One nation, one price

(Mains GS 2 : Government policies and interventions aimed at development in various sectors and issues arising out of their design and implementation.)

Context:

- The government opened up its vaccination policy to expand coverage and include everyone above 18 years of age.
- Under the new policy, to be implemented from May 1, producers are free to supply 50% doses to State governments and in the open market for which they will have to make an advance declaration of the price before the roll out date.

The economics of vaccine:

- The market relies on price mechanism and the forces of supply and demand and the market makes available any good to a buyer who values it the most.
- At the same time, increased competition drives up supply and pushes down prices, so that only the lowest cost producers are able to operate in the market.
- This combination leads to an efficient allocation of scarce resources.
- However , all this is true only when there is no “externality” associated with the consumption of a particular good.
- Vaccines have a “positive externality”; it is a good whose consumption benefits not just the one who has it.
- A vaccinated person is not only relatively protected against the disease himself/herself, but also less likely to transmit it to others.

The positive and negative externalities:

- Usually, a person getting vaccinated takes into account only his/her own cost and benefit, while ignoring the fact that he/she lowers the chances of infecting others.
- It is the opposite of smoking, which has “negative externality”.
- Smokers know the harm they are causing to themselves, but are largely indifferent to the negative impact of their cigarette smoke on others.

- Since every individual ignores the full set of benefits/costs from consuming goods with positive/negative externalities, the market isn't always the most efficient mechanism for allocation of such goods.
- Thus a situation would end up as "under-provision" or "over-provision" (too little or too much) of the good and a situation of "market failure".

The vaccine as public good:

- The governments treat goods having large positive externalities as "public goods" and provide these while factoring in the full costs and benefits to society.
- Viewed from this perspective, the latest version of India's vaccine policy is quite significant.
- It requires vaccine manufacturers to supply 50 per cent of their production to the Centre at controlled prices, while allowing them to sell the remaining half in the open market (including to state governments) at pre-announced "self-set" prices.
- The policy is susceptible to market failure as the new policy can lead to differential access to the vaccine.
- Manufacturers are supposed to "transparently declare" their prices in advance for their 50 per cent supply to the open market.
- But there is no limit per se on the retail price they would charge.
- This could lead to a whole range of prices and vaccine inequality, apart from diversion of supplies from the controlled low-price government centres to the open market.
- So, the country may well have scarcity in the "mass" segment co-existing with a glut in the "elite" segment.

The inequality in access to vaccine:

- The irony is that the section more prone to infecting others would also be low-income people, who cannot ordinarily afford the vaccine.
- Under these circumstances, when the market is allowed to deliver vaccines, those with higher incomes — and even prepared to pay more than what the manufacturers are currently charging — will have better access.
- The market will ignore those with lower purchasing power, despite them having a higher probability of spreading the disease.
- In fact, the bigger the income difference between the two segments, the greater will be the extent of market failure from simultaneous over-provisioning and under-provisioning.

The possible solution:

- An efficient solution that addresses market failure could be a single price to be paid to vaccine makers for all the doses that they supply.
- The price should be high enough to stimulate vaccine manufacturers to rapidly ramp up production.

- The moment people receive the dose of vaccine, the government will pay the vaccine maker or the hospital administering the dose.

Conclusion:

- The suggested solution is similar to the fertiliser subsidy, which is now disbursed to companies only after actual sales to farmers.
- No subsidy is paid on any bag unless the purchase, along with the farmer's biometric authentication and other details, is captured on a point-of-sale machine at the retail outlet linked to a central server.
- A similar mechanism, where the vaccine producer gets the full market price — it shouldn't matter to him whether the final consumer or government pays — after a person gets the jab, will also ensure no diversion or grey market.