

### 2018 Nobel Prize in Economics - Relevance for India

#### What is the issue?

 $n\n$ 

The ideas of this year's Nobel Memorial Prize in Economic Sciences are relevant for India in terms of handling its growth.

 $n\n$ 

### What were the prizes awarded for?

 $n\n$ 

۱n

• The Nobel Prize for this year has been awarded to two economists in two different fields.

۱'n

- $\hbox{\bf William Nordhaus has worked on $\underline{\bf climate change and economic growth.} } \\ {\bf has more than the control of the contro$
- It is more on the 'negative spillover' of emissions and damage to the environment as a result of growth.
- Paul Romer had worked on <u>innovation and growth</u> and is on the 'positive spillovers' of knowledge and technology.
- Notably, both works were related to economic growth.

 $n\$ 

## What are the key ideas of Nordhaus?

 $n\n$ 

\n

• **Observation** - As the world strives to bring about high growth, it tends to damage the environment.

\n

• This, in turn, comes back to haunt people and retard future growth.

\n

- $\bullet$  E.g. land gets less fertile due to excessive use of fertilisers and overgrazing  $\n$
- Carbon emissions affect health, damage the ozone layer, cause erratic rainfall, affect ocean life, etc.
- **Measures** Nordhaus hence spoke of 'DICE' ('Dynamic Integrated model for Climate and Economy') as the way forward.
- $\bullet$  The obvious solution is a carbon tax, which is now quite popular in the world.
- It discourages emissions or makes entities use better technologies that lower such emissions.

\n

- $\bullet$  Concerns The problem here is that countries, at times, make such compromises for short-term gains.  $\ensuremath{\backslash} n$
- Also, the externalities caused by damaging the environment are often assumed to be everyone's problem and not just that of the nation.
- Given this, carbon tax is a softer option that may not really bring an end to the polluting process.

\n

• It only increases the cost of damaging the environment, which will be passed to the consumer.

\n

• Way forward - Outright bans are the only way out.

\n

• There should ideally be ban on the use of certain material or technology that damages nature.

۱n

- Importantly, this should be agreed upon by all the countries.
- It is important here for government intervention as the market system is less likely to ensure such a solution.

 $n\n$ 

# What are the key ideas of Romer?

 $n\$ 

\n

• **Argument** - Romer talks of a positive stimulus to growth, which is based on knowledge or technology.

\n

- This is logical because across countries technology has been the differentiating factor in the strategies pursued for higher growth.
- Evidently, going by this, the African countries remain slow-movers in terms of growth.

\n

- The East Asian economies were able to gallop on the back of innovation.
- In fact, a lot of progress in India can be attributed to innovation.
- E.g. the Green Revolution in agriculture, the IT revolution, etc
- An interesting observation by Romer is that when technology brings about growth, it is non-exclusive.
- $\bullet$  This is because the benefits do percolate to other companies and countries.  $\mbox{\sc h}$
- **Measures** There is thus the need for Research & Development subsidy to be given by governments.
- $\bullet$  The power of new ideas is quite supreme and cannot be contested.
- $\bullet$  So here, one can leave it to the market to drive such innovation as it is intrinsic to the business models that focus on growth. \n

 $n\n$ 

# What are the apprehensions?

 $n\n$ 

۱'n

• The works of the two winners raises a key question regarding the <u>link</u> <u>between technology and climate change</u>.

\n

- For innovation to succeed, it is hard to ensure that such technology is consistent with sustainable growth.
- E.g. the technology of mobile phones has brought in a broader debate of radiation emissions

\n

- Here the tenets of Nordhaus and Romer would collide.
- ullet Another concern is that if  $\underline{technology}$  which becomes  $\underline{labour\text{-}displacing}$  can

really lead to meaningful higher growth.

- Addressing this is crucial especially in labour-surplus economies.
- Also, the practical feasibility of innovations in several countries in Africa and South Asia where there is power shortage is uncertain.

 $n\n$ 

#### What could be done?

 $n\n$ 

\n

- For India, the ideas of both these economists are very relevant.
- $\bullet$  Innovation must be tailor-made to suit local requirements so that it does not disturb the ecosystem.  $\ensuremath{\backslash} n$
- When talking of inclusive growth and creation of jobs, the focus has to be on using innovation in a balanced manner.
- The climate change issue is more challenging; there needs to be internal rules to ensure that environment is protected.
- $\bullet$  Laws need to be in place to ensure that there is a proper balance of technology with carbon emissions.  $\mbox{\sc h}$

 $n\n$ 

 $n\n$ 

## **Source: Financial Express**

\n

