Population Pressure
and
Technological Change
Plan of Action
6/17/04

Topic: Population Change and Technology

(1) Review Quiz
(2) Boserup
(3) Results of Change in Agricultural Technology: A Drier Planet?
Ester Boserup
(1910 – 1999)
Boserup’s Questions

(1) What causes people to change how they farm?
   - Particularly what social conditions

(2) What is the relationship between changing agricultural technologies and productivity?
Boserup's Challenge to Malthus

“Population growth is here regarded as the independent variable which in its turn is a major factor determining agricultural developments.”

-Boserup, p. 11
Changing Agricultural Technologies

(1) Long Fallow (Rudimentary Technology)
   Forest Fallow
   Bush Fallow

(2) Short Fallow (Ploughs)
   Natural Grazing
   Produced Fodder

(3) Intensive Cropping (Irrigation)
   Annual Cropping
Key Conclusions

(1) Population Density causes technological change in farming
   - As population density increases, it reaches a critical mass that spurs changes in agricultural technologies

(2) Productivity (output per person hour) decreases with greater technology
   - More people
   - People work more