HEALTH AND HIV AND AIDS ALONG THE EAST AFRICAN COMMUNITY (EAC) TRANSPORT CORRIDORS

A Situation Analysis Report
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A Situation Analysis Report

EAST AFRICAN COMMUNITY SECRETARIAT
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ABBREVIATIONS

AIDS  Acquired Immune Deficiency Syndrome
AIHD  African Institute for Health and Development
ANC  Ante Natal Care
ART  Anti-Retroviral Treatment
ARV  Anti-Retroviral Drugs
BCC  Behavior Change Communication
CB-HIPP  Cross-Border Health Integrated Partnership Project
CBR  Crude Birth Rate
CNLS  Conseil National de Lutte Contre le SIDA (Burundi)
COMESA  Common Market for Eastern and Southern Africa
CPR  Contraceptive Prevalence Rate
CSW  Commercial Sex Workers
DALYS  Disability Adjusted Life Years
DRC  Democratic Republic of Congo
EAC  East African Community
EALP  EAC Lake Victoria Basin HIV and AIDS Partnership Programme
EAPLN  East Africa Public Laboratories Networking
FHI 360  Family Health International
FP  Family Planning
FSW  Female Sex Workers
GDP  Gross Domestic Product
GFATM  Global Fund to Fight AIDS, Tuberculosis and Malaria
GLIA  Great Lakes Initiative on AIDS
HTC  HIV Testing and Counseling
HDI  Human Development Index
HIV  Human Immunodeficiency Virus
HMIS  Health Management Information System
ICT  Information, Communication and Technology
IDU  Injecting Drug User
IEC  Information, Education and Communication
IGAD  Intergovernmental Authority on Development
ILO  International Labor Organization
IMF  International Monetary Fund
IOM  International Organization for Migration
JAR  Joint AIDS Review
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LVBC</td>
<td>Lake Victoria Basin Commission</td>
</tr>
<tr>
<td>M&amp;E</td>
<td>Monitoring and Evaluation</td>
</tr>
<tr>
<td>MARPs</td>
<td>Most-At-Risk Populations</td>
</tr>
<tr>
<td>MCH</td>
<td>Maternal Child Health</td>
</tr>
<tr>
<td>MDG</td>
<td>Millennium Development Goal</td>
</tr>
<tr>
<td>MDR-TB</td>
<td>Multi-Drug Resistant TB</td>
</tr>
<tr>
<td>MoH</td>
<td>Ministry of Health</td>
</tr>
<tr>
<td>MSM</td>
<td>Men Who Have Sex with Men</td>
</tr>
<tr>
<td>NACC</td>
<td>National AIDS Control Council (Kenya)</td>
</tr>
<tr>
<td>NCD</td>
<td>Non Communicable Disease</td>
</tr>
<tr>
<td>OSBP</td>
<td>One-Stop Border Post</td>
</tr>
<tr>
<td>PEPFAR</td>
<td>President’s Emergency Plan for AIDS Relief</td>
</tr>
<tr>
<td>PLHIV</td>
<td>Person Living with HIV</td>
</tr>
<tr>
<td>PMTCT</td>
<td>Prevention of Mother-to-Child Transmission of HIV</td>
</tr>
<tr>
<td>RBC</td>
<td>Rwanda Biomedical Centre</td>
</tr>
<tr>
<td>RH</td>
<td>Reproductive Health</td>
</tr>
<tr>
<td>ROADS</td>
<td>Regional Outreach Addressing AIDS through Development Strategies</td>
</tr>
<tr>
<td>SADC</td>
<td>Southern African Development Community</td>
</tr>
<tr>
<td>SGBV</td>
<td>Sexual and Gender-Based Violence</td>
</tr>
<tr>
<td>SRH</td>
<td>Sexual and Reproductive Health</td>
</tr>
<tr>
<td>STI</td>
<td>Sexually Transmitted Infection</td>
</tr>
<tr>
<td>TACAIDS</td>
<td>Tanzania Commission for AIDS</td>
</tr>
<tr>
<td>TB</td>
<td>Tuberculosis</td>
</tr>
<tr>
<td>TWG</td>
<td>Technical Working Group</td>
</tr>
<tr>
<td>UAC</td>
<td>Uganda AIDS Commission</td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
</tr>
<tr>
<td>UNAIDS</td>
<td>Joint United Nations Programme on HIV/AIDS</td>
</tr>
<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
</tr>
<tr>
<td>USG</td>
<td>United States Government</td>
</tr>
<tr>
<td>VCT</td>
<td>Voluntary Counseling and Testing</td>
</tr>
<tr>
<td>VHT</td>
<td>Village Health Team</td>
</tr>
<tr>
<td>WFP</td>
<td>World Food Programme</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
<tr>
<td>ZAC</td>
<td>Zanzibar AIDS Commission</td>
</tr>
</tbody>
</table>
**GLOSSARY OF TERMS**

**Discrimination:** Purposeful denial of goods and services to an individual or segregation of an individual or group of people based on their perceived or real HIV status or on the grounds of their sexual orientation.

**E-health:** It is a term used in the health sector for digital data that is transmitted, stored, and retrieved electronically - in support of healthcare, both at the local site and at a distance.

**Essential Health Products and Technologies (EHPT):** Those products that satisfy the priority healthcare needs of the population. They are selected with regard to public health relevance, evidence on efficacy and safety, and comparative cost-effectiveness. EHPTs are intended to be “available within the context of a functioning health system at all times in adequate amounts, in the appropriate dosage forms, with assured quality and adequate information, and at a price the individual and the community can afford. The implementation of the concept of EHPT is intended to be flexible and adaptable to many different situations; exactly which health products are regarded as essential remains a national responsibility.

**Gender:** Refers to the socially constructed roles, behaviors, activities, and attributes that a given society considers appropriate for men (masculine) and women (feminine).

**Healthcare Workforce:** The workforce that delivers the defined healthcare services. It includes all those whose prime responsibility is the provision of healthcare services, irrespective of their organizational base (public or non-public).

**Health System:** The mechanism to deliver high-quality healthcare services to all people when and where they need them.

**Key Populations:** Key populations (also referred to as most-at-risk populations) are people who inject drugs, gay men and other men who have sex with men (MSM), transgender persons and sex workers.

**Medical Care Services:** The management of disease, illness, injury, and other physical and mental impairments in humans. This involves diagnosis, treatment and rehabilitation of persons following a disease, illness, injury, or other impairment.

**Public Health Services:** The healthcare services concerned with the science and art of preventing disease, prolonging life, and promoting health through organized efforts and informed choices of society, organizations (public and private), communities, and individuals, and are concerned with threats to the overall health of a community.

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Referral: The process by which a given level of health services that has inadequate capacity to manage a given health condition or event, seeks the assistance of a higher level of healthcare delivery to guide or take over the management of the condition. It ensures establishment of efficient health service delivery system linkages across levels of care that ensure continuity of care for effective management of the health needs of the population. It involves movement of clients, expertise, specimens, and/or client information.

Universal Access: The effective physical and financial access to health services.

Universal Health Coverage (UHC): Ensuring that everyone who needs health services is able to get them without undue financial hardship².

Vulnerability: Socio economic disempowerment and cultural context and work situations that make workers and other population groups more susceptible to the risk of HIV infection or put them in situations of marginalization and exploitation and exposure to risky behaviors.

FOREWORD

Five million people in EAC region are living with HIV as at 2012. Kenya, Uganda and Tanzania contribute to a third of the burden of People Living with HIV (PLHIV) in the region. HIV Prevalence rates among the EAC countries range from a low of 1.4% in Republic of Burundi to a high of 7% the republic of Uganda. In 2012, there were around 333,400 new infections in the region. 2 million HIV positive people were eligible for ART although only 75% of these were receiving treatment. In the past few years, there has been a consistent decline in the number of AIDS related deaths. HIV prevalence among key populations in the EAC region is five to ten fold higher as compared to general adult population in the same region. Globally, there are 22 high-burden countries that account for approximately 80% of all new TB cases arising each year; out of these, nine are in Sub-Saharan Africa including Kenya, Uganda and Tanzania in East Africa.

While the establishment of the EAC Common Market and Customs Union has accelerated trade relations to an unprecedented high, it has also potentially increased the frequency of population movements across the borders of the five countries and consequently posing a great risk of spreading HIV from one country to another. Major challenge facing the health of migrants and mobile populations is access to appropriate services. Major barriers to accessing health services include gender, language, immigration status, culture, stigma and discrimination towards the key populations because of their sexual behaviours, legal environment among others, have a significant impact on health-related vulnerabilities and access to services. 50 percent of the corridors populations are transient, impoverished, and have poor health status.

As part of the EAC’s successive Regional Health Sector Strategic Plans, which aim to control communicable and non-communicable diseases in the region, the EAC Secretariat intends to develop a regional strategy for integrated health and HIV programming along the transport corridors in the East Africa region. This situational analysis report highlights existing gaps in service delivery along the EAC transport corridors in addition to the regional report on mapping of existing health and HIV and AIDS services along the transport corridors. This report therefore provides key information and data necessary for developing the regional strategy for integrated health and HIV programming along the transport corridors in the EAC region.

On behalf of the EAC, I would like to express my gratitude to the Partner States experts; FHI 360 Kenya and all technical experts that contributed to the compilation of this report. Observations and recommendations from this situational analysis report will go a long way in guiding the EAC Secretariat towards integrating health and HIV and AIDS programming along transport corridors in the region in the spirit of One People, One destiny”.

Hon. Jesca Eriyo
Deputy Secretary General (Productive and Social Sectors)
East African Community
ACKNOWLEDGEMENTS

The Health and HIV and AIDS along the East African Community (EAC) Transport Corridors: A Situation Analysis Report was commissioned by the East African Community (EAC) through the Regional Task Force on Integrated Health and HIV and AIDS Programming along Transport Corridors and conducted by a team of consultants under the leadership of FHI 360.

Particular acknowledgement goes to Dr. Larry Adupa and Mr. Namanya Bharam the consultants developing this document.

Special thanks to members of the Regional Task Force on Integrated Health and HIV and AIDS Programming along Transport Corridors for their contribution in reviewing the findings and sharing of information and data to enrich the report. We thank the core team comprising Dr. Michael Katende from EAC HIV and AIDS Unit; Ms. Dorothy Muroki, Ms. Missie Oindo and Mr. Boniface Kitungulu from FHI 360; and Mr. Derek Sedlacek from USAID/East Africa.

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The development of this report was made possible with funding from the United States Agency for International Development (USAID) and the U.S President’s Emergency Plan for AIDS Relief (PEPFAR) through the Roads to a Healthy Future (ROADS II) project.
1. INTRODUCTION

1.1 East African Community: A brief

The East African Community (EAC) is the regional intergovernmental organization of the Republics of Burundi, Kenya, Rwanda, the United Republic of Tanzania, and the Republic of Uganda, with its headquarters in Arusha, Tanzania. The Treaty establishing the EAC was signed on November 30, 1999. EAC’s vision is a prosperous, competitive, secure, stable and politically united East Africa. The mission is to widen and deepen economic, political, social and cultural integration in order to improve the quality of life of the people of East Africa through increased competitiveness, value added production, trade and investments.

To achieve the above, the EAC countries established a Customs Union in 2005 and a Common Market in 2010. As a result of the EAC Treaty and the associated protocols, there has been progress in currency convertibility and macro-economic convergence; adoption of common travel documents with free movement of people across borders, work permits, fees for education, tourism, common negotiating frameworks, substantial progress in harmonizing academic and professional qualifications, free movement of capital; and harmonization of transport facilitating instruments. There are on-going processes to move the EAC to the next phase of integration into a Monetary Union and ultimately a Political Federation of the East African States.

Article 118 (b) of the Treaty on the establishment of the East African Community, with respect to cooperation in health activities, stipulates that the partner states undertake to promote the management of health delivery systems and better planning mechanisms to enhance efficiency of health care services within the partner states. The EAC, in its 4th Development Strategy 2011/12 – 2015/16, acknowledged that the improvement in the quality of life and social well-being of the East African people depends on the provision, affordability and access to quality health services for the prevention and control of communicable and non-communicable diseases (NCDs), including HIV and AIDS.

The key objectives for EAC and the region include strengthening regional cooperation and integration in the health sector by harmonizing national policies, legislation, strategies, standards, guidelines, databases and regulatory systems. Among the policies to be harmonized are pharmaceutical policies; food safety and quality policies; disease surveillance; university medical and dental schools curricula; and sexual and reproductive health policies. These actions promote enhanced provision of health services in the region including cross-border disease prevention and control activities.

1.2 Purpose and Development of the Situation Analysis Report for EAC

As part of the EAC’s successive Regional Health Sector Strategic Plans, which aim to control communicable and non-communicable diseases in the region, the EAC Secretariat in collaboration with its strategic partners intends to develop a regional strategy for integrated health and HIV programming along the transport corridors in the East Africa region. Hence, the purpose of this exercise is to support the EAC Secretariat conduct a situational analysis to highlight existing gaps in service delivery along the EAC transport corridors, as a preliminary deliverable towards developing the regional strategy for integrated health and HIV programming along the transport corridors in the EAC region.
1.3 Developing the Report

The situational analysis was conducted in July 2014. Methodology included extensive literature review of documents shared by the EAC Secretariat, Partner States and implementing partners.

The situation analysis report was extensively reviewed by members of the EAC Regional Task Force and Partner States experts in various fora, including the third Meeting of the Task Force convened by the EAC Secretariat held on October 2–4, 2014 in Kampala, Uganda. The review process culminated in the validation of the report by Partner States experts during the validation workshop for the Regional Strategy held on February 9 – 13, 2015 in Bujumbura – Burundi. The revised report incorporating experts’ comments was presented at the 15th Meeting of the TWG on HIV and AIDS, TB and STIs held on February 16 – 20, 2015 in Arusha–Tanzania, and the 20th Ordinary meeting of the EAC Sectoral Committee on Health held on February 23 – 27, 2015 in Arusha–Tanzania.

The report is structured into six chapters that includes introduction, overview of the social and macro-economic development of EAC, discussions on the health indicators, findings on the HIV and AIDS situation in the region with a special sub-section focusing on the key and vulnerable populations, discussions on integrating HIV and health including TB and the appropriate referral services, and recommendations on the way forward. More information on Socio-Demographic and Economic Indicators in the EAC is presented in the Annexure.

1.4 Study Challenges and Limitations

The main challenge in preparing this report was the limited data and documentation on certain aspects of the subject area from EAC countries. Effort was made to report using available data from special studies and on the general population for EAC region and/or those from Southern Africa and other parts of the world as deemed appropriate.

**KEY GAPS IN HEALTH SERVICES DELIVERY IN TRANSPORT CORRIDORS**

There is limited access to quality health services along the corridors, although the populations located in the corridors face increasing vulnerabilities to HIV infection, as detailed later in this report. Moreover, in communities along the transport corridors in the region, there is:

- Inadequate access to quality health services for both migrants and host populations;
- Lack of harmonized health-related policies, protocols and guidelines across EAC countries
- A myriad of public and private sector actors involved in health service delivery, with inadequate coordination;
- Dependence on development partners for provision of services, and hence challenges with sustainability of externally funded health programmes;
- Poor data/information capture/management of health information systems on services
- Inadequate services for populations located in the corridors on family planning, sexually transmitted infections (STI), tuberculosis (TB), reproductive health, nutrition, malaria, and maternal and child health in towns along the corridors, also known as hot spots;
- Poor sanitation and hygiene with limited access to clean water.

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1  3rd Meeting of the Regional Task Force on Integrated Health and HIV and AIDS Programming along the Transport Corridors in East Africa, Meeting Report, October 2014, Minute No. 2.3
2  Validation Workshop for the Regional Strategy for Scaling Up Integrated Health and HIV Programming along the Transport Corridors in the EAC held on February 9 – 13, 2015 in Bujumbura – Burundi, Meeting Report, February 2015, Minute No. 4.1
2. GENERAL HEALTH INDICATORS

2.1 Selected Key Indicators

2.1.1 Population Growth Rate:
The EAC Partner States have reported different population growth rates, with the highest growth rate (3.5 percent) recorded in Uganda and the lowest recorded in Kenya (1.3 percent). Figure 1 presents the trend in population growth rates of the Partner States, with the Tanzania’s and Uganda’s population growth having an upward trend. Kenya’s population growth rate seems to be stabilizing, especially after mid-2009.

![Figure 1: Mid-Year Population, Million Persons (2002-2010)](image)

Source: EAC Facts and Figures, 2011

2.1.2 Crude Birth Rate
On the other hand, the crude birth rates (CBRs) remained relatively stable over the same period as shown in Table 1 below.

<table>
<thead>
<tr>
<th>Partner State</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
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<tr>
<td>Burundi</td>
<td>48</td>
<td>46</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>43</td>
<td>39</td>
</tr>
<tr>
<td>Kenya</td>
<td>56</td>
<td>38</td>
<td>-</td>
<td>57</td>
<td>57</td>
<td>39</td>
<td>38</td>
<td>38</td>
<td>38</td>
</tr>
<tr>
<td>Rwanda</td>
<td>41</td>
<td>41</td>
<td>42</td>
<td>42</td>
<td>42</td>
<td>42</td>
<td>42</td>
<td>42</td>
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</tr>
<tr>
<td>Tanzania</td>
<td>43</td>
<td>46</td>
<td>42</td>
<td>-</td>
<td>42</td>
<td>44</td>
<td>43</td>
<td>40</td>
<td>39.3</td>
</tr>
<tr>
<td>Uganda</td>
<td>48</td>
<td>47</td>
<td>48</td>
<td>49</td>
<td>49</td>
<td>49</td>
<td>50</td>
<td>49.6</td>
<td>49.6</td>
</tr>
</tbody>
</table>

Source: EAC Facts and Figures, 2011
2.1.3 Fertility Rate:
The average total fertility rate (TFR) in EAC was 5.6 children per woman. Uganda recorded the highest at 6.7, Tanzania had 5.1 (TDHS, 2012), while Kenya recorded the lowest at 4.6 children per woman. This is a reflection of the population growth rates earlier discussed above.

2.1.4 Morbidity and mortality
The Partner States share a common regional epidemiological profile with various diseases causing high morbidity and mortality. The leading causes of morbidity and mortality due to communicable diseases in the EAC Partner States include the following: malaria; HIV and AIDS; STIs; drug resistant tuberculosis; respiratory tract infections such as pneumonia and upper respiratory tract infection (URTI); measles; diarrheal diseases, including cholera and shigellosis; food borne diseases (salmonella, campylobacter); typhoid fever; and trypanosomiasis. It was noted in the 4th Development Strategy 2011/12 – 2015/16 for EAC that these conditions threaten not only to overwhelm public health systems among EAC member states, but also to reverse health gains and progress towards the Millennium Development Goals (MDGs) that have been achieved in the last decade of implementing Poverty Reduction Strategies (PRSs). The table below presents data on the health indicators of EAC Partner States.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Burundi</th>
<th>Kenya</th>
<th>Tanzania</th>
<th>Rwanda</th>
<th>Uganda</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population living within 5km radius of health facility</td>
<td>80</td>
<td>50</td>
<td>60</td>
<td>50</td>
<td>60</td>
</tr>
<tr>
<td>Total fertility rate (TFR)</td>
<td>6.4</td>
<td>4.6</td>
<td>5.01</td>
<td>4.6</td>
<td>6.06</td>
</tr>
<tr>
<td>Contraceptive prevalence rate (CPR)</td>
<td>18</td>
<td>46</td>
<td>34.4</td>
<td>51.6%</td>
<td>30%</td>
</tr>
<tr>
<td>ANC coverage</td>
<td>92</td>
<td>96</td>
<td>97</td>
<td>97</td>
<td>95</td>
</tr>
<tr>
<td>Unmet Family Planning (FP) needs</td>
<td>55</td>
<td>47.1</td>
<td>40</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td>SGBV prevalence</td>
<td>21</td>
<td></td>
<td>22.3</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>Percentage of births taking place in a health facility</td>
<td>43</td>
<td>50</td>
<td>69</td>
<td>57</td>
<td></td>
</tr>
<tr>
<td>Proportion births attended by skilled personnel</td>
<td>60</td>
<td>44</td>
<td>51</td>
<td>69</td>
<td>58</td>
</tr>
<tr>
<td>Life expectancy</td>
<td>51.3</td>
<td>54.9</td>
<td>60.76</td>
<td>58.85</td>
<td>53.98</td>
</tr>
<tr>
<td>Crude birth rate</td>
<td>15</td>
<td>11</td>
<td>13.5</td>
<td>14</td>
<td>14.4</td>
</tr>
<tr>
<td>Maternal mortality rate</td>
<td>500</td>
<td>360</td>
<td>460</td>
<td>340</td>
<td>438</td>
</tr>
<tr>
<td>Under-five mortality</td>
<td>151</td>
<td>74</td>
<td>81</td>
<td>76</td>
<td>90</td>
</tr>
<tr>
<td>Infant mortality</td>
<td>93</td>
<td>42.18</td>
<td>45.1</td>
<td>50</td>
<td>62.47</td>
</tr>
<tr>
<td>Neonatal care</td>
<td>31</td>
<td>26</td>
<td>27</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td>Post neonatal care</td>
<td>21</td>
<td>25</td>
<td>23</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td>Basic vaccination coverage</td>
<td>78.5</td>
<td>77</td>
<td>64.3</td>
<td>78</td>
<td></td>
</tr>
<tr>
<td>Heath expenditures as % GDP (2011)</td>
<td>4.5%</td>
<td>7.3%</td>
<td>10.8%</td>
<td>9.5%</td>
<td></td>
</tr>
</tbody>
</table>

Source: Demographic Health Surveys in the Five States 2010; EAC Facts and Figures, 2011
The table above reveals substantial variations in the selected sexual, reproductive, maternal and child health indicators of EAC Partner States. Progress has been made against a number of causes of maternal and child mortality and morbidity, including progress on improving nutrition and underlying social determinants of health. The table also shows that for the four countries whose data was available (Kenya, Uganda, Rwanda and Tanzania), health expenditure as a percentage of GDP is still very low.

2.1.5 Child, Infant and Neonatal Health

**Uganda:** Available data indicate that the number of under-five deaths fell from 167 per 1,000 births in 1990 to 90 per 1,000 births in 2011, equivalent to a 6.3 percent reduction per year (UDHS, 2011) in Uganda. This means that 1 in every 19 babies born in Uganda does not live to the first birthday, and 1 in every 11 children will die before their fifth birthday. The pace needed to achieve the MDG target of 56 under-five deaths per 1,000 births by 2015 is 10 percent reduction per year. Presently, 131,000 child deaths (approximately 2 percent of the global under-five deaths) occur in Uganda.

The number of infants who die under 12 months fell from 86 per 1,000 live births in 1995 to 54 in 2011. Thirty-seven percent of infant deaths occur in the first 28 days of life, forming the single largest category of death. Reducing newborn deaths is critical for progress in infant mortality reduction in Uganda. The first 24 hours around labor, childbirth and the first week are the riskiest time of life and provide a specific window of opportunity to prevent and manage newborn complications.

Newborn babies mainly die from three complications related to the following:

- Premature birth (born before 37 weeks of gestation)
- Birth asphyxia
- Infections

Yet only a half (54%) of the babies are born in the hands of skilled providers and only 34% receive a post-natal check-up within seven days after birth.

**Tanzania:** In Tanzania, 2010 DHS data shows a rapid decline in child mortality. Infant mortality estimates declined from 71 in the 5 to 9 year period preceding the survey (approximately 2001-2005) to 51 per 1,000 live births during the 2006-2010 period. The 2010 TDHS estimate for the 5- to 9-year period preceding the survey is almost identical to the 2004-05 TDHS rate of 68 deaths per 1,000 births for the same period (i.e., 0 to 4 years preceding the 2004-05 survey). Thus, results of the two surveys indicate a significant decrease in infant and child mortality rates in recent years. The largest decline is shown in the post neonatal mortality rate, which dropped from 36 deaths per 1,000 live births in the 2004-05 TDHS to 25 deaths per 1,000 live births in the 2010 TDHS. Under-five mortality rate declined by 41 percent, from 137 deaths per 1,000 live births in 1992-1996 to 81 deaths in 2006-2010. Over the same period, the infant mortality rate (IMR) declined by 42 percent, from 88 to 51 deaths per 1,000 live births. The decline in childhood mortality can be attributed to continued improvement in the health sector, especially in the areas of maternal and child health, with specific reference to immunization and malaria prevention initiative. Recent statistics from Zanzibar indicate IMR of 54 deaths per 1,000 live births.

**Kenya:** There have been remarkable declines in all levels of childhood mortality since the Kenya demographic and health survey (KDHS) of 2003. Thus, under-five mortality declined by 36 percent, from 115 deaths per 1,000 in the 2003 KDHS to 74 deaths per 1,000 in the 2008-09 KDHS, while infant mortality dropped by 32 percent, from 77 deaths per 1,000 in the 2003 survey to 52 deaths per 1,000 in the 2008-09 survey. Post neonatal mortality declined more than 50 percent, from 44 deaths per 1,000 in the 2003 KDHS to 21 deaths per 1,000 in the 2008-09 KDHS. Results from the 2005/06 Kenya Integrated Household Budget Survey also showed

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3 EAC Facts and Figures, 2011
4 Uganda Demographic Health Survey 2011
6 National Strategic Plan 2015-2019 for TB and Leprosy Control, ZIHTLP/MOH, 2014
a decline following the 2003 KDHS, with rates of 92 deaths per 1,000 for under-five mortality and 60 deaths per 1,000 live births for infant mortality (KNBS, 2008).

**Rwanda:** According to RDHS 2010, neonatal mortality is reported to be 27 deaths per 1,000 live births. This rate is higher than the post-neonatal mortality rate (23 deaths per 1,000 live births) during the same period; that is, the risk of dying for any child who survives the first month of life decreases during the period of the next 11 months. The results further show that infant mortality has declined substantially in the past five years, from 86 deaths per 1,000 live births in 2005 to 62 per 1,000 in 2007-08 and to 50 per 1,000 in 2010. Under-five mortality also declined during this period, from 152 deaths per 1,000 live births in 2005 to 103 per 1,000 in 2007-08 and to 76 per 1,000 in 2010. The decrease in infant mortality and under-five mortality result mainly from the implementation of integrated management of childhood illness in health facilities, communities, and the introduction of new vaccines.

**Burundi:** According to the 2010 BDHS, the child mortality rate was 96 per 1,000 live births, while infant mortality was reported at 59 percent.

### 2.1.6 Maternal, Sexual and Reproductive Health

#### Maternal Mortality Ratio and Antenatal Coverage

Maternal mortality in Tanzania is reported at 454, Burundi, 500, Rwanda, 476, Kenya, 360, while Uganda is reported at 438 per 100,000 live births. The major causes of maternal mortality include haemorrhage (42 percent), obstructed or prolonged labour (22 percent) and complications from abortion (11 percent). Indirect causes include malaria, anaemia, and HIV/AIDS. High TFR, high teenage pregnancy rate, and high unmet need for family planning (FP) increase exposure to the risk of pregnancy and hence pregnancy related deaths for both women and newborns. It is estimated that for every woman who dies, 15 suffer long-term illness and disability, including obstetric fistulae, whose true magnitude is still unknown. The high mortality and morbidity can be explained in part by the fact that the vast majority of births still take place at home and are not attended by skilled attendants. Skilled attendance coverage remains relatively low in all the countries of the region: 44 percent in Kenya, 51 percent in Tanzania, 58 percent in Uganda, 60 percent in Burundi and 69 percent in Rwanda. The situation therefore implies that if the stable population has such rates, the populations along the transport corridors are likely to be having worse indicators because they are migrants and have limited time to go for the services due to the nature of their occupation.

**Uganda:** Ninety-five percent of mothers attended antenatal care (ANC) from a skilled provider at least once, while only 48 percent of women made four or more ANC visits during their pregnancy; these proportions have not changed much since 2006. UDHS 2011 data shows that the median time for the first ANC visit for women in Uganda is at 5.1 months of pregnancy, which may compromise some interventions, e.g., repeat HIV testing in the last trimester. The low attendance below four ANC visits may also pose challenges for the success of Prevention of Mother-to-Child Transmission of HIV (PMTCT) interventions. Generally, these sub-optimal indicators negatively impact on the delivery of PMTCT services for women and their exposed infants. There are gaps however in data for these indicators for HIV-infected women since many of the UDHS indicators are not disaggregated by HIV status. This area may require further evaluation to inform PMTCT programmes.

**Tanzania:** Available information indicates that 96 percent of women who gave birth in the five years preceding the survey received ANC from a skilled provider at least once. Coverage of ANC in Mainland Tanzania (96 percent) is higher than that in Mainland Tanzania (96 percent). According to the 2010 TDHS, the percentage of women who received ANC from a skilled provider is 96 percent, which is slightly higher than that reported in the 2004-05 TDHS at 94 percent.

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7 Burundi Demographic Health Survey 2010
8 Demographic and Health Surveys of Partner States
9 Uganda Demographic Health Survey, 2011
10 Tanzania Demographic Health Survey, 2010
Kenya: The 2008-09 KDHS data showed that the proportion of women who had ANC from a trained medical provider for their most recent birth in the five years before the survey rose slightly from 88 percent in 2003 to 92 percent. Ninety-two percent of women received ANC from a medical professional, either doctors (29 percent) or nurses and midwives (63 percent). Less than 1 percent received ANC from traditional birth attendants, and 7 percent did not receive any ANC at all.

Rwanda: For their most recent live birth in the five years preceding the survey, nearly all of the mothers (98 percent) received ANC from trained personnel, representing an increase from the previous survey (2005) where 94 percent of births benefited from ANC. Although the great majority of Rwandan mothers sought ANC, the number of visits was below the standard set by WHO and Rwanda Ministry of Health. Only about 35 percent of women who had a live birth in the five years preceding the survey met the standard of at least four ANC visits.

2.1.7 Contraceptive Prevalence Rate (CPR)

Using contraceptives is one of the methods that could lessen maternal and infant health risks by preventing unintended or closely spaced pregnancies and reducing adolescent birth rates. In Uganda, CPR among all married women or those with a partner (age 15-49 years) was reported at 30 percent (2011), Rwanda 29 percent, Kenya 46 percent, Burundi 18 percent and Tanzania 34.4 percent. Despite improved CPR, “unmet need for FP” is reported to be high with Uganda at 34.3 percent, Kenya 55 percent, Tanzania 47.1 percent and Rwanda 40 percent. The rates are reported to be among the highest “unmet need” in sub-Saharan Africa.

IOM (2010) found that there was low and inconsistent condom use among the transport corridor population and yet it is one of the main contraceptive methods for family planning and HIV and STI transmission prevention. As previously described, 73 percent of the bars/lodges along the Mombasa-Kampala route sold or distributed condoms, while only 52 percent did the same on the Kampala-Juba route. Against this, only 1 percent of such bars and lodgings on Kampala-Juba route and 33 percent of those in the Mombasa-Kampala route had condom dispensers.

2.1.8 Proportion of Births Attended by Skilled Health Personnel

The proportion of births attended by skilled health personnel varies across the EAC countries. In Burundi, it is reported at 60 percent, Kenya at 43 percent, Rwanda, at 50 percent, Tanzania at 69 percent, and Uganda at 57 percent. The percentage of births taking place in a health facility was at 60 percent in Burundi, 44 percent in Kenya, 51 percent in Rwanda, 69 percent in Tanzania, and 58 percent in Uganda.

2.1.9 Tuberculosis

The region faces significant challenges with regard to TB, with the high burden of TB mainly attributed to the high HIV prevalence. Three of the five EAC countries (Uganda, Kenya and Tanzania) belong to the 22 high TB burden countries in the world, while Rwanda is among the top 15 countries with the highest estimated TB incidence rates per capita and corresponding incidence rates of HIV-positive TB cases. For example, TB prevalence in Tanzania as per the 2013 national TB prevalence survey has estimated a prevalence rate of 124 per 100,000 population with a case notification of smear positive cases at 51.1 per 100,000 population.

Multidrug Resistant Tuberculosis (MDR-TB) in Zanzibar is however still low compared to the mainland. The Drug Resistant Survey of 2007 in mainland indicated MDR-TB burden of 1.1 percent in new and 3.9 percent in retreated cases. The TB situation in the region could be due to weak HIV and TB collaborative interventions, limited

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11 Kenya Demographic Health Survey 2010
12 Rwanda Demographic Health Survey 2010
13 Ministry of Health, Uganda “The Sharpened Plan-Accelerating the MDGs, 2013”
15 Demographic Health Surveys in the Five States 2010 & EAC Facts and Figures, 2011
16 National Strategic Plan 2015-2019 for TB and Leprosy Control, ZIHTLP/MOH, 2014
capacity of peripheral facilities for TB case
detection, poor TB surveillance systems including
gaps in contact tracing for smear positive TB
patients and limited/absent cross-border TB
surveillance, and lack of harmonized/standardized
TB treatment protocols. For example, Uganda uses
an 8-month TB treatment regimen while Tanzania
and Kenya use a 6-month regimen thus creating
challenges for treatment continuation for cross-
border migrant populations.

A Regional TB Control Best Practice Meeting that took place in Nairobi-Kenya in 2012 took
stock of the progress the EAC, as regional block, has taken to improve the quality of health care
services offered to patients with TB. They also shared best practices that could be scaled up and
ultimately lead to a more vibrant and healthy East Africa. The meeting noted lack of high quality
laboratories as well as effective diagnostic tools could hinder timely diagnosis of TB and
MDR-TB leading to continuous transmission of the disease thus undermining the region’s
efforts to offer quality services to patients. The meeting discussed the work of an East African
Public Health Laboratory Networking (EAPHLN) project which aims at establishing a network of
efficient, high quality, accessible public health laboratories for the diagnosis and surveillance of
TB and other communicable diseases. This lab is supporting 31 laboratories in East Africa and had
adopted the WHO Stepwise Laboratory (Quality) Improvement Process towards Accreditation
to strengthen laboratory systems. Under the EAPHLN project, a total of 35 GeneXpert machines
were to be procured. GeneXpert machine is the latest technology that is recommended by WHO
for use in patients suspected of having MDR-TB or HIV-associated TB and also is able to produce
laboratory results in a few hours rather than
the existing diagnostics that takes months to
produce results. The meeting was informed that
following the directives by the EAC Sectoral
Council of Ministers on Regional Cooperation in
Health, the EAC had begun the processes and
negotiations that may lead to the establishment
of the EAC Medical and Public Health Laboratories
Accreditation Board and the EAC Medical and
Public Health Laboratories External Quality
Assessment Scheme. These are regional initiatives
aimed at strengthening laboratories in the EAC.

2.1.10 Non-Communicable Diseases
In EAC, the increasing affluence resulting from
closer urban-rural economic linkages, improved
transport infrastructure and increased trade and
labor mobility within the region is likely to cause
increases in non-communicable diseases and
health conditions such as hypertension, diabetes,
heart disease, cancers, injuries, mental health and
tobacco related diseases. Moreover, conditions
such as diabetes, trauma and road traffic injury
as well as mental health conditions are now
becoming the leading cause of death and disability
among educated and productive population group.
Tobacco and alcohol are two main preventable
risk factors for non-communicable diseases, with
tobacco being the single largest preventable cause
death among young and middle-aged people in
the world.

Combined, communicable diseases and NCDs cause
high burden of disease, stretch the already weak
public health systems and contribute to reduced
life expectancy, increased morbidity, mortality,
disability, and ultimately increased poverty. This
calls for harmonization of EAC Partner States’
national health information systems for efficient
and effective information exchange on best
practices for managing communicable and diseases
and NCDs.

id=145%3Aregional-tuberculosis-control-best-practices-meeting-concludes-in-nairobi&catid=33%3Apress-release&Itemid=1

2.2 Access to Health Services along the Transport Corridors in the EAC

2.2.1 Mobility as a Social Determinant of Health

Although mobility itself is not detrimental to health, it still is a social determinant of health. Multitudes of sources indicate that a major challenge facing the health of migrants and mobile populations is access to appropriate services. For example, the circumstance in which migration takes place, coupled with individual factors such as gender, language, immigration status, and culture, have a significant impact on health-related vulnerabilities and access to services. Availability, geographical accessibility, economic accessibility (affordability), and acceptability are major challenges to access, all of which must be addressed when reassessing health policy. Addressing the health needs of migrants and mobile populations not only improves their well-being, but also safeguards the health of host communities.

2.2.2 Availability of Health Care Services

The EAC transport corridors are economic lifelines that link Partner States with their neighbors, serving as pathways for trade and engines to expand local economies. However, many corridor towns are reported to lack sufficient services for family planning, reproductive health, nutrition, malaria, and maternal and child health. As previously discussed, they are also major transmission routes for HIV. People working and living along these corridors — truck and bus drivers, traders, businesspeople, employees of bars and lodgings, border and customs officers, and others — are at elevated risk of HIV infection. High unemployment and underemployment, multiple concurrent sexual partnerships, substance abuse, widespread gender-based violence and poor access to quality health services — including HIV prevention, care and treatment services — all fuel HIV transmission.

Similarly, many fishing landing sites, particularly on islands, have been long neglected and have limited basic health, HIV and AIDS care or education facilities. In this regard, Lake Victoria Basin Commission indicated that of 46 fishing landing sites surveyed, only seven (15 percent) had schools; these low levels of education exacerbate the difficulties of providing preventive medicine, diagnoses and treatment. Indeed, it was found that limited facilities are faced with both structural and behavioral issues. This implies that fishing communities may experience difficulties to access health service interventions due to their frequent mobility. Other fishing communities are disadvantaged, not only by poor roads and electricity but also challenges of human resources and retention of health professionals.

Studies in the region further show that marginalized communities and those along the transport corridors continue to lack access to adequate health services. For instance the AIHD study noted that 50 percent of the corridor population are transient, impoverished, and have poor health status. Although migrants inhabit/pass through the cross-border towns, findings from the AIHD study also show that a large proportion of persons living in cross-border communities (52 percent) had lived in their current locations for more than 10 years. The findings further indicate that the community in both the cross-border and comparison towns perceived treatment services as available. However, it was noted that the comparison towns had more in terms of availability of maternal child health (MCH) services (FP, ANC, delivery, postnatal care, immunization, nutritional care and infant care).

An IOM study (2013) revealed that the catchment population at health facilities at border posts is significant, yet the human resource capacity is limited, and health workers are thus overstretched. The table below highlights the average working hours of health workers per border site.

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20 African Institute for Health and Development (AIHD), 2013
21 Ibid
23 IOM (2013). A Rapid Assessment of Access to Health Care at Selected One Stop Border Posts (OSBP) in East Africa
The study indicated that clinics providing health services are not open during hours that are convenient to most cross-border populations, such as informal cross-border traders who work during normal clinic operating hours and often do not have the time during the day to access healthcare services. It should be noted, therefore, that whereas there is inadequate human resource, longer opening hours would improve access to health services because truck drivers, their assistants, FSWs, cross-border traders and people from the host communities who work at night would have more choices for times to visit health facilities. Establishment of 24-hour clinics along the routes and employing task shifting for health workers would also facilitate access to health services by the populations.

### 2.2.3 Cost of Accessing Health Care

Affordability and health care financing determine access to health care. The health sectors in EAC Partner States remain significantly under-funded and mainly rely on private sources of financing, especially out-of-pocket spending\(^{24}\). At 4.5 percent, 7.3 percent, 9.5 percent and 10.8 percent for Kenya, Tanzania, Uganda and Rwanda, GDP allocation to public spending on health is far below the Abuja target of 15 percent to which the governments committed.

According to a study conducted by IOM (2010)\(^{25}\), participants perceived the cost of accessing medical services to be prohibitively high. As such, costs of accessing health care discourage or obstruct some people at the OSBP from seeking health services. Similarly, participants noted that most of the existing health facilities were not adequately financed and thus had poor quality service provision. This sentiment was also expressed by health care workers who decried what they perceived as the prohibiting cost of healthcare and were often frustrated by the inability to provide high quality service due to limited resources and facilitation.

### 2.2.4 Service access barriers due to multiplicity of languages

Language has been cited as one of the barriers to services by cross-border populations. Lack of clarity in practices and policies across countries in the region was also cited as hindrance to seeking services by cross-border populations. In Kenya for example, Eastleigh, a large trading district in Nairobi, is (a) home to thousands of migrants largely fleeing prolonged poverty and conflict in Ethiopia and Somalia (b) a major transit point between refugee camps, Somalia, and third world

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24 Ibid
countries to which migrants travel through legal and irregular channels. In Eastleigh, language barriers, stigma and lack of health literacy are some of the social factors which discourage migrants from seeking appropriate diagnosis and treatment\(^{26}\). On the other hand, in South Africa, it was reported that service providers may be using their native language during service provision. For some cross-border population, language is a barrier as Information Education and Communication (IEC) materials are not written in their native languages. Even when they find materials in their language, service personnel at medical clinics still may not be able to communicate with them.

### 2.2.5 Legal Status and Administrative Barriers

IOM (2010) reported that in order to access health services, medical professionals often require clients to produce travel documents. Moreover, some informal cross-border traders enter their destination countries without legal documentation, and their inability to present travel documents results in arrest or deportation. In addition, some study participants also cited unfavorable administrative regulations as a barrier to seeking health care. For example, at some facilities, one of the prerequisites to access care was a registration procedure that required proof of residence or legal status in the country. While this procedure was deemed necessary for accountability and monitoring of service delivery for reimbursement of costs incurred on behalf of the government, it often discouraged migrants from accessing health services.

The AIHD (2013) study\(^{27}\) showed that some of the cross-border towns are major administrative and business towns with potential for added growth. Unfortunately, corridor and cross-border towns are generally underserved by national health programmes due to the reluctance of governments to provide services primarily to non-nationals. The study also found that discrimination and lack of access to health services was reported in many cross-border sites. In some sites, higher costs were levied to ‘outsiders,’ while in other sites, language was a key barrier. Lack of clarity in practices and policies across countries in the region was also cited (e.g. fear of truck drivers to cross into Rwanda due to an understanding that they would be forced to test for HIV).

### 2.2.6 Harmonization of Different Health Care Provision Practices

Harmonization of health care provision practices including health care information systems among the five countries was yet another health sector challenge documented by World Bank (2009)\(^{28}\). Each country has its own health care system and it is necessary to find ways to provide a seamless service while respecting the autonomy of each country.

### 2.3 The Policy Environment

The national responses to health in the five EAC countries are guided by their respective national health sector strategic plans as is shown in the table below:


\(^{27}\) African Institute for Health and Development (2013), The East Africa Cross-Border Health Study Report

\(^{28}\) World Bank Global HIV/AIDS Program Discussion Paper, August 2005, Lessons Learned to Date from HIV/AIDS Transport Corridor Projects

### TABLE 4: NATIONAL HEALTH SECTOR STRATEGIC PLANS FOR EAC PARTNER STATES

<table>
<thead>
<tr>
<th>Partner State</th>
<th>Health Sector Strategic Plan</th>
<th>Timeframe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burundi</td>
<td>Burundi National Health Sector Strategic Plan</td>
<td>2011-2015</td>
</tr>
<tr>
<td>Kenya</td>
<td>Kenya Health Sector Strategic and Investment Plan</td>
<td>2013-2017</td>
</tr>
<tr>
<td>Rwanda</td>
<td>Third Health Sector Strategic Plan</td>
<td>July 2012-2018</td>
</tr>
<tr>
<td>Tanzania</td>
<td>Tanzania Health Sector Strategic Plan III</td>
<td>2010-11/2014/15</td>
</tr>
<tr>
<td>Zanzibar</td>
<td>Zanzibar Health Sector Strategic Plan</td>
<td>2011/12-2015/16</td>
</tr>
<tr>
<td>Uganda</td>
<td>Uganda National Health Sector Strategic Plan III</td>
<td>2011/12-2014/15</td>
</tr>
</tbody>
</table>
Similarly, the national constitutions form the basis of laws in all countries in the EAC. The legal, policy and institutional frameworks in the various EAC Partner States guide their respective country responses to different health issues/interventions as illustrated by the sexual reproductive, maternal and child health example shown in the table below:

TABLE 5: LEGAL FRAMEWORK FOR POLICIES ON SEXUAL REPRODUCTIVE, MATERNAL AND CHILD HEALTH IN THE EAC

<table>
<thead>
<tr>
<th>Partner State</th>
<th>Policy</th>
</tr>
</thead>
</table>
| **Burundi**   | The Constitution of Burundi 2005  
                The National Policy on Reproductive Health (Politique nationale de la santé de reproduction 2007)  
                Burundi’s Revised Penal Code 2009 |
| **Kenya**     | The Constitution of Kenya 2010  
                The Sexual Offences Act 2006  
                The Prohibition of Female Genital Mutilation Act 2011  
                Children’s Act Revised Edition of 2010  
                The Kenya Health Policy 2012-2030  
                National HIV Policy, 2005  
                National Community Health Policy 2008 |
| **Tanzania**  | The Constitution of the United Republic of Tanzania  
                The National HIV and AIDS Policy, 2012  
                The Law of Marriage Act, Revised 2002  
                The Sexual Offences Special Provision Act 1998  
                National HIV/AIDS Policy, 2006 |
| **Zanzibar**  | The 1995 Constitution of the Republic of Uganda  
                National Health Sector Policy, 2010  
                Uganda National HIV and AIDS Policy, 2011  
                Vision 2025  
                The National Gender Policy  
                The Adolescent Reproductive Health Policy |
| **Uganda**    | National Health Sector Policy, 2010  
                Uganda National HIV and AIDS Policy, 2011  
                Vision 2025  
                The National Gender Policy  
                The Adolescent Reproductive Health Policy |
2.4 Programmatic Responses: Sexual Reproductive, Maternal and Child Health in EAC countries

With support from different development partners, EAC Partner States are implementing programmes aimed at improving sexual, reproductive and maternal and child health along the transport corridors. There are also specific programmes that are being implemented with a regional perspective. The section below gives some examples:

2.4.2 Regional Response

Integrated HIV and AIDS and Reproductive Health Project in Lake Victoria Basin (IHARP-LVb):

The project contributes to the Strategic Interventions area of promoting improved health services with emphasis on HIV and AIDS, reproductive health, gender mainstreaming, water supply and sanitation as stipulated in the 4th EAC Development Strategy and the Lake Victoria Basin Commission (LVBC) Strategic Plan (2011-2016). The response is premised on the fact that despite the existence of many policies to reduce the prevalence of HIV and AIDS – and Reproductive Health (RH) – related diseases among migrants within the Lake Victoria Basin, most of them are mainly related to the workplace. Overall, few policies and programmes address the specific structural issues that either increase risks or deny access to services, and even in such cases, the responses do not address the related reproductive health issues.

By addressing the structural barriers, and strengthening cross-border response frameworks, this multi-year project will increase the proportion of migrants accessing HIV and AIDS and reproductive health services within the Lake Victoria Basin.

Regional Outreach Addressing HIV/AIDS through Development Strategies (ROADS) Project:

Managed by FHI 360, ROADS is USAID/East Africa’s platform to address HIV and broader health challenges along major transport corridors in East, Central and Southern Africa. Since 2005, ROADS has supported transport unions and local community-based organizations, nongovernmental organizations and faith-based organizations to design and implement programming targeting most-at-risk populations/ key populations, in liaison with national AIDS commissions, ministries of health, relevant line ministries, the private sector and other development partners. Under ROADS I and Roads to a Healthy Future (ROADS II), FHI 360 has supported transport corridor programming in Burundi, DRC, Djibouti, Kenya, Mozambique, Kenya, Rwanda, Southern Sudan, Tanzania, Uganda and Zambia. In addition to HIV prevention, care and support, ROADS has supported programming in economic strengthening, substance abuse, gender-based violence, FP/RH, MNCH, and nutrition.

The Reproductive, Child, Adolescents Health and Nutrition Unit of the EAC:

There are three documented projects one of which directly meets the need of the youth. Invest in Adolescents: Building Advocacy Capacity in East Africa is a European Commission-supported project, in the EAC Partner States, implemented in partnership with the Deutsche Stiftung Weltbevölkerung (DSW). The overall objective of the project is to contribute to the improvement of adolescent and youth Sexual Reproductive Health and Rights (SRHR) and ultimately the achievement of MDGs 3, 5 and 6, promoting a holistic approach to SRHR in line with the principles of the International Conference on Population and Development (ICPD) and the ICPD+5 Programme of Action.
3. HIV AND AIDS SITUATION IN THE EAC REGION

3.1 Prevalence of HIV in the EAC

The current estimated national HIV prevalence rates among adults stand at 1.4 percent in Burundi, 5.6 percent in Kenya, 3 percent in Rwanda, 5.1 percent in Tanzania (Zanzibar 1%) and 7.3 percent in Uganda. According to UNAIDS, there were about 5 million people living with HIV in the region in 2012; and Kenya, Uganda and Tanzania each contributed to a third of the burden of People Living with HIV (PLHIV) in the region.

3.2 HIV Prevalence among Key and Other Vulnerable Populations

HIV epidemic in East Africa is widespread. However, some groups have a higher risk of acquiring HIV than others, and they are important to the dynamics of HIV transmission in a given setting. They also are essential partners in an effective response to the epidemic. It is in this context that this Situation Analysis defines key and other vulnerable populations in this region as most-at-risk populations (MARPs) that include fishing communities, sex workers and their clients, long-distance truck drivers, uniformed services, men who have sex with men (MSM) and people who inject drugs (PWID). PEPFAR defines key populations as MSM, PWID, sex workers and transgender persons (TG) who bear disproportionate burdens of HIV infection.

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29 Enquête Démographique et de Sante 2010
30 Kenya AIDS Indicator Survey 2012
31 Rwanda 2010 Demographic Health Survey: Key findings
32 Tanzania HIV/AIDS and Malaria Indicator Survey 2011 - 2012
33 Uganda AIDS Indicator Survey 2011

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FIGURE 2: PLHIV IN EAC PARTNERS STATES

Fishing landing sites, where fishing communities congregate, are hubs of dense local and regional sexual networks. Interactions along fish trading chains can spread HIV from these hubs to the wider population.

Fishing Communities:
Fishing in East Africa provides jobs and income for many people. Fishing communities are made up of men and women who fish, boat owners, fish processors, boat builders, fishing gear makers and repairers, dealers in fishing equipment, fishmongers and traders as well as the men and women who work in small restaurants and bars, and provide accommodation and other services, and the children in these areas. Fishing landing sites, where fishing communities congregate, are hubs of dense local and regional sexual networks. Interactions along fish trading chains can spread HIV from these hubs to the wider population.

Trucking Community
In East Africa, long-distance truck drivers were identified as early as the 1980s as having relatively high HIV prevalence, with rates of 25 to 32 percent among truck drivers in Kenya and Uganda. Indeed, it is estimated that along Mombasa-Kampala highways, 3,200 to 4,148 new infections occur every year. In the Great Lakes Region, it was estimated in 2008 that the average HIV prevalence for the truckers was 18 percent which is higher than the national HIV prevalence in the GLIA countries.

A FISHING COMMUNITY
A fishing community can be described as a group of people that substantially depends on harvesting fish, or as a socio-economic group of persons living together in a locality and deriving their livelihood directly or indirectly from fishing.

TABLE 6: HIV PREVALENCE AMONG TRUCKERS

<table>
<thead>
<tr>
<th>Site</th>
<th>Sample</th>
<th>% HIV+</th>
<th>Year</th>
<th>National HIV prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRC</td>
<td>Truck drivers and assistants</td>
<td>4.9%</td>
<td>2006</td>
<td>n.d.</td>
</tr>
<tr>
<td>DRC-West</td>
<td>Truck drivers</td>
<td>3.3%</td>
<td>2006</td>
<td>n.d.</td>
</tr>
<tr>
<td>Kenya</td>
<td>Truck company employees</td>
<td>18%</td>
<td>1999</td>
<td>6.7% (2003)</td>
</tr>
<tr>
<td>Median HIV prevalence</td>
<td></td>
<td>18%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: GLIA (2008)

This high vulnerability to HIV infection among long-distance truck drivers was partly attributed to the drivers’ long absence from home, the mobile nature of their work, the lack of affordable rest facilities at truck stops, and lack of access to condoms and correct HIV information, as elaborated further in this report under factors affecting HIV transmission.

**Sex Workers:**
HIV prevalence among sex workers is generally higher than the national average. In Kenya, 29.3% of all sex workers nationwide were estimated to be living with HIV in 2012 against 5.6 percent among adults in the general population. In Uganda, sex workers had 33 percent prevalence compared to 7.2 percent among the general adult population. In 2012, a study of MARPs in Nairobi City, Kenya, found that there are migrant sex workers because of continuing migration trends into and from Kenya due to EAC integration, climate change, urbanization, economic development and continuing humanitarian challenges in neighboring countries. Thus, the study found that migrant FSWs in Nairobi are from Ethiopia (31.2 percent), Tanzania (27.6 percent) and Uganda (27.6 percent), followed by Somalia (11 percent), Democratic Republic of Congo (1.3 percent), Sudan (1 percent), and Rwanda (0.2 percent). These trends are likely similar for the other EAC partner states.

These statistics show that FSWs are an important source of HIV infections with the implication that the clients of sex workers constitute a significant bridge between the sex workers and the general population. It is therefore important to link strategies addressing HIV and AIDS among FSWs to those targeting truck drivers and other populations along the transport corridors who are potential clients of FSWs. Against this background, in general, efforts to estimate the number of FSWs is complicated because sex work is illegal in the region and many sexual activities involve some transactional component, making it difficult to categorize them as sex work.

### 3.3 Country specific HIV rates among key populations

**Burundi:**
BSS studies conducted among high risk groups found HIV prevalence rate of 19.8 percent (95 percent CI: 17.5 percent - 22.0 percent) among sex workers, 2.4 percent (95 percent CI: 0.9 percent to 3.9 percent) among MSM, and 1.4 percent (95 percent CI: 0.7 percent -2.1 percent) among seasonal workers. The Demographic and Health

### TABLE 7: HIV PREVALENCE AMONG FEMALE SEX WORKERS IN EAC PARTNER STATES

<table>
<thead>
<tr>
<th>Partner States</th>
<th>Source</th>
<th>Female Sex Workers</th>
<th>Adult Population (UNAIDS 2013)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burundi</td>
<td>BSS 2011¹</td>
<td>19</td>
<td>1.3</td>
</tr>
<tr>
<td>Kenya</td>
<td>MoH 2012</td>
<td>29</td>
<td>6.1</td>
</tr>
<tr>
<td>Rwanda</td>
<td>CNLS 2009</td>
<td>51</td>
<td>2.9</td>
</tr>
<tr>
<td>Uganda</td>
<td>Crane 2010⁴</td>
<td>33</td>
<td>7.2</td>
</tr>
<tr>
<td>Tanzania</td>
<td>TACAIDS 2008</td>
<td></td>
<td>5.1</td>
</tr>
<tr>
<td>Zanzibar</td>
<td>Unguja ZAC, MOH 2011</td>
<td>19.3</td>
<td>1%</td>
</tr>
<tr>
<td></td>
<td>Pemba</td>
<td>18.8</td>
<td>1%</td>
</tr>
</tbody>
</table>

Note: The Crane study was a small study conducted only in Kampala hence not appropriate to extrapolate to the national level.

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Survey (DHS) report published in 2012 showed a decrease of HIV prevalence rate in the general population from about 3 percent in 2007 to 1.4 percent in 2010 (1 percent in men and 1.7 percent in women, 4.1 percent in urban areas and 1 percent in rural areas).

Uganda:
The 2011 AIDS Indicator Survey in Uganda reported HIV prevalence at a national average of 7.3 percent and important variations by sex and in specific regions. In line with global UNAIDS guidance, the Uganda National HIV/AIDS Strategic Plan (NSP) and National HIV Prevention Strategy (NPS) 2011/12 – 2014/15 define several population groups that are important in the national AIDS response because of a combination of high HIV prevalence and extensive sexual networks. These populations include: sex workers and their sexual partners, fishing communities, uniformed services, and mobile populations such as migrant workers, MSM, and persons with disability.

The prevalence of HIV in these key populations as estimated in recent years through sub-national studies indicate a prevalence rate of 33 percent among FSWs, 17.5 percent among male partners of FSWs, 13.2 percent among MSM, 37.1 percent (32.4 percent males, 42.3 percent females) among fishing communities, and 6.8 percent (13.4 percent males, 4.5 percent females) among plantation workers. A study in Kampala in 2012 contracted out by the MARPs Network found HIV prevalence at 35.7 percent among sex workers (n=503); 16.7 percent among PWID (n=54); 9.3 percent in fisher folk (n=321); 9.1 percent in MSM (n=398), 6.6 percent in truckers (n=213), and 1.9 percent in uniformed forces (n=415).

Kenya:
Population-based surveys undertaken in Kenya in the last 10 years show that HIV prevalence among women and men aged 15–49 years ranged from 6.7 percent in 2003 to 5.6 percent in 2012. Although the prevalence has taken a downward trend, women are more disproportionately affected than men. Kenya has both a generalized and a concentrated epidemic. The epidemic is deeply rooted among the general population while there is also concentration of very high prevalence among key populations. Prevalence is about 29.3 percent among FSWs, 18.3 percent among PWID and 18.2 percent among MSM.

Tanzania:
The HIV prevalence in Tanzania is estimated at 5.3 percent among adults aged 15–49 years. Statistically significant decline was observed among men in the same age group from 6.3 percent to 3.9 percent but not among women. HIV prevalence among key populations has been reported to be high. Available data from recent studies gives the prevalence of HIV among PWID at 15.5 percent, MSM at 22.2 percent and FSWs at 31.4 percent. Although these may not be national representative estimates, they show a decline in HIV infection among key populations when compared to earlier estimates among MSM (42 percent) and PWID (51 percent). Data from Integrated Behavioral and Biological Surveillance Surveys (IBBSS) conducted in 2007 indicate higher prevalence rates of 10.8 percent among FSW, 16 percent among PWID and 12.3 percent among MSM in Zanzibar. Data from the second IBBSS (2011/2012) in Zanzibar indicates HIV prevalence 18.8 percent and 19.3 percent for FSW, 8.8 percent and 11.3 percent for PWID, and 5 percent and 2.6 percent for MSM in Pemba and Ugunja respectively.

Rwanda:
The Institute of HIV/AIDS, Disease Prevention and Control (IHDPC) conducted a Size Assessment and Population Size Estimation of FSW in Rwanda in 2012. The preliminary analysis shows that the prevalence of FSWs is 51 percent and that, 66 percent of the frequent clients of FSW are married men.

3.3.1 Gaps in service delivery for Key Populations
Evidence suggests that key populations are consistently under-served, and that low service coverage remains an important driver of ongoing HIV transmission. At the core of these inequities are the social and structural barriers of stigma and
social discrimination, including discrimination in health care settings, and the criminalization of substance use, sex work, and same sex behavior. For example, Tanzania IBBSS (2011/12) reported that though services are available for key populations in Zanzibar there was relatively low levels of access due to fear of stigma and discrimination, experienced stock-outs, limited service integration and referrals to address multiple needs (treatment, shelter, nutrition, etc.), and poor health seeking behavior among these populations. In contrast, even in settings where laws are unlikely to be changed and social stigma likely to remain, pragmatic public health approaches can help develop enabling environments where inclusion in HIV services can be progressively realized. Key populations such as MSM need access to prevention and treatment services delivered in a friendly environment, without discrimination or fear of stigma. This means not only establishing specialized clinics, but also training health workers in existing non-specialized clinics so that they meet a minimum standard for non-discrimination and quality provision of care in service delivery. Many Partner States have acknowledged the challenges with size estimation for key and mobile populations in the region. Nevertheless, they recognize the role of these size estimates as crucial components of national HIV strategic planning, programme design, resource mobilization, service delivery and monitoring and evaluation (M&E) at national and sub-national levels.

3.4 Mother-to-Child Transmission of HIV (MTCT)

There has been considerable improvement in the proportion of pregnant women that received ARVs to prevent MTCT across the EAC countries. In Uganda and Tanzania, there was an increase from 26 to 72 percent, in Burundi from 29 to 54 percent and Kenya from 34 to 53 percent.

3.5 Access to ARV in the EAC

ART is a lifelong therapeutic undertaking that is being scaled-up in the EAC because there is significant scientific evidence to show when PLHIV take ART as guided by WHO and adapted by Partner State Ministries of Health, the rates of opportunistic diseases and deaths decline markedly. The table below shows that by 2012, there were nearly 2 million adults eligible for ART but less than 1.5 million got the treatment.

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FIGURE 3: PERCENTAGE OF WOMEN RECEIVING ARVS (EXCLUDING SDNVP) FOR PMTCT

<table>
<thead>
<tr>
<th></th>
<th>Percentage (%) Pregnant Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burundi</td>
<td>29</td>
</tr>
<tr>
<td>Kenya</td>
<td>54</td>
</tr>
<tr>
<td>Rwanda</td>
<td>40</td>
</tr>
<tr>
<td>Uganda</td>
<td>53</td>
</tr>
<tr>
<td>Tanzania</td>
<td>60</td>
</tr>
</tbody>
</table>

In a study on access to health care at selected OSBP in East Africa, out of 29 facilities providing HIV and AIDS related services, 25 provided HTC, 13 provided ART, 20 provided treatment of opportunistic infections (TOIs) and 26 carried out diagnosis and treatment of STIs. Against this, it was found that there was considerable variation in availability of care and treatment services targeting MARPs in hotspots along transport routes in Uganda, despite improvement in availability of ART services within the districts.

3.6 AIDS-Related Deaths

There are no statistics on the deaths due to AIDS-related conditions among the people in the transport corridors of the EAC. In the general population, however, there has been a consistent decline in the number of AIDS-related deaths in all Partner States since 2005, when ART became more widely available (see figure below). Between 2001 and 2012, a total of 3.6 million people were estimated to have died from AIDS with the majority being in Tanzania (35 percent), Kenya (33 percent) and Uganda (24 percent). The remaining eight percent were in Burundi and Rwanda.

**TABLE 8: NUMBER OF ADULTS ELIGIBLE FOR ART AND ON ART, 2011 AND 2012**

<table>
<thead>
<tr>
<th>States</th>
<th>2011 Adults Eligible</th>
<th>2011 Adults on ART</th>
<th>2012 Adults Eligible</th>
<th>2012 Adults on ART</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burundi</td>
<td>590,000</td>
<td>538,983</td>
<td>40,000</td>
<td>27,098</td>
</tr>
<tr>
<td>Kenya</td>
<td>100,000</td>
<td>96,123</td>
<td>110,000</td>
<td>107,021</td>
</tr>
<tr>
<td>Rwanda</td>
<td>470,000</td>
<td>313,117</td>
<td>580,000</td>
<td>403,089</td>
</tr>
<tr>
<td>Tanzania</td>
<td>570,000</td>
<td>277,070</td>
<td>580,000</td>
<td>399,886</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1,730,000</td>
<td>1,225,293</td>
<td>1,990,000</td>
<td>1,485,682</td>
</tr>
</tbody>
</table>


**TABLE 9: AVAILABILITY OF CARE AND TREATMENT SERVICES FOR MARPS IN HOTSPOTS ALONG TRANSPORT ROUTES**

<table>
<thead>
<tr>
<th>Site / District</th>
<th>Implementers Visited</th>
<th>ART</th>
<th>HTC</th>
<th>TOI</th>
<th>IT</th>
<th>HBC</th>
<th>PC</th>
<th>RS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malaba/Tororo</td>
<td>3</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Naluwerere/Bugiri</td>
<td>4</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Lyandtonde/Lyantonde</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ruti/Mbarara</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mpondwe/Kasese</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Migyera/Nakasongola</td>
<td>7</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Karuma/Masindi</td>
<td>6</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Bibia/Amuru</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Arua Park, Mbuya</td>
<td>7</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Nalukolongo/Kampala</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Key: ART=Anti-retroviral Therapy; HTC+ HIV Testing and Counseling; TOI: Treatment of Opportunistic Infections; IT=Integrated Treatment; HBC=Home-Based Care; PC=Palliative Care; RS=Referral Systems

Source: IOM (2009)
3.7 Vulnerability to HIV Transmission along the Transport Corridors

3.7.1 Mode of HIV Transmission
Throughout the EAC region, the dominant method of HIV transmission is through sexual intercourse as is documented in the Mode of Transmission studies conducted in Kenya⁴⁹, Rwanda⁵⁰ and Uganda⁵¹, demographic and health surveys and indicator surveys⁵²,⁵³,⁵⁴,⁵⁵,⁵⁶. Heterosexual transmission including heterosexual sex within a union or regular partnership, mutual monogamous/casual relationship and in a transactional arrangement account for over 90 percent of new infections in all the countries in the region except Kenya, where men who have sex with men (MSM) account for 15 percent of new infections. Mother-to-child transmission accounts for less than 10 percent while transmission in medical facilities is less than 1 percent.

3.7.2 Factors Affecting HIV Transmission along Transport Corridors
Road rehabilitation and construction projects in the region create jobs for locals and expatriates along the transport corridors, improve road infrastructure in the region and also increase the movement of people and goods across borders. Although these benefit the economies of the region, they also come with one important unintended consequence of a greater risk of HIV transmission. Studies on international migration indicate that border crossings are characterized by a socio-cultural context of high risk sexual behaviors that predispose persons to HIV and profound mobility, as migrants such as truckers, traders, sex workers, and others move through these spaces⁵⁷, ⁵⁸.

Duration of time away from home and family: An IOM study⁵⁹ in 2010 noted that the time spent on the road by long-distance truck drivers is a serious vulnerability factor identified by drivers themselves.

⁵⁴ National Institute of Statistics of Rwanda (NISR) [Rwanda], Ministry of Health (MOH) [Rwanda], and ICF International. 2012. Rwanda Demographic and Health Survey 2010. Calverton, Maryland, USA: NISR, MOH, and ICF International.
De la Torre et al., (2009) had earlier observed that some regional studies on migration and HIV found that people who spend time away from home are much more likely to have multiple concurrent sexual partners than those who remain in their home areas, putting migrants at greater risk of HIV. Drivers are often away for weeks at a time, increasing the probability that they will engage in high-risk sexual activity to assuage the boredom, loneliness and stress of their jobs.

In East Africa, nearly 40 percent of the truckers in Uganda and Kenya spent more than 40 nights away from home in the past year before the surveys were conducted. However, it is appropriate to note that over a quarter of the truckers spend less than three weeks at home, including 12 percent who spend only one week or less in a year. This is a matter of grave concern because the majority of these truckers are in the sexually active age group and as such when they stay away from their spouses for such a long time, it increases their risk of having sex with another partner whose HIV sero-status may not be known. This predisposes them to a higher level of vulnerability to HIV infection.

Poor working conditions and delays at border posts and ports:
It was reported by IOM (2010) that in Southern Africa the work of a truck driver is not only highly mobile in nature but also involves periods of immobility, long waits and boredom in unfamiliar and often in inhospitable environments as drivers have to wait, often for a day or two, while loading or unloading at ports and, due to paperwork delays, sometimes for a week or more, depending on the border post.

This brings about boredom with increased opportunities for engaging in risky sexual behaviors including sex with multiple partners. Although there are no statistics for EAC region, it was documented that there were 47 hotspots along the Mombasa-Kampala and Kampala-Juba routes (39 in Kenya and eight in Uganda) between 2005 and 2006. It was also reported that many nights are spent by long haul truck drivers especially at cross border areas due to non-integrated infrastructure and systems (ICT, procedures and standards for both taxation and migration systems) as well as tariff and non-tariff barriers of the countries.

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**FIGURE 5:** TIME SPENT AT HOME IN PAST YEAR BY TRUCKERS OF UGANDA AND KENYA

<table>
<thead>
<tr>
<th>Number of Nights</th>
<th>Percentage of Truckers</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;6 Nights</td>
<td>6</td>
</tr>
<tr>
<td>6-9 Nights</td>
<td>5</td>
</tr>
<tr>
<td>10-19 Nights</td>
<td>13</td>
</tr>
<tr>
<td>20-29 Nights</td>
<td>17</td>
</tr>
<tr>
<td>30-39 Nights</td>
<td>16</td>
</tr>
<tr>
<td>40+ Nights</td>
<td>18</td>
</tr>
</tbody>
</table>

In general, however, average delays for customs clearance on the Northern Corridor is between one-and-a-half and two hours, and less than half-an-hour for immigration clearance. Delays at the Central Corridor border posts are around three-quarters of an hour for customs and half-an-hour for immigration. The border posts perform at similar levels, although the overall delay at Kabanga (Tanzania) is reportedly more than a day. It will suffice to state that the environment at the hotspots and the mobility of populations in such places are conducive to both men and women engaging in multiple concurrent sexual partnerships.

Attitudes towards HIV risk:
It has been documented\(^{65}\) that the risk of contracting HIV constitutes just another risk among many other risks, often more immediate, faced daily by migrants and sedentary population groups along the transport corridors. For truckers, the working conditions along the transport corridors such as high number of road accidents and stress factors tend to foster a sense of fatalism in which HIV is perceived as a distant threat. For the migrants and sedentary populations, the principal concern for most is to maintain their families and meet their basic needs in the immediate future, rather than getting infected with HIV, whose health and social impact are often experienced years later.

Lack of knowledge about HIV and STIs:
The figure below shows that in the EAC region, many truck drivers and their assistants do not know about the symptoms of STIs. Based on the IOM studies carried out in Kenya\(^{66}\) and Uganda\(^{67}\) in 2005 and 2007 respectively, half of the truckers do not know that urethral discharge and burning pain on urination are symptoms indicating presence of an STI. This suggests that this population lacks exposure to HIV or STI programmes in their countries or while on route. Thus, there is a great need for information, education and communication about HIV and STIs, including identification of symptoms and need for seeking support for controlling and/or managing the disease/condition.

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### FIGURE 6: PERCENTAGE OF TRUCKERS WHO KNOW SYMPTOMS OF STIS

<table>
<thead>
<tr>
<th>STI Symptom</th>
<th>Percentage of Truckers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urethral discharge</td>
<td>60</td>
</tr>
<tr>
<td>Burning pain on urination</td>
<td>48</td>
</tr>
<tr>
<td>Genital ulcers or sores</td>
<td>51</td>
</tr>
<tr>
<td>Swellings in groin area</td>
<td>42</td>
</tr>
<tr>
<td>Other symptoms</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>21</td>
</tr>
</tbody>
</table>

Multiple sexual partners:
There are close interactions among formal and informal traders and the surrounding communities within the maritime, cross borders, and truck stop stations of the region. This gives plenty of opportunity for sexual interactions between the road constructors along the transport corridors, the truck drivers, traders, especially women and youth participating in informal trade, as well as the host communities. Yet, engaging in concurrent multiple sexual partnerships creates large, interconnected sexual networks whose members are at heightened risk of infection, especially if sexual intercourse in such relationships is unprotected. In this regard, it was reported in a study conducted along Northern Maputo and Nacala Transport Corridor in Mozambique\textsuperscript{68} that truckers have a number of different sexual networking patterns during their journeys, all of which are potentially high risk. These sexual networking includes:

- Having regular sexual partners at trucking stops, who are often the regular partners of more than one trucker;

- Taking a partner on the journey in the cab in order to cut down on the number of partners along the route, but the travelling partner is not always the same person and is almost certainly not their wife or regular spouse

- Casual sex at different places

While on average only about 30 percent of truckers in Kenya\textsuperscript{69} and Uganda\textsuperscript{70} have had only one sexual partner, the majority have had more than one partner in the 12 months before the survey. In particular, truckers on the Kampala-Juba route have relatively higher numbers of multiple partners compared to their counterparts on the Mombasa-Kampala route. Another important point to note is that over 20 percent of truckers in Kenya have five or more partners, with some having 10 or more partners. Against this background, there were up to 3 percent of truckers who reported not having had sexual partners. The fact that some truckers abstain or have only one sexual partner in a year is an indication that with appropriate interventions, including, information, education and communication, it is possible to reduce the number of multiple sexual relationships, which represent the main driver of the epidemic among this particular population as well as the general population in the region.


\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure7.png}
\caption{Number of Sexual Partners among Truckers in Previous 12 Months}
\end{figure}

The studies above found that on the Northern Transport Corridor, 59 percent of truckers have sex with FSWs or casual acquaintances compared to 42 percent of those in Uganda. Another one third of the truckers reported that they had sex with their spouses while about a fifth had sex with a girlfriend or fiancé.

FSWs represent a vulnerable population at OSBP and are at a high risk of infection with HIV/STI, violent physical victimization, and other health risks. It was found\(^7\) that FSWs are exposed to a range of factors that place them and their clients at risk of HIV. These include the following: (a) some of their clients refuse to use condoms (citing the desire to feel “skin on skin”) or offer more money for condom-less sex—which FSWs might not be able to turn down because of economic deprivation; (b) difficulties in negotiating for condom use especially in the presence of a language barrier or under the influence of alcohol; and (c) condom breakage during intercourse with their clients resulting from sexual roughness and violence.


**FIGURE 8: DISTRIBUTION OF TYPES OF SEXUAL PARTNER AMONG TRUCKERS**

<table>
<thead>
<tr>
<th>Type of sexual partners</th>
<th>Percentage of truckers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spouse</td>
<td>27</td>
</tr>
<tr>
<td>Girlfriend/fiance</td>
<td>13</td>
</tr>
<tr>
<td>Casual acquaintance</td>
<td>23</td>
</tr>
<tr>
<td>FSW</td>
<td>52</td>
</tr>
</tbody>
</table>

**Large number of partners of sex workers along transport corridors:**

The vulnerability to HIV along transport corridors is not restricted to truck drivers and FSWs. Research shows that FSWs engage with diverse clients, of which only about 28-30 percent are truckers in Uganda\(^7\) and Kenya\(^7\). Other clients come from a range of occupations and include fuel dealers, businessmen, bar/lodge workers, uniformed personnel (immigration officers, soldiers and police officers), and drivers of other types of vehicles as is indicated in the figure below. This shows the extent of sexual networking, thereby supporting the concept of programming within ‘spaces of vulnerability’\(^7\).


\(^7\) Spaces of vulnerability are those areas where migrants live, work, pass-through or from which they originate. They may include the following: land border posts, ports, truck stops or hotspots along transport corridors, construction sites, commercial farms, fishing communities, mines, migrant communities and urban informal settlements, migrant-origin sites, detention centres, and emergency settlements.

Low or inconsistent condom use:
The availability of condoms can affect access and utilization by the population along transport corridors. Furthermore, in Namibia, it was noted by IOM (2010) that despite the availability of free condoms, their use is still reported to be low and inconsistent among truckers. While 73 percent of the bars/lodges along the Mombasa-Kampala route sold or distributed condoms, only 52 percent did the same on the Kampala-Juba route. Against this, only 1 percent of such bars and lodgings on Kampala-Juba route had a condom dispenser while 33 percent of those along the Mombasa-Kampala route had the same.

The types of condoms sold in bars/lodges tend to be very country-specific. For instance, along the Kampala-Juba route, it was reported that the brands readily provided within Uganda were mainly Protector, Trust, Engabu and Lifeguard, while Number One and Unidus were found only in outlets within South Sudan. This finding suggests that users who travel across countries need sensitization to access condom brands that they are familiar with from their respective country.

Regarding usage, in EAC, it was also found that there is a trade-off between degree of intimacy and condom use in sexual encounters with truckers. In particular, condom use increased with the degree of social distance between the truckers and the type of partner. As is shown in the figure below, condom use with close partners was generally very low although consistent condom use was highest for liaisons with sex workers.

**FIGURE 9: SEXUAL NETWORKS OF FSWS**

The types of condoms sold in bars/lodges tend to be very country-specific. For instance, along the Kampala-Juba route, it was reported that the brands readily provided within Uganda were mainly Protector, Trust, Engabu and Lifeguard, while Number One and Unidus were found only in outlets within South Sudan. This finding suggests that users who travel across countries need sensitization to access condom brands that they are familiar with from their respective country.

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FIGURE 10: CONDOM USE AND TYPES OF SEXUAL PARTNERS OF TRUCKERS

Variation in parameters of transactional sex between two road transport corridors in EAC:
As shown on the table below, for nearly all risk parameters, the FSW-trucker interactions on the Kampala-Juba route are more likely to facilitate HIV transmission than those on the Mombasa-Kampala route. The FSWs have higher numbers of different partners and more sexual acts per liaison. Condom use, as reported by both FSWs and truckers, is lower on the Juba route and, furthermore, FSWs on this route are three times more likely to practice unprotected sex during menses. Only in terms of completing prescribed STI drugs do truckers on the Kampala-Juba route perform better than those on Mombasa-Kampala route.

TABLE 10: PARAMETERS OF TRANSACTIONAL SEX AND RISK OF INFECTION IN EAST AFRICAN TRANSPORT ROUTES

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Kampala-Juba</th>
<th>Mombasa-Kampala</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSW – Client Interactions (Average)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Different clients per month</td>
<td>18.0</td>
<td>13.3</td>
</tr>
<tr>
<td>Liaisons per month</td>
<td>25.3</td>
<td>24.4</td>
</tr>
<tr>
<td>Sexual acts per month</td>
<td>63.6</td>
<td>52.9</td>
</tr>
<tr>
<td>Condom Use</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reported by FSWs (Average)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>With regular partners</td>
<td>53.8</td>
<td>64.5</td>
</tr>
<tr>
<td>With casual partners</td>
<td>77.2</td>
<td>89.9</td>
</tr>
<tr>
<td>Overall</td>
<td>68.4</td>
<td>77.7</td>
</tr>
<tr>
<td>Reported by truckers (Last encounter)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>With casual partners</td>
<td>41.7</td>
<td>69.5</td>
</tr>
<tr>
<td>With FSWs</td>
<td>75.6</td>
<td>88% (casual), 69% (regular)</td>
</tr>
<tr>
<td>% Truckers reporting STI symptom in previous 12 months</td>
<td>32.0</td>
<td>15.0</td>
</tr>
<tr>
<td>% Truckers practicing “unsafe sex”</td>
<td>46.0</td>
<td>33.2</td>
</tr>
<tr>
<td>% Liaisons where unprotected sex during menses occurred</td>
<td>2.4</td>
<td>0.79</td>
</tr>
<tr>
<td>% Truckers completing prescribed course of STI drugs</td>
<td>57.1 (16/28)</td>
<td>45.0 (18/40)</td>
</tr>
</tbody>
</table>

3.8 Vulnerability of Adolescents and Young Women:

Women in general and young women in particular find themselves in situations where negotiation for safe sex is almost impossible. Adolescents and youth are by the nature of their biological, sociological and economic developmental stages a vulnerable population in any community, and the nature of the transport corridors, places these vulnerabilities to a higher level. In Kenya, the odds of being infected with HIV are higher among young women aged 15-24 years compared to young men in same age group. Prevalence among young people 15-24 years would be largely attributed to new infections as opposed to the impact of the scale up of HIV treatment.

The Reproductive, Child, Adolescents Health and Nutrition Unit of the EAC has three documented projects one of which directly addresses the needs of the youth. Young people and adolescents play a critical role in health and development e.g. as volunteers in health centers, home-based caregivers for HIV and AIDS patients and as heads of households, yet their involvement in decision-making processes and advocacy strategies often nevertheless remains token. The projects highlight the crucial nature of involvement of knowledgeable and empowered adolescents and youth in strengthening sexual reproductive health rights.

Other than transgender persons, FSW and female PWID identified under key populations, other vulnerable groups of women include: women who use drugs and female partners of men who use drugs; women prisoners and female partners of male prisoners; women and girls in complex emergencies; migrant women and female partners of male migrants; women who have sex with women, etc. For these groups of women, what have been known to work include comprehensive prevention programmes such as for FSW that include components such as peer education, medical services, and support groups that facilitate adoption of safer sex practices including condom use; clinic-based interventions with outreach workers can be effective in increasing condom use and HIV testing; and, creating a sense of community, empowerment and leadership among them can help support effective HIV prevention.

Limited access to health services:

In Southern Africa, IOM (2010) reported that there is a dearth of HIV-prevention programmes and products, especially in smaller towns, truck stops and border posts throughout the region. Unfortunately, however, it was observed that many transport workers do not have time to go to clinics that cater for local populations except when they

77 What works for women and girls: http://www.whatworksforwomen.org/chapters/7-Prevention-for-Key-Affected-Populations
are critically ill and often beyond help. This is partly because these facilities are open at hours and located in areas, which are inconvenient or inaccessible to these truckers. On the other hand, it was reported that long-distance truckers are aware of their vulnerability to STIs and HIV and will use services if they are convenient, discreet and do not require them to leave their trucks unattended. Besides, many transport workers do not have the time, money or inclination to travel into town to be tested, educated or treated. Hence, if they are to benefit from HIV and health services, such services should be brought closer to them. Secondly, the services should be comprehensive, including a minimum services package that addresses basic primary care, STI screening and treatment, nutritional support, malaria prevention and treatment, as well as provision of integrated tuberculosis and HIV responses such as HIV testing and counseling, adherence counseling and treatment literacy.

- Criminalization of transmission of HIV
- HIV-related discrimination
- HIV in the workplace, including pre-employment and mandatory HIV testing of employees
- (4) Mandatory HIV testing and disclosure
- Sexual and reproductive health, including sexual and HIV education and access to information;
- The rights of MARPs and key populations (including FSWs, MSMs, the transgender population, women, children, fisher folk, migrants and internally displaced populations, people who use drugs, people with disabilities and prisoners)

3.9 Response to HIV Epidemic in the Transport Corridors

3.9.1 National HIV and AIDS Responses

The national responses to HIV and AIDS in the five EAC countries are guided by their respective national strategic plans as is shown in the table below:

<table>
<thead>
<tr>
<th>Partner State</th>
<th>National HIV and AIDS Strategic Plan</th>
<th>Timeframe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burundi</td>
<td>National Strategic Plan on HIV/AIDS Control</td>
<td>2007 - 2011</td>
</tr>
<tr>
<td>Rwanda</td>
<td>Rwanda HIV and AIDS National Strategic Plan</td>
<td>2013 - 2018</td>
</tr>
<tr>
<td>Zanzibar</td>
<td>Zanzibar National HIV and AIDS Strategic Plan</td>
<td>2011-2016</td>
</tr>
</tbody>
</table>
In the strategic plans, truckers, host communities, returnees, women and girls affected by sexual and gender-based violence (SGBV), migrant workers, PWID, MSMs, female petty traders, fisher folk, married couples and young women are mentioned as important target populations. However, the recent EAC report\(^9\) has noted that size estimation of these populations is still a major challenge. Hence, there is need to ensure that the region has adequate capacity and information for guiding the development of effective strategies for an integrated HIV and health service provision to the populations along the transport corridors in the region. It is worth noting that the Government of Kenya through the National AIDS Control Council (NACC) initiated programming for populations at higher risk for HIV within the 2nd Kenya National AIDS Strategic Plan period (2005-2010). This was premised on an increasing global recognition that HIV-related morbidity and mortality were significantly higher among key vulnerable populations namely FSWs, MSM, PWID, and members of the adult population whose livelihoods were inextricably linked with sex trade including clients of sex workers and fishing communities, and that these sub-populations represented a bridging opportunity of HIV transmission to the general population. The country has since developed a national strategy on HIV/AIDS and STI Programming along Transport Corridors.

The EAC carried out a comprehensive analysis of the HIV and AIDS legislation, bills, policies and strategies in the EAC in 2013\(^{80}\). The analysis found that there are punitive laws, policies and practices related to:

- Gender inequality, harmful gender norms and GBV as it relates to HIV and AIDS
- Access to care, treatment and services
- Migration and cross-border movements and their implications for access to health

The review also noted that for the sake of regional integration and free movement of goods and persons, there should be access to anti-retroviral drugs (ARVs) across borders for all persons living with HIV and AIDS in the East Africa region who are in need of treatment, care and support. However, it was also stated that people crossing borders and internally displaced people are not comprehensively covered by legislation and policies regarding access to treatment, care and support.

The review also noted that all Partner States have legislation condemning sex work/prostitution and MSM. This not only sends these groups into hiding with very limited access to information and education on HIV but also fuels stigma and discrimination at the community level and in the health facilities where these populations may go to access healthcare services. It was found that legislation and policy framework in the Partner States recommend access to care, treatment and services free from discrimination, but, at the same time, condemn key populations by making them and their activities illegal.

While most countries have a policy on gender and HIV and AIDS, it was noted that Burundi does not have a policy on gender and HIV AIDS. Furthermore, it was noted that the countries in the region have experienced conflicts and unrest at different stages of their history. This includes the genocides in Rwanda and Burundi, internal conflict in Northern Uganda and post-election violence in Kenya. In spite of these instances of instability, in most countries, no legislation or policies cater for the management of HIV and AIDS in times of volatility, particularly along the transport corridors and camps that many displaced people use.

### 3.9.2 Programmatic HIV and AIDS Responses

**Joint Regional Response to HIV and AIDS along the Major Transport Corridors in the East, Central and Horn of Africa:**

This joint project\(^{81}\) undertaken by three collaborating Regional Economic Communities (RECs), namely, EAC, IGAD and COMESA, aims to respond to HIV and AIDS along major transport corridors in East, Central and Horn of Africa, for

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\(^{81}\) Njag' J (undated). Joint Regional Response to HIV and AIDS along the Major Transport Corridors in the East, Central and Horn of Africa.
Among the five areas of global commons identified as vital to accelerating Africa’s development priorities is “preventing and managing cross-border and communicable diseases (including HIV and AIDS, tuberculosis, malaria and avian influenza)”. Improved socio-economic development of the Partner States. It is envisaged that the rate of HIV and AIDS infections in the regions, especially in the hotspots (border points, truck stop junctions/resting points) along the major transport corridors of the Partner States, is still high despite efforts and initiatives undertaken by the RECs and Partner States to combat the disease.

**EAC Lake Victoria Basin HIV and AIDS Partnership Programme (EALP):**

EALP was initiated as a programme of the EAC, coordinated by the Lake Victoria Basin Commission (LVBC) and managed by AMREF. It aims to establish a framework for improvement of HIV and AIDS response among mobile populations and identified key sectors of transport and agriculture within the basin and linking transport economic corridors.

**Regional Outreach Addressing AIDS through Development Strategies (ROADS) projects I and II:**

ROADS is a community-focused initiative that seeks to implement HIV prevention and AIDS care and support services in “hotspot” communities linked by major transport routes across East, Central and Southern Africa transport corridors. ROADS is currently active in Democratic Republic of the Congo, Djibouti, Mozambique, Rwanda and Zambia. Funded by USAID, the project focuses specifically on underserved, often remote communities along transport corridors to enhance health and development. The main features of the project are economic empowerment, integration of HIV and health, community engagement, collaboration and linkages of partners, provision of clinical health services, and documenting and disseminating innovations and best practices from the project.

CB-HIPP focuses on three Results: 1) Increased access to and uptake of integrated health and HIV/AIDS services at strategic cross-border sites and a select few regionally recognized HIV transmission “hotspots” along Eastern, Central, and Southern transport corridors; 2) Alternative health-financing models identified, implemented, and tested to strengthen the long-term sustainability of networked health and HIV/AIDS service delivery; and 3) Strengthened leadership and governance by intergovernmental institutions to improve the health of mobile and vulnerable populations.

It is pertinent to note that the projects that address the concerns of transport corridor populations have been (a) donor-driven and (b) very limited in life span. Their scope in some cases has been limited in both geographic coverage and technical content.
This means that in planning for future interventions, HIV/AIDS services should be more comprehensive, taking into consideration (a) diversity in demography, ethnicity and culture, and (b) range of services required, including HIV prevention, treatment and care, and social support including income generation activities for women.

3.9.3 Regional HIV and AIDS Responses

Millennium Development Goals:
The EAC Partner States are signatories to the MDGs. One of the MDG, to which all the EAC Partners States are signatories is to combat HIV/AIDS, malaria and other diseases. In particular, the aims of this MDG are twofold, namely, to: (a) Have halted by 2015 and begun to reverse the spread of HIV/AIDS; and, (b) Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases.

Post 2015 Development Agenda:
The international community has agreed to collectively address the sustainable management of global commons in the post-2015 Development Agenda. Among the five areas of global commons identified as vital to accelerating Africa’s development priorities is “preventing and managing cross-border and communicable diseases (including HIV and AIDS, tuberculosis, malaria and avian influenza)”. The African Union’s common African position on the Post 2015 Development Agenda has accordingly adopted these priority areas as well.

The African Union Roadmap on Shared Responsibility and Global Solidarity for AIDS, TB and Malaria Response in Africa:
The Roadmap presents a set of practical African-sourced solutions for enhancing shared responsibility and global solidarity for AIDS, TB and malaria responses in Africa on a sustainable basis by 2015. The solutions are organized around three strategic pillars: diversified financing; access to medicines; and enhanced health governance.

Dakar Declaration 1992:
The Dakar Declaration outlines 10 cardinal legal and ethical principles to be observed in the fight against HIV and AIDS. It recognizes that the fundamental values of respect for human rights, life and human dignity provide the foundation on which the fight against HIV and AIDS is built.

Abuja Declaration 2001:
The leaders of African Union Partner States assembled in Abuja, Nigeria in 2000 and 2001 and adopted the Abuja Declarations and Frameworks for Action on Roll Back Malaria, and on HIV and AIDS, tuberculosis and other related infectious diseases. The primary objective of the Abuja Declarations and Frameworks was for African countries to collectively and individually work towards arresting and reversing the staggering rate at which these diseases were eroding prior progress made in socio-economic development.

The HIV and AIDS Prevention and Management Bill 2012:
The East African Legislative Assembly passed a Bill requiring governments to ensure that persons living with or affected by HIV and AIDS are protected from all forms of abuse and discrimination and are provided with appropriate support, care and treatment services.

Protocol on East African Community Regional Cooperation on Health:
This protocol provides for, among others, strengthening regional collaboration and coordination in the health sector among the Partner States through cross-border health services, disease surveillance and joint outbreak response.

The East African Community Common Market (Free Movement of Persons) Regulations:
These regulations allow for the following: (a) free entry or exit upon presentation of a valid common standard travel document or a national identity card; (b) free entry or exit upon presentation of a contract of employment, in addition to the documents mention above; and (c): self-entry, stay and exit for a self-employed person upon presentation of a valid travel document or national identify card only.
### The Great Lakes Initiative on AIDS (GLIA) Strategic Plan:

GLIA was established in 1998 by Ministers for Health drawn from Burundi, DRC, Kenya, Rwanda, Tanzania and Uganda. The mandate of GLIA is to contribute to the reduction of HIV infections and to mitigate the socio-economic impact of the epidemic in the Great Lakes Region. This is done / accomplished by developing regional collaboration and implementing interventions that strategically address issues with regional dimensions that are best addressed from a regional perspective so as to complement and add value to the efforts of each country. Noting that interventions targeting truck drivers tend to be concentrated in the northern transport corridor and more specifically in Kenya and Uganda, and more focused on providing HIV prevention services and limited treatment and mitigation services, GLIA sought to harmonize HIV interventions for these populations and to scale up the programmes in the southern and central corridors with emphasis on Burundi, Rwanda, Tanzania and DRC. Thus, the strategic plan of GLIA has four goals, namely:

1. to support the development of evidence-based HIV and AIDS strategies targeting eight specified vulnerable groups in the six GLIA countries;
2. to act as a catalyst for providing HIV and AIDS services to the selected eight vulnerable groups in the GLIA countries;
3. to support the cross-pollination of information about what works in providing HIV services to the selected eight vulnerable groups in the GLIA countries; and
4. to develop GLIA's capacity for effective achievement of its strategic goals.

### EAC Development Strategy (2011/12 – 2015/16):

The 4th EAC Development Strategy focuses on deepening and accelerating integration. The strategy recognizes the following health challenges: weak coordination and harmonization of health policies and strategies for the region as well as monitoring of regional and global commitments for health and HIV and AIDS; fragmented medical research and training on communicable diseases; and inappropriate mainstreaming of health-related issues into regional and national strategic plans.

### The EAC Strategic Plan for Gender, Youth, Children, Persons with Disability, Social Protection and Community Development (2012-2016)

The above articulates its plans for youth as: “Under the component on youth, this strategic plan intends to promote the socio-economic and political development of the youth within the East African Community region. It targets the harmonization of regional youth policy and legal frameworks, promotion of strategies for youth employment creation and mainstreaming youth issues in the planning and budget processes of six priority sectors of EAC including health, agriculture, peace and security, trade, infrastructure and statistics. The strategic plan provides for measures to facilitate capacity building of youths in vocational skills, ICT, e-commerce and other special tailored programmes”.

It is clear from the above discussion that there are: (a) laws and policies that are not always very supportive of the response to HIV and AIDS in the context of key populations along the transport corridors, and (b) no coherent and coordinated HIV and AIDS policies in relation to the transport corridors or indeed, transport sector within the EAC region. Hence, as the EAC, SADC and COMESA look forward to one large economic market, it is important that such a policy is put in place.

### 3.9.4 Non-HIV and Health-related Projects

There are many infrastructure and development projects that have been planned within the region. The implementation of the projects is likely to increase the number of people coming into the transport corridor areas and therefore increase the possibilities of high risk sexual activities in EAC. The projects include those for increasing the quality and distribution of the road, rail and air...
transport networks, as discussed earlier in Chapter two of this report. In addition, there are also many large construction contracts for improving basic services, e.g., construction of power dams at Karuma in Uganda on the major highway to Sudan, and expansion of rural electrification. Moreover, increasing oil and gas exploration and exploitation, including constructing of pipelines, will attract many construction workers and service industries. Lastly, there are initiatives for the expansion of tourism, which is heavily dependent on the transport infrastructure, as a major source of income in EAC Partner States. Deliberate effort is required to mainstream HIV and health into such projects.

3.10 Multi-sectoral Approach to the HIV Response

Country-level Approaches
HIV and AIDS is not just a public health issue; it is a multi-sectoral and a workplace issue. It is also a development challenge and the source of widespread insecurity in the East African Community. A multi-sectoral approach recognizes the importance of the social determinants of health in attaining the overall health goals. The multi-sectoral nature of HIV and AIDS is recognized at all levels of discussions. Previous strategic plans placed multi-sectoral response as vital aspect of implementation. For example, in the Kenya Health Strategic Plan 2014-2030, a ‘Health in all Policies’ approach will be applied to attain policy objectives. The relevant sectors include, among others, agriculture—including food security; education—secondary-level female education; roads—focusing on improving access among hard-to-reach populations; housing—decent housing conditions, especially in high-density urban areas; and environmental factors—focusing on a clean, healthy, unpolluted and safe environment. The same applies to all the other individual country health sector responses. A combined response should therefore include this multi-sectoral approach.

Regional Approach
An extract from the EAC Website reads in part ‘For the implementation of the EAC Strategic Plan 2007-2012, A Multi-sectoral HIV and AIDS Task Force chaired by the Secretary General was recommended. The Task Force was to help to ensure that HIV and AIDS get the priority it deserves and is effectively mainstreamed within all sectors, organs and institutions of the EAC’. The EAC HIV and AIDS Multi-Sectoral Strategic Plan has four objectives:

• Scale up regional and national leadership involvement, commitment and ownership for sustainability of HIV and AIDS response.

• Facilitate the adoption, harmonization and implementation of international and regional protocols, guidelines, policies and strategies.

• Improve the design, management, and sustainability of HIV responses at national and regional levels.

• Strengthen the coordination and implementation of regional responses for mobile and key populations in the EAC region.

88 The Kenya Health Strategic Plan 2014 – 2030: Page 28 Section 3.3 on Policy Principles
89 EAC (2012). Realigned EAC HIV and AIDS Multisectoral Strategic Plan (2012-2014)
The fourth objective is in response to the identification of increased mobility among different groups – for example military personnel, transport workers, mine workers, construction workers, agricultural farm workers, informal traders, domestic workers, fisher folk, and refugees – as one of the key drivers of the epidemic. The current strategic plan is under development.

The EAC has a Secretariat in Arusha, Tanzania, where activities on HIV/AIDS and health are coordinated. GLIA also has its own Secretariat and individual projects also have their own management secretariats. For instance, AMREF was the Secretariat for EALP while FHI 360 coordinates the ROADS project. To-date, there has been limited coordination, monitoring and evaluation of the response to HIV and AIDS in the EAC transport corridors. In order to combat the negative health consequences related to the mobility and migration process along transport corridors, there needs to be:

- Commitment from Partner States and proper coordination and collaboration of all actors
- Strategy and policy development combined with implementation frameworks and advocacy around inclusive and equitable services.

Coordination, quality assurance and partnership building are also crucial ingredients for a comprehensive HIV response. Hence the establishment of the Regional Task Force on Integrated Health and HIV and AIDS Programming along the EAC Transport Corridors is a timely initiative.

When creating new structures for coordination of regional projects, it is necessary to include simple supervisory bodies and management systems. Effective partnering among different stakeholders is important and should be fostered to complement each other in providing services. For instance, such partnerships with donors, governments, civil society, communities and the private sector among others can lead to sustainable financing.
4. INTEGRATION OF HEALTH AND HIV/AIDS

4.1 Linkages between HIV and AIDS and Sexual, Reproductive, Maternal and Child Health

A review of the literature on service delivery integration reveals that the lexicon of terms that refer to concepts related to integration is varied, and the definition of the term integration itself is not uniformly understood. The related term most commonly used, sometimes interchangeably, is the concept of linkages. The World Health Organization (WHO) has attempted to distinguish between these two terms, defining linkages as a concept that encompasses more broadly the synergies that exist between sexual and reproductive health and HIV policies, programmes, services, and advocacy efforts\(^90\). Integration is one level more specific, focusing on targeted services and/or programmes that can be joined together to ensure and perhaps maximize collective outcomes by offering more comprehensive services; this requires specific organizational and management structures/procedures to support such enhanced service delivery\(^91\).

There is a strong but complex relationship between HIV/AIDS, sexual and reproductive health and rights (SRHR), and gender. The majority of HIV infections in EAC region are hetero-sexually transmitted or associated with pregnancy, childbirth and breastfeeding, accounting for over 95 percent of new HIV infections.

The presence of STIs increases the risk of HIV transmission. Sexual and reproductive health (SRH) ill-health and HIV transmission share root causes such as poverty, limited access to reproductive health information, gender inequality, harmful traditional/cultural practices and social marginalization.

Prevention of HIV/AIDS and SRH ill-health targets can be more effectively and efficiently met when quality and equitable HIV/AIDS and SRH services are delivered in an integrated, comprehensive and sustainable manner. This calls for strengthening of linkages between HIV/AIDS and SRH proactive policies, programmes, and integrated service delivery\(^92\).

This means that problems such as the spread of HIV or poor reproductive health should not be addressed piecemeal but rather through joint efforts. Sexually active individuals have a variety of social, reproductive and health related needs that are best addressed through a package of care options. If that package is to be easily accessible by clients, it should ideally be offered at the same facility or at least with a strong referral system, and by providers that have been trained in both fields. This is beneficial to patients and more cost-effective for the health care system. Integration is also about people’s right to have the entire continuum of their needs and desires respected. For example, the unmarried young person might be sexually active and need contraceptives. The HIV-positive woman, on the other hand, might be pregnant and need counseling on breastfeeding.

The diagram below shows the linkages between HIV and AIDS and sexual, reproductive and maternal and child health interventions\(^93\).

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\(^91\) Ibid.


4.2 Benefits of Integrating HIV and Health Interventions

4.2.1 Increasing access, efficiency, and cost effectiveness:

Integrating reproductive health and HIV programmes can expand entry points for accessing HIV/AIDS services, increase efficiency and cost effectiveness of programmes; and help to address the shortage of health care workers. While in some cases, vertical, programme-specific approaches may be useful as a way to maintain a clear focus, there is increasing concern that the creation of parallel programmes within the broader health care system can lead to duplications, distortions, and disruptions in services.

FP/RH and HIV programmes share a common target audience, especially in countries with generalized epidemics: women and girls of reproductive age. By increasing entry points along the life cycle of women and girls, EAC can increase access to HIV prevention, care, and treatment services for vulnerable women and girls along transport corridors, while helping to ensure their dignity and safety. Integrated programmes can reduce the stigma and discrimination associated with attending stand-alone HIV facilities. While reaching populations such as sex workers, adolescent girls, and injecting drug users (IDUs) remains a challenge, integrated services have the potential to reach larger numbers of these target groups in need of both HIV and RH services.

4.2.2 Addressing the shortage of health care workers:

Integration can also help to address the shortages of health care workers, because most acutely affected countries cannot afford to develop parallel programmes that duplicate human resource requirements. Although initial costs may be higher due to new training requirements, the investment will pay off in the long run. While there is always a risk of overburdening staff, programme managers...
can be engaged to help providers organize their work more efficiently. Integration may be more efficient at reaching both HIV and RH goals since FP/RH providers and non-governmental organizations are already equipped to offer services to women, and many are already reaching target populations, especially young women involved in unprotected sex who lack information and access to services. For example, FP/RH programmes have years of experience in working with women and girls that can be adapted to HIV information and services, including the skills in counseling and testing, as well as education and STI management, which are essential for HIV prevention.

HIV is a key catalyzer and synergizer. Attention to health system structures enables HIV programme success. Integration can be accomplished at different levels, and not necessarily at point of service; however, context matters. Furthermore, attention to organizational cultures and individual programmatic goals are important when planning integrated programmes and services.\(^\text{94}\)

### 4.3 Experiences in Integration of HIV and AIDS and Other Health Services

#### 4.3.1 Integration of the Services for the General Population

**Kenya:**

In the mid-term review of HLM report\(^\text{95}\) it was noted that important achievements under integration have included:

- Development of RH TB/HIV/MCH tools and strategies and rapid results initiatives (RRIs) conducted, MCH, TB and HIV;

- Cervical cancer screening for all HIV positive women, integrated in the Comprehensive Care Center (CCC)

- Strengthened M&E HIV monitoring through DHIS

The key challenges experienced in integration included:

- HIV services are not fully integrated like in the example of non-communicable diseases
- MCH and RH services are inadequately funded.

**Rwanda:**

The following activities were taken on integration\(^\text{96}\) of services in 2012:

- Active case finding and treatment of TB cases through DOTS (community-based case finding & improved lab detection);
- Systematic provision of ARVs to co-infected people
- Infection control measures promoted.

The major constraint experienced in integration of services is limited capacity for diagnostic (among PLHIV and children) and detection of new cases and for treatment of extra pulmonary TB in PLHIV.

**Uganda:**

Efforts on integration\(^\text{97}\) have included:

- Building capacity for delivery of integrated HIV/AIDS related services through multi-skilling, multitasking, coaching, mentoring and joint planning;
- Expanding and strengthening linkages and referral systems between different service provision platforms for HIV/AIDS, TB, NCDs interventions
- Supporting service providers including central and local governments and CSOs to integrate HIV/AIDS into their sector programmes (e.g. human rights, food and nutrition, water and sanitation etc.).

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\(^{94}\) Wafaa El-Sadr, 2011, Scale-up of HIV Care & Treatment: Can it transform Health Care Services?


However, the key challenges in integration have included:

- The health sector faces insufficient training capacity, low remuneration and poor working conditions in the public and Private not for Profit (PNFP) sectors, making it difficult for the sector to recruit, motivate and retain staff to provide integrated services;

- Mainstreaming HIV/AIDS in sector programmes is not receiving adequate attention and budgetary allocations;

- Poor dissemination and implementation of existing policies and strategies that enhance integration of HIV/AIDS related services in health and non-health sectors.

**Tanzania:**

In Tanzania, integration is one of the guiding principles in health service delivery. Various forms of integration have been in progress in health services, health programmes and finance. However, it was noted that HIV integration should target other sectors such as agriculture, fishing, education, and industrial sector. An integration framework was to be developed to improve human resource and cost effectiveness in use of resources and rolling out existing integration at local levels.

### 4.3.2 Integration of Services for Transport Corridor Populations

ROADS served as a model for program integration by integrating HIV prevention and other health and development program areas in the project activities. The figure below presents the conceptual framework that ROADS used in looking at the linkages of various contextual issues and behaviors while taking cognizance of the need for individual, couples, and community behavior change in the adoption of healthier social norms.

**FIGURE 12: ROADS CONCEPTION OF THE LINKAGES AMONG CONTEXTUAL ISSUES, HIGH-RISK BEHAVIORS, AND INDIVIDUAL, FAMILIAL, AND SOCIETAL IMPACTS**

In implementing the model, ROADS worked with 110 clusters including 1,445 community groups and 121,020 individual members, against a baseline of 24 clusters, 237 groups and 25,394 members in 2006. The community clusters harnessed their networks to promote strengthened FP/RH, malaria, MNCH and TB services, while continuing to address HIV/AIDS, alcohol abuse, gender-based violence (GBV) and other salient issues. The clusters’ linkages with public and private providers, including pharmacists/drug shop operators were also strengthened. In addition, strategic communication skills of community volunteers and health providers were strengthened to effectively promote the different services. ROADS also supported the development of messages to promote essential health services. Thus, according to the health priorities of each country, the project supported the roll-out of improved FP/RH, malaria, MCH and TB services by creating an inventory of messages, materials and campaigns used to promote these services around the region.

Against the background of the earlier discussed challenges in transport corridor programming, and in the context of Regional Health Sector Strategic Plan, the EAC has constituted the Regional Task Force on Integrated Health and HIV and AIDS Programming to oversee scaling up of integrated health and HIV programming along the major transport corridors in the EAC region. For example, the mission of EAC’s realigned HIV and AIDS Multi-Sectoral Strategic Plan 2012 - 2014 is “coordinated, evidence-based and effective regional HIV and AIDS response”; with a goal to “Reduce the incidence of HIV and AIDS infection and its socio-economic impacts in the East Africa Region by strengthening expanded regional integration and harmonization of responses within the EAC region”. Thus one of the key objectives of the Task Force is to develop a Regional Strategy for Integrated Health and HIV Programming along the Transport Corridors in the EAC Region. The development of this strategy is anticipated to not only address the challenges that exist with coordination of the different players in the EAC transport corridors, but also ultimately set standards on service delivery to populations in the transport corridors. Towards this endeavor, the EAC, through the Task Force and with support from development and implementing partners, has conducted a situation analysis of health and HIV and AIDS and regional mapping of health and HIV and AIDS services along the Transport Corridors in East Africa, and is developing a guidance document minimum package for HIV and AIDS and other health services along the East African transport corridors and cross-border areas.
5. RECOMMENDATIONS

From this situation analysis, it is clear that the populations along transport corridors in East Africa face numerous challenges that hinder access to HIV and health services. The challenges range from institutional arrangements to service delivery processes. In view of the challenges highlighted above, the following suggestions should be considered for facilitating programming and improvement of access to services by the populations along transport corridors in the EAC region:

5.1 Strategic Planning

Adopt a minimum service package that addresses basic primary care, HIV prevention, STI screening and treatment, nutritional support, malaria prevention and treatment; as well as referral and provision of services for integrated HIV and TB, SRH/MNC health, malaria and non-communicable diseases.

Integrate alternative livelihoods in the regional HIV and health strategic plan for the transport corridors.

Link wellness centers along the transport corridor with national health systems (particularly through the primary health care systems) to ensure that they are integrated with national health systems and there is optimum information sharing, quality control and appropriate referrals.

5.2 Service Delivery by Partner States

Partners supporting health sectors in the region should support human resource for health and specific training in SRHR/HIV/AIDS services integration to boost the opportunity to scale up SRH/HIV/AIDS integration.

Partner States should revise the service delivery guidelines and training protocols such as Integrated Management of Pregnancy and Childbirth (IMPAC) and Essential Care Pregnancy Guidelines (ECPG) for Pregnancy, Child-birth and Newborn Care to fully incorporate guidelines for integration of HIV/AIDS into SRHR services.

Partner States should utilize the revision of major sector Investment and Strategic Plan (HSSP and HIV Strategic Plans) as well as Global Fund Standard Disease Applications as an opportunity for facilitating integration and programming for transport corridor populations in the region.

All Partner States should have a health financing component to their health strategy and plans. This relates to the process of mobilizing and managing required finances to ensure provision of health and related services. For example, the Kenya Health Strategy demonstrates the policy’s commitment to progressively facilitate access to services by all by ensuring social and financial risk protection through adequate mobilization, allocation, and efficient utilization of financial resources for health service delivery. The primary responsibility of providing the financing required to meet the right to health lies with the national and county governments.

1 Extracted from the Kenya Health Policy 2014-2030: Page 48, Section 4.3.4- On Health Care Financing
5.3 Policy and Advocacy

Harmonize policies and legislation in the EAC region that facilitate access to health services across the Partner States and develop appropriate framework to help with monitoring implementation of the harmonization policies and protocols in the region.

Establish a supportive regulatory environment for cross-border health programming; improved service delivery at key cross-border sites; and subsequently increased access and uptake of these services by vulnerable populations.

Advocate for East African Community Legislative Assembly and Partner States’ Parliaments to improve their legal frameworks to allow adequate services for most-at-risk population groups such as FSWs, IDUs and MSM.

Strengthen advocacy efforts at the regional, national and sub-national government levels to promote and address barriers to SRH and HIV services for populations living along transport corridors.

Develop a specific regional strategy for public-private sector engagement in integrated health programming along transport corridors.

EAC should support Partner States to develop policies guiding their establishment, management and utilization of facilities and services such as wellness centers beyond the road and other transport establishments during the construction phase.

5.4 Communication and Knowledge Management

Develop a multi-sectoral communication strategy as an integral part of the HIV and health response in the road transport sector.

Undertake special demographic and AIDS indicator surveys for the population within transport corridors and specialized studies on the various determinants of HIV and health in the transport sector in order to inform the various interventions in place and improved strategies.

EAC should establish a platform and various mechanisms (e.g. conferences, workshops, websites etc.) for sharing information and experiences among partners in the region to encourage continuous learning for better results.

5.5 Resource Mobilization

Create a regional health fund to cater for cross-cutting health issues.

Promote community mobilization and increased awareness on the importance of universal access to SRHR and HIV and AIDS services along transport corridors.

Develop strategic Public-Private Partnerships (PPP) for alternative health financing to facilitate scaling up of programmes for key populations in East Africa focusing on transport corridors.

Sensitize managers of businesses linked to transport corridors to make the creation, funding and operation of HIV/AIDS and health programmes a matter of primary concern and part of their corporate responsibility.

5.6 Coordination, Quality Assurance and Partnership Building

Establish regular coordination platforms at the different levels of operation spanning from the community to the regional level.

Establish an inclusive Regional Advisory and Oversight Forum within EAC with responsibility for coordinating regional integrated health programming along the transport corridors, regional policy formulation, regional programme monitoring, capacity building and technical assistance, regional research, knowledge management, etc.

Strengthen regional level coordination and advocacy actions led by the High Level Regional eminent persons such as former presidents, religious and cultural leaders.
Provide opportunities for technical partnership among different service providers to foster quality improvement.

**Monitoring and Evaluation**

EAC should develop a mechanism for: (a) monitoring the overall implementation of the strategy that integrates HIV and health; and, (b) monitoring Partner States’ progress in implementing the strategy.

Strengthen joint cross-border disease surveillance mechanisms.

Develop and adopt common indicators at different programming levels to benchmark progress and provide a basis for detection and implementing corrective actions for any form of programmatic deviation.
6. REFERENCE


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The Kenya Health Strategic Plan 2014 – 2030.

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7. ANNEX 1 SOCIO-DEMOGRAPHIC AND ECONOMIC INDICATORS IN THE EAC

7.1 Overview of Socio-demographic and Economic Situation

7.1.1 Socio-Demographic Features of the EAC Region

The EAC Facts and Figures\(^1\) (2013) indicate that the East African region has a total surface area of 1,818 thousand square kilometers (Km\(^2\)), with Tanzania, Kenya, Uganda, Burundi and Rwanda accounting for 51.7, 32.1, 13.3, 1.5 and 1.5 percent respectively. The population projection in the region was estimated by International Monetary Fund (IMF) at 144 million persons in 2012 and projected to reach over 155 million by 2015. The population density was 82.2 persons/Km\(^2\), with higher densities in Rwanda (435.5 persons/Km\(^2\)) and Burundi (364.0 persons/Km\(^2\)), followed by Uganda Kenya and Tanzania at 170.8/Km\(^2\); 73.1 persons/Km\(^2\) and 50.7 persons/Km\(^2\) respectively. Life expectancy in the region is lowest in Burundi (51 years) and highest in Rwanda (63 years) as the table below highlights:


<table>
<thead>
<tr>
<th>EAC Partner States</th>
<th>POPULATION (million)</th>
<th>2012</th>
<th>2015</th>
<th>ESTIMATED LIFE EXPECTANCY (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burundi</td>
<td>8.8</td>
<td>9.4</td>
<td>50.9</td>
<td></td>
</tr>
<tr>
<td>Kenya</td>
<td>42.1</td>
<td>45.8</td>
<td>57.7</td>
<td></td>
</tr>
<tr>
<td>Rwanda</td>
<td>10.4</td>
<td>11.1</td>
<td>63.0</td>
<td></td>
</tr>
<tr>
<td>Uganda</td>
<td>35.6</td>
<td>39.3</td>
<td>54.5</td>
<td></td>
</tr>
<tr>
<td>Tanzania</td>
<td>47.1</td>
<td>50.0</td>
<td>58.9</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>144.0</td>
<td>155.6</td>
<td>57.3</td>
<td></td>
</tr>
</tbody>
</table>

Source: IMF (2013)
7.1.2 Main Economic Features of the EAC Region
The EAC Facts and Figures\(^2\) for 2013 indicate that the region had a combined GDP of $46,901 million (m) in 2005, which increased to $99,812m in 2012. Kenya dominated in GDP, contributing over 40% to the region’s GDP as represented in the diagram below. In general, the GDP per capita at current prices for EAC region has also increased from $406 in 2005 to $727 in 2012.

FIGURE 13: CONTRIBUTION OF EAC PARTNER STATES TO REGIONAL GDP

![Graph showing GDP contributions of EAC partner states](source)

28% Tanzania, 28.4,
21% Uganda, 21.3
41% Kenya, 40.8
7% Rwanda 7.1
13% Burundi, 2.4

Source: EAC (2013)

On the other hand, the human development index (HDI) has remained low: 0.389 for Burundi, 0.484 for Uganda, 0.488 for Tanzania, 0.506 for Rwanda, and 0.535 for Kenya and in 2013.\(^3\) HDI is a composite index measuring average achievement in three basic dimensions of human development – a long and healthy life, knowledge and a decent standard of living. For comparison, the average HDI for the world is 0.702 and 0.502 for sub-Saharan Africa.

7.1.3 Trade and Transport in the Region
In general, there is very lively engagement of the Partner States in trade. Between 2007 and 2012, the overall balance of trade for Burundi declined from a surplus of $61m to $51m; Uganda and Tanzania declined from $767m to $522m and $405m to $327m respectively; Kenya increased to $1.261m million from $824m surplus in 2007; and Rwanda registered a deficit of $212m in 2012 although it had a surplus of $111m in 2007.

The EAC Facts and Figures (2013) also indicate that considerable intra-regional trade continues to take place. In 2012, the total exports trade among the five Partner States was $3.230m while the total imports amounted to $3.508m resulting in an intra-trade deficit of $279m. The balance of trade between the Partner States in the region is shown in the table below:


<table>
<thead>
<tr>
<th>Exports</th>
<th>Imports</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burundi</td>
<td>Kenya</td>
<td>Tanzania</td>
</tr>
<tr>
<td>BUR</td>
<td>KEN</td>
<td>RWA</td>
</tr>
<tr>
<td>16</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Kenya</td>
<td>62</td>
<td>1,580</td>
</tr>
<tr>
<td>Rwanda</td>
<td>14</td>
<td>96</td>
</tr>
<tr>
<td>Uganda</td>
<td>46</td>
<td>334</td>
</tr>
<tr>
<td>Tanzania</td>
<td>46</td>
<td>333</td>
</tr>
</tbody>
</table>

TABLE 13: INTRA-TRADE IN EAC, MILLION US$ FOR 2012

2 Ibid.
7.2 Transport in EAC Region

7.2.1 Movement of Goods and People
EAC is characterized by high migration flow that continues to increase, in part because the EAC is building the regional economic bloc and customs union with free movement of people across borders. Transport in the region therefore comprises movement of goods and people, each made up of regional and local components. EAC goods trade flows amounted to twenty million tonnes per annum (Mtpa) in 2007. Trade between EAC Partner States makes up 1.0 Mtpa, trade with neighboring states another 1.0 Mtpa, with Southern Africa 1.4 Mtpa, with the rest of Africa 2.1 Mtpa, and the rest of the world 14.6 Mtpa. Purely domestic trade within EAC countries themselves is understood to be between 6 and 7 Mtpa.

7.2.2 Transport Corridors
The dominant modes of transport in the EAC are road, air, rail and water. These are described below.

Road Transport: In the EAC region, the road transport network consists of the five transit corridors, as follows:

- Corridor No. 1 (Northern Corridor): The Northern Corridor is from Mombasa Port and runs to Bujumbura via Nairobi, Kampala and Kigali to Goma in DRC. It serves road traffic transiting to/through Nairobi and Kampala, and on to Rwanda and Burundi. It carries a major portion of cargo volume outbound from Uganda and Rwanda and also freight bound for Ethiopia and South Sudan, originating from Mombasa Port.

- Corridor No. 2 (Central Corridor): The Central Corridor originates from the Port of Dar es Salaam and runs via Dodoma to Masaka, branching to Kigali and Bujumbura. It provides access to/from the landlocked countries of Burundi, Rwanda, and Uganda. While it serves inland-bound imported freight from Tanzanian ports, it also handles seaport-bound export freight from Rwanda and Burundi, and export produced in western Tanzania.

- Corridor No. 3: Biharamulo–Lokichogio, linking Tanzania with Kenya, Sudan and Uganda.

- Corridor No. 4: Tunduma–Nyakanazi, linking Tanzania with Burundi and Rwanda.

- Corridor No. 5: Tunduma–Namanga–Moyale, linking Tanzania with Kenya and Ethiopia and part of the great North Road.

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5 ‘Corridors’ has become a key organizing principle for transport and development. It is the backbone surface transport route, forming the scaffolding to which smaller, more localized access links are attached, aggregating the load off these feeder links. They are not just transport arterials, but also routes for development attracting complementary industrial and utility investments.
FIGURE 14: THE ROAD NETWORKS OF EAC REGION

LOCATION MAP OF EAST AFRICA
EAST AFRICAN COMMUNITY ROAD NETWORK PROJECT
(Including Proposed Additional Road Links)

Note:
1. The Map is not to scale. It should therefore not be used for any other purpose other than purposes of reflecting the general alignment of the East African Road Network Corridors.
2. The additional road links are to be added in colours similar to the Corridors of their alignment.

1. Mombasa-Malindi-Kakuma Corridor
2. Dar-es-Salaam-Dodoma-Ilaa-Mbulula-Masaka Corridor
4. Nyanza-Kisumu-Stburg-Mazinga-Lunduwa Corridor
5. Tunduma-Muumbo-Dodoma-Musoma-Manya-Mbale Corridor
6. Sectoral axis, connecting with East Africa neighbours, those of interregional connectivity.
In addition, there are three new corridor initiatives at different stages of implementation (Lamu–Juba, Tanga–Arusha–Musoma–Kampala and Songea–Mtwara), and a further two routes identified in the Strategy for Transport Development\(^6\) as prospective corridors (Tororo–Gulu and beyond, and the Coastal Corridor).

**Kampala-Juba-Khartoum-Dongola (Sudan) and Aswan and Cairo Egypt Corridor:**

The sector of this corridor that is located and linked directly or indirectly to the northern and central road corridors in EAC is increasing becoming a major supply route for food, hardware and other merchandise outward bound from Uganda and Rwanda to South Sudan and Sudan.

Road transport has continued to expand within the region due to increasing trade. The number of trucks that access the roads have increased, for instance, from 7,178 to 64,790 between 2005 and 2010 for Tanzania and from 66,472 to 80,736 between 2005 and 2012 for Kenya. The trucks have also increased from 18,684 to 33,425 between 2005 and 2009 for Uganda and from 2,100 to 3,134 between 2005 and 2010 for Rwanda. Most of the freight in the region moves by road because it is (a) more flexible and easily available across the Partner States than railway and water, and (b) much less expensive per ton/kilometer than especially air transport. Passenger vehicles have also increased, reaching 472,907 for Tanzania in 2010 and 485,258 for Kenya in 2012.

**Railway Transport:**

There are two main railway transport corridors in the region:

**The Kenya-Uganda Railway Northern Corridor:**

This railway link connects Mombasa Port–Malaba Border–Kampala. There is also an alternative route, consisting of (i) the railway from Mombasa Port to Kisumu via Nairobi and Nakuru, (ii) the ferry service between Kisumu and Port Bell, and (iii) the railway from Port Bell to Kampala. There is a plan for extension of the service, connecting Kampala, Kigali, and Bujumbura.

**The Tanzania Railways Central Corridor:**

This is the main railway line from Dar es Salaam to Tabora, where this Central Railway Corridor branches into the Isaka line and the Kigoma line. The Uganda route passes through Tabora and Isaka, up to Mwanza via railway, where it is connected with a ferry service for Port Bell, and then is served overland by Uganda Railways to Kampala. Freight bound for Burundi and Rwanda via Isaka is transshipped to trucks at Isaka Inland Container Depot, and then transported by road to the final destination. The major routes to each inland country via Kigoma are: (i) the ferry over the Lake Tanganyika to reach Bujumbura; (ii) truck overland from Kigoma to Rwanda; and (iii) the ferry to the eastern part of the DRC.

**Waterways Transport:**

There are three main ports along the coast in Tanzania and one in Kenya. Along the lakes, there are 11 ports in Tanzania and one each in Burundi, Kenya and Uganda:

**Mombasa Port Network:**

Mombasa Port serves as a hub of the Northern Transport Corridor, and is the largest port in East Africa, serving as the world’s gateway to Kenya, Uganda, Rwanda, Burundi, the eastern part of the DRC, South Sudan, and northern Tanzania.

**Dar es Salaam Port:**

Dar es Salaam Port is the largest cargo-handling port in Tanzania and it serves as a hub of the Central Corridor, serving as a gateway to international trade through which export and import goods are hauled not only to/from domestic Tanzania, but also to/from Zambia, Burundi, and Rwanda. Dar es Salaam Port also handles, although lesser volumes, of cargo for Malawi, Uganda, Zimbabwe, and eastern DRC.

**Maritime and road transport corridors:**

In the EAC, there is the Lake Victoria Basin Maritime and Road Transport Corridors (Biharamulo-Mwanza-Sirari-Kisumu-Port Bell, etc.); and the Lake Tanganyika Basin Maritime and road transport (Nyakanazi-Bujumbura-Kigoma-Kasulu-Sumbawanga-Tunduma).

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\(^6\) Ibid, EAC (2011)
**Air Transport:**
The development of the framework for the implementation of the Yamoussoukro Declaration on the full liberalization of air transport in EAC is progressing well. It is expected that the liberalization framework and the application of the EAC common market protocol will be able to eliminate all economic restrictions in the aviation sub-sector related to capacity, frequencies, city pairs, carbotage and designation of airlines.

Currently, air transport in the region continues to be dominated by the traditional markets of Kenya and Tanzania. In 2012, there were 83 internal operators in the region with 31%, 27% and 21% in Kenya, Tanzania and Uganda respectively; and the remainder in Burundi and Rwanda. Out of the 55 domestic operators in 2012, about 78 percent were in Tanzania, 18 percent in Kenya and the remainder in Uganda, Rwanda and Burundi.

The growing air connectivity within the region and the arrival of low-cost carriers are continuously helping to boost overall seat capacity in this market. Against this background, on scheduled air services within Eastern Africa, air capacity remains dominated by Nairobi’s Jomo Kenyatta International Airport as is shown in the figure below which also illustrates that there has been a consistent increase in the seat capacity at each of the four major airports of the region.

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**FIGURE 15: SCHEDULED ANNUAL INTRA-EASTERN AFRICA SEAT CAPACITY**


7.3.2 Future Development in Transport Infrastructure

There is a new strategic plan for developing the transport sector in EAC⁸. The strategy focuses on addressing the immediate shortcomings of the transport system. The components include the following:

- Transport system integrity projects, which aim to ensure alternatives to the main transport network;
- Policy and institutional projects, which deal with modernizing management of the regional transport system;
- Roads projects to be implemented throughout the 10 years of the strategy;
- Special projects, which are ‘warehoused’ in anticipation of the outcome of the various preparatory activities. The overall budget is US $19.577 million as is shown below; with road transport taking the largest share (39%) of the budget for future investment of EAC in transport.

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### TABLE 14: INVESTMENT IN TRANSPORT BY PRIORITY BAND (US $ MILLION)

<table>
<thead>
<tr>
<th>Priority</th>
<th>Air</th>
<th>Border Post</th>
<th>Multi</th>
<th>Pipe</th>
<th>Port</th>
<th>Rail</th>
<th>Road</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional Capacity Projects</td>
<td>550</td>
<td>10</td>
<td>2,178</td>
<td>10</td>
<td>2,109</td>
<td>1,616</td>
<td></td>
<td>5,711</td>
</tr>
<tr>
<td>Roads Projects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7,482</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7,482</td>
</tr>
<tr>
<td>Policy &amp; Institutional Projects</td>
<td>86</td>
<td>78</td>
<td>20</td>
<td>200</td>
<td>49</td>
<td>956</td>
<td>11</td>
<td>1,400</td>
</tr>
<tr>
<td>System Integrity Projects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,400</td>
</tr>
<tr>
<td>Special Projects</td>
<td>1</td>
<td>1</td>
<td>52</td>
<td>17</td>
<td>285</td>
<td>354</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Economic</td>
<td>1,199</td>
<td>17</td>
<td>1</td>
<td>1,540</td>
<td>1,102</td>
<td>1,013</td>
<td>11</td>
<td>4,851</td>
</tr>
<tr>
<td>Total</td>
<td>1836</td>
<td>106</td>
<td>2266</td>
<td>1767</td>
<td>3545</td>
<td>3939</td>
<td>7508</td>
<td>19,463</td>
</tr>
<tr>
<td>%</td>
<td>9%</td>
<td>1%</td>
<td>12%</td>
<td>9%</td>
<td>18%</td>
<td>20%</td>
<td>39%</td>
<td>100%</td>
</tr>
</tbody>
</table>
7.3 Profiles of Transport Corridor Populations

7.3.1 Age Distribution
An African Institute for Health and Development (AIHD) study funded by USAID/EA\(^9\) in cross-border towns located on routes between the five EAC countries, Ethiopia and South Sudan found no significant difference in the age distribution of study respondents between cross-border and comparison sites. In general, a majority of the respondents were in the sexually active age groups of 20-44 years, which in all Partners States is an age range that is vulnerable to HIV infection.

\(^9\) AIHD (20013). The East Africa Cross-border Health Study Report, November 2013

7.3.2 Occupations along the Transport Corridors
The populations along transport corridors can be grouped into five categories:

**Transport workers**
They include truck and bus drivers and their assistants: Available data shows an estimated\(^10\) 298,000 truck drivers in the Great Lakes Initiative on AIDS (GLIA) countries: Burundi – 13,138, DRC – 102,954, Kenya – 57,800, Rwanda – 15,513, Tanzania – 61,668 and Uganda – 47,385. Further, IOM studies of 2005\(^11\) on Mombasa-Kampala route and of 2007\(^12\) on Kampala-Juba route indicated that truckers in the region are between 25-40 years of age with drivers being older than their assistants as the table below illustrates.

\(^10\) Methodology according to Kissling et al. 2005.
\(^12\) Ferguson A and Kriitmaa K (2007): Hot-spot Mapping along the Kampala-Juba Transport Route. IOM. Kampala

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Kenya</th>
<th>Uganda</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of hot spots</td>
<td>39</td>
<td>8</td>
</tr>
<tr>
<td>Mean number of overnight trucks</td>
<td>2,397</td>
<td>669</td>
</tr>
<tr>
<td>Estimated number of FSWs</td>
<td>5,655</td>
<td>3,020</td>
</tr>
<tr>
<td>Total number of bars/lodges mapped</td>
<td>540</td>
<td>231</td>
</tr>
<tr>
<td>Percentage bars/lodges selling/distributing condoms</td>
<td>73%</td>
<td>52%</td>
</tr>
<tr>
<td>Percentage of bars/lodges with condom dispensers</td>
<td>33%</td>
<td>1%</td>
</tr>
<tr>
<td>Number of hotspots with HIV testing and counseling (HTC) facility</td>
<td>20</td>
<td>3</td>
</tr>
</tbody>
</table>

TABLE 15: CHARACTERISTICS OF TRUCKERS IN MOMBASA-KAMPALA CORRIDOR AND KAMPALA-JUBA ROUTE
The mean number of years of education was found to be less than 10, implying achievement of primary or secondary level of education. More than half of the truckers are married, and more than a quarter are cohabiting, separated/divorced or widowed. The assistants were more likely to be single and never married compared to the drivers. Truckers in Kenya were found to be mainly from the five EAC countries including DRC and Somalia. Majority of truckers in Uganda are locals. However, there is a presence of Sudanese, Kenyans and Tanzanians truckers as well.

The truckers have a very wide range of operational experience over East Africa derived from continuous travel across the region. For instance, truckers on the Kampala-Juba route indicate that Kenya, Tanzania and DRC were the most frequently visited countries outside of Uganda. Ninety-six percent of the truckers mentioned South Sudan as their destinations of travel; 71 percent mentioned Kenya; 42 percent DRC, 41 percent Tanzania, 34 percent Rwanda, and 19 percent mentioned Burundi.

Cross border passenger movement:
The passengers include the young and old, men and women, locals and migrants. The availability of statistics on regional passenger transport is poor. From border post statistics and traffic surveys undertaken, it is estimated that road passenger traffic between the EAC countries amounts to 4 million passengers annually, with traffic between Tanzania, Kenya and Uganda making up about two-thirds. Passenger air traffic between the eight major airports within the EAC is about 5 million passengers annually; traffic between Nairobi, Dar es Salaam and Entebbe makes up a quarter, traffic between Nairobi and Mombasa another quarter, with the Kigali and Bujumbura traffic share increasing. Rail and lake ferry traffic contribute negligibly to regional passenger transport.

Sex workers
They include the host community and migrant girls and women who provide direct and indirect sexual services. Along the transport corridors, sex work is intricately interwoven with other economic activities. In particular, female sex workers (FSWs) in the transport corridors include bar workers and lodge attendants, women soliciting for sex in bars, brothels, truck stops and streets, women providing sex in their homes, and women selling sex when they need money. In the EAC region, it was estimated that there were 5,655 FSWs along the Mombasa-Kampala highway and 3,020 on the Kampala-Juba route as indicated in the table below:

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13 Ibid, EAC (2011)


### Table 16: Key Indicators: Kenya-Uganda Contrasts

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Kenya Drivers (n=162)</th>
<th>Kenyan Assistants (n=219)</th>
<th>Uganda Drivers (n=80)</th>
<th>Uganda Assistants (n=23)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Age (years)</td>
<td>39.2</td>
<td>28.5</td>
<td>34.0</td>
<td>28.7</td>
</tr>
<tr>
<td>Mean years of education</td>
<td>8.3</td>
<td>9.4</td>
<td>8.4</td>
<td>5.3</td>
</tr>
<tr>
<td>Marital Status (%)</td>
<td>Never Married</td>
<td>6.8</td>
<td>31.1</td>
<td>17.5</td>
</tr>
<tr>
<td></td>
<td>Married</td>
<td>87.0</td>
<td>64.4</td>
<td>56.3</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>6.2</td>
<td>4.5</td>
<td>26.2</td>
</tr>
</tbody>
</table>

**Uniformed personnel**
They include immigration and customs officials, soldiers and police officers and other law and order personnel at the border posts.
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