UNIT 11: MARKET SUCCESSES & FAILURES

Market determined prices → convey important economic information → signalling

If these market-determined prices are capable of making people fully account for their actions on others → outcomes are said to be efficient. When prices do not capture these external effects → MARKETS FAIL → need PUBLIC POLICY

externality when property rights and legal contracts are not complete

Policies can be implemented to enable ~~workers~~ people to induce ~~them to~~ internalization of the external effect.

eg: Pollution → externality of prod^n
→ Not a cost for producers
→ Implement a pollution tax.

Private could also sometimes help internalize this external effect

The external cost does not show up anywhere on the cost calculation of the private firm.

There is a social dilemma here

MARKET FAILURE : When markets allocate resources in a Pareto inefficient allocation

11.2 The Market and Other Institutions

Markets are a way of organizing the prod^{n} and distb^{n} of goods and services

Markets are preferred institutions than government, firms, families, etc. for reasons that include the ability to arrive at an efficient allocation

11.3 Markets, Specialization, and the Division of Labor

Specialization is a key feature of markets as it ↑s efficiency due to 3 reasons:
(i) learning by doing
(ii) Comparative advantage
(iii) Economies of scale : → exist when avg cost ↓ reduces as production ↑s.

Distribution of goods produced under specialization from producers to consumers?
→ Coordination of division of labor

Markets create unintended cooperation on a global scale.

1.4 Prices are messages plus motivation

When markets work well prices capture the real scarcity of goods and services.

1. Prices coordinate specialization among complete strangers
   # prices contain information & provide incentive to act on this information

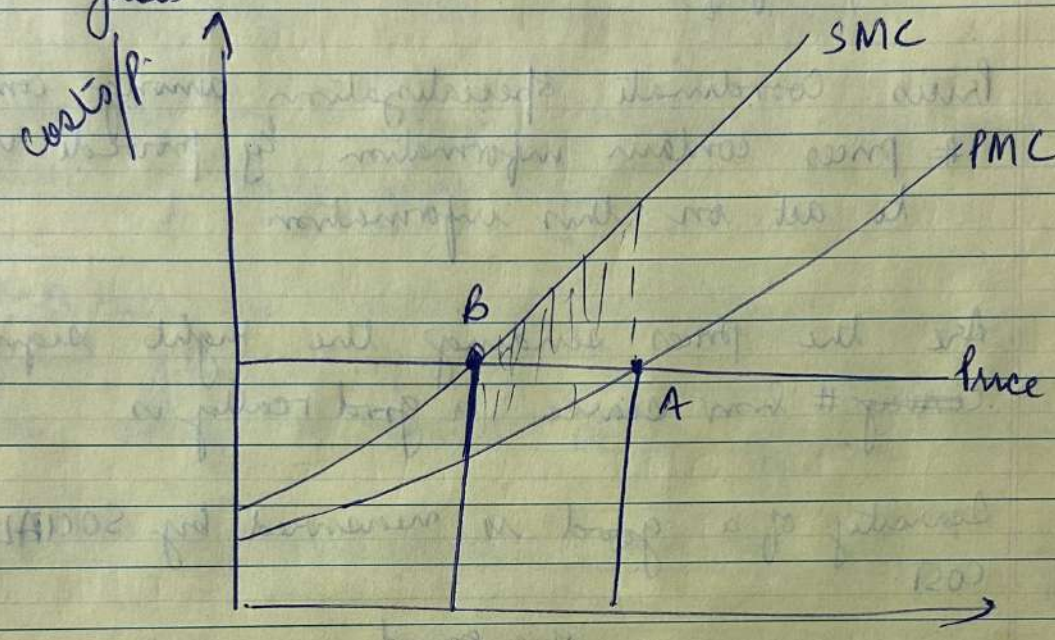
2. Are the prices sending the right signal?
   ~~Convey~~ # how scarce a good really is

Scarcity of a good is measured by SOCIAL MARGINAL COST.

of a good
Social Marginal Cost, is the total cost of having one more unit of the good, including cost of production, distribution, and the cost it imposes on others due to its external effect.

Prices could fail to reflect social marginal cost because:
   (i) Lack of competition → then P > private marginal cost to the producer
   (ii) External effects that are costs → eg, the negative environmental ~~costs~~ effects.
   (iii) Positive external effects

Can one use public policy to correct the situation when prices give the wrong information eg: taxing prod^n processes that emit greenhouse gases



Profit firms get ~~P-A~~ P - PMC

loss fishermen make SMC - PMC

As long as ~~SAA~~ SMC - PMC > P - PMC fishermen could pay firms upto SMC - PMC to ↓ prod^n

Pareto efficient level of prod^n would be at B.

And

11.8 External effects and Private Bargaining

Since fishermen paying firms upto the pt. where SMC = P is better off for both, this could be a potential way of solving market failure

The fishermen and firms could negotiate a private bargain and it is called COASEAN BARGAINING.

The two parties involved in the exchange often have more of the information necessary to implement an efficient outcome than does the government.

Transaction costs: costs of bargaining, that impede the bargaining process or the agreement of a contract. eg: costs of acquiring information about the goods to be traded and costs of enforcing a contract.

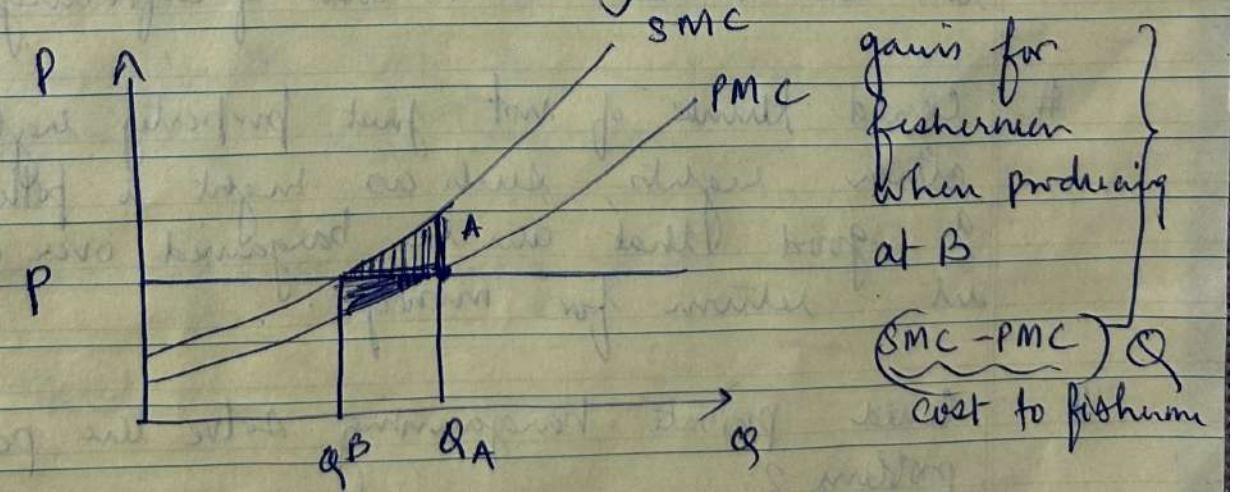
Could think of not just property rights, but other rights, such as right to pollute, to be a good that can be bargained over and traded in return for money.

Could private bargaining solve the pesticide problem?

- the firms have the property right to the machinery and firm that allows it to pollute
- This allocation, the associated prod", income, and even the environmental outcomes represent the reservation options of the ~~plantation~~ firms and fishermen respectively.
- The reservation option is what they will do if they do not come to some agreement

The area b/w the PMC and SMC is the gains for the fishermen if prod" is reduced to Pt - B.

The fall in profit for firms when prod" happens at B instead of at A } = Shaded region = $(P - PMC)(Q_A - Q_B)$



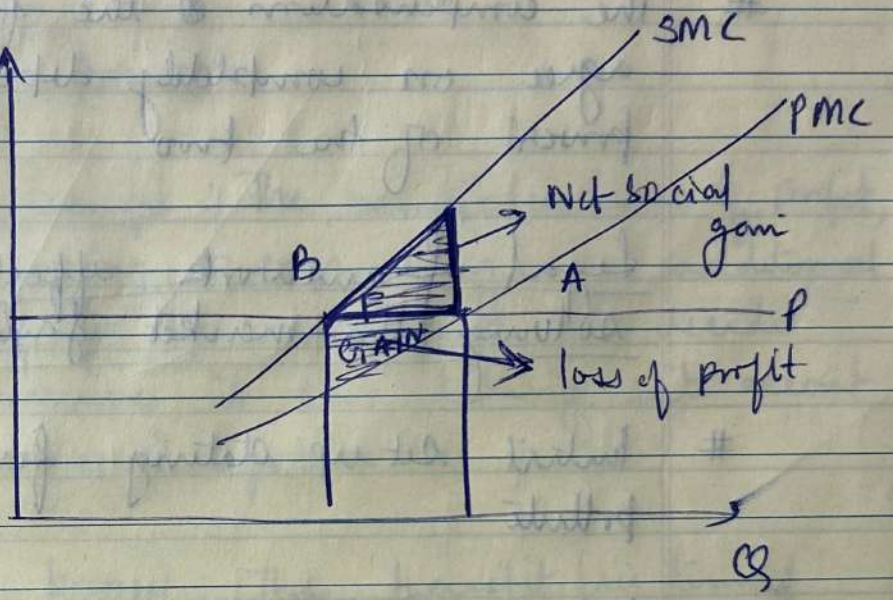
SMC - PMC > P - PMC

Since SMC − PMC > P − PMC, until B, the fall in profit for the firm < ~~gain~~ / ~~social net gain~~ gain to fishermen

⇓

Until B reducing prod^{n} provides a SOCIAL NET GAIN.

If the



The minimum acceptable offer is the smallest offer the proposer can make that will not be rejected by the responding.

Here, the minimum acceptable offer from the fishermen to the firm depends on what the firms get in the existing situation, which is their reservation profit ⇒ shown in the graph as loss of profit

If plantation owners agreed to the minimum acceptable offer, the fishing industry would achieve a net gain = net social gain

The maximum the fishing industry would pay is determined by their reservation option which is area b/w PMC and SMC curve between A and B.

The compensation @ the firms and fishermen agree on completely depends on the bargaining power of the two

Legal framework affects who benefit from solving the market failure

Initial set up stating firms have the right to pollute

Instead if the legal framework shifts such that fishermen have the right to clean water.

In ~~prcipl~~ principle we would reach to the pareto efficient allocation irrespective who has the rights in the start.

However the two cases differ dramatically in who gains and losses when the market failure is solved.

Why would private bargains not work

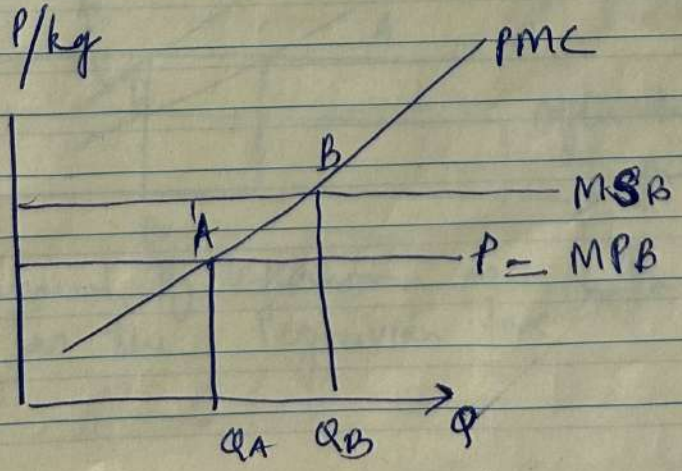
1. Impediments to collective action
2. missing information
3. Tradability and legal enforcement
4. Limited funds.

The polluter pays principle

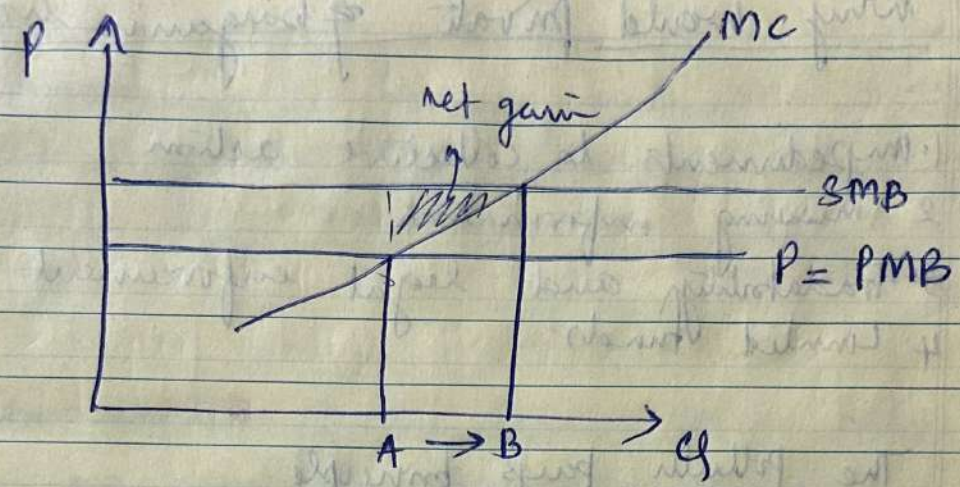
+ Marginal private benefit: The benefit (in terms of profit, or utility) of producing or consuming an additional unit of a good for the individual who decides to produce or consume it, not taking into account any benefit received by others.

+ Marginal social benefit: The benefit (in terms of utility) of producing or consuming an additional unit of good, taking into account the benefit to the individual who decides to produce or consume it, and benefit to anyone else affected by the same.

Constant P/kg



* pay per keeper to produce > P = PMC point as long as



@ MC - PMB < MC - SMB

-PMB < - SMB

PMB > SMB

~~P < MC~~ ~~< P < SMB~~

If prod^n ↑ from A to A+δ

loss for the farmer = MC - PMB

profit for horticulturalist = SMB - PMB

produce as long as

MC - PMB < SMB - PMB

⇒ MC < BMB

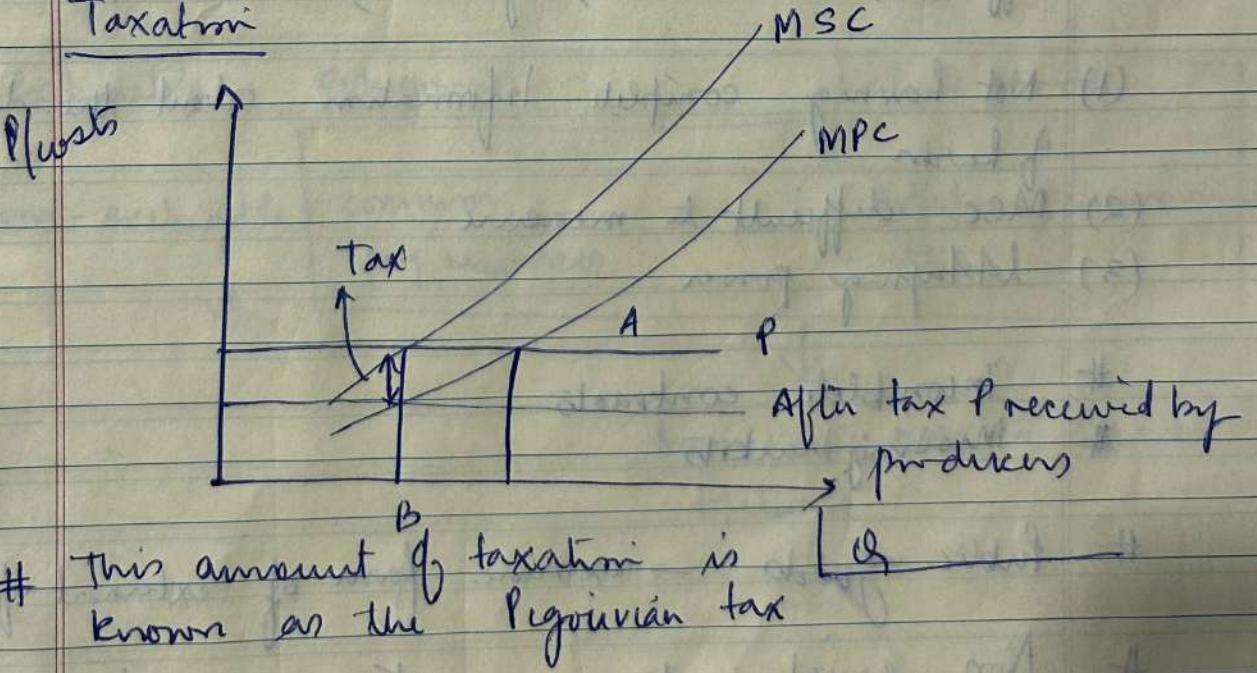
11.9 External effects: government policies and income distbn

govt intervention:
(1) taxation
(2) regulation
(3) compensation

The distributional impacts of each of these policies are different.

Regulation: → difficult if multiple firms polluting.
→ reduce the costs of pollⁿ for freshmen
→ profits of firms
→ shift income from firms to freshmen

Taxation



This amount of taxation is known as the Pigouvian tax

Pigovian tax is a tax levied on activities that generate negative external effects so as to correct an inefficient market outcome (fishermen ↑income, firms ↓ profit more than regulation, govt ↑revenue

⇔ equivalently Pigovian subsidy for the external effect.

Compensation Plantation owners pay subsidy to fishermen

compensation = MSC - MPC

than the MC for firms = MSC

fishermen better than tax as they receive compensation & not government, firms doing same

Difficulties in taxation, regulation, and compensation

(1) Not having complete information about the degree of harm
(2) MSC difficult to measure
(3) lobbying power

Incomplete contracts
Missing Markets

Public goods → extreme form of external effects

Non-rival goods → ~~at~~ MC = 0 to provide to additional users

Non-Rival goods → happening R&D

Non-rival good use can be excluded
→ copyrights → artificial scarcity

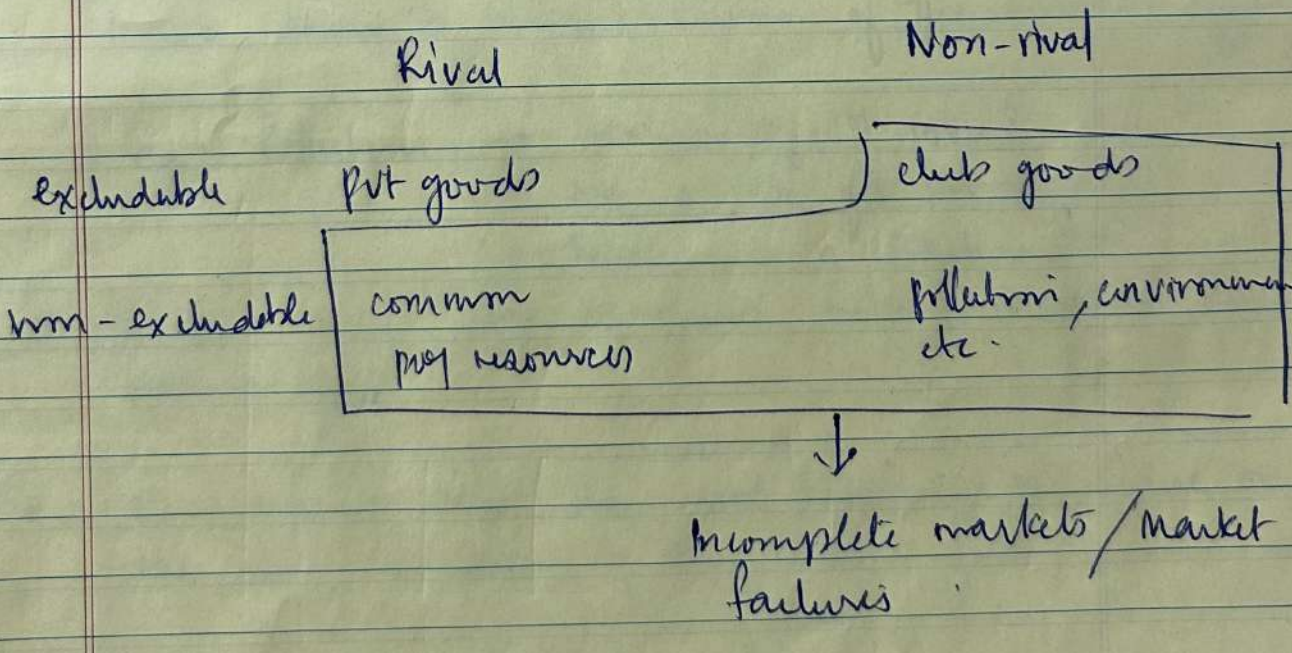
Artificially scarce goods / club goods where use can be excluded for non-rival goods

Public goods generally → non-rival
→ non-excludable

Common pool resources: Rival but non-excludable

VS

Club goods: Non-rival but excludable



↓

Incomplete markets / Market failures

because:

MC of an additional user is zero
non-excludable resources cannot charge a price for their

- ~~Asymmetric~~ info
- moral hazard
- Adverse selection from hidden attributes