

**Development Research Methods**  
**Prof. Rajshree Badamatta**  
**Department of Humanities and Social Sciences**  
**Indian Institute of Technology - Guwahati**

**Lecture – 23**  
**Social Capital Assessment Tools**

Hello and welcome to week 8 and lesson 1 of the NPTEL MOOC's course on development research methods. This is the final week of this course and we will end with 2 more operationalization issues with respect to research methods in development. In the lesson 1 of this week, we will study about social capital assessment tools and in the second lesson of this week we will study about monitoring and evaluation frameworks and in the final lesson of this week, we will conclude and summarize this course which would be best for students of this course in terms of a summary of what we have done all throughout.

Now as far as social capital assessment tools are concerned, as a student of social science you would know that social capital is at the center of much of the discourse on development. And you would also know the importance of social capital with respect to the accessibility of material conditions of living as far as development is concerned. So, in this class what I will do is to flag off certain tools that are widely used with respect to social capital assessment after giving you a brief background of what social capital assessment is, what is social capital and how does one go about thinking when one is presented with facts about social capital assessment.

**(Refer Slide Time: 02:09)**



## What we will cover in today's lecture

1. What is Social Capital
2. Different Types of Social Capital
3. Measuring Social Capital
4. Social Capital Measurement Tool (SOCAT)

So, what we will cover in today lesson is as follows; we will first look at what is social capital. Secondly what are the different types of social capital, thirdly measuring social capital and lastly, we will also look at social capital measurement tool, SOCAT, which is one of the tools that is widely used by the World Bank for assessing social capital in various country contexts. So, in this lesson we will mostly look at some of the major features of social capital measurement tool with respect to the one which is used by the World Bank, which is developed by the World Bank and you would find the details about this social capital assessment tool if you look up online on the World Bank website and you could look into more details of the integrated questionnaire that is available with respect to the social capital assessment tool.

**(Refer Slide Time: 03:06)**

## What is Social Capital?

- Social capital is defined as the institutions and relationships, as well as the trust, norms and values, that govern interactions among people and contribute to economic and social development.
- It can be used to measure individuals and groups' opportunities and constraints by focusing on the social assets and networks that determine their access to resources.
- Helps in understanding the transaction costs associated with acquiring information, and actions by members to overcome imperfect markets through social sanctions or mutual support.
- It is useful for estimating likely changes in productive behavior at the household and community level in response to policy change.
- It allows analysts to identify how networks and norms affect this behavioral response.
- It can be tailored to specific policy domains and used to give depth to other methods of data gathering and analysis.

So let us begin with the what is a social capital. Now social capital is basically defined as the institutions and relationships as well as the trust, norms and values that govern interactions among people and contribute to economic and social development. It can be used to measure individual's and group's opportunities and constraints by focusing on the social assets and networks that determine the access to resources. For example, if you remember the general lecture we had from M. N. Srinivas's book on 'The Field Worker and The Field' you would remember that we did talk about social networks within a village and how having social networks within a village ensures accessibility to resources as far as certain groups of people within a village is concerned. For example, suppose an individual or a household within a village is highly networked with respect to their social hierarchies that are present within the village. For example, one is very close to the panchayat secretary or one is very close to the functionaries at the block level, at the district level and the state level usually the accessibility to resources whether it is in terms of physical resources or it is in terms of financial resources or it is simply in terms of having networks with respect to possessing information that increases. So, this is what we in a nutshell refer to as a social capital. However social capital has various other dimensions other than this and therefore we are talking in terms of measurement of or assessment of social capital.

So, it helps us in understanding the transaction costs associated with acquiring information and actions by members to overcome imperfect markets through social sanctions or mutual support.

For example, in the context of a labor market or rural labor market or informal market let us say. If I am seeking employment and I do not have information regarding where I should apply for work or where I should go to seek employment then obviously, I will not be able to find the required avenues that I am looking for. And this is where social networks play a very important role. Many of you who are working on issues of migration; we did receive a question on migration during the live interaction and you would see that assessing social capital using different tools of social capital assessment can come in handy for you for studying migration issues.

It is also useful for estimating likely changes in productive behavior at the household and community level in response to a policy change. Social capital also allows analysts to identify how networks affect to this behavioral response. And of course, it be tailored to specific policy domains and used to give depth to other methods of data gathering and analysis and social capital assessment tools are usually used in a combination of different other methods and methodologies that we apply in our research question. And this is a tool which is increasingly being used by international development agencies in understanding the endowments that households have with respect to their social networks and that also gives them a sense of what is the quality and quantity of information that households have with respect to various policies, with respect to various interventions and so on and so forth.

**(Refer Slide Time: 06:42)**

### Different Types of Social Capital



Now there are different types of social capital. A good starting point for understanding how to measure social capital is with understanding the different types of social capital. There are broadly 2 types of for social capital. You have a network perspective to understanding the types of social capital and the social structure perspective. Let us begin with a network perspective. Now in the network perspective there are 3 important characteristics that refer to the social ties between different sets of people. So, we begin with bonding and then bridging and then linking. These are the 3 concepts that are used with respect to the network perspective.

Now when we are referring to bonding it usually refers to social ties between individuals within the same social group or with others who are primarily like them. When we talk about bridging, we are talking about social ties that link people together with others across a cleavage that typically divide society like race or class or religion. Often you would see that people belonging to different ethnicities or belonging to a specific ethnicity stick together. So this is what we are referring to as social ties and they build networks within that specific ethnicity. They identify themselves more with a certain group. In development economics and development studies, we have come up with the various studies focusing on horizontal inequalities and this is what we are basically referring to. The network perspective also focuses on linking which is a social tie which often is a bridging social tie to those with power that provides one with the capacity to gain access to resources, ideas and information from formal institutions beyond the community.

**(Refer Slide Time: 08:31)**

Table 1 Examples of different types of ties of different strengths

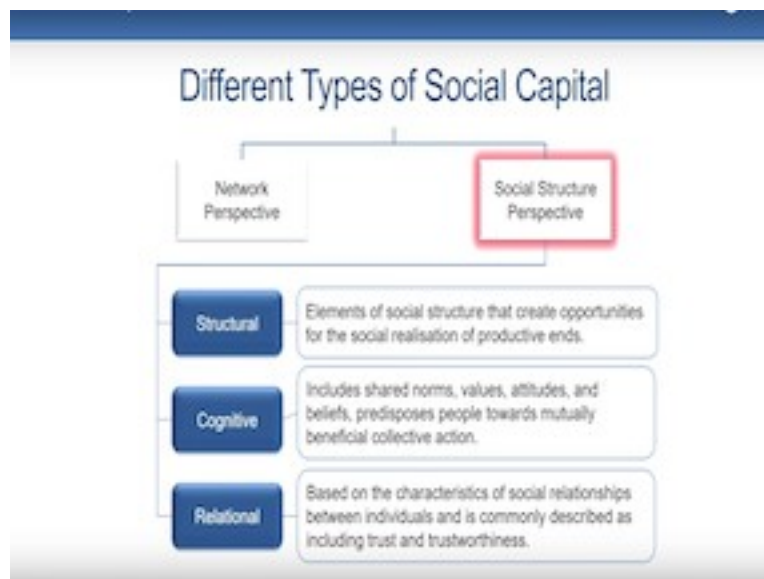
	Strong Ties	Weak Ties
Bonding (horizontal) ties	Close friends or immediate family with similar social characteristics, e.g. social class or religion	Members with similar interests or social characteristics within voluntary associations
Bridging (horizontal) ties	Close friends or immediate family with different social characteristics, e.g. age, gender or ethnicity	Acquaintances and members with different social characteristics within voluntary associations
Linking (vertical) ties	Close work colleagues with different hierarchical positions	Distant colleagues with different hierarchical positions and ties between citizens and civil servants

Source: [www.socialcapitalresearch.com](http://www.socialcapitalresearch.com)

Now if you look at this table here. This table gives you examples of different types of ties of different strengths. So, there can be strong ties and they can be weak ties. The bonding and bridging links are horizontal ties and the linking ties are the vertical ties. So, with respect to bonding strong ties are close friends or immediate family with similar social characteristics example social class or religion. And often you would see that people, individuals or households families belonging to a certain class of people try to stick together. Weak ties are members with similar interests or social characteristics within voluntary associations. Bridging are also horizontal ties here. The strong ties are close friends or immediate family with different social characteristics, example age, gender or ethnicity and weak ties or acquaintances and members with different social characteristics within voluntary associations. Linking ties- strong ties are close work colleagues with different hierarchical positions and weak ties are distant colleagues with different hierarchical positions and ties between citizens and civil servants.

If you are interested to look into the details of these ties, I would urge you to look up this website which is showing on your slide on social capital research.com which gives you very useful tips with regard to how to go about conceptualizing social networks and social capital theory.

**(Refer Slide Time: 10:02)**



With respect to the social structure perspective again there are 3 important features. Structural, cognitive and relational. Structural are those elements of social structure that create opportunities

for the social realization of productive ends. Cognitive includes shared norms, values, attitudes and beliefs. Predisposes people towards mutually beneficial collective action. And relational perspective is based on the characteristics of social relationships between individuals and is commonly described as including trust and trustworthiness. So, this theoretical perspective could be expanded to include potential indicators for each type of social capital. Let us look at an example which will come up in the next slide here.

**(Refer Slide Time: 10:46)**



So this is an example of the theoretical perspective and it can be expanded to include potential indicators. So, this is an example prepared by the network for business sustainability. If you look here there are the 3 dimensions, structural dimension, relational dimension and cognitive dimension. With respect to the structural dimension there are 2 parts- Network structure, civic engagement. Network structure includes a network diversity, network density. These are the parts which are included under the structural dimension. The structural dimension it also includes trust here. So, the general, institutional, interpersonal. It also includes a civic engagement in terms of association, member, volunteerism, civic and political participation.

Relational dimension similarly includes 2 aspects here- social networks, bonding, bridging and linking relationships. And social cohesion, social interaction, neighborhood cohesion, togetherness. The cognitive dimension includes 2 sets of characteristics- norms and values and

trust. Now this is simply a flowchart with respect to an example that is prepared by the network for business sustainability. However similar kinds of frameworks can be developed according to the need of the research question that you have taken.

**(Refer Slide Time: 12:29)**

## How to Measure Social Capital

- Social capital cannot be measured directly, but can be inferred from its determinants or manifestations.
- Measurement of social capital depends on the level of analysis and also on the interests of researchers – whether they are interested in the source, form or consequences of social capital.
- Manifestations are the outcomes of social capital for example lower crime rates. We measure social capital by using indicators or "proxies" that are theoretically linked to social capital.
- The determinants are factors that have an impact on social interactions and therefore allow social capital to come about.
- Past approaches to measuring social capital have ranged from simply using one indicator (e.g. trust) to using complicated groups of indexes.
- Most investigators now agree that due to the multidimensional nature of social capital a wide range of indicators should be used.

Now, the question arises how do we measure social capital? So, social capital cannot usually be measured directly but it can be inferred from its determinants or manifestations. Measurement of social capital basically depends on the level of analysis and also on the interests of the researchers whether they are interested in the source, form or consequences of social capital. What is the source of social capital? What are the different forms of social capital? And what are the outcomes of having access to these social networks? Are they acting in a very positive manner with respect to a certain goal that we have?

So, manifestations are the outcomes of social capital. For example, lower crime rates. We measure social capital by using indicators or proxies that are theoretically linked to social capital. And the determinants or factors that have an impact on social interactions and therefore allow social capital to come about.

Various approaches in the past to measuring social capital have ranged from simply using one indicator example trust to using complicated groups of indices. And most investigators now



agree that due to the multidimensional nature of social capital a wide range of indicators should be used. Now this issue of social capital is a highly subjective one and it is very context specific and often location specific and often the question that you are investigating, or you are pursuing becomes very important with regard to assessment of social capital needs. Suppose I am working on the issue of food security or nutrition security and there are of course various dimensions to this concept of nutrition security and food security. There could be an availability problem, there could be an accessibility problem, there could be an affordability problem, there could be an absorption problem. Now, when we are looking at the issue of what food is available, how it is made available, whether the food is accessible or not and whether the food is affordable or not, accessibility is an important dimension which takes social capital as one of the determinants.

For example, if I have a ration card, I possess a ration card, I am entitled to be able to buy some subsidized food grains from the public distribution network to which I have access to. Now my being entitled for having access to food may be highly dependent upon the social capital that I have access to. Whether I am counted as someone who is eligible to possess a ration card or not, how am I being counted and what are the characteristics that ensure that I be counted as one of the eligible members for getting a ration card are all dependent upon what is the access that I have with respect to my social networks. And here information becomes very important. Whether I am informed about whether I am eligible or not, what are my rights, what are my entitlements and often in locations and in areas where there are structural constraints that create huge barriers and limitations with respect to information flow, social networks become extremely important.

**(Refer Slide Time: 15:50)**

## How to Measure Social Capital-2

- The type of measurement will depend on the scale of interest. Generally, there are three different levels:

- Macro – community or national
- Meso – groups or organisations
- Micro – individual

Most investigators tend to summarise the components of social capital into four broad categories:

- Networks, relationships and connections
- Trust
- Civic engagement and voluntary activities (including cooperation, political participation, social participation, associational memberships, community volunteerism, etc.)
- Civic norms, shared norms and values

So now the type of measurement will depend on the scale of interest, and generally there are 3 different levels. At the macro level it is the community or the national, meso- groups or organizations and at the micro level- individual. Most investigators tend to summarize the components of social capital into 4 broad categories. One is networks, relationships and connections. Second is trust. Third is civic engagement and voluntary activities including cooperation, political participation, social participation, associational memberships, community volunteerism etc. And fourth civic norms, shared norms and values. Now let us look at each of them one by one. Let us look at this first- measuring a social capital at a community and national level.

**(Refer Slide Time: 16:42)**

## Measuring Social Capital at Community and National (Country) level

- **Structural Dimension**

- Trust (General And Institutional), Trustworthiness, Network Structural Characteristics (e.g. Network Density, Intra-community Ties, etc.), Association Membership and Community Engagement, and Voluntary Activities (e.g. Community Volunteerism, Civic Engagement, Social And Political Participation, Etc.).

- **Relational Dimension**

- Social Relationships, Social Cohesion, And Social Interactions.

- **Cognitive Dimension**

- Civic Norms, Reciprocity, Trust, Social Support, Affective Bonds And Collective Goals.

Now when we are trying to measure social capital at the community or the national level there are 3 dimensions. There is a structural dimension, there is a relational dimension and there is a cognitive dimension. Now at the structural dimension level social capital is a community level resource or collectively owned capital. And due to the challenges of data availability measures with the macro level often resort to analysis of secondary data or secondary analysis of existing data sets which is not collected specifically to measure social Capital. These data sets could include country level census data, world values survey data, European values survey, general social survey etc. These are simply examples of how you can carry out social capital assessment at the macro level with the already existing database.

In the Indian context the census level information that we have, the information that is provided with regard to let us say housing facilities and so on could be one of the proxies that are used for understanding the structural dimension. With respect to relational dimension- the items in these indices have been primarily from the structural dimension and have included trust, trustworthiness, network structural characteristics, association membership and community engagement and measures used to describe relational social capital has focused on social relationships, social cohesion and social interactions. And the cognitive dimension includes civic norms, reciprocity, trust, social support, effective bonds and so on.

**(Refer Slide Time: 18:32)**

## Measuring Social Capital at Group and Organisation Level

### Structural Dimension

- Network structural characteristics (e.g. Network links, network centrality, network density, network diversity, network size, network frequency, network redundancy, institutional network, etc.) Network ties (government officials tie, structural holes, etc.) Association membership and institutional links

### Relational Dimension

- Social connections and ties with Close acquaintances (e.g. Family members, and colleagues at work), and Various external stakeholders (e.g. Executives from other businesses, board members, political leaders, government bureaucratic officials, and community leaders)

### Cognitive Dimension

- Shared norms, values and obligations, Reciprocity, Shared goals and mission, Attitudes and beliefs.

At the meso level which is measuring social capital at group and organizational level, you have again the same structural, relational and cognitive dimensions. For structural dimensions, we focus on network structural characteristics, network links, network centrality, network density, network ties, government officials ties, structural holes etc. Relational dimension we focus on social connections and ties with close acquaintances. Example family members and colleagues at work and various external stakeholders. And the cognitive dimension focuses on shared norms, values and obligations, reciprocity, shared goals and missions, attitudes and beliefs etc.

**(Refer Slide Time: 19:13)**

## Measuring Social Capital at Individual level

### • Structural Dimension

- Social network structure and position (e.g. Network centrality, network size, network density, betweenness centrality, network homogeneity/heterogeneity, homophily/heterophily, network constraint, tie strength, structural holes, etc.), Number of network memberships, Association memberships and social participation, Social connections and relationships (e.g. Bonding ties, bridging ties, linking ties, connectivity, etc.), and The quantity or volume of social resources

### • Relational Dimension

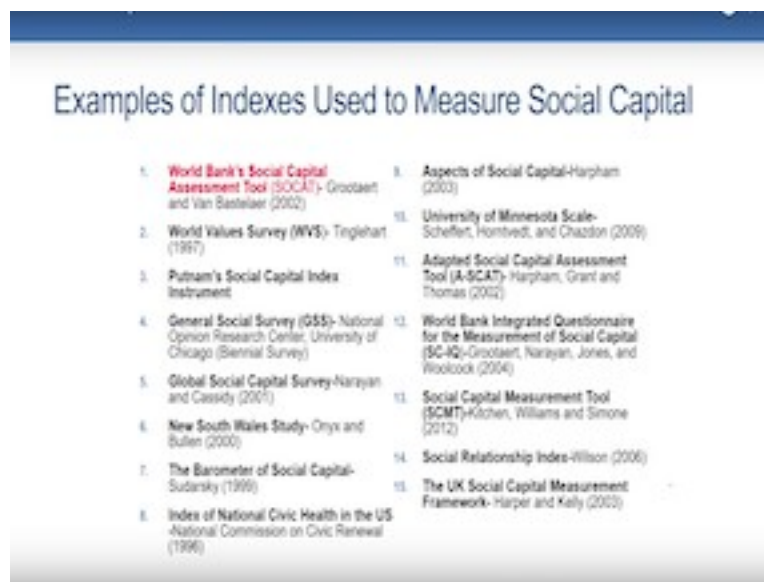
- Social interactions, Social relationships, Social networking, Social support, Social cohesion, and Associability.

### • Cognitive Dimension

- General and interpersonal trust, Shared goals, Shared culture, Reciprocity, Feelings of safety, and Views of multiculturalism to gauge the individual's tolerance of diversity.

Now, with respect to measuring a social capital at individual level. At the individual level social capital is usually measured by questionnaire surveys using indicators that tap into social connection, social networks and social support. And measurement of social capital is also less problematic at the individual level than at the community level or at the organizational level, because of the greater specificity of the indicators. We can actually come down to specifying the indicators at the individual level which are derived from social network research. Again, here there are the same 3 dimensions- structural, relational and a cognitive dimension. Structural dimension would include degree of trust, social network structure and position, example networks centrality, network size, network density, number of network memberships, association memberships and social participation, social connections and relationships and the quantity or volume of social resources. Relational dimension will include social interactions, relationships, networking, cohesion and associability. Cognitive and social capital would include general and interpersonal trust, shared goals and the like.

**(Refer Slide Time: 20:28)**



Now let us look at some of the examples of indices that are used to measure social capital. Now what I have done in this slide is to point out 15 such social capital assessment tools that have been used in different contexts. However, the one that I have highlighted as part of this lesson is the number 1 which is appearing in red in your slide- the World Bank's social capital assessment tool, which was developed in 2002.

So, now for the rest of the lesson let us look at some of the important features of this social capital assessment tool. However, for the benefit of those who have interest in social network analysis and social capital assessment particularly within the context of development research, you could look up the rest of the social capital assessment tools that are showing up on your slide. The World values survey, Putnam's social capital index instrument, General social survey, Global social capital survey, New South Wales study, Barometer of social capital, Index of national civic health in the US, Aspects of social capital 2003, University of Minnesota scale 2009, Adopted Social Capital Assessment Tool or ASCAT developed in 2002, the World Bank integrated questionnaire for the measurement of Social Capital 2004. I have looked into the details of the World Bank Integrated Questionnaire for Measurement of Social Capital 2004 which is freely available online and I could see that the indicators that are used through this tool are extremely elaborate and it could be adapted to various country cases and country's situations. Similarly, Social capital measurement tool 2012, Social Relationship index 2006, UK Social Capital Measurement Framework.

**(Refer Slide Time: 22:33)**



**Social Capital Assessment Tool (SOCAT)**

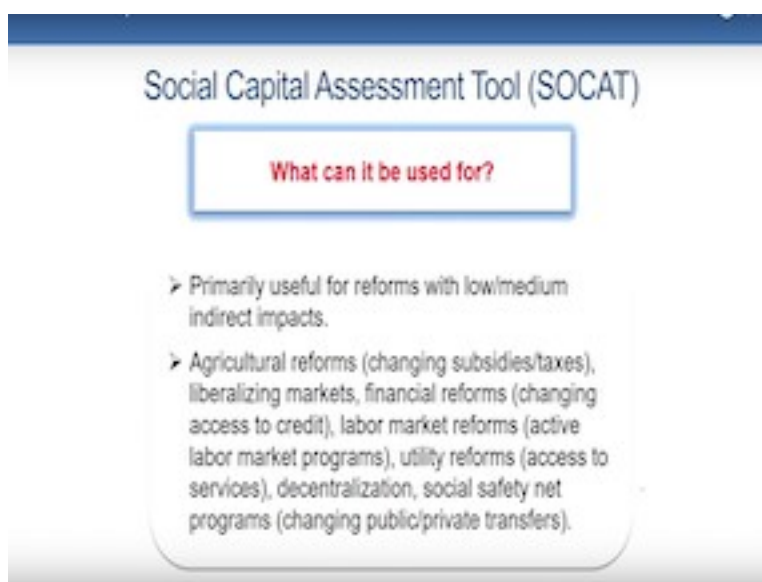
**What is it?**

- A set of integrated quantitative and qualitative measurement tools to investigate institutions, networks and norms that enable collective action.
- The general framework of this tool is edited by the World Bank Group.
- It has to be adapted to a specific research issue. Can be implemented in conjunction with other tools.

Let us get back to SOCAT. What is SOCAT, what is social capital assessment tool? So, it is basically a set of integrated quantitative and qualitative measurement tools to investigate institutions networks and norms that enabled collective action. And the general framework of this tool is edited by the World Bank group. It has to be adapted to a specific research issue and

can be implemented in conjunction with other tools. This is what I had mentioned earlier that social capital assessment helps us assess only one part of the story with respect to social networks and how that enables an individual or how that enables an organization or the community in achieving something collectively. It cannot answer all the questions. It cannot address all the issues of the research question that we have adopted. So therefore it is almost always used in conjunction with other tools.

**(Refer Slide Time: 23:27)**



The slide features a blue header bar at the top. Below it, the title 'Social Capital Assessment Tool (SOCAT)' is centered in a dark blue font. Underneath the title is a red-bordered box containing the question 'What can it be used for?' in red text. Below this box, a list of applications is presented in a light blue rounded rectangle, with each item preceded by a right-pointing arrowhead.

Social Capital Assessment Tool (SOCAT)

What can it be used for?

- Primarily useful for reforms with low/medium indirect impacts.
- Agricultural reforms (changing subsidies/taxes), liberalizing markets, financial reforms (changing access to credit), labor market reforms (active labor market programs), utility reforms (access to services), decentralization, social safety net programs (changing public/private transfers).

Now what can it be used for? It is primarily useful for reforms with low, medium, indirect impacts. For example, agricultural reforms, changing subsidies and taxes, liberalizing markets, financial reforms, changing access to credit, labor market reforms, active labor market programs, utility reforms, access to services, decentralization, social safety net programs, changing public/private transfers and so on.

**(Refer Slide Time: 23:53)**

## Social Capital Assessment Tool (SOCAT)

### What does it tell you?

- Existence of institutions and networks affected by and/or involved in reform implementation.
- The distribution of social assets and their role in income generation and risk management.
- What are the impacts of reforms on households with low social assets? Which adaptations in policy formulation and / or which mitigation measures are advisable? Which norms and values lead to policy adoption or resistance?

Now what does it tell us? It tells us about the existence of institutions and networks affected by or involved in reform implementation. It tells us about the distribution of social assets and their role in income generation and risk management. And it also tells us about what are the impacts of reforms on households with low social assets. Which adaptations in policy formulation or which mitigation measures are advisable, which norms and values lead to policy adoption or resistance.

**(Refer Slide Time: 24:26)**

## Social Capital Assessment Tool (SOCAT)

### Key Elements

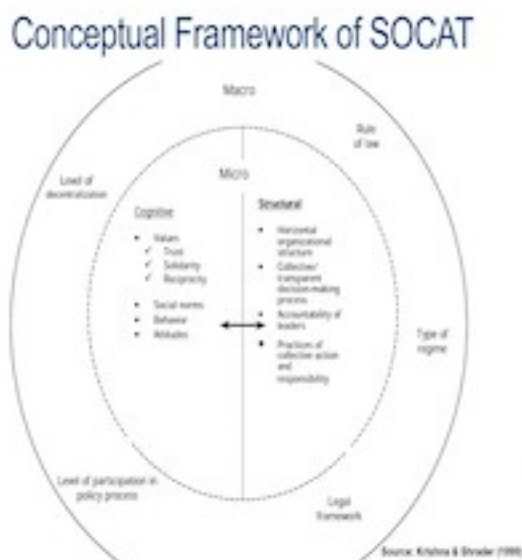
- Integrated application and analysis of quantitative and qualitative information (surveys, key informant interviews, focus groups) obtained at the level of households, communities, and organizations.
- Analysis builds on the understanding of solidarity, trust and cooperation, and conflict resolution (cognitive social capital), as well as organizations and their membership (structural social capital).



Now what are the key elements of the SOCAT? Primarily to integrated application and analysis of quantitative and qualitative information, usually in the form of surveys, key informant interviews, focus groups, obtained at the level of households, communities and organizations. And the analysis builds on the understanding of solidarity, trust and cooperation and conflict resolution which is cognitive social capital as well as organizations and their memberships.

Now let us look at what is the conceptual framework of SOCAT.

**(Refer Slide Time: 24:58)**



This is how it looks like which is showing on your slide now- the macro and the micro, now Social Capital is divided roughly into 2 levels, the macro and the micro. So, these are the 2 levels the macro and the micro. Here the macro level refers to the institutional context in which organizations operate. And this macro level includes formal relationships and structures such as the rules of law, legal frameworks, political regime, level of decentralization and the level of participation in policy formulation process. So, this is the macro level, where the macro level refers to the institutional context in which the organization operates. And the micro level refers to the potential contribution that horizontal organizations and social networks make to development. So, within the micro level there are 2 types of social capital- the cognitive and structural. The less tangible side of social capital that refers to values, beliefs, attitudes, behavior and social norms is termed here is cognitive social capital. And these values include the trust

solidarity and reciprocity that are shared among members of a community and that create the conditions under which communities can work together for a common good.

Structural social capital includes the composition and practices of local level institutions both formal and informal. That serves as instruments of community development. So social capital is built through a horizon organizational structure and networks that have a collective and transparent decision-making process, accountable leaders and practices of collective action and responsibility.

Now while important to understanding the role of social capital and development the social capital assessment tool does not attempt to measure macro level indicators of social capital. Instead the SOCAT focuses on structural and cognitive social capital at the micro level and the ways that these types of social capital interact at the community, household and institutional levels. For those interested in getting into the details of this conceptual framework of SOCAT because it can be adapted to the household and the community social capital assessment needs, I would suggest you to look up in detail the source of information here Krishna and Shrader 1999.

**(Refer Slide Time: 27:49)**



Now let us also look at what are the requirements of SOCAT. There are primarily five requirements- data or information, time, skills, supporting software, and the financial cost. Now

with respect to data and information it is often we use as a standalone tool for social capital analysis or use in conjunction with other surveys. Example, this is income surveys, this is lifestyle surveys for analysis of links but in poverty and social cavity and also modules for integration in other surveys are available, so are sector specific questionnaires.

**(Refer Slide Time: 28:33)**



With respect to time, the typical application requires 3 to 4 months. So, this is something that must be kept in mind when you are designing your research. If you want to use Social Capital Assessment or you want to use different Social Capital Assessment Tools, you have to ensure that you have this much time. You have created the space for the time required to make this tool applicable.

**(Refer Slide Time: 29:01)**



With respect to skills, sociological or anthropological training is helpful in particular sound understanding of formal and informal institutions and networks. And a good knowledge of the program and its setting is crucial. Now this is where often we talk about inter disciplinarily in research because issues of development or development questions are pursued by the various social sciences by various disciplines. And often when we want to carry out a network analysis if I am carrying out network analysis and as an economist, it is important for me to enter into the arena of sociological and anthropological literature and try to understand the formal and informal institutions and networks and how they have conceptualized them and how these networks works before I start trying to apply the SOCAT as a tool for coming up with a better understanding of my results. So, good knowledge of the program and its setting is crucial.

**(Refer Slide Time: 30:08)**



Supporting software, the SOCAT tool developed World Bank includes an interactive CD ROM which is available. There might have been a number of other changes to this toolkit which I am sure if the learners try to follow up on this toolkit through the World Bank website you might have more access to it.

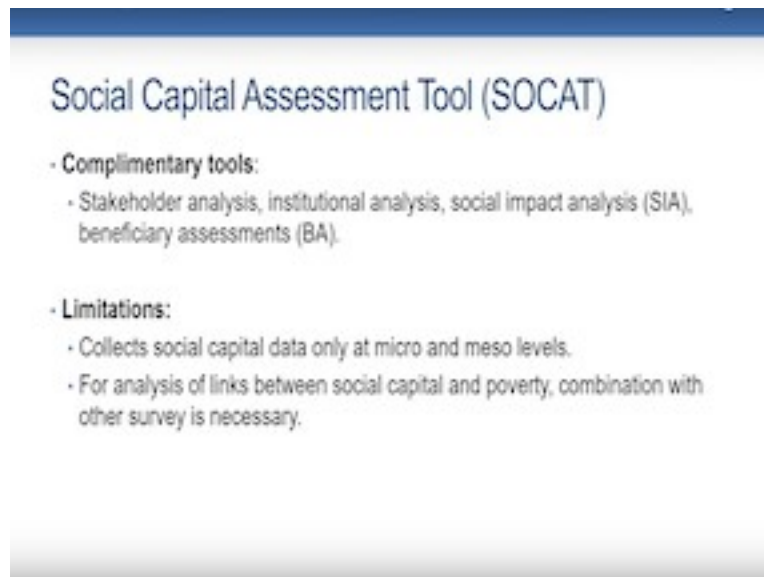
**(Refer Slide Time: 30:33)**



And with respect to financial cost it depends on the sample size and the local wage and transport costs for the field team. The SOCAT exercise I am not sure which year this data belongs to.

However, the typical range for standalone SOCAT exercise would be about 50,000 US dollars to 200,000 US dollars. So pretty costly with respect to the needs of developing countries. But costs can be substantially lower if it is used in conjunction with other data collection instruments.

**(Refer Slide Time: 31:00)**



Now there are some of the other complimentary tools that can be used with SOCAT. Stakeholder analysis, institutional analysis. If you remember logical framework matrix that we have covered in one of the classes, we had touched upon stakeholder analysis. Now understand that these tools can also be used simultaneously in conjunction with each other. So, stakeholder analysis, institutional analysis, social impact analysis and beneficiary assessments are some of the complimentary tools that can be used along with SOCAT.

And like various tools that are used, there are limitations of so carrot as well. It collects social capital data only at the micro and meso levels and for analysis of links between social capital and poverty combination with other surveys becomes necessary.

**(Refer Slide Time: 31:51)**

## References used for this lecture

1. Claridge, T. (n.d.). How to measure social capital. Retrieved July 30, 2019, from <https://www.socialcapitalresearch.com/measure-social-capital/>
2. Krishna, A., & Shrader, E. (1999, June). Social capital assessment tool. In Conference on social capital and poverty reduction (Vol. 2224). Washington, DC: World Bank.
3. Instruments of Social Capital Assessment Tool. (n.d.). Retrieved July 30, 2019, from <http://literesources.worldbank.org/INTSOCIALCAPITAL/Resources/Social-Capital-Assessment-Tool--SOCAT-Annex1.pdf>
4. Grootaert, C., & Van Bastelar, T. (Eds.). (2002). Understanding and measuring social capital: A multi-disciplinary tool for practitioners. The World Bank.

For a comprehensive literature on the topics covered in this lecture it is also suggested that students go through the reference list of the above cited papers.

These are the references that I have used for this lecture. I would ask the learners to refer to the first two references How to Measure Social Capital which appears on social capital research.com. Krishna and Shrader 1999, Social capital assessment tool that is available freely. And for a comprehensive literature on the topics that I have covered in this lecture I suggest that students go to the reference list of all the above cited references.

Now what we have done in today's lesson is to give you some information about social capital assessment and social capital assessment tools. This lesson is by no means exhaustive in nature in the sense of giving you an idea about the details of social capital assessment, the networks. This lesson was not planned in a way which would give you exhaustive information about all of these sources. However, since social capital assessment has increasingly become an integral part of most development research frameworks. The purpose of this lesson was to introduce you to some of the concepts and some of the tools that exist and depending upon the requirement that you have you may look up each of these tools and try to adapt them to your needs. I hope you have learned about social capital assessment through this lesson.

I will see you in the next class. Thank you.