

Agricultural Revolutions

Neolithic Revolution (First Agricultural Revolution)

Hunters/gathers

Plant/animal domestication around Fertile Crescent

Subsistence Agriculture

Primarily for direct consumption

Civilization

Rise of culture, govts, econs

Still common practice in Africa

Shifting cultivation

Farmers move for better land

Primarily in subtropical zones where soil becomes infertile

Slash & Burn

Farmers use tools slashing vegetation and then set fire

Ash contributes to soil's fertility

2nd Agricultural Revolution

Industrial Revolution 17th c

Enclosure + population increase

Tools

Seed drill/horse collars

Crop rotation/Breeding

First commercial agriculture

Primarily for selling

Cash crops

Cotton, tobacco, indigo

Luxury crops

Coffee, cocoa

Von Thunen Model

1st effort to analyze spatial character of economic activity

deals w/ interaction of land use & transportation costs

frequently still explains agricultural patterns

as you get closer to the city, price of land increases

3rd Agricultural Revolution

aka Green Revolution

1930s American Midwest

experimenting w/ technologically manipulated seed varieties & fertilizers to increase crop yields

1982: IR36 produced-resistance against 15 pests + growing cycle of 110 days w/ warm conditions

brings new high-yield varieties of wheat/corn/rice

criticisms

impacts of genetically modified plants

potential for disease resistant plants

large scale monocropping

make farms vulnerable to change in climate or

infestation of particular pests

higher inputs of chemical fertilizers, herbicide can reduce

organic matter in soil

economic argument

doesn't alleviate poverty in small farms