

## Quiz 2

(5 points)

Time: 22 September 2021 at 15:00-15:30 (30 minutes)

There are 2 questions. You need to answer all two questions. Please **submit** your answers in a PDF file with a file name "**Quiz2\_StudentID\_FirstName Surname**" via BE Moodle class before **15:40**.

Write a paragraph to answer two questions below:

**Question 1: What are the problems in water resource management?** (2.5 points)

**Question 2: What could be a source of inefficient allocation of land?** (2.5 points)

1.) There are 3 main problems in water resource management

- 1.1) water scarcity which come from rapidly growing urban areas, neighbouring water resources such as share river with near by country, climate change and bio-energy demands such as high demand of hydropower leads to high demand of water
- 1.2) nowadays, water is contamination can cause harm to people due to their everyday use and there are reduce in clean water due to use in many sector. moreover, water stress if total use more than availability means scarcity level increase.
- 1.3) water demand is increasing more than predicted.
- 1.4) There are now small percentage of drinkable fresh water and some are polluted also.

Moreover, sources of inefficiency:

- a.) Restrictions on transfer due to there are preferential treatment for use water
- b.) Beneficial use: some user cannot allocate water properly ex. use water more than they need can lead to scarcity.
- c.) pricing: due to we didn't include opportunity cost for next generations in water price. This lead to under price of water.

2c) 1.) lack of property rights : due to use "first come first serve" which is give rights of own the land to the people that come first. so, some owner have poor potential to allocate the land, so it create less benefit to social due to owner can focus only on their benefit.

2.) Under value of land : for example, large farm have beautiful view that visitor have to pay fee for visiting but there are free rider that avoid to pay fee due to undervalue the land and they think that everyone got benefit why they have to pay. and farm owner don't have money to conserve land.

3.) owner of land inefficient land allocate and cause negative external to society. And land owner ignore the external cost and this cost is on neighbor that got an impact. Ex: resort provide beautiful view but create water waste to neighbor