

# FOURTH SEM

Paper - 4016

(Micro.)

Unit 1 : General eqn<sup>m</sup>, Efficiency and welfare

a) Exchange economy, Consumption allocation and Pareto optimality. Edgeworth box and Contract curve, Eqn<sup>m</sup> and efficiency under pure exchange.

b) Pareto-efficiency with production: concepts of PPF, Social indifference curves, and Resource alloc.

c) Perfect competition, Pareto efficiency and market failure (externalities and public goods), Property right and Coase Theorem.

# Welfare Economics

Welfare Economics is concerned with the evaluation of alternative economic situations from the point of view of society's well-being. Suppose that total welfare in a country is  $w$ , but given the factor endowments (resources) and the state of technology, the welfare could be larger, say  $w^*$ . The tasks of welfare economics are (a) to show that in the present state  $w < w^*$  and (b) to suggest ways of raising  $w$  to  $w^*$ .

To evaluate alternative economic situations we need some criterion of social wellbeing or welfare. Various criteria have been suggested by economists at different times. Adam Smith implicitly accepted the growth of the wealth of a society, that is the growth of GNP as a welfare criterion. The growth criterion implies acceptance of income distribution as ethical or just.

Now the question is whether any allocation of resources is efficient or not. By efficiency in economics we mean whether any state of situation regarding resource allocation maximises social welfare or not.

The interrelationship among various parts of the economy means that certain particular change in one part of the economy affects resource allocation in all parts of it. Thus the problem is whether a particular change in resource allocation will increase or decrease social welfare. It is impossible to measure social welfare objectively, for it involves making interpersonal comparison of utilities or welfares of different individuals in the society. Therefore economists have mostly used what is known as Pareto-optimality criterion for evaluating whether social welfare increases or decreases as a

result of a specific change in economic state, situation or policy. The concept of Pareto-optimality or economic efficiency <sup>can be objectively measured and</sup> is the basis of welfare economics and has large number of applications in applied economics.

\*Now--

The Pareto-optimality criterion:

According to this criterion any change that makes at least one individual better-off and no one worse-off is an improvement in social welfare. Conversely, a change that makes no one better off and at least one worse-off is a decrease in social welfare.

The criterion can be stated in a different way: a situation in which it is impossible to make any one better-off without making someone worse-off is said to be Pareto-optimal or Pareto-efficient.

For the attainment of a Pareto-efficient situation in an economy three marginal

conditions must be satisfied:

(a) Efficiency of distribution of commodities among consumers (efficiency in exchange)

(b) Efficiency of the allocation of factors among firms (efficiency of production)

(c) Efficiency in the allocation of factors among commodities (efficiency in the product-mix, or composition of output)

### Main weaknesses of Pareto criterion

The Pareto criterion cannot evaluate a change that makes some individuals better-off and others worse-off. Since most government policies involve changes that benefit some and harm others it is obvious that strict Pareto criterion is of limited applicability in real world situations.

Furthermore, a Pareto-optimal situation does not guarantee the maximisation of the social welfare. For example, we know that

any point on the production possibility curve represents a Pareto-efficient situation. To decide which of these points yields maximum social welfare we need an interpersonal comparison of the individual's consumer's utility.

It can be said that Pareto optimal state is a necessary but not sufficient condition for maximum social welfare.