### **8. Explain how market failures will occur as a result of the presence of positive externalities**

**Economic Causation of impact of merit good**

|  |  |  |
| --- | --- | --- |
| **Merit Good** | Education | Medical Services |
| **Positive Externalities** | Productive Labor Force | Productive labour force |
| **External Benefit $** | ↑productivity /COP ↓ | ↑productivity /COP ↓ |
| **DWL** | ↓I, ↓N+ | ↓I, ↓N+ |

🞹DWL: Failure to reap external benefits due to underproduction

(economic causation – merit good, positive ext, external benefit, welfare loss (DWL)

Due to the presence of positive externalities in the production and consumption of merit goods like education services, external benefit such as the benefit of more productive workers will arise. This will lead to a condition of under-production when there is no government intervention and the society fails to reap the benefit whereby the market equilibrium is lower than the social equilibrium, thus contributing to deadweight loss (DWL); **welfare loss to society which is the value of external benefit the society fails to reap.**

P0

Qty of Education Services

Cost/Benefit

QS

QM

SMB = PMB + EMB

SMC

PMB

DWL

As seen from the diagram, the **market equilibrium is set at Qm where the PMB is equal to PMC and there is no externalities taken into account. T**he presence of positive externalities will create external marginal benefit that will raise the PMB to SMB(PMB + EMB), causing the market equilibrium of the production education services to be set at Qm which is lower than the social equilibrium level of production education services at Qs where SMB=SMC. Consequently, the value of deadweight loss will arise if there is no government regulation, implying that there is market failure.