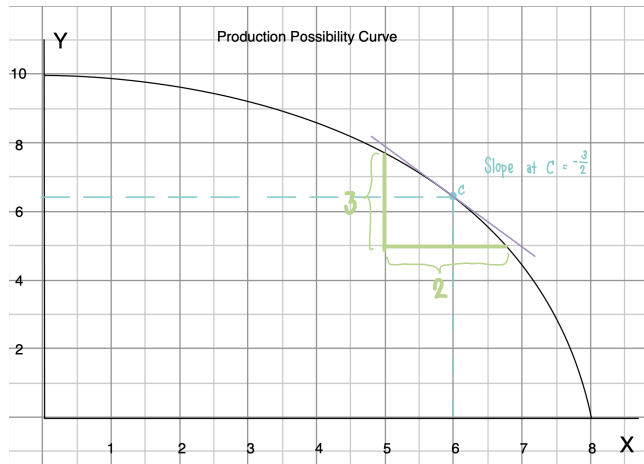


Punnada Sridilok (Pear) ID: 63046 41241

HW Nonlinear PPC



- a) Find the opportunity cost of each additional unit of y in terms of units of x

y	x	Opp. Cost of y
0	8	
1	7.9	= 0.1
2	7.7	= 0.2
3	7.4	= 0.3
4	7.1	= 0.3
5	6.7	= 0.4
6	6.3	= 0.4
7	5.6	= 0.7
8	4.7	= 0.9
9	3.4	= 1.3
10	0	= 3.4

- b) Is the opportunity cost of y increasing? *yes, it does*

- c) Compute the opportunity cost per unit of y when

$x = 6$ ^{point C} opportunity cost of $y = \frac{1}{-1.5} = -0.67$

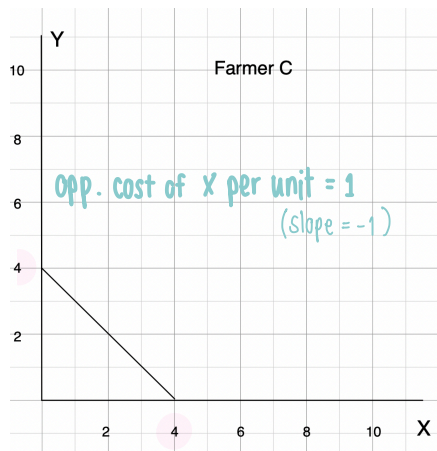
- d) At $x = 6$, approximate how much more x can be

produced if we have y less by 0.2 units. $\rightarrow x$ can be produce approximately 0.13 unit more.

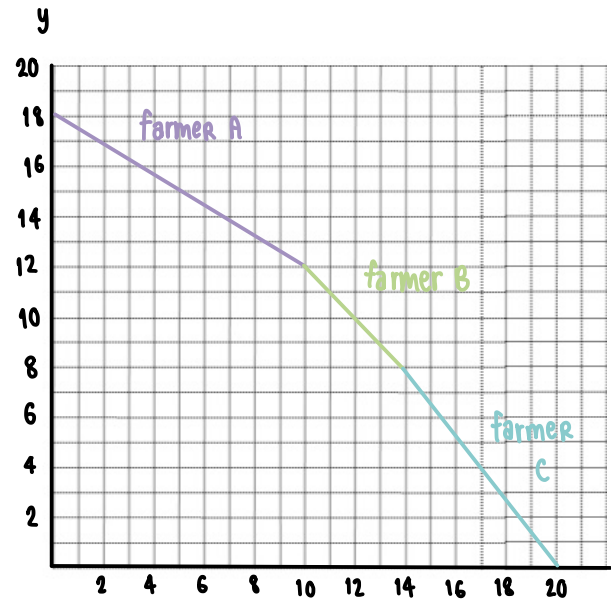
when $\Delta y = -0.2$, $\Delta x = \frac{\Delta Y}{\text{slope C}} = \frac{-0.2}{-1.5} = 0.13$

Can a PPC have positive slope?

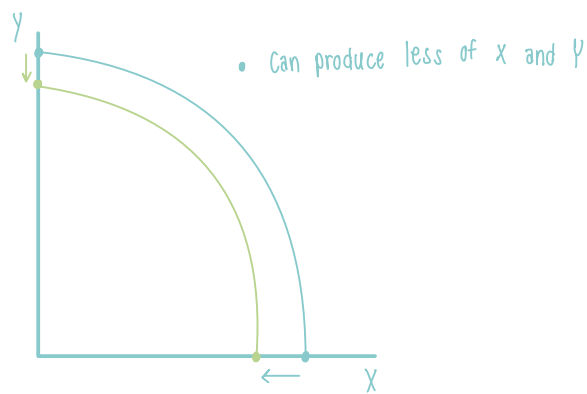
HW Farmer C has the PPC given below. Find the PPC of all three farmers A, B and C combined.



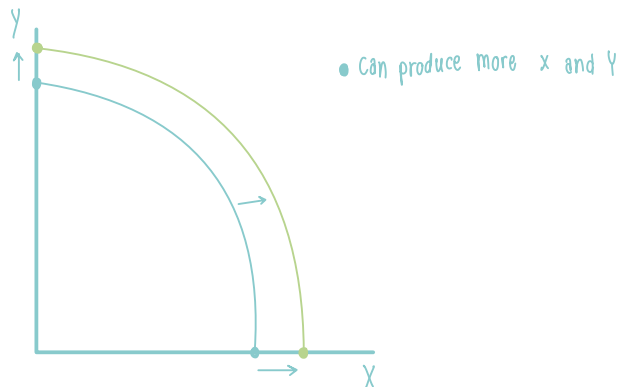
Change in PPC fixed Resources, fixed technology, most efficient



1. COVID-19

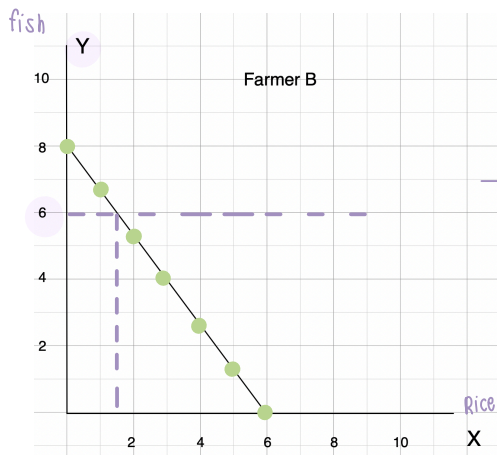


2. Improvement of Technology of producing both x and y.



X	y	
0	18	A
1	17.4	
2	...	
...	...	
10	12	
X	y	
11	11	B
12	...	
...	...	
14	8	
X	y	
15	6.67	C
16	...	
17	...	
20	0.02	

HW. If a new fertilizer is found to double the output of rice (x) for any level of production of fish (y), how will PPC of farmer B change? Does the opportunity cost of x increase? Does the opportunity cost of y increase?



opportunity cost x

↑

Slope = $-\frac{8}{6} = -1.33$

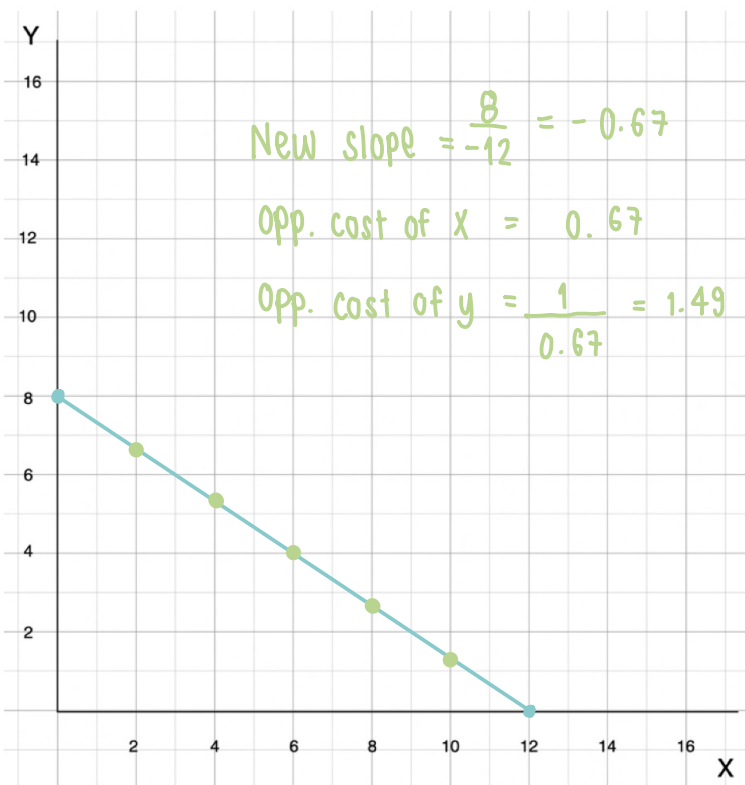
opportunity cost y

↳ $= \frac{1}{1.33} = 0.75$

X	Y
0	8
1	6.67
2	5.34
3	4.01
4	2.68
5	1.35
6	0

New :

X	Y
0	
2	
4	
6	
8	
10	
12	



To conclude :

- The opportunity cost of x is decrease from 1.33 to 0.67 while the opportunity cost of y is increase from 0.75 to 1.49