19. Africa – Ecology problems

Droughts and desertification cause local and regional food shortages => people suffering from *malnutrition*. People starve if:

- they are unable to acquire food from elsewhere (abroad),
- they don´t have enough money to buy food,
- there´s nothing to buy because the distribution system doesn´t work.

African countries = amongst the poorest in the world => <u>people starve especially in rural areas</u>.

Famine

= occur when (and where) both the environmental and human systems function badly.

<u>In Africa:</u> 1970s and 1980s, in countries of Sahel and Ethiopia *famine = the outcome of droughts*. People were too poor to purchase supplies (food) from outside + problems with distribution => *refugees* in Sudan (from Chad and Ethiopia).

In most of these cases the people who suffer are the *poor people of remote rural areas* ⇔ they don´t have enough (any) money to pay for food => these poor people:

- first sell first their animals
- then sell their meager possessions
- finally eat their seeds for next year´s planting
- eventually there´s no alternative for them but to *move to places where they think there may be a chance to survive.*

The old and the very young are most at risk.

Reasons why food is scarce (lack of food): droughts, floods, pests, conflicts.

<u>Food aid and famine-risk areas</u>

= saves lives but it can´t prevent the survivors suffering in the long-term from the effects of hunger and the diseases associated with it.

= risks of upsetting (decrease of) local production and marketing systems in the long run.

Famine-risk areas – around both of the Tropics:

- *Cancer* – Mauritania, Mali, Niger, Chad, Sudan, Ethiopia, Eritrea, Somalia (Sahel zone)
- *Capricorn* – Angola, Botswana, Zambia, Zimbabwe, Mozambique

Droughts

= condition when much less rain is received than might normally be expected => *environmental degradation*.

= common along desert margins (Sahel zone)

= outcome of *global warming* (global climate change) ⇔ human activities, e.g. clearing the woodland (cutting the trees) and thereby reducing the plant cover in S Sahara has increased the Earth´s albedo.

Increased *aridity* and deterioration of the plant cover (result of grazing and cultivation) => winds at the desert margins generate more *dust* and this, heated by the sun, creates a warm layer through which clouds will not grow by convection to reach the dew point => *prevents precipitation*.

Desertification and soil erosion

= "dessication", reduction of the biological productivity to low levels = result of human action in semi-arid areas.

= environmental degradation accompanying the destruction of forests in humid regions.

<u>Soil erosion</u> = a serious menace => remote areas were set-aside as game & forest reserves. Erosion of a topsoil (humus) and removal of the plant cover reduces infiltration of water into the soil and allows rapid surface run-off.

- e.g. desertification of Sahara (last 50 yrs. = 100 kms southward shift)

White man has come to Africa as a settler and trader, building roads, railways, mines and disrupting traditional land-use practices and whole native African societies.

Without involving local people in the planning and implementation of development projects, little progress will be made.

Keywords:

famine, drought, desertification, malnutrition, starving, albedo, Sahel, refugees, environmental degradation