

#### **Central Africa**

- Current Threat Conditions
- U.S. National Security Objectives
  - CINC Operational Objectives
- IPB Overview
  - Battlespace Environment
  - Impacts on the Battlespace Environment
  - Tactics, Techniques, Procedures Analysis
  - Opposition Course of Action Analysis
- Blue Force Course of Action Analysis
  - Force Structure
  - Force Employment

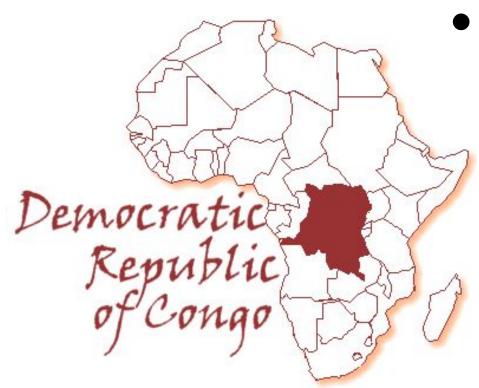


#### **Central Africa – Today**





#### **Current Threat**



- The D.R.C. is a lawless land unable to capitalize on its huge store of valuable natural resources
  - Years of conflict have left the D.R.C. in economic turmoil and incapable of assembling the resources necessary to control its borders or the multiple factions inside the country



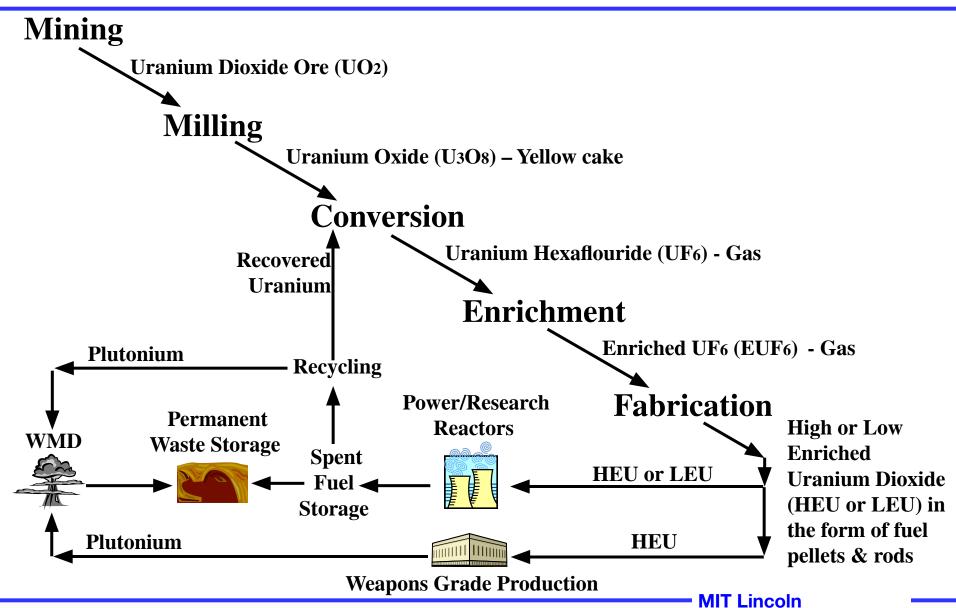
#### **Current Threat**



- Strapped for the cash needed to deal with their enemies, D.R.C. has shown a willingness to deal with rouge nations & terrorist organizations
- D.R.C. has been the object of terror states and organizations to obtain nuclear materials for "dirty bombs" and fissionable material to generate WMD



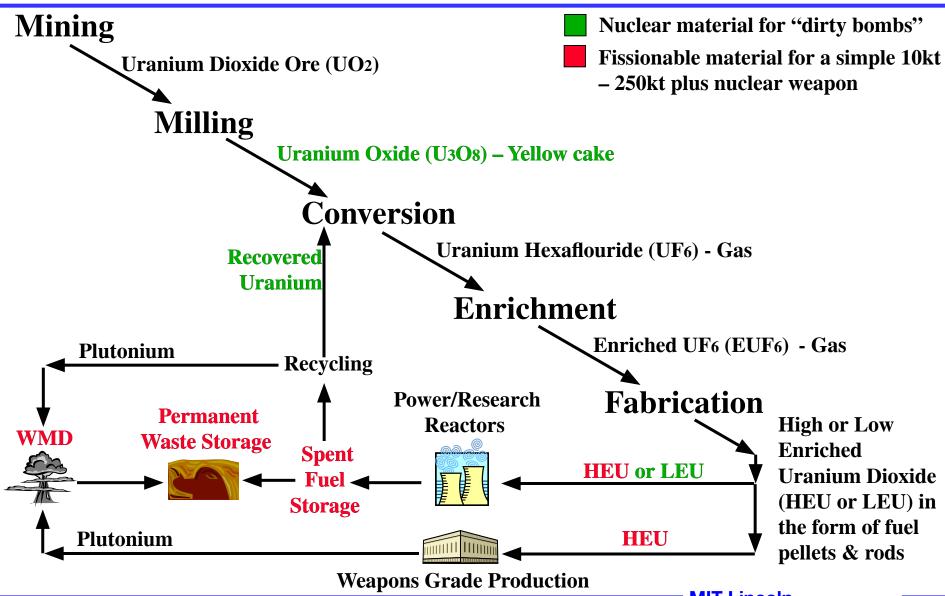
## **Nuclear Fuel Cycle - 101**



Laboratory



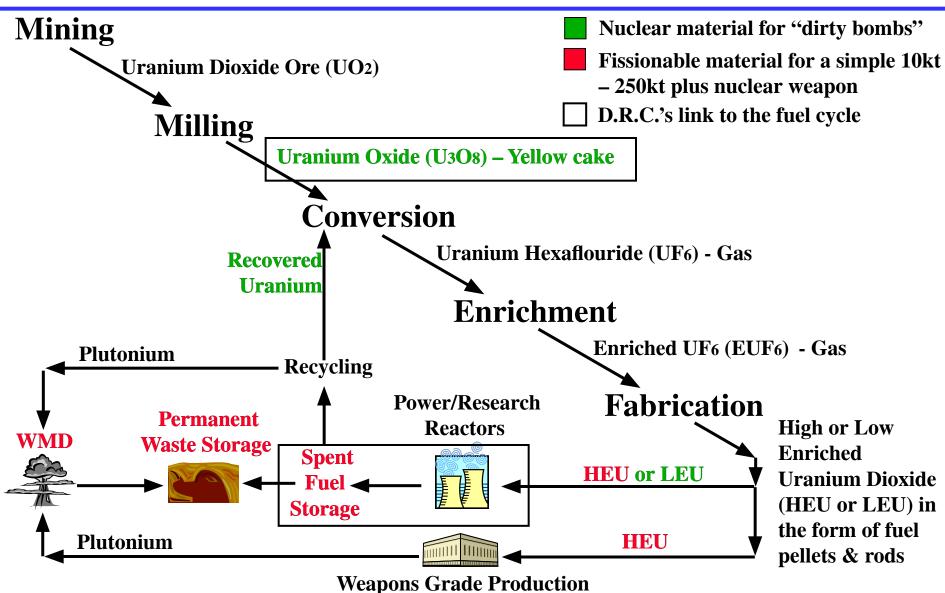
# **Vulnerability of the Nuclear Fuel Cycle**



999999-6 XYZ \*



# D.R.C. Link with the Nuclear Fuel Cycle

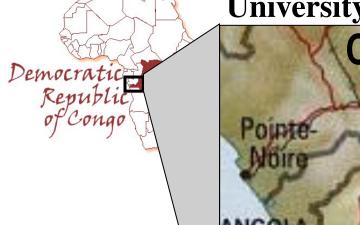


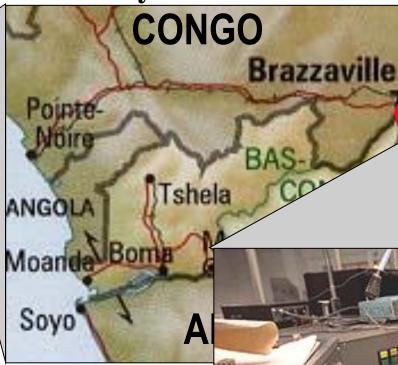
999999-7 XYZ \*



#### **Current Threat – Fissionable Material**

University of Kinshasa Nuclear Research Reactor





- Built in 1959 via President Eisenhower's "Atoms for Peace" program
- Refurbished in 1972 and uses HEU fuel rods





#### **Current Threat - Nuclear Material**

#### **D.R.C.** Uranium Mines



- UraniumDioxide (UO<sub>2</sub>)
  - 1 ton of ore contains 0.6% uranium
- Mines closed or converting to Copper or Cobalt
  - Shinkolowbe
     Mine has rich
     vein of UO<sub>2</sub>
    - Supplied U.S. ore for our first generation of



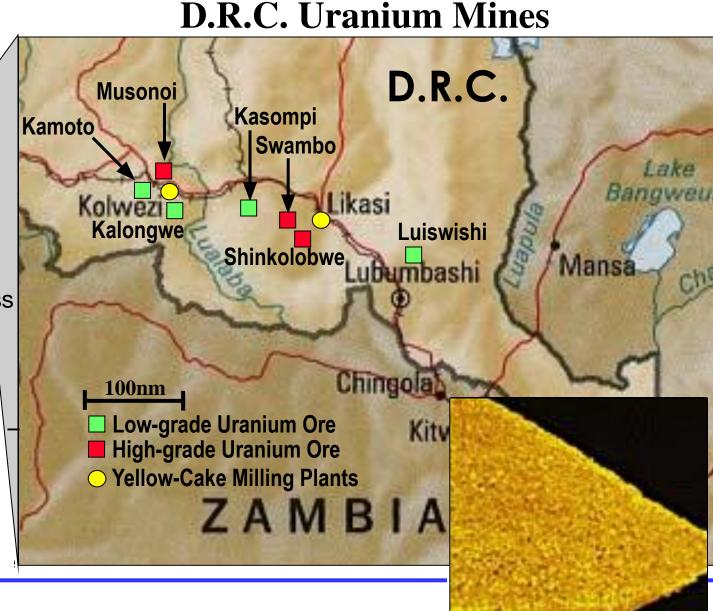
999999-9 XYZ \* nuclear weapons



#### **Current Threat – Nuclear Material**

# Democratico Republic of Congo

- Uranium Oxide (U3O8) – Yellow Cake
  - Milling process takes place close to the mine
  - Yellow cake contains 60%85% uranium
- U<sub>3</sub>O<sub>8</sub> milling was done at Kolwezi and Likasi





#### **Current Threat - Nuclear Materials Trafficking**



Rods recovered in Italy with 13 Italian mafia arrested trying to sell material to Mid-east agents

**Kikwit** 

U.S. negotiations w/ D.R.C. for the return of all HEU fuel rods have been unsuccessful

Kenya detains 5 Iraqis traveling on Indian passports trying to get to D.R.C. in 2001

Rutshuru

Kigoma

TANZANIA



Tanzania seizes 5 containers of yellow-cake in Kigoma in Feb

Tanzania seizes 110kg of yellow cake in Sumbawanga in Nov '02

North Korean mine engineers & military training cadre caught in the Katanga mine region in 1999

- Exchanging military training for access to D.R.C.'s high-grade uranium mines
- Diplomatic pressure on D.R.C. resulted in North Korea's departure in 2000

#### **Democratic Republic** of the Congo

International boundary Province boundary National capital Province capital

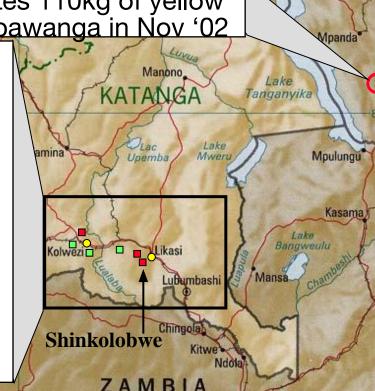
\*Kinshasa (Ville de Kinshasa) has status equal to that of a province.

Railroad

Road

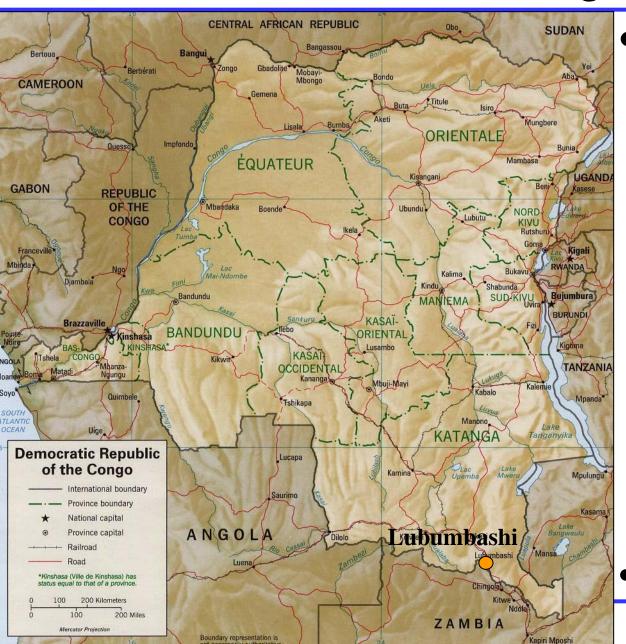
**OCEAN** 

200 Miles





#### **Current Intelligence**



- A CIA electronic surveillance in the Gecamines building (the D.R.C. state mining company) in Lubumbashi captured the following:
  - Le gâteau a été payé.
     Préparer le chargement.
     Le colbalt va dans trois semaines.

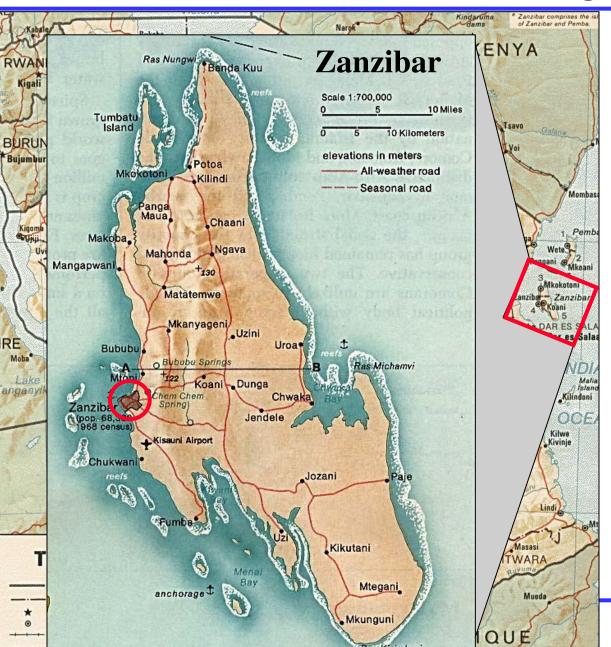
#### Translation:

- The cake has been paid for. Prepare the shipment. The colbalt goes in three weeks.
- DTG: 171740ZApr03

Laboratory



#### **Current Intelligence**



- The CIA in Zanzibar, Tanzania tracking elements of Al Qaeda have intercepted communications indicating a "priority shipment" is imminent
- The intercept defined the shipment as:
  - "...key to the Jihad"
  - "...will cripple the eagle"
  - "...send the team in
- The could wears straced to Zanzibar City
- DTG: 171830ZApr03
   Laboratory



# **Summary of the NSC Situation Brief**

- Cumulative CIA evidence suggests Al Qaeda is working directly with Gecamines and the D.R.C. government to acquire yellow-cake from the Katanga mine region
  - The shipment will depart the mine region in three weeks
    - ☐ Exact location of the yellow-cake is unknown
  - How the yellow-cake will be shipped is tentative
    - Possibly buried in a shipment of Cobalt already scheduled for export
  - The destination of the yellow-cake is unknown
    - ☐ An Al Qaeda cell in Zanzibar is involved



# **Summary of the NSC Situation Brief (2)**

- CIA proposes a black operation to:
  - Find the yellow-cake prior to shipment
  - Track the shipment to its final destination
  - Identify and maintain surveillance on the members of the Al Qaeda network and the D.R.C. government linked with the smuggling operation
  - At the designated time, pick-up the Al Qaeda operatives and responsible D.R.C. government officials, and
  - Seize the yellow-cake
- CIA proposes SOCOM lead operation with CIA operatives providing additional in-country support



# **Summary of the NSC Situation Brief (3)**

- The President agreed with the CIA proposal and made the following decisions:
  - The operation will be covert
  - Diplomatic coordination will be made only with the host nation(s) needed to help position and provide support to our assets on the ground
    - ☐ Eritrea, Ethiopia, and Uganda were the only African nations that publicly endorsed the U.S. war against Iraq and may be willing to support a black operation
    - Tanzania and Kenya should be considered as allies as they have stymied other yellow-cake shipments, and are struggling with Muslim extremists in their countries
    - ☐ Zambia, pinched between Angola and Zimbabwe who have lent military forces to defend D.R.C., can not be seen by their neighbors as openly working against D.R.C.



# **Summary of the NSC Situation Brief (4)**

- The President's decisions continued:
  - SOCOM will assume operational command of all forces used for this operation..."Operation Cakewalk"
  - CENTCOM, EUCOM, USCINCPAC, USSTRATCOM, and USTRANSCOM will be supporting commands
  - In addition, the President has directed simultaneous contingency planning for an assault on the Kinshasa Nuclear Research reactor
    - ☐ The objective is to determine the operational feasibility and identify the resources required to seize and transport the HEU fuel rods out of D.R.C. where the fissionable material can be controlled
    - The planning effort is named "Operation Hot Rod" and maybe executed in conjunction with seizing Al Qaeda and D.R.C. operatives under Operation Cakewalk



## **National Objectives**

- The President's stated the following national objectives for Operation Cakewalk:
  - Ensure nation states and terror organizations located in Central and East Africa are unable to threaten the U.S. or our allies with weapons of mass destruction
    - ☐ Stop the on-going, illicit trafficking of nuclear materials materials within D.R.C.
    - Improve the safety of the U.S., our allies, and the world by securing the fissionable materials in D.R.C.
    - Improve the stability of Central and East African nations by removing terrorist organizations and subversive government agents bent on obtaining and using weapons of mass destruction



#### **CINC Objectives**

- Find, track, and stop D.R.C. shipment(s) of nuclear materials (yellow-cake)
- Identify the terrorist and nation state network illicitly trafficking nuclear materials from D.R.C.
- Capture or otherwise neutralize this trafficking network
  - Includes D.R.C. Government officials involved in supplying and providing cover for the trafficking of nuclear material
  - Includes middle men and members of terrorists organizations that support the trafficking of nuclear materials and the development of WMD
- Place U.S. forces in a position that leads D.R.C. to peacefully turn over the fissionable fuel rods from the Kinshasa reactor or have them removed by force

**Laboratory** 

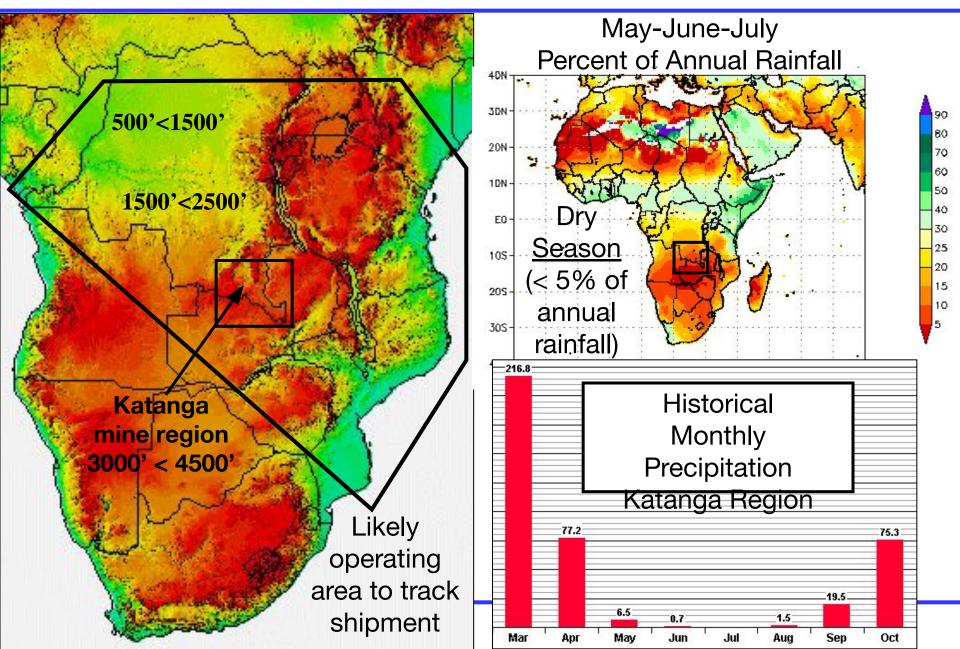


#### **Operation Cakewalk – IPB**

- Define the Environment
  - Terrain, weather, infrastructure, demographics
  - History, political relationships, economics
- Evaluate Tactics, Techniques, & Procedures (TTP)
  - Gecamines mining and product delivery practices
  - Kinshasa Nuclear Research Reactor operations
  - Al Qaeda cell operating techniques
- Assess Environment Impacts on TTP
- Anticipated Opposition COAs

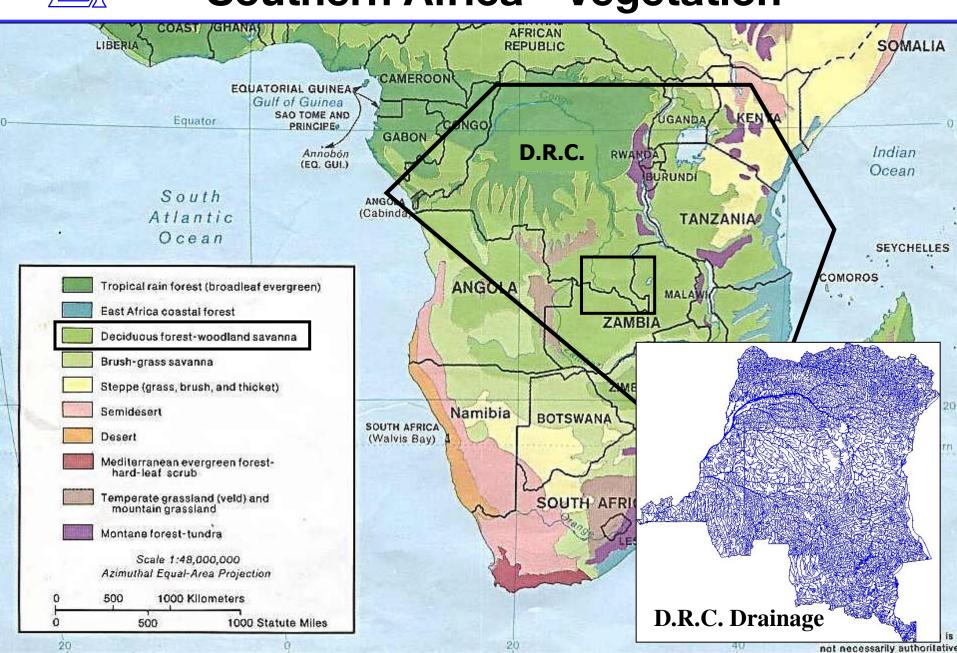


#### **Southern Africa – Terrain & Weather**



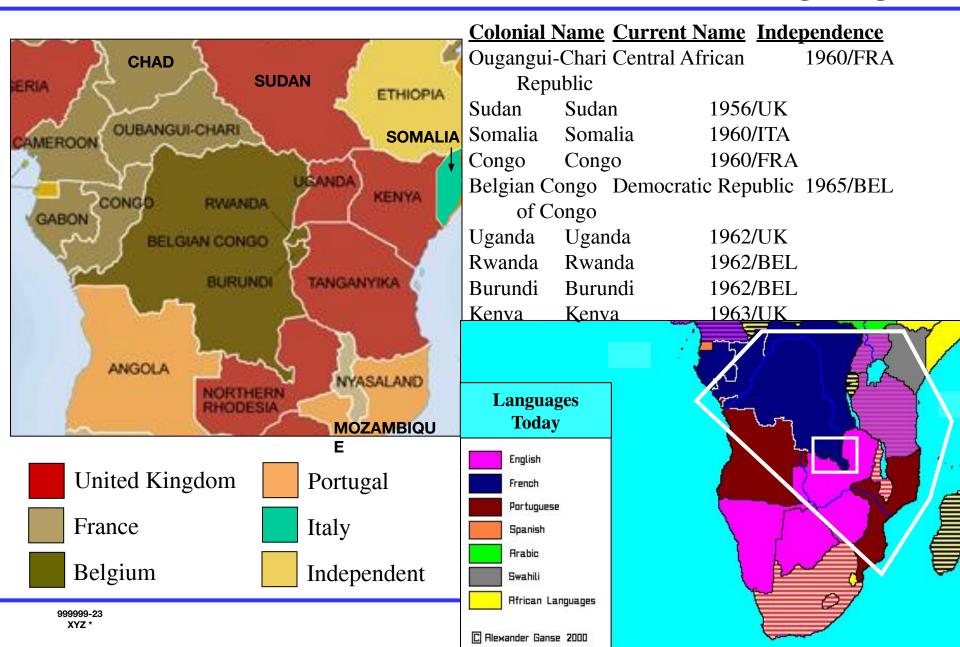


# Southern Africa - Vegetation



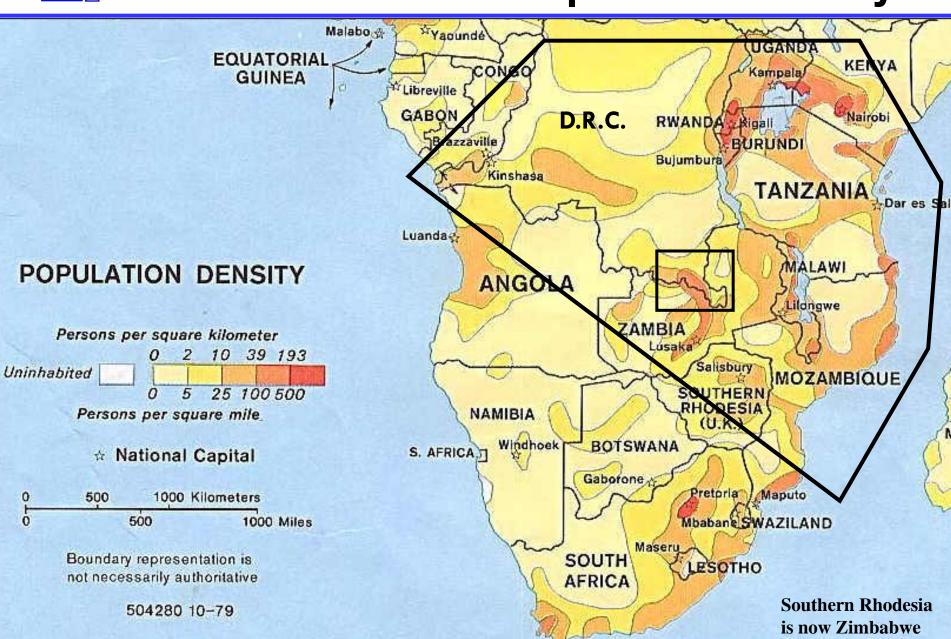


# **Central Africa – Colonization/Languages**



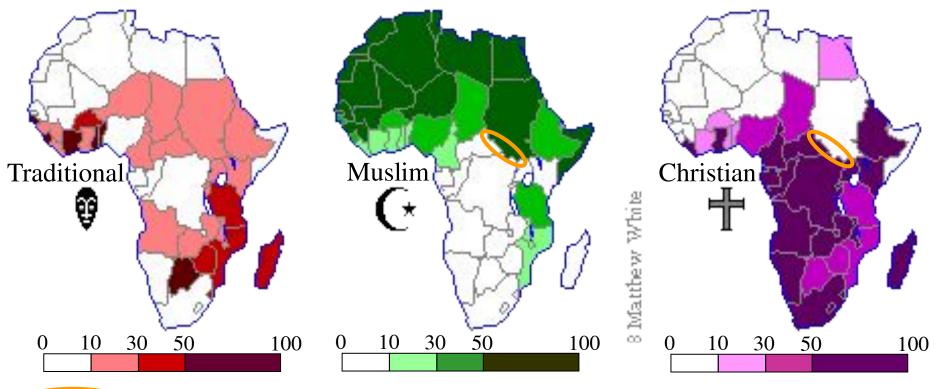


# **Southern Africa – Population Density**





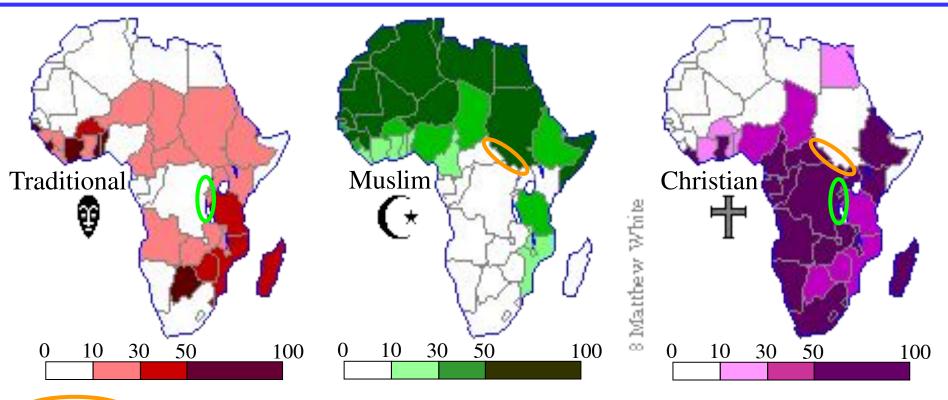
# **Religions of Central Africa**



Sudan's border with C.A.R., D.C.R., and Uganda represents a sharp divide between the density of Muslim and Christian people



## **Religions of Central Africa**



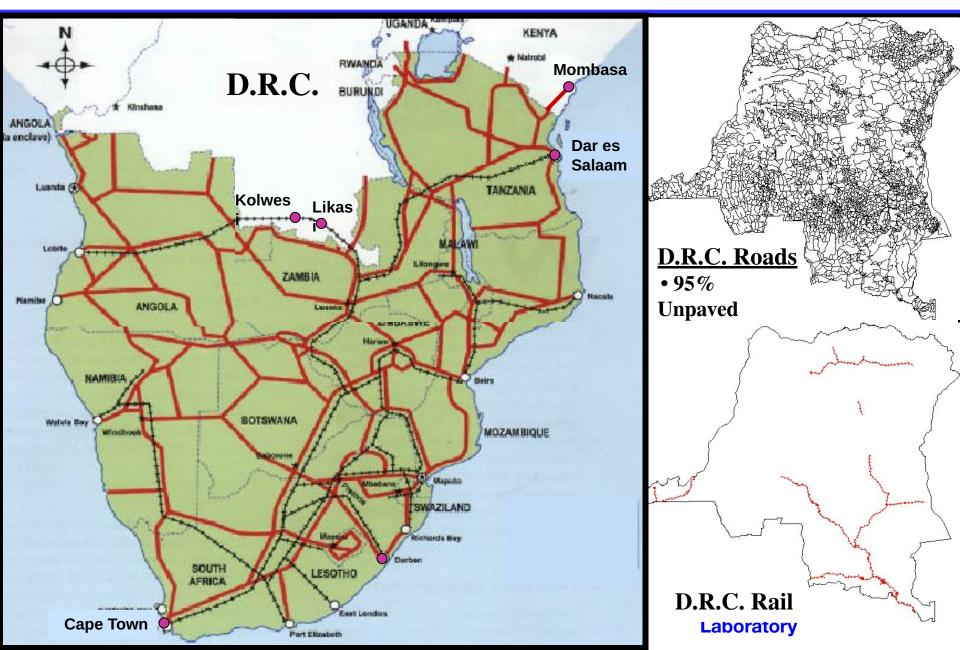
- Sudan's border with C.A.R., D.C.R., and Uganda represents a sharp divide between the density of Muslim and Christian people
- Tanzania is divided into religious sectors with traditional African religions dominating the west, Christians in the center, and Muslims along the coast
  - D.R.C.'s eastern border with Tanzania, and to a lesser extent with, Uganda, Rwanda, and Burundi, represents a significant divide between the density of Christians and traditional African religions

    MIT Lincoln

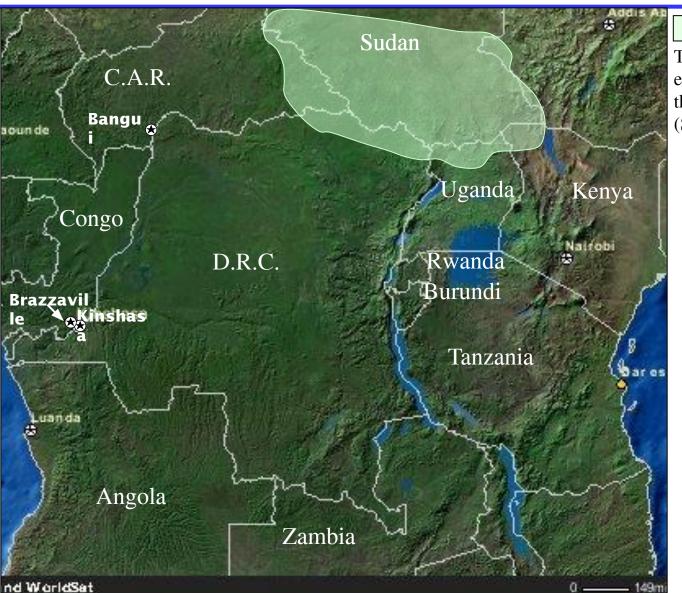
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#### **Southern Africa – Infrastructure**







Sudan vs SPLA

The **Sudanese** Government is engaged in a religious conflict with the Sudan People's Liberation Army (SPLA)

- Islam vs SPLA Christians
- SPLA finds refuge across Sudan's borders
- Fighting on going since 1955





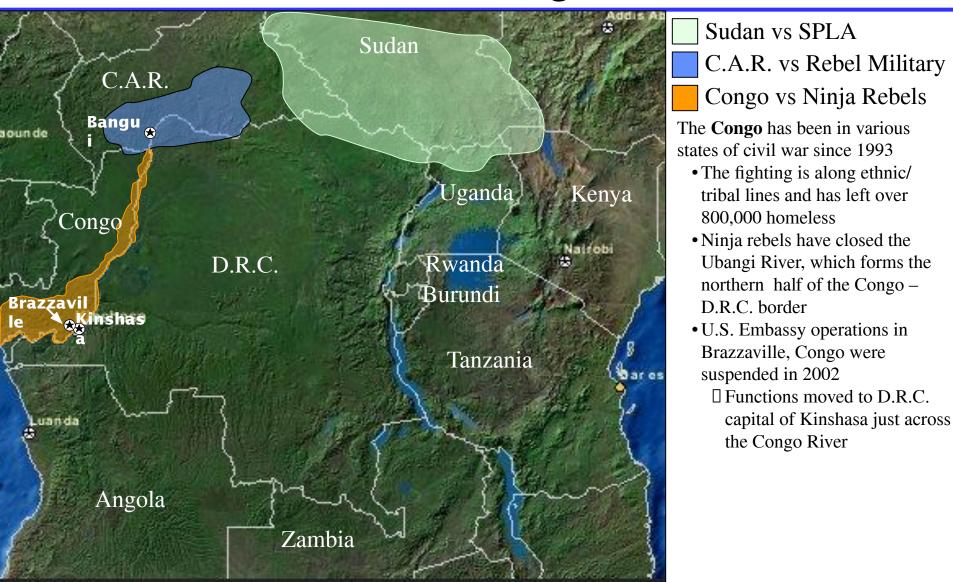
Sudan vs SPLA

C.A.R. vs Rebel Military

The **C.A.R.** government has endured continuous coup attempts

- 1996 three failed coups
- 1997 French Foreign Legion pulls out of C.A.R.
- 1998 U.N. police-keeping force of 1400 maintain order in Bangui, the capital
- 2001 Two failed coups
- Oct 2002 U.S. Gov't personnel ordered to leave the country
- No travel outside of capital without armed escort

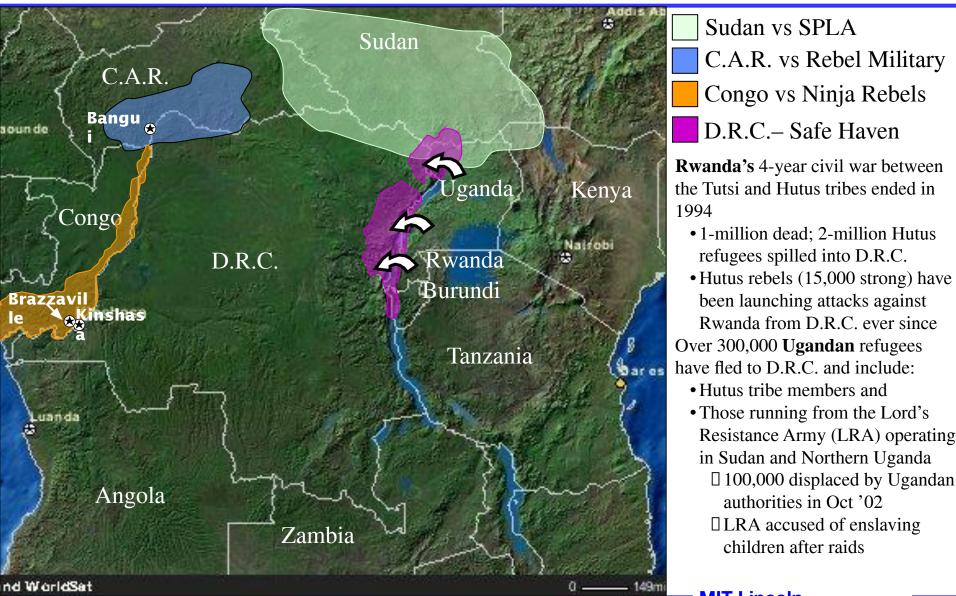




MIT Lincoln Laboratory

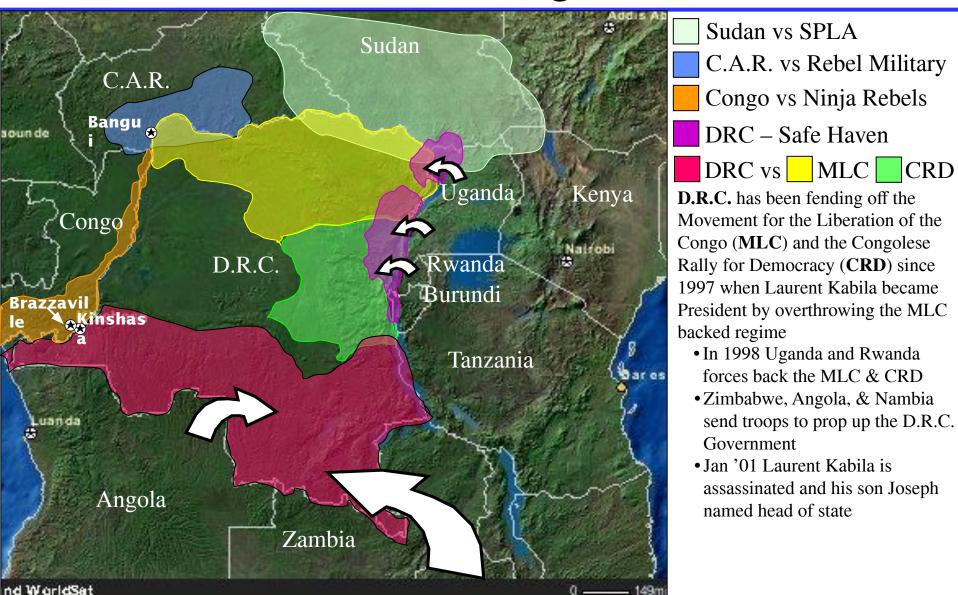
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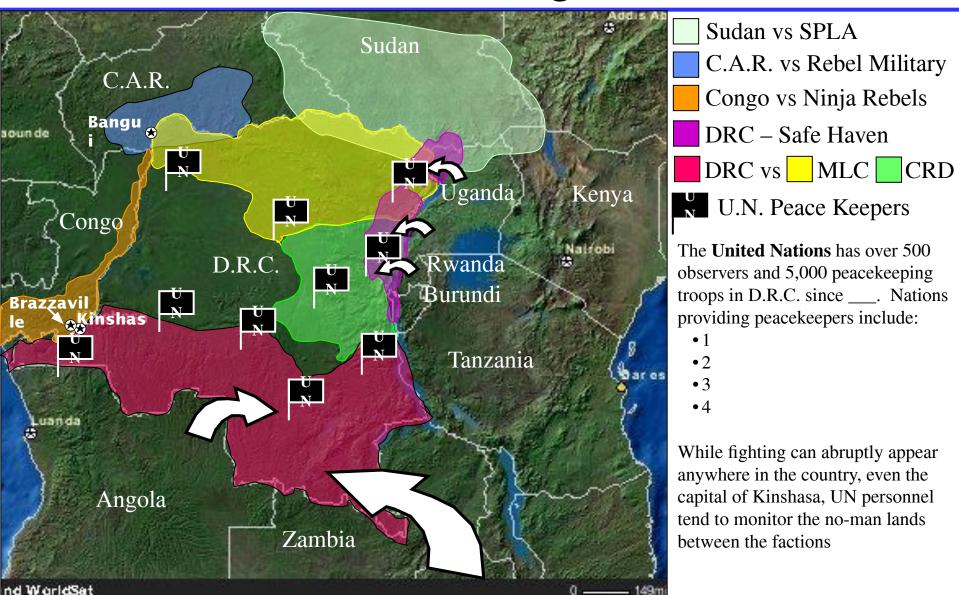
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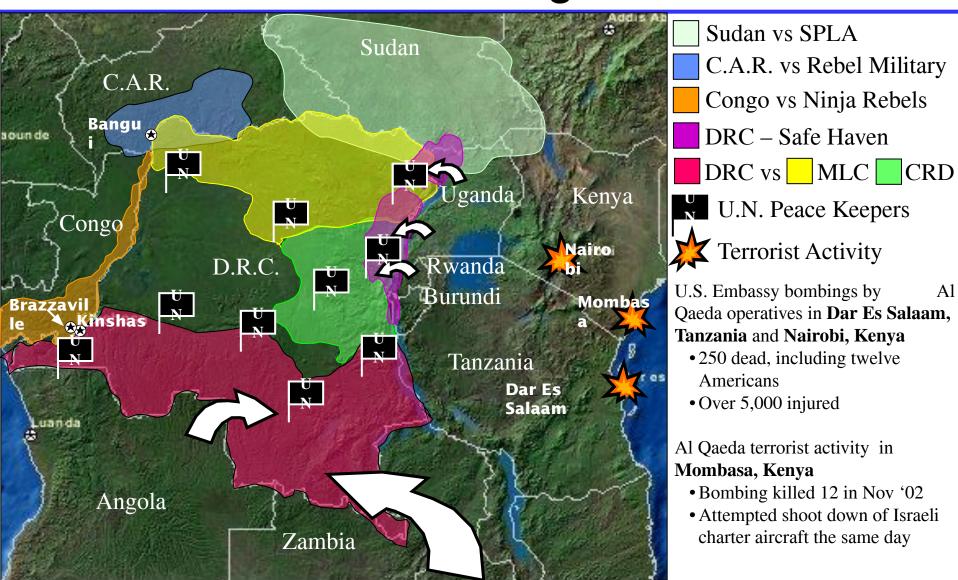
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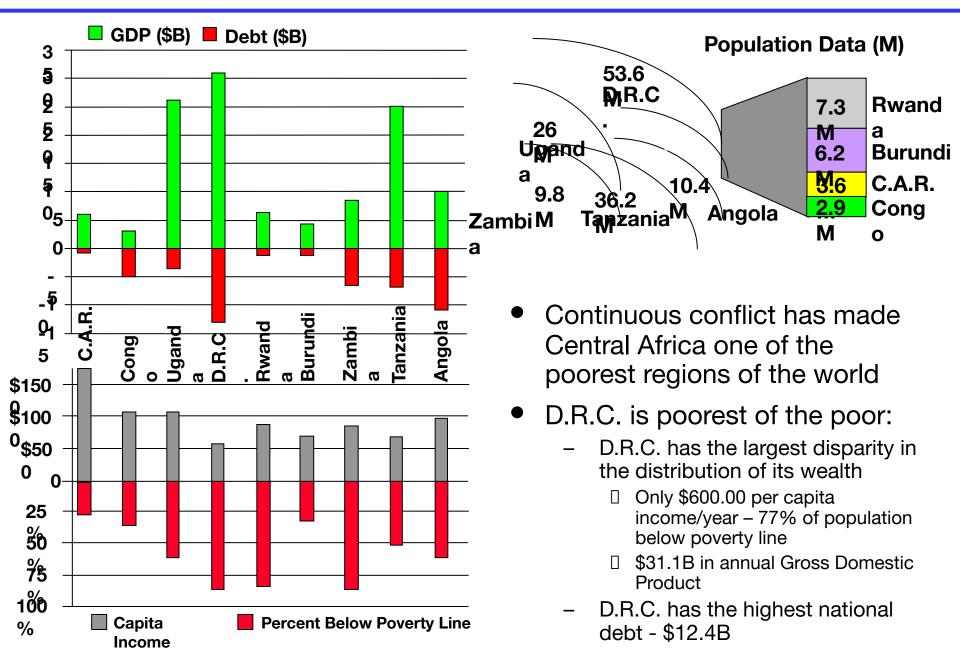


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#### **Central Africa – Economic Status**





#### **Opposition TTP**

- To be supplied
  - DRC Mining practices
  - Kinshasa reactor operations
  - Al Qaeda cell practices



### **Shipment COA Analysis**

#### **Shipment Options**

- Rail COA
- Road COA
- Rail/Road COA
- Air COA





Kolwesi To:	Dist (Km)	# Days
Lobito 14	50/@ 1	

@ - Not operational

MIT Lincoln Laboratory





Kolwesi To:	Dist (Km)/ # Days	Border X-ings
Lobito 14	50/@ 1	
Dar es 21: Salaam	25/4 2	

**@** - Not operational





Kolwesi To:	Dist (Km)/ # Days	Border X-ings
Lobito 14	50/@ 1	
Dar es 21: Salaam	25/4 2	
Mombasa	2315/6*	3

- @ Not operational
- \* Requires transload from 1.000m gauge track to 1.067m gauge track





Kolwesi To:	Dist (Km)/ # Days	Border X-ings
Lobito 14	50/@ 1	
Dar es 21: Salaam	25/4 2	
Mombasa	2315/6*	3
Beira 24	59/5 3	

- @ Not operational
- \* Requires transload from 1.000m gauge track to 1.067m gauge track





Kolwesi To:	Dist (Km)/ # Days	Border X-ings
Lobito 14	50/@ 1	
Dar es 21 Salaam	25/4 2	
Mombasa	2315/6*	3
Beira 24	59/5 3	
Durban 29	<b>36/6 4</b>	

- @ Not operational
- \* Requires transload to 1.067 gauge track



### **Transportation Options: Rail**



Kolwesi To:	Dist (Km)/ # Days	Border X-ings
Lobito 14	50/@ 1	
Dar es 21 Salaam	25/4 2	
Mombasa	2315/6*	3
Beira 24	59/5 3	
Durban 29	<b>36/6 4</b>	
<b>Cape Town</b>	3611/7	4

- @ Not operational
- \* Requires transload to 1.067 gauge track



#### **Transportation Options: Rail**

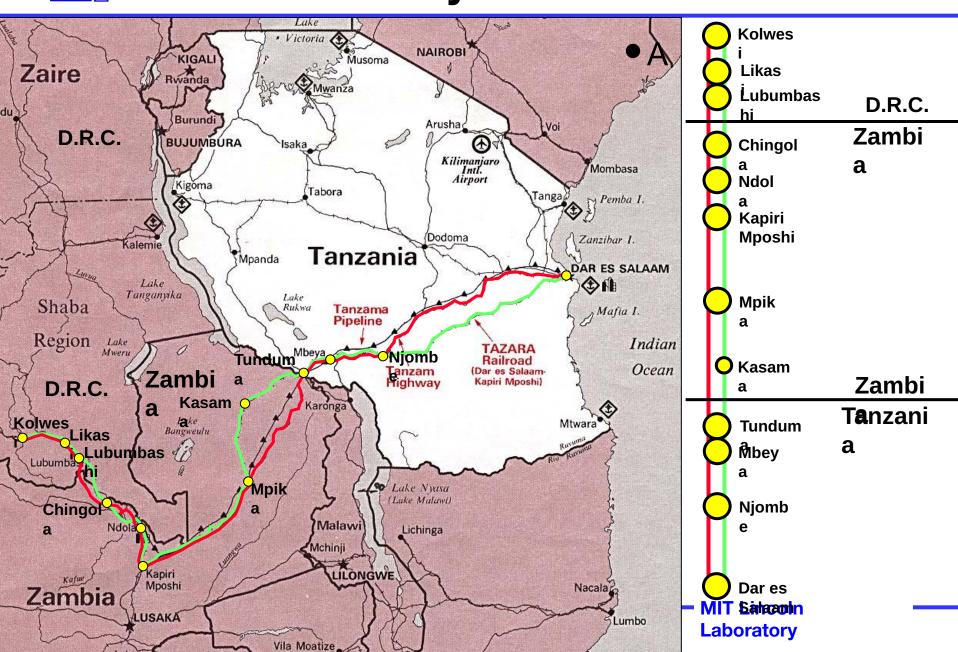


Kolwesi To:	Dist (Km)/ # Days	Border X-ings
Lobito 14	50/@ 1	
Dar es 21 Salaam	25/4 2	
Mombasa	2315/6*	3
Beira 24	59/5 3	
Durban 29	<b>36/6 4</b>	
<b>Cape Town</b>	3611/7	4

- @ Not operational
- \* Requires transload to 1.067 gauge track



# **Most Likely Railroad COA**





# **Shipment COA Analysis – Road**

To be supplied



# **Shipment COA Analysis – Air**

To be supplied



To be supplied....

- Blue Force Course of Action Analysis
  - Force Structure
  - Force Employment