

The Production Possibility Curve (PPC)

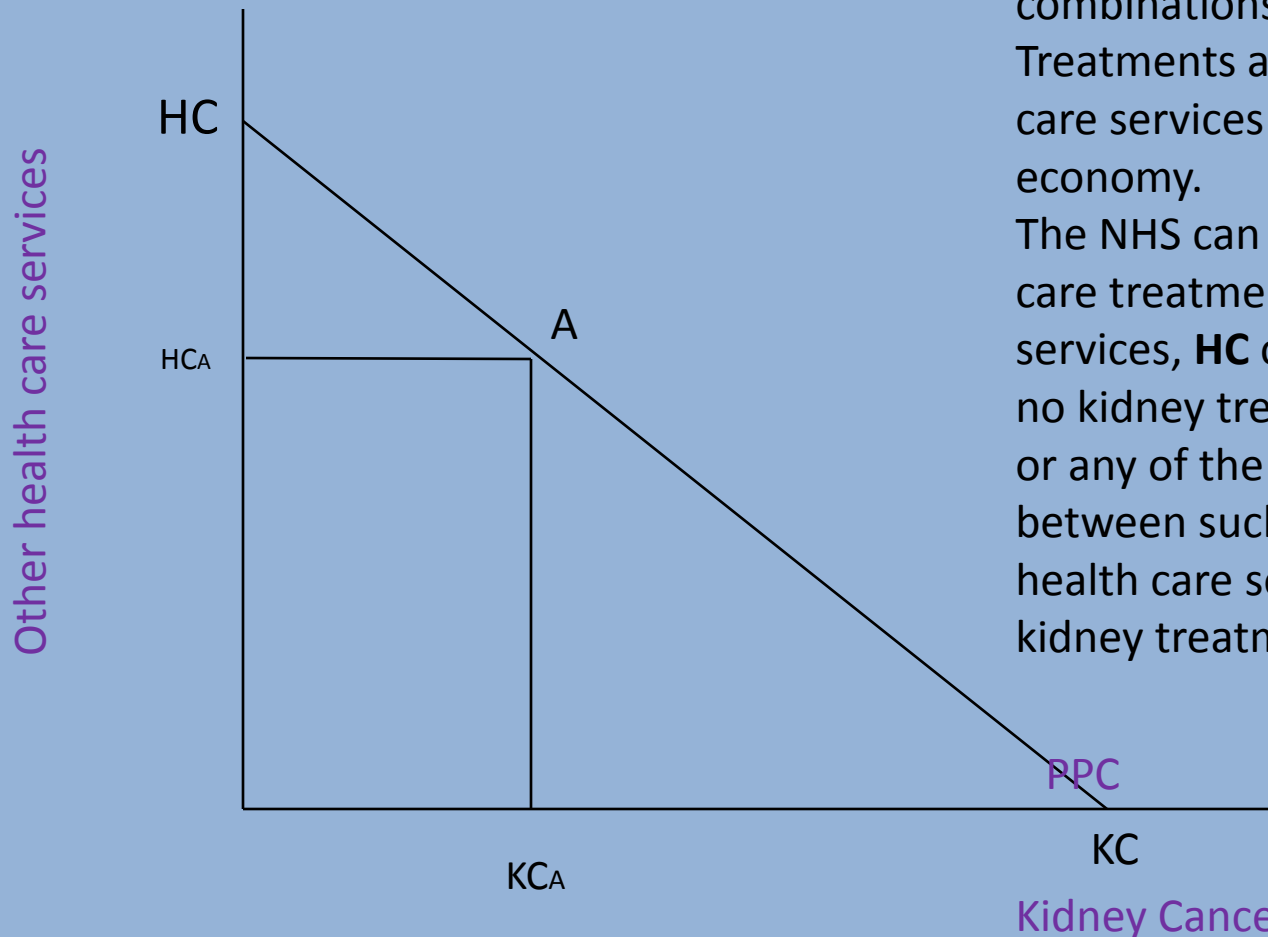
A PPC shows **all the combinations** of **two 'goods'** which can be provided if all resources are being used efficiently

The Production Possibility Curve (PPC)

USE 1. Showing Choices

This PPC shows all the combinations of Kidney Cancer Treatments and other health care services available in the economy.

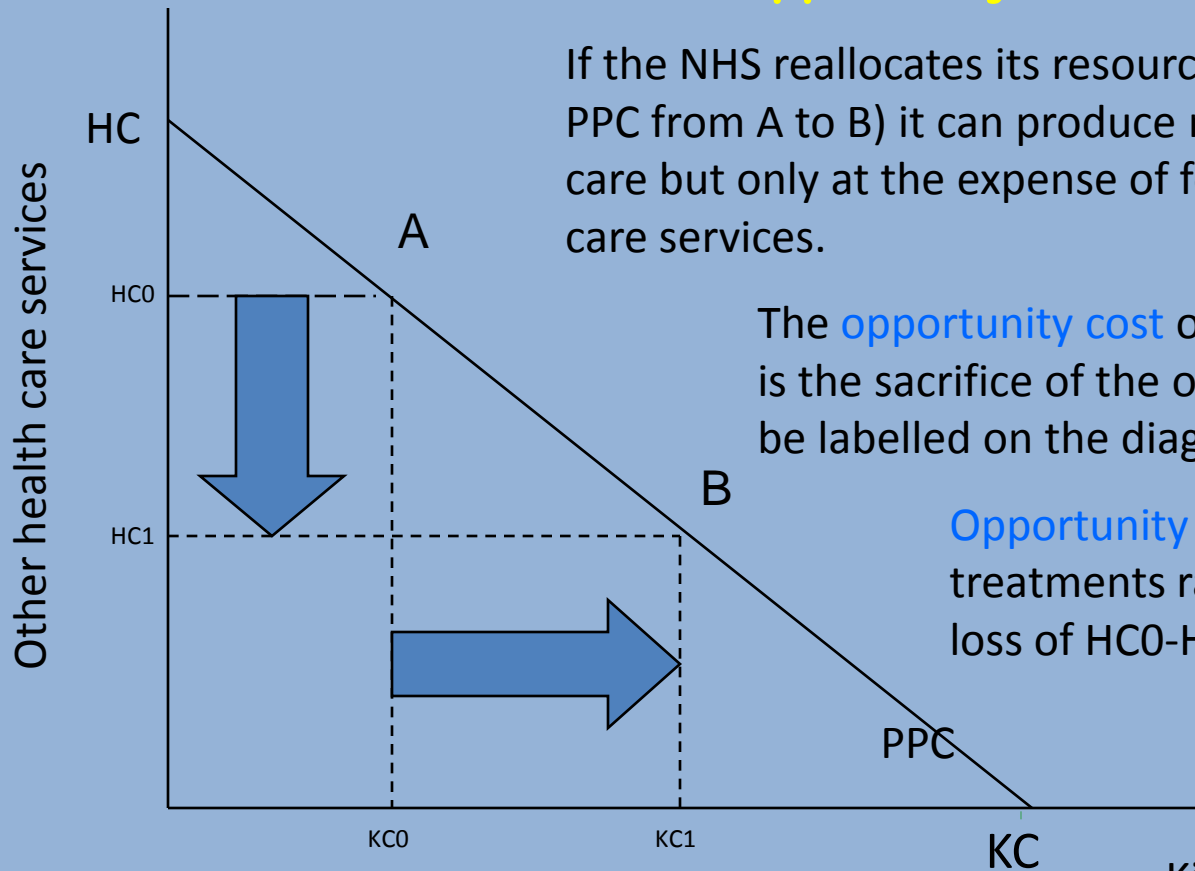
The NHS can provide **KC** kidney care treatments and no other services, **HC** other services and no kidney treatment or any of the combinations in between such as **A** where **HC_A** health care services and **KC_A** kidney treatments are provided.



The Production Possibility Curve (PPC)

USE 2. Opportunity costs can be illustrated.

If the NHS reallocates its resources (moving along the PPC from A to B) it can produce more kidney cancer care but only at the expense of fewer other health care services.



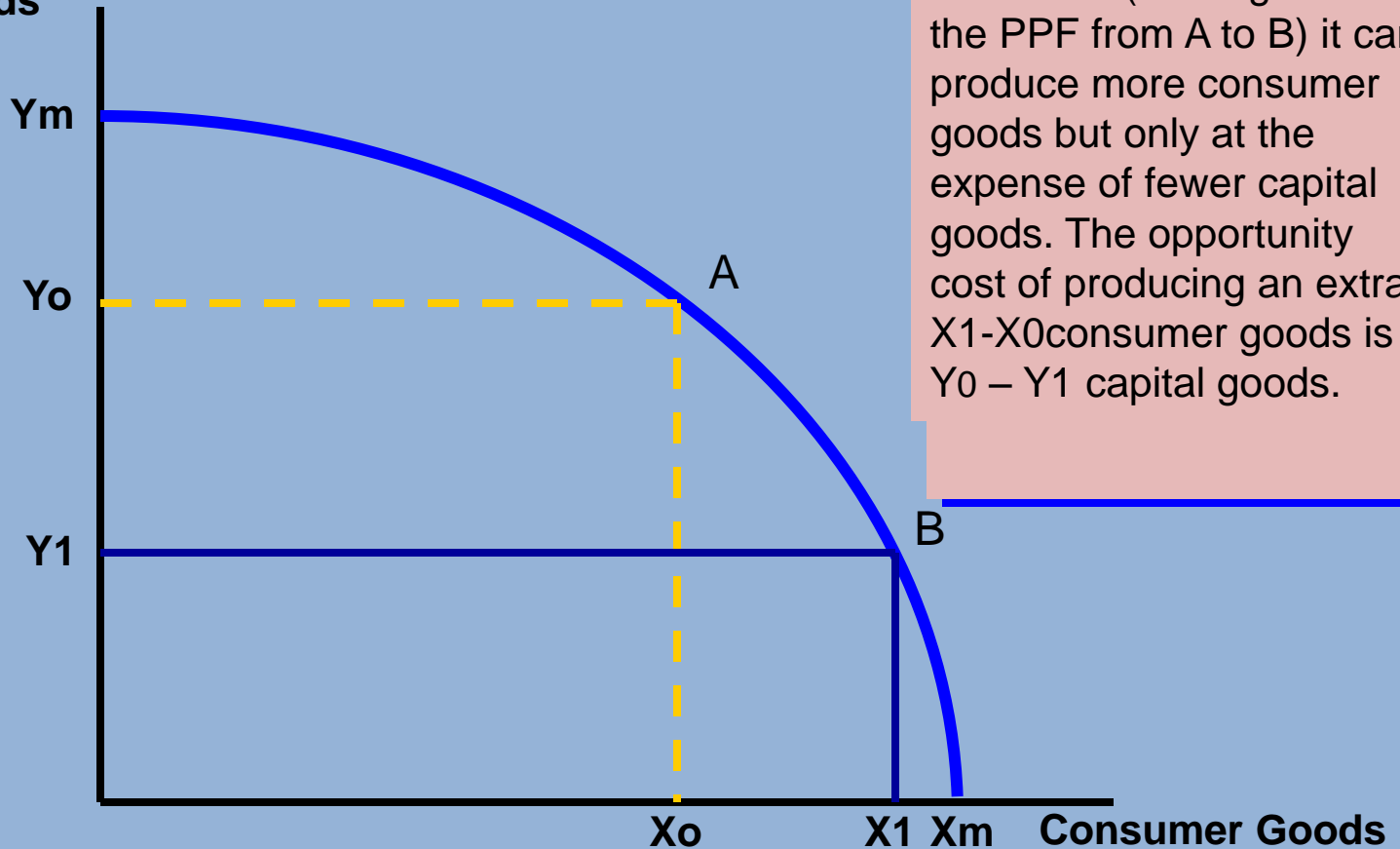
The **opportunity cost** of producing more KC is the sacrifice of the other services. This can be labelled on the diagram.

Opportunity cost of KC1 kidney treatments rather than KC0 is the loss of HC0-HC1 other services.

Kidney Cancer Treatment

Production Possibility Curves

Capital Goods

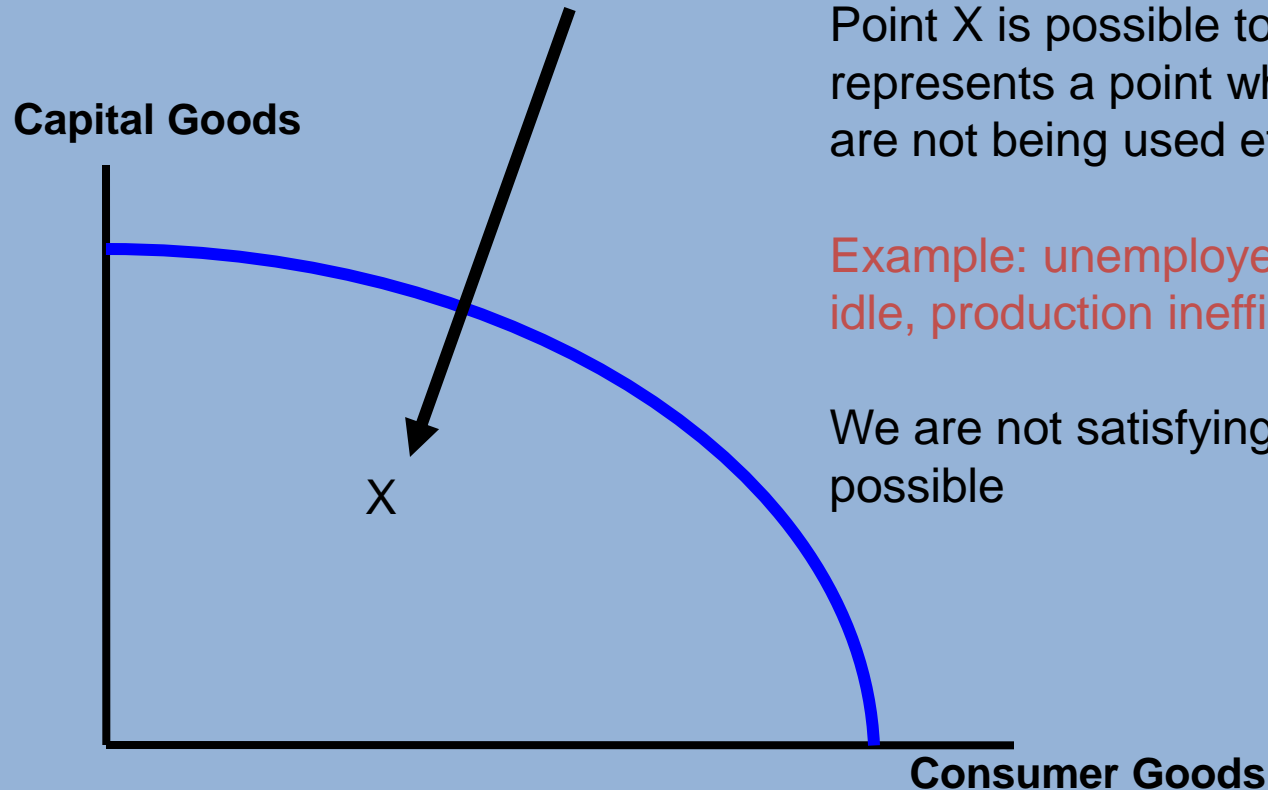


If it reallocates its resources (moving round the PPF from A to B) it can produce more consumer goods but only at the expense of fewer capital goods. The opportunity cost of producing an extra $X_1 - X_0$ consumer goods is $Y_0 - Y_1$ capital goods.

Productive efficiency

- The PPF is drawn on the assumption that **all resources are fully and efficiently employed**
- Therefore:
 - any point **on** the PPF shows **efficient** production
(**Productive Efficiency**)
 - any point **inside** the PPF shows **inefficient** production or unemployed resources
 - any point **outside** the PPF is currently unobtainable

Production Possibility Curves



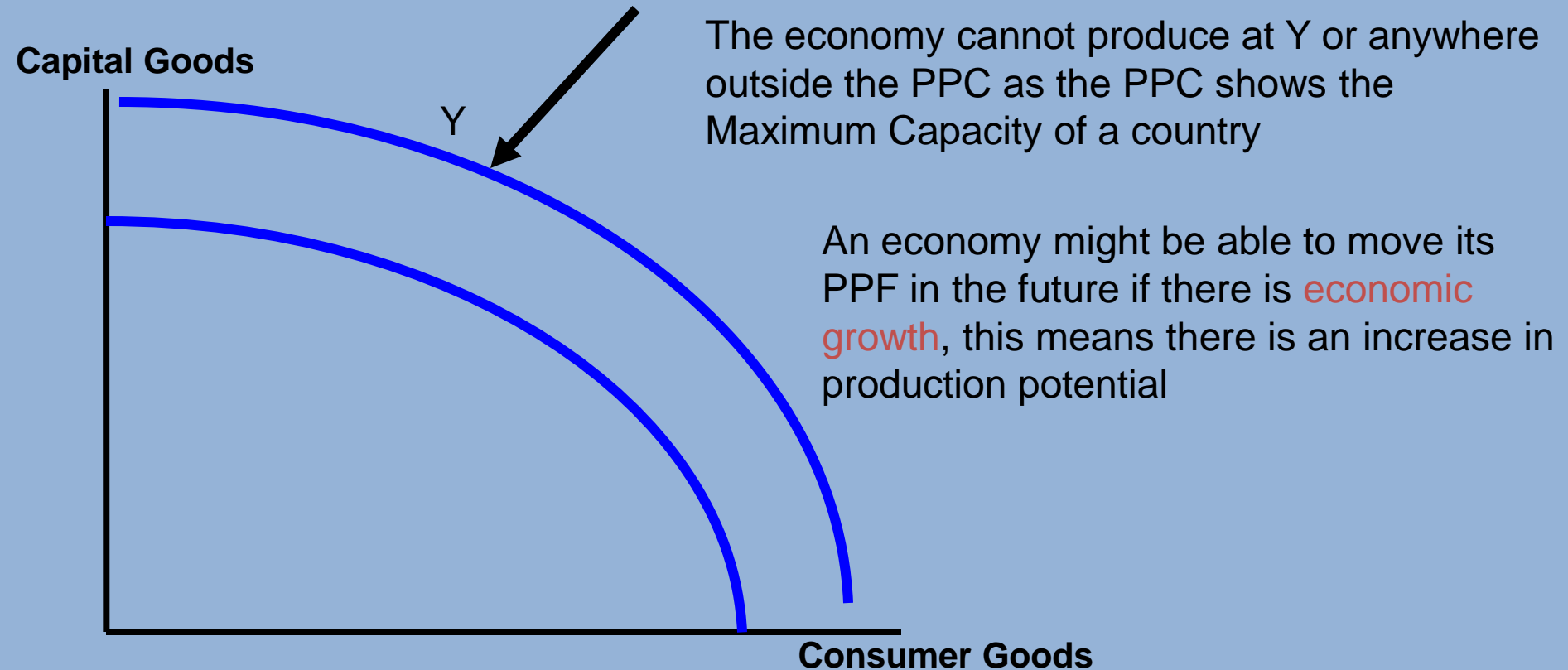
Point X is possible to achieve BUT represents a point where some resources are not being used efficiently

Example: unemployed workers, factories idle, production inefficiently organised

We are not satisfying as many of our wants as possible

Production Possibility Curves

Can illustrate **ECONOMIC GROWTH**



Growth

Economic Growth increases the productive potential of the economy:

An economy can grow if it increases the **quantity** or **quality** of its factors of production.

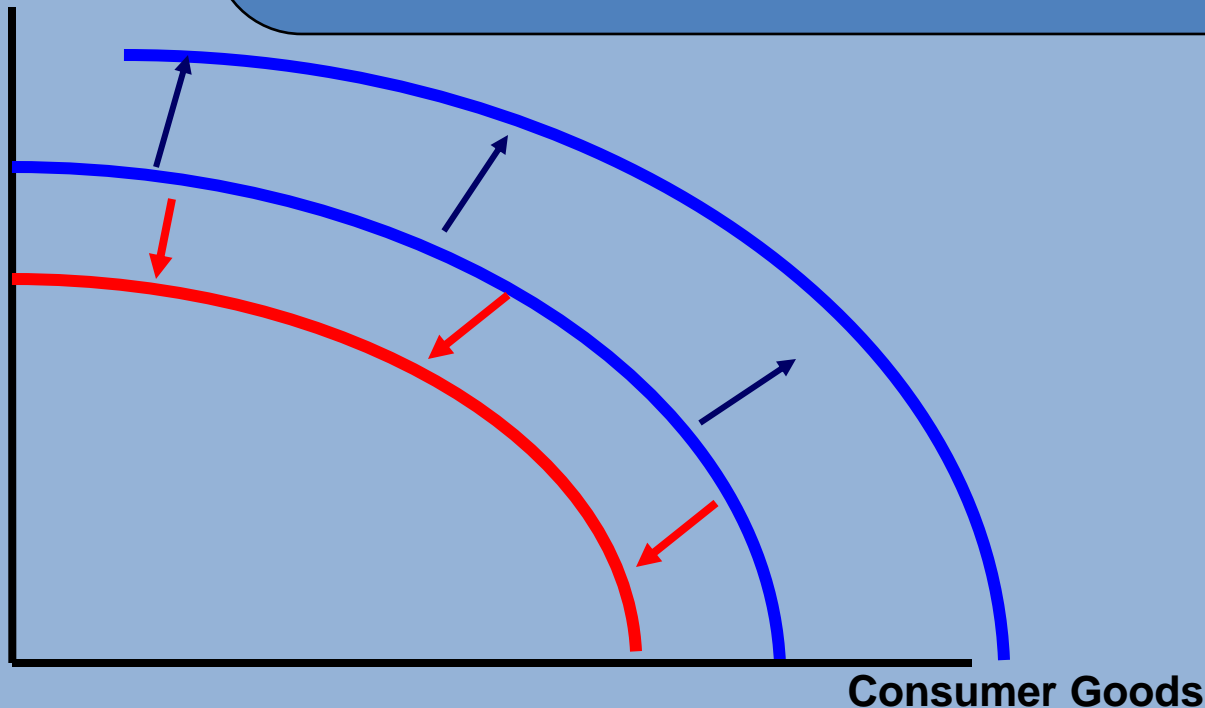
e.g. A new technological development results in an increase in productive potential and the curve can move outwards.

Production Possibility Curves

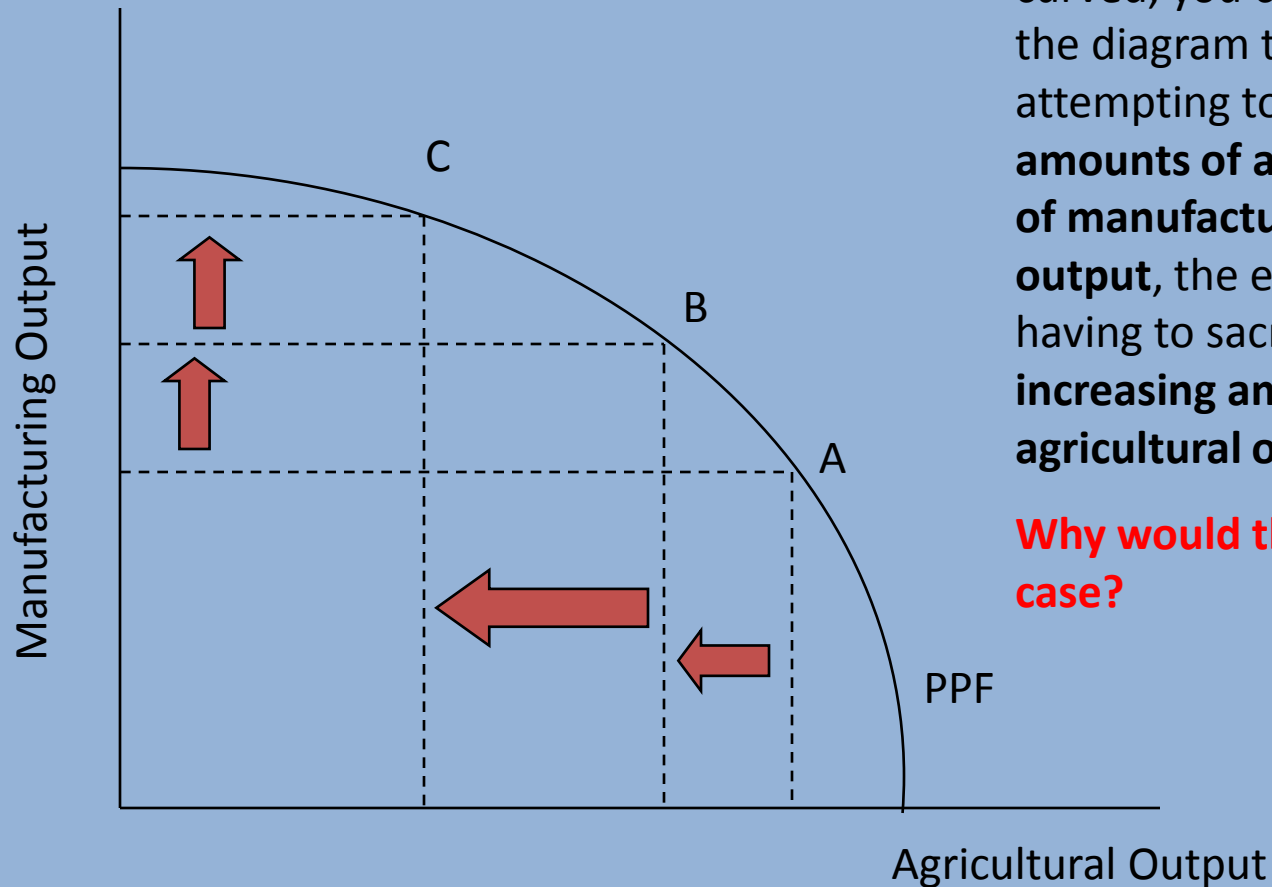
What else might cause the PPC to shift to the Right?
Remember that it is also possible for the curve to shrink inwards.

What might cause this?
Make a note of your ideas...

Capital Goods



Curved PPCs



When the PPC is curved, you can see from the diagram that in attempting to gain **equal amounts of addition units of manufacturing output**, the economy is having to sacrifice **increasing amounts of agricultural output**.

Why would this be the case?

Curved PPCs

The Opportunity cost of producing more manufactured goods is increasing as we give up increasing amounts of agricultural products to achieve it.

The reason is that different factors of production have different properties or skills and as we concentrate more and more on the production of one thing we have to start using resources that are less and less suitable for it.