INTELLECTUAL PROPERTY PORTFOLIO MANAGEMENT

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Welcome friends, we are almost on the verge of completion of this particular course. on IP portfolio management and as we discussed that we are trying to summarize our discussions and also we are trying to explore give directions or you can say food for thought where you can see that how IP can create few more interesting outcome considering the current world's problems. We started the discussion in our very first that IP is a very important source for economic development and we all are looking that how to have more and more economic development because we feel that economic development is essential for the well-being of all of us and IP is considered to be a very important way of economic development which is leading to prosperity which is leading to well-being of all of us. But unfortunately

In this economic development race, we have lost, we have missed the concept of sustainability. We need to see that if environment is not there, how we will survive, how business will survive, what is the role of IP in that case, if no society is there. So, therefore, people, experts, they have started discussions that can IP also contribute in sustainability of the planet. We all know there are 17 sustainable development goals (SDGs) which are decided and we are expecting the whole world to make progress on these sustainable development goals.

And in this particular session we are going to discuss that how IP can contribute in the achievement of those sustainable development goals. Because it is believed if we achieve these sustainable development goals, it will ensure some sort that you will have a better life, you will have a longer life, longer life of the planet. Otherwise, the kind of environmental challenges we are facing, the kind of disasters which are happening, we just saw, we are recording this course in the year 2024, this is the month of May 2021. Last month in April, we heard that there was a massive flood in Dubai and that massive flood in Dubai is natural, but there are also theories coming up that it is because of

artificial rains, which the country is doing. And unfortunately, they could not control the amount of artificial rain.

So, it resulted in a kind of a cloud bust. So, developing the technology of artificial rain can be protected under IP. But that technology may result into such type of disasters. That is again a question of whether all the technologies we are developing are helping us in promoting the sustainability of the planet or not. So, therefore, all such type of discussions we are going to do in this particular session where we are talking of what are the United Nations Sustainable Development Goals, quickly a brief introduction of those 17 SDGs, relevance of SDGs for intellectual property ecosystem,

Then, World Intellectual Property Organization (WIPO), has also taken some kind of initiatives to promote SDG through IP. Then, we also know, this year, in year 2024, we have celebrated World IP Day on the theme of sustainable development goals. So, WIPO is taking a lot of initiatives in that direction. there are different types of IP assets. So, we will see that SDGs role and patents

Then we will also see another very important type of IP asset that is geographical indicators and how GIs can help or in promote the SDGs. There are different types of studies which are taking place to see the role of GI in promoting the sustainable development goals. So, we will also be talking about them in this particular session. So, as we know that the importance of sustainable development. Now, let me first talk for few seconds what do we mean by sustainability?

So, without any prejudice to the definitions given by the UN or various other agencies, the simple literal meaning of the term sustainable is something that is long-lasting. So sustainability is something which is long-lasting. Now we can talk long lasting in various perspective. If I am an organization, so I will see how my organization will be a long-lasting organization. Can my organization survive for 100 years, or 200 years?

If I am a country, how will my country survive for longer durations? If I am an individual, how can I live for a longer life? So, there can be different perspectives for this sustainability. So, therefore, when I talk of sustainable development, I see all those perspectives that whoever you are whether you are an individual, you are an organization, you are a nation, how to have a longer continuity, longer continuity that is the sustainable and in that development is also important.

If you are at a particular level today, if you are here today, this is your per capita income let us say. So, the sustainable development says that you should be able to have a longer duration also, and in this longer duration, your per capita income should also increase from here tomorrow you should be here. If you are having let us say some other measurement if you are consuming let us say this much kilowatt (kW) of energy per day as per of sustainable development. Tomorrow you will be consuming this much of energy and you should be able to consume that energy for longer period of time.

So, you can see sustainable development from different different point of view. But since we are talking of time and increase, time and increase, these are the two very important dimensions of sustainable development. Different national governments are setting targets for sustainability improvements ranging from societal inclusiveness to carbon emission reduction. People feel that this longer period from here to here, this is only possible when our environmental issues can be handled And environmental issues can be easily handled if we reduce the carbon emissions.

As more carbon goes into the environment, it is damaging our environment, which is the reason for, as researchers say, a large number of environmental challenges which our society is facing at the moment. So, UN, WIPO, they all are concerned about making this planet a better place to live. 2030 agenda for sustainable development has proposed 17 SDGs and all of you must be aware that almost all the countries have well accepted these 17 SDGs. Countries are working significantly seriously that they need to improve their sustainability development goal index. In fact, you all can see that there is an SDG tracker available and that SDG tracker gives you real time picture that which country has what score on a particular SDG.

So, if possible, we would like to show you those SDG trackers also, and IP is a critical incentive for innovation and creativity, we all know. And now how in innovative ways we can achieve SDGs. So, the issue is why we are talking of SDGs in a class of innovation and IP we feel that innovation can help achieve SDGs at a much faster rate. If in normal case you are achieving some SDG in 10 years. Now, if you propel innovations in your thought process maybe you will be able to achieve the same SDG in three years.

So, your rate of achieving SDGs can become much faster if you are linking IP issues or innovation and creativity with your SDG requirements. gives you complete details of 17 SDGs that are proposed by the UN, interestingly, there are a few nations that are doing very well on some of the SDGs and a few nations that are not so well on some of the

SDGs. So, collectively the countries which are in the Scandinavian natures for example, Finland, Norway, Sweden, Denmark etc. these are the top countries doing exceptionally good on the sustainable development goal on all of them more or less. And then there are countries which are mediocre and then there are countries which are lagging their performance on the sustainable development goal.

Unfortunately at the moment India is not in the top performers of its activities with respect to SDGs. But we are expecting that the kind of infrastructure development and other things that are happening in our country, these things may help in promoting SDG in our country also. considering the large size of our country and considering the small sizes of various Scandinavian countries, it is quite obvious that their scores are much better as compared to India's score. So, SDGs are related to no poverty, zero hunger.

good health and well-being, quality education, gender equality, clean water and sanitation, affordable and clean energy, decent work, economic growth, industry innovation and infrastructure. In fact, there is a full SDG which is related to innovation. Then reduced inequalities, sustainable cities and communities, responsible consumption and production. It is very interesting to see that most of the developing nations and low-income nations scores on SDG are much better for SDG 12 as compared to various developed nations because of the low purchasing power of these developing nations. they are not able to increase their consumption.

And you see that this is the fault of let us say our measurement criteria itself I will say that since I do not have money I cannot buy things. And therefore, you are giving me very good score on my ability to responsible consumption and production activities. While those who have money They are buying in bulk, and therefore they are making a lot of waste also. I have money, I buy, let us say, 1 litre of milk, but I am only consuming 250 ml of that, and the remaining 750 is going to waste.

So, therefore my score will go down on this responsible consumption activity. since I do not have money and therefore I am buying only 200 ml. My requirement is 250 ml but I am able to buy only 200 ml because I do not have money and therefore you are giving me good scores because of I am not wasting any resources. So, this is the flaw of the measurement criteria. The 13th SDG is climate action.

14th is life below water, 15th is life on land, 16th is about peace, justice and strong institutions. For a good IP ecosystem, we know that a very strong judicial system is very very important. So, in fact, if you have a good judicial system, it will also ensure a

appropriate IP creation in your society. And partnerships for goals that is you cannot achieve these SDGs on your own. You need partnerships.

And therefore, if India does something good, it will have a favourable impact on the SDG scores of all the neighbouring countries. So, it is impossible that I alone can do or make significant progress in SDGs because we all are sharing our borders with other countries. So, it is not possible that my actions are limited to me only; my actions will affect my neighbouring countries, and similarly, my neighbour's actions will affect me. So, neither my neighbour nor me alone can achieve these SDGs. If we come together, if we start partnerships, we both will have a better quality of life for all the citizens in the area.

So, SDG also promotes partnerships for achieving these goals. Now, relevance of SDGs for intellectual property system. Now, relevance of SDG for intellectual property system for that purpose I will like to give you some important you can say bullet points. One is that IP does not require any kind of physical substance. We know since beginning of this particular course that

IP is intangible and IP is something which is inherently highly scalable and sustainable. Once you develop a technology in your lab, that technology has a potential for commercial application and that commercial application has no limit. You can expand this technology, you can scale this technology as much resources as you have. So, the basic nature of IP is expendable, it is scalable and therefore, I say that without requiring any kind of efforts you if you have resources you can scale these activities. But on its own IP is not having any kind of tangibility.

IP is supporting the innovation. Once IP is created. You are not reinventing the wheel again and again. You are moving ahead and you are able to solve those problems which are yet not solved. Like we all know there are challenges of smog during the winter season around NCR area.

We know that there are problems of stubble burning in Punjab and Haryana. which is considered to be very very dangerous for the environment of that area. We all know there are so much of crowd of tourism in upper Himalayan regions. Large number of mountaineers are trying to go to Mount Everest and it may all lead to significant loss of glaciers. Reports are already available.

now how to create you cannot ask all of us that do not do these things do not do these things do not do these things but can technology provide some solutions where we can

explore new things also without damaging the environment so that all is possible with better innovations in those lines. So, that therefore, IP role is very important in improving the science and technology activities otherwise we will not move ahead and we will keep doing the same thing again and again. IP contributions to the innovation ecosystem. The IP is a fruit of innovation ecosystem and when you get the fruit it creates a booster

It helps you in getting kind of stimulus. And therefore, the IP system, robust IP ecosystem which is in the form of fruit of all my hard work that is improving our ability to achieve the SDGs. And it has high level of international acceptance and conformity. Because when you are doing any kind of IP as the process we all know. we have to publish the IP in the journals, whether I am filing IP in India or I am going for PCT, whether it is in WIPO journal or our Indian patent office journals, you have to disclose all your technology and therefore, whole world is able to see your invention and when the there is no objection on that, that means, there is international acceptance

the international community is confirming that yes this is a innovative technology, this is in the interest of the society, this is in the interest of the development of science and technology. So, all these important aspects of intellectual property help us to understand that intellectual property is very relevant for achieving these SDGs. has as I mentioned during the introduction of various SDGs, WIPO has considered this SDG 9 which is talking of industry innovation and infrastructure which is directly relevant to our discussions of intellectual property. Because when you are going to do innovation you have to protect it and as soon as you protect that innovation it becomes intellectual property right available to you.

And therefore, you need to see that if you simply do more and more IP you are actually helping through WIPO in achieving our SDG number 9. But not only SDG 9 there are various other SDGs also which are directly related to our IP related activities or you can say IP can help in promoting those SDGs like quality education. This MOOC course which we are developing, now there are a lot of IP which are involved in effective use of MOOCs. Lot of education is provided through various online media for example, copyright

can be an important IP if we use copyrights in a fair manner then more and more people will be interested in developing their online content affordable education will be available to all of us those who are in the remote areas where enough infrastructure is not available those students those communities will also get opportunity to get quality content. if we

understand the role of copyrights appropriately, that IP will help in promoting the quality education. So, for example, copyright will lead to SDG 4. Because to provide quality education, these days we can understand the role of online education. And there are

Some very good education systems there are various private and tech partners where they are providing content but that may be expensive. So, for that purpose systems like NPTEL are available and these NPTEL systems which are available freely is providing the quality content but it is all protected with the help of copyright systems. Gender equality there is a term which is coming. that role of women in science and technology. Now, women in science and technology that is promoting the gender equality.

Now, indirectly what we are trying to say few years back in fact, WIPO also made the Word Intellectual Property day theme that role of women in IP. So, when more and more women are coming into science and technology they are creating more IP it is in one way the women empowerment which is leading to SDG 5 also. We are expecting when we say that gender equality generally we say that they need to be financially independent and you may expect some kind of more physical labour oriented work for women so that they get some kind of minimal wages but I feel a different role for them.

They may be more creative and more creative means more opportunity of innovations and you can create the gender equality by promoting in science and technology systems and it will help you in getting more and more IP. SDG 17 industry academia partnership. is the simplest example that how partnership is important and with partnership again you will be able to create better IP which will be in the interest of industry also. And there are most of the other IP SDGs which are also possible to achieve with the help of better you can say IP creations in the field of economic and social development. These are various initiatives which WIPO has taken in the field of sustainable development and these are some of the programs which are supporting SDGs particularly through education that means awareness etc and collaboration for green innovations.

Now, if you remember in one of the session we have discussed about lean IP portfolio that is basically WIPO green oil where you are now seeing that how we are doing the IP creation that is used generally in those areas where green technologies are used which are promoting the environmental conservation. So, WIPO has especially promoted such types of technologies that promote environmental sustainability. Then WIPO has also promoted technology innovation and support centers so that the SDG 4 can be achieved which is providing on the ground IP information and support

to innovators helping to unlock innovation, creativity and competitiveness. And all these things are also promoting SDG 9 as well because innovation, infrastructure and industry are related with this technology innovation and support centers. Inventor assistant programs are also created so that matching the developing country inventors with various patent attorneys so that you can easily contact the patent attorney because many a time if I am an inventor, I do not know where to go. And we have this perception that it may be very expensive process.

So, we have this kind of hesitation for going for IP filing. So, they give free legal advice on patent-related activities. Then innovation gender gap initiatives where we are creating more inclusive innovation landscapes by including more people from other genders also. They are creating IP and tourism thing that how IP tools and strategies can support the promotion of sustainable tourism. as well as economic, social and cultural development.

Just I mentioned like in India, in Himalayas there is so much of uncontrolled tourism and this uncontrolled tourism is creating more damage than the goods for the society. because it is hampering the environmental ecosystem, it is entering into the sensitive zones etc. So, all those problems can also be addressed through the IP and tourism initiative of the WIPO. And Accessible Books Consortium, which is known as ABC, and here it contributes to SDGs by helping increase the number of books worldwide in accessible formats and making them available to the visually impaired formats also.

So, creating various books in the form of digital copies and in the braille formats also so that not only normal but visually impaired readers can also use these books without actually printing those books. So, different countries including India has also taken some initiatives which promote the sustainable or our commitment for SDG. In India, we have almost all IPs e-filing is there and there are incentives also for e-filing, like reduced cost of filing, etc, that we have already discussed in one of our earlier you can say sessions. than use of AI in office, IP offices. There are softwares which are available which are helping us in doing the faster prior art surveys and it is saving the time.

We are becoming more productive, more efficient with the use of AI related tools and in India Also, we have to improve our gender equality in terms of IP filing. So, therefore, for women entrepreneurs, the 80 percent cost is waived off for filing the IP and at all the stages of IP granting process, the cost is reduced by 80 percent. So, that is also a very important initiative of Indian government. Then, carbon footprint reduction.

For example, whenever you have any kind of examination and query or even presentation to IP office, it is all possible in virtual mode. So, lot of carbon footprint reduction is also happening. IP offices are becoming committed that by minimizing the travel requirement and using more and more virtual tools, we should try to reduce our carbon footprints. Then if I see the various different type of IP assets which are helping in achieving the SDGs. So, we know that there are 15.2 million active patent families worldwide at this moment and around one-third of that.

around one-third of that are related to different types of SDGs. So, you can say that there is a high rate of patents that are contributing in one way or another to achieving the SDGs. So, out of 17 SDGs, 13 SDGs are represented by these 4.7 million patents. So, we are expecting that For the other four SDGs also, there should be some kind of patents that will be available.

So, there will be you can say databases available which also give you SDG to patent mapping out of these 4.7 million patents which patent is related to which SDG. Most of the patents are going to more than one SDG also. It is not that one patent is contributing only to one SDG, one patent may contribute to two, three, four SDGs also. And this you see that detailed mapping of different types of SDGs to different types of patent families.

So, obviously, the biggest number is for industry innovation and infrastructure SDG 9. And then a large number of patents are in the climate action, then good health and well-being, all those healthcare related patents, responsible consumption, production, affordable clean energy. So this is a WIPO data which is helping you in getting the around 2.9 million patents. are only in the field of industry innovation and infrastructure. And in fact, there are significant number of patents in the field of gender equality also.

And you see there around 1,70,000 patents are in the field of quality education also. So, this is a very, but this is a dynamic data. I request all my learners, students that whenever they see this video, they can also see WIPO database of that particular year that how these changes are happening over a period of time. This is 2023 data through which we have given you these numbers.

If you see the global SDG patent trend, so how these numbers in that US is leading in the bar that most of the patents which are related to different types of SDGs are coming from the US, then from Europe, China is also significantly doing this. So, these are the five important countries which are actually helping in achieving the SDGs through their patent families. This is again a data which is available from WIPO and it is again a

dynamic data just for your reference purpose you can see that who are actually owning the most number of patents related to SDG achievements. So, like you see Chinese Academy of Sciences is owning around

And you will see that most of the Chinese, Korean, US, Japanese, one in fact German institutions, France institutions are also part of this list that they are owning a large number of patents. So, these are 25 patent owners from academia and research organizations based on the number of SDG-related patents that are there. Then, geographical perspective on sustainable innovation. So, if you see that compounded annual growth rate of SDGs share from 2018 to 2023. So, here you see that how this share is increasing, compounded annual growth is increasing.

So, if you see that over a period of time that in Asia, and this is in India. Now in India the rate of growth is not so high as compared to rate of growth in case of China. Here it is around And CAGR of SDG share is increasing at the rate of 3%, while in India, it is increasing at the rate of 1%.

The number of patent families which are coming from China is mind-boggling. And when you see the number of patents which are coming from India, these are very small, just 35,000. So, you can see that in India, we are slightly behind the China in terms of CAGR. But when we see the absolute number, there is a huge, huge difference where it is around 27 million and it is just 35,000 in the case of India. India that so for a country like India we need to be doing our innovations more into the line of sustainability and considering the SDG as a important criteria for that purpose.

So, with this we come to end of this particular session where we discuss that to achieve SDG IP and IP related activities can be very important thing. Around one third of the global patents are helping in achieving the sustainable development goals. For a country like India, we just saw in the last that our numbers are not so great with respect to our innovations in the field of SDG. So there is an urgent need that because we are a developing nation. We need more and more developmental activities.

But our developmental activities should be in alignment with SDG. Then only this development will be sustainable development. So, with this, we come to the end of this particular session. Thank you very much.