Strategies for Sustainable Design
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Lecture 27
Policy Push in Real Estate and Manufacturing Sectors

Hello everyone. So, in this lecture we will discuss about policy push in real estate and manufacturing sectors. So, we will see try to understand and analyze the scenario what is happening in this particular area.

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So, if you see how this revolution of Indian manufacturing sector has actually progressed over a times. So, majorly this period is actually divided into four segments the first one being Pre-Independence area the time. So, at this time most of the products were handicraft based or they were majorly exported in large numbers before the British era started.

The first actually charcoal fired iron making was attempted in the Tamil Nadu in 1830 then India's present day largest conglomerate Tata Group started by Jamsetji Tata in 1868 then the slow growth of Indian industry due to regressive policies of that time and there was Indian industry grew during the two world war periods in an effort to support the British in the wars.

So, there was entirely like a different kind of scenario as you can see over here the India, was not independent country and it was driven by the British for their own benefit interest and the two world wars by country and they were the driving forces and India was majorly actually utilize as

a resource country from where they stores resources and India was extensively exhausted for its resources.

Well, later on things change India got independence let us see what happened during this period from 1948 till globalization period of 1991. So, in during this period Indian government actually focus was into developing and growing basic and heavy industries and they started with the concept of 5 years plan you have may heard of these Panchvarshiya Yojana.

So, these were year plans of the 5-year basis on the regular interval they were framed, implemented and reviewed. So, this is how actually the independent India started functioning to develop its industrial sector, then a comprehensive industrial policy resolution announced in year 1956 and iron and steel industry, heavy engineering, lignite projects and fertilizers products were taken as the main basic industries and industrial planning and policies were actually framed to promote these industries.

Why steel because steel is backbone, we have discussed in the previous like lc lecture. Steel is one of the backbone materials for today's technology based this manufacturing. So, steel was actually one of the very important material start with for like a development and growth. Then focus shifted to agro-industries as a result of many factors while License raj grew in the country and public sector enterprises grew more inefficient.

The industries lost their competitiveness. So, what happened during this period of time it is very famous actually story of this license raj and how the government employees and the authorities they kept files pending for processing and all that has overall are these laconic industrial sector suffered and industries lost some of their competitiveness in phase of lack of world.

So, several other economies, several other countries who started functioning as an independent country in around and around same time of as India's they grew much faster and they meant quite ahead, but at least India started its coping with the new world order and post 1991 the globalization reforms which government of India adopted at this point of time.

So, the Indian markets were opened to the global competition with the LPG reforms and gave way to private sector entrepreneurs as license raj came to an end. So, actually privatization was newly encouraged and promoted and the public distribution systems were also kind of refined and the markets were opened. So, the Indian market consumers the people of India they had option of mind stuff which was made proud of India as normal consumer product. Earlier it was tightly controlled and new product which used to be like imported in India heavy duty was actually charged as import duty.

Then services became the engines of growth while the industrial production saw volatility in growth rates during this period. So, service sector was one of the sectos which got evolved quite a lot this sector saw huge jump in terms of creating new service sectors and increasing the footprint, increasing the volume of it.

So, this was actually one of the major outputs of the post globalization reforms in India. An MSMEs micro small and these medium enterprises in the country were given a push through government's policy and measures. So, the smaller size, small scale industries and manufacturing units were actually being given a lot of promotion because before that there were major companies only in the government sector and very few companies private sector.

There was very little amount of, very small amount of such MSME units were existing at that point of time. So, this sector given strong push after this 1991 reforms and in the present time if you see these are four major pushes this government and the state governments are also insisting on to promote, to make in India campaigns to manufacture and fabricate in India.

So, this was one of the measure policy, pushes which has adopted by the current government and the previous government also. So, this was launched also to attract manufacturers and foreign direct investments from different countries in the India. So, these several multi-national companies they came, and they started they invested a huge amount of capital and they started manufacturing units, production units in India.

Secondly government is trying to establish India as a global manufacturing hub through various policy measures and incentives to specific manufacturing sector. So, software industry, IT industry has emerged as one of the prime industries which India is has attained a huge capacity and power in this area and India is giving providing services to most of the countries from across the world. 70 percent of a manufacturing units under the private sector and then GVA at the basic prices from manufacturing grew at a CAGR of 4.46 percent to financial year 19AE at current prices.

So, there was huge jump observed from like a previous time to this particular time. So, this well there are a lot of other repercussions also all of this become major economic boost, major boost to the growth and development in the industrial sector is going to have equal proportionate impact on the Ecology. So, the question is whether India as a country is also prepared to handle those impacts. So, we will see that in the coming lectures but first we will try understanding this scenario like how its, shaping up this industrial sector in India.

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So, the notable trends if you see there are 4 notable trends observed in India's marketed in the recent times. So, this is with the help of policy and these decisions there were several special economic zone established and specific sector of manufacturing or production units were given priority one area and whole Ecosystem, economic ecosystem was developed to help them

established themselves at one point, one place, at one point of time and they are giving successful results.

So, these assets and such units were majorly established for their exports driven purposes. So, now India is able to supply huge number of items, then huge number of volume even service based, renderings is India is able to render to the entire world currently. Then next notable trend India has recently seen in the recent years is the additive manufacturing based 3-D printing-based innovations and products. So, there are several institutions also from India who are developing into RND, developing into commercial products and entities. Then next one is internet of things with the help of the communication in telecom industry with the huge growth in this particular sector in the Indian market.

India has become powerhouse in telecom businesses and India is one of the countries where the lowest rates of Telecom are available in the entire world as comparative basis and internet-based things and other allied technology is there finding place in Indian market is there are several technology-based interventions which are being developed in the India currently and advanced Robotics.

So, in this area also India is working very fast to develop automation plants, automation manufacturing, automated operators for several types of consumer-based services and things. So, these the recent trends which are observed in the Indian market and these are the areas which we as a designer, engineer and architect can refer directly and can try for interning and working into these areas for maximizing our exposing the industry and with the market.

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Well, the market kind of strategies which are adopted to boost such level of economic success is using digital technology, using like telecom, using other mediums of communication internet-based communication, fast Australia communication, excetra for focusing on the backward integration. So, India is working on integrating the other straight of the society second for the straighter of the society also which is not so able to cope up with the other half of the society it focuses on integrating the society for growth for the times to come it is trying to focus on the collaboration establishing collaboration between technological houses, between research institutions, between different countries also. So, India is partnering with the several countries to afford the collaborations in several RND areas.

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So, what are the if you see this particular table it talks about India's high-potential manufacturing value chains have attained various levels of global competitiveness in the recent time if you see over here even in the renewable energy generation India has pinned technology and education and now India is one of the pinned countries which is working into this area and apart from this there are several other these many sectors also you can see in the aerospace and defense.

So, recently defense is one of the areas which have been conventionally resolved only for government sector related company to produced defense related products but this is one of critical sectors which government of India has recently opened at the private also where they can design, they can develop and mass produced for the market products for the consumption Indian military.

Well, in electronics and semiconductors also India has grown up very fast and it has lost rapid growth in this particular area and computing power whether it is providing laptops and other computing capabilities. So, India has grown quite faster number of facilities are coming up in India for producing semi conducted devices and other processing chips and excetra.

On the conventional manufacturing area if you see furniture, leather, rubber, apparel and textiles, metals and basic materials and other agriculture services, chemicals and allied products. So, there are also medium range growth is registered and other conventional in the vehicle and vehicle components, capital goods, pharmaceuticals India has also registered significant growth and

particularly in pharmaceuticals India is one of the countries which is supplying if just I talk about one product for example vaccines. So, India is producing at least 60 percent of the world's supply of the vaccine as for as last year concerned. So, India has developed humongous capacity of the manufacturing of medical things also, medical items also.

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So, India's GDP last year till year of 2019 after period of globalization during this period India has registered hence some growth in terms of GDP and. So overall, the terms of the growth in GDP and the productivity India has grown significantly there is huge amount of improvement is needed in the net employment factor also which governmental agencies must look into.

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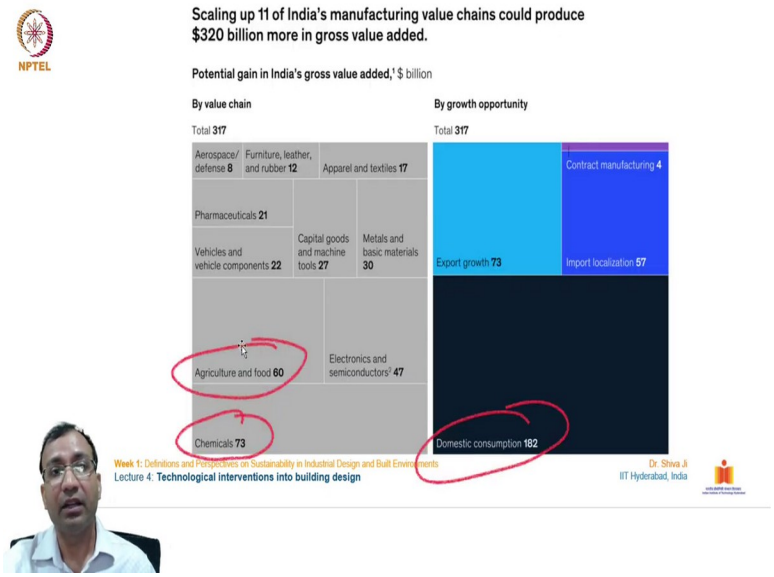

As sector wise if you see these are the sectors which are pinerring the Indian market and if you see the chemicals, agriculture and food, electronics and semiconductors they are in the top of the chain value chain series over here and in the growth of opportunity if you see domestic consumption itself or in India is vey robust and very big. So, even if along with the growing going globally India itself is big market for its own products and there is huge scope of consumption and expending the market further.

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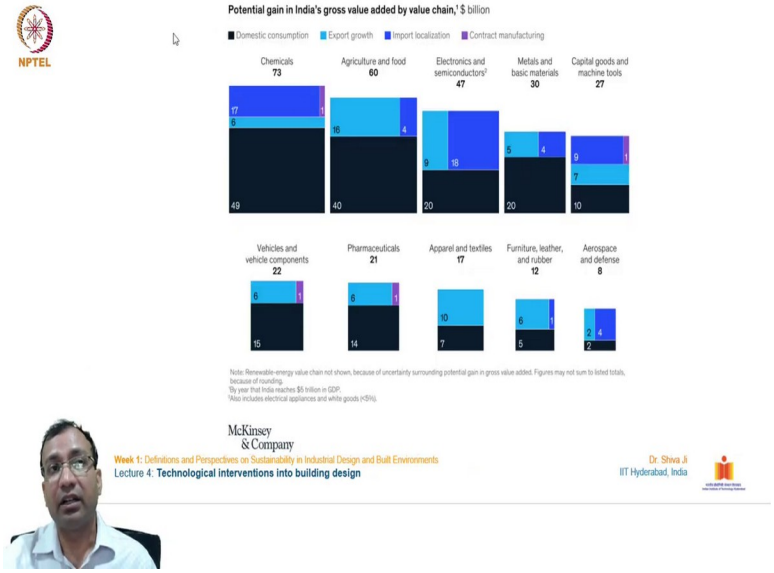

Well, there are potential areas, potential sectors also for feature gain. So, you can see over here how much of value they have added over the times. So, chemicals and chemicals sector is one of the biggest one. So, which has biggest share in domestic market itself over here you can see with this black patch and overall, this belongs to chemicals, then comes agriculture, food, electronics, semiconductors, excetra.

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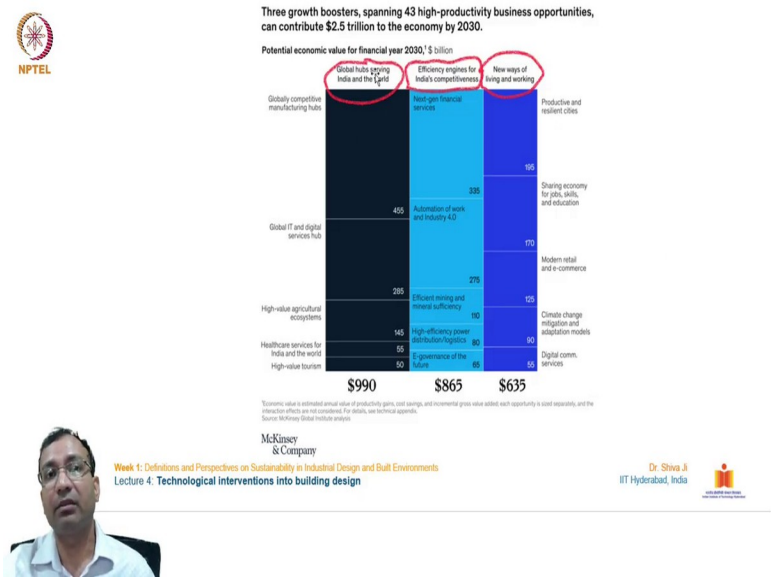

Likewise, here 3 growth boosters they have been identified over here as spanning 43 high-productivity business opportunities and they overall sense they are contributing around leki 2.5 trillion US dollars to the economy by year 2030 that is also a huge volume and I think if India continues this place of growth of its GDP then India may surpass actually several other like a bigger countries who have been conventionally holding the top numbers in terms of growth of economy and.

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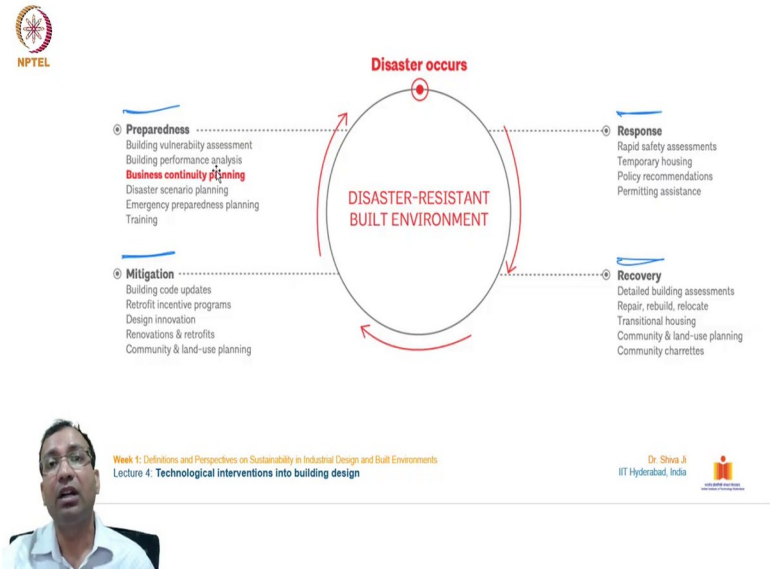

So, disaster if you see there are some prepaidness also is needed to sustain and to minimize impact to the whole ecosystem which has developed in the recent years and recent decades. So, some like corrective measures also required to take care of such things prepaidness is needed, mitigation plans are needed response actually response frame, response framework should be prepaid and recovery mechanisms and (())(17:41) these things should be worked out.

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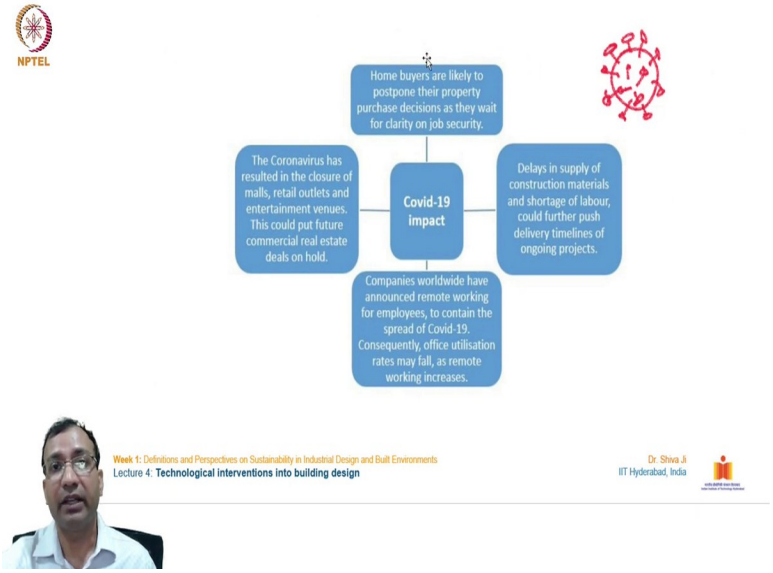

In case there is some impact on the economy or the overall well-being of the people of the India. So, the one recent impact what we are seeing is because of this covid scenario. So, quickly we

can have a look how this covid which originated in China has caused the catastrophic effect India as well as across the world almost every countries suffering with this virus. So, well it has severe impact on the economy also and you may read in the news India has registered growth minus 23 percent for its economy in the previous quarter in this year. So, this is really unfortunate. So, we need to prepare we need to have resilient plan. So, that we can take care of society, our people, our community in a very sustainable way.

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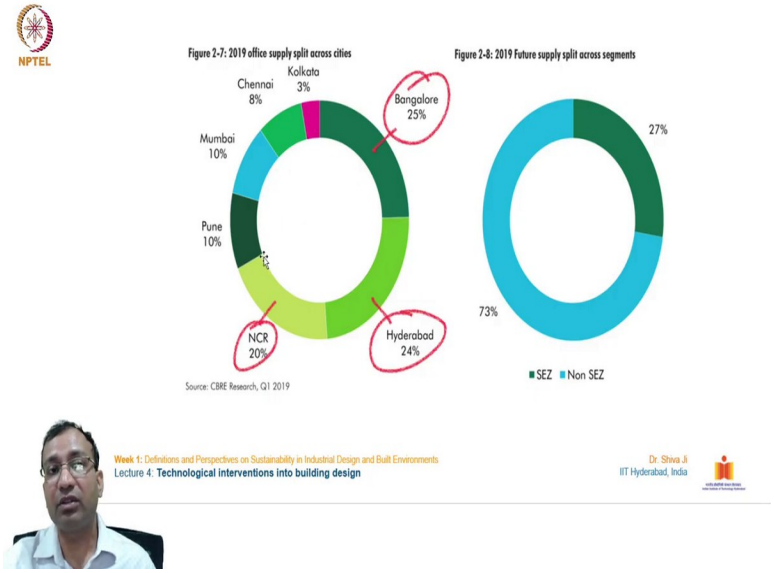

So, measure consumer cities and places if you see. So, if you see there is just for office supply if you see Bangalore consumes 25 percent, Hyderabad 24 percent, NCR 20 percent and so on and in the future supplies facility if you see across the segments SEZ (())(19:03) and non-SEZ (()) (19:05) also is SEZ are like a close to 27 percent one quarter almost and the other non-SEZ. So, our government needs to focus on this non-SEZ organizations also manufacturing units also. So, that they can also enjoy the benefits and relaxation is the… their SEZ they actually enjoy.

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So, well government of India is currently creating land pool you can see this figures over here 461, 589 hectares of piece of land as big as twice the size of the Luxembourg as place where we can host industries who are moving out the China in the recent times, there are actually several policy base changes which are come in the neighboring country and because of this several companies, multi-national companies they are moving out of that country right now.

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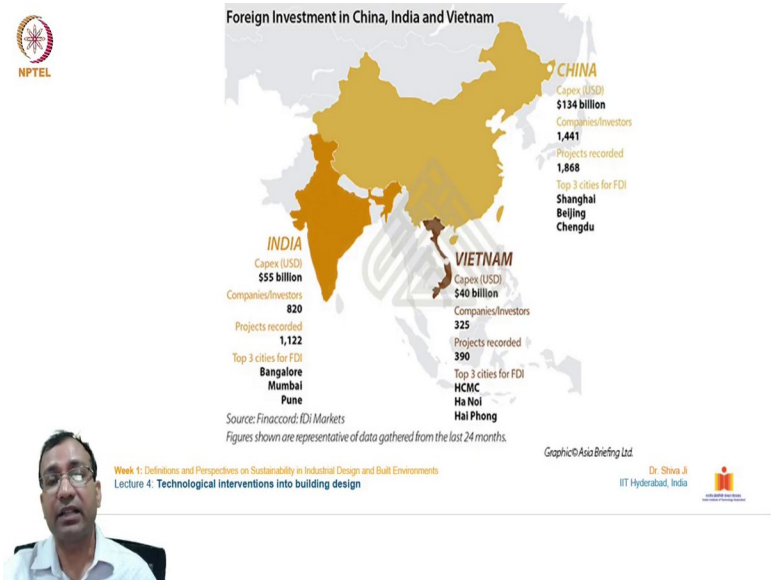

So, how India can take this as an opportunity and work it for benefit along with maintenance sustainable like growth and development that is challenge what we have. So, here in the numbers

you can see how much of like FDI attracted by India, China and Vietnam. Vietnam is also one of the major company countries which is has recent times emerged major hub of manufacturing and other stuff.

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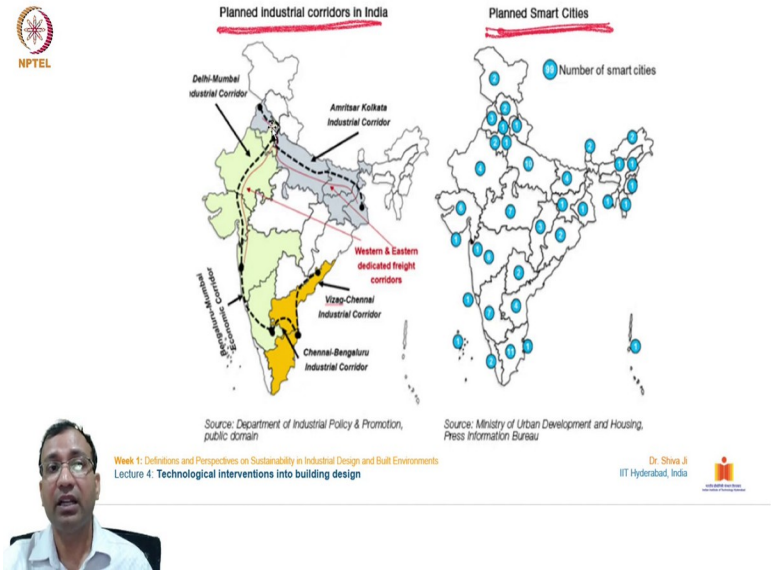

Well, in the India if you see how state governments and central governments are planning to develop industrial corridors created this corridor connecting from Kolkata to New-Delhi till Bombay and to the Bengaluru and Chennai over here you can see this is the Andhra Pradesh the Vizag this is the port city over here on the shore of the Bay of Bengal over here. So, how there connecting the different ports, different actually manufacturing hubs from the India different transportation hubs from the India from where these are manufactured goods can go out of the country. So, these are and the second map you can see over here these are the smart cities which are planned by the government of India. So, in the first (())(21:28) few number of (())(21:28) are smart cities are actually in the plan of their execution well others will follow we reach home.

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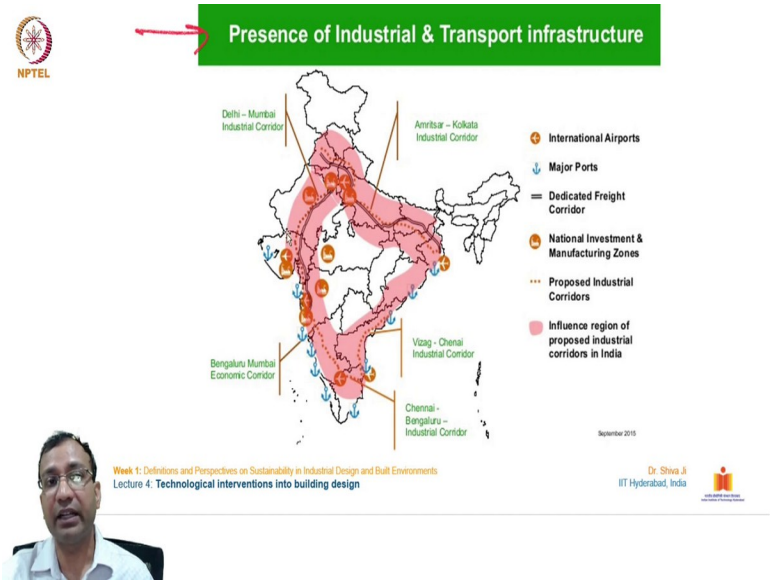

So, the presence of industrial and transport infrastructure if you see, so this says called as like a golden quadrangle. So, which these are the actually 4 major notes of India on the like geographical plan you can see over here which India is actually connecting to create industrial corridor. So, on these lines only majorly industrial corridors and major actually transport corridors are coming up there they will be like a dedicated (())(22:10) carriage corridor also on which double tear (())(22:15) trains can also run very large capacity trains can also run.

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So, this is actually the prepaidness from India we can see and these are the actually 10 top states from India who have the actually highest employability you can see starting from like Andhra Pradesh, Delhi, Gujrat this is given in the alphabetical order. So, these are actually 10 places majorly southern India, western India and part of this northern India two-three states over here Delhi, Uttar Pradesh and Punjab. So, they are under the highest number with the employability actually quotient.

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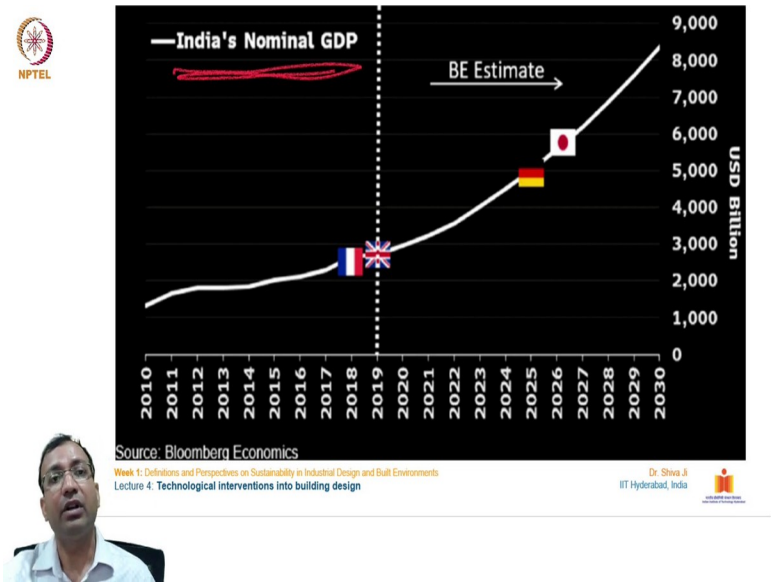

So, this is the last slide of this lecture over today. So, India has actually adopted very fast space of growth to increase its GDP, to involve every citizen of India, to be partly intrusive this whole like phenomena of growth and development and in year of like 2019 you may come across this news like India has surpassed the economy of France and United Kingdom and it is on the way to behind this journey and Japan which we can see over here and it is projected by the year 2025, 2026 or by 2027. We may be able to surpass. So, with the best of the hopes for the Indian economy and sustainable growth and development we will close out this lecture right here. Thank you.