

Figure 7-9 Producer's surplus.

In Figure 7-9 a point  $(X_1, P_1)$  on the supply curve can be given two interpretations. For a given price  $P_1$ , the output  $X_1$  is the largest that the firm is prepared to supply at that price. Or, for a given output  $X_1$ , the price  $P_1$  is the minimum price that the firm will accept for supplying  $X_1$ . In the market, all units sell for the same price, hence the producer gains on all unit levels lower than the total sale, because the market price exceeds the minimum he needs. This gain is called producer's surplus, and is represented by the area  $AP_1B$  in Figure 7-9 - the area above the supply curve bounded by the market price.

Changes in the value of this producer's surplus are interpreted as a measure of welfare change. This change causes a supply shift from S to  $S_1$ , due, for example, to an increase in crop yields from reduced LRTAP, and is illustrated in Figure 7-10.





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