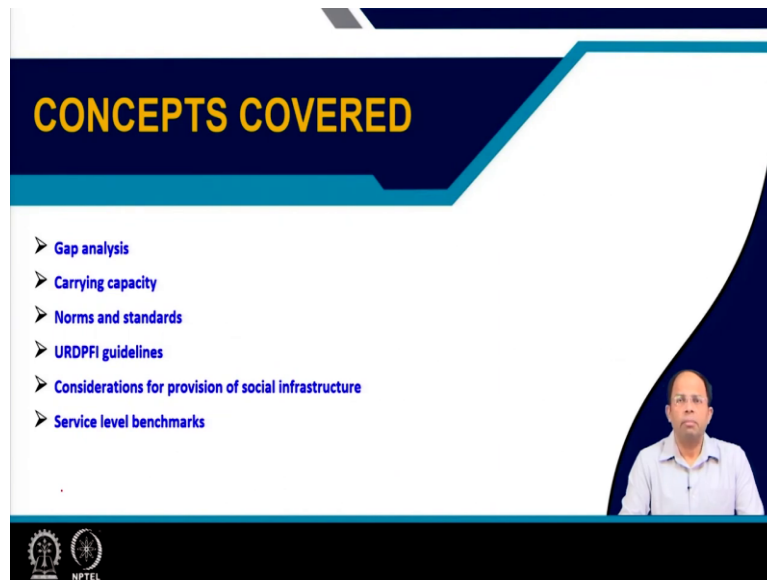**Urban Services Planning**
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Lecture 07
Service Planning Basics Part II

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Welcome back. In Lecture 7, we will continue with Service Planning Basics.

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So, in this lecture, we will cover the concepts of gap analysis, carrying capacity, we will look into the norms and standards and within that we will look into URDPFI guidelines. Then, we will consider, we will look into the considerations for provision of social infrastructure, and finally, we will talk about service level benchmarks.
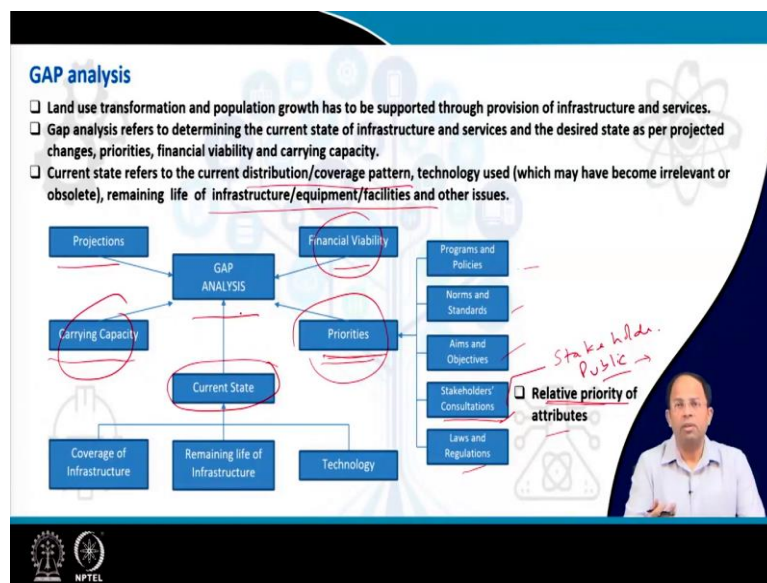
So, gap analysis, in urban services or municipal services planning, gap analysis is one of the most important steps. Now, as we have discussed, any kind of land use transformation and population growth has to be supported through provision of infrastructure and services. So, in the last lecture, we have talked about how population and land use growth for urban area is estimated. But once we have estimated that then we have to determine that what sort of service provision needs to be provided or what sort of infrastructure provision needs to be provide, infrastructure needs to be provided to take, to account for this excess growth in both in terms of land use or for population.

So, gap analysis refers to determining the current state of infrastructure and services and the desired state as per projected changes, priorities, financial viability and carrying capacity. So, as you can see that the desired state, that means it is not only as per what people want, definitely, as you can see over here in this particular image, the desired state is a function of stakeholder consultations which involves the different stakeholders in the process and also the actual public. So, public is definitely involved. So, what people want. So, what are the things that they want improved, this has to be considered.

So, this is one very, very important part of determining gap analysis. That means, we have to analyze what people think about the current service and what they want. So, relative priority of the different aspects of those services needs to be understood. So, relative priority is like within that particular service or within the overall urban services, what needs to be improved what does not need to be improved and what should be the priority of those changes. So, that has to be determined.

Now, once this is determined, then along with the overall vision of growth for this particular city, and the different laws and regulations which are already there in place for deciding on, these are the rules which are fixed for everybody and these are there already to determine that what sort of services needs to be provided. Then based on this norms and standards that is what are the ways service should be provided, general guidelines and all this, and the government policies and programs which are being implemented for that particular time period or by that particular government, all this is considered in determining overall priorities these provision for a particular urban area.

So, we have relative priority of attributes. This is like within a service, what has to be improved or not. And this priority refers to actually what should be the overall priority of service provision in an urban area. So, this priority determines how the gap needs to be filled or what service needs to be provided. So, along with that, we also have to understand the financial viability, the projected populations and all and the carrying capacity. I will come to that. So, and the carrying capacity of that particular area. Now, all this determines what is the gap analysis.

Now, what needs to be provided can be determined based on all this, but we first have to understand that what is the current state of affairs. Now, current state of affairs refers to the current distribution or coverage pattern or technology used or the remaining life of infrastructure equipment or facilities and other issues which determines the current status of service provision in that particular area.

Now, a technology which is used currently which may have become irrelevant which needs to be updated. So, it has become obsolete, we need to change it or the current distribution or coverage pattern has a certain focus but we now want to change the distribution pattern. Already some infrastructure has already reached its remaining life, so, that also needs to be considered.

So, all this determines the current state of the infrastructure. That also helps us in determining the gap that has to be bridged for provision of new infrastructure. So, current state, the priorities which is based on many facts, many things the financial viability and the carrying capacity and of course the projected population all determines the gap that has to be analyzed or gap that is there which has to be filled for service provision in an urban area.

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So, first coming to carrying capacity, it is a very common term used in urban planning. And it refers to the ability of an area to support population at number of population based on available resources and their usage in that particular area. So, usually it is like when we have certain amounts of urban services and infrastructure in place, how much people it can support. But the problem is the resources or these urban services and infrastructure which are there, they are also interdependent on each other. And provision of one of them will also affect the other.

So, provision of services will determine how many people will be there. So, and on the other end, if there is already a certain number of people, we can provide certain kind of infrastructure because there is no space available for provision of other infrastructure. And also provision of certain infrastructure influences the provision of other infrastructure. So, if I provide too much of one thing, the other thing may also get affected. So, carrying capacity, it also depends on the socio-economic characteristics of the people and the technology used.

Now, certain technology is more efficient. So, if that more efficient technology is provided, automatically, I probably may be able to cater to more number of people. So, if, for example if I tell you in case of transportation system, if I provide a metro rail, automatically I increase the carrying capacity of people along a particular corridor. So, more number of people can stay near that corridor. And I can increase the fair along that particular corridor.

But if there is no metro rail and all, if I keep on increasing the fair, there are too many people living along a particular corridor and the bus service may not be able to cater to so many number of people. So, that is how technology also changes the carrying capacity. And

similarly, socio-economic characteristics, affordability of the people and the way the people, the culture, the nature of the, everything affects the carrying capacity of a particular area.

Now, the different kinds of carrying capacities of our area include the infrastructure capacity level where urban services are mostly concerned about the urban infrastructure and all, the institutional capacity level, how good are the urban institutions or what capacity does the urban institutions have which will support certain kind of services like, the institutions means the government, the way the government operates, certain bodies such as your, this, the security system, aperture, apparatus of that particular city or maybe the health system of that particular area.

So, how that is governed, what are the institutes that are there, their capacity, all this will determine the carrying capacity of that urban area. Then, the perceptual carrying capacity. The, how you perceive that particular area, how dense it is, and all this, these, certain things based on perception of people that will that be area be able to be grow or not. Environmental carrying capacity, sustainable capacity level, bio-centric capacity, these are all different aspects of environment and biodiversity and all which also affects the carrying capacity of a particular area or to sustain certain kind of species in that particular area.

Now, infrastructure, like for example, if I take infrastructure capacity, you can say that infrastructure facilities and services within an area affects the quality of life and also the environment of that particular area. So, for example, if I provide good infrastructure, there would be less pollution. So, it would be clean air. If I do proper sewage treatment, proper sanitation and drainage, then the water quality of the, water environment of that area would be good.

Same goes for soil, greenery and so on. So, as you can see that provision of certain infrastructure affects other infrastructure which is, we can say that these are recreational facilities, parks and all those things will be affected. So, environment and ecosystem of an area also affects the quality of life. So, environment is affected by provision of certain infrastructure whereas environment also changes the quality of life and vis-a-vis the number of people it can support.

And institutional capacity affects the quality, and also affects the quality of urban services. If the institution is not, the capacity is not there, I cannot even provide the urban services that needs to be provided. So, this is how all these are interconnected and we need to build up

capacities in all this to support each other. So, carrying capacity is a big part of determining what is the gap of, in service provision for a particular area.

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Next comes the norms and standards, and as you understand, we have already talked about that laws and regulations. So, for example the Solid Waste Management Rules, 2016, these are the rules which are decided by the government, these are acts and laws which are fixed for all urban local bodies, everybody has to follow. So, these are certain guidelines or certain rules which has to be followed by everybody. So, this will definitely affect the service provision that has to be there. So, if it is said that 100 percent open,, every city has to be open defecation free.

So, that means I have to provide toilets for every household or every community. I mean community toilets can be provided in the urban level. So, that means that rule decides what sort of service has to be provided. But in addition of rules there are a lot of norms and standards which are also followed for provision of urban services. Now, norms and standards, these are two terms which are used interchangeably and sometimes we say norm, sometimes we say standards but we can also do differentiate a bit as well.

What are this? So, norms are a set of rules based on expert opinion and consensus considering technical and technological processes, their limitations and appropriateness of their application in the local context and other factors such as availability of alternatives and financial viability. So, norms and guidelines which are based on expert opinion but it is based

on consensus. That means, it is not given by one expert. It is a consensus, based on opinion of multiple experts.

And these are provided and this is in terms of what the technical processes, because engineering, the outcome of an engineering process could be multiple, but which one is appropriate, which one is good, that is decided by experts. And then certain techniques have certain limitation. It should not be applied somewhere. So, these are also guided by experts that where has to be provided or not.

And similarly, what are the alternatives which are appropriate for a particular area. These are also suggested via these norms and standards. Whereas in case of standards, where norms are, we can say norms are more or less guidelines, certain instruction, there could be standards as well, but standards are definitely, these are repeatable, harmonized and agreed values for different procedures, dimensions or types and options.

So, these standards are more or less fixed, whereas norms can vary as per area or as per certain context and all this. We can adjust, but standards are values which has to be adhered to. Usually, these are like pollution standards. For example, government decides on what are the appropriate levels of PM10, particulate matter of size 10 or PM2.5 and then say this should be the levels in the ambient air. So, these are ambient air quality standards, which are framed by the government.

Now, is it right is it wrong? So, it is very difficult to answer that because different levels of pollution will lead to different kind of responses in the population in terms of health responses, but government takes a call and makes a certain value standard which is more or less safe for the population. So, that is how a standard is created. And once the standard is created, it becomes, it has to be applied for the entire population. Whereas norms, those could be tweaked or changed as per the situation.

So, where do I get this norms and standards? For provision of urban services, usually as we have discussed in the 12 schedule, urban services covers social infrastructure, physical infrastructure and many kind of social and other economic improvement for that particular urban area and so on.

So, to generalize we can say that like for example there are several guidelines and norms or standards created by the government by different ministries of the government create this kind of guidelines and standards but if I focus on urban services, we can say that the Indian

Road Congress, they formulate guidelines, this is the body which formulates guidelines, they format many standards many guidelines for, and also the codes of practices and guidelines for design, construction and maintenance of roads and bridges, road transportation, traffic management and so on.

So, these are the different aspects in terms of transportation which are, these norms and rules are given by IRC, whereas for the Central Public Health and Environmental Engineering Organization or CPHEEO, they have created guidelines manuals for planning, designing construction and operation and maintenance of water supply, sanitation, drainage, solid waste management projects, and for public health, and these guidelines should be followed by public health engineering departments of different states, the different ULBs and various other bodies such as state water boards and all which provides municipal services.

So, as you can see that that many of this infrastructure provision is, particularly, the capital infrastructure provision is taken care of by the CPHEEO, this manual created by CPHEEO.

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Similarly, if I look into the, not only the engineering or the infrastructure provision, but also how they should be incorporated in the process or how we should provide them in a particular area or how do I prepare plans, in that case, we have to look into URDPFI guidelines which provides a framework for overall plan preparation and implementation of those plans in urban areas. And these guidelines suggest the planning, they include suggestions on the planning process and what should be there inside different types of plans?

Resource mobilization measures how land and finance has to be mobilized in a particular urban area to generate more resources for provision of services. The institutional reforms towards capacity building, how they have to be done. Then the different approaches and strategies for both regional and urban planning, and they, and as you can understand that, this different guidelines that are given by the URDPFI, these are not standards. Standards are something which is absolute, which has to be maintained. It is not a law, but it is a value for certain things which has to be adhered to.

So, you have to try to add it to those standards. We can say that a system is not operating efficiently if you are not adhering to those particular standard whereas in case of law, we have to do that. But in case of guidelines, like URDPFI guidelines, these are not standards, and the guidelines itself state that these are not uniformly applicable to all places. So, you have to take a call on how to tweak this or how to modify this to apply in your context.

So, these are modified as per the local context, as per the existing issues and the needs and the technologies that are considered. So, according to that, this framework, these guidelines needs to be modified. Now, as we are discussing for plan preparation, we have guidelines, for certain infrastructure provision, we have guidelines, but there is lack of manuals and standard for provision of labor intensive services such as solid waste collection or provision of police services in a particular area.

So, there are some guidelines, of course, based on each department which actually operates this kind of service, they have some rules some guidelines. But overall, in general terms, we, there are lack of manuals and standards for this kind of labor intensive services and provision of social infrastructure.

Now, for provision of social infrastructure and all, URDPFI do have, give some guidelines. But again, as we have discussed that these are not uniformly applicable everywhere, and it has, these are very, very basic guidelines which can be followed but sometimes people follow this by the word of this guidelines but we really have to take a look into the actual context to apply these particular guidelines.

And what are these guideline standards based on? These are in regards to provision of educational facilities in urban area, provision of healthcare facilities in urban areas, socio-cultural facilities, police stations and other sort of security or safety facilities which provide look into the safety of the urban population like disaster response and so on, distribution

services, gas distribution, food distribution and other kinds of distribution services, sports facilities, recreational facilities and so on. So, URDPFI guidelines do give some standards for this, but again this is a very, very broad guidelines, and as per the context we have to modify them.

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So, this is an example of the different educational facilities that has to be provided as per URDPFI guidelines. Again, as you can see that it states for a population of around 2,500, there has to be a pre-primary nursery school. So, if there is a urban area of 10,000 people, there has to be four nursery schools. And similarly, they also give some amount of recommendation for the size of the building that is required. In some case, it is not only the building but the size of the play field that should come along with the building and sometimes there are other facilities as well.

So, for primary school you can see that for 5,000 people, there has to be a primary school and the student strength of the school would be approximately 500, and so goes on. So, the list is also there for colleges, for different kinds of technical education centers, then nursing and paramedical institutes, veterinary institute and so on.

So, what is important is that these guidelines are very, very broad. We can say the engineering college has to be provided for 10 lakh people, there has to be 1 engineering college, and the size of the engineering college would be around for 1500 people. For 1,500, students, we have to build an engineering college. But a city may not have an engineering college but still, may not have 10 lakh population but can still have engineering college.

So, there may be so many things that needs to be considered. And so accordingly, in the plans or the service or the infrastructure or facilities that we provide in an urban area, we have to really consider many other things when we decide on provision of these kind of facilities.

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Similarly, for sports facilities you can see over here, for residential unit play areas, for every 5,000 people there has to be a 5,000 square meter of land area that is reserved for a residential unit play area. For a neighborhood play area, the land reserved is 1.5 hectare and population considered is 15,000. So, definitely, it is not, as you can see that these values are given, but if a neighborhood is of a small size or maybe a city may be very low density city, there are smaller neighborhoods, should we not have a residential play area, or a neighborhood play area if it does not match the size of 15,000 people? We still should have it.

Then, should we proportionately reduce the size of this particular facility? Maybe not, because the requirement for the facility is in terms of what kind of field, should be there should there be a football field, should there be other facilities. Accordingly, there has to be stand standard sizes that has to be adhered to. So, this, that means that these are not, we cannot say that we, based on the population, we will proportionately reduce the sizes as well. So, these kind of calls has to be taken.

So, as you can, to summarize, so these standards depend upon land use and nature of the urban area. So, if it is a industrial city, hill station, based on the demographic characteristics, based on the different cohorts we have to decide on what sort of schools are required, what

sort of other technical institutes are required. For example, if it is an industrial city, it may require lot of technical ITIs and those kind of insttutes.

Whereas if it is a hill station, there may be required for other sorts of institutes. So, that has to be considered, the demographic characteristics, some, as we are discussing in our previous lecture, that as per the cohort analysis we can determine which age group we are getting how many people in the near future, and that actually will determine the number of schools.

So, these are the other factors which influences. Then size of the urban area, economic characteristics of the urban area, land availability. Already it is a very, very dense urban area, we may not have adequate land for provision of this kind of recreational facilities or sports facilities. So, we may go for a regional order facility. Instead of providing this kind of sports facility in the urban area, we can provide that at a higher order, maybe at the district headquarters or maybe at a certain distance away.

So, that means that these decisions are not fixed. So, these are some guidelines but we can always modify them as per our requirement. So, plot area, two things that we saw over here. One is the threshold population and the plot area. So, plot area may vary as per the above characteristics as well as on the nature of the educational facility. So, based on what sort of educational facility, the plot area will vary.

For example, if I am having a IIT, based on the structure of the IIT system, we can have certain norms on the area required. But if I have a small private engineering college, it may require a different area. Threshold population. Then can, so this means that for how many people we are going to provide a popular, what is the minimum number of people for which, whom I am going to provide a certain kind of facility. So, here also, this can be determined based on population characteristics of that area, the population density of that area and the total population of the area. So, it is again something which is not fixed.

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So, what should be the considerations provision of social infrastructure. So, there are some characteristics or some properties which we should consider when we determine what sort of social infrastructure needs to be provided. So, the first characteristics is the hierarchy of social infrastructure or the service.

So, as you can see that small towns can serve the surrounding villages. So, if I have health centers, colleges all these things, we may not provide them in the smaller village, but we can have it in that small town which, and this small town will serve the villages in the surrounding area.

Similarly, medium town cater to both small towns and villages. So, certain facilities could be there at the medium town and not there at the small town. Then large cities usually cater to both the local demand as well as the regional demand. So, actually the number of, the facility requirements in the large city should be actually more than what it should because it is catering to the regional demand.

So, that means for higher order facilities, there is a need to consider higher population size, may be to the extent of 25 or even more percent. So, that means, so higher order facilities actually cater to more population than actually that is given in the URDPFI guidelines. So, that is one part. Or we can say that consider top tier facilities beyond the standard measures.

So, when we have a total population number for a particular area, all the normal facilities could be decided as per URDPFI guidelines, but the top order facility like district hospital

and all, this should be kept beyond the basic estimates of population, those, determining the number of health centers or hospitals that that is given in the URDPFI guidelines.

That means that certain order of facilities like certain engineering colleges or maybe IIT or these things could be kept outside this standard calculation and if there is a provision to bring those kind of infrastructure that it is, they should be brought to serve the entire region. So, a higher order facility can be also provided in a lower order settlement if considering other constraints. Considering land area availability and all this in the main core city area, we can have a higher order facility in the surrounding smaller town or this in the nearby village. So, that is also possible.

So, this is the first or the attribute or the character or that particular property which should be considered when we provide a particular social infrastructure. Next is the property of proximity, which says that a local level facility should be provided considering people can walk to that facility. For example if I want to provide a field or a sports facility, it should be within walkable distance. So, accordingly 300 to 800 meter or 5 to 15 minutes walking distance can be considered.

On the other hand, if a fire station has to be provided, then we have to look into the travel time of the fire tender to reach the furthest extent of the area it is going to serve. So, in that case, the proximity is estimated differently, not on terms of the walking distance or not on terms of considering non-motorized transportation. But here we have to consider the time in which the fire tender will arrive at the place where the fire has happened, and we will assume that if a fire happens in the extent at the furthest extent of the area it serves, then how much time it will take to travel there.

If it is beyond a certain threshold, we can say that now the distance has to be reduced. So, that means you have to have more number of fire stations. Then comes participation. That means a location it does not only considers the physical attributes but also the, it considers the need of the community. That means, it should consider participation of the community it is designed to serve.

So, if the location is such that it is able to serve the surrounding community, the residential population, this increases community involvement in the maintenance of the facility, and it is it will also encourage participation of women. So, that means participation is also a key feature when we decide on service provision.

Next comes ownership. Now, ownership is, in case of social infrastructure, government can provide, reserve some lands where government will provide a certain facility like a market or maybe certain kinds of, some schools maybe but there are other schools and centers which are privately owned. In that case, location choice of these facilities is taken by, made by the owners.

So, I can have some land use provision in my plan that these are the locations which are suitable for this kind of facilities, the owner may choose to buy a plot in those areas or he may also choose to buy a plot in some other area as well. So, location choice is determined on several factors which varies as per the service that is provided.

So, as per what service, for a school, I will determine the location in a certain way, for a health center I will decide the location in another way. So, accordingly we will determine where the location should be, and facilities like small things, like small kindergarten schools or medical clinics, these are developed as business opportunities by private individuals and usually they will try to develop it in their own premises.

So, in that case, if residential use allows certain kinds of kindergarten schools and health clinics to be developed also, those can come up over there. So, that means the location choice is not a decision by urban planners only, it is a choice decision by individuals who provide those kind of services. So, this kind of concepts could be also considered when we frame the norms and standards for service provision in urban areas.

So, ownership of land, that becomes very, very important. Or ownership of that facility also becomes important. Then multiple use. That means, a facility can be designed to serve multiple purposes. This improves efficiency in land utilization. It reduces the investment that is required, and sometimes the uses can be also complementary.

For example, in the morning, same facility can act as a school, in the evening it can become a adult education center, or it could be a place where community, some people can take shelter at night, some homeless people can take shelter at night, or a bus terminal can have a transit authority office on the top of it. So, same land area, same building could be utilized for multiple purposes.

So, sometimes we, in case we see that a need for a facility is not there. For example, due to the change in demographic pattern, the number of students in the school has reduced. So, we can consolidate two schools and can use the existing infrastructure of a school for some other purpose. So, that means repurposing existing underutilized infrastructure for other purpose, that also could be one thing that we can consider while we consider, when we do service provision or service planning.

Then the nature of the service, this is, of course very, very important. The threshold value. If there are threshold values determined for that kind of services, like in case of fire tender, within what time I have to reach a particular location, that kind of thresholds. Then novelty of that service and the sustainability of that service. All this will determine how that service has to be provided in an urban area. So, accordingly, we will decide how many of those service where to provide them and so on. So, these are some of the basic properties of provision for social infrastructure in urban areas.

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Finally, we come to the service level benchmark. So, in addition to the norms and standards and all, Government of India and in general most governments create certain kinds of service level benchmarks, which means that these are some standards which the government provides as targets which has to be adhered to by different sort of services that are provided in urban areas. So, obviously it is not a law, that means we do not have to provide this but this is what we should aspire to provide.

So, when we measure gaps, we measure gaps from these particular levels. That means if, like for example in this table you can see that for Solid Waste Management, government has given some benchmarks such as household level coverage of solid waste management should be 100 percent. That means every house should be covered. So, if a municipal area has covered 70 percent, definitely that means there is, they have a long way to go, that means they have to bridge that gap of 30 percent.

So, from there also we can determine what is the service gap. For example, efficiency of collection of municipal solid waste or extent of segregation of municipal solid waste, if right now there is no segregation happening, that means that is the service gap. I have to introduce segregation in that urban area. So, this is also, gaps could be also established. So, service level benchmarks also helps us to determine, it facilitates measurement of performance gaps, performance management and overall improves service delivery accountability.

So, the, to create this kind of benchmarks, we first have to determine the different performance parameters for each of this service. Like in case of solid waste, these are the

performance parameters that has been defined. These parameters have to be understood and used by all. And we have to monitor the service delivery in that urban area so that we can measure that what is the actual value of those parameters for that area. So, benchmark levels has to be fixed. Like here, the benchmark levels, government has fixed. So, these are based on expert opinion.

And then there has to be a framework for monitoring and reporting of this particular values, how the municipality should monitor this and report this. And sharing of information and best practices. That means, how the bridge is being gap, meant overcome, or how do I fill that gaps, what are the practices taken up by some municipalities, that is being shared with other municipalities. Then other municipalities will also improve. So, that is how service level benchmarks also helps in determining gap analysis.

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So, this is an example of how service level benchmarks are created. As we have discussed that for each indicator, each indicator has a definition. There is a title for it, there is a unit measure for it. Then there is a rational for that indicator, why that indicator is being collected. Then there is a calculation methodology, frequency of measurement, how often do we measure it, then jurisdiction of measurement, where we should measure it. And finally, a service goal that what value I should try to reach within a certain time period.

So, in addition to that, there is also the reliability of that indicator. That means, when I am measuring that indicator at the urban level, I am using certain ways to measure it. Now,

sometimes these ways are not reliable or the reliability levels differs as per the data that we use for measuring this.

So, let us go into the detail. When I take the indicator coverage of Solid Waste Management Service, you can see that the rationale is door to door collection is good for waste collection and it results in 100 percent waste collection in urban areas, and it reduces the amount of waste that goes into the streets because it is being collected and eventually from streets the waste goes into the drains. So, that is being reduced.

So, overall, it maximizes treatment and recycling and disposal of solid waste. The definition, the definition is straightforward. Percentage of households and establishments that are covered by a daily doorstep collection system. That is the definition. Data requirement, we require two data points. One is total number of households and establishment of the service area and the total number of households and establishments with daily doorstep collection. So, obviously if I divide one by other, then, and multiply by 100, I get percentage of houses which are covered by this doorstep collection. So, this is the final measure.

So now, coming to the data reliability part, D level of data reliability is the service provided gives a very broad, aggregate level value. So, that is a D level of service. There is no data recording. So, let us go to the A level of service. So, here can we, number of, we need to have data on number of households and establishments with doorstep collection as stated by involved agency for waste collection.

Now, this can be verified from the records of usual charges for doorstep collection services or we can use GIS maps for data integration and so on. So, you can see that we have got detailed data on who pays and who does not pay, and that gives us an idea about exactly how many people we are providing doorstep collection for. So, that means it is a very good, reliable data.

But the other levels, for example, if I, instead of taking this, I use the data from weigh bridges, that is every day the load is come with the waste to the solid waste landfill or the incineration plant, wherever it is, and the daily averages of how much waste is collected is based on the weigh bridge values, that is, the load of that lorries, for seven consecutive days in a month.

So, I take that overall weight and I know that per capita how much waste is united. Based on that I can derive total, how many number of people are actually being reached by door to

door collection. So, that is how we can also say that these measures are very easy, the indicators are pretty easy, but how to monitor them, how to measure them, what, are those indicators reliable, these are the different questions that we need to ask. So, service level benchmarks also helps us in framing the service level gaps or that helps us to conduct a gap analysis for an urban area.
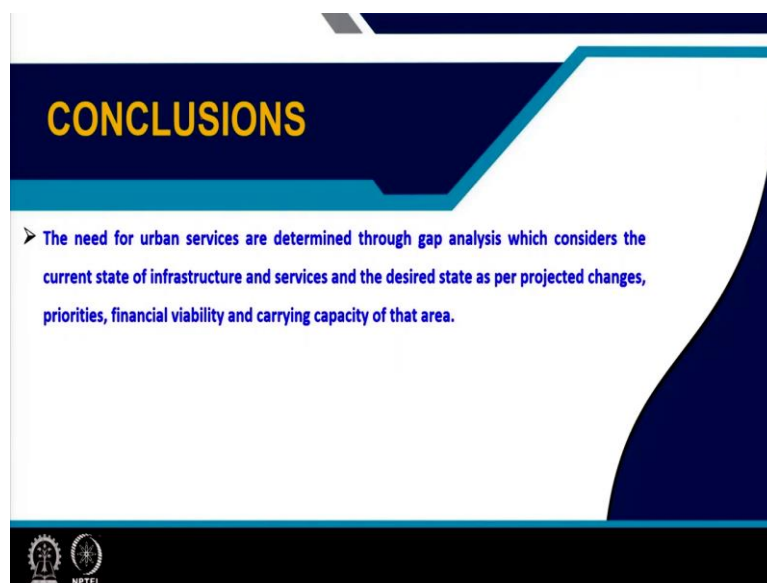
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So, these are some of the references you can use.

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And to conclude, the need for urban services are determined through gap analysis, which considers the current state of infrastructure and services and the desired state as per projected changes, priorities, financial viability and carrying capacity of that area. Thank you.