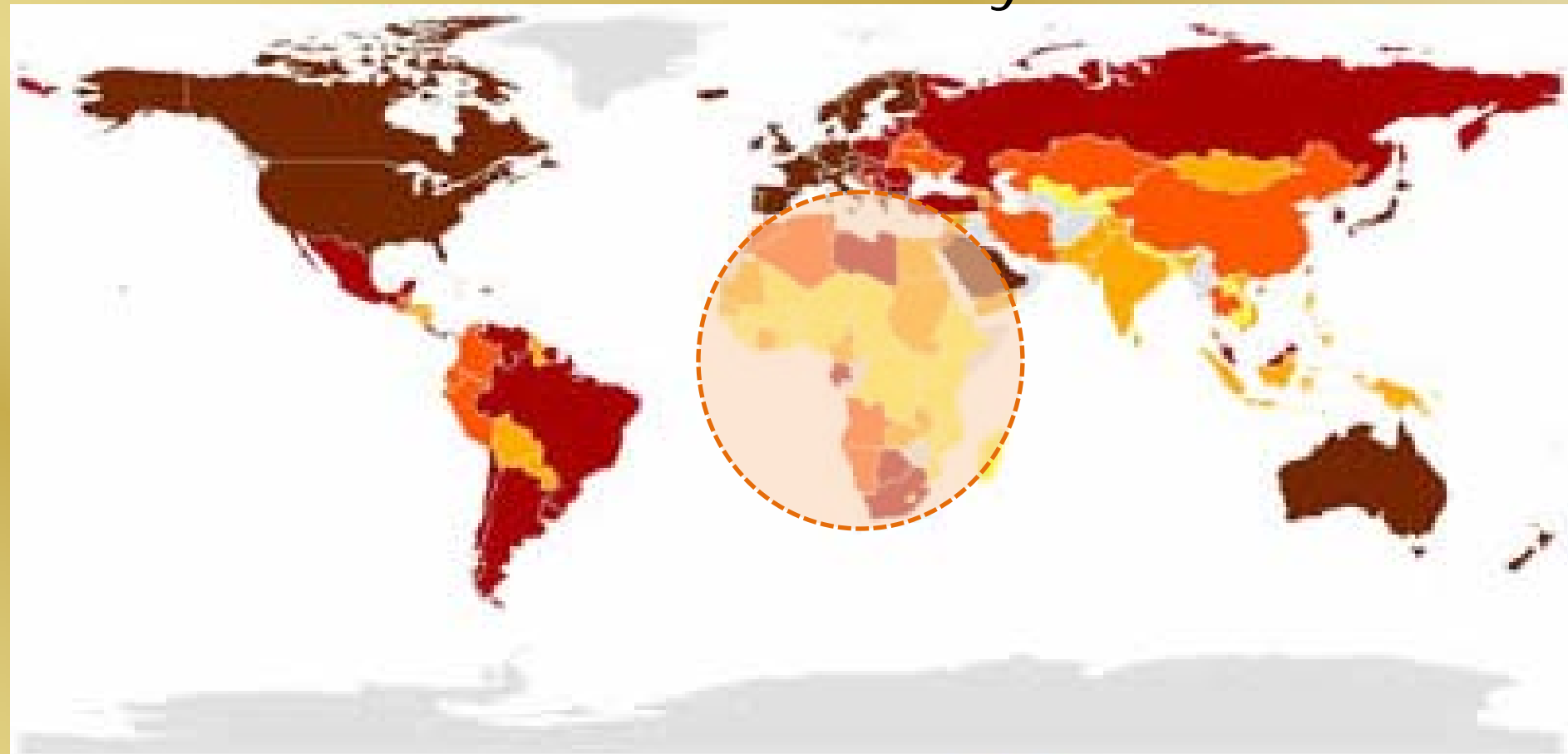
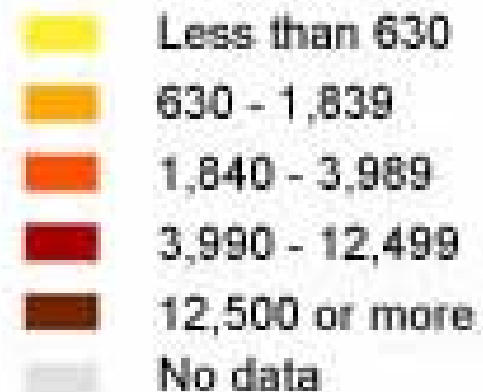


Global Poverty

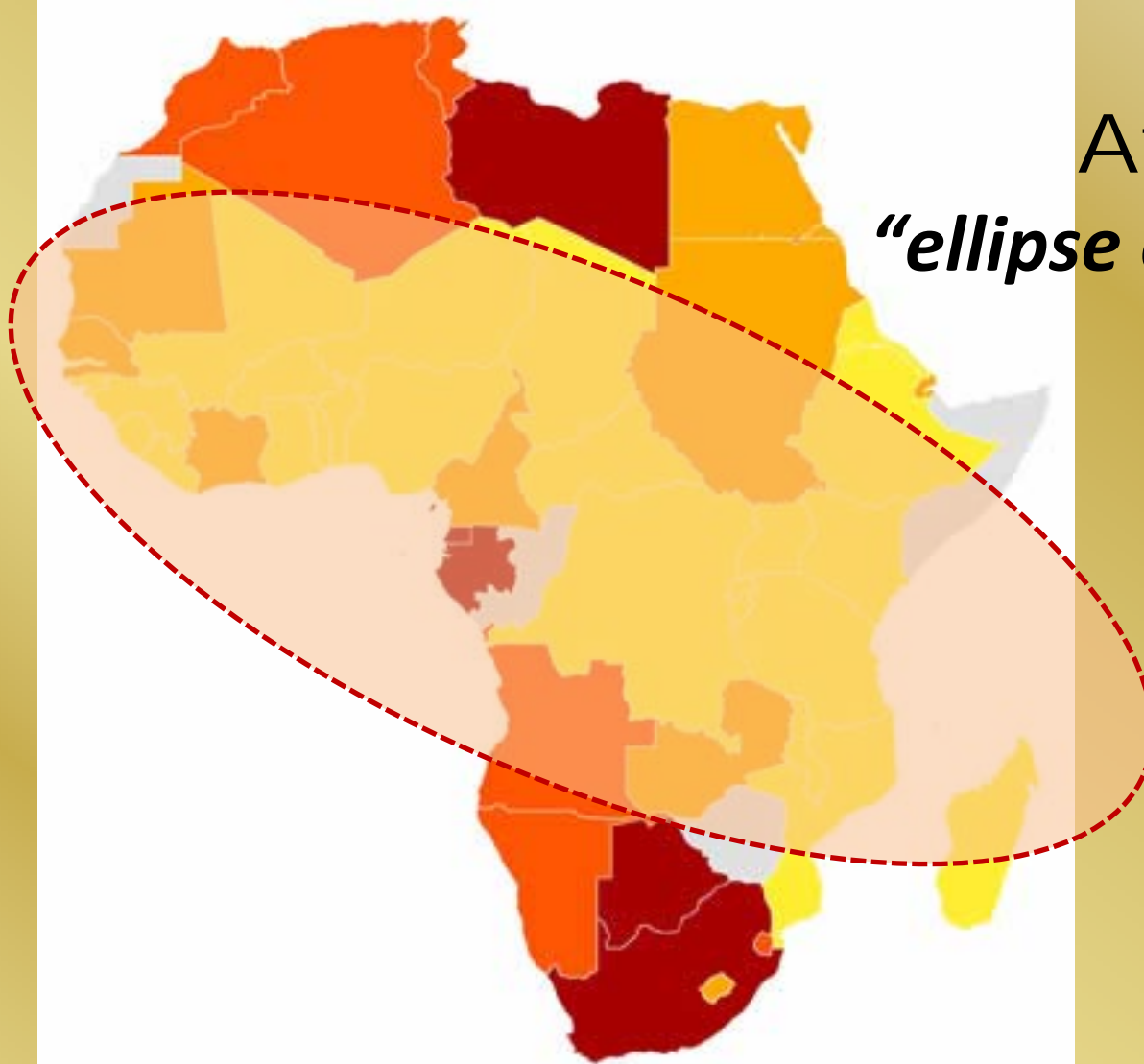


Poverty map
GNI per capita
Atlas method
(Current US\$)

Source: World Bank 2008



Africa *“ellipse of despair”?*

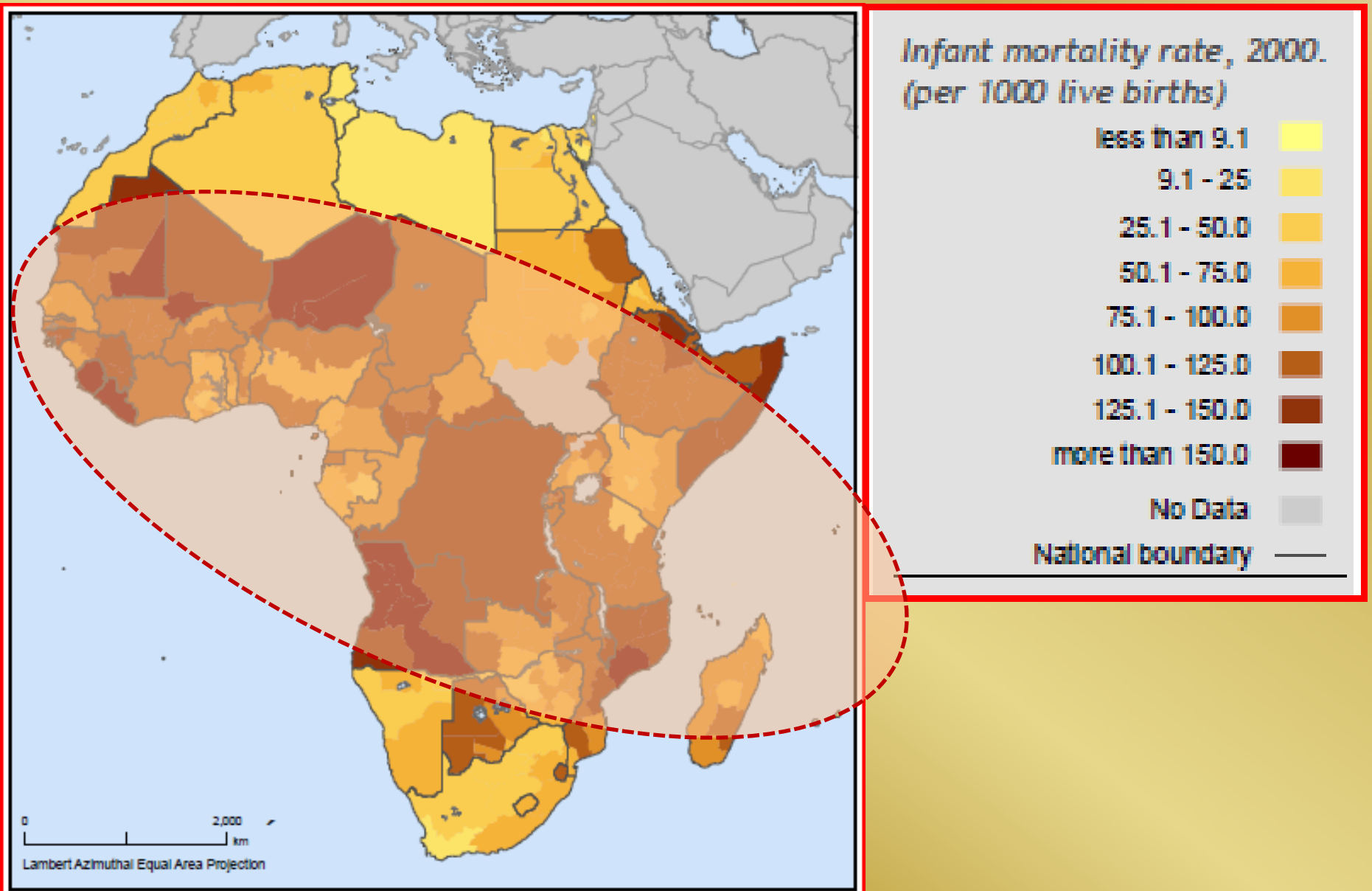


Poverty map
GNI per capita
Atlas method
(Current US\$)

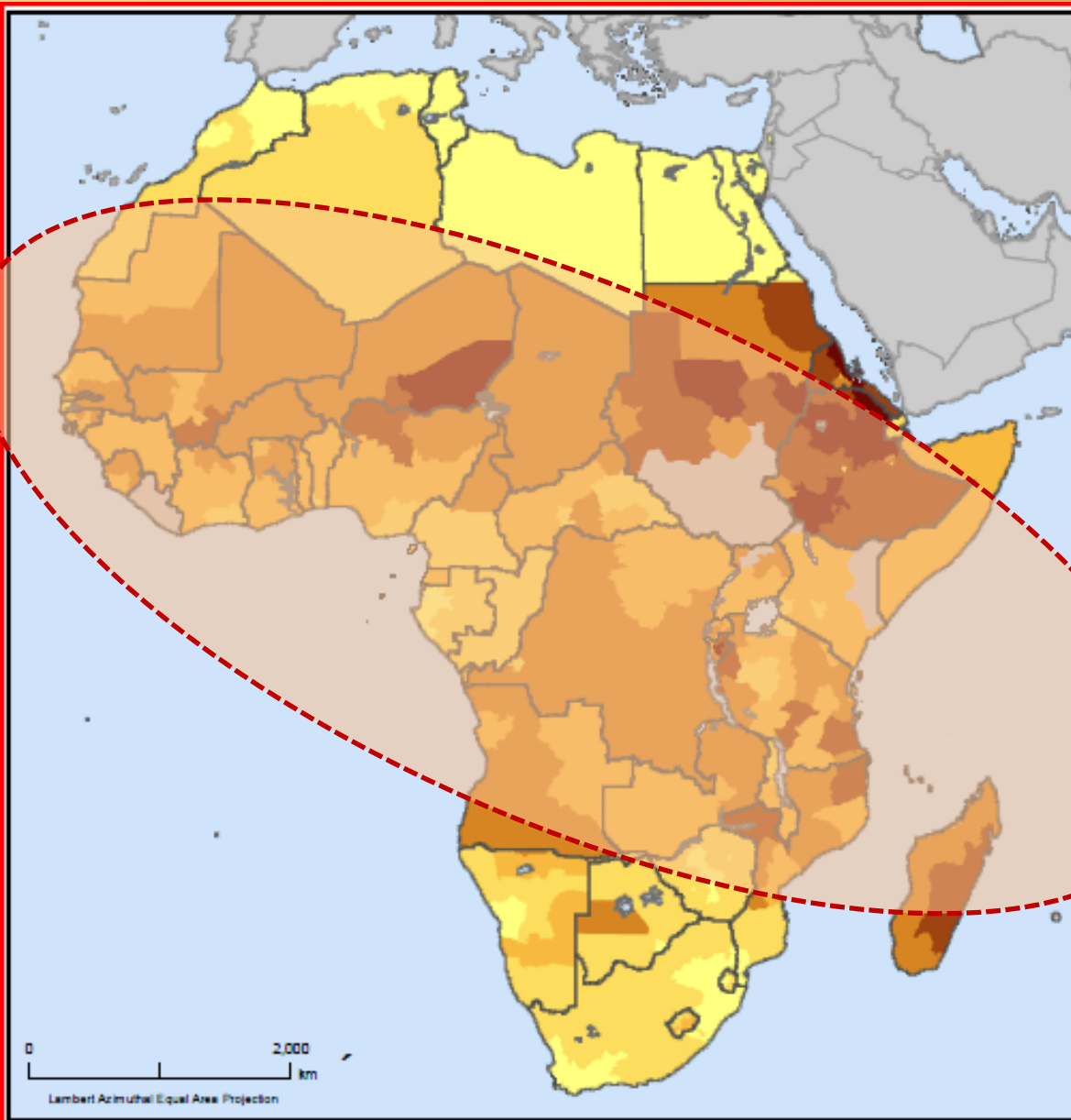
Source: World Bank 2008



Infant Mortality



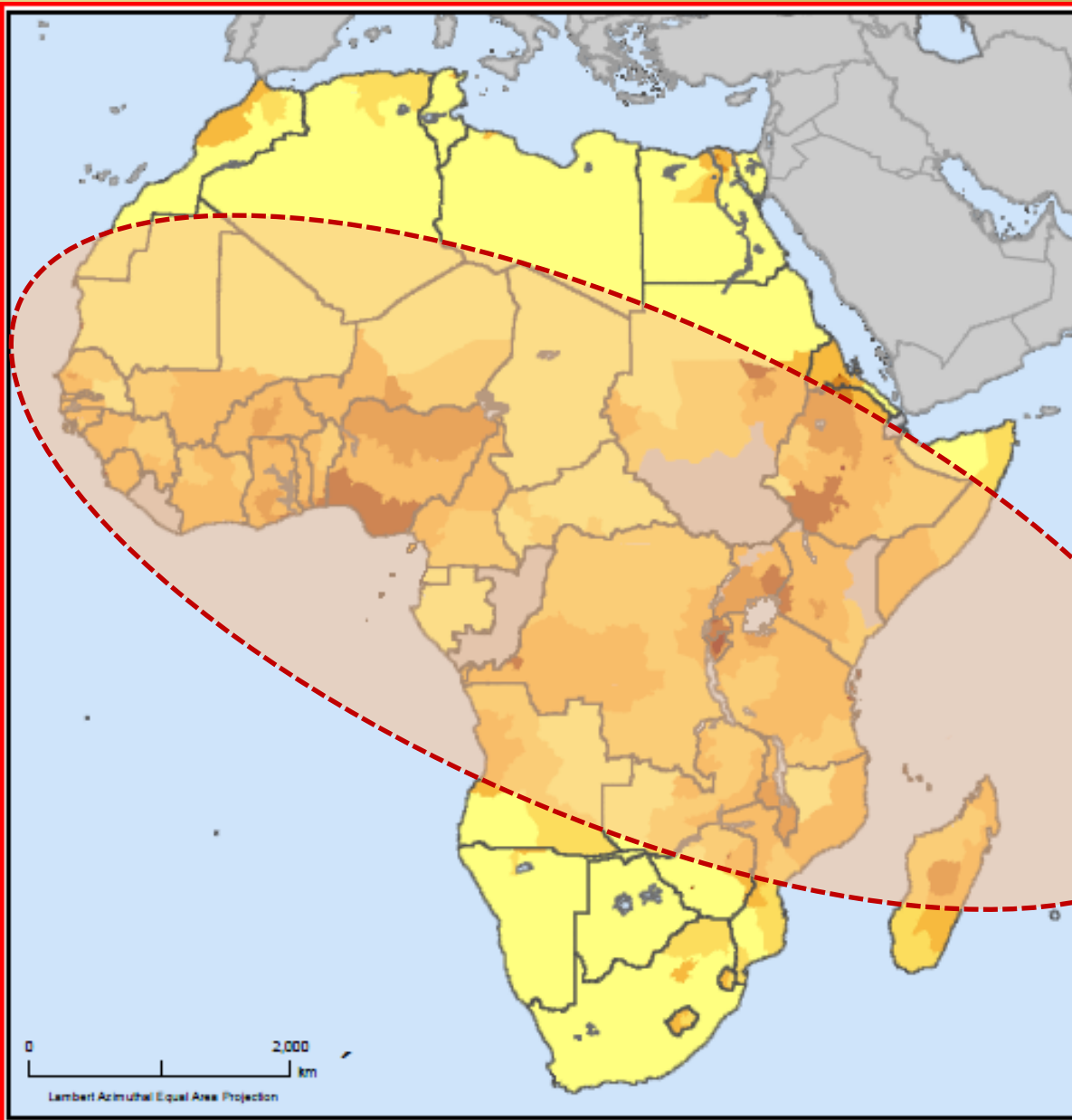
Child Manutrition










*Percent of Children
Age 0-5 Underweight*

< 10.1	
10.1 - 20.0	
20.1 - 30.0	
30.1 - 40.0	
40.1 - 50.0	
50.0 <	
no data	

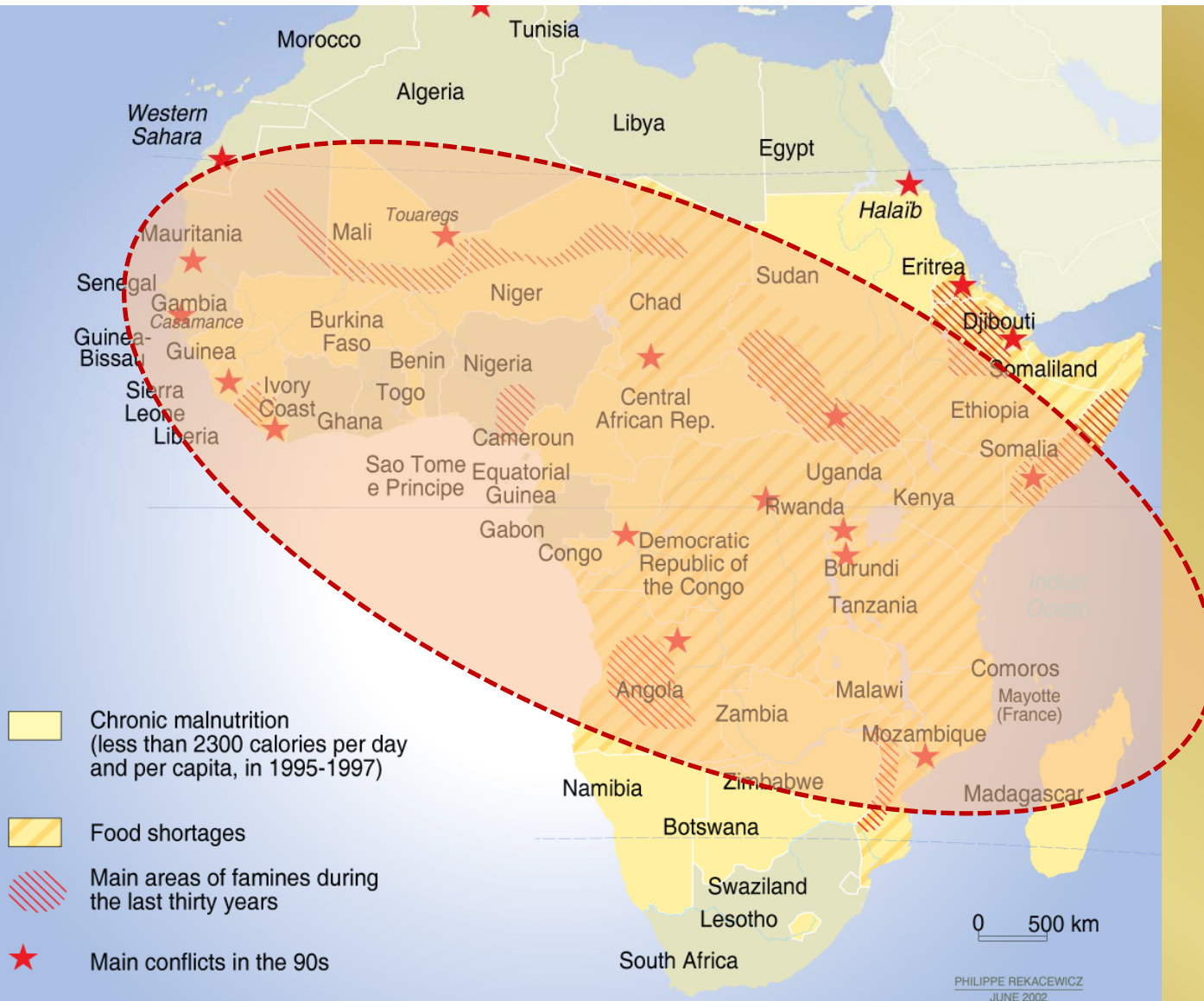
Hunger Density



*Population Density of Children
Age 0-5 Underweight
(per square kilometer)*

< 0.5	
0.5 - 1.0	
1.0 - 5.0	
5.0 - 10.0	
10.0 - 25.0	
> 25.0	
no data	

Malnutrition & Famine

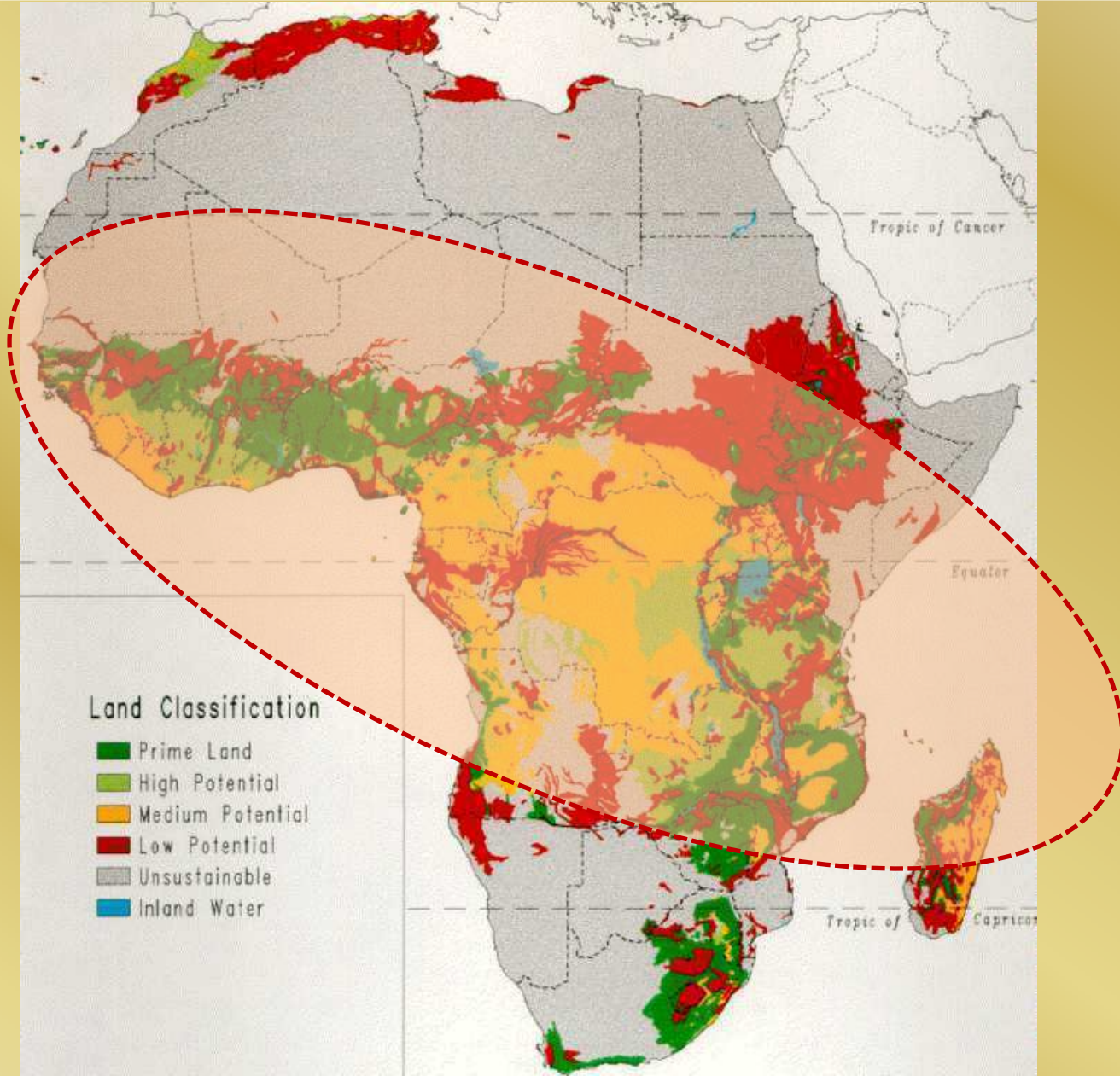


Sources: Map originally created by sylvie Brunel and Cécile Marin. *Human Development Report*, PNUD, 1996 ; Ramsès 1994, Dunod; *Total Call of the HCR Examination of the Programs*, HCR, 2001 ; *The State of Food Insecurity in the World*, FAO, Rome, 1999 ; *Populations en danger*, Médecins sans frontières - Lepac, La Découverte, 1995 ; *Interventions*, Action internationale contre la faim, 1994; *Le Monde peut-il nourrir le monde?*, Les Clés de la planète, hors-série n° 1, Croissance, Paris, 1998.

But does the ellipse have no growth
& development potential?

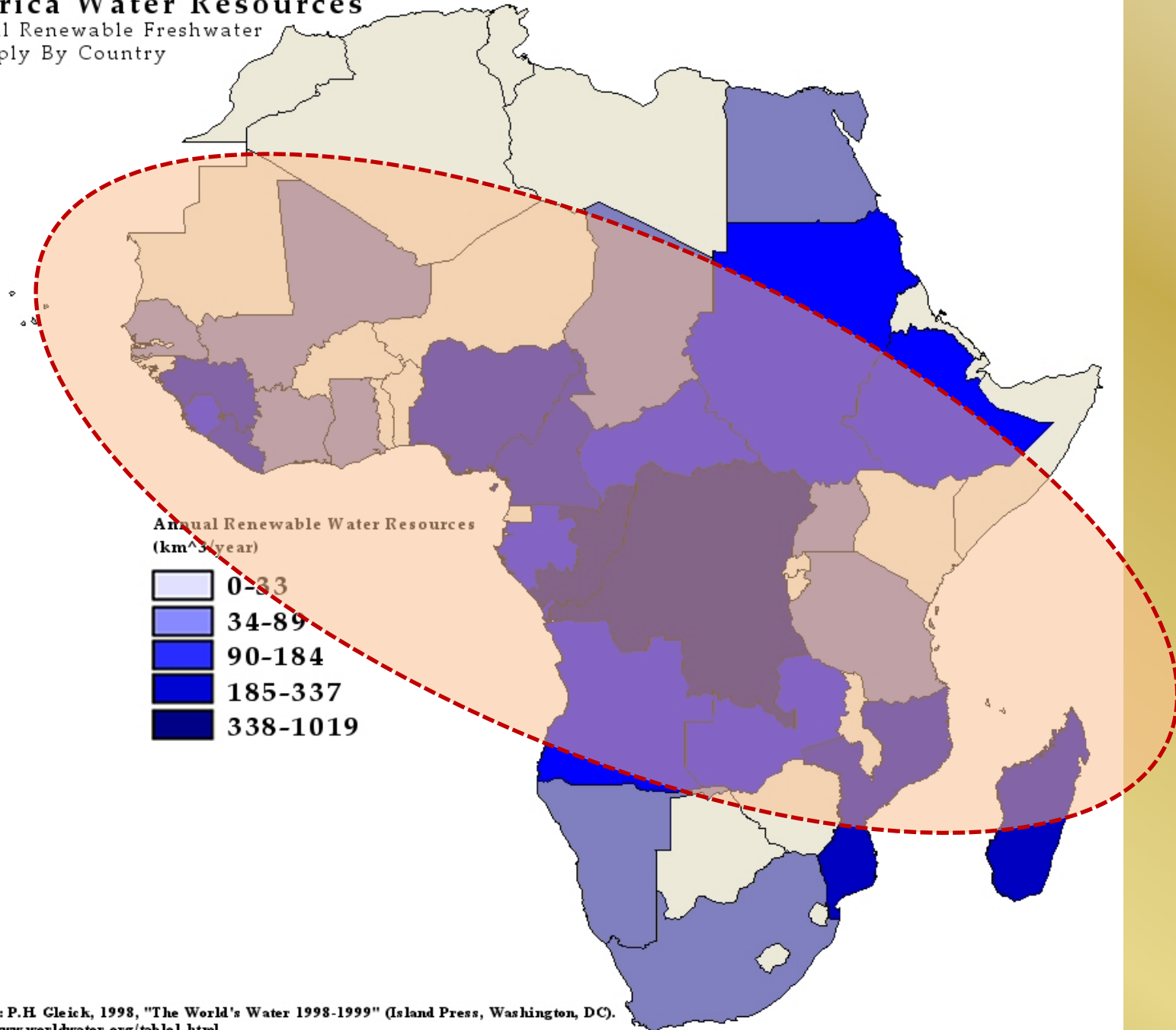
Apparently not.....??

Agricultural potential

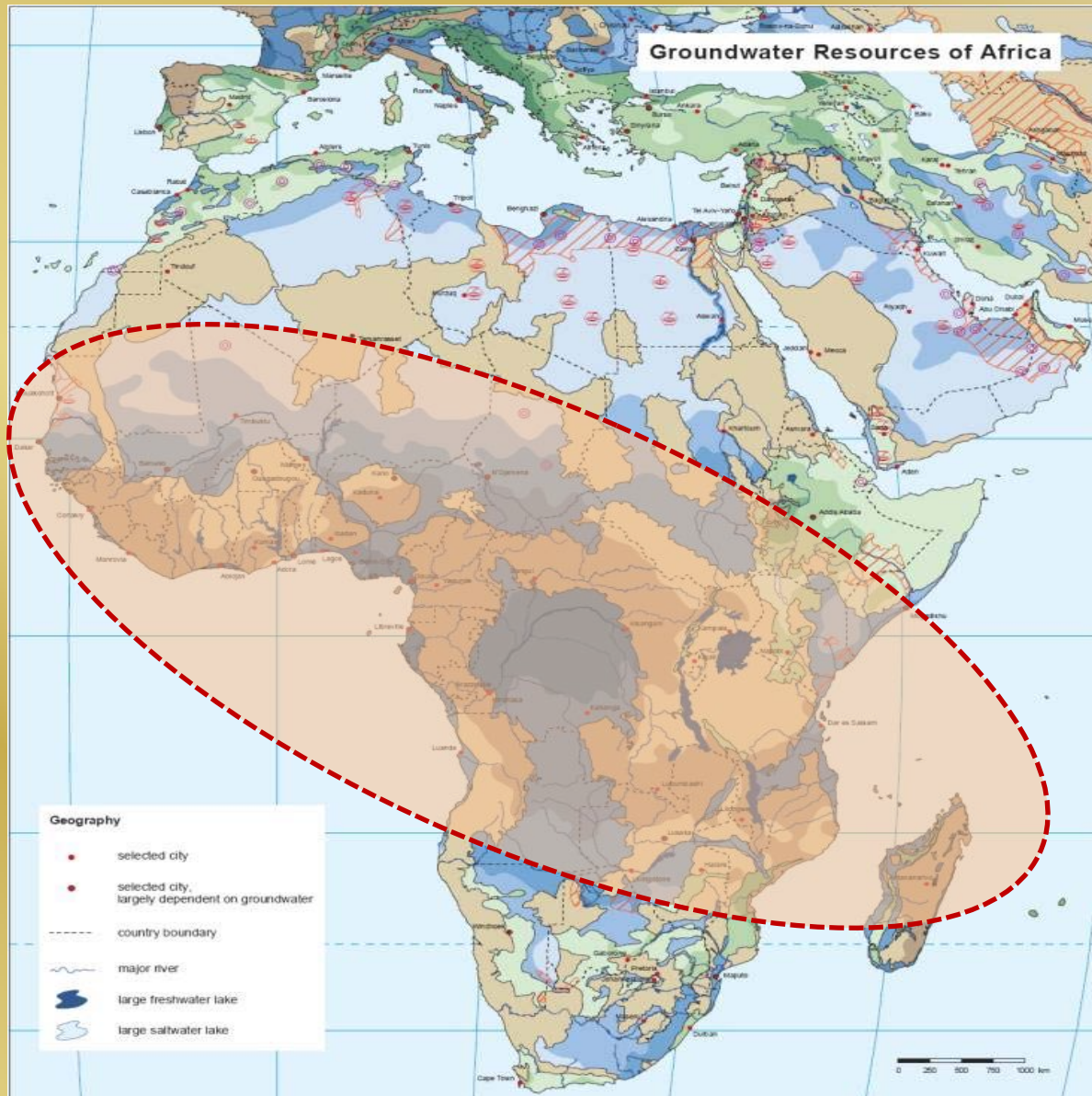


Africa Water Resources

Total Renewable Freshwater
Supply By Country



Groundwater Resources of Africa



Geography

- selected city
- selected city, largely dependent on groundwater
- country boundary
- ~~~~~ major river
- large freshwater lake
- large saltwater lake

Groundwater resources

groundwater recharge (mm/a)

very high	high	medium	low	very low
300	100	20	2	0

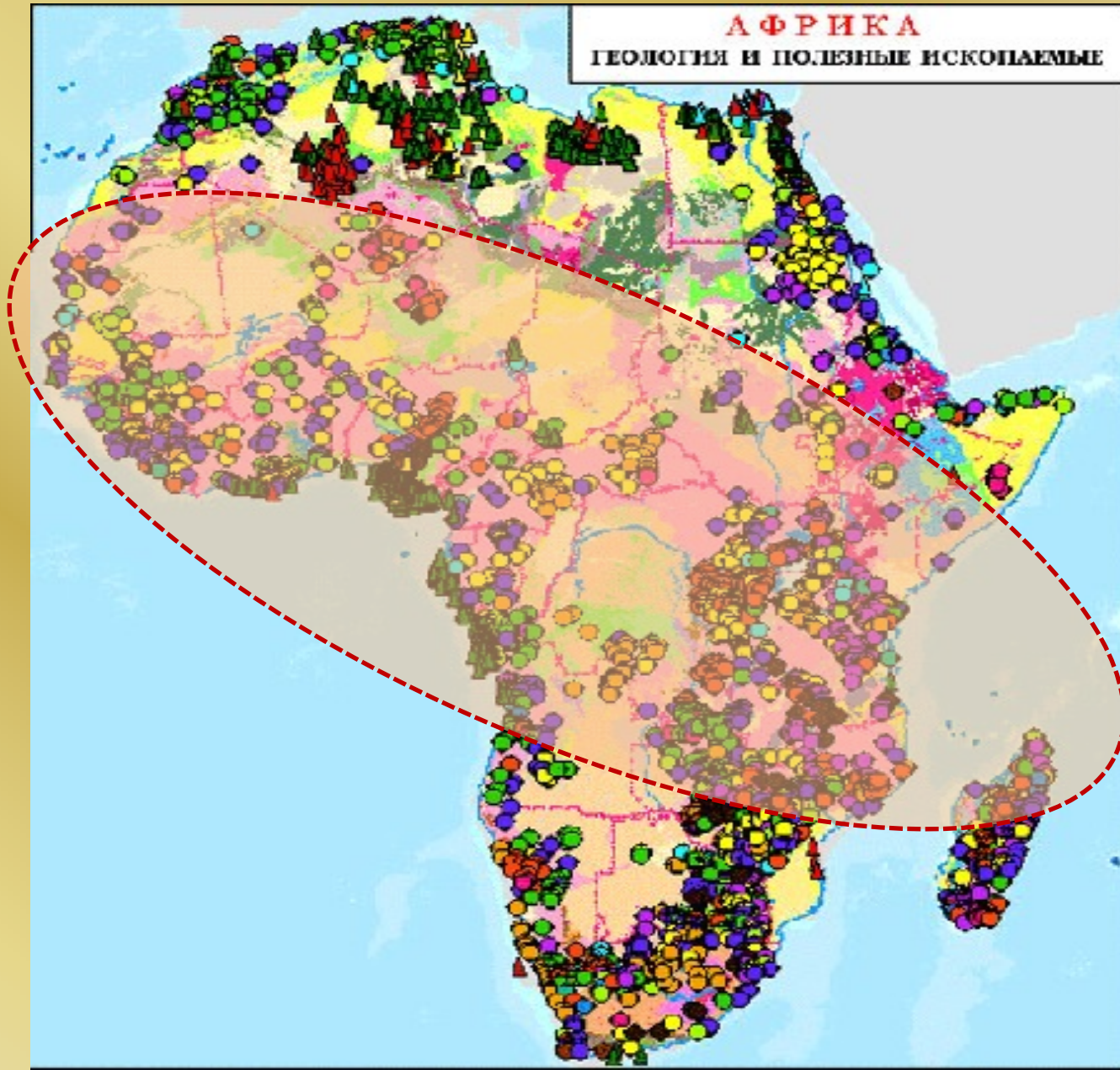
- in major groundwater basins
- in areas with complex hydrogeological structure
- in areas with local and shallow aquifers

Special groundwater features

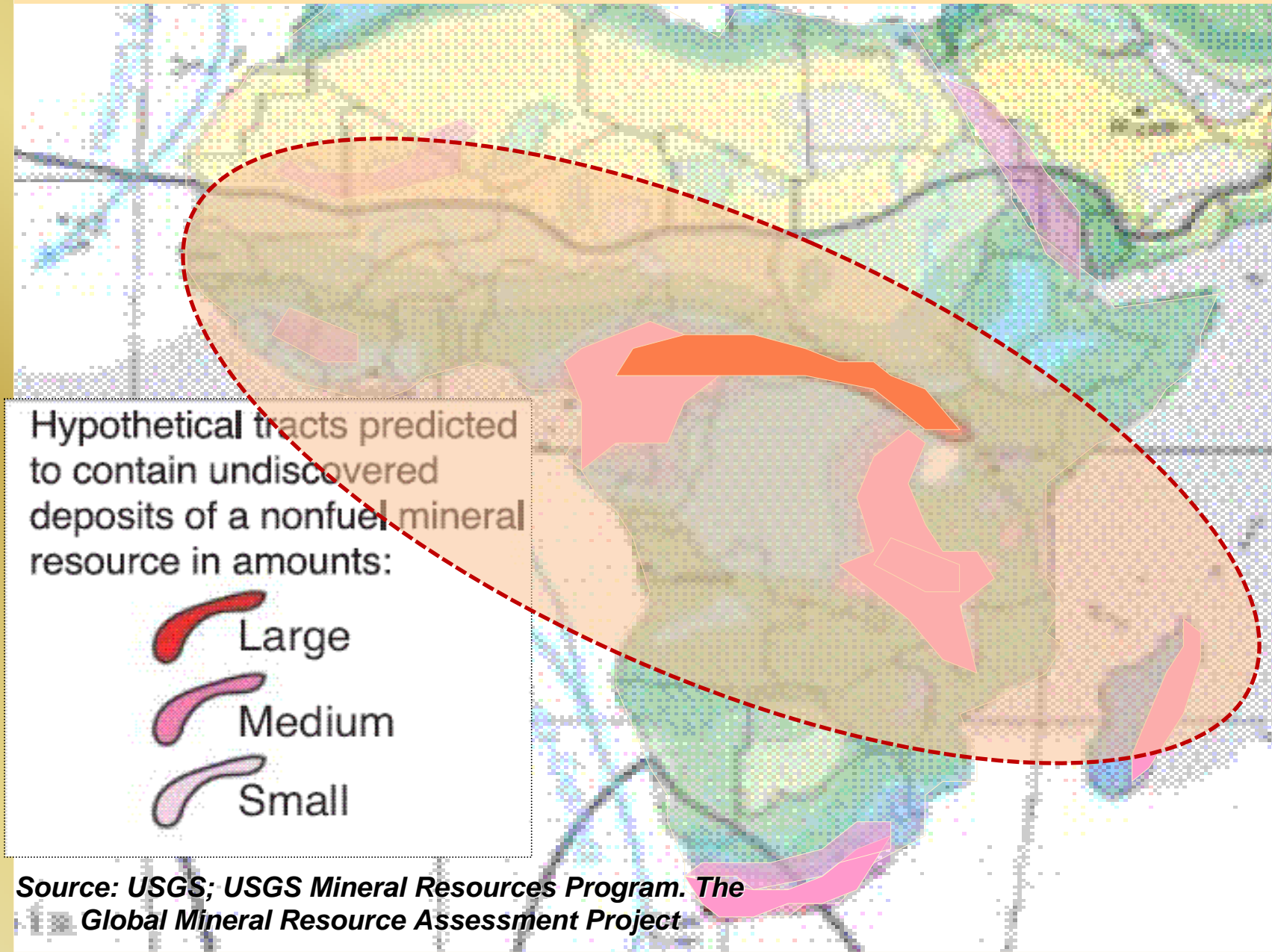
- ▨ area of saline groundwater (> 5 g/l total dissolved solids)
- natural groundwater discharge area in arid regions
- ⊖ area of heavy groundwater abstraction with over-exploitation
- ⊖ area of groundwater mining



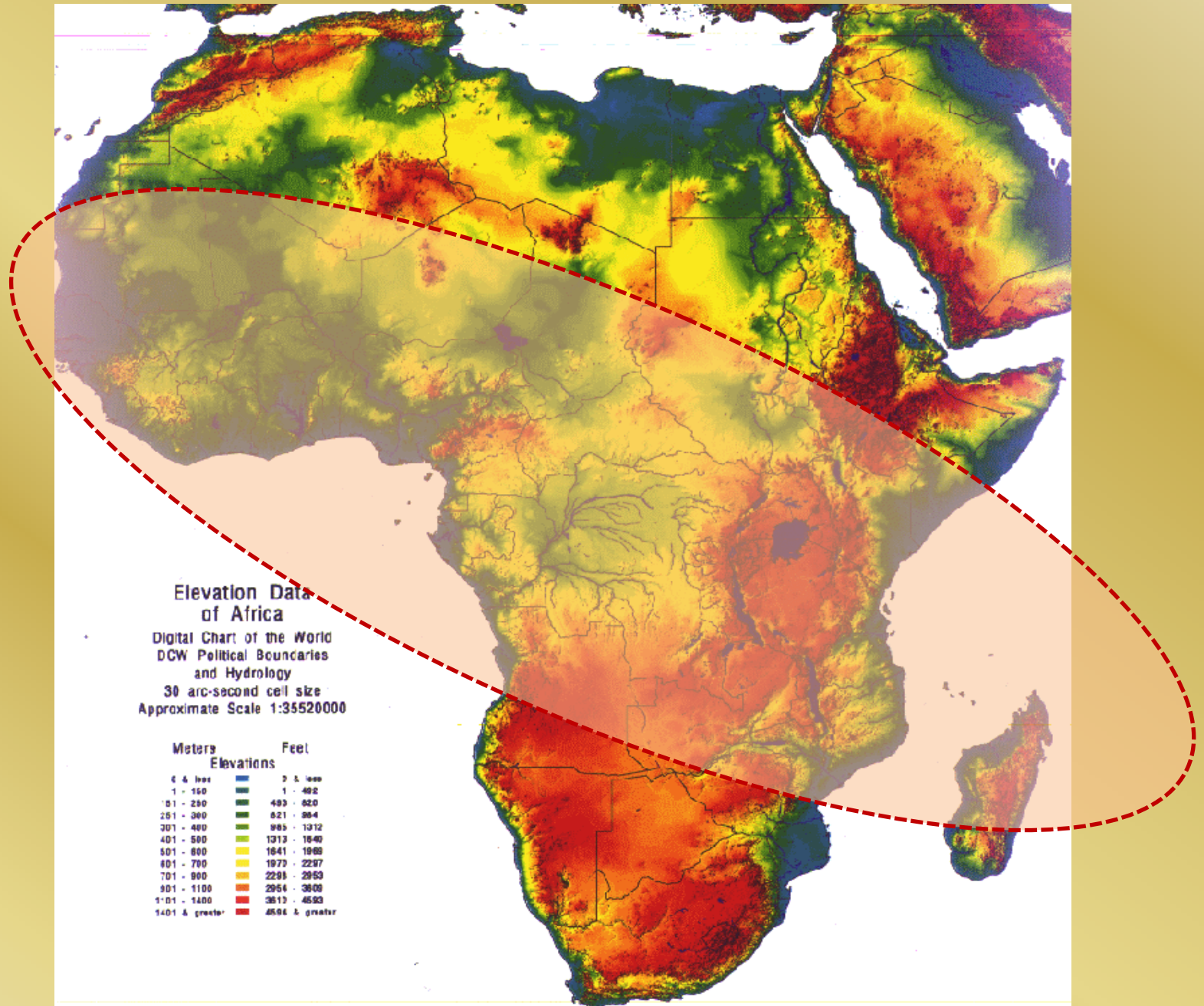
Geology & Mineral Resources



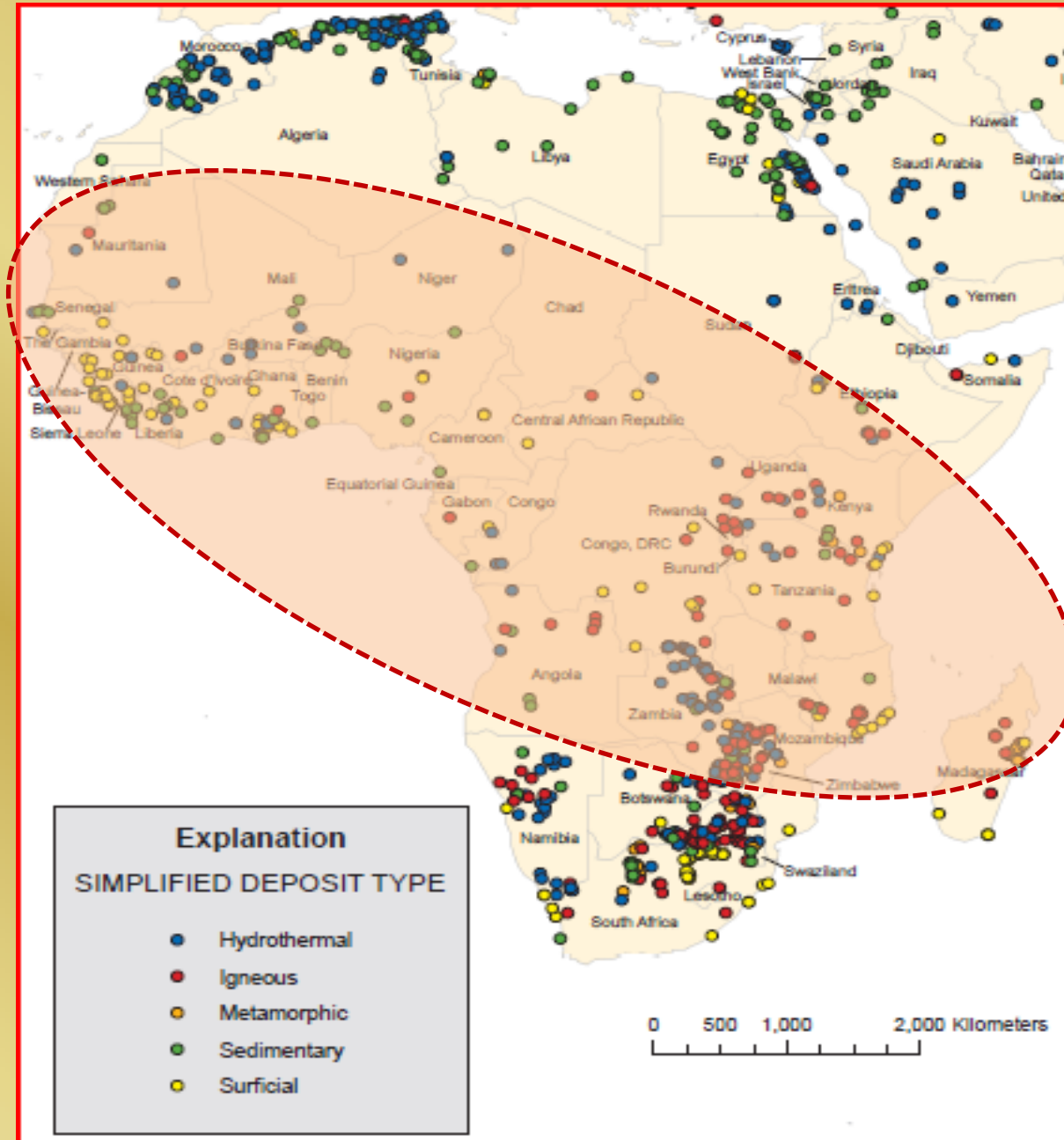
Africa's Undiscovered Resources



Elevation



Non-Fuel Mineral Deposits



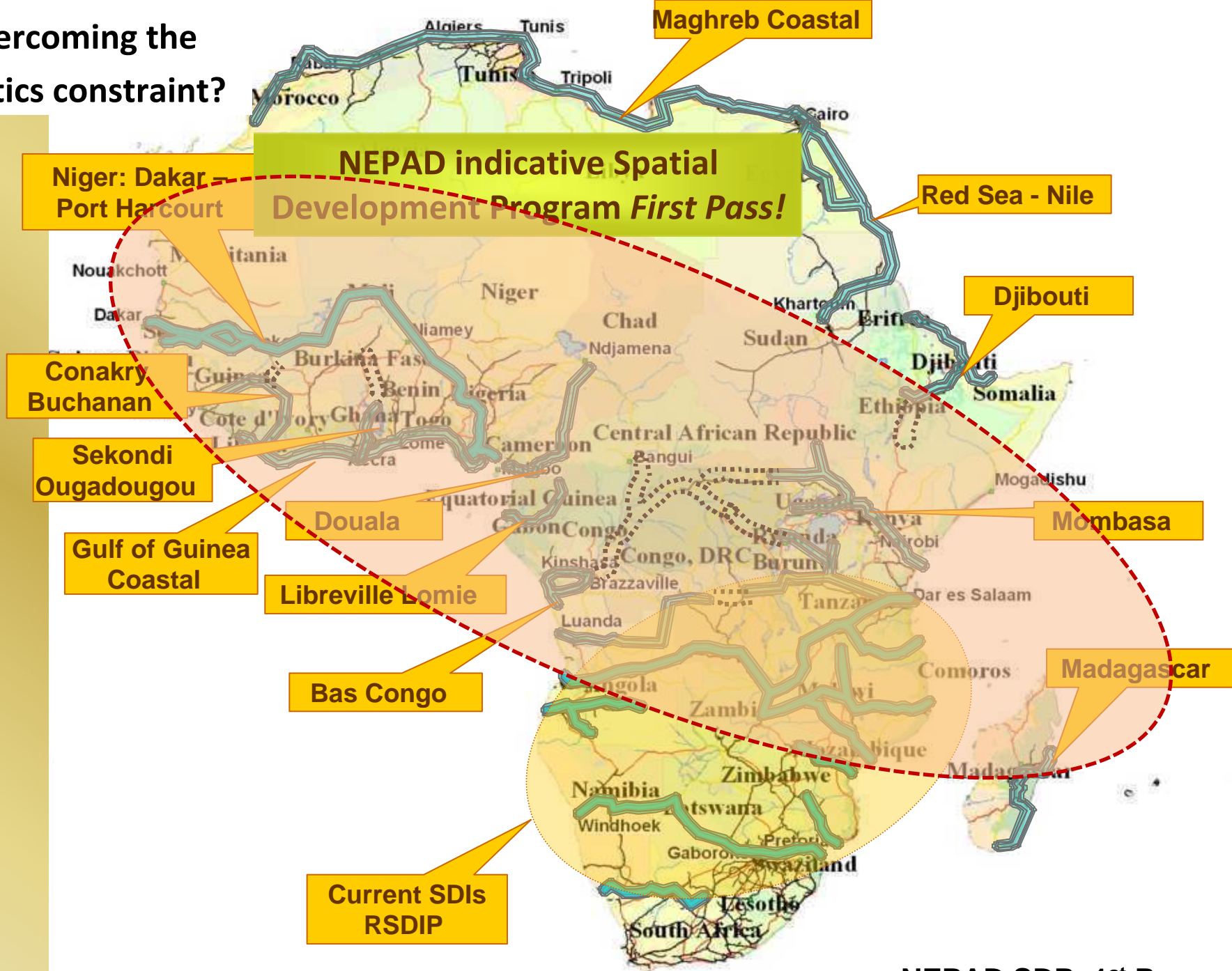
Proving Adam Smith Wrong 200y later?

“There are in Africa none of those great inlets, such as the Baltic and Adriatic seas in Europe, the Mediterranean and Euxine seas in both Europe and Asia, and the gulphs of Arabia, Persia, India, Bengal, and Siam in Asia, to carry maritime commerce into the interior parts of that great continent: and the great rivers of Africa are at too great a distance from one another to give occasion to any considerable inland navigation.”

Smith, Adam. 1976 [1776]. *An Inquiry into the Nature and Causes of the Wealth of Nations*. Chicago: University of Chicago Press (Cannan's edition of the *Wealth of Nations* was originally published in 1904 by Methuen & Co. Ltd. First Edition in 1776). page 21

Minerals could finance the infrastructure to connect the interior parts of the African continent!

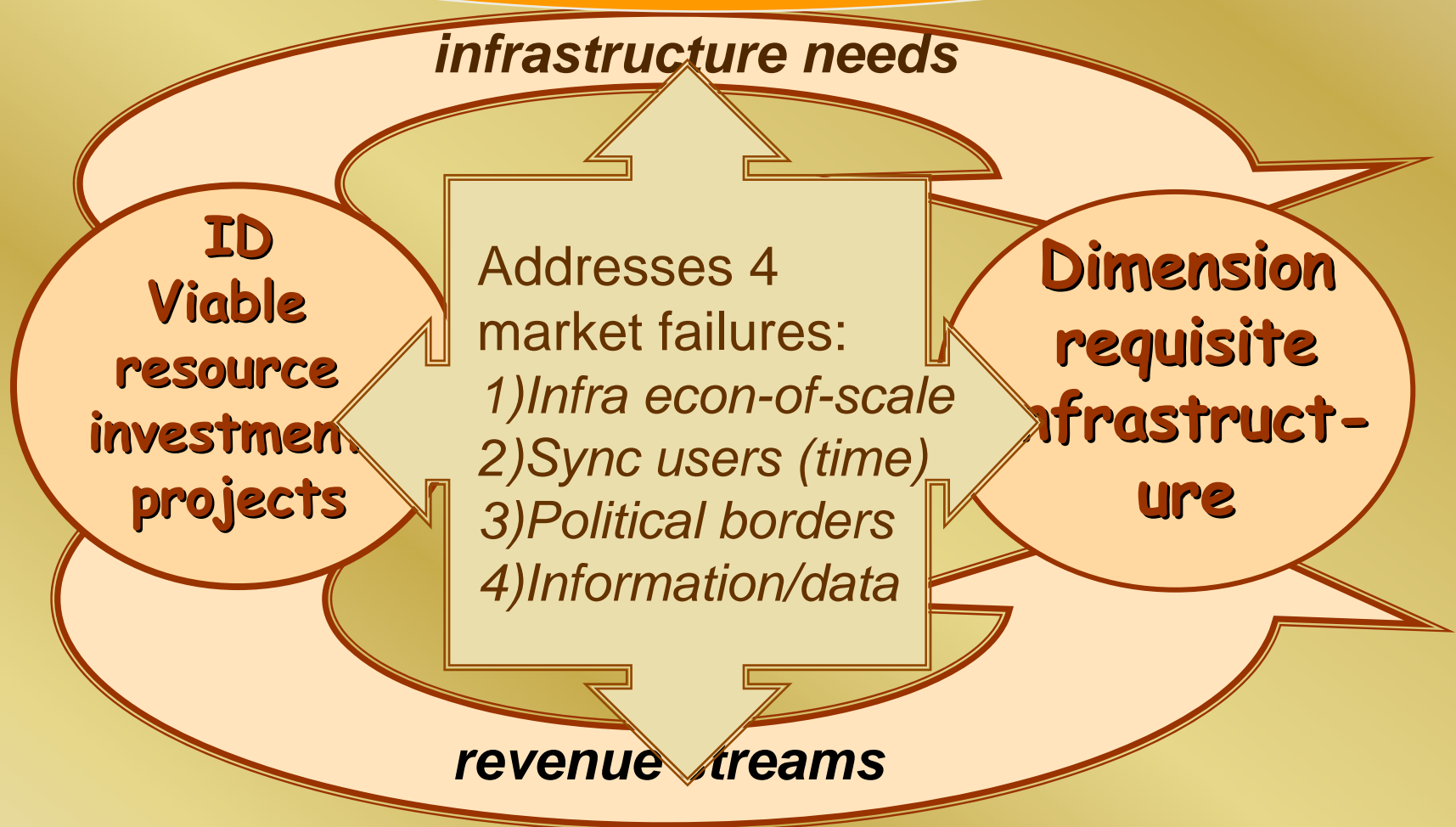
Overcoming the logistics constraint?



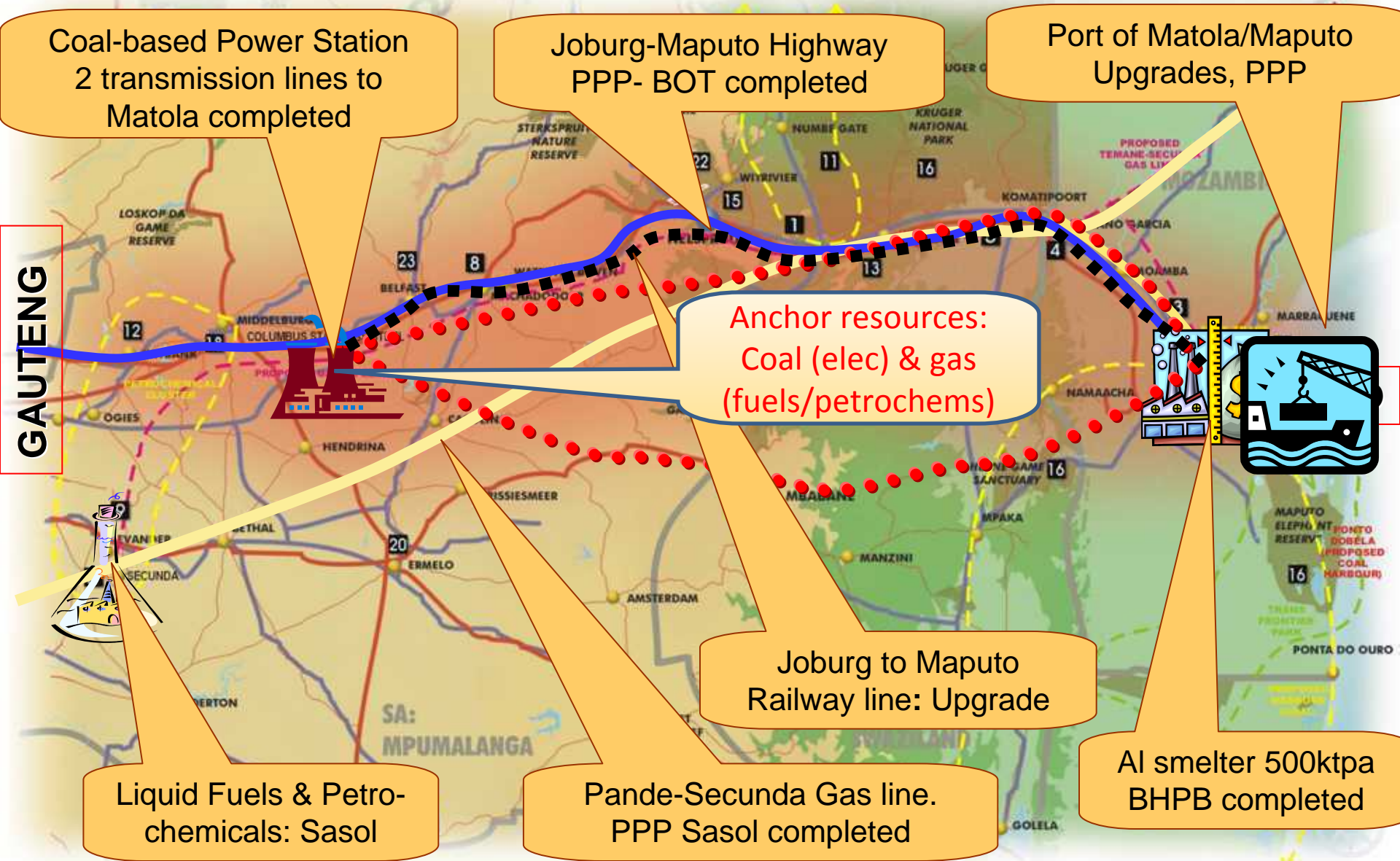
NEPAD indicative Spatial Development Program *First Pass!*

NEPAD SDP: 1st Pass

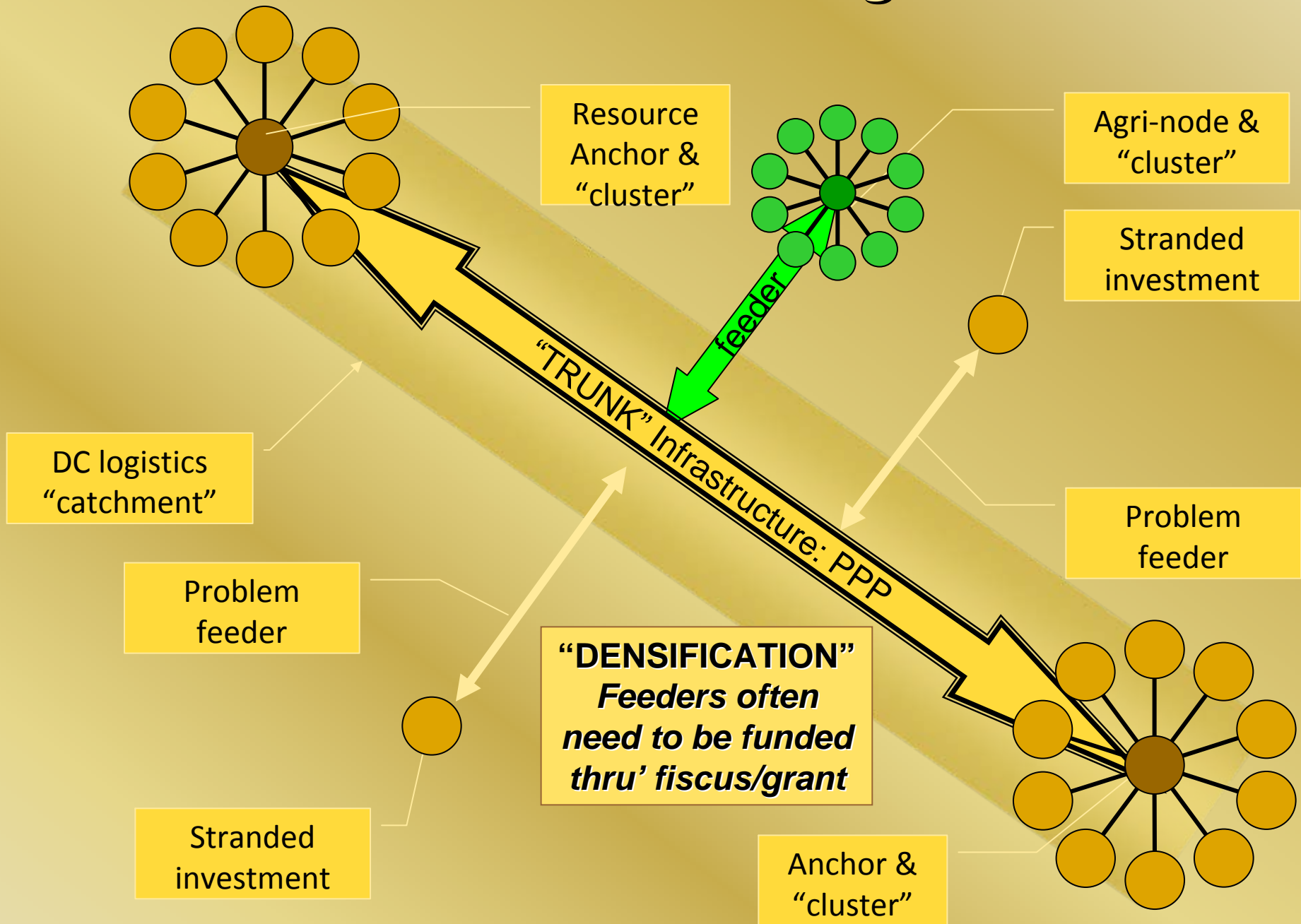
SDI/DC methodology: Synchronous INVESTMENT CONFIGURATION



Mature SDP Example: The Maputo Development Corridor



Idealised DC Configuration



Current DC Initiatives

- NEPAD SDP
- Nepad Business Initiative (NBI)
 - BAGC: Beira Agricultural Growth Corridor
- RSDIP: Regional SDI Programme
 - Central DC
 - Mtwara DC
 - Bas Congo DC
 - ANSA potential DCs
 - Luanda DC
 - Lobito DC
 - N-S (west coast) DC
 - Namibe DC
 - Walvis DC
- Mocambique SDI Unit
 - Nacala DC
 - Zambeze DC
 - Beira DC
 - N-S (east coast) DC
 - Limpopo DC
 - Lubombo DC
 - Maputo DC
- NCTTCA: Northern Corridor conversion to DC?
- Also, Logistics Corridor: N-S (central) Corridor

ANSA: Potential SDIs

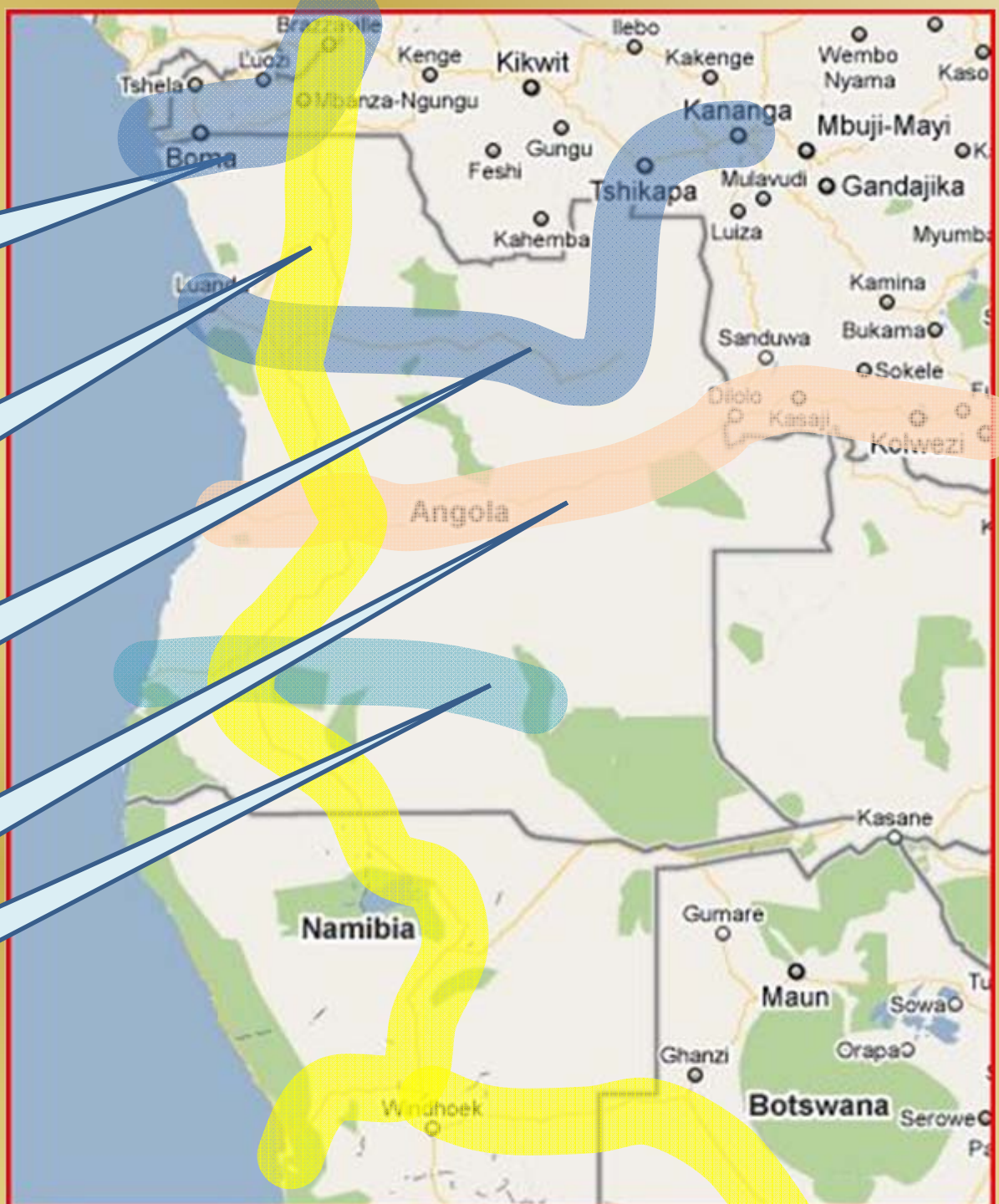
Underway: Bas
Congo SDI

Potential North –
South SDI

Potential Luanda –
Kananga SDI

Potential Lobito –
Copperbelt SDI

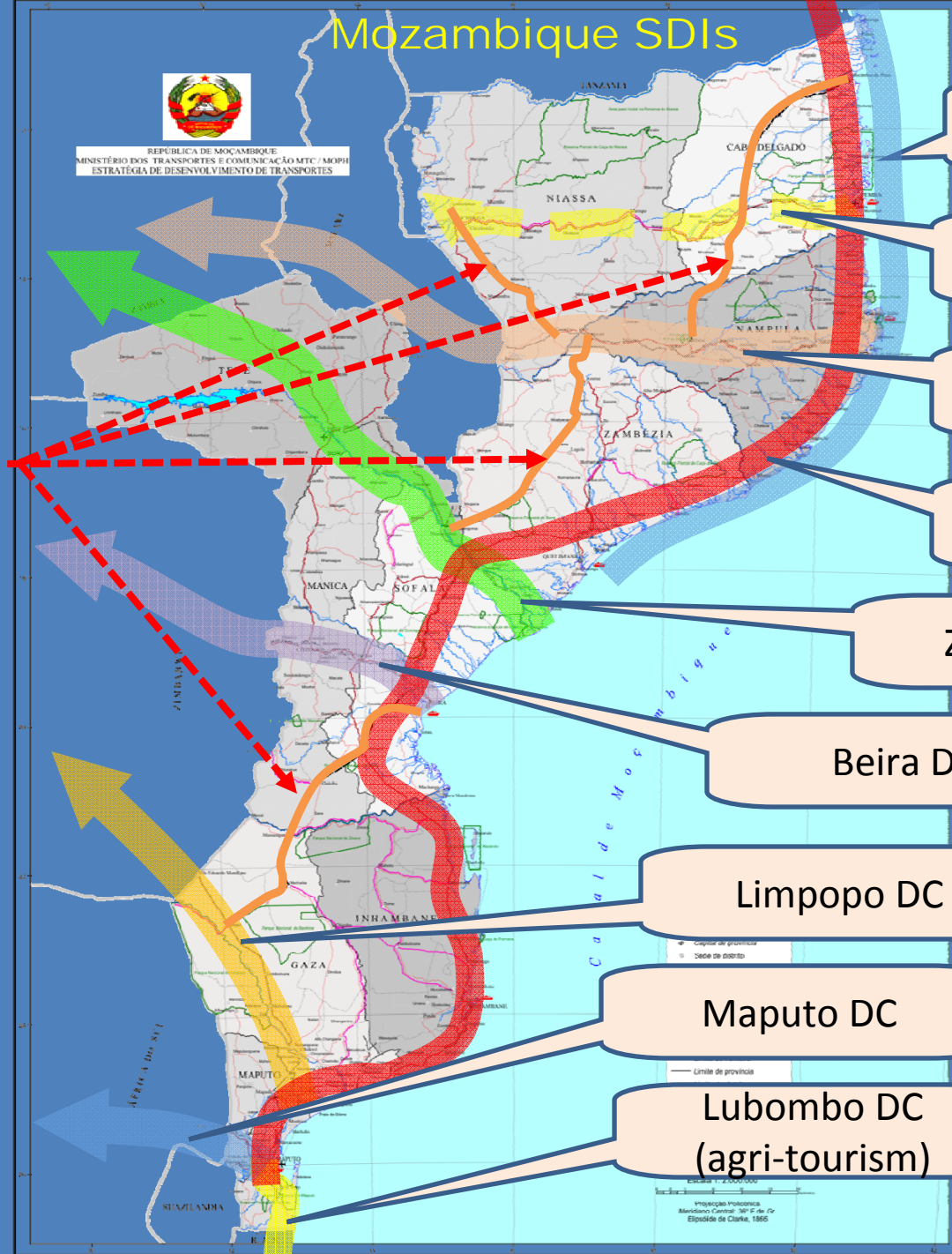
Potential Namibe –
Cuito Cunavale SDI



Mozambique SDIs



REPÚBLICA DE MOÇAMBIQUE
MINISTÉRIO DOS TRANSPORTES E COMUNICAÇÃO MTC / MOPH
ESTRATÉGIA DE DESENVOLVIMENTO DE TRANSPORTES



Great East African
Barrier Reef

Lichinga-Pemba DC?

Nacala DC

Eastern N-S DC
(agri-tourism)

Zambeze DC

Beira DC

Limpopo DC

Maputo DC

Lubombo DC
(agri-tourism)

Critical Links
(densification)

BAGC (Beira (Zambeze) Agricultural Growth Corridor) “Anchor” Projects

Zambeze SDI

Beira SDI

ROADS

ADB has committed nearly \$65mn towards the upgrading, rehabilitation and maintenance of various road projects in the Manica and Tete provinces.

RAILWAY

The Beira Corridor railroad comprises two main lines. The first is the Machipanda line linking Zimbabwe (and therefore Zambia and DRC) to Beira port. The second being the Sena Line linking Beira to Moatize (coal mines), the Malawi border and the Zambezi delta (sugar plants). The EIB and the EU have recently lent \$94mn towards the Sena Line. A further \$110mn has been committed by the World Bank for the entire project.

BIOFUELS

Principle Energy is expected to utilise 14,000ha to invest \$400mn towards Ethanol production from sugar cane. Located in Dombe, the biofuel is expected to flow out of Mozambique through Beira port. The project is expected to generate 13-15MW of extra power to be sold within Mozambique.

MINING

Tete province's coal reserves are among the largest in the world. The largest project expects to see \$1.5bn invested by Vale. Riversdale mining and Tata Steel will invest \$800mn into their Benga Project mine.

PORT

Cornelder de Moçambique is developing a programme to rehabilitate the port, returning it to its previous operating capacity. Funding commitments are as follows:

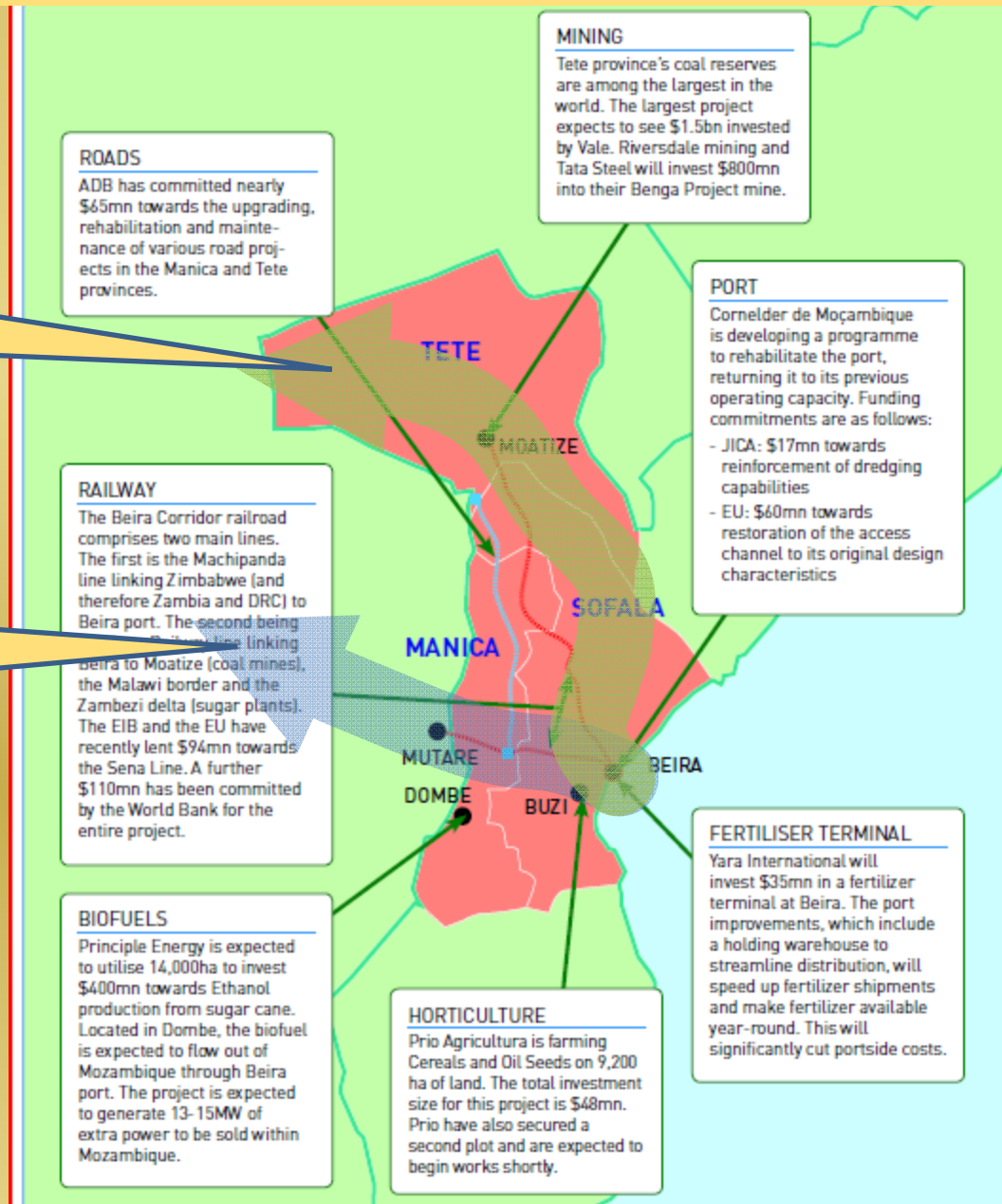
- JICA: \$17mn towards reinforcement of dredging capabilities
- EU: \$60mn towards restoration of the access channel to its original design characteristics

FERTILISER TERMINAL

Yara International will invest \$35mn in a fertilizer terminal at Beira. The port improvements, which include a holding warehouse to streamline distribution, will speed up fertilizer shipments and make fertilizer available year-round. This will significantly cut portside costs.

HORTICULTURE

Prio Agricultura is farming Cereals and Oil Seeds on 9,200 ha of land. The total investment size for this project is \$48mn. Prio have also secured a second plot and are expected to begin works shortly.



NORWEGIAN MINISTRY OF FOREIGN AFFAIRS



Requires greater integration into Moz SDI programme

Current RSDIP Development Corridor (SDI)

**NCTTCA:
Northern DC**

**Extend to
Kisangani?**

**New Rail:
Isaka-Kigali**

**Seminal Multilateral Ministerial Decision
to concession the Kigali – Dar rail as a
single seamless project!**

**CDC:
Central DC**

Central SDI: Dar to Kigali (Kisangani?) RSDIP

Countries: Tanzania, DRC, Rwanda, Burundi

Anchors: Nickel (Kabanga), Gold (Mwanza Au Belt), Ta/Nb (DRC), agriculture & agri-industries, fishing/aquaculture, tourism

Infra: rail upgrade & ext., port upgrade, road net., elec gen & grid

Legend

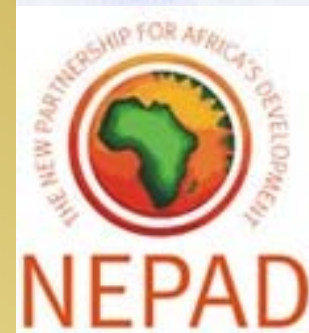
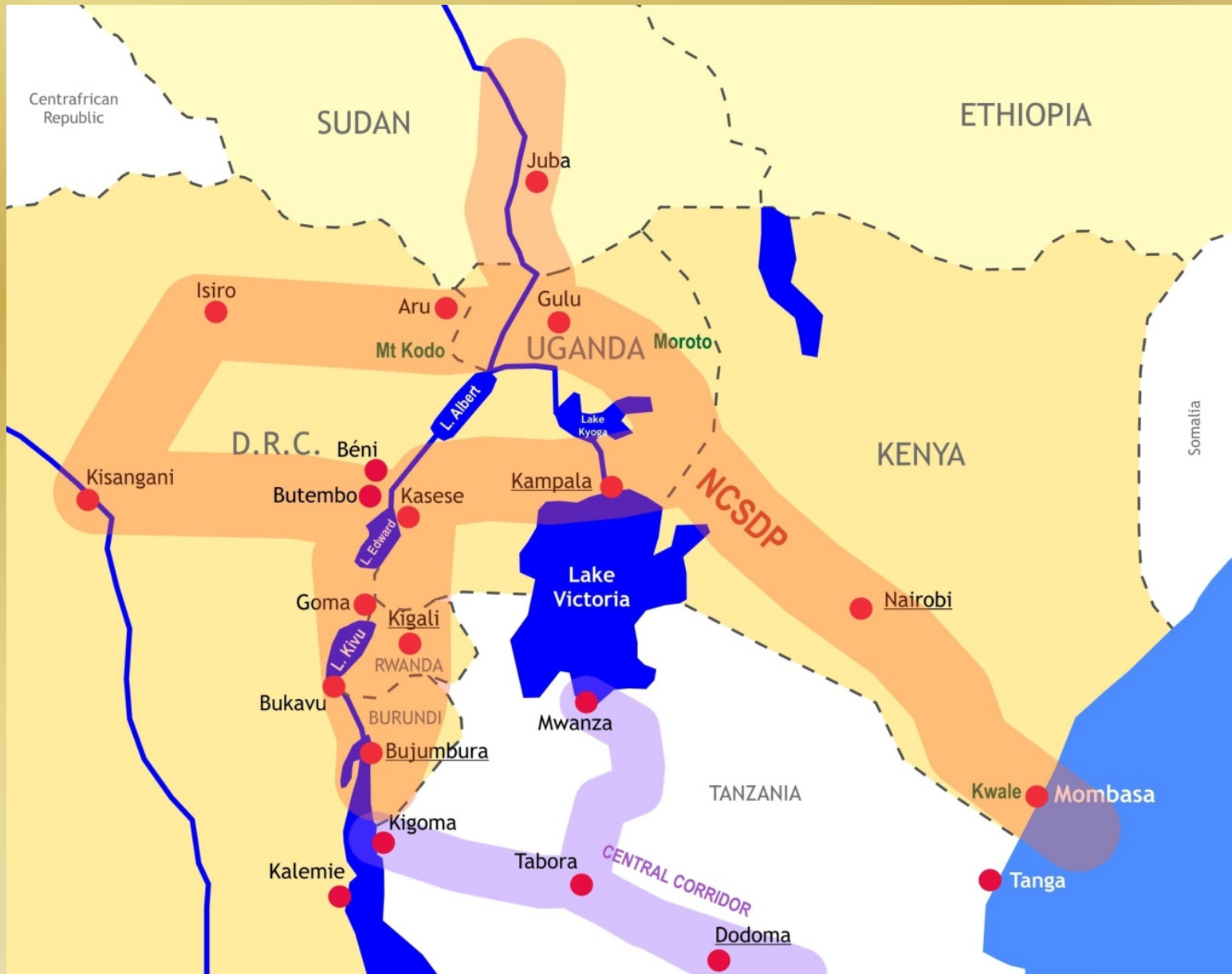
Central SDI

- 15 km
- 15 - 30 km
- 30 - 45 km

Legend

- Cities
- Major Road
- Main Road
- Secondary Road
- Rail Network
- Existing Power Grid
- Possible Power Grid
- Reserves

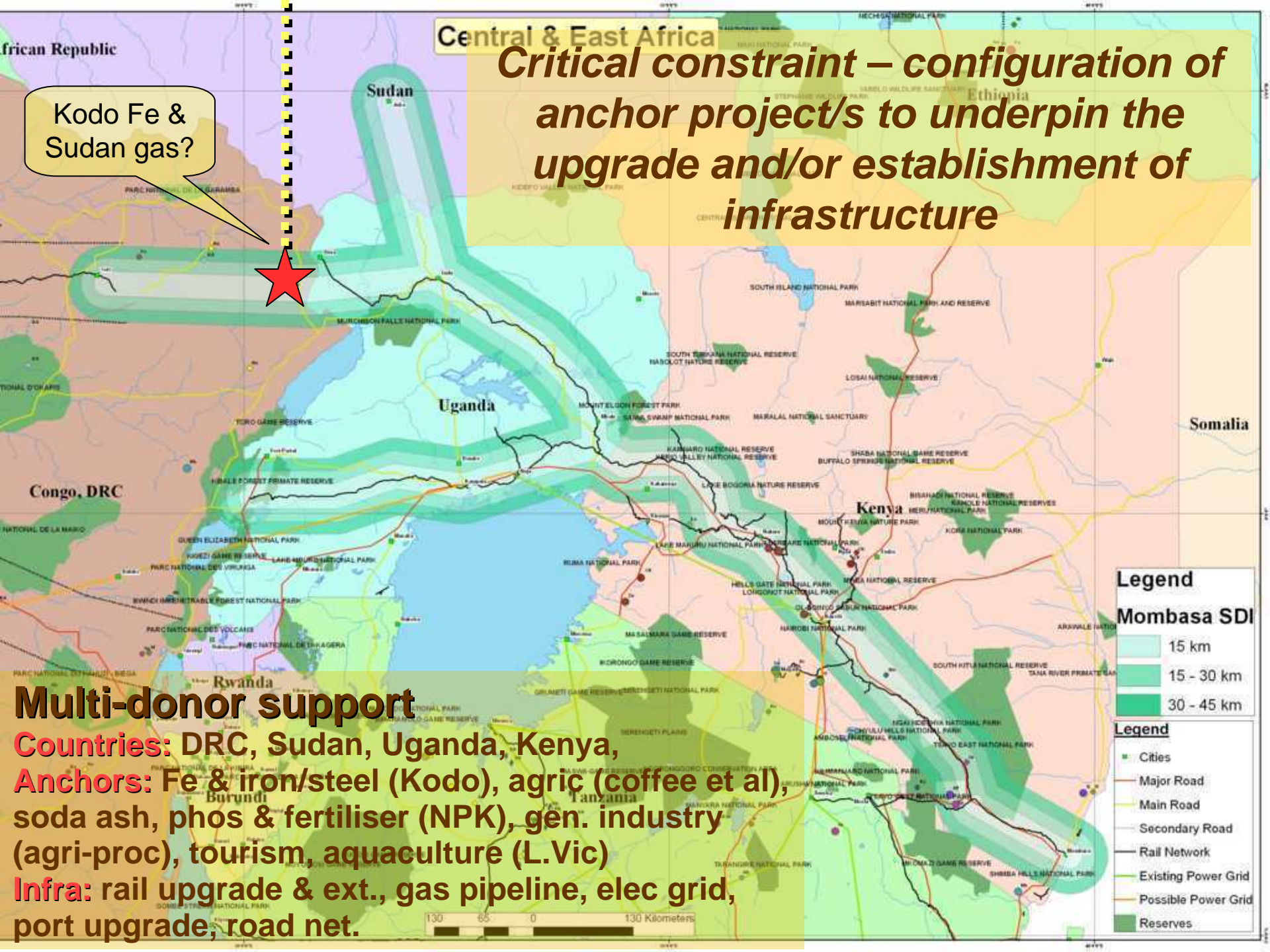
Northern Corridor: Conversion to SDI



Central & East Africa

Critical constraint – configuration of anchor project/s to underpin the upgrade and/or establishment of infrastructure

Kodo Fe & Sudan gas?



Multi-donor support

Countries: DRC, Sudan, Uganda, Kenya,
Anchors: Fe & iron/steel (Kodo), agric (coffee et al),
soda ash, phos & fertiliser (NPK), gen. industry
(agri-proc), tourism, aquaculture (L.Vic)
Infra: rail upgrade & ext., gas pipeline, elec grid,
port upgrade, road net.

Critical Interventions

- DC Concept Studies (DC viability)
- DC Project Preparation
 - Infra PPPs (transport, power, water) and
 - Resource Projects (agri-biz, tourism, forestry minerals)
- Project Development (PFS, FFS, BFS)
- Project Concessioning (transaction advisors) and Contract/lease
- Legal & regulatory framework (cross-border)
- DENSIFICATION (small-holder)
 - Logistics (feeder infra)
 - Tenure
 - Capital (micro loans)
 - Extension Services
 - Marketing
- DEEPENING: Up-, side- & down-stream investment opportunities (project prep, dev & investment facilitation)

Suggestion: Make dependent on (1) cross-border DCs (regional integration) and (2) PPPs for viable infrastructure

Thank You

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