* Angola's rebel leader Jonas cut bargains w/
* Diamonds—precious gem—have Botswana &South Africa. Angola:
* ppl use diamonds to fund costly bloody civil wars.
* Rebel groups & Angolan gov sold diamonds on the world market & used $ for weapons.
* killed more than 500,000 Angolans & left more than 4 million homeless.

**A Vast Plateau**

* shape & landforms r result of loc. in the S. part of *Pangaea* 200 mill. yrs ago
* Africa moved very little.

**AFRICA'S PLATEAU**

* huge plateau covrs most of Africa
* rises inland frm narrow lowlands along the coast
* xcept Mozambique &Somalia coasts, most continent is at least 1,000 ft above sea level
* geographers refer Africa—world's 2nd largest continent—as "plateau continent."   
    
  **BASINS &RIVS**
* several huge [**basins**](javascript:openFootnoteWindow('http://images.classwell.com/mcd_xhtml_ebooks/2002_world_geo/footnotes/wg03_b.html');)thruout plateau
* Each basin spans more than 625 mi. across & 5,000 ft deep.
* H20 collects in Chad Basin, & rivs flow thru the Sudan, Congo, & Djouf basins.
* [**Nile Riv**](javascript:openFootnoteWindow('http://images.classwell.com/mcd_xhtml_ebooks/2002_world_geo/footnotes/wg03_n.html');)**:** provided irrigation for 1000s of yrs.
* More than 95% of Egyptians depend on the Nile for H20.
* average pop. density along Nile is more than 3,320 ppl per square mi
* average pop. density of 177 ppl per square mi. in all of Egypt.   
     Africa's rivs contain many H20falls, rapids, &gorges.
* less useful for transportation than shorter rivs
* 2,900-mi.-long Congo Riv continent's largest network of H20ways.
* 32 cataracts, / H20falls, makes large portions of riv impassable.
* meandering courses difficult to use for transportation
* Niger Riv begins in W. Africa & flows N. to Sahara, forms an interior delta & turns to SE. cuts thru Nigeria &forms another delta & empties into Gulf of Guinea.

**Distinctive African Landforms**

* no long chain of mts. but valleys &lakes   
    
  **RIFT VALLEYS &LAKES**
* distinctive landforms in East Africa.
* continental plates pulled apart ovr millions of yrs, huge cracks appeared on earth.
* land sank=**rift valleys.** stretch ovr 4,000 mi.s frm Jordan in Southwest Asia to Mozambique in Southern Africa.
* eastern part of Africa is pulling away frm rest of Africa.
* lakes formed at the bottoms of some rift valleys
* unusually long &deep
* Lake Tanganyika: longest freshH20 lake in world, stretches 420 mi.s &reaches depth of more than 4,700 ft.
* Africa's largest lake, Lake Victoria, sits in shallow basin btwn two rift valleys. world's 2nd largest freshH20 lake, only 270 ft deep

**MTS.**

* contains mainly volcanic mts.s.
* Mt. Kenya &[**Mt. Kilimanjaro**](javascript:openFootnoteWindow('http://images.classwell.com/mcd_xhtml_ebooks/2002_world_geo/footnotes/wg03_m.html');)**,** Africa's highest mts., both volcanoes.
* Volcanic activity produced in Ethiopian Highlands, Tibesti mts.s in Sahara, & Mount Cameroon in W. Africa
* volcanic rock covrs Great Escarpment in S. Africa: marks edge of continent's plateau in S. Africa.

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| **ECONOMIC DEVELOPMENT**  **Oil Pipeline** |
| ppl of Chad &Cameroon:construction of new 665-mi. oil pipeline  new income frm the oil, Chad plans to improve edu., social services, & infrastructure.  leaders concerned cuz past African oil exploration caused corruption, civil wars, povrty, & serious environmental damage.  ppl in Cameroon worry cuz the pipeline travels thru otherwise untouched tropical rain forest.  represents a test for new African development policies.  **Africa's Wealth of Resources**    * huge amount of the world's minerals But lack industrial base & $ to develop them.   **A WEALTH OF MINERALS**   * minerals make it 1 of world's richest continents. * contain large amounts of gold, platinum, chromium, cobalt, copper, phosphates, diamonds * South Africa is world's largest producer of chromium used in manufacturing stainless steel &  produces nearly 80 % of world's platinum &nearly 30 % of world's gold. * African nations produce about 42 % of the world's cobalt, used in high-grade steel for aircraft & industrial engines, mostly frm the Democratic Republic of the Congo & Zambia. * ores & minerals more than 1/2 of total value of Africa’s exports. * not meant economic prosperity for most of its pop. * European colonial rulers developed Africa's nat. resources for export to Europe to manufacture goods there. * many African nations slow to develop infrastructure & industries to turn resources to valuable products  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  |  | | --- | --- | | **OIL RESOURCES**   * Libya, Nigeria, &Algeria r among world's leading petroleum producers. * Angola &Gabon have huge untapped oil reserves. * Libya, Nigeria, Algeria, &Angola combine to produce ovr 7 % of world's oil.   Recentl discovred offshore oil deposits will likely enable Angola to pass Nigeria as Africa's most oil-rich country. * American oil companies pay Angola fee for drilling rights & the oil. * Angolan gov spends $ on ongoing civil war caused in part by ethnic divisions resulting frm yrs of colonialism * Angola invests little $ in schools, hospitals, / other public infrastructure   **Diversity of Resources**    * rain forests &rivs, possesses diversity of resources.   **MJR COMMODITIES**   * After oil, coffee is most profitable commodity in Africa * few Africans drink coffee, continent grows 20 % of world's supply. * Lumber is another commodity which Nigeria leads African nations in lumber exports & ranks 8th worldwide * logging is depleting Africa's forests * Every yr loggers clear land in Africa about X2 size of New Jersey. * Other mjr commodities: sugar, palm oil, &cocoa. * Côte d'Ivoire: world's largest exporter of cocoa beans main ingredient in chocolate. * Agriculture: single most important economic * 66 % of Africans earn their living frm farming * farm products account for 1/3 of continent's exports. * Farmers benefit frm Africa's climate * 1352, 48-yr-old Ibn Battuta, traveler frm Morocco, set out for Mali in W. Africa. challenging obstacle was Sahara, nearly same size as the continental United States. Began February. * traveled only in early morning &early evening to avoid the midday heat still battled temps of nearly 100° during day & freezing temps at nite. * Reaching empire around April more than 1,000 mi. on foot. * fewer than 2 million of Africa's approx 800 mill ppl live in it.   **A Warm Continent**   * lies almost entirely btwn the tropic of Cancer & Capricorn. * loc. gives most of Africa warm, tropical temps.   **THE DESERTS**   * Sahara:"desert" in Arabic. * 3,000 mi. across continent, frm the Atlantic Oc. to the Red Sea, & runs 1,200 mi.s frm N-S. * Temps high as 136.4°F in summer & fall below freezing at nite in winter.  20 % of the Sahara consists of sand. * rest: towering mts.s, rock formations, &gravelly plains * Tibesti mts: located in NW Chad 11,000 ft. * Other deserts:Kalahari & Namib.  camel as desert transportation. * can go for up to 17 days w/out H20. * wind-blown sand -> closes its nostrils &just keeps walking.  6,000 ft under r [**aquifers**](javascript:openFootnoteWindow('http://images.classwell.com/mcd_xhtml_ebooks/2002_world_geo/footnotes/wg03_a.html');)**.** * this H20 has come to the surface at [**oasis**](javascript:openFootnoteWindow('http://images.classwell.com/mcd_xhtml_ebooks/2002_world_geo/footnotes/wg03_o.html');) & supports vegetation, wildlife & resource for ppl living in desert.   **THE TROPICS**   * largest tropical area * 90% of the continent lies w/in the tropics of Cancer & Capricorn * Temps run high most of yr. * hottest places r in Sahara that lie in Somalia: July temps average btwn 110°F &115°F almost every day. * Differences in temp btwn winter &summer in the Tropics r barely noticeable. Differences in temp btwn nite &day difference btwn seasons. * nitetime is the "winter" of the tropics   **Sunshine &Rainfall**    * rainfall can vary greatly frm yr to yr & season to season. * variations have impact on E. Africa, endured several droughts in the 1980-90s.   **RAINFALL PATTERNS**   * rain forest in Central Africa receives most precipitation as rain falls thruout the yr. * rest:1 or 2 rainy seasons. * tropical savanna stretches thru middle of continent & covrs ½ the total surface area w/ rain season last to 6 months * closer to equator=longer rainy season. * closer to desert=longer dry season.  W. coast around Monrovia, Liberia, experiences more than 120 inches. * parts of Africa barely get 20 inches of rain ovr the course of a yr. * In the Sahara & other deserts no rain for yrs.   **AFRICA'S MODERATE AREAS** * Mediterranean climate exists on N&S tips of the continent w/ Clear, blue skies * Rain falls usually only in the winter—December &January in N. Africa &June &July in S. Africa. * Summer temps in Johannesburg, 68°F.   **A Grassy Continent**    * Africa's vegetation mirrored N&S of the equator * Africa's vegetation: grasslands, rain forests   **TROPICAL GRASSLAND**   * Tropical grassland covrs most of the continent. [**Serengeti Plain**](javascript:openFootnoteWindow('http://images.classwell.com/mcd_xhtml_ebooks/2002_world_geo/footnotes/wg03_s.html');):in N. Tanzania. dry climate &hard soil = notrees/crops,but grass yes. * Serengeti Nat. Park contains some of the best grasslands in world. * grasses can grow taller than average person & abundance ideal place for grazing animals. * Huge herds of wildebeests, gazelles, &zebras * largest numbers of land mammals make annual migrations   **Africa's Extremes**    * enormous tropical rain forest across Central Africa.   **RAIN FOREST**   * mjr rain forests sit on equator: Congo Basin. * 1 square acre contain almost 100 different kinds of trees. * home to 100s of species of birds. * massive # of plants, leaves, & trees block out sun that would hit floor * Beneath vegetation air is hot & filled w/ moisture= quick decompose, / decay. * a fallen leaf in Europe decomposes in yr. jungle floor: 6 weeks. * animals live in [**canopy**](javascript:openFootnoteWindow('http://images.classwell.com/mcd_xhtml_ebooks/2002_world_geo/footnotes/wg03_c.html');): uppermost layer of branches 150 ft above the ground. * Birds, monkeys, &flying w/ large # of snakes live in these rain forests * Gaboon viper, largest African viper, 18 pounds fangs more than 2 in. long. * black-necked cobra, shoot venom more than eight ft thru air. * farmers using slash-and-burn agricultural methods endanger rain forest. * responsible for nearcomplete destruction of Madagascar's rain forest. * ovr 1/2 of Africa's original rain forest destroyed.   **VARIETIES OF PLANTLIFE**   * N.Africa: sizable oak &pine forests in Atlas mts * W.Africa: mangrove tree w/ roots asbreeding grounds for fish, build up dry land by holding silt. * [**Niger delta**](javascript:openFootnoteWindow('http://images.classwell.com/mcd_xhtml_ebooks/2002_world_geo/footnotes/wg03_n.html');)**:** region w/ most of Nigeria's oil. * July 10, 2000 explosion, &a fire spread along a mi.-long stretch of the pipeline & killed more than 300 ppl * Nigeria: 1 of top oil producers in the world, cost 1000s of lives & mjr environmental ruin * **Desertification of the Sahel** [**Sahel**](javascript:openFootnoteWindow('http://images.classwell.com/mcd_xhtml_ebooks/2002_world_geo/footnotes/wg03_s.html');)means "shore of the desert" in Arabic. * narrow band of dry grassland runs E-W along S. edge of Sahara. * Used for farming & herding * 1960s: desert spread intoSahel called [**Desertification**](javascript:openFootnoteWindow('http://images.classwell.com/mcd_xhtml_ebooks/2002_world_geo/footnotes/wg03_d.html');)   Normally nature's long-term cycle, but human activity speedup  **HUMAN CAUSES OF DESERTIFICATION**   * allowing ovrgrazing of vegetation by livestock exposes the soil & trample the soil, more vulnerable to erosion.     Farming: clear the land to plant crops expose the soil to wind, cause erosion. * farmers drill for H20 to irrigate crops, * Widespread drilling & more irrigation increase salt levels in soil, prevent the growth of vegetation.     Increasing pop. Levels: more ppl require more food. * farmers continue to clear more land for crops, burn more wood for fuel, & ovrfarm   **RESULTS OF DESERTIFICATION**   * large forests once existed around Khartoum, Sudan. * desertification destroying tropical rain forest around Lake Chad S. edge of Sahel. countries have increased tree planting & promoted more efficient use of forests &farmland to slow process * **Harming the Environment in Nigeria**  discovry of Rich oil deposits in the Niger delta 1965made Nigeria one of Africa's wealthiest countries. * drilling for oil, the Nigerian gov &foreign oil companies damaged land &harmed the ppl living in the Niger delta.   **A MJR OIL PRODUCER**   * Nigeria = sixth leading oil exporter in the world (Two million barrel extracted / day, much shipped to the United States. * Oil = 80 to 90 % of Nigeria's income.  1970s, high oil prices made Nigeria one of wealthiest nations in Africa so gov borrowed heavily against the future sale of its oil. However, oil prices fell, &the Nigerian gov owed millions to other nations, including the US. * Mismanagement, poor planning, corruption, decline in prices left Nigeria poorer than before oil boom.   **DESTROYING THE LAND &PPL**   * damage caused by oil companies &the Nigerian gov has been severe—over 4,000 oil spills have occurred in the Niger delta ovr the past four decades. * Cleanup operations=slow &sometimes non-existent. * Fires often resulted, causing acid rain &massive deposits of soot, so ppl in region contracted respiratory diseases. * btwn 1998 &2000, oil pipeline explosions killed over 2,000 ppl—including three of Akierou Awe's sons. * Many explosions were not accidents but were intentional. Bandits, in cooperation w/ corrupt gov officials &the military, drain fuel frm the pipelines &then resell it. In 1999, these bandits damaged about 500 pipelines * after bandits finish draining oil, local villagers arrive to collect any spilled oil & sell it   **A NEW START**   * May 1999, Olusegun Obasanjo became Nigeria's new president-former Nigerian military leader but has distanced himself frm the armed forces. * He started many economic reforms &fired corrupt gov officials. * Now he has task to find ways for Nigeria to benefit frm oil. * **Controlling the Nile**  Egypt faces environmental challenges caused by resource—H20. * Thruout history, the Egyptians tried to control flooding of the Nile Riv. * Ancient Egyptians built canals &small dams. * ppl still experienced cycles of floods &droughts. * To solve these problems, Egyptians completed first Aswan Dam on the Nile in 1902,-became outmoded. * **THE ASWAN HIGH DAM** Four mi.s upriv frm the first Aswan Dam, Egyptians cut huge channel thru the land beside the Nile Riv. * builders used rocks frm the channel as a base for new creation—the [**Aswan High Dam**](javascript:openFootnoteWindow('http://images.classwell.com/mcd_xhtml_ebooks/2002_world_geo/footnotes/wg03_a.html');)—was completed in 1970. * Lake Nasser, which Egypt shares w/ Sudan, is artificial lake created behind the dam. It stretches for~300 mi.s. * The dam gives farmers regular supply of H20. * It holds the Nile's floodH20s, releasing them as needed so that farmers can use the H20 effectively for irrigation. * As a result of the dam, farmers can have 2-3 harvests per yr rather than one. * Irrigation canals even keep some fields in continuous production thru the use of artificial fertilizers. * The dam has increased Egypt's farmable land by 50 and helped Egypt avoid droughts &floods.   **PROBLEMS W/ THE DAM**   * During the dam's construction, many ppl had to be relocated, including thousands of Nubians, whose way of life was permanently changed. * In addition, one of ancient Egypt's treasures, the temples at Abu Simbel, had to be moved. Other smaller ancient treasures could not be saved &now lie at the bottom of Lake Nasser. * The dam also decreased the fertility of the soil around the Nile sincefor one, riv no longer deposits rich [**silt**](javascript:openFootnoteWindow('http://images.classwell.com/mcd_xhtml_ebooks/2002_world_geo/footnotes/wg03_s.html');)**,** / sediment, on the farmland--Farmers must now rely on expensive artificial fertilizers to enrich the soil. * Second, this yr-round irrigation has resulted in a rising H20 table in Egypt. As a result, salts frm deep in the earth have decreased the fertility of the soil. * Before the dam was built, floodH20s flushed out the salt. Now expensive field drains have to be installed. * Rates of malaria &other diseases have increased due to greater numbers of mosquitos, that love still H20s of Lake Nasser &the irrigation canals. * since Lake Nasser holds the floodH20s, Egyptians lose millions of gallons of fresh H20 every yr to evaporation. * Measuring the success of the Aswan High Dam is difficult. For all the ways it has helped Egyptians, it has also created new problems. |  | | | | | | http://delta.classwell.com/ebooks/images/topnav/clear.gif | |