We can therefore obtain a monetary measure of the welfare change, by considering the change in income which will have the same impact as the change in environmental quality. Here there are two measures — compensating and equivalent surplus (denoted as CS and ES), depending upon which welfare position is used for the initial starting point for comparison.

Compensating surplus is the change in income which results in the same level of utility, given the change in quantity. Equivalent surplus is a change in income which produces a change in utility equal to the change in quantity, at the original quantity level. These measures are shown graphically in Figure 7-8.

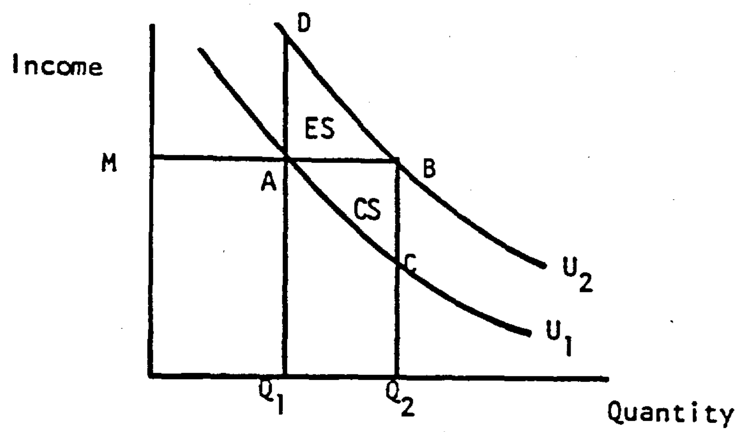


Figure 7-8 Compensating and equivalent surplus.

## 7.5.2 Producer's Surplus

The discussion thus far has been concerned with consumer's surplus as one measure of economic welfare. It is possible to define an analogous concept for producers in the economy. This is called producer's surplus. The concept of consumer's surplus is defined with respect to the consumer's demand curve. Producer's surplus is defined with respect to the producer's supply curve of the relevant commodity. Figure 7-9 presents a supply curve, which presumes that more of the output will be produced as price rises. Higher prices are required to cover increased production costs at higher output levels.