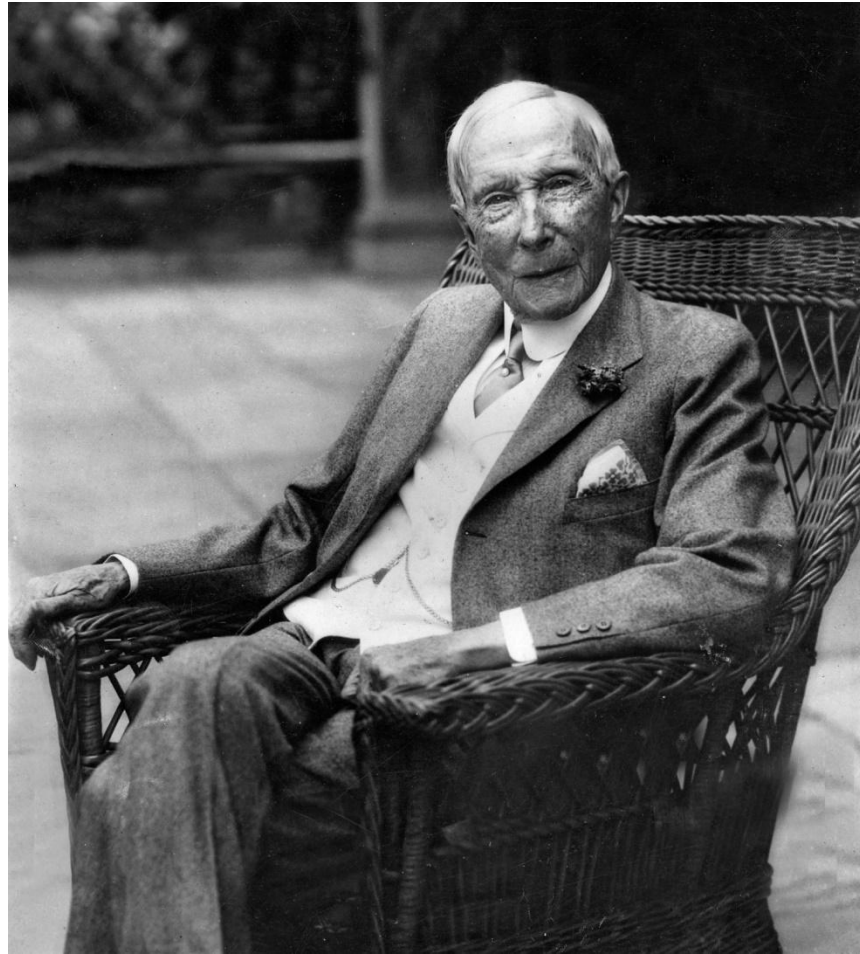


# Production and growth

Are you richer than the richest person in the world?



# The production function

- $Y$  – the quantity of output
- $L$  – the quantity of labour
- $K$  – the quantity of physical capital
- $H$  – the quantity of human capital
- $N$  – the quantity of natural resources

$$Y = AF(L, K, H, N)$$

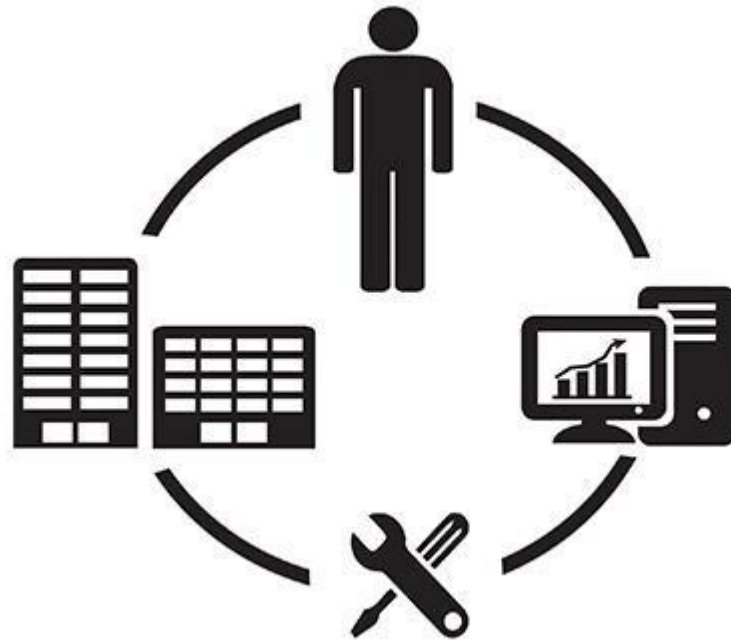
$$xY = AF(xL, xK, xH, xN)$$

$$Y/L = AF(1, K/L, H/L, N/L)$$

# Are natural resources a limit to growth?



# Promoting human capital



# Population growth



# A solution to Africa's problems

