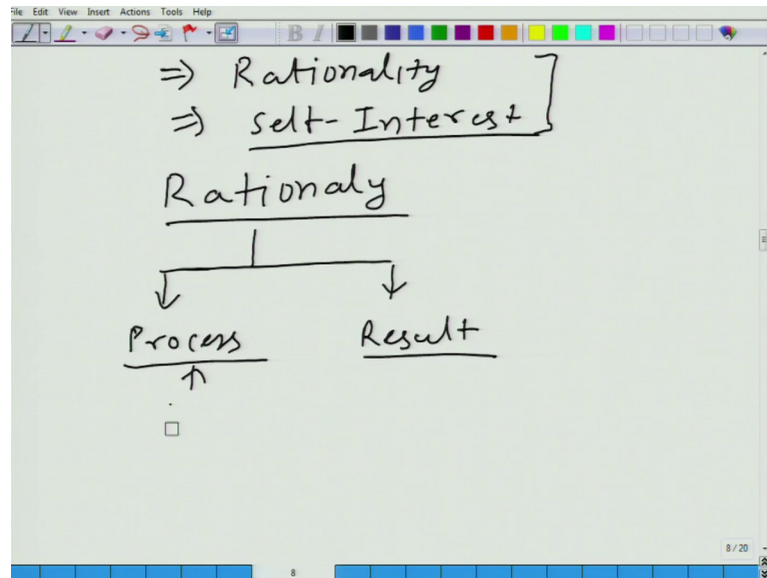


An Introduction to Microeconomics
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Lecture – 05
Move on Rationality and Self Interest and Optimization

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Let us endow our individual with 2 properties. The first is rationality, and the second is self-interest. It is not exactly endowment, it is like if we want to study individual systematically then we say that the individual is rational. Because let us say if someone is acting irrationally. Someone is acting very, very irrationally; then of course, we cannot analyze that situation.

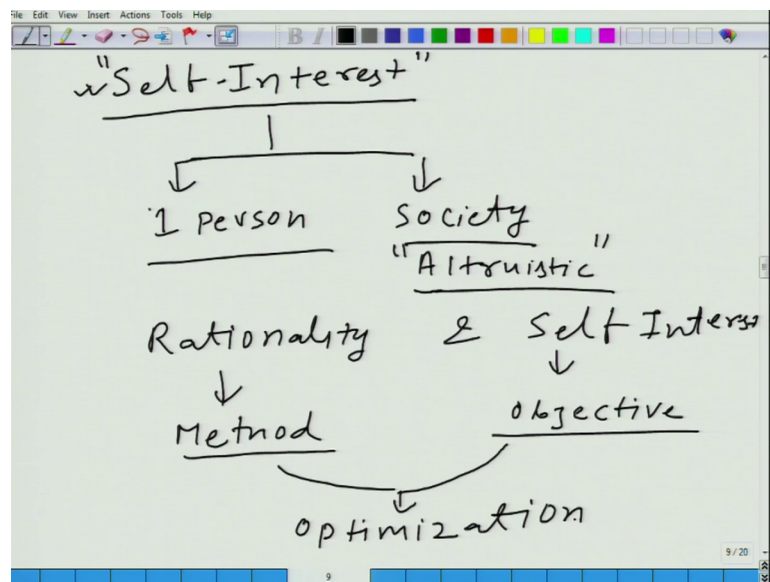
For an example let us say that someone did something. And then you may you may contemplating why that person has acted in this particular way. One simple answer could be this is the way he wanted to act. Everything can be explained on this basis, that this is the particular way this person wanted to act. And that is why he has acted in this fashion. So, here the explanation this explanation would explain everything in the world. So, in that way this explanation does not give you any more information that you already had. So, for this reason this explanation is useless.

So, that is why we want to fix one side of the story, that individuals are always acting rationally. Now it has 2 side. Because, this rationality can be about process, how a person

has reached to this decision, or it is about result acting in a particular way that lead gives you the maximum the best possible result. And these 2 are not the same. These 2 are different. Sometime a rational process may lead to not the best possible result. So, but still we talked about in economics, we emphasize process rather than result.

The reason is very simple. Then because result it is it is very, very difficult to internalize. That it is very it is almost impossible to internalize; how did someone reach to that result. One can say this is the best result, and he should act in a act to get achieve that result, but that does not say anything about the process the thought process that is going on. So, here in economics we are going to concentrate on process. The next term is self-interest.

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what do we mean by self-interest?

So, this is the most fundamental assumption that we make in economics is that all individuals act in self-interested fashion. Now what do we mean by self-interest? It is like acting for your own benefit, for the self-benefit and that is self-interest. Someone may ask off immediately that why you are making centra self-interest as the central assumption of this subject. I know many people you can say I know many people who do not act to fulfill their self-interest.

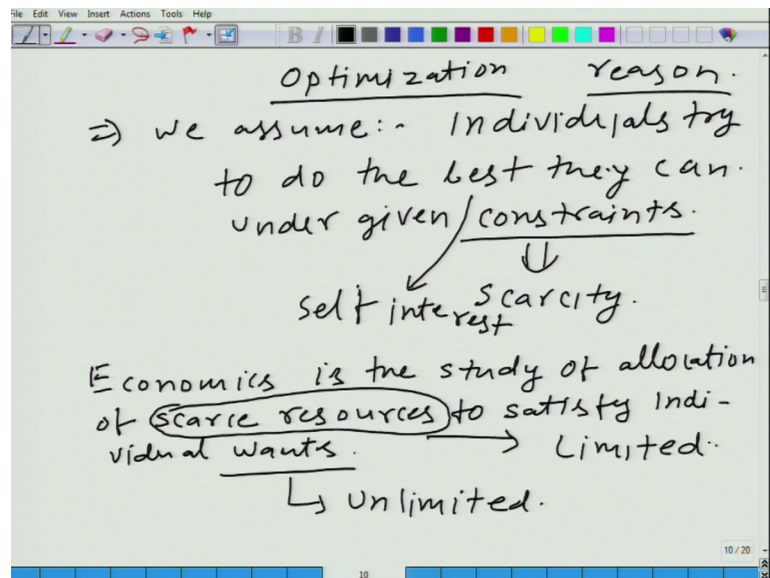
They act for the betterment of the society, but here in economics the common the basic assumption is that people humans are self-interested. How they have reached to this level

it is not typically it is not discussed. We take a person's preferences a person tests as given. So, we do not say why that person has become. So, self-interested. We do not care about it. We take that person's nature as given, and then we analyze.

But here another way to look at it this self-interest can be broad enough; that you may care for just one person or you may care for the society. So, when you care for society you become altruistic, but this also includes here the narrow definition would say, narrow here we can use it to say this is your this is what you want to do. Whatever if you want to do well for the society that is what you would like to do.

So, here we are completely silent about how you have reached to this assumption, but the we take this assumption as given. So now we have seen this rationality and self-interest. Rationality is about method that your methods would be of well thought should be well reasoned. It should not be guided by emotions. It should not be guided by your fear. It should be well thought reasoned. That is what we are talking about method. And self-interest it gives you an objective. What you do? You do anything to satisfy your need, your wants. So, it gives you objective. And these 2 leads to optimization. So, what is optimization?

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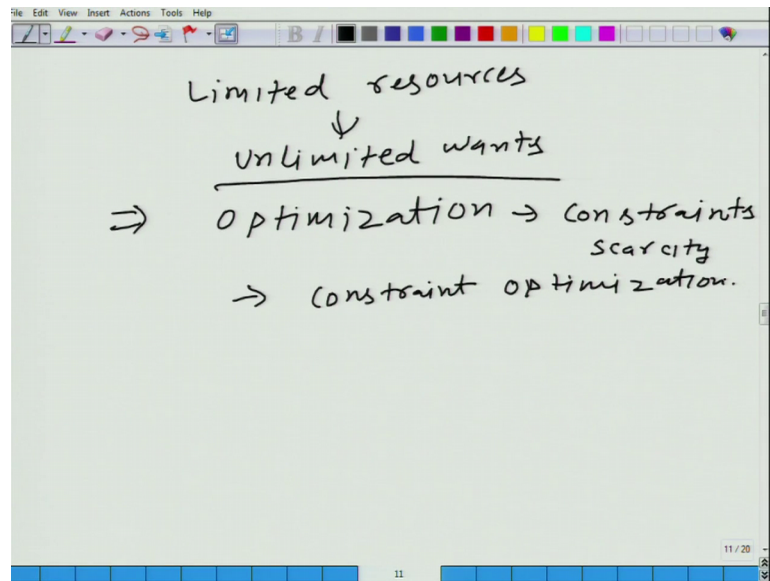
That here in optimization we assume that individuals try to do the best they can. And also, under given constraints. It is not that you can do anything that you want to. You

have to consider the constraints. So, why do we have constraints? That typically reasons for having these constraints are scarcity. We have already discussed what does it mean.

So, scarcity leads to constraint. Self-interest leads to this is related to self-interest. And here we are talking about how they try to do, but how using reason. Let us look at it again at optimization why do we get into optimization, why do we get to this problem. That individuals try to do the best they can under given constraint.

Let us look at the definition of economics once again. What do we say that what is the definition? Economics is the study of allocation resources to, now let us look at it. What do we have economics is the study of allocation of scarce resources to satisfy individual wants. So, the problem here is that individual wants are unlimited. There is no end to yours or mine's want. And how about resources? Look at resources are scarce in nature, resources are limited.

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So, you have limited resources, and from limited resources you want to satisfy unlimited wants. How could you do that? Of course, when you have limited resources, and your wants are unlimited or infinite the only way to do it is to figure out that which wants are more important than others. And then given the availability of resources, you would satisfy the wants which are which has higher priority than other wants.

So, that is why you have optimization. And not only optimization, we have very special kind of optimization, that optimization where you need to consider constraints, because of scarcity. So, from here you get constrained optimization. More on optimization little later. We will talk about optimization in detail.