Syllabus 2.9 Public Goods

# Webnote 291 Syllabus: Items 66-67

Use the syllabus to understand the key concepts in relation to items 66-67 of the syllabus

## Market Failure – Public Goods

#### **Public Goods**

#### Features:

(importanf for

definition/explanation)

**Public** 

Goods

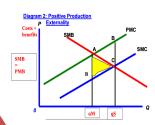
- Non-excludable
- 2. Non-rivalrous
- 3. Non-rejectable

#### Features:

#### **Features:**

(importanf for definition/explanation)

- . Non-excludable not possible to restrict use of public goods, e.g. street lighting, judicial system
- Non-rivalrous users are not competing to use the public good so access to public tood
- 3. (Non-Rejectable person cannot reject benefit e.g. national defence)



#### Positive Externality of Production COMMENT: DIAGRAM 2

- QS is the socially efficient level of
- Market under supplies at qM
- Underproduction = area abc
   Abc=welfare loss
- This is a welfare loss to society of the market failure. (benefit > cost)
- Example would be a chemical plant installing a water purification system that benefits other local firms e.g. a local fish farm is not paying for cost o clean water

#### Pure public good:

- Non-excludable
- 2. Non-rivalrous
- 3. E.g. think of police services, judicial service or nuclear defence of a country

#### Problem:

#### **Solutions:**

- 1. Government Direct Provision: Underprovided see Diag 2 below where Market equilibrium is below optimal level for society.
- 2. Government employs the market (firms) to supply the good.

### Key problems:

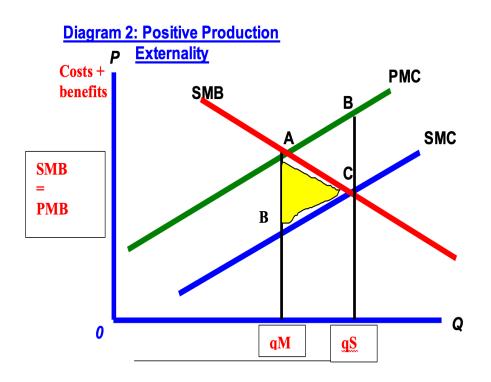
- with public goods are over use e.g. tragedy of the commons
- 'free rider' problem
- Need for direct provision by government e.g. infrastructure roads, street lights etc

Government can use legislation to restrict use e.g. overfishing

Difficult to regulate. Advertising may reduce e.g. need to pay for service e.g. national television lisence. This is a legal requirement but many households do not buy e.g. free riding

Government can use direct probision to over come shortage of public goods where market fails to provide

# Public goods + underprovision



## **Positive Externality of Production**

#### **COMMENT: DIAGRAM 2**

- QS is the socially efficient level of output
- Market under supplies at qM
- Underproduction = area abc
- Abc=welfare loss 📄
- This is a welfare <u>loss to</u> society of the market failure. (benefit > cost)
- Example would be a chemical plant installing a water purification system that benefits other local firms <u>e.g.</u> a local fish farm is not paying for cost of clean water