Causes of long term growth:

<table>
<tr><th>Causes</th><th>Description</th></tr>
<tr><td rowspan="4">(1)
The amount of resources available</td><td>1. Capital
• The nation's output depends on its stock of capital (K), e.g. K rises, output rises
• If we ignore the problem of machines wearing out or becoming obsolete & needing replacing, then stock of capital will increase by the amount of investment: $\Delta K = I$
Marginal efficiency of capital ← MEC = $\frac{\Delta Y}{\Delta K} = \frac{\Delta Y}{I}$
• The higher this rate of new investment, the higher will be the PG rate
$g_p = i \times MEC$
• Determinants of the rate of investment:
– Confidence of business people about the future demand for their products
– Profitability of business
– Tax regime
– Rate of growth in economy
– Rate of interest
• Over the long term, if investment is to rise, then people must save more (& consume less) to finance that extra investment</td></tr>
<tr><td>2. Labour
• If working population increases, potential output increases due to
– Increase in participation rate, i.e. higher proportion of total population in work / seeking work
E.g. ↑ proportion of women with children deciding to rejoin the labour market, ppl retiring later & ppl working part time deciding to work longer hour
– Increase in total population
*** If increase in total population doesn't result in increased proportion of working population, output per head of population may not rise at all.</td></tr>
<tr><td>3. Land & material
• Since land is virtually fixed in quantity, land reclamation schemes and the opening up of marginal land can add only tiny amounts to national output.
• Even if new raw materials (e.g. oil) are discovered, this will result only in short-term growth.</td></tr>
<tr><td>• If a single factor of production increases in supply while others remain fixed, diminishing returns will set in.
• Unless all factors of production↑, ∴ the rate of growth is likely to slow down. It isn't enough that labour & capital ↑ if there is a limited supply of land & raw materials.
• If a rise in labour and capital leads to a more intensive use of land and natural resources, the resulting growth in output may be environmentally unsustainable.
• Solution: an increase in the productivity of resources</td></tr>
<tr><td>(2)
Productivity</td><td>• Technological improvements can increase the marginal productivity of capital.
• New skills, improved education/training, better health ⇒ ↑ productivity of labour
• Innovation & inventions</td></tr>
</table>