Difference b/w

Private gs &	Public goods
1. they yield utility to people. These are to be purchased.	1. All enjoy in common & everyone has equal access.
2. Othername → market goods	2. Collective goods or Social goods
3. eg:- food items, clothing etc	3. Lighthouse, fire protection etc
4. gives utility to people individually.	4. gives utility to people collectively
5. Consumption is rivalrous.	5. non-rival
6. Price is to be paid to procure them.	6. No direct payment is to be made for pure public goods.
7. Simultaneous consumption is not possible by the society.	7. Can be consumed simultaneously by all.
8. Private property right	8. no control of an individual
9. It is divisible like 1, 2 etc	9. It is indivisible. eg:- highway
10. It is excludable	10. It is non-excludable
11. Additional resource costs are involved for producing & supplying additional quantities	11. Additional resource cost of another person consuming the good is zero.

12. They do not have free rider problem.	12. They have free rider problem.
13. There is not market failure due to higher incentive more goods are produced	13. are often under provided in free market

→ Pure & Impure Public Goods

	Excludable	Non-Excludable
Rivalrous	Pure public goods	Common Access Resource → Forest, Public parks etc.
Non-rivalrous	Impure public goods. eg:- club goods, Cinemas, Private Parks etc	Pure Public goods eg:- National defence, knowledge et.

→ Impure public goods

Club goods

These goods are replicable & so individuals who are excluded from one facility may get similar services from an equivalent provider.

eg:- Internet, Swimming Pools, fitness centres etc.

Variable Use Public Goods

- These are non-replicable.
- They are excludable or non-excludable

eg:- roads, bridges etc.

→ Incomplete Information

Complete information is an important element of a Competitive market. Perfect information implies that both buyers & sellers have complete information about anything that may influence their decision-making. However, in real world, this condition is not satisfied due to various reasons

Ignorance
Unawareness

Inaccuracy
Incomplete data

Complexity
complex nature of a product/ service
eg:- Cardiac surgery

Timeliness
information available too late

Misunderstanding
Consumer misunderstand the true costs & benefits.

→ Problems of Information failure

Asymmetric information
- There is an imbalance in information between the buyer & seller.

Adverse Selection
- It is a situation in which asymmetric information

→ buyer knows more (health insurance)
→ Seller knows more (Used car seller)
→ ~~too~~ This can distort choice.

a) Low-quality goods can drive high-quality goods out of the market
"Lemons problem" given by George Akerlof. (Used cars' market)

→ about quality eliminates high-quality goods from the market.
eg:- Used car market
owner knows more than the buyer.
So, buyer would be willing to pay average price even for the good car which drives goods cars out of the market.

Central concepts related to the problem of information gaps

Adverse selection

Moral Hazards
- It is opportunism characterized by an informed person taking advantage of

a less informed person through an observed action.

- It arises from lack of information about someone's future behaviour.
- It occurs when one party to an agreement knows that he need not bear the consequences of his bad behaviour.

→ Moral Hazard refers to a situation that increases the probability of occurrence of a loss or a larger than normal loss because of a change in the insurance policy holder's behaviour after buying the policy.

→ Government can ensure economic efficiency by providing the necessary legal & regulatory system for efficiency & for correcting market failures.

- patronage to consumer associations
- Tough investigations (Cartelisation & predatory pricing)
- Restriction on monopsony power of the firms
- Reduction in import controls
- Nationalisation

→ Monopoly allowed
- Monopoly can arise due to patent or copyright law granted for innovation & invention.

→ Natural monopoly — can produce entire output at lowest cost.
eg:- electricity, gas, water supply.
- Govt regulates ~~the~~ price.

→ Govt intervention to correct externality

To promote positive externality

Subsidies
- reduces production cost
- leads to higher output & supply

Production & SS
- Govt enters directly
eg:- Cleaning up rivers, sewage treatment etc

→ To reduce the effects of Negative
Externalities

Direct Controls

- These are aimed at regulating the actions of those involved in generating negative externality by -

a) Total Prohibition
b) Setting limits for Negative externality etc.

Indirect / Market-based

- These provide economic incentives to market participants, to achieve socially optimal solution.
- They convert the negative externality (social cost) into a private cost of the firm by

Taxes

Environmental tax / Pollution Tax / Pigouvian tax
- A. C. Pigou

- Tax levied on pollution emission rather than output.
- Based on concept "Let the polluter pay".

Permits

(Tradeable Emission permits) i.e (Cap-&-trade)

- Marketable Licenses to emit limited quantities of pollutants can be bought at a specified

Role of the Government

- Creating physical infrastructure - roads, bridges, airports & waterways
- provision of institutional infrastructure legal & regulatory framework
- ensuring fair competition & Consumer law framework.

→ Govt intervention to Minimize Market power

Govt promotes fair competition.

→ Competition Act 2002 (Amended in 2007) to promote & sustain competition in India.

→ Antitrust laws in the US & the Competition Act, 1998 of UK are designed to promote competitive economy.

Other measures

- Market liberalisation - promoting monopolistic competition in energy, telecom etc.
- Controls on mergers & acquisition (b/w large firms)
- price capping & price regulation
- profit or rate of return regulation

- Tax increases the private cost & reduces the quantity (pollution)

price from the Regulatory agency by polluters.

- Each firm has Permits ~~to~~ specifying the no. of units of emissions that the firm is allowed to generate.
- These permits are transferable.
- A high polluter either has to pay monetary penalties or buy more permits both leading to increasing cost & decrease in profits.
- A low polluter can
- avoid Monetary penalties, & sell permits & earn revenue both making such firm profitable.

Total Prohibition

Control prohibit specific activities that create negative externality.

eg:- Smoking is banned in public places, production, use & sale of many commodities & services are prohibited

Setting limits for Negative Externalities

- Regulation that stipulate that negative externality be limited to a certain level — permissible level of emissions, pollutants etc.

- Requirement as to install Pollution-control/Abatement Mechanisms in the factories
- Charging of fee per unit of emission.
- Monetary ~~policy~~ penalties or criminal liabilities for exceeding the permissible level of emissions etc.

→ Govt may also form Special Bodies/ Boards to specifically address these issues – eg- Ministry of Environment & forests, the Pollution Control Board of India etc.

→ Govt intervention in case of Merit Goods

- Merit goods – are socially desirable
  - involve substantial positive externalities in their consumption.

eg:- Education, health care, Housing, Waste management etc.

Need for Govt Intervention

- Lower output
- Equity/fairness
- Uncertainty in Consumption
- Imperfect information.

Forms of Govt intervention in Merit Goods
- determine how the private activity can be Conducted. eg:- education - CBSE
→ prohibit some type of goods & activities.
eg:- drugs, smuggling etc.
- set standards & issue mandates.
eg:- helmet for driving
- enhance consumption of merit goods.
- ensure quality
→ Subsidies - provide subsidy
→ Direct Government Provision
→ Supplementing Market Provision - procurement