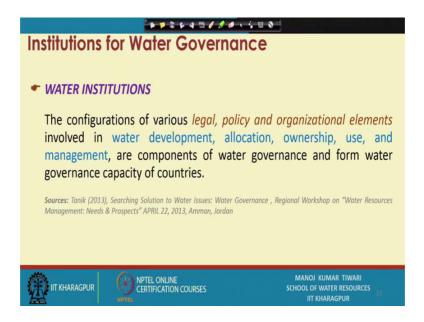
# Water Economics and Governance Prof. Manoj Kumar Tiwari School of Water Resources Indian Institution Technology, Kharagpur

# Lecture – 47 Effective Water Governance Schemes and its Benchmarking

Hi, everyone. This week we have been discussing about Water Governance and in last couple of session we talked about various principles on water governance. We did discuss the 12 principles on water governance recommended by OECD and then what are the ways to sort of benchmark water governance systems. This session we are going to talk about some of the aspects of Effective Water Governance and its Benchmarking.

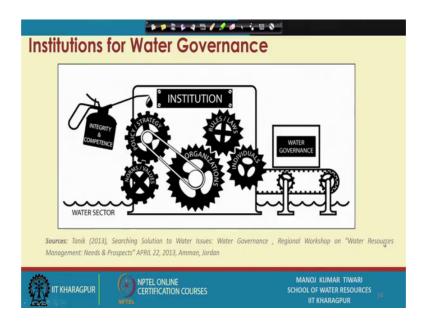
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To start with in water governance framework there is one very basic, but very important entity is water institutions. Institutions as in we are not talking about academic institutions, water institutions means any organization any system any set up which is responsible for managing water, ok. So, the water institution basically has sort of responsibility of participate in the governance process at different scales. This water institution could be different the ministry of water resources you can consider as a separate institution the water utility is a separate water institution. So, those kind of set ups would be there. The idea is to con configurations of various legal policy and organizational elements involved in water development allocation ownership uses and management are components of water governance and from water governance capacity of countries.

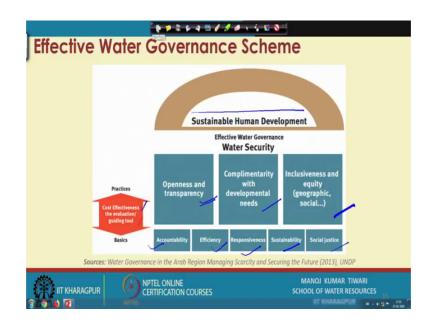
So, these are the very basic aspects, ok. A country how it configures it is legal policy and organizational elements for water development allocation water services it is uses it is overall holistic management. These are the basic components of water governance and these form the governance capacity of a country. So, a country with strong water services or a good organizational set up good institutions will have higher capacity or better capacity of governing water will be placed better in terms of governing water as opposed to the other country which does not have adequate infrastructure, adequate facility, adequate manpower, and adequate set ups in general.

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So, if you see the water institutions, so there is there is going to be policies and strategy making would be the sort of one of the role of one of the institutions then rules and law making and their implementation, ok. There would be individuals would be a component of institutional their organisations which are closely linked with the policy and strategy framing or implementation purpose then there are norms and values. So, all this sort of in integral way forms different components or different subsets of water institution which in turn derived the basic water governance of the reason or of the country.

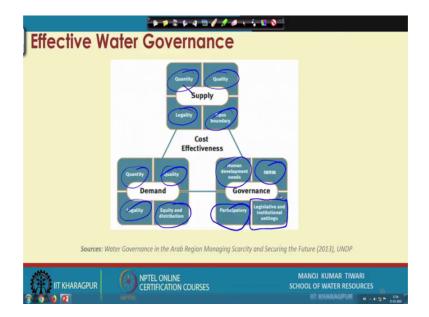
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So, when we talk about the effective water governance scheme ok, it all comes down to the basics where there is requirement of certain integration of aspects like cost effectiveness, the evaluation what are the basic guiding tools and the effective water governance ensuring water security will have openness and transparency as one of the aspect. Complementary with development needs means it is not that on the name of water governance on the name of let us say resource protection or sustainability of resources we stop all the development activities. That is not a ideal water governance structure.

Water governance or a good water or effective water governance will complement with the development needs as well. So, what is the requirement of water for development for growth and how that can be managed sustainability a in a in a sustainable fashion, ok, how it can be managed without having too much of negative impacts either on society or on the environmental systems, that also need to be taken care. And, of course, there has to be inclusiveness and equity so, there is geographical equity, social equity stockholders involvement all this will come under there and one of the basic aspect is sustainable human development.

So, this, all three aims towards the sustainable human development the overall entire humanity can develop in a sustainable fashion, alongside the fulfilling the basic need of water for the domestic sector, for the growth sector, for the agriculture sector all that. Now, this covers in the various building blocks where is accountability has to be there efficiency has to be there, the responsiveness if there is any issue any complaint, any sort of problem occurs there has to be adequate responsibility and response sharing mechanism there has to be sustainability and social justice. So, all these things should basically be integrated for an effective water management policy.



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The effective water governance works on three distinct frames there is a supply box which you can see here. So, this seeks for the, what is the demand that a means the quantity of the supply, the quality of the supply, ok. The legality of the supply whether the supply that is being done is legal or there is lot of theft losses those kind of thing and the trans boundary, ok.

So, from where it is coming whether it is in state service or it is basically coming across different states different nations. So, those kind of a aspect also need to be considered then there is a demand block which considers again quantity, ok. What is the quantity demanded, what is the quality demanded, what is the legal framework of the demand, how people want their demand to be fulfilled in which legal framework, ok.

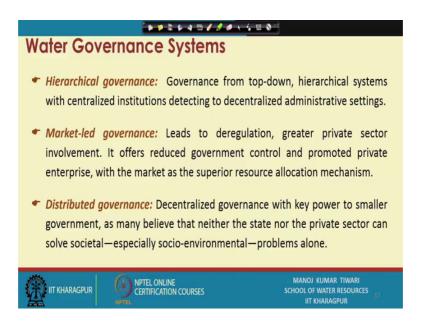
So, that also and then of course, there is a equity and distribution. So, the demand block will have that the distribution of water has to be ensured in an equitable fashion because demand is likely to come from the different sectors. Then the governance aspect which is human development needs. So, what is the basic need of water for human development

human development does not mean only household consumption or drinking water supply or this thing. Human development incorporates everything human development incorporates agricultural growth incorporates industrial growth how it can be achieved in a participatory fashion, ok. So, this again talks about the stakeholders involvement at different stages.

The integrated water resources management ok, where all the different aspects are bringing together and the holistic approach is adopted we will talk about it later and then legislative and institutional settings. So, how are the water institution set up how the roles and responsibilities are distributed or divided among different among different administrative or authoritative positions, what are the legislature legislations regarding the governance of water, the authority of water or right to water.

So, whatsoever are under the legislation all these things needs to be considered and they should basically closely work in a frame of each other ensuring the overall cost effectiveness, ok. Cost effectiveness incorporates here the social efficiency as well. It is not just we want to financially optimize the cost or financially pick up the cost effective system there has to be fulfilling the social objectives as well.

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Now, there are three distinguished type of water governance systems which are recognized widely of course, we can have a mix and match as well at times, but the three conventional water governance system incorporates the first one is hierarchical governance. So, hierarchical governance is the simple mechanism where the governance is done from top to bottom. So, there will be people sitting at different hierarchy there will be authorities or administrative administrators at different hierarchical level and the centralized institutions those who are sitting at the top because hierarchical will always percolate from top to the bottom.

So, the person which is sitting at the top has the highest hierarchical position he has the maximum say because all peoples are under working under him across the different levels. So, that way the governance in occurs from the top to bottom. Those who are sitting at the top are the one who basically decides what is to be done. They are the basic policymaker and then comes to the different levels, ok.

But, in a hierarchical system let us say implementation guy let us say a junior engineer and field at site engineer, or a NGO one or user side stakeholders civil societies will not have any say in the policy making, because policymaking is to be done by the person sitting at the top, . So, that is one system where basically the centralized institutions kind of dictate the administrative settings ok, even if the role and responsibility is to be distributed it will be again distributed from the top only.

So, the top boss will decide who is to be given what kind of responsibilities and then accordingly it percolates to the lower hierarchical levels. This is one of the very common governance structure for water at most places. In India also if we see state wise so, there is there are those kind of hierarchical structures are available the policies are mostly made from the top.

Now, it is not that like it is not that the central government only decides what is to be done of course, there is a say of state government as well, but if you see within a state. So, within a state it is the state authority which will basically decide how to what water policies should be adopted in the reason in a specific reason or in the entire state territory and who will be given what kind of responsibility for implementation for operation and maintenance for regulation or for investigation check up all these things are controlled by the top systems there is market led governance, which leads to deregulation, ok.

In a market led governance it the government will not have that much of say. It is deregularized greater private sector involvement is there, ok. It often offers reduced government control and promotes private enterprise where the market is the market the market grounds are the major basis for policy decisions as well, ok. So, based on the market prices the resource allocation mechanism will be developed accordingly.

Now, market led governance is better in some terms, but has its own demerits as well. Water is not a commodity which should be utilized for profit making. We have discussed this earlier that water is a basic human essential need and if we go by simple market processes or if we go by the market led governance model so, the resource allocation would eventually have a skew towards the more rewarding allocations.

If industries are paying higher prices so, by the market allocation systems one should actually allocate more water to the industries because from there it is getting maximum revenue. However, the water has it is social values as well and as we discussed the first priority should be given to the basic life the requirement of water for this sustaining basic life. So that way the domestic sector or particularly for the poor or deprived people where market will not have much of interest will be at large disadvantage in a market led governance, ok. So, that is one of the disadvantage.

On the other hand the incorporation of the political agendas in water management will be reduced the role of governing a government will be reduced. So, there will be large degree of transparency large market base competition will occur. So, those kind of things will be there on a positive front while as discussed that there are bound to have some negative aspects as well the third one is a distributed governance which is basically the decentralized governance with key power to smaller government, ok.

Now smaller government means in a decentralized system we can say that right of making localized policy or localized management of water resources or for such systems would lie to the local governments. Local governments could be as low as gram panchayats, or urban municipal bodies. So, it is not that their central government or direct state government has not much say in the water management or the water policy or water governance system of a village. The village can have it is own water governance system. So, that is what decentralized governance means.

Now, this has a lot of advantages ok, because see many people believe that the central bodies or central government or even the large state governments are not in an adequate position to understand the basic need at the field level. What is the because the water is particularly the issues related to water are very much localized at times as we discussed

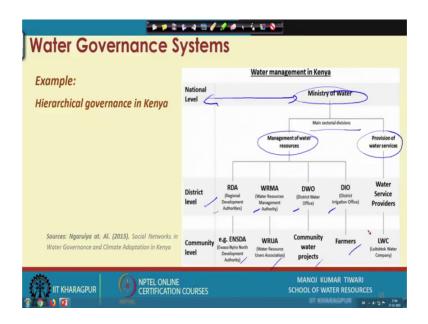
some reason may have different type of problems, some reason may have different type of problems. Now, our central policy making will not be adequately address these small, small. small multiple number of issues. So, it is better to leave the management or leave the governance of such cases to the local bodies as well.

Local bodies can best comprehend the problem, best can actually have best understanding of course, there would be financial support required which will be provided by the central or state governments of course, there may need to be acquiring expertise again there has to be a water institutions dedicated water institutions for providing human resources support or expertise support to these small sections. However, the policy making or the major governance or the major implementation authorities should lie down to these smaller units as well. So, this is the distributed governance structure ok.

However, none of them could solve the entire problem always because there are issues related to distributed management distributed governance as well particularly in a distributed governance there are going to be lot of conflicts if you try to manage water at a village level if there is a pond lying between two villages there is going to be a conflict. So, that kind of small conflicts could arise at many places plus the allocation of funds the management of the funds becomes very difficult, if you do not have to a say in policymaking. Now, I have two blocks in a district let us say block a and block b both have different population, different water requirements, different kind of water resources, so, their expenses or the needs or requirements of funds could be different.

However, if they are making the policy and they are coming they are just asking the government for fund out the central bodies for fund and had not much say into the governance part. So, then there could be sort of a block A could oversee that, higher funds are allocating being allocated to block B which may not be which could be fair or could not be fair ok, but there could be a issues or there could be a conflicts out of such situations that why such and such block is being given preference why we are not being given preference and those sort of issues can arise.

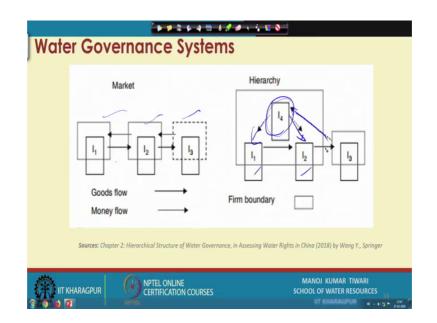
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So, this is an example of hierarchical governance in Kenya a we have the ministry of water which is the national level agency which governs. This is the main it has main sectoral divisions the management of water resources and provision of water services both fall under this. Provision of water services are basically being managed through water service provider, and the management of water resources are being again done with a separate district level agencies, where regional development authorities is then water resources management authorities, then district water officers, district irrigation officers.

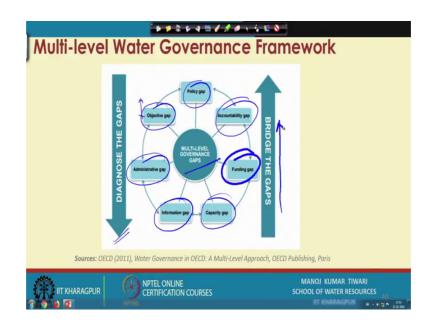
So, there are various subsets at the district level and thereafter at the community level there is again some organization or some agencies which are involved in the overall holistic water management, ok. We will specifically see the governance in India in the next week session.

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This is a comparison between the market and hierarchical water governance systems. So, in market the money and goods flow according to the market scenarios, as is evident from the figure over here, ok. The money flow as well as good flow is basically from the different zones or sectors of market whereas, in hierarchy the flow could be only one sided in the market flow could be only one sided from one end to another end and just the inputs would be taken up and then this is the central agency which will guide what to do by these two independent. These two different level of authorities ok. So, that is kind of a an example of hierarchical and market water governance mechanism.

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The multi level water governance framework if you see, so, there is the need of diagnosing the gaps one should diagnose what are the gaps in the overall governance framework and then attempts should be made towards bridging those gaps, ok. So, those gaps could be policy gap there could be a gap at policy level there could be a gap at the basic objective level if the objective itself is not clear, ok. What is the objective of water governance? Objective of water governance is to let us say making water services financially sustainable ok, but that could not be a right objective there. There would be objective gap because we are then leaving the social aspects out there, ok. So, what kind of objective we are having for the water governance and are these objectives adequate that needs to be understood.

Then there could be administrative gap, for the objectives that we are having whether there is sufficient institutional supports, efficient administrative supports are available or not. So, that if it is not so, that will be considered as an administrative gap, then there could be an information gap ok, whether these informations that are being made available to public or not, ok. the policy largely depends on the information. If one knows that if one is well informed about the availability of resources about the issues about the demand about the various other aspects then one can come up with a integrated policy frame framework, but if the administrators, if the authorities are not well informed it becomes very difficult to come up with a good policy.

There could be capacity gap. So the capacity gap essentially means that where actually the administrators or where actually the overall set up stands, whether there is adequate amount of resource available or not. If there let us say our requirement is higher and resource availability is less so, there is a capacity gap. Capacity gap essentially not only in the form of capacity in the form of availability of water, the capacity gap could be in the form of other things, ok. The capacity of let us say human resources capacity. So, for managing this particular service if you need hundred skilled people, but you are not getting those hundred skilled people there are not many people well trained to look after these kind of operation and these kind of set ups so, then there is a capacity gap in terms of human resources as well .

There could be funding gap which is another form of capacity gap, in a way you can say that when there is a scarcity of funds. So, whatsoever amount needed for managing water services are there adequate amount of funds available or not, ok. If not so, what are the alternate ways to iden get those funds in and then accountability gap. So, who like during the water services during ensuring the water services who is going to be accountable for those services, ok. Those lapses those problem those issues, so, anything if it occurs there has to be accountability and if there is accountability gap. So, then it becomes difficult because without any specific accountability the authorities will not be responsive, authorities will not be sort of liable to perform their duties. So, that is one of the very like important aspect.

Now, this gap needs to be diagnosed, ok. So, one needs to identify that how much is the word how much what are the policy gaps what are the objective gaps then administrative gap, capacity gap, information gap, funding gap, accountability gap all those things and then try to bridge those gaps, ok. So, how these gaps will be bridged? These gaps will be bridged with multi level effective water governance this incorporates bringing in the funds developing the human resources identifying the correct objectives, identifying this accountable set of responsible administrators, percolating information, involving different stakeholders so, all those things will come into the prospective over here for the governance framework.

So, we will end this session here and in the next session which will be the last for this week, we will talk about some of the some of the basic performance indicators, some of the basic indicators of good governance and some other aspects related to the good governance.

Thank you.