

Entrepreneurship and IP Strategy
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Lecture 36
Incubators, Research Parks

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A very warm welcome in the first module of week eight of the course, Entrepreneurship and IP strategy, titled "Incubators, Research Parks". By now, we have a clear picture about entrepreneurship and intellectual property, innovation, a various types of IPs that is trademark, patent, copyright, industrial design. Then we have seen IP strategy and entrepreneurship, within that we have covered IP strategy of start-ups and MSMEs, then a few things about IP transaction, then what do you understand by IP valuation, bank loan, insurance and a few success stories.

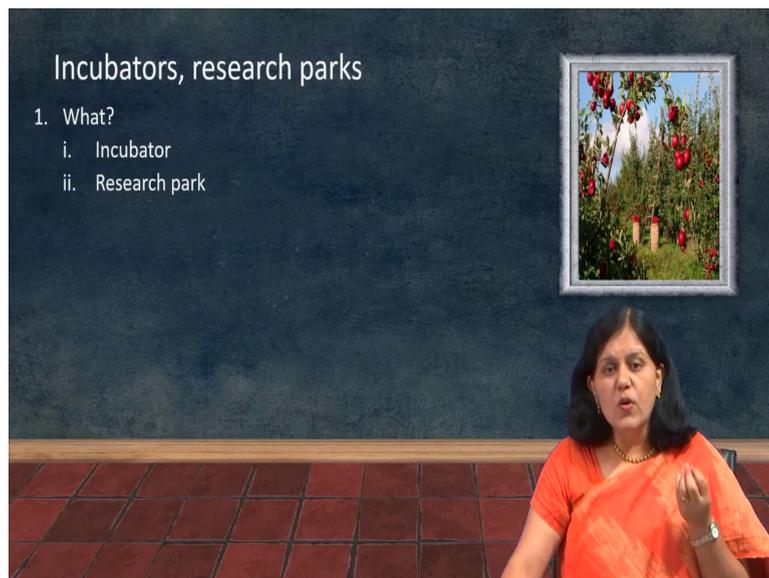
Along with this in every week, we have tried to study one case study and we have covered case studies like Google, Biocon, Arvind Mills, Bhansali Production, Tesla and so on. So, now, I guess with this much of information, you are now ready with your business plan or already you have already started and now you will apply the learning related to IP and how you can use effectively IP as a competitive intelligence in your entrepreneurship you are almost ready and let us check now in this module, what are the different government facilities are available to do this entrepreneurial activities.

So, first we will focus here in this module on incubator and a research parks. Now, this incubators and research park when we are talking about that particular facility, which is given by the government, we will focus on a few points related to that. That is, we will try to

understand, what do you understand by incubator and research park. Then, what are the objectives of setting up of that incubator and research park.

Then we will see a few examples and then we will see one example of a incubator which is there in IIT system. So, we will cover this module under this four, titles and we will try to understand how this facility will help to entrepreneurial activity. So, let us check out, that what objectives, examples and one kind of a case study of a incubator kind of thing.

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So, first that is what do you understand by a incubator or a research park. So, when we try to understand that incubator system or a research park system, as per definition, there are so many definitions are given about the incubator, we will just stuck to one of them, that is incubators are generally these are the self-sustaining form of a, fiscal perspective.

There is most incubators, they receive some sort of subsidy from the establishing entity or state or a local government. So, first that this incubator, that are like a very secluded, very protected environment which is created in particular that institute or wherever that incubator is formed and therefore, we have clearly said that, it is getting that establishment getting that subsidy from that establishing entity or a state or a local government.

So, somebody is supporting that particular activity or that particular environment which is created. Now, why this environment is necessary when we are talking about entrepreneurship, it is like a very safe environment for entrepreneurial activity and in that particular secluded safe environment, in that incubator new entrepreneur, that whatever the entrepreneurial

activity is there it is protected from that external competition and we will see what facilities and what assistance incubator gives.

Now, generally it is expected then when we are talking about a incubator, they should have some mission to provide and generally that mission of every incubator is to provide a business assistance to a early stage companies. Around that only the mission is of every incubator is formulated. So, this is the first thing that providing business assistance to early stage companies that is very important.

Second thing is that it must have a staff that will deliver and coordinate business assistance to these budding entrepreneurs. So, there will be like a environment, there will be a human resource which will help to these budding entrepreneurs to, in certain way to help them that entrepreneurial activity and then the third important thing is like that, it is designed to lead its company tenants to a self-sufficiency.

So, generally the time period is there in incubator you cannot incubate the company for infinite time, there is a time period maybe 3 years, maybe 5 years, generally that timeline is given and within that timeline it is expected that, that deadlines are there within that time it is expected that that particular organisation, I should not say organisation, I should say the entrepreneurial that activity which is going on.

It should be self-sufficient after that whatever the stipulated time is there, maybe 3 years or 5 years and within that time period, whenever that company is graduating from that incubator, they should be able to sustain themselves.

So, these three things are important when we are talking about a incubator, that is a mission for assistance to that early stage companies, then delivering and coordinating certain activities which are required for that entrepreneurial activity and it is expected that at the end of that particular time span that company should be self-sufficient to handle things.

Now, how the processes are working in the incubators. So, generally anybody want to incubate company or that start-up, whatever you want to say I am using these word interchangeably, but there is a much difference according to Act company Act defines company, start-up is defined by the start-up India website if you go, that definition is given, so they are totally different.

We can, common word we can say that entrepreneurial activity. So, whosoever is applying or interested to incubate the company or that entrepreneurial activity in that particular incubator,

how exactly it goes, generally there is a, every incubator have their own system and they are doing that a screening first.

So, that screening may be that external reviewers are there, some interviews may be there, some presentations may be there then some, so much question answer kind of drilling may be there and through that, that incubator decides that people who are there, who are organising all this activity or managing all that incubator activity, they will decide whether the particular that proposal is acceptable or not and based on that screening the decision will be taken. So, that is a important thing.

Now, once you pass through that screening, you incubate the, your entrepreneurial activity, whatever that company in corporation is necessary there and generally it is necessary and then that you are incorporate, after incorporation you incubate your company in that incubator and you get a assistance and that assistance may be like that flexible lease terms of space kind of thing, then shared services in office support, maybe photocopying or meeting rooms or something like that.

Then onset business assistance if it is required, that particular thing is provided. Then the networking opportunities, so that will be organised by incubator. Then resource matching kind of thing is organised or that incubator will help you to give that the mentorship kind of activities there.

So, all these kind of activities which will be probably helpful for that budding entrepreneur to grow his business, all these facilities are expected that incubators should give to that budding entrepreneurs. So, and for that some entity, government state or central government are giving a certain fund to that incubator and through that fund that activity is going on and in that what we can say a very protective environment it is expected that and budding entrepreneur that company which is incorporated now incubated it should grow and it should become self-sufficient within that time period of either three years or five years that is expected.

Now, what is research park is? We have seen that incubator kind of thing, what that incubator is, we have understood, now what the research park is. So, in the research park a little bit a different model exists there.

In the research park the physical environment is that expected physical environment, it should, it is expected that it should generate, it should attract and retain science and

technology companies and a talent that is very important that companies should be and here that is a different between that incubator and research park is like that, companies which are already established they are, they may be a part of that research park and this the budding entrepreneurs that kind of activities there R&D is extensive.

So, that what is happening is that the R&D which is growing, which is in the going on that R and D activity and the companies which are having their established kind of activities in the market, they are there in the Research Park, so that the R and D which is going on will be supported by that established ventures and that conducive environment may help to develop something a very promising and that very innovative will be there.

So, it is expected that in a research park it should generate attract and retain that science technology companies and talent in alignment with that sponsoring research institution. So, generally means research parks, now IITs also have that research parks, IIT Madras is a first one who have established that research park.

So, whatever say that institutions, objective is there in that alignment, all the activities related to that science and technology are expected to develop in that particular environment which is created through a research park, so that is a research park. Now, who will be the sponsoring research institutes, so generally these research institutions include universities or public and private research laboratories are there who are sponsoring that particular activities related to research park. Now, we will just see one Gartner's framework and it says that there are four major perspectives to the entrepreneurship.

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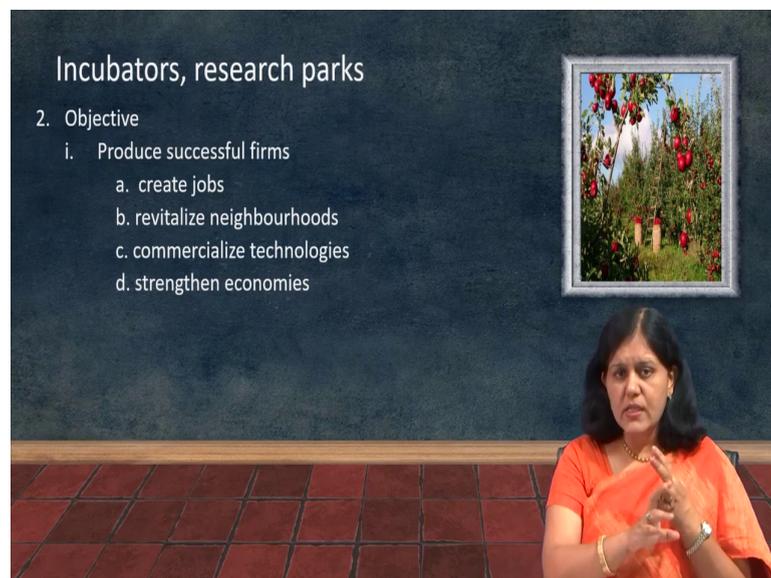
Incubators, research parks

INDIVIDUALS
ENVIRONMENT ORGANIZATION
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And these four major perspectives are like a characteristics of individual who start the venture that is very important that individual who is starting it, then the organisation that they are creating, that is the second, then the environment surrounding that venture, that is again the most important thing and the process by which that venture is started.

So, process, environment, organisation and that individual, these are the four the important perspectives of entrepreneurship according to this Gartner's framework and they like interlinked with each other and they are creating that entrepreneurship and that entrepreneurship activity will grow based on this, four perspectives. Now, the next thing is, we have understood that incubator and research parks, then we have seen that Gartner's that framework.

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Now, we will see what are the objectives of a, this incubator and research park. So, business incubators, main goal is to produce successful firms that will leave the programme financially viable and a free standing and that time period is fixed.

Generally 3 to 5 years is a time period, which is given to the incubator and given to that entrepreneurial company whatever is incubated there and they should be, it is expected that within three years they should be self-sufficient and they should graduate from that incubator successfully by becoming financially viable and a self-sufficient to handle all aspects of entrepreneurship.

Now, what do we mean by successful, so it is expected that when we are talking about a successful that company which just came out or graduated from that incubator, a few things

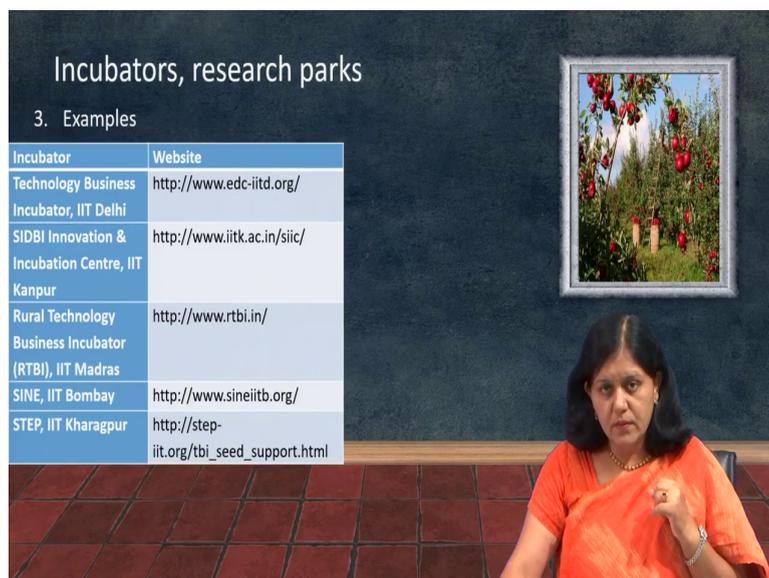
are like that it is successful when it is able to create jobs, may not be a big number but at least a few jobs it should create, then the neighbourhood whatever that, wherever it is now going to be established to should revitalise that neighbourhoods that is expected.

Then obviously, when we are talking about incubator it is generally technology driven and it is expected that, that commercialization of that new technologies should expect it, means it should be happen with that companies, which are graduating and they, it is the most important thing that they should strengthen the local and national economies and that obviously the, end effect is like a boost to that economy of a country in all like that is expected thing is there, along with job creations and the flourishing or the well-being of the society. So, that is expected from that entrepreneurial activity.

Now, research parks are unable to flow ideas between that, generally this idea generators or innovation generators, such as the universities are there or non-profit R and D research organisation are there and they are there and along with, in that particular region and then the companies maybe some units or the part of that particular research park, maybe occupied by that established company and they together help each other to grow and develop a new technologies.

Now, we will see a few after knowing this. Now, we know now what is incubator or research park, what are their objectives we understood. Now, we will see a few examples of incubators and research parks, probably it will be helpful to you to know that where exactly and how that incubators are working, you can visit the websites.

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The slide is titled "Incubators, research parks" and contains a section "3. Examples" with a table listing various incubators and their websites. A woman in an orange sari is visible in the bottom right corner of the slide, and a framed picture of a tree with red fruit is on the wall behind her.

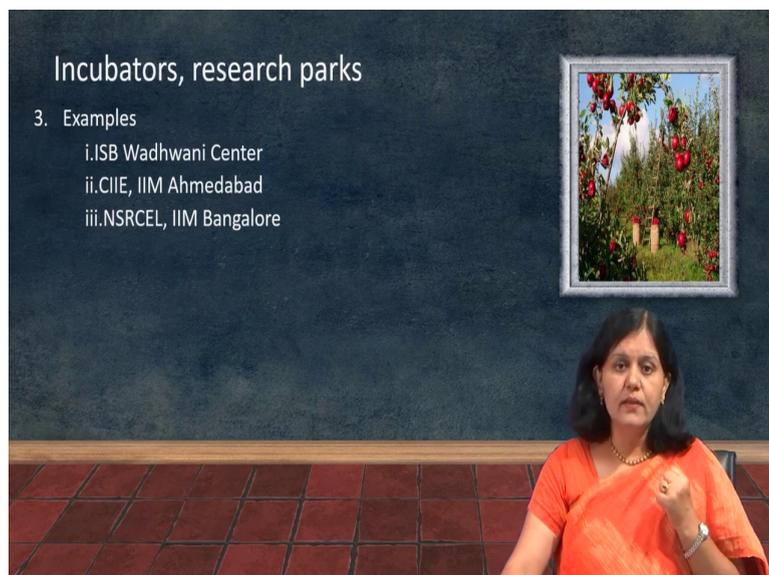
Incubator	Website
Technology Business Incubator, IIT Delhi	http://www.edc-iitd.org/
SIDBI Innovation & Incubation Centre, IIT Kanpur	http://www.iitk.ac.in/siic/
Rural Technology Business Incubator (RTBI), IIT Madras	http://www.rtbi.in/
SINE, IIT Bombay	http://www.sineiitb.org/
STEP, IIT Kharagpur	http://step-iit.org/tbi_seed_support.html

This is the example whatever you are seeing it is about IITs, who are hosting or who are having that a separate incubators. So, IIT Delhi is having this technology business incubator, you can see the link there. So, you can just visit that link and see what are the different activities are going on and what assistance and what procedure is followed, if anybody want to incubate there, but obviously when IITs having that particular incubation, it is expected that suppose it is general expectation is like this.

If it is in IIT Kharagpur, it is expected that the one of the proposed, means the person who is proposing that incubation in that particular incubator, that person should be from the IIT Kharagpur community or if it is from IIT Bombay It is expected that he or she should be a part of that IIT Bombay system either as a student or a staff or a faculty something. So, every incubator, they have some guidelines. So, you can check that guidelines and accordingly you can apply for that incubator and you can start your entrepreneurial activities with the help of guidance of these incubators.

So, IIT Delhi then the next is like IIT Kanpur SIDBI Innovation and Incubation Centre. Then Rural Technology Business Incubator is there in IIT Madras. Then SINE that is in IIT Bombay and STEP that is in IIT Kharagpur. So, these are the few examples of incubators in IIT system.

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The next example is like in IIM System, ISB Wadhvani Centre is there in ISB. Then in Ahmedabad there is CIIE. Then in IIM Bangalore there is like a NSRCEL. So, that is something in IIM Bangalore is there.

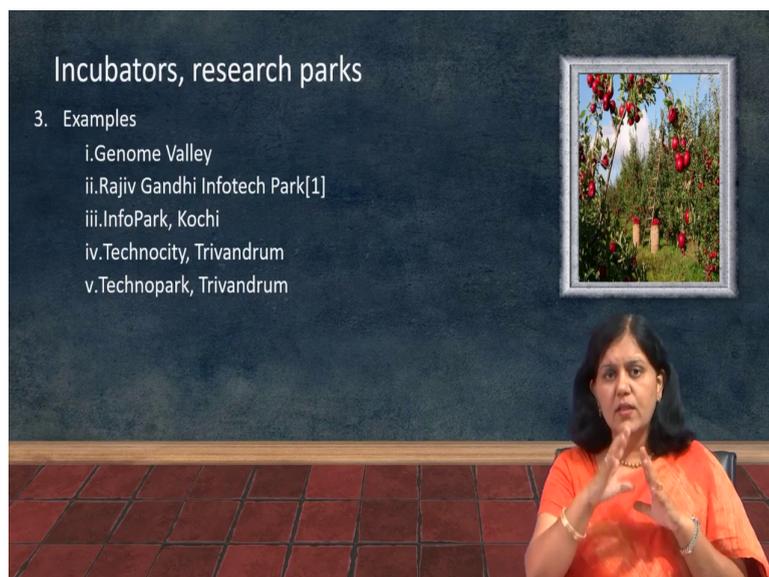
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Now, the next one that is a few more examples of BITS Pilani and then there is example of a design incubator in Ahmedabad and then there are a few more examples like Amity University have their own Amity innovation incubator in Noida. Then S.P JAIN Management Research Centre in Mumbai they have their own incubator. Then there is a incubator in Techno Park, more it is a research park, it is there in Kerala.

Then start-up villages there it is like established by DST. Then another example is like Indian Angel network is there. So, these are the few examples of incubators. Now, we will see a few examples of a research park also.

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So, a few examples like a Genome Valley is there. Then then Rajiv Gandhi Infotech Park Hinjawadi Pune is there. Then Infopark is there in Kochi. Then Technocity is there in Trivandrum. Technopark is, yes it is a research park and that is in again Kerala. So, a few information about that research parks. Genome Valley is like a high technology business, it is spread across 600 Square Kilometre, it is in Hyderabad.

Then if we see the example of Rajiv Gandhi Infotech Park Pune Hinjawadi, it is a very good example that how exactly means whatever the criteria or expected things are there from that incubation or that incubator or research park you can easily see that in that Infotech Park Pune, because it was like a very village kind of area and once that that Infotech park, Hinjawadi Infotech park it is started a complete structure of that area is completely changed like a neighbourhood, like the well-being of a neighbourhood is there, job creation was there definitely and that was a very good example of research parks.

Then the Infopark Kochi is there, it is like IT park, it is situated in Kochi, Kerala and it is established in 2004 and it is spread across a 260 acres actually. Then, this Technocity is again in Kerala only it is in Trivandrum and it is also more or less related to IT only, software and electronics kind of thing.

So, these are the few examples of what research park is there. We have already seen the examples of incubators and that university driven research park examples if we have to see now, IIT Madras is like a first IIT where it is started, it is a university driven research park and now it is in IIT Kharagpur also, then it is in IIT Bombay also it is coming up. So, that research park is like started with IIT Madras and they have followed the Stanford University or MIT model and now, it is like coming up in other IITs also and already it is established in other IITs we can say.

Now, here after going through this much information about research park and then the incubators and then objectives and then the expectations and how exactly they are assisting what is a procedure.

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We will just watch one video regarding these incubators. This is the video of that is in SINE that is IIT Bombay SINE they have the one session on that entrepreneurship and we will just watch this video.

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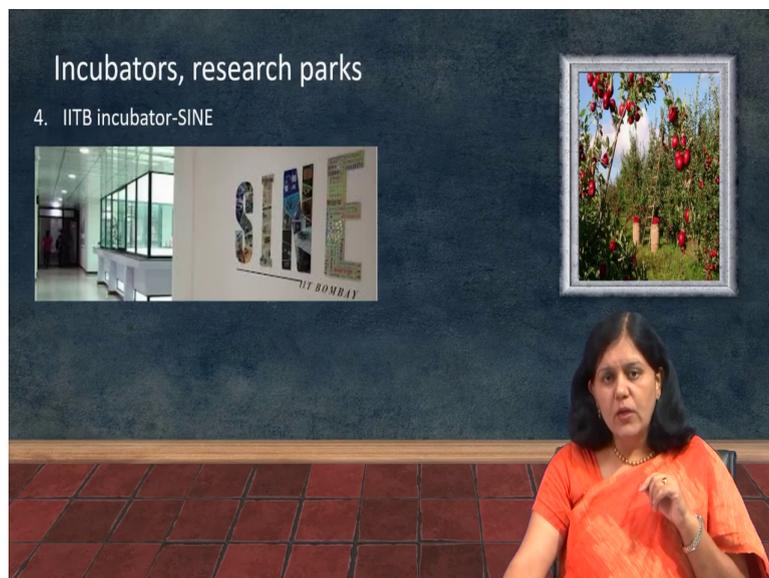
If you're not IP over, intellectual saying I am an engineer, but I am not a B. Tech or an M. Tech. You may still be an engineer without being a B. Tech or M. Tech, there are geniuses like that and I can see the journey that TCS went through, I think the largest start-up that India has of an idea which was in the brain in 1968 was TCS, many others very admirable companies like Infosys and other followed. It's a product of its time it took from 1968 till the end of the century the millennial to develop.

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So, this is the example of TCS he has given, He is Shri Gopal Krishna, he is a pass out of IIT Kharagpur and you probably enjoy that, this is a long actually keynote it is, so maybe you can watch it later the link is given for you.

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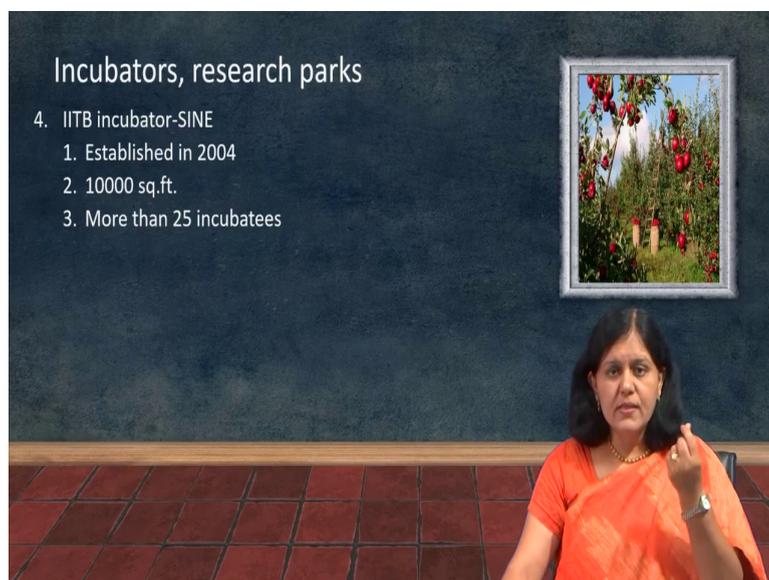
Now, we will see a example of IIT Bombay incubator which is a society for innovation and entrepreneurship that is a SINE. Now, we can say that SINE is like a very good example of that incubator and they have like, this is early adopter in the concept of a business incubation in India, IIT Bombay.

Now, this IIT Bombay SINE it is established in say 2004 and it is business incubator and it is like a accelerate the growth of yes, entrepreneurship in a higher education institutes and

obviously, the main criteria if anybody want to incubate organisation, incubate a company in the SINE that incubator you should be a part of IIT Bombay community that one partner in that company should be from IIT Bombay that is compulsory and then yes, that is a very serious kind of activity it is and it is a very thorough screening will be carried out, when you are going to incubate in this incubator, that is a SINE.

And we can say that it is like a very good example that this is a very good example of a incubator, it is supported by a DST, Government of India and all financial assistance is coming from that is one of the source.

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And it is spread across almost 10,000 square feet and almost 25 incubatees are there breeding in that Institute, they are expanding now, that space which is there available in IIT Bombay it is like a limited and they are expanding probably in that Powai area and we can say that if we see the little bit about a statistics of that particular SINE, the total like 170 plus start-ups they have incubated then the employment kind of thing, if we see it is like a 4000 plus employment is created and almost 1400 crore fund is raised by SINE and they are supporting these budding entrepreneurs.

And as we have seen that there should be a mission to that activity that is the incubator and that mission is always to help the business, give up business that assistance to that budding entrepreneur. The science mission is like the it will create an ecosystem that will foster, support innovation and knowledge base entrepreneurship amongst the IIT Bombay

community, leading to the creation of wealth and social value through a successful venture, that is a mission.

And you can relate it easily with the four points which are expected from the incubator, and yes it is following that particular activity and their keeping vision like providing a environment to translate knowledge and innovation into creation of successful entrepreneurs and yes, the activity which is going on it is like a very good support will be given there and being a financial hub Mumbai as a financial hub, it is very easy to get, do networking marketing kind of thing and get the support, it is very easy because of that locational advantage also and the activities which are carried out by the staff in this incubator.

So, there are few examples like BIRAC is there or DBT is there all that funding is coming from Government of India and then the few other funding resources are there. So, with this, I guess this much is a good enough information for us to know about incubators and research parks and we have just gone through like, what is that incubator or what that research park is, what are the objectives, the few examples we have seen and we have seen the example of IIT incubator, that is a SINE and the support and the system which is going on there.

I just given you just glimpses of that particular thing and yes, that will be a very safe way to enter into the entrepreneurial activity because you are getting fund, you are getting that support and you are getting that protective environment for a particular period of time, so that during that time, you can grow sufficient to tolerate that competitive environment which is there outside in the market. I guess this is good enough for you to know about incubators and research parks. With this we are coming to the end of this session. Thank you.