#### MINERAL ECONOMICS AND BUSINESS

### **Prof. Bibhuti Bhusan Mandal**

## **Department of Mining Engineering**

### IIT Kharagpur

#### Week 11

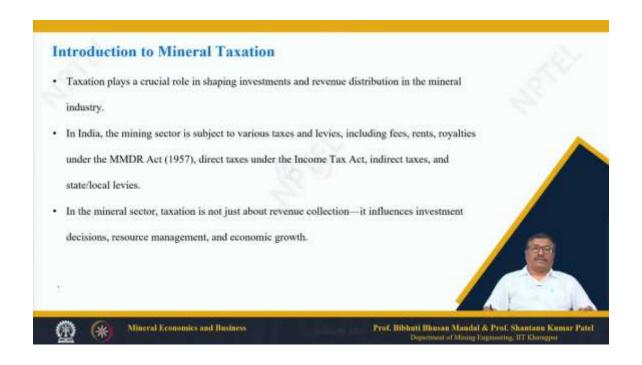
# Lecture 53: Royalty and Taxes - I

Hello everybody, I once again welcome you to this lecture in which I will be talking about royalty and taxes. It is a very important chapter and it has got a lot of contribution. It talks about the contribution, directly and indirectly, to the economy of any country from the mineral sector. So, what are the topics that we will be discussing today? Let me summarize in the beginning, and then we will pick them up one by one. The mineral taxation—ah—introduction to the concepts, what are the different types of mineral taxation in our country, specially.



And then, what is royalty and dead rent? What are the excise duties and welfare schemes? So, these are the broad topics that we will cover, and then we will see how they are calculated, how they are collected, and how they play a great role in developing countries, benefiting society and the economy as a whole. Taxation, in this case—

especially in coal and minerals—plays a crucial role. It does not only relate to investments but also the revenue distribution in the mineral industry. In our country, we have various taxes and levies—like different fees, rates, and royalties under the MMDR Act.



We also have direct taxes under the Income Tax Act, indirect taxes, and state and local levies, depending on the policies adopted by the respective governments. So, this taxation is not just about revenue collection; it influences investment decisions, resource management, and the overall economic growth of any country. This serves as a crucial form of government intervention also. That means the industry is going on—it is not that they are going alone or on their own autonomously, not at all. There is serious concern, and there is sufficient government intervention into it, ensuring that resource extraction benefits our economy and we maintain the sustainability of the business as a whole.

The taxation is not that much that you pay almost all your profit to the government does not that is not the ah case. So, we the the the royalty collection or the taxes collections are a part of sharing the ah the ah this income from the from the companies to the government definitely for for the social and economic benefits. but also to see that the companies are not over taxed and they can sustain the business So, what are the key objectives of this mineral consent ah the taxation? We encourage optimal exploration that

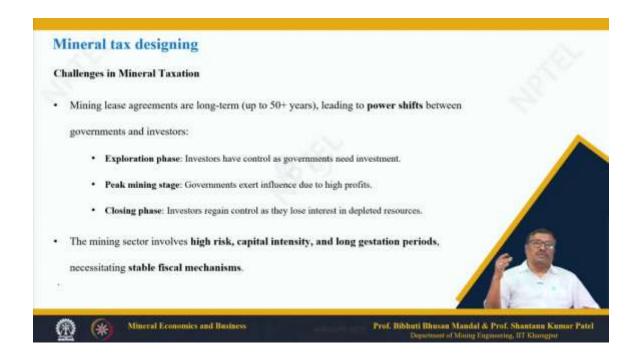
means, I mean not that over exploration and ah that much whatever is ah required for the purpose of mining and excavation.



Then maximizing mineral rent, we try to get maximum rent from there. Upholding environmental and sustainability standards. So, we provide incentives ah in the form of reinvestment. we must protect against the market failure in case in a market fails and some industries under severe stress. So, what we see that whether the tax can be regulated or we can give some kind of incentives from the ah previous previous taxes or royalties paid by the government, whether that can be reinvested and we can protect them in the ah huge severe market volatilities.

We support through this taxation, we support the planned development and conservation of minerals. So, what are the challenges that we have repeatedly discussed in the whole series of the lectures. Here also in mineral taxation we have challenges like the mining lease agreements are long So when you are taking the lease now, say in next 50 years, there will be a lot of power shifts in the government and the investors also, the people who control the shareholders. So they will also change.

So, in that case there will be lot of differences in the in the in the taxation system it can be ah when we start mining and when we go through the mining operations and close the mining operations. It is a long term—ah say say 5 decades or even more than that in many cases. So in the beginning for example exploration phase when you start doing that so investors will have more control because government will need investment. But when the mining is at peak the government exert influences due to high profits that the companies are earning. Again in the closing phase when the earning is going down depleted resources investors will regain control for the settlement at the end of the business.



The mining sector definitely involves high risk, it is capital intensive and then long gestation period is there. So, it requires stable fiscal mechanism which includes the tax regimes. In the design of the taxation system which may be applicable to any mining or mineral industry, we have certain objectives, some broad framework or broad guidelines which we follow, which any government will follow for designing the taxation system. First thing there is a revenue security for the government. They want to secure a fair share of the mineral rents.

Other than regular taxes there will be additional payments to maintain tax neutrality. There is also tax policies in this case which should minimize the ecological damage. And revenues should be reinvested for long term economic stability beyond mining operations. Also, we need to have efficient administration, so that we can ensure efficient tax collection with minimum delays. So, that the process should be streamlined, they are

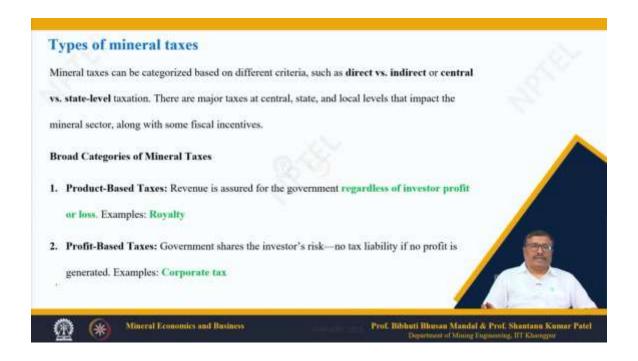
updated and the government gets the regular revenue and taxes from the mineral industry for utilizing it for the overall development of the society.



Now this can be the mineral taxes can be categorized either you can call it direct based on the type or indirect or it can be a central a tax or state level taxation that we will we will see how it works actually. There are major taxes at the central state and local level that will impact the mineral sector and and of course, with some kind of fiscal incentives wherever applicable. Now, there are said two broad regimes broad categories rather. One is the product based taxes that means, this is this revenue is assured for the government regardless of the investor profit or loss that means, you are selling the mineral or ore from some mine and whether you have made profit or not that is not the consideration here royalty is a good example of this it is calculated on the basis of the average sale price of the mineral and ore and the quantity that you sell not on the not on the profit ah you make in the company now the other type is just opposite it is profit based

So, government shares the investors risk that means, there will be no tax liability in case no profit is generated by the company. A good example is again the corporate tax which is completely it is calculated ah based on the profit earned by the company not unlike I mean the royalty which is irrespective of whether you are we are making a profit or loss. Now we have say regulatory taxes, this is to encourage beneficial activity that means, we

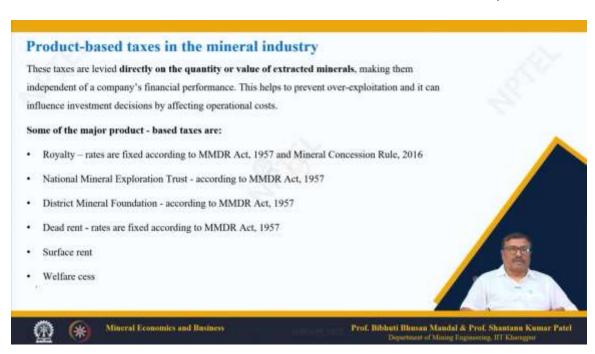
can lower the taxes to encourage the mining activity in many cases. And we can do the opposite the government can just do the opposite they can discourage undesirable activities by increasing taxes, this is equally applicable to other industries and mineral industry also. There are other also fixed contribution taxes.



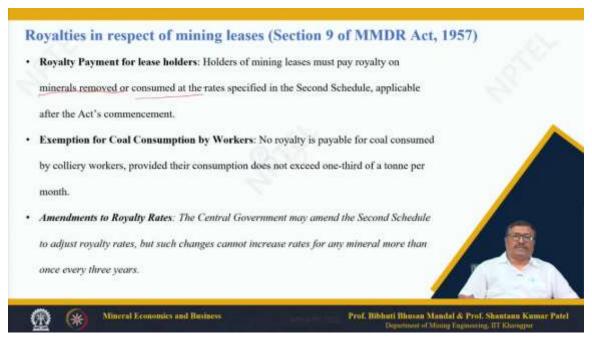
So, you have a mining company, you have a leasehold area. So, say for example, in the beginning this is charged to recover government expenses or say consistent revenue generation like the application fees, license fees, this will be charged. Now, there are something the product based taxes in the mineral industry. So, these are levied directly on the quantity or value of the extracted minerals which we will see very soon. And it is not dependent on the company's financial performance.



This helps in to prevent over exploitation and it can definitely influence the investment decision. The major product based tax that we know are royalty, the rates are fixed according to the act MMDR act 1957 and this is already amended up to 2016 or later and the mineral concession rules 2016. National Mineral Exploration Trust NMUT, this is framed under the purview of provisions of the MMDR act again. Then we have district mineral foundation very important DMF. Then we have dead rent to be paid according to the in the third schedule or the act, the ah surface rent and also the welfare system.



These are major product based ah product based taxes. That means, it will depend on the quantity or value of the extracted minerals. Now the what are the royalties in respect of mining leases. So, section 9 of the act as amended up to date says that the holders of mining leases must pay royalty on minerals removed or consumed at the rates specified in the second serial of the act. But if the coal is consumed for example, for in case of coal if the consume by the workers, where the consumption does not exceed one third of a ton per month for any for any worker.



So, in that case the colliery workers will be exempted I mean that that much will be exempted ah from the royalty. Now, the rule 39 we are just trying to summarize these things. The royalty is charged on the processed mineral. If we are processing the mineral, then if it is processed processing occurs within the leased area, then we will be charging on the processed mineral. But outside the leased area if raw minerals or run of mine as you say ROM or say run of mine are transported outside for processing.

The difference is that the royalty will be charged on the unprocessed mineral because you have taken the mineral out of the ah of the leased hold area and processed it. So, it will be charged on the unprocessed mineral the run of mine. Royalty is calculated as a percentage of the ASP which we have learnt in details in the previous 2 lectures. And this

is published by the IBM. So, you can see the your ASPs on the IBM websites and a fixed percentage of that will be calculated as the amount of royalty.

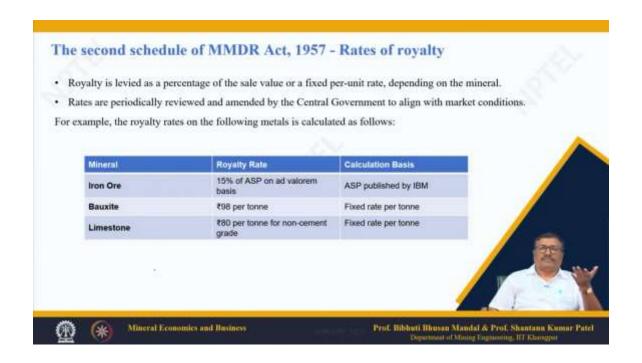


For certain minerals royalty is also based on the LME price or LBMA prices. This is applied to the metal content. or by product output. In certain cases where this is not applicable, we apply this one. This is also also in certain cases charged on the tonnage basis, charge plus tonnage of mineral extracted or consumed at the least areas specific at a specified rate.

According to the act the royalties levied as a percentage of the sale value and or a fixed part per unit rate as I said earlier. So, they are they are periodically reviewed and amended by the government. For example, in one case if we we can see we we this is the all the details are not given in this part, but this is an example 15 percent of the average sale price on ad valorem basis for iron ore. For bauxite for example, 98 rupees per ton fixed rate per ton. So, this is ad valorem, this is fixed rate per ton, this is again limestone also it is a fixed rate per ton.

So, there can be different criteria for calculating the variety of minerals, as we have seen in a few examples. Now, we are coming to another type of tax or levy, you can say, which is, ah, what I must say, a revolutionary concept because, as mining engineers for a

long time, we found that the exploration was not good enough. To understand what our reserves or resources are in the country. So, because we needed more money, additional money, for the purpose of exploration, which was usually a government initiative in our country. So, this, ah, the great change came when the government established the National Mineral Exploration Trust, which is a non-profit trust set up under the Mines and Minerals Regulation and Development Act to enhance mineral exploration activity.



So, that means the idea is that we take a small amount of money from the mineral production of companies and reinvest it in exploration. That was the concept, and it has given a great boost. Otherwise, it was a government initiative like GSI or MECL, which used to do it. Now, even if they want to do it, they can get the funds for exploration, which is a very expensive venture in the beginning without any return other than the information you get. So, this has done, I mean, a great service to the nation. This is a very good initiative by our government to promote—the purpose is to promote.

Detailed mineral exploration across India and fund exploration projects to improve the mining sector's sustainability. The more informed you are, the better you can manage resources. We can reduce dependency on imports by increasing domestic resources if you have an idea of what resources you have and how to exploit them. The basic calculation is 2 percent of the royalty. First, you calculate the royalty, then you take an additional 2

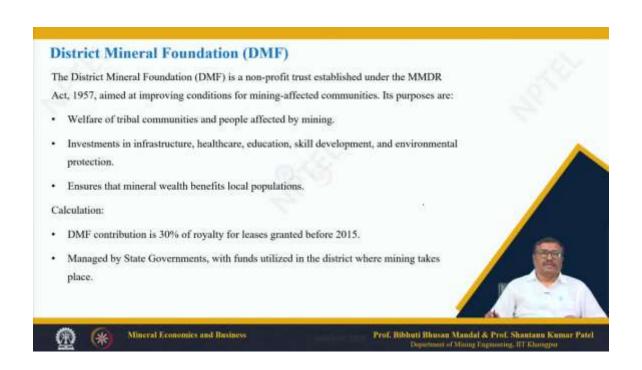
percent of the royalty that is paid by the mining lease holders. So, this is collected by the state government and forwarded to the central government for national exploration projects. We have GSI, we have MECL, and we can fund any other agency, ah, if considered fit by the government, for the purpose of exploration in our country.



Now comes another great initiative by the government: the District Mineral Foundation. So, this is a non-profit trust established under the MMDR Act again, and this is aimed at improving the condition of the mining-affected communities. The purposes are the welfare of tribal communities and people affected by mining. So, if you go to the places where mining has been going on for 100 years—almost more than that—you will see that, in many cases, the condition of the people around may still not be satisfactory. So, the development is meager; the development is not satisfactory.

So, the government took a direct decision—this is a good decision. That if you are mining from any area which is severely affecting the environment and society, then a part of your profit must go back to the society. How to do that? How to ensure welfare for the tribal communities or the people affected by mining activity in any specific area? So, can we invest in infrastructure, healthcare, education, skill development, or environmental protection?

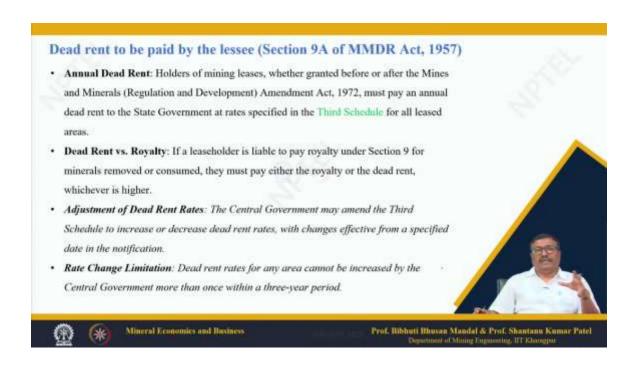
The answer is yes. And this is how it is done—or this is what is done—through the District Mineral Foundation. This ensures that the mineral wealth benefits the local population. So, how to calculate that? See, the District Mineral Foundation contribution to DMF is calculated as 30 percent of royalty for leases granted before 2015.



So, this is 30 percent of the royalty for this is that means, you calculate ah the the the royalty and then take 30 percent that will go as a contribution to the district mineral foundation. This is managed by the state governments with funds utilised in the district where mining takes place. That means it will be under the purview of the district collectorate and then this will be published in the website also that how much is now a particular district is having and which how much is the utilisation for the development of that particular district. So, this is a I mean ah paradigm shift in the the development strategy, how the development is done. That means, when one when some mining company is making thousands of crores from any any place, then a part of that is going back to the society.

The district mineral foundation this provision is a great help towards the development of the mining affected people. Now, this is a very common thing dead rent, you must I mean you have heard about it. So, when you are having mining lease, the mining lease holders must pay an annual dead rent as to the state government as a specified in the the schedule.

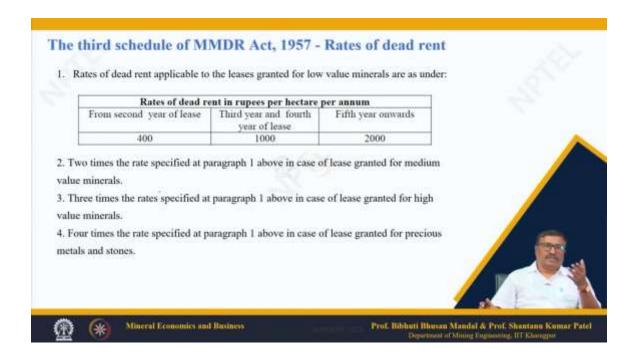
Now, also we have the dead rent and the royalty. So, if a leaseholder is liable to pay royalty under section 9 for the mineral removed or consumed, they must pay either the royalty or the dead rent.



I will explain these things. For example, you have started mine, developing a mine. So, you are not getting any mineral removed effectively which you are selling or doing anything you are dumping inside ah if you if at all you are recovering anything later on. So, all these phases when you are not getting any mineral during the development phase then you go on paying dead rent as per the schedule I will show that.

But so, when you start getting the minerals recovery, excavation and recovery of minerals starts in the leased area, then there will be two things. You have to either pay royalty or pay dead rent because when you are selling that mineral or consuming it even by yourself, then you have to pay according to the average sale price published by the IBM. So, there will be two figures: royalty and dead rent. In the beginning, royalty will be even compared to dead rent, then you go on paying dead rent. The moment you cross the amount of dead rent per year, then you have to start paying royalty, not dead rent anymore.

Now the rates are fixed and described in rupees per hectare per annum in the third schedule, and as you can see, from the second year it is rupees 400 as dead rent per hectare per annum in rupees 400. Then from the third year and fourth year, it is 1000, and from the fifth year onwards, it is rupees 2000. Now, this can vary also if the 2 times, I mean, if it is a case of lease granted for medium value minerals, then it will be twice as we have seen earlier. It can be 3 times where the lease is granted for high value minerals, and it will be 4 times as we have described there in case of lease granted for precious metals and stones. So, for that, you need a definition of what is medium value, what is high value, and what is precious metal and stone.



So, there also we have directives or definitions very clearly notified under the Mines and Minerals Development and Regulation Act 1957, where the precious metals and stones are gold, silver, diamond, ruby, sapphire, emerald. And high value minerals are the semi-precious stones like agate, gem garnet, corundum, copper, lead, zinc, asbestos. Then the medium value minerals are chromite, manganese ore, kyanite, silimanite, vermiculite, manganesite; all these things are considered medium value. And low value minerals are given as the other than precious metals and high value; whatever is remaining is considered as low value. So, this is applicable; I mean, the calculation will be based on

this definition and the basic rates of dead rent are given in the third schedule as I have shown before.



Now the surface rent another is other than debt rent we have surface rent. This is a fee paid by mining lease orders. Remember that I have tasked these things the lease the debt rent and surface rent somewhere in the beginning when I was teaching the the action regulation. So, I am just giving it I am just trying to tell you once again because it is in the proper context of the taxes and royalties. I cannot leave these things because these are important rents and levies.

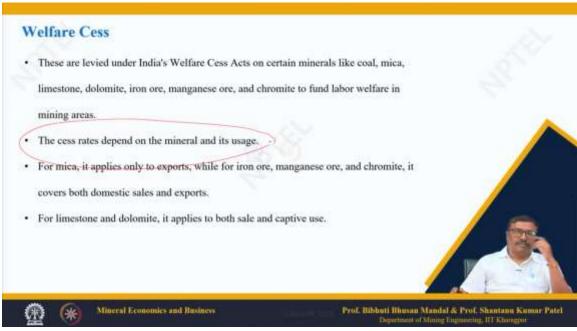
So, this is this surface rent is again a fee paid by the mining leaseholders to the land owner or the government for using the surface land for the mining operations. So, this will actually compensate for the occupation you are occupying and disturbing the land due to your mining activity. So, this is applicable to land owned by the government and private individuals, they are also paid annually as per the terms of the lease agreement and it does not depend on the mineral production, but on the land area occupied. So, no activity you have occupied, so you have to pay rent. It covers all infrastructures, storage, operational use of the land.

So, the rate is fixed by the for government is fixed by the respective state government. Private land negotiation between the mining company and the land owner and it can vary depend on location, land type and what are the terms and conditions stipulated in the land agreement. Then there is welfare says this welfare says is to be a single figure now it has change. This is levied under India's welfare says acts on certain minerals like coal, mica, limestone, dolomite, manganese ore and chromite to fund labour welfare in the mining areas. So, this says rates depend on the mineral and its uses like a kind of levy.

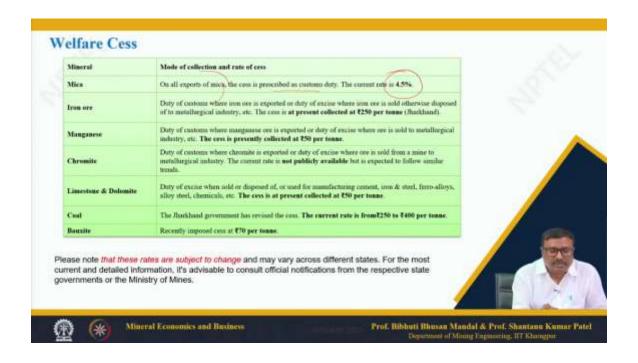


So, this was fixed for certain ah period of time now it has changed. So, for mica also it applies only on exports while for iron ore manganese ore this is cover for domestic cells and export both not only export, but also domestic cells. For limestone and dolomite it applies for captive and non-captive use. for example, mica on all exports of mica, this says is prescribed as customs duty, the current rate is 4.5 percent. In case of iron ore, the duty of customers iron ore is exported

or duty of exercise exercise exercise duty where RNO is sold otherwise disposed of the ah to for to metallurgical industries. The stress is at present collected as rupee 250 per ton in Jharkhand. The state wise it also varies. Similarly, we have rates for manganese and then chromite. For limestone and dolomite also we have the says at present collected as rupees 50 per ton.



In case of coal the Jharkhand government has revised the says this current rate is 250 to 400 rupees per ton. These rates remember that these rates are subjected to change. We have tried to cover the royalties and taxes on the minerals, coals and the taxes also covered the specific which are very specific to the industry like the surface rent, dead rent, the national mineral exploration trust, the district mineral foundation all these things, and very importantly royalties. So, this we have covered to show you that what is the tax planning or how it is being collected ah through different agencies the state government and central government.



And from this, we can imagine that If we can encourage exploration and mining activities, the government can earn much more revenue from the industry and ensure that it can be used for the development of the mining sector. So, this is not only about exact control. On the mining operations, but also this can help the government to invest the revenue that we collect for the development of society, the community, or overall the development of the nation. So, you can use the website that I have already shown for more information or detailed information. Go through the acts, rules, and regulations that are listed in the references, and from there, you can get more information.



So, see you in the next class. Thank you very much.