opportunities rather than agricultural farms or private schools that would help promote development. Some residents spoke of few support services for local entrepreneurs in addressing needs and demands.

"There's a lot of market for sure. And the government has to do something because the neighboring countries are also coming in and they're coming in because they have the experience they have the skills. They're coming in well organized and they have the potential of beating [over compete] local entrepreneurs. Something has to be done to really help the local entrepreneur because you might have the skills you might have the idea the zeal to really do something but do you have the capital?" (Loku: male, 32, NGO staff)

Mapping Key Market Priorities

Due to the devastation caused by the long-running war, in Southern Sudan everything is a priority. When asked to identify the key priorities for Southern Sudan to realize the dividends of the CPA, the participants listed the following:

- Food security/production
- Transportation
- Education
- Health services
- Housing

Participants argued that the above listed priorities will improve the livelihoods of not only the foreigners who might have money but all the local people in Southern Sudan. An enhancement in one of the priorities will help development and accelerate achievement of the others. Respondents believed the listed priorities could urgently be achieved by better TVET programs.

These market needs and priorities suggest a number of TVET opportunities suitable for Southern Sudan. Table 3 shows a backward mapping of market needs and demands in Southern Sudan. Respondents mapped what skills are needed to achieve the market priorities. However, currently, most of the skills and capacities needed to achieve these priorities do not exist. Table 4 presents a number of apprenticeable trades relevant for the backward mapping of these priorities and needs.

Previous studies commissioned by Plan in South Sudan found additional sectors with market potential, including hospitality, retail, automotive, insurance, logistics, travel, intelligence and security, telecom, repair and maintenance (CAP Foundation, 2008). All these market needs are important for the development of Southern Sudan, but participants in this study highlighted that

16. Reuters. (2009). South Sudan Brewery Shows Distance from Khartoum Available from: http://www.flex-news-food.com/pages/22779/Africa/SABMiller/South-sudan-brewery-shows-distance-khartoum.html. Accessed on July 15, 2009.

priorities including food security and production, transportation, education, health services and housing are of a paramount importance. These priorities cannot be isolated from each other because they are interrelated. Participants made clear that the market priorities which they listed are intended to serve the wider local and marginalized communities of Southern Sudan; market priorities such as hospitality, intelligence and security, and insurance would instead serve the NGO community, foreigners, and well-off locals with existing market and political access. This is partly because the residents see that the government is not providing basic needs such as education and housing.

Table 3: Backward Mapping of Short and Long-Term Market Needs and Priorities in Southern Sudan

	Needed Infrastructure	Needed Skills
Food Security and Production	Markets Fair-market prices	Farming techniques Aqua-culture Forestry Entrepreneurship
Transportation and Roads	Roads Bridges	Driving De-mining Planning Surveying Mechanics Entrepreneurship
Education	Curriculum TVET programs Schools Teachers training	Trained teachers Entrepreneurship
Health Services	Hospitals Health centers	Nurses Midwives Public health workers Entrepreneurship
Housing	Allotted plot Planning	Construction Masonry Carpentry Welding Entrepreneurship
Hospitality	Hotels Restaurants Guest houses	Hotel/Office management Cooking Cleaning Entrepreneurship

Table 4: Apprenticeable Trades Corresponding to Market Needs and Priorities for Southern Sudan

- Agricultural Equipment Technician
- Animal Production & Husbandry
- Arborist
- Auto Mechanic
- Automotive Service
 Technician
- Baker
- Blacksmith
- Brick & Stone Mason
- Dairy Herdsperson
- Early Childhood
 Educator
- Educational Assistant
- Electrician: Domestic & Rural
- Field Nurse
- Fitter Welder
- Fruit Grower
- General Carpenter
- General Machinist
- Hairstylist
- Herdsperson
- Horticultural Technician
- Locksmith
- Midwife
- Para-veterinary
- Plumber
- Pump Systems Installer
- Refrigeration & Air Conditioning Systems Mechanic
- Small Engine Technician
- Utility Arborist
- Water Well Driller
- Welder

Source: The trades presented in Table 4 are taken from the Ministry of Colleges, Training and Universities of the Government of Ontario, Canada. Training standards and curricula are developed for the trades presented.

TVET Strengths, Weaknesses, Opportunities, and Threats (SWOT)

An analysis of strengths, weaknesses, opportunities, and threats (SWOT) highlights the potential and challenges for the development of effective and inclusive TVET in Southern Sudan. Tables 5 and 6 present key considerations for building effective and inclusive TVET in Southern Sudan. Importantly, and contrary to classic neoliberal perspectives on development, the government must play an important role in the development of TVET in Southern Sudan. Taking a policy of partnering and shared responsibility, GOSS has the ability to bring to the table civil society, including community and

Table 5: Strengths and Weaknesses for Inclusive TVET in Southern Sudan

Weaknesses **Strengths** Government capacity initiatives by the Capacity challenges: government and civil society international community Unequal community representation in government Some successful TVET policy examples in Inexperienced local and international NGO staff Africa, including post-conflict contexts · Socioeconomic challenges of highly war-· Support for multiple development priorities, marginalized and traumatized communities, with including education growth in prostitution, alcohol consumption and Historical TVET experience drug use Regional and international TVET examples · Reliance on historical TVET role models that are not applicable to current and future market and and curricula development needs Active universities in Southern Sudan with · Limited understanding of TVET and negative effective programs in Juba and Malakal stigma International support for DDR and returnees TVET policy, standards, accreditation, certification Strong international NGOs interest in TVET and curricula yet to be established Southern Sudanese Diaspora committed to Few successful TVET role models in Southern the development of a successful Southern Sudan Sudan Lack of clear articulation of TVET into a holistic Presence of active local communities enterprise development framework including CSOs, CBOs, women's organization, the private sector and Short-term development incompatible with longterm socioeconomic development priorities and religious organizations goals Post-war development resources and attention, with increasing recognition to the Women-focused programs often ignore the importance of market and enterprise-based important needs of girls and negative impacts of interventions excluding male youth Emergence of locally produced quality · Poor infrastructure for rural market access and effective development of stable locally-centred goods such as lulu and honey markets · The expansion of existing markets and development of new market spaces with Limited market access for marginalized potential for local community participation communities and the general public Segregated economy and multiple-level dependencies supported by the development industry

religious organizations, intellectuals, the private sector, local, regional, and international development agencies and NGOs. Policies should be harmonized to create effective partnerships for TVET which build on strengths, harness opportunities, alleviate the constraints of existing weaknesses and avoid potential and future threats. The current and future role of the Government of National Unity (GoNU) in the development of Southern Sudan should be harnessed, both for experience and resources for building infrastructure and supporting national and regional stability aligned with the development aspirations of the people of Southern Sudanese.

Table 6: Opportunities and Threats for Inclusive TVET in Southern Sudan

Opportunities	Threats
 Strong high-level government support for TVET for multiple communities and post-war development, including the DDR process 	Perceived lack of political will, demonstrated tensions and competition between some GOSS ministries and affiliated agencies
 Strong demand that GOSS play a leading role in development TVET priority in regional development policy Southern Sudanese are tired of war, even in the face of challenges to peace Education is a priority for many Southern Sudanese communities University interest in engaging with TVET and appropriate livelihoods and sustainable development Returnees from neighboring countries and IDPs bringing education and skills Strong need and high demand for trained teachers at all levels and types of education Emergence of community-based initiatives as an aspiration of community values and needs Ability to quickly launch TVET activities through the refurbishment and retooling of existing buildings Potential for growth of sectors based on untapped natural resources including agriculture, livestock and related industries High market growth and potential in multiple sectors with strong future economic projections under conditions of relative political stability 	 Multiple forms of insecurity and violence: tribal conflicts (including cattle raiding), a highly militarized population and the presence of Uganda's Lord's Resistance Army The uncertain future of the CPA, lack of stability of peace, and time-pressure and ambiguity over 2011 referendum Challenges for reintegration of returnees, including discrimination and competition over scarce opportunities War sentiments among some Southern Sudanese Diaspora and internal actors Short-term donor-driven development funding supporting measurable and quantifiable initiatives over long-term peace-building and sustainable socioeconomic development Targeted community and gendered development interventions can lead to unequal development, rivalry and hostility Dominance of local markets by regional actors, including entrepreneurs, traders and labour Growth sectors based on little infrastructure investment, with quick dismantling ability

Section Six: Recommendations to Build Effective and Inclusive TVET in Southern Sudan

Discussion

A comprehensive and effective TVET program for Southern Sudan will require time, diverse and dedicated partnerships and political will. There is a great need to prioritize TVET as government policy for post-war development, livelihoods security and peace through efforts to demilitarize and reintegrate ex-combatants. For TVET programming to contribute to broader post-conflict reconstruction in Southern Sudan, it must seek to build ties with broader reconstruction initiatives and take into account the obstacles and socioeconomic realities facing the local communities targeted for training. These realities include the market disparities emerging post-CPA, including market dominance by Kenyan and Ugandan traders and retailers and wealth inequalities among Southern Sudanese communities with and without market access. Of particular concern is the vast number of IDPs who have little market access but remain vulnerable to food insecurity and market volatility (Abdelnour et al., 2008b).

Effective TVET programs can provide marginalized, uneducated and underemployed individuals, including women, early school leavers, out of school youth and ex-combatants, with opportunities to participate in the economic development of the country. Where traditional education is not suitable, as with the case of former child soldiers and other youth who have experienced the trauma of war and violence, TVET may assist with their return and contribution to society by imparting employable skills (UNESCO, 2002). In post-conflict and post-war contexts, such as Southern Sudan, TVET could become a cornerstone for creating an economically-empowered community which can participate in the reconstruction of their homes, cities and villages (AUC, 2007). However, after promising TVET as a key component of the CPA, little progress has been made. With the exception of short-term TVET programs run by SAVOT at MTC, Southern Sudan is still in need of effective and organized TVET programs.

While hopes for TVET among various stakeholders in Southern Sudan are high, progress and impact of vocational and entrepreneurial programs must be carefully measured to ensure continual feedback and improvement. Experiences in TVET from other African countries in rebuilding after emerging from conflict and colonialism should be carefully examined. Rwanda, for example, offers contracts to high skilled workers and requires each to be shadowed by a local to provide for transfer of knowledge to locals. Efforts to attract the Sudanese Diaspora for similar programs should be considered. In another example, Cameroon intends to develop vocational and professional training to facilitate integration into the labour market. Ghana links vocational education and training with education of youth and the development of technical and entrepreneurial skills. Lesotho and Rwanda focus on linking TVET to businesses. Malawi emphasizes the need to promote self-employment through skills development. In addition to the above examples, a number of African countries are now prioritizing TVET as a development policy (AU, 2007).

Lack of investment in adequate schooling has led some residents to send their children to boarding schools elsewhere, while those who are unable to afford this have no suitable education options or alternatives. This disparity is quickly creating a class structure where communities with political and market access are able to benefit from services, while communities without access, especially IDPs, find their situation deteriorating. TVET programs that produce well-trained local teachers and government and private entrepreneurial programs that help integrate TVET graduates will both help in improving people's livelihoods. Planning and implementation of TVET programs should explore both horizontal and vertical linkages with development and educational needs and priorities. Horizontal implementation should imbed psychological counseling to address war trauma, health

awareness training to prevent the spread of HIV/AIDS and outbreaks such as cholera and programs to promote community-based reconciliation for an inclusive reintegration of ex-combatants and vulnerable youth based on shared community values. Vertical approaches relate to long-term sustainable socioeconomic development through the creation of SLENs.

A SLEN approach (Wheeler et al., 2006) to TVET takes an inclusive and partnerships approach to address the needs of marginalized and vulnerable communities beyond the traditional short-term timeframe of most reintegration and development programs. Agriculture-related skills and training might take community food security and production as a goal. Considerations would be given for traditional approaches to agriculture and livestock including small and communal plots, the importance of cattle to social status and culture, transportation, market access, storage, availability of repairable



Charcoal business on the road to Lainya. The BEST model will train young people to sustainably realize local enterprise opportunities. c. Ndūng'ū Kahīhu, December 2009.

equipment, quality control, commodity price and seasonal planning, appropriate irrigation methods, trained agriculture laborers and labour market information, appropriate manageable credit, food processing, drying and canning, protective regulation, agricultural specialists and scientists who are experts in local soils and produce, and continual monitoring of the network. When considering the complexity of a SLEN approach to TVET, effective long-term partnership between government agencies, NGOs, CBOs, community leaders, religious organizations and market and private sector interests is apparent. When formulating TVET policy and planning implementation, the SLENs framework is effective in focusing on enterprise development dimensions of target communities and local markets. Enterprise which addresses development needs would take into consideration the development and support of initiatives for clean water filtration and distribution, health clinics, midwives, Para-veterinary services, demining, sustainable building materials, energy and communication in rural areas. An inclusive approach also serves to support traditional livelihood strategies to enhance quality of life and opportunities to strengthen fragmented communities and protect pastoralist and nomadic traditions and customs (Abdelnour et al., 2008b).

Many in Southern Sudan complain that Kenyans, Ugandans, Ethiopians, Eritreans and other foreigners are dominating local markets without reinvesting in local infrastructure and communities. Southern Sudan is also a region in which immense resources are being disbursed through the presence of international development agencies and private sector actors supporting a segregated non-inclusive development industry economy, especially in the area of pre-fabricated and tent hotels and related food and hospitality services. Juba's fast-growing economy is evidence that the above mentioned market and development actors are generating and bringing great wealth, most of which is not reinvested in development-conducive infrastructure and programs. Southern Sudanese, if aware of regulations requiring foreign investors to partner with local citizens, may be more able to negotiate effective partnerships which could benefit local investment and the general public interest. Strong and secure local banks may also encourage increased local investment, especially by the regional business community operating in Southern Sudan.

Without adequate investments for long-term sustainable socioeconomic development, marginalized communities in Southern Sudan will remain market observers and may be potentially consumed by development-induced dependencies. Serious development dependencies are widely documented and criticized, including Southern Sudan's Operational Lifeline Sudan (OLS) history. The micro-dimensions of development dependencies are often more subtle. For example, in 2006, the second author found an entire community of IDPs at Lobonok camp in Juba – from young children to the elderly – crushing large rocks into smaller stones without tools or gloves, in what was reminiscent of a prison labour camp. One day of crushing rocks would fill one large bag, which were sold for \$1 US each. The IDP's hard labour benefited the development industry; the middlemen who bought the stones sold them to builders constructing NGO, UN and private sector development offices and buildings (Abdelnour et al., 2008b).

One of the most important features of an effective TVET program will be an orientation towards employable skills and creative entrepreneurial opportunities which respond to evolving market and development needs. Flexible, upgradable and modular curricula are needed which can be frequently reevaluated and are suitable for diverse challenges faced by multiple ethnic and tribal communities, vulnerable youth, ex-combatants, early school leavers and young unemployed youth. Participatory learning and evaluation structures for TVET programs will help include the diverse needs of the communities in Southern Sudan.

Importantly, the translation of post-conflict development knowledge and practice from across Sudan can prove beneficial for the development of Southern Sudan. While it is understandable that direct collaboration with organizations based in the north may be viewed as politically undesirable, organizations which have successfully demonstrated social and economic empowerment of local communities can be looked to by policy makers and implementing agencies for their expertise. The development and educational sectors, which have traditionally crossed between Khartoum and Southern Sudan at various times of war and peace, may provide a readily available platform for the sharing of knowledge and experience. University examples include the return of expertise, staff and resources to the Upper Nile University, Juba University and other southern universities from Khartoum. The work of Ahfad University for Women in successfully training large numbers of

teachers for early childhood and primary education across ethnic, cultural, religious and political divides can assist Southern universities in addressing the critical need for quality primary school teachers, especially in rural villages. From the development sector, Practical Action's practice of creating and supporting women and community development associations, as well as the dissemination of culturally and market-appropriate technology interventions, can provide extremely useful for communities in Southern Sudan.



Entrance of Upper Nile University, Malakal. c. Samer Abdelnour, May 2006.

Recommendations

The issue of vocational education is a serious one for the development of Southern Sudan. A clear articulation of TVET with national social and economic goals and guidelines can create a platform for developing locally-rooted sustainable programs which are not dependent on external funding over the long-term. Policymakers and stakeholders need to develop short- and long-term strategies for TVET. The following recommendations should be considered in conjunction with the information presented throughout this report, particularly information identifying market needs and priorities. Where the discussion provides an overview of themes for building effective and inclusive TVET in Southern Sudan, the recommendations provide an outline for suggested actionable items for GOSS and its identified partners, as well as other TVET stakeholders.

Strengthen the Directorate of TVET in the Ministry of Education Science and Technology

At present, TVET and education is managed by the Ministry of Education and many NGOs with little coordination among them. The Directorate of TVET under the umbrella of the Ministry of Education should be strengthened to oversee all government technical education activities throughout Southern Sudan and work in close collaboration with external partners. Close collaboration between all stakeholders (government and non-government organizations) is required to maximize the effects of international assistance and to avoid duplication. In addition to GOSS officials and the development sector, religious and civil society groups, community organizations, the local private sector and educational institutions should be represented. The Directorate should have procedures in place for the participation of additional stakeholders and participation by diverse communities in Southern Sudan as TVET grows, expands and changes. Opportunities for improving TVET should be continually assessed through regular monitoring and evaluation of existing programs, experimentation with new and innovative TVET curricula and training methods and commissioned studies. The Directorate can also ensure that relevant TVET-based subjects are integrated within the curricula of mainstream general education in Southern Sudan.

Develop a Unified Curriculum, Standards and Certification

A unified curriculum for technical and vocational education should be developed and the integration of this curriculum into the existing educational institutions should be investigated. Priority should be given to vocational education programs due to their importance for reconstruction of the country.

Currently, curricula from Kenya, Uganda, Khartoum and Southern Sudan leave educators without clear guidelines and little incentive for developing appropriate standards and certification. If TVET is to be effective in Southern Sudan, feeder schools will require a unified curriculum with acceptable and recognized standards and certification on which to build vocational and enterprise training initiatives. GOSS should adopt a unified curriculum that encourages technical and vocational schooling at all levels of education, including primary, intermediate and secondary schools. A flexible, modular TVET curriculum should be developed based on market priorities and development needs. Otherwise, fragmentation and inequitable education will result from having a variety of curricula across Southern Sudan.

Qualifications, accreditation frameworks and training standards must allow for articulation between formal and informal education and training, between academic and technical training, between private and public schools and training institutes. Although a multitude of excellent approaches exist throughout the developed world, Ontario Canada's Ministry of Education Curriculum is an excellent model. The curriculum includes Science and Technology in grades 1 through 8 and Technological Education in grades 9 to 12 that maps to Ontario's apprenticeable trades (which include a number of areas identified as priorities in Sudan).

Secure Appropriate Equipment and Qualified Teachers

An important starting point for TVET is to outfit the existing technical facilities with appropriate equipment and qualified teachers. The needs of these existing technical vocational educational institutions should be identified. Priority should be given to reestablish these institutions with urgency, as these institutions can be used for both short- and long-term training and education purposes.

Create a TVET Faculty or College

The creation of a TVET faculty or college in Southern Sudan is highly recommended. A TVET college would aim to:

- Train teachers for all TVET
- Formulate and develop training programs at TVET institutions for skilled labourers
- Provide the rules, regulations and certifications for technicians such as electricians, plumbers and others
- Conduct TVET related research
- Connect with other TVET faculties or colleges regionally and internationally to share knowledge and resources

Develop Two Categories of TVET

Two types of TVET programs should be developed for Southern Sudan. The first category of programs should be focused on high school level and two-year college level students, with an aim to train technicians and a high-level, skilled workforce for the country. Some of the areas that need to be covered include:

- Agriculture and veterinary
- Health services including nursing, midwifery and medical officers
- · Building industry including highways and roads
- Electricity and energy resources
- · Telecommunication, information technology and electronics
- Architecture and graphics
- Hotel management and hospitality
- Food and nutrition industries
- Accounting, business and office management

The second type of TVET training program should be focused on people with no formal education, including excombatants, refugees, widows and other adults who have the responsibility for feeding their families. The government needs to train these community members in vocational skills relevant to local development needs. Short-term, non-formal, TVET training programs for millions of unskilled and unemployed people, especially in the villages, should be developed. Skills associated with traditional livelihoods practiced by rural and traditional communities can be associated with this



Brick workers, Juba. c. Dr. Dominic Odwa Atari, March 2009.

second type of TVET training. Local TVET institution facilities could be used for this type of training. People in this category can be trained as skilled workers in the following industries:

- Farming, agriculture, livestock and para veterinary
- Building industry
- Carpentry
- Plumbers and sanitation
- Masons
- Automotive mechanics

Develop an Information Champaign (Identifying Role Models)

Due to the lack of understanding of the positive impact of TVET on individuals, families and communities, an effective publicity campaign should be launched. It should identify and promote both female and male role models who, by learning specific knowledge and skills, have positively impacted their lives and the lives of those around them.

Employ a SLENs and BEST Approach for Inclusive Market Participation

The SLENs and BEST models should be considered as tools for inclusive participation and market adaptation for TVET program development. TVET planning and curricula development must be flexible to address market needs, demands and changes. Inclusive participation demands appropriate literacy and numeracy, as well as training and market access for diverse stakeholder and community members. Local needs satisfied through local capacities and resources suggest the building and strengthening of local enterprise networks. Local enterprise networks should consider appropriate mechanisms for sustainable and inclusive harvesting of the natural environment in all sectors, including fisheries, forestry, agriculture and wildlife. A focus of SLENs and BEST should be the inclusion of Southern Sudanese communities and organizations in market activities and local socioeconomic development, the effective linkage of skills provision to market needs and the creation of mentorship and alumni support networks that will help address the negative stigma towards TVET. Policies should be promoted which strengthen networking and support the development of inclusive and diverse participation in local enterprise networks. Market policies should be developed and enacted to support local trades and to encourage fair opportunities to access marketplaces and spaces, in order to ensure local enterprises and organizations who participate in TVET training and skills development have legal and economic support.

Promote TVET as Peace-Building and Development

An opportunity exists to promote TVET as a mechanism for community-level reconciliation. Student and teacher exchanges between the various institutes can help spread tolerance and understanding between the communities of Southern Sudan. These institutes should position their activities as complementary to one another rather than positioning themselves as competitors. TVET stakeholders, especially government and NGOs, should invest in sensitizing and creating public awareness of the benefits of TVET skills. Quality education at all levels, from literacy and numeracy to skills and vocational training, must be encouraged to convince Southern Sudanese to keep their children in local schools rather than schools in neighboring countries. Demobilization and reintegration efforts must be directly linked to long-term livelihood creation and appropriate and marketable skills development. Thus, DDR efforts should be planned in close connection with TVET development. Monitoring can ensure that ex-combatants finding little success in one training scheme have the opportunity for continual support and retraining opportunities. Development approaches for training the disabled and other marginalized groups, including young girls and the elderly, are especially important for TVET. Creating diverse opportunities will assist in the development of inclusive training programs.

Ensure Regional and International Collaborations

The South Sudanese government and its partners should explore the possibility of close collaboration, including student and staff exchanges, with regional and international educational establishments. Southern Sudanese expatriates working at colleges and universities abroad can play a catalytic role in reestablishing proper technical and vocational education. Expatriates could help in preparing curricula, training teachers and junior academics and offering timely seminars in the urgently needed areas of each institution. Programs to attract skilled Southern Sudanese Diaspora as volunteers and to transfer knowledge should be developed.

Strengthen Investment and Capacity

Technical education requires substantial investment. Present resources in Sudan are very limited and the country cannot afford to establish a viable system of TVET with current levels of investment. Donors and their respective NGOs should be made aware of the education gaps and challenges which exist in Southern Sudan. Multilateral organizations and bilateral agreements should provide the support necessary to reestablish TVET in Southern Sudan, especially considering the wartime destruction of education and training facilities. However, reliance on foreign aid will not provide sustainable long-term solutions. The government and its partners must plan and measure the progress towards self-reliance. The transitional period requires long-term planning and programs based on local needs and priorities, with GOSS and its partners working to strengthen capacity for resource management, policy and program development and good governance.

Conclusion

In summary, the workshop and the in-depth interviews revealed several important issues related to TVET in Southern Sudan. Many participants acknowledged the mixed historical experiences and stigma associated with TVET. Yet while they were aware of the difficult challenges and obstacles facing Southern Sudan, including political ambiguity over the upcoming referendum and capacity challenges, many of the participants were also optimistic and hopeful for positive change. There are considerable opportunities for developing a diverse array of marketable and apprenticeable trades specific to Southern Sudan which can contribute to sustainable development and post-war reconstruction. There is no doubt that TVET is crucial if local people are to participate in nation-building and benefit from expanding market activity in Southern Sudan.





One-day workshop: Group discussions. c. Dr. Dominic Odwa Atari, March 2009.

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