Economics 172
Issues in African Economic Development

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Lecture 5 – January 30, 2007

2. Health factors

- Widespread tropical disease
  - Yellow fever (vector: mosquito), sleeping sickness / trypanosomiasis (vector: tse-tse fly), schistosomiasis / bilharzia (vector: snail), intestinal helminths …

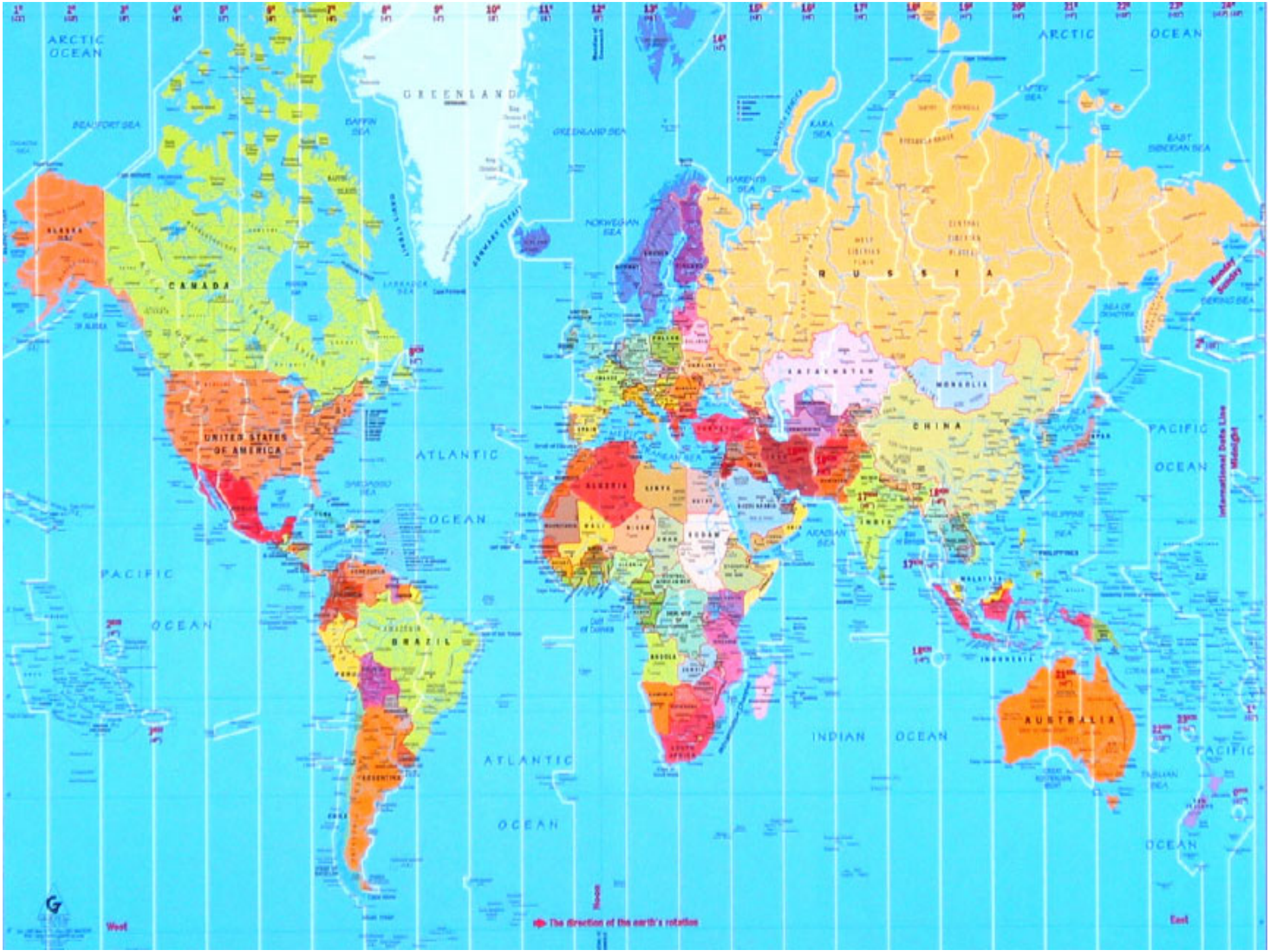
- The most important disease: malaria (vector: mosquito)
  - Kills 1-2 millions Africans every year
  - The Global Fund: over US$4 billion committed to projects in 128 countries. One quarter to fight malaria (over 60% of total targeted to African countries)

3. Transport factors

- Transport costs are critical determinants of trade and technology transfer, especially historically

3. Transport factors

- Ratio of coastline to land area is very low in Africa:
  - 1.15 in SSA, 2.54 in South Asia, 15.7 Western Europe


ARCTIC OCEAN
GREENLAND
BEAUFORT SEA
BAFFIN SEA
GREENLAND SEA
NORWEGIAN SEA
BARENTS SEA
KARA SEA
LAPTEV SEA
EAST SIBERIAN SEA
CANADA
RUSSIA
ALASKA
UNITED STATES OF AMERICA
KAZAKHSTAN
MONGOLIA
CHINA
ATLANTIC OCEAN
PACIFIC OCEAN
BRAZIL
INDIA
INDONESIA
AUSTRALIA
INDIAN OCEAN
International Date Line
Midnight
West
East
The direction of the earth's rotation

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- Major rivers to the interior (e.g., the Nile, Niger, Congo, and Zambezi rivers) have large cataracts and are only navigable locally


ATLANTIC OCEAN
Mediterranean Sea
Tropic of Cancer
Equator
Tropic of Capricorn
1000 Miles
1000 Km
Ponta Delgada
Lisbon
Madrid
Rome
Algiers
Tunis
Valletta
Athens
Ankara
Yerevan
Baku
Tehran
Baghdad
Kuwait
Riyadh
Beirut
Damascus
Jerusalem
Amman
Cairo
Tripoli
Rabat
Praia
Nouakchott
Dakar
Banjul
Bissau
Conakry
Freetown
Monrovia
Abidjan
Accra
Lome
Porto Novo
Bamako
Ouagadougou
Niamey
Abuja
NÕDjamena
Malabo
Yaounde
Sao Tome
Libreville
Bangui
Brazzaville
Kinshasa
Luanda
Khartoum
Asmara
Sanaa
Djibouti
Addis Abbaba
Mogadishu
Kampala
Nairobi
Kigali
Bujumbura
Dar es Salaam
Moroni
Lilongwe
Lusaka
Harare
Antananarivo
Windhoek
Gaborone
Pretoria
Maputo
Mbabane
Maseru
Bloemfontein
Cape Town
ALGERIA
LIBYA
EGYPT
MAURITANIA
MALI
NIGER
CHAD
SUDAN
ETHIOPIA
SOMALIA
KENYA
TANZANIA
ANGOLA
ZAMBIA
NAMIBIA
BOTSWANA
SAUDI ARABIA
IRAN
IRAQ

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- 28% of SSA population lives in land-locked countries
- Large distance from the major industrialized economies in Europe, Asia, North America (contrast: Mexico)

The Curse of the Tropics?

- “At the root of Africa’s poverty lies its extraordinarily disadvantageous geography, which has helped to shape its societies and its interactions with the rest of the world.” Bloom and Sachs (1998), p. 211

- Agricultural factors
- Health factors
- Transport costs

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- **Health factors**
- Transport costs

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OR

- Income → Purchases of all goods, including healthcare

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Omitted variables / Confounding

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  (Acemoglu, Johnson and Robinson 2001)

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More tropical disease

→ Less European residential settlement

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OR

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Bloom and Sachs (1998) versus Acemoglu, Johnson, Robinson (2001)

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- If Bloom and Sachs are correct, then the key to dealing with African's geographic inheritance is addressing the tropical disease burden today

- If Acemoglu, Johnson, and Robinson are correct, then the key to dealing with African's geographic inheritance is addressing the quality of government institutions today

Another approach: analysis with “micro-data”

- Both Bloom and Sachs (1998) and AJR (2001) focus on broad country-level historical trends
- But establishing causality and theoretical channels is exceedingly difficult in that setting

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- Another approach uses data at the level of individuals, communities, or firms to test theories about the link between health and wealth
- Problem Set #1 will feature some analysis of this kind

- For next time: Read Miguel (2005)

Whiteboard #1

Whiteboard #2

Whiteboard #3

Whiteboard #4

Whiteboard #5


Map of Africa
TUNISIA
Mediterranean Sea
MOROCCO
IRAQ
IRAN
Canary Islands (SPAIN)
ALGERIA
LIBYA
EGYPT
Persian Gulf
WESTERN SAHARA
SAUDI ARABIA
MAURITANIA
MALI
NIGER
Red Sea
CHAD
ERITREA
SENEGAL
GAMBIA
Lake Chad
BURKINA
SUDAN
DJIBOUTI
GUINEA BISSAU
GUINEA
GHANA
BENIN
SOMALIA
NIGERIA
SIERRA LEONE
IVORY COAST
Lake Volta
TOGO
ETHIOPIA
LIBERIA
CENTRAL AFRICAN REPUBLIC
CAMEROON
Lake Rudolf
EQUATORIAL GUINEA
UGANDA
KENYA
SAO TOME & PRINCIPE
GABON
CONGO
ZAIRE
RWANDA
Lake Victoria
BURUNDI
TANZANIA
Lake Tanganyika
ANGOLA (Cabinda)
MALAWI
Lake Nyasa
ANGOLA
ZAMBIA
Lake Kariba
MOZAMBIQUE
MADAGASCAR
ZIMBABWE
NAMIBIA
BOTSWANA
SOUTH AFRICA (Walvis Bay)
SWAZILAND
LESOTHO
SOUTH AFRICA

Map of Africa