

UNIT V

EMERGING ISSUES

Global environmental governance – alternate culture systems – Mega farms and vertical farms – Virtual water trade and its impacts on local environment – Agricultural environment policies and its impacts – Sustainable agriculture.

AGRICULTURAL ENVIRONMENT POLICIES AND ITS IMPACTS

Agricultural policy describes a set of laws relating to domestic agriculture and imports of foreign agricultural products.

Governments usually implement agricultural policies with the goal of achieving a specific outcome in the domestic agricultural product markets.

Agricultural policies are pathways of improving the activities involve in cropping, livestock, forestry, processing and marketing of agricultural product .

Agricultural policies are predetermined goals, objectives and pathway set by an individual or government for the purpose of achieving a specified outcome, for the benefit of the individual(s), society and the nations' economy at large.

Agricultural policies take into consideration the primary, secondary and tertiary processes in agricultural production.

Outcomes can involve, for example, a guaranteed supply level, price stability, product quality, product selection, land use or employment.

Agriculture policy concerns

The major challenges and issues in industrial agriculture industry are:

Marketing challenges and consumer tastes

International trading environment (world market conditions, barriers to trade, quarantine and technical barriers, maintenance of global competitiveness and market image, and management of biosecurity issues affecting imports and the disease status of exports)

Biosecurity (pests and diseases such as bovine spongiform encephalopathy (BSE), avian influenza, foot and mouth disease, citrus canker, and sugarcane smut)

Infrastructure (such as transport, ports, telecommunications, energy and irrigation facilities)

Management skills and labor supply (With increasing requirements for business planning, enhanced market awareness, the use of modern technology such as computers and global positioning systems and better agronomic management, modern farm managers will need to become increasingly skilled. Examples: training of skilled workers, the development of labor hire systems that provide continuity of work in industries with strong seasonal peaks, modern communication tools, investigating market opportunities, researching customer requirements, business planning including financial management, researching the latest farming techniques, risk management skills)

Coordination (a more consistent national strategic agenda for agricultural research and development; more active involvement of research investors in collaboration with research providers developing programs of work; greater coordination of research activities across industries, research organizations and issues; and investment in human capital to ensure a skilled pool of research personnel in the future.)

Technology (research, adoption, productivity, genetically modified (GM) crops, investments)

Water (access rights, water trade, providing water for environmental outcomes, assignment of risk in response to reallocation of water from consumptive to environmental use, accounting for the sourcing and allocation of water)

Resource access issues (management of native vegetation, the protection and enhancement of biodiversity, sustainability of productive agricultural resources, landholder responsibilities)

Agricultural policies, including price and income supports, were not originally developed to affect environmental quality in any way. They included no explicit conservation objectives. Agricultural policies influence farming practices mainly by changing the relative costs and returns of using resources in agriculture, or by imposing direct restrictions on output and input use. In particular, agricultural policies influence farming activities through changes in:

The relative prices of inputs and outputs

Direct and indirect restrictions on the use of inputs and outputs

Incentives (or disincentives) for adopting new practices

Impediments to resource movement

Agricultural and rural infrastructure

The main objectives of agricultural policy are to support

Farm incomes and

Ensure a stable and reasonably priced supply of food.

These objectives are achieved through a complicated system of farm programs that insulate the farm sector from the market economy by artificially supporting the prices of certain commodities, and controlling their supply. Each mechanism employed to support commodity prices, farm incomes and control the supply goals has secondary, and unintentional, effects on environmental quality.

As well as price supports, agricultural policies may include

Trade barriers,

Subsidies for inputs and direct payments to farmers.

In general, agriculture is affected by a number of measures reflecting multiple policy objectives and changes in priorities over time. The increasing or sustaining a high price for a particular commodity sends strong signals to farmers to produce more of it, and to use more agricultural chemicals in producing it.

It is increasingly recognized that price supports provided to farmers have encouraged them to expand their production, making intensive use of potentially polluting inputs such as chemical fertilizers and pesticides.

However, the effects of agricultural policies on the environment also involve some uncertainties. To make things more complex, many policies are administered on a commodity basis, whereas the environmental effects of agriculture are resource-specific.

Furthermore, there can be a considerable time lag between a change in a policy and its environmental impact. The effects of changes in policies and production practices on the environment are often gradual and cumulative. It may take some time before they become noticeable and measurable.

Policy tools

An agricultural subsidy is a governmental subsidy paid to farmers and agri businesses to manage the agricultural industry as one part of the various methods a government uses in a mixed economy.

The conditions for payment and the reasons for the individual specific subsidies varies with farm product, size of farm, nature of ownership, and country among other factors.

Enriching peanut farmers for political purposes, keeping the price of a staple low to keep the poor from rebelling, stabilizing the production of a crop to avoid famine years, encouraging diversification and many other purposes have been suggested as the reason for specific subsidies.

Price floors or price ceilings set a minimum or maximum price for a product.

Price controls encourage more production by a price floor or less production by a price ceiling.

A government can erect trade barriers to limit the quantity of goods imported (in the case of a Quota Share) or enact tariffs to raise the domestic price of imported products. These barriers give preference to domestic producers.

Objectives of market intervention

National security

Some argue that nations have an interest in assuring there is sufficient domestic production capability to meet domestic needs in the event of a global supply disruption. Significant dependence on foreign food producers makes a country strategically vulnerable in the event of war, blockade or embargo. Maintaining adequate domestic capability allows for food self-sufficiency that lessens the risk of supply shocks due to geopolitical events. Agricultural policies may be used to support domestic producers as they gain domestic and international market share. This may be a short term way of encouraging an industry until it is large enough to thrive without aid. Or it may be an ongoing subsidy designed to allow a product to compete with or undercut foreign competition. This may produce a net gain for a government despite the cost of interventions because it allows a country to build up an export industry or reduce imports. It also helps to form the nations supply and demand market.

Environmental protection and land management

Farm or undeveloped land composes the majority of land in most countries. Policies may encourage some land uses rather than others in the interest of protecting the environment. For instance, subsidies may be given for particular farming methods, forestation, land clearance, or pollution abatement.

Rural poverty and poverty relief

Subsidizing farming may encourage people to remain on the land and obtain some income. This might be relevant to a third world country with many peasant farmers, but it may also be a consideration to more developed countries such as Poland. It has a very high unemployment rate, much farmland and retain a large rural population growing food for their own use.

Price controls may also be used to assist poor citizens. Many countries have used this method of welfare support as it delivers cheap food to the poorest in urban areas without the need to assess people to give them financial aid. This often goes at the cost of the rural poor, who then earn less from what is often their only realistic or potential source of income: agriculture. Because in almost all countries the rural poor are poorer than the urban poor, cheap food policies through price controls often increase overall poverty.

The same often counts for poverty relief in the form of food aid, which (unless while during severe drought) drives small producers in poor countries out of production. It tends to benefit lower middle class groups (sub-urban and urban poor) at the expense of the poorest 20 percent, who as a result remain deprived of customers.

Organic farming assistance

Welfare economics theory holds that sometimes private activities can impose social costs upon others. Industrial agriculture is widely considered to impose social costs through pesticide pollution and nitrate pollution. Further, agriculture uses large amounts of water, a scarce resource. Some economists argue that taxes should be levied on agriculture, or that organic agriculture, which uses little pesticides and experiences relatively little nitrate runoff, should be encouraged with subsidies.

Fair trade

Some advocate Fair Trade rules to ensure that poor farmers in developing nations that produce crops primarily for export are not exploited or negatively impacted by trade policies, practices, tariffs, and agreements which benefit one competitor at the expense of another - which advocates consider a dangerous "race to the bottom" in agricultural labor and safety standards. Opponents point out that most agriculture in developed nations is produced by industrial corporations (agribusiness) which are hardly deserving of sympathy, and that the alternative to exploitation is poverty.

The objectives of the common agricultural policy

The objectives of the common agricultural policy shall be:

- (a) To increase agricultural productivity by promoting technical progress and by ensuring the rational development of agricultural production and the optimum utilization of the factors of production, in particular labour
- (b) Thus to ensure a fair standard of living for the agricultural community, in particular by increasing the individual earnings of persons engaged in agriculture
- (c) To stabilize markets
- (d) To assure the availability of supplies
- (e) To ensure that supplies reach consumers at reasonable prices.

The need for a common policy on agriculture

If agricultural produce was to be included in the free movement of goods while maintaining state intervention, national intervention mechanisms had to be made compatible across the Community. This is the basic purpose on which the common agricultural policy was founded and remains valid today

It is asserted, through the subsidiarity principle, that EU-level action is justified on issues that cross national borders. Agricultural policy influences several supra-national issues, such as food security (as agricultural products move freely within the EU), the preservation of natural resources and biodiversity (although specific habitats might be deemed a local issue), and tackling climate change.

Member States are likely to differ in the priority that they place on agriculture and rural development. The potential for distortion of competition because some producers are supported more than others increases the more CAP expenditure or policy is determined nationally or is co-financed. The

Given the strategic importance of food and the openness of markets First, this helps to maintain fair competition for agricultural products within the EU. Second, agricultural policy affects cross-border issues such as food security and climate change where action at a supra-national level is appropriate. Third, through acting collectively, the EU is able to be a major player in global agricultural trade.

The Commission's Communication gives three overall objectives for the future CAP, and several sub-objectives within each main objective