Class #5: Announcements

• Get your Team folders
  – Pick up a scratch off
  – Pick up handouts – one for each member of your team.

• Today’s Goal: Help you acquire an intuitive understanding of what is meant by efficient and inefficient.

  RAT #1 Discussion

Team Quiz
CLOSED NOTES - 2 MINUTES

• Which of the following is the primary environmental issue discussed in the article assigned for today?
  a) Water pollution from agriculture.
  b) Deforestation from logging and species loss.
  c) Electricity generation and carbon emissions.
  d) Toxic emissions from garment and textile industries.
  e) Air pollution from home cooking.

  1 scratch = 10 pts, 2 = 7 pts, 3 or more = 4 pts
A review of efficiency
Market goods

Consumer’s MWTP

MWTP = D

P

Q′
Bottom Line:
Market prices will lead to a price and quantity that maximizes net benefits to suppliers and demanders.

A review of efficiency for environmental services

Team Discussion (2 minutes)
Suppose that the environmental service being considered is reduced pollution in Bangladesh.
1) What benefits might "society" get for which they would be willing to pay?
Team Discussion (2 minutes)
Suppose that the environmental service being considered is reduced pollution in Bangladesh.
2) Why is the marginal willingness to pay for ___ decreasing (i.e. why does the value of further improvements in environmental quality fall as air quality gets better)?

Team Discussion (2 minutes)
Suppose that the environmental service being considered is reduced pollution in Bangladesh.
1) What is one costly change would be required in order to reduce pollution in Bangladesh?

Team Discussion (2 minutes)
Suppose that the environmental service being considered is reduced pollution in Bangladesh.
2) Why is the marginal cost for ___ increasing? That is, why would the incremental cost rise, so that as environmental quality improves, making further improvements becomes more difficult?
The socially optimal level
The socially optimal level

Inefficiently low, but still passes as Benefit-Cost Test

Inefficiently high, but still passes as Benefit-Cost Test
100% can be efficient

0% can be efficient

**Team Exercise**
Using everyday language, complete the sentence, “It is economically undesirable to have **less than** the optimal level of an environmental service because ...”  
Hint: Think on the margin
Team Exercise
Using everyday language, complete the sentence, “It is economically undesirable to have more than the optimal level of an environmental service because ...” 

Hint: Think on the margin

Aunt Sue Exercises

• Your Aunt Sue is a diehard environmentalist. She’s convinced that every environmental regulation needs to be stronger. In fact, she thinks that pollution should be illegal. Write a short e-mail message to your Aunt explaining why some level of pollution makes sense in terms of economic efficiency.

Aunt Sue Grading Rubric

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is it clear that social net benefits are considered?</td>
<td>3</td>
</tr>
<tr>
<td>Are marginal concepts used correctly to explain that, for at least some pollutants, the marginal benefit at 100% elimination is less than the marginal cost?</td>
<td>5</td>
</tr>
<tr>
<td>Is the answer well written in every-day language with correct grammar and word choice?</td>
<td>2</td>
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• Pick the better answer between A & B
  – Circle positive aspects. Put an X by negative aspects
Aunt Sue Grading Rubric

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- Pick the better answer between A & B
  - Circle positive aspects. Put an X by negative aspects
- Pick the better answer between B & C

Aunt Sue

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- Pick the better answer between A & B
  - Circle positive aspects. Put an X by negative aspects
- Pick the better answer between B & C
- Pick the best answer.

Is water pollution in Bangladesh at the efficient level?

- What would be two benefits of a marginal decrease in water pollution in Bangladesh?
- What would be a cost associated with decreasing water pollution in Bangladesh?
- Do you believe the benefits outweigh the costs?
Apply the definition of efficiency to water quality in Bangladesh

• Write a one or two sentence explanation of why it would be economically efficient to improve water quality in Savar Bangladesh.

Now write your own (personal) msg to Uncle Bob (5 minutes)

• Your Uncle Bob is an extreme free market advocate. He’s convinced that every environmental regulation is bad. In fact, he thinks that there should be no attempt by the government to reduce the amount of pollution.

Write a short e-mail message to your Uncle explaining why it is probably socially efficient for there to be some efforts to reduce pollution.

Come up with a team best answer

• Submit for grading.
• Should be less than 50 words.

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