Economic Growth and Development
Dr. Rajshree Bedamatta
Department of Humanities & Social Sciences
Indian Institute of Technology, Guwahati

Lecture – 21
Multidimensional Poverty, MDGs and SDGs

Hello and welcome to week 8 of the NPTEL MOOC's course on Economic Growth and Development. This is the concluding week of this course. We have in this course moved far in being able to discuss that poverty is no longer measured based on a single dimension, on the single dimension of income. And that there is a lot of focus on multidimensional measures of poverty, and as a part of the last 2 weeks of this course, we have been focusing a lot on other indices of human development; which also goes a long way in telling us what are the different levels of achievements and deprivations that people have had in different parts of the world.

And as a part of these issues on measuring development and poverty, we have looked at along with the human development index; we have also looked at the measurement of deprivations based on the human poverty index, gender development index, gender empowerment measure and so on. In this class we will look at one of the most recent indices of human development which is being taken very seriously as far as policy implementation is concerned and that is referred to as the multidimensional poverty index. And international thinking has revolved around this thought of the thought that the poverty has multiple dimensions.

And therefore, that needs to be a focus on multiple deprivations that people face on a daily basis. There is also an increasing attention as far as the conception of poverty is concerned. There is a lot of discussion surrounding the fact that the way people view poverty, or the way people view, how they are poor differs from how the policy makers view how they are poor. And based upon this the United Nations Development Program has had a number of pioneering works surrounding the issue of measurement of multidimensional poverty.

Let us begin in this class with a small video clip on how peoples conception of poverty is very different from the way policymakers, or people working from the comfort of their

office spaces view poverty. And then we will move on with the discussion on the measurement of multidimensional poverty index.
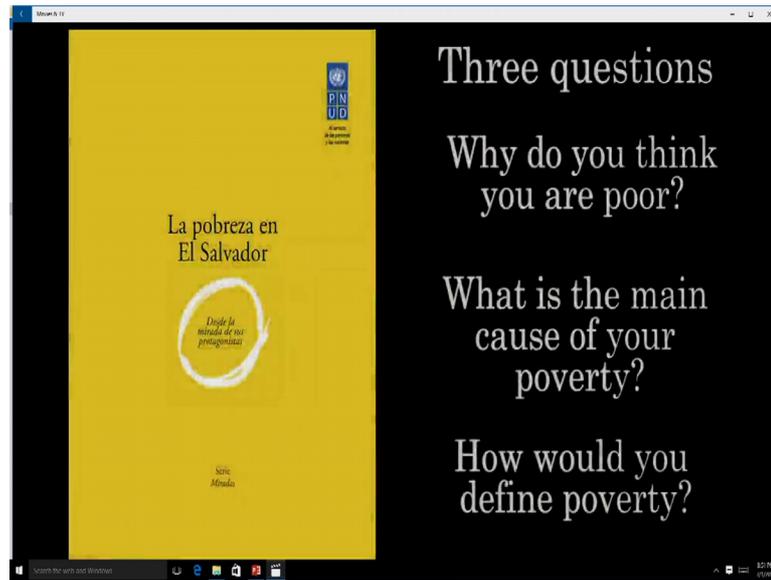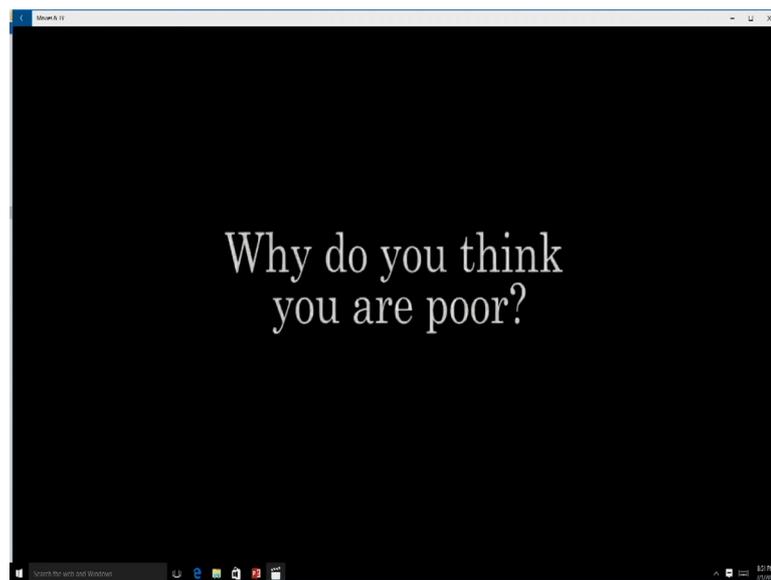
(Refer Slide Time: 02:56)

What is poverty? We have been studying it for more than a symmetry thousands of documents comes and finance of the resources, and yet we all know that poverty is more than the lack of income. What part of the profession apart from income that might cause a person to be poor, many of the answers to this question have been formulated from the comfort of our officers?

An alternative approach; however, is to find that I mentioned of poverty by I asking the people who are poor, in other words through a participatory process on poverty is defined from protagonist perspectives.
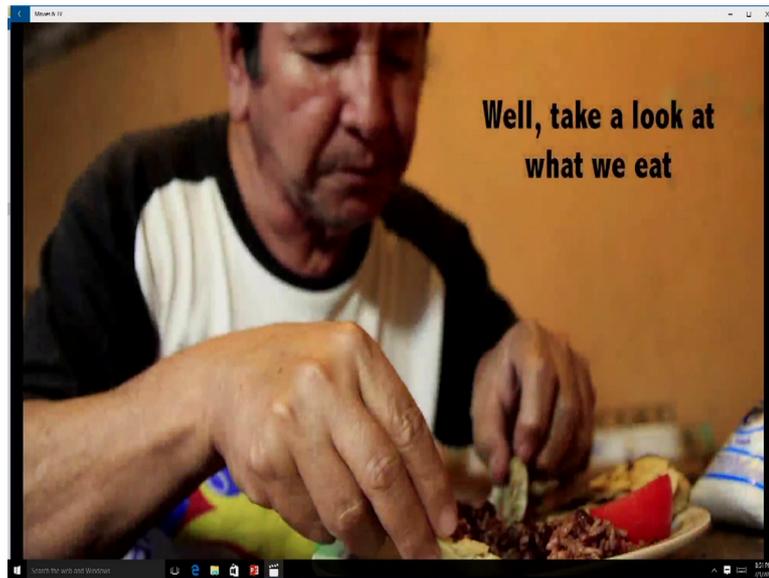
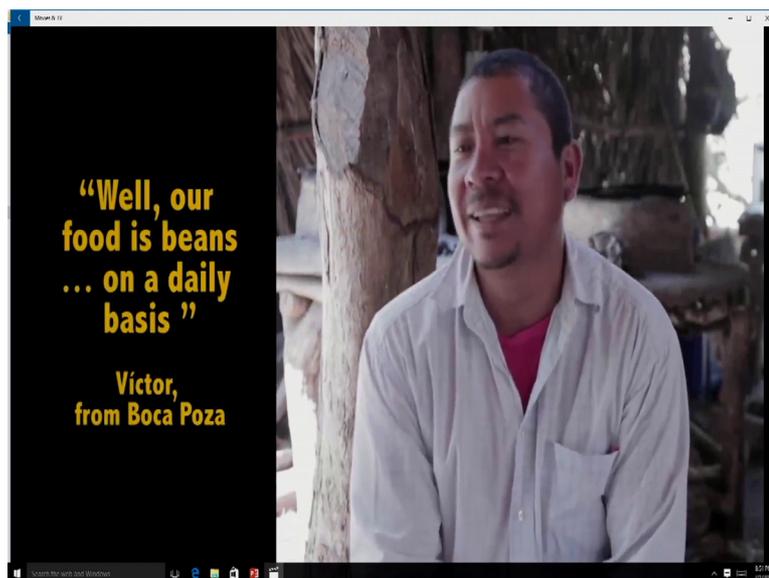(Refer Slide Time: 03:31)
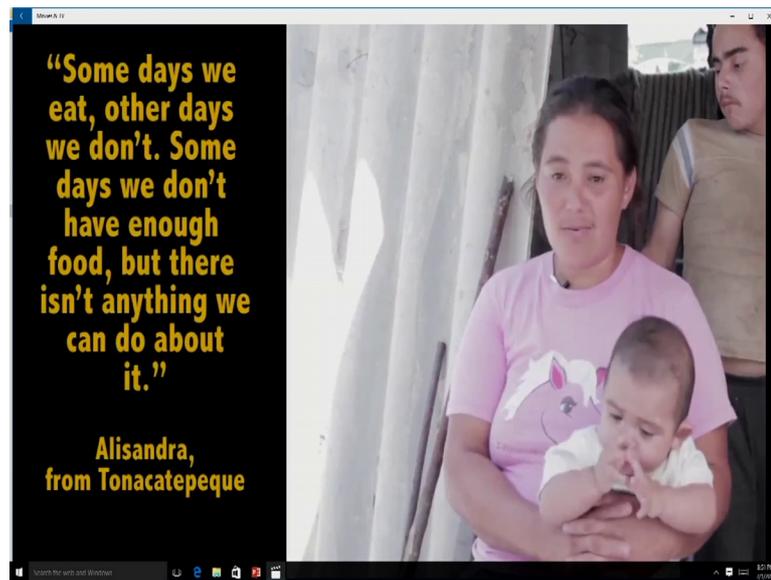

(Refer Slide Time: 03:41)

(Refer Slide Time: 03:44)

(Refer Slide Time: 03:49)
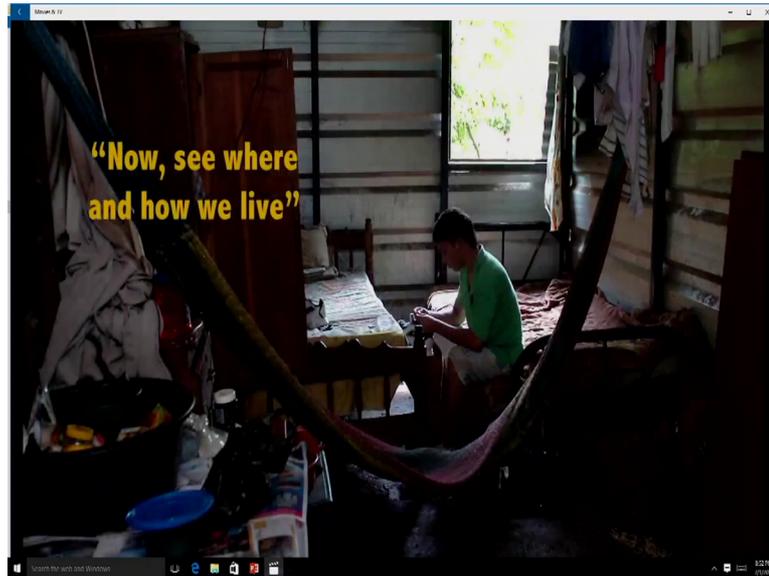
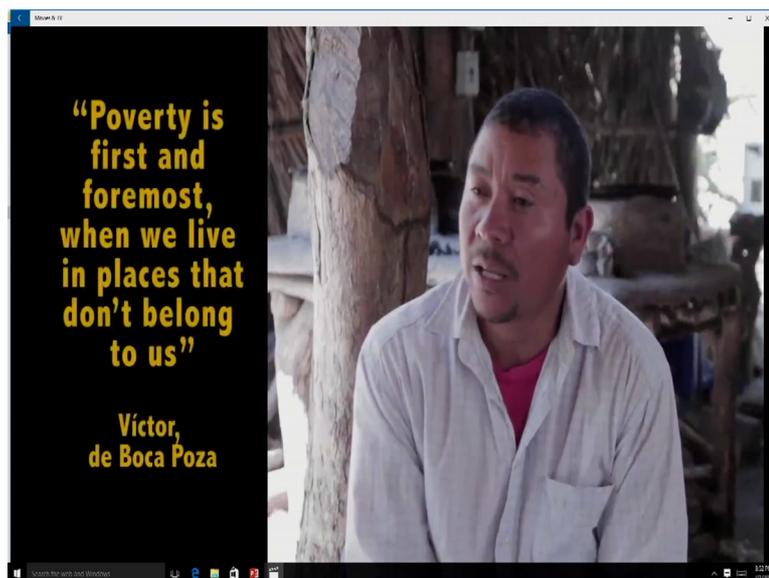(Refer Slide Time: 03:56)

[FL]

(Refer Slide Time: 04:02)

(Refer Slide Time: 04:13)

(Refer Slide Time: 04:20)

(Refer Slide Time: 04:31)

(Refer Slide Time: 04:43)

(Refer Slide Time: 04:51)

(Refer Slide Time: 04:57)

[FL].

(Refer Slide Time: 05:17)

(Refer Slide Time: 05:24)
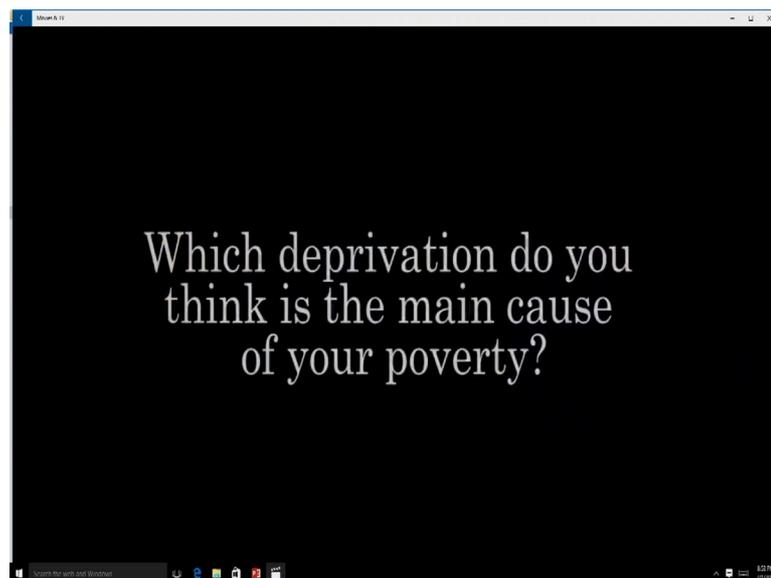
(Refer Slide Time: 05:28)

(Refer Slide Time: 05:32)

(Refer Slide Time: 05:41)

(Refer Slide Time: 05:43)

(Refer Slide Time: 05:48)
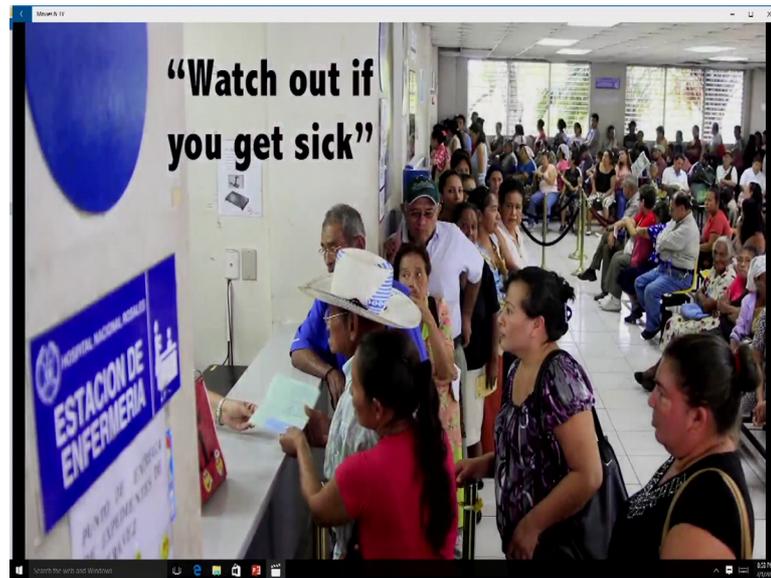
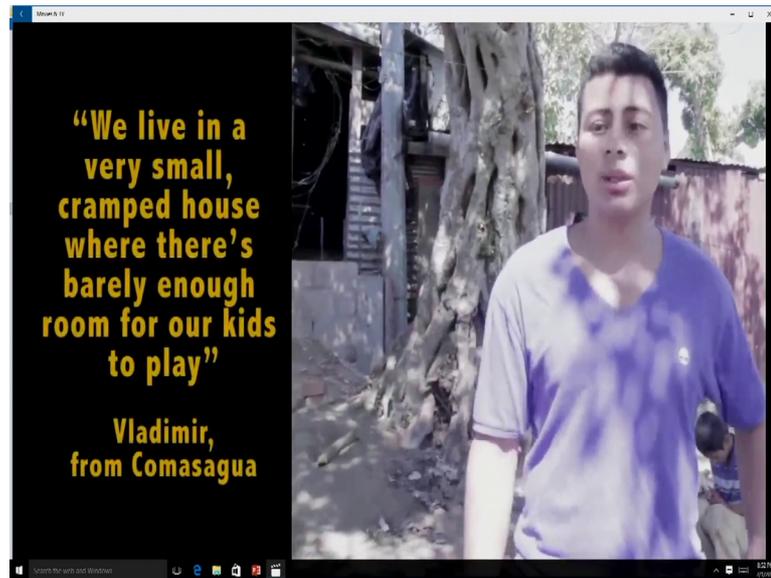

(Refer Slide Time: 05:52)

[FL].
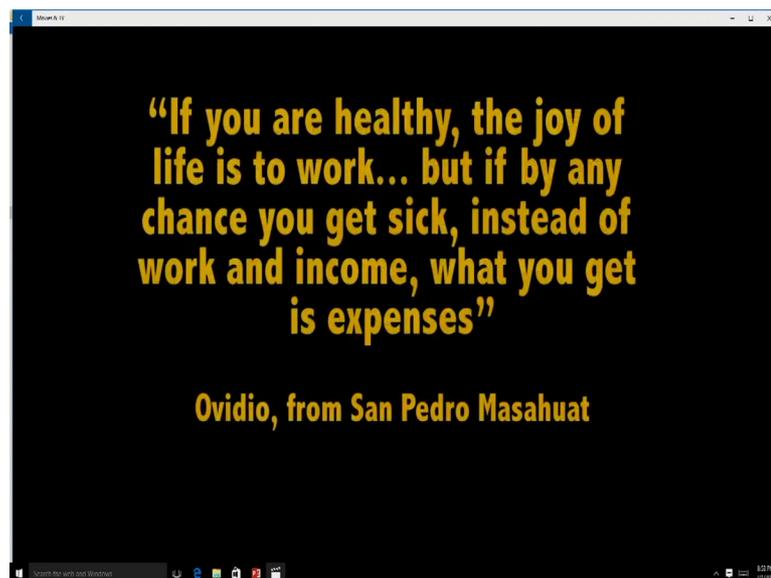
(Refer Slide Time: 06:04)
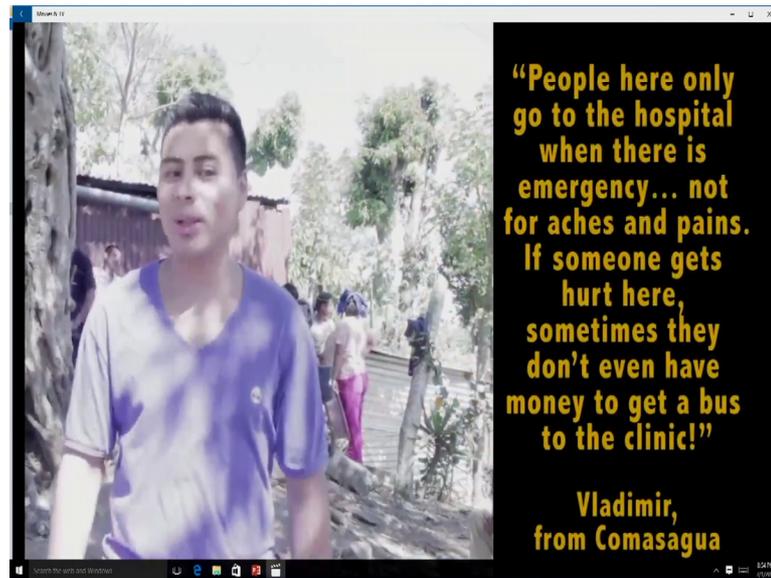
(Refer Slide Time: 06:26)
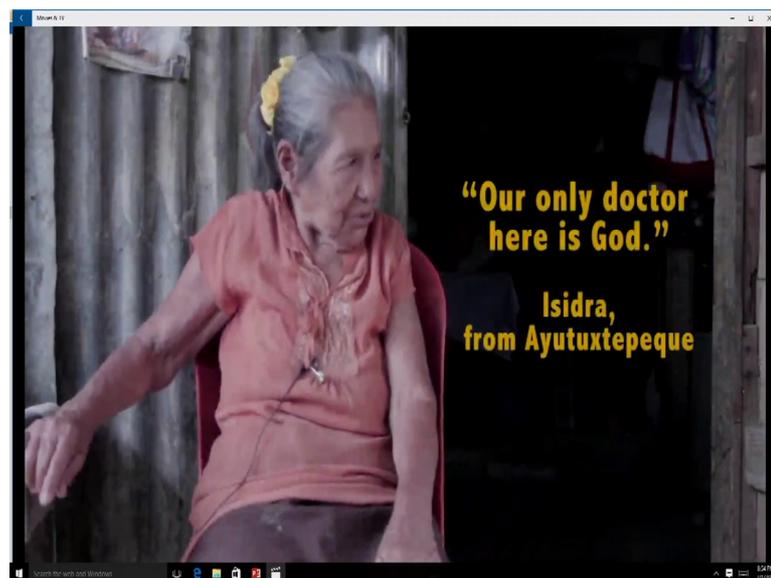
(Refer Slide Time: 06:30)
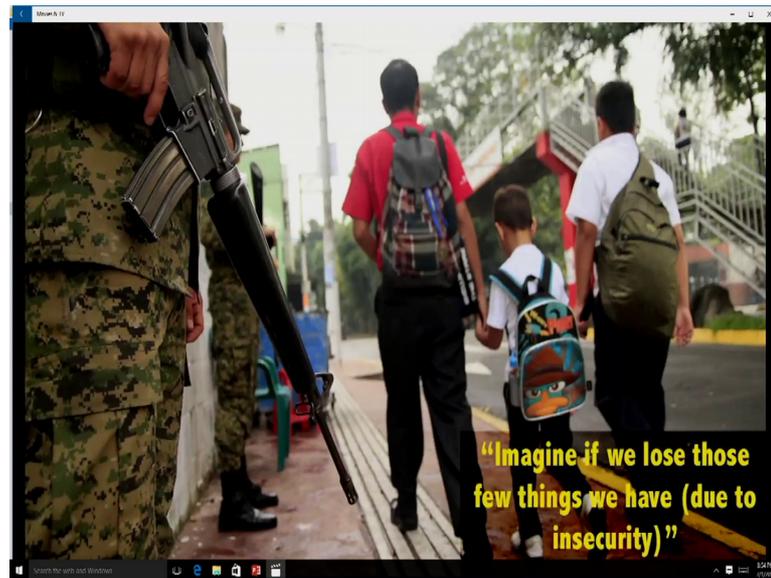
(Refer Slide Time: 06:39)

[FL].
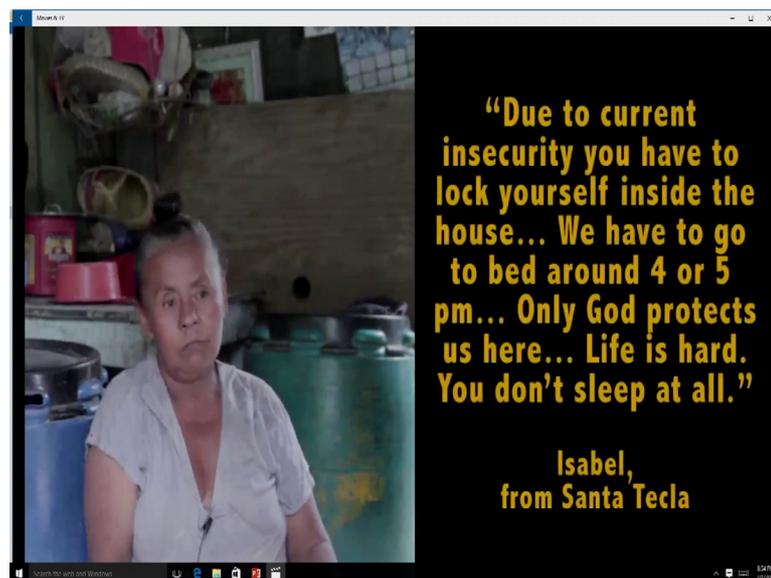
(Refer Slide Time: 07:14)
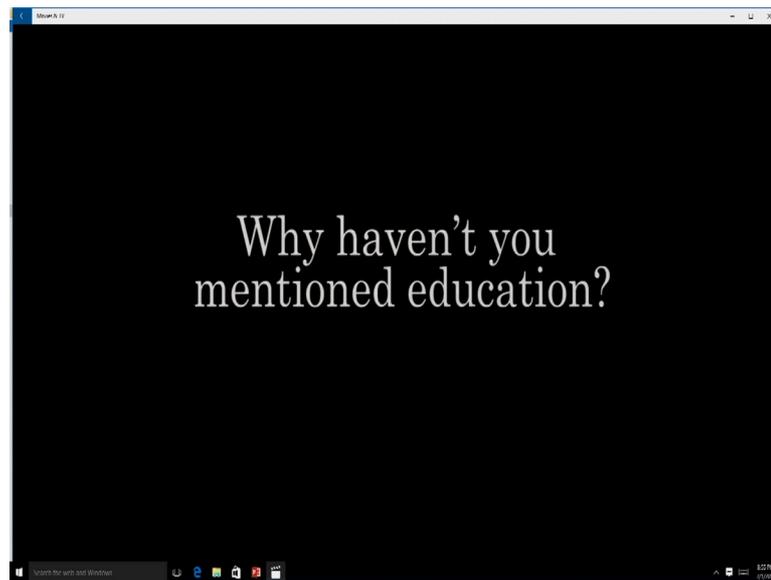
(Refer Slide Time: 07:19)

(Refer Slide Time: 07:22)
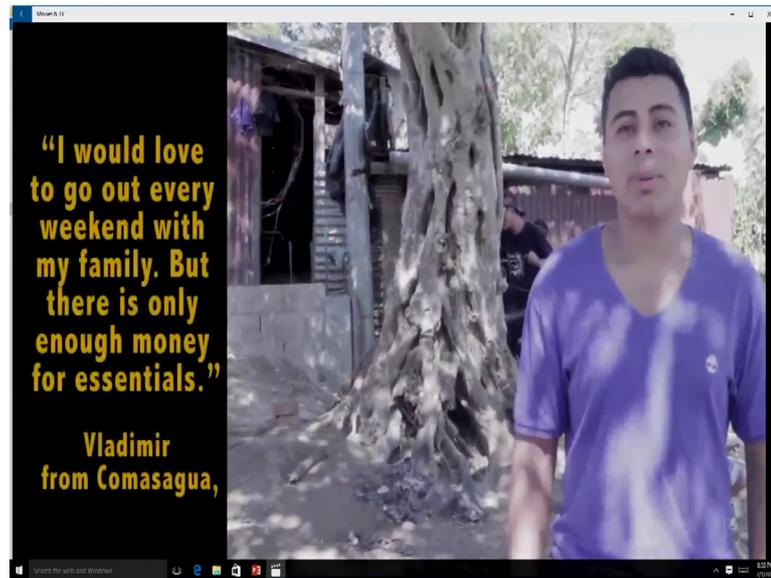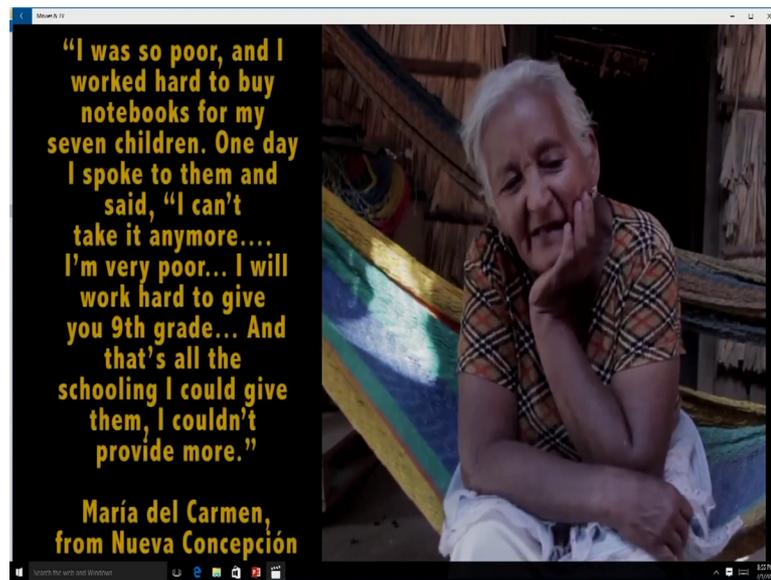

(Refer Slide Time: 07:55)
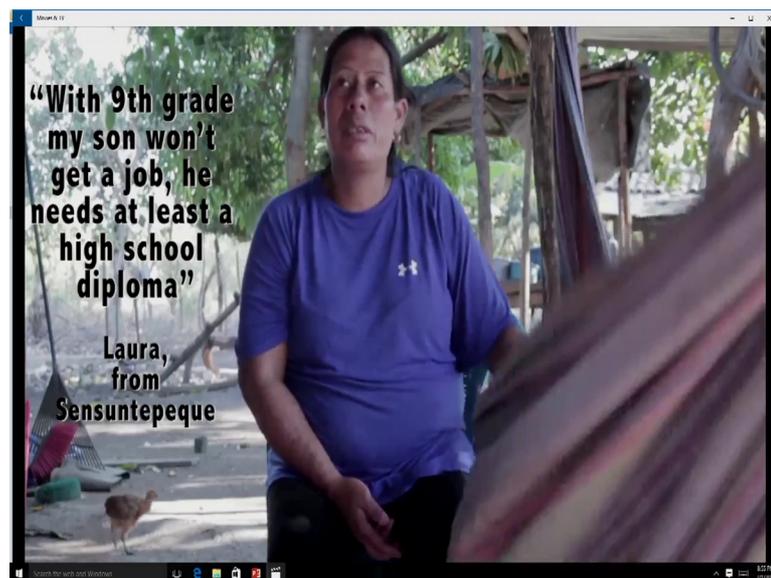
(Refer Slide Time: 07:57)

[FL].
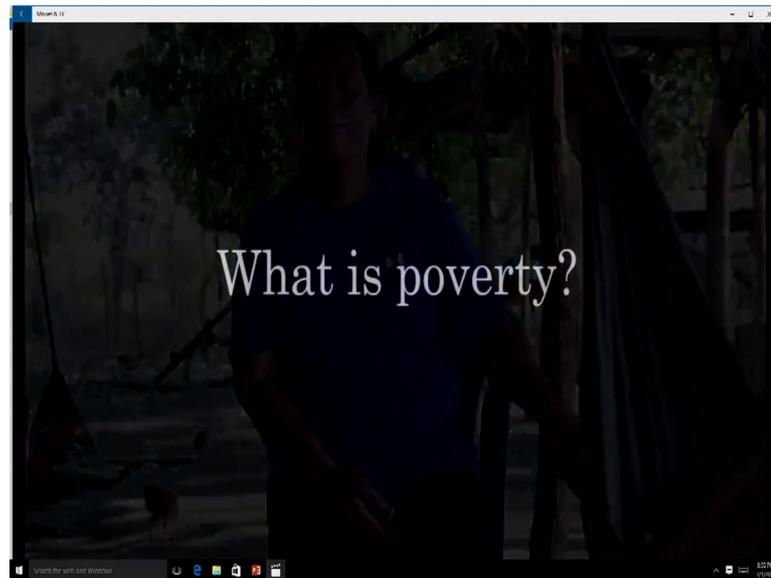
(Refer Slide Time: 08:04)
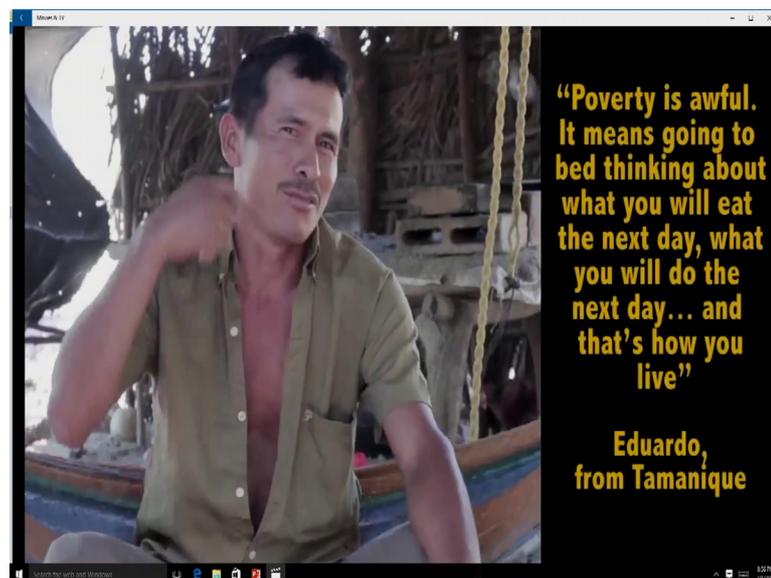
(Refer Slide Time: 08:11)
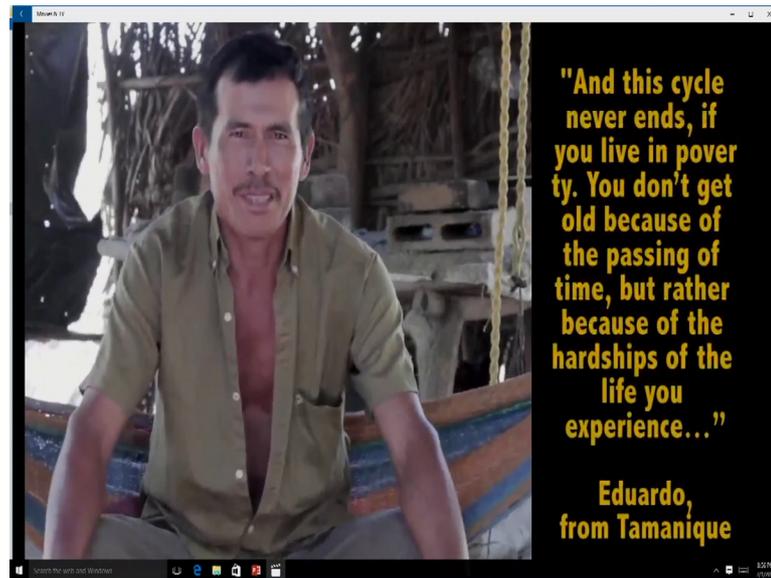
(Refer Slide Time: 08:21)
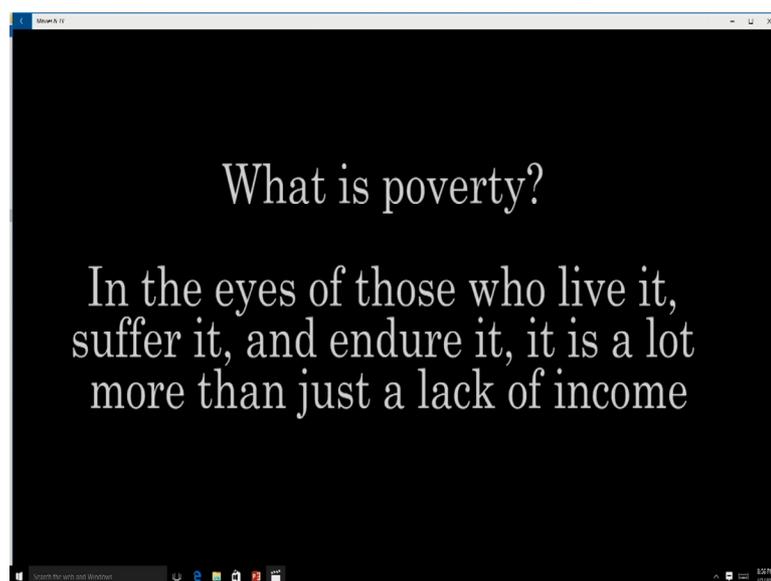
(Refer Slide Time: 08:27)
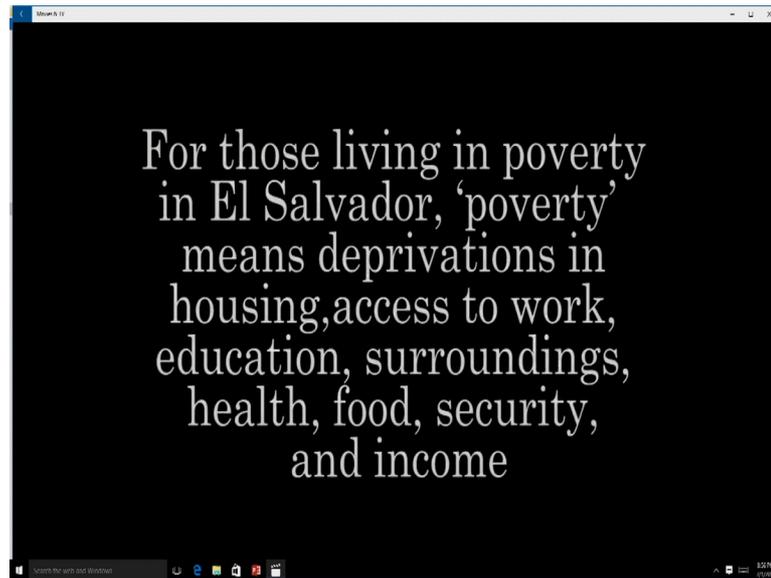
(Refer Slide Time: 08:35)

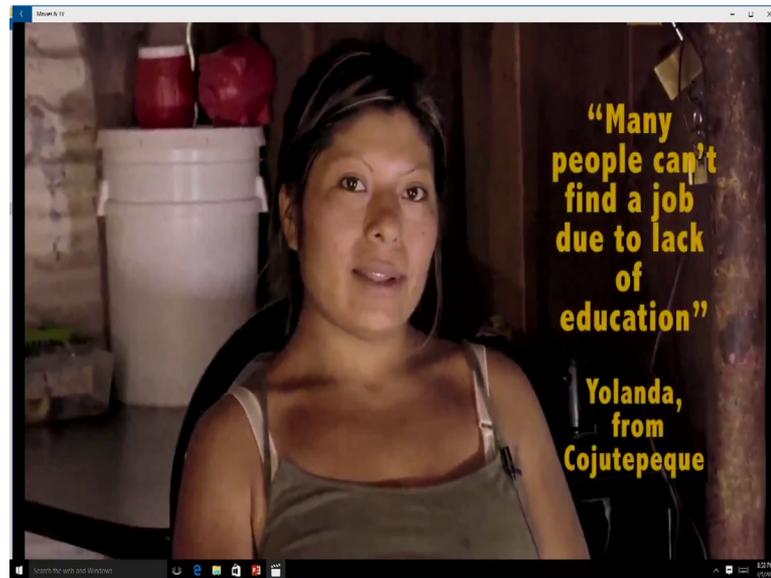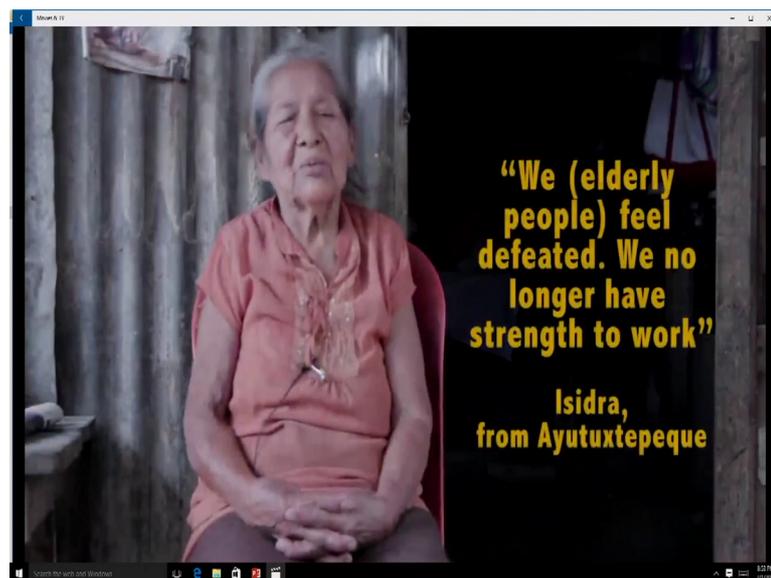
[FL].
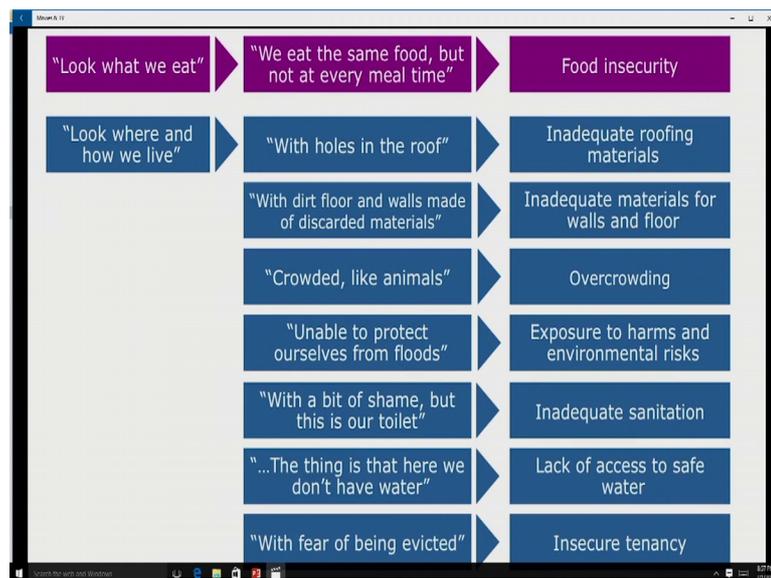
(Refer Slide Time: 09:09)
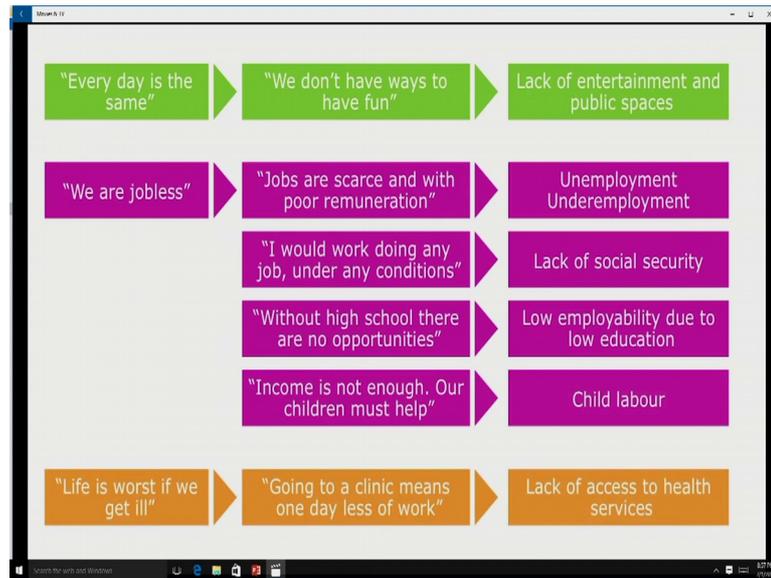
(Refer Slide Time: 09:38)

.
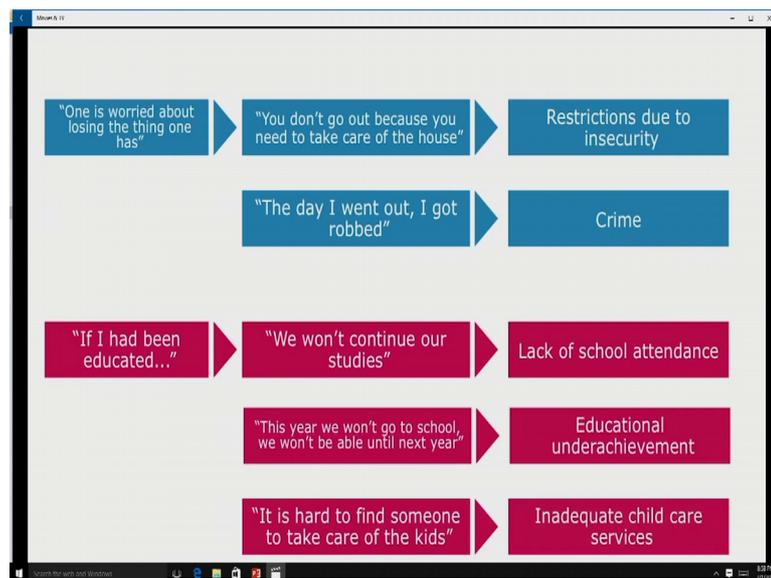
(Refer Slide Time: 10:01)
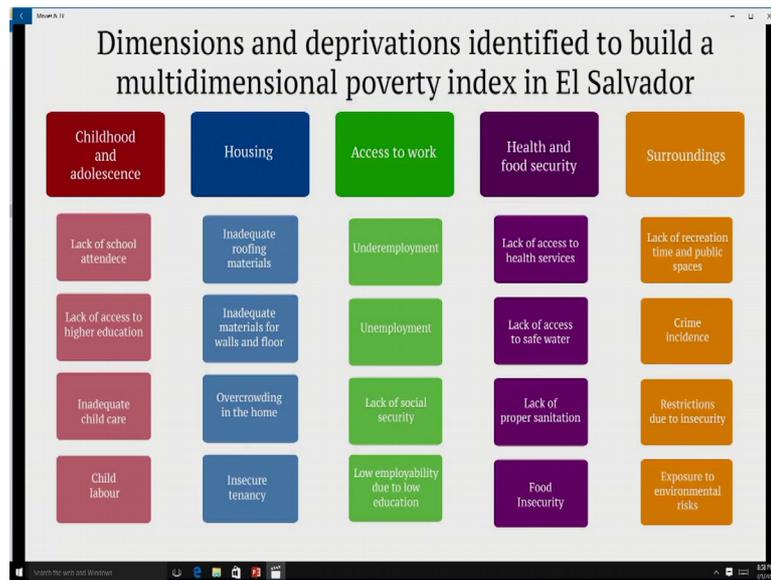
(Refer Slide Time: 10:15)

So, as seen in this video, there are people some interviews have been carried out among different people of different age groups in El Salvador. And one of the things that is coming out very clearly is the amount of deprivations the people face on a daily basis. So, while on the one hand a good conception of development or successful development index is able to capture the achievements that, people have acquired or the countries have acquired over a period of time. It is equally important to look at the extent of deprivations and the degree of deprivation that people face in their daily lives.

And that is what the concept of or the measure of multidimensional poverty index sets out to measure. Towards the end of the video you saw some of the dimensions that have been taken into consideration; based upon the actual conceptions of poverty as people themselves have spoken about for the construction of the multidimensional poverty index as carried out in El Salvador. Now, in this class there are different measures of multidimensional poverty index. And there are 2 generic measures that you see that you will come across in reports and the literature on development. One is the multidimensional poverty index as calculated based upon the global human development reports, particularly when it came out in 2011.

And another measure of MPI you will see in the context of different countries or at different sub regional levels or the sub national levels. Now, the MPI the measure of MPI itself has over a period of time become very versatile, because it is flexible with regard to be the number of dimensions, and the number of indicators that can be taken to suit the regional or the sub regional needs. So, for example, if we are trying to calculate MPI at a country level so that we can carry out global comparisons or country comparisons at the global level, then a certain set specific set of indicators need to be taken; such that data is available for those specific indicators for all the countries that we are taking for calculations of the MPI.

But suppose, we want to carry out MPI at a sub-regional level, sub national level, let us say for the state of Uttar Pradesh or Bihar or Assam or Odisha in the country in India, then depending upon the data available at the sub regional level or the sub national level, usually the amount of data that is available at a more disaggregated level increases. Because as a sample size increases the amount data that can be collected at the sub national levels increases. So, depending upon the data that is available, different MPI MPIs can be calculated to suit the needs at the regional level, and that helps policy making ultimately. However, in this class, we will mostly be concerned with the MPI that is calculated at the global level, at the country level taken up by the HDR.
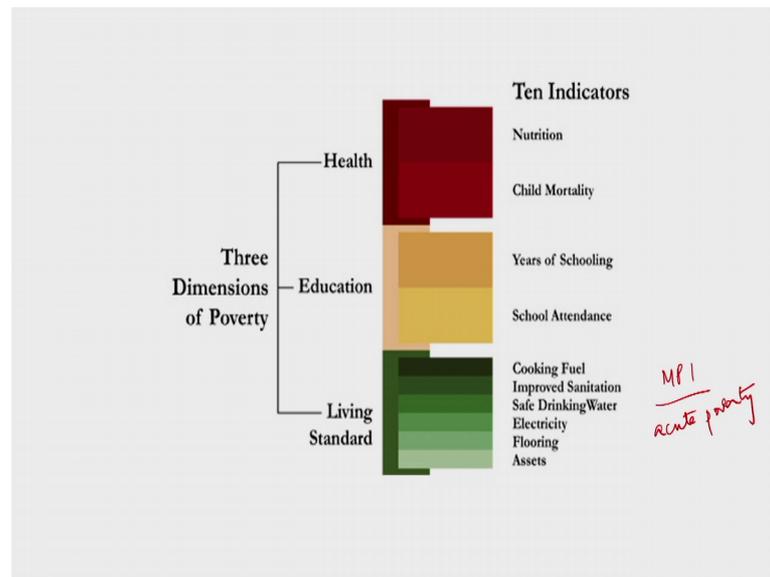
So, based upon what we have just learnt, there are again three dimensions of poverty that the HDR considers the health, education and living standard dimensions. And there are ten indicators as compared to the human poverty index, or the human development index that we have studied in the previous classes, you will see there the number of indicators increase. And these indicators have been shortlisted by the UNDP after lot of consultation with different experts from each of these dimensions.

So, there are experts who have been working on health issues for a long period of time, who been working on education issues, on income issues and with a lot of consultations with the experts working on each of these dimensions, these indicators have been shortlisted by the UNDP. So, there is a lot of justification with regard to how much can be calculated, how sensitive this indicators are to be able to measure acute poverty. Another thing to keep in mind based upon the indicators that you see that are showing on your slide is that multidimensional poverty also measures what is called acute poverty.

It measures acute poverty. So, this is one of the things that we try to measure when we are in poverty studies or in income related studies where we are looking at levels of deprivation or the degree of deprivation among people. So, multidimensional poverty index is a tool for measuring acute poverty. So, there are multiple dimensions that are being taken into consideration to access peoples deprivations. So, the health dimension is measured by nutrition and child mortality. Education dimension is measured by years of

schooling and school attendance. Living standard is measured by cooking fuel, improved sanitation, safe drinking water, electricity, flooring and assets.

So, these are the indicators for which data are collected at all at the level of the countries. For example, in 2011 HDR 109 countries participated in the calculation of MPI. So, which means for all those 109 countries data was collected based upon all of these ten indicators. And then following a suitable methodology which we will see presently the MPI was calculated.

(Refer Slide Time: 16:05)
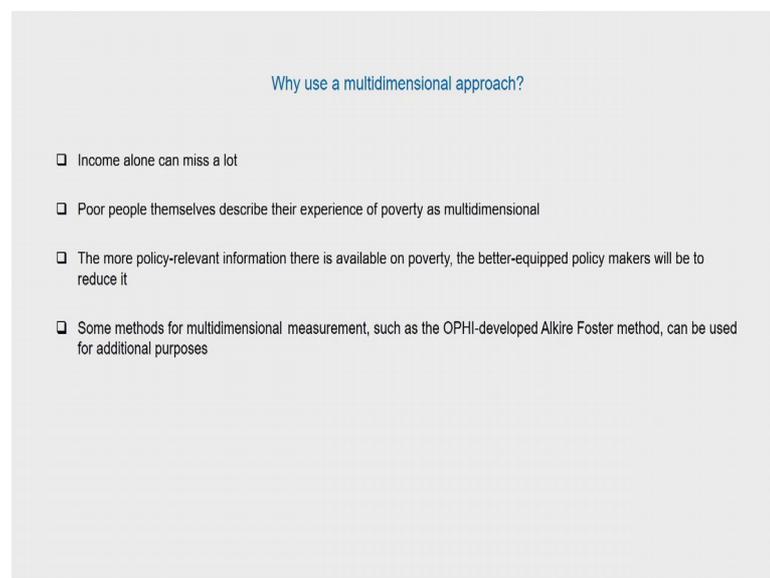
Now, one of the questions that needs answer although many of these questions have already been answered as we have progressed in this course is that, why does one use a multidimensional approach to poverty. One reason is of course, that it is measuring acute poverty, because alone income alone can miss a lot of things. And we have seen that in the last few classes how income alone are does not have any straight forward relationship with the human development issues or human development indicators.

For example, in India we know that economic growth in India over the period of last 30 years was so has been unprecedented. Economic growth has risen like never before. But the same time the number of malnourished children has also rise in, malnourishment rates also show a very high rise. In fact, the hunger index came up just a few days back, and based upon the hunger index you will see that India's rank has worsened in the hunger in the global hunger index. So, while economic growth has gone up or has risen

unprecedentedly, very the sensitive indicator of human development also does not show a very good performance.

So, income alone can miss a lot of things and therefore, they need to measure a multidimensional, multi-dimensionally what are the different deprivations that people face. Another reason is the, that the video clipping that we just saw in the beginning of this class. Poor people themselves describe their experiences of poverty as multidimensional, they never focus only on lack of incomes.

So, poor people are focusing more on the participatory exercises that international organisations have had reveal that poor people describe ill-being to include poor health, poor education, poor work conditions and so on and so forth. So, there is lot of focus on inadequate sanitation or although children within the households may have had some exposure to a primary schooling, secondary schooling. There is a lack of resources to be able to access higher education and so on. So, peoples conception about how they are poor whether it is absolute poverty or relative poverty is very different. And there needs to be a focus on peoples conception of how they are defining themselves as poor as far as policy making is concerned.

The third reason why multidimensionality approach is important is that, the more policy relevant information that is available on poverty the acquired policymakers will be to reduce it. So, for example, if I continue with the example of India, when I said that economic growth has been increasing, but the India's performance in terms of the global hunger index has also been worsening, probably if we have more measures with regard to what are the dimensions in which deprivations are high. If deprivations are high in terms of child nutrition or women's morbidity issues then probably policy making health policy making should be focussing more on child nutrition and so on.

So, therefore, for relevant policy making it is important that we focus on these multidimensional indicators. Fourthly some methods for multidimensional measurement are available. And today if you look I would request all of you to look at the Oxford Poverty Human Development Initiative which has come up with the Alkire Foster method. And which is being very widely used with different kinds of cut off at the sub national levels at the regional levels. And that is a very good starting point to be able to

do carry out disaggregated analysis with regard to multidimensional poverty. So, that justifies why use a multidimensional approach.

(Refer Slide Time: 19:44)

Now, let us look at the calculation that has been carried out of MPI based upon the human development reports the global human development reports. Like the previous indices we let us first look at the steps that are involved for calculations of the MPI. First we have seen that there are 10 indicators and 3 dimension.

Here let us first look at the dimension of education here. The dimension of education includes 2 indicators; school attainment and school attendance. And here the for calculation of multidimensional poverty we are looking at the headcount ratio of persons who are deprived as well as the intensity of people who have been deprived of the human development achievements.

So, each person is assigned a deprivation score according to his or her households deprivations in each of the 10 components. And maximum deprivation score is 100 percent with each dimension equally weighted. Thus, the maximum deprivation score in each dimension is 33.3 percent. The education and health dimensions of 2 indicators; so, each indicator is worth half 33.2 or 16.7 percent. Standard of living dimension has 6 indicator so, indicator is worth 33.3 by 6 or 5.6 percent.

Let us look at this calculation with the help of a hypothetical example. But before that let us first look at what a what do these indicators mean. Now remember we are looking at deprivations here. So, school attainment is being measured as when no household member has completed at least 6 years of schooling. So, we are not looking at achievements here, but we looking at deprivations. So, if no household member so, if there is a household comprising of 5 members, and if no none of the household members have completed at least 6 years of schooling then we will consider that as a deprivation for that household.

Similarly for school attendance a school age child up to grade 8, but who is not attending school. So, that is the second indicator which is also measured in deprivation. For the health dimension the indicators are nutrition and child mortality. So, for nutrition the deprivation is that a household member for whom there is nutrition information is malnourished as measured by the body mass index for adults. And by the height for age z score calculated based on world health organisation standards for children under age 5. So, for nutrition the data is collected based upon survey household survey from women and children within the households.

You may ask why the data is collected only from adult women and children. Now, literature has shown as an empirical studies have shown us that a households health can be well assessed very well assessed based upon the health of the women and the children within the family. Because they are they considered to be the most vulnerable within a family. Therefore, for nutrition indicator the BMI for women are collected. And the height for age is collected for children. And the height for age basically tells us the degree of stunting among children.

And stunting is one of the most important indicators that tell us how much nutrition is being received by children. So, children below the age of 5 if they do not enough nutrition of for their age appropriate for the age of appropriate required for nutrition, then they are at a very high risk of being a of facing stunting. So, stunting is one of the important indicators here. Now at this point let me also mention to you that the MPI unlike the human development index or other gender development index and the human poverty index is entirely based upon survey data.

So, special surveys have been carried out, and based upon those surveys the data has been collected at the household level which is then being used for calculations of the multidimensional poverty index. The second indicator of health called child mortality; that basically says if a child has died in the household within the 5 years prior to the date of the survey. So, that measures the child mortality indicator.

(Refer Slide Time: 24:09)
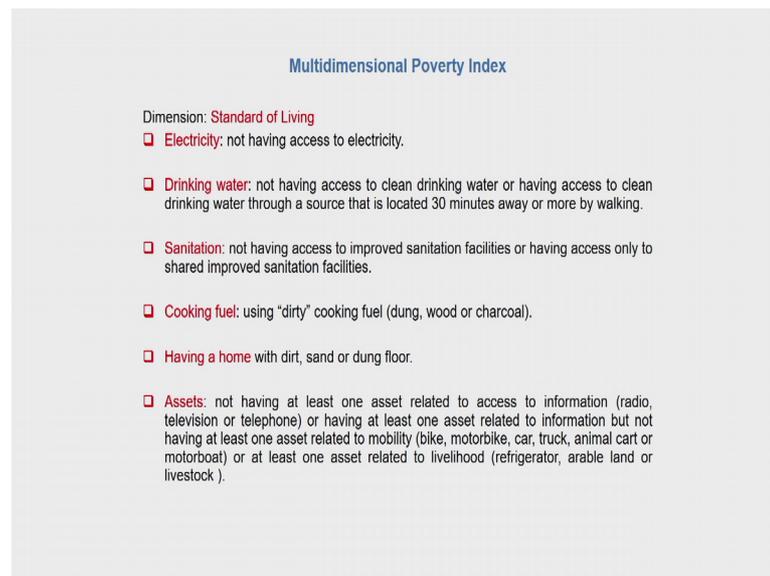
Standard of living includes electricity, drinking water, electricity if there are households they do not have access to electricity, then that is a deprivation. Not having access to clean drinking water or having access to clean drinking water through a source that is located at least 30 minutes away or more by walking which means, that how members in the family spend a lot of time fetching water for their daily needs.

So, that is also considered to be a deprivation. Sanitation: not having access to improve sanitation facilities or having access to shared improved sanitation facilities. Cooking fuel: that uses dirty cooking fuel dung wood and charcoal, having a home with dirt sand or dung floor. And assets that is also one of the important indicators for standard of living.

And that includes a number of sub indicators, not having at least one asset related to access to information such as radio television or telephone, or having at least one asset related to information, but not having at least one asset related to mobility. Bike, motorbike or truck, animal cart a motor boat; or at least one asset related to livelihood,

refrigerator arable land or life stocks. So, these are there are proxies for assets deprivation among the households.

So, all 3 together form the indices education, health and the standard of living. Under education school attainment and attendance, under health nutrition and child mortality and under standard of living access to; no access to electricity, no or restricted access to drinking water, no or restricted access to sanitation, no access to clean cooking fuels, not having an appropriate housing condition and restricted access to assets that can help with the accessing information or mobility or related to livelihood choices.

(Refer Slide Time: 26:04)

Calculating MPI

The headcount ratio, H, is the proportion of the multidimensionally poor in the population

$H = \dfrac{q}{n}$ where, H= headcount ratio, q is the number of people who are multidimensionally poor and n is the total population.

The intensity of poverty, A, reflects the proportion of the weighted component indicators in which, on average, poor people are deprived. For poor households only (deprivation score c of 33.3 percent or higher), the deprivation scores are summed and divided by the total number of poor people:

Intensity of poverty is given by

$$A = \dfrac{\sum_1^q C_i}{q}$$

where C_i is the deprivation score that the ith poor person experiences. The deprivation score C_i of the ith poor person can be expressed as the sum of the weights associated with each indicator j (j = 1, 2, ..., 10) in which person i is deprived, $C_i = C_i1 + C_i2 + ... + C_i10$. The MPI value is the product of two measures: the multidimensional poverty headcount ratio and the intensity of poverty:

$$MPI = H.A$$

So, then how do we calculate MPI? The first step is actually to be able to identify what are the data sources which we have already done; the indicators on the data sources. Then the headcount ratio is first calculated, this headcount ratio is basically a proportion of the multidimensional poor in this population given by this formula H is equal to q by n; where H is the headcount ratio, q is the number of people who are multi-dimensionally poor and n is a total population. So, we are basically doing an headcount of how many people within a given population are multi-dimensionally poor, even the indicators that we have just considered.

And then the intensity of poverty or A is calculated which reflects the proportion of the weighted component indicators in which on average poor people are deprived. You have seen that there is a certain weightage given to calculate the amount of deprivations. So,

based upon an appropriate weighting formula we calculate what is the intensity of poverty, how many people are multi-dimensionally poor. And then for poor households only the deprivation scores are summed and divided by the total number of poor people. So, if you see here q is the total number of poor people and n is a total population.

So, for intensity of poverty the indicators on which the individuals are multi-dimensionally poor is summed up and then divided by the total number of poor people. So, here C i is the deprivation score that the ith poor person experiences. And the deprivation score C i of the ith person can be expressed as a sum of the weights associated with which indicator j. So, the j being the 10 indicators that we have just discussed under the education health and standard of living dimensions. And then the deprivation indicators are all added up and then the MPI value is basically the product of headcount ratio H multiplied by the intensity of poverty as calculated by A.

(Refer Slide Time: 28:07)

So, let us look at an illustration this is a hypothetical example, here if you see we have taken 4 households; 1, 2, 3 and 4, these are the 4 households for whom we are calculating a multidimensional poverty. The first row here mentions the household size or the number of members in each of these households. So, household 1 has 4 members, household 2 has 7 members, 3 has 5 members, and 4 has 4 members. And then these are all of the indicators that we have just discussed; these are the dimensions, education, health and living conditions.

Now, look at the indicators. We have already seen that depending upon the number of indicators within each dimension; the deprivation is calculated by providing a weight of 33.3 divided by 2. So, here indicator in education gets a weight of 16.7 percent; in health 16.7 percent because there are 2 indicators. And under living conditions because there are 6 indicators, the receiver weight of 5.6 percent. So, let us look at education here. For the indicator no one has completed 6 years of schooling. There are no members in household number 1 among the 4 who qualify with these criteria.

So, all the members in household number 1, all the 4 members of household number 1 have completed 6 years of schooling. Of the 7 members in household number 2, there is one member who has not completed 6 years of schooling and therefore, this household is facing a deprivation. In household number 3, all the 5 members have completed 6 years of schooling. So, deprivation count score here is 0. For household number 4, 1 member of the household has not completed 6 years of schooling and therefore, there is the deprivation score here is 1.

Similarly, for at least one school age child not enrolled in school there are none in household one there is one in household 2, none in household 3 and none in household number 4. For the health dimension the at least one member is malnourished. There are no members in household number 1 who are malnourished 1 and 2 and 4. But there is 1 member in household number 3 that is malnourished. Similarly, one or more children who have died, in the last 5 years prior to the date of survey; household numbers 1, 2 and 4 have experienced at least 1 death. And therefore, they are facing some sort of a deprivation, they given a score of 1 each, household number 3 faces no deprivation on this count.

Similarly, for living conditions, no electricity households number 2, 3 and 4 are facing deprivation. No access to clean drinking water household number 3 faces a deprivation. No access to adequate sanitation 2 and 3, house has dirt flow, none of the households face the deprivations so, all of them get a 0. Households using dirty cooking fuel all of them face a deprivation which means none of them have access to clean cooking fuels. And households having no access to information or assets related to mobility and livelihood, households 2 and 4 are facing deprivation. So, based upon this deprivation scores what do we then do? Household deprivation score is then calculated. So, they so,

based upon the weights so, which means that for education indicator, the weight is 16.7. So, this is 16.7 into 0 0, this is 16.7 percent, this is 0 and this is 16.7 percent.

So, accordingly the weights are multiplied with the deprivation scores, and then the final scores are just added up to get a score such as this; 22.2 percent 72.2, 38.9 and 50. Now since the deprivation score is 33.3 percent. So, in the final addition, all those households who have a score of less than 33.3 percent are not considered to be deprived. Whereas, all those households that have a score above 33.3 percent are considered to have faced deprivations and therefore, they are multi-dimensionally poor.

So, in this final analysis here, households number 2, 3 and 4 are multi-dimensionally poor. The deprivation scores are very higher than 33.3 percent. So, among them, the household number 3 is relatively multi-dimensionally poor compared to 2 and 4. But household number 1 has fewer deprivations than households numbers 2, 3 and 4. So, one indicates deprivation in this indicator and 0 indicates non deprivation.

(Refer Slide Time: 32:57)

So, this a repetition of how the deprivations have been calculated. For household 1 the deprivations are 22.2, household 2 72.2; similarly, for household 3 38.9 and 50.9. And then based upon this the headcount ratio is calculated. Headcount ratio is the number of people who are multi-dimensionally poor. So, in this case, you see that this household number one is not multi-dimensionally poor. Therefore, here the total population is 7, 9, 10. And the number of people who are multi-dimensionally poor is 2 plus 3 is 7 plus 5

plus 6 whereas, a total for plus 4. So, here if you see the headcount ratio is 0 plus 7 plus 5 plus 4. These are the number of members in the household who are multi-dimensionally poor. So, in household number 1, 0 there are none of the members are considered to be deprived.

So, the value received here is 0 plus 7 plus 5 plus 4. So, which means and the value is 0.8; which means that 80 percent of people in this hypothetical example live in poor households and that is the headcount ratio. Similarly, the intensity of poverty is measured; the intensity of poverty is given by the number of members in each of the household multiplied by the number the percentage of deprivation that they are facing. So, here 7 into 72.2 so, this is the deprivation that the household has faced. And these are the number of household members in that family household number 2.

Household number 3, 5 members deprivation 38.9 household number 4, is number of 4 members and deprivation 50. So, that is to measure what is the amount of deprivation faced by the total number of people. So, 56.3 is the value, this is the intensity of poverty, this is the headcount ratio of poverty. So that means, that the average poor person is deprived in 56.3 percent of the weighted indicators. And therefore, the MPI is then calculated by multiplying the headcount ratio of poverty by the intensity of poverty which is given by 0.450.

So, what does this exercise tell us? This exercise tells us that given the counts on which or given the indicators on which the households are multi-dimensionally poor, a deprivation index can be calculated; which in this case is the multidimensional poverty index. And then we can also assess which of those dimensions contribute more the households being multi-dimensionally poor. And that is where policy making comes in or policy focus comes in.

(Refer Slide Time: 35:47)

Policy making on basis of MPI

Contribution of deprivations in:

Education: Contribution 1 = $\frac{16.67(7+4)+16.67(7)}{4+7+4+5}$/45.0 = 33.3%

Health: Contribution 2 = $\frac{16.67(5)+16.67(7+4)}{4+7+4+5}$/45.0 = 29.6%

Living conditions: Contribution 3= $\frac{5.56(7+4+5+4+4+3)}{4+7+4+5}$/45.0 = 37.1%

Calculating the contribution of each dimension to multidimensional poverty provides information that can be useful for revealing a country's deprivation structure and can help with policy targeting.
For example in the above calculation living conditions are worse than other dimension , policy maker can target living conditions.

So, this is how the contributions of deprivations can be calculated; so, of each the contribution of each dimension to multidimensional poverty. This is the contribution of health to multidimensional poverty. So, in this hypothetical example, let us say 33.3 percent of the households being multi-dimensionally poor is because of deprivations in education. 29.6 percent is because of health and for living conditions 37.1 percent because of living conditions. So, these calculations can be useful for revealing a countries deprivation structure and then help with the policy targeting.

(Refer Slide Time: 36:24)

Grouping of Countries on the basis of MPI

A cutoff of 33.3 percent, which is equivalent to 1/3 of the weighted indicators, is used to distinguish between the poor and non poor.

❑ If the deprivation score is 33.3 percent or higher, that household (and everyone in it) is multidimensionally poor.

❑ Households with a deprivation score of 20 percent or higher but less than 33.3 percent are near multidimensional poverty.

❑ Households with a deprivation score of 50 percent or higher are severely multidimensionally poor

So, now after the MPI is calculated for different countries in the HDR, different groupings are carried out based upon the weighted indicators a cut off of 33.3 percent which is equal to one third of the weighted indicators is used to distinguish between the poor and non-poor. So, if the deprivation score is 33 percent, 33.3 percent or higher there that household and everyone in it is multi-dimensionally poor. Households or the deprivation score of 20 percent or higher, but less than 33.3 percent are near multidimensional poverty.

So, in this previous example, this household which has a multi-dimensional the deprivation score of more than 20 percent, but less than 33.3 percent. This is the house hold which is near multidimensional poverty, but not exactly multi-dimensionally poor. And households with the deprivation score of 50 percent or higher are considered to be severely multi-dimensionally poor.

And these groupings of country is carried out based upon multidimensional poverty can of course, go a long way in solving policy issues at the respective country levels. This is the multidimensional poverty index that was calculated; this is just an example for of that I have put here for Afghanistan, Ethiopia, Bangladesh, China and India; all developing countries.

(Refer Slide Time: 37:34)

Multidimensional Poverty Index

	Multidimensional Poverty Index		Population in multidimensional poverty		Population near multidimensional poverty	Population in severe multidimensional poverty
			Head counts	Intensity of deprivation		
country	Year and survey	Index (value)	%	In thousands	%	%	%
Afghanistan	2010/2011	0.293	58.8	16,942	49.9	16.0	29.8
Ethiopia	2011	0.537	88.2	79,298	60.9	6.7	67.0
Bangladesh	2014	0.188	40.7	64,816	46.2	19.6	16.0
China	2012	0.023	5.2	70,807	43.3	22.7	1.0
India	2005/2006	0.282	55.3	642,391	51.1	18.2	27.8

So, this is the multidimensional poverty index that was calculated for different years. These are the headcounts of poverty. So, in India 55.3 percent of people based upon the

calculations carried world multi-dimensionally poor. And if you look at the headcount ratio of poverty based on income criteria you will see that it is much higher than that. If you look at the all India level, the income poverty shows that the ratio is about 28 or 29 percent. So, if somebody says: what is the poverty rate for India, the official headcount ratio of poverty based upon income criteria is that about 27 or 28 percent of people in India are poor.

But if you look at the multidimensional poverty measure, almost double close to double of that is considered to be multi-dimensionally poor; which are facing these are the households who are facing deprivations on a daily basis. So, 55.3 percent is the headcount, and intensity of deprivation tells us that it is 51.1. And in India population near multidimensional poverty is 18.2 and population in severe multidimensional poverty is 27.8. And if all of these are added you would see that proportion of population in India let us say that are multi-dimensionally poor away above 50 percent or 60 percent; which is nowhere near to what we see in case of income poverty calculations shown to be on an average 27 to 28 percent. Which means the also that and this has serious policy implications, because poverty measures and how poverty is calculated has a lot of significance with respect to the welfare measures carried out in the country, and the welfare benefits received by the people within this country.

So, if official policy says that only 27 percent are poor, then probably welfare policies will be such designed that only 27 percent of the poor receive the benefits. However, there will be about 30 percent in the population close to 30 percent the population who are left out of these policy orbits, because they have not been counted as being poor or being deprived in certain indicators.

(Refer Slide Time: 40:06)

So, that the significance of looking at a different measures. Now these are some of the key findings of the latest global MPI which was calculated in 2017. I have put them together to provide a more emphasis on what these figures can tell us; what is the significance of these figures. The key findings are as follows; the global MPI of 2017 showed as the total of 1.45 billion people; from 103 countries are multi-dimensionally poor, considering 2013 population and 26 percent of the people living in these countries. 48 percent of poor people live in South Asia and 36 percent in Sub Saharan Africa.

So, South Asia which includes India, Bangladesh and the like, includes about 48 percent of multi-dimensionally poor people. Most MPI poor people about 72 percent live in middle income countries. So, again this is also a significant finding here; because when we talk about middle income countries if you remember the World Bank income classification that I had done in the earlier classes based upon the WDI data, you would see that as income raises one of the conclusions drawn is a people have more access to basic services and they like.

But if you calculate multidimensional poverty, you will see that 72 percent live in middle income country. So, although their income levels are much higher than the low income countries, or the low middle income countries in they like; but people who are facing multi-dimensionally poor conditions are also very high. Half of the multi-dimensionally

poor are children in the age of 0 to 7 48 percent. This is also very significant finding; which means that children of this world are poorer than the rest.

So, children would not have access to basic services. Like the implications of this is also very important. Because, if children in their growing age do not receive some of the basic amenities of life, that shows up in terms of worsening work conditions and work performances when they grow. So, they do not have access to education, they do not have access to good sanitation facilities, electricity, drinking water and so on, then the life chances of children moving into productive age groups is also worsening. So, therefore, this finding is important. 48 percent of the children are multi-dimensionally poor.

Nearly half of all MPI poor people are destitute; that means, experience extreme deprivations like severe malnutrition in at least one third of the dimensions. In Uganda 22 percent of people live in a household; where at least one person experiences a severe disability. This is an important finding. Poverty in these households is higher 77 percent of people are poor versus 69 percent in other households. So, households which has disabled persons face much poorer conditions, much less life choices survival choices than those in which there are quote unquote able bodied individuals.

The MPI and it is indicators are disaggregated by 988 sub national regions and 78 countries. And the poorest regions are Chad, Burkina Faso, Niger, Ethiopia's, South Sudan, Nigeria, Uganda and Afghanistan. Inside Afghanistan poverty rates vary from 25 percent in Kabul to 95 percent in Urozgan; which shows that there is lot inequality within Afghanistan. And number of countries in the Sub Saharan African region. So, these are the key findings of global MPI as came out in 2017.

Now I will end today's class with a very brief and short discussion about what is called the millennium development goals and the sustainable development goals. And there has been a some sort of a political shift when one moved when we moved from millennium development goals to sustainable development goals. Let us have a look at what are MDG's and what are SDG's, and what does this movement from MDG's to SDG's mean?

(Refer Slide Time: 44:08)

So, MDG is started in the form of a Millennium Declaration in 2000; when 189 nations came together to make a promise to free people from extreme poverty and multiple deprivations. And this is important in the context of multidimensional poverty that we are studying. And the pledge became the 8 millennium development goals to be achieved by 2015. This pledge was taken in 2000, and the pledge was achieved by 2015 certain goals should have been achieved. And in September 2010 the world recommitted itself to accelerate progress towards these goals.

So, they are referred to as the millennium development goals. They were adopted at the largest ever gathering of heads of state committed countries rich and poor to doing all they can to eradicate poverty, promote human dignity, equality and achieve peace democracy and environmental sustainability.

(Refer Slide Time: 44:59)

Millennium Development Goals (MDG)

❑ The Millennium Development Goals is a plan of action aimed primarily at the top priority and high priority countries most in need of support.

❑ The eight Millennium Development Goals (MDGs) – which range from halving extreme poverty rates to halting the spread of HIV/AIDS and providing universal primary education, all by the target date of 2015 – form a blueprint agreed to by all the world's countries and all the world's leading development institutions. They had galvanized unprecedented efforts to meet the needs of the world's poorest. The UN was also working with governments, civil society and other partners to build on the momentum generated by the MDGs and carry on with an ambitious post-2015 development agenda.

And the millennium development goals are as follows.

(Refer Slide Time: 45:02)

Millennium Development Goals (MDG) and Targets

	Goals	Targets
1	Eradicate extreme poverty and hunger	Halve, between 1990 and 2015, the proportion of people whose income is less than $1 a day
		Halve, between 1990 and 2015, the proportion of people who suffer from Hunger
2	Achieve universal primary education	Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling
3	Promote gender equality and empower women	Eliminate gender disparity in primary and secondary education, preferably by 2005 and in all levels of education no later than 2015
4	Reduce child mortality	Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate
5	Improve maternal health	Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio
6	Combat HIV/AIDS, malaria and other diseases	Have halted by 2015 and begun to reverse the spread of HIV/AIDS
		Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases

These are the goals that were considered there were 8 millennium development goals. And these millennium development goals were based upon the study of poverty and development carried out by the United Nations over a period of 20 odd years. The goals were the first goal was eradicate extreme poverty and hunger. And the targets were fixed each goal, the targets in this case was that poverty should be halved between 1990 and 2015; proportion of people whose income is less than 1 dollar a day. Often in this

literature you will come across this number of 1 dollar a day, how many people live below a poverty line of one dollar a day. And therefore, the target was to half the number of people between 1990 and 2015.

Proportion of people whose income is less than 1 dollar a day; half between1990 and 2015 the proportion of people who suffer from hunger. The second goal was achieving universal primary education, and the target was to ensure that by 2015 children everywhere girls and boys should be able to complete a full course of primary schooling. So, that is the in fact, this is one of the criticisms of the millennium development goals also, that instead of millennium development goals ever been touted as minimum development goals because, the focus here is entirely on the poverty of the developing countries.

So, the goal of achieving universal primary education hardly applies to the industrial advanced countries of the world. So, in that since the MDG's are more focused on the poverty of the developing countries. The third goal was promote gender equality and empower women. And the target here goes to eliminate gender disparity in primary and secondary education, preferably by 2005 and in all levels of education no later than 2015. So, the focus here was to ensure that enrolments among boys and girls increase both in primary and secondary schooling; and the bridge in and to bridge the inequality in enrolments. And this is something that has increased over a period of time; if you look at the developing countries education statistics you will see that, the number of girl children and number of enrolments of girls and boys are more or less equal as far as primary and secondary schooling is concerned.

However, the dropout rates are much higher beyond the secondary schooling age group. Also within secondary schooling dropout rates are very high; which is also a big challenge, and one of the criticisms of posing such a goal. The fourth one was to reduce child mortality, and the target was to reduced it by two thirds between 1990 and 2015; the under 5 mortality rate. And as far as global aid for reducing child mortality is concerned this is one of the biggest successes of the millennium development goals; that child mortality has reduced to a large extent. Improving maternal health, the target was to reduces it by 3 quarters between 1990 and 2015. Combat HIV AIDS, malaria and other diseases to target was to have it have been halted by 2015; and begun to reverse the

spread of HIV AIDS and halted by 2015 malaria and begun to reverse the incidence of malaria.

(Refer Slide Time: 48:18)

Number 7: was to ensure environmental stability, sustainability and the targets were to integrate the principles of sustainable development into country policies and programmes. And reverse the loss of environmental resources. Sustainable access to safe drinking water by 2015 and significant improvement in the lives of a slum dwellers by 2020. And the final one was developing a global partnership for development. The target was to develop a non-discriminatory trading and financial system. Now there are lot of criticism of the millennium development goals as I have just pointed out; because the focus was primarily on the poverty of the developing countries.

And the inequalities or the inequities existing within the developed countries was not discussed, or were not considered as part of the millennium development goals. And there were also issues raised by human rights activist saying that human rights issues were not integrated within the millennium development goals. And therefore, in 2015 a new set of agenda were worked out which were referred to as a sustainable development goals.

And so, the sustainable development goals have completely replace the millennium development goals. And one of the focus areas of the SDG's is that it is not focusing only

on the poverty of the developing countries, but also on the inequalities existing in the developed countries of the world.

(Refer Slide Time: 49:47)

Sustainable Development Goals

❑ The SDGs came into effect in January 2016, and they will continue to guide UNDP policy and funding until 2030. As the lead UN development agency, UNDP is uniquely placed to help implement the Goals through our work in some 170 countries and territories.

❑ The Sustainable Development Goals (SDGs), otherwise known as the Global Goals, are a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity.

❑ These 17 Goals build on the successes of the Millennium Development Goals, while including new areas such as climate change, economic inequality, innovation, sustainable consumption, peace and justice, among other priorities. The goals are interconnected – often the key to success on one will involve tackling issues more commonly associated with another.

❑ Our strategic plan focuses on key areas including poverty alleviation, democratic governance and peacebuilding, climate change and disaster risk, and economic inequality. UNDP provides support to governments to integrate the SDGs into their national development plans and policies. This work is already underway, as we support many countries in accelerating progress already achieved under the Millennium Development Goals.

So, the SDG's came into effect in January 2016 they were demo worked out in 2015 and they will continue to guide all UNDP policy and funding till 2030. And UNDP is uniquely place to help implement these goals. The SDG's are otherwise also known as the global goals now; because it considers both the developed and the developing countries.

And as an universal call to action to end poverty. There are 17 SDG's, and they are it is said that they are built on the successes of the millennium development goals. And it also includes many new areas which were not covered in the MDG's; such as climate change, economic inequality, innovation sustainable, consumption, peace and justice among other priorities. And there is a greater focus on integrating the SDG's into the national development plans and policies so much. So, that there is a lot of discussion with regard to SDG's as well as national plans and policies are concerned today.

(Refer Slide Time: 50:42)

So, what were the goals? The first goal is no poverty, end poverty in all it is forms everywhere. Second is to zero hunger or end hunger, achieve food security and improved nutrition. Third is good health and well-being, fourth is quality education. So, unlike the MDG's where the focus was only on increasing enrolments in primary and secondary schooling; here the goal is to ensure inclusive and equitable quality education and promoting lifelong learning opportunities for all; which means a focus can also be on higher education technical education and so on. Goal 5 was achieving gender equality and empowering women and girls. Goal 6 was clean water and sanitation ensuring availability and sustainable management of water.

(Refer Slide Time: 51:26)
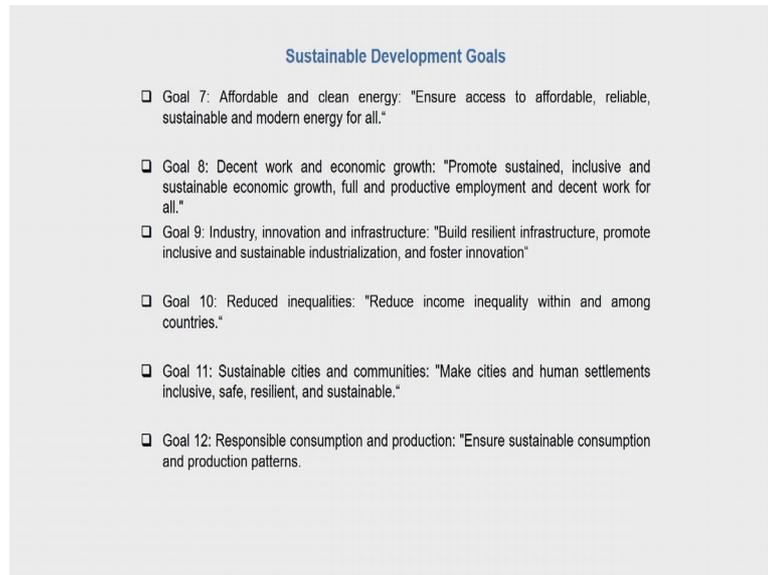
7, on clean energy, 8 on decent work and economic growth; which was not focused in the MDG's. Goal 9 is an industry innovation and infrastructure. Goal 10 was on reducing inequalities. Now, this is something which is being identified and emphasised upon in a big manner now.

Because, while economic growth has risen, we have seen that how in the 1990's and the 2000's inequalities have risen. So, there is now an active emphasis and a focus on shifting attention towards reducing inequalities within countries. Goal 11 was sustainable cities and communities, 12 responsible consumption and production pattern which is also related to sustainability.

Sustainable Development Goals

- Goal 13: Climate action: "Take urgent action to combat climate change and its impacts by regulating emissions and promoting developments in renewable energy."

- Goal 14: Life Below Water: "Conserve and sustainably use the oceans, seas and marine resources for sustainable development Goal 15: Life on Land: "Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss."

- Goal 16: Peace, justice and strong institutions: "Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels."

- Goal 17: Partnerships for the goals: "Strengthen the means of implementation and revitalize the global partnership for sustainable development"

13, on climate action, 14 was on life below water. So, which means the focus on environmental ecosystems the protecting life on land as well as water, that was goal number 15. 16 on promoting peace justice and strong institutions and 17 on partnerships for the goals; which means that for being able to successfully carry out all of these goals there has to be partnerships in different institutions and strong stakeholder networks; so, that these goals can be made successfully.

The Shift From MDG to SDG

The UN has conducted the largest consultation Programme in its history to gauge opinion on what the SDGs should include. Establishing post-2015 goals was an outcome of the Rio+20 summit in 2012, which mandated the creation of an open working group to come up with a draft agenda. The open working group, with representatives from 70 countries, had its first meeting in March 2013 and published its final draft, with its 17 suggestions, in July 2014.

SDGs differ from the MDGs in purpose, concept, and politics.

First, the MDGs were a North–South aid agenda. The goals and targets – such as universal primary education – were mostly relevant for developing countries only, and were sometimes labeled 'Minimum Development Goals' (Harcourt 2005, 1).

In contrast, the SDGs are a global agenda for sustainable development. They are universal goals that set targets for all – not just poor countries, and are as relevant for the USA as for Liberia. They emerged from the 2012 Rio+20 Conference, driven by the environment ministers, from countries in both the global North and South, and especially from middle-income countries such as Brazil and Colombia.

So, what was the reason for the shift from MDG's to SDG's? They differ from the SDG is differ from MDG in purpose concept and politics. The MDG's were mostly a north south aid agenda. And the goals and targets such as universal primary education as I have just said were mostly relevant for the developing countries and was sometimes labelled as minimum development goals than millennium development goals. But SDG's are agenda for sustainable development, and they have universal goals at set targets for all kinds of countries.

(Refer Slide Time: 53:13)
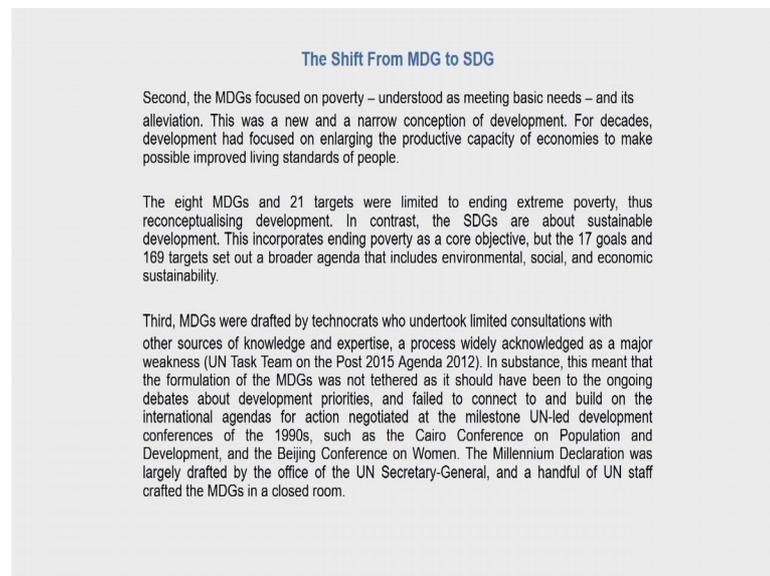
The Shift From MDG to SDG

Second, the MDGs focused on poverty – understood as meeting basic needs – and its alleviation. This was a new and a narrow conception of development. For decades, development had focused on enlarging the productive capacity of economies to make possible improved living standards of people.

The eight MDGs and 21 targets were limited to ending extreme poverty, thus reconceptualising development. In contrast, the SDGs are about sustainable development. This incorporates ending poverty as a core objective, but the 17 goals and 169 targets set out a broader agenda that includes environmental, social, and economic sustainability.

Third, MDGs were drafted by technocrats who undertook limited consultations with other sources of knowledge and expertise, a process widely acknowledged as a major weakness (UN Task Team on the Post 2015 Agenda 2012). In substance, this meant that the formulation of the MDGs was not tethered as it should have been to the ongoing debates about development priorities, and failed to connect to and build on the international agendas for action negotiated at the milestone UN-led development conferences of the 1990s, such as the Cairo Conference on Population and Development, and the Beijing Conference on Women. The Millennium Declaration was largely drafted by the office of the UN Secretary-General, and a handful of UN staff crafted the MDGs in a closed room.

Second is that MDG's focused on poverty understood as meeting the basic needs. This was a narrow conception of development. For decades development had focussed on enlarging productive capacity of a economies. So, SDG's are about sustainable development, and they incorporate ending poverty as a core objective. But the 17 goals and the targets that have been set out they set out, a broader agenda that includes environmental social and economic sustainability.

So, that is a more comprehensive and a broader definition than given by the millennium development goals. Thirdly, the MDG's were drafted by technocrats who undertook limited consultations with other sources of knowledge when expertise.

(Refer Slide Time: 53:57)


The Shift From MDG to SDG

Human rights scholars and practitioners – including the UN Office of the High Commissioner for Human Rights (OHCHR) – have consistently criticized the MDGs as not adequately aligned with human rights standards and principles, especially equality, participation, non-discrimination, and transparency (OHCHR 2008). OHCHR (2008) has also criticized them for overly technocratic implementation, based on an assumption that resources and technology are the answer to poverty.

The MDGs were goals, not an agenda, and picked out only the numeric goals in the conference agendas of the 1990s.

Whereas, the SDG's were drafted based upon various discussions exhaustive discussions based upon different kinds of scholars and practitioners in the field of development including the UN office of the UN Commissioner for Human Rights, who have consistently criticize the MDG is has not adequately aligned with human right standards and principles; especially, equality participation non-discrimination and transparency.

So, the MDG's were goals not an agenda and picked out only the numeric goals in the conference agenda so the 1990's. So, number of conferences were carried out by the UN in the 1990's. Some of the, they were considered to be only numeric goals rather than being an agenda in itself.

(Refer Slide Time: 54:36)
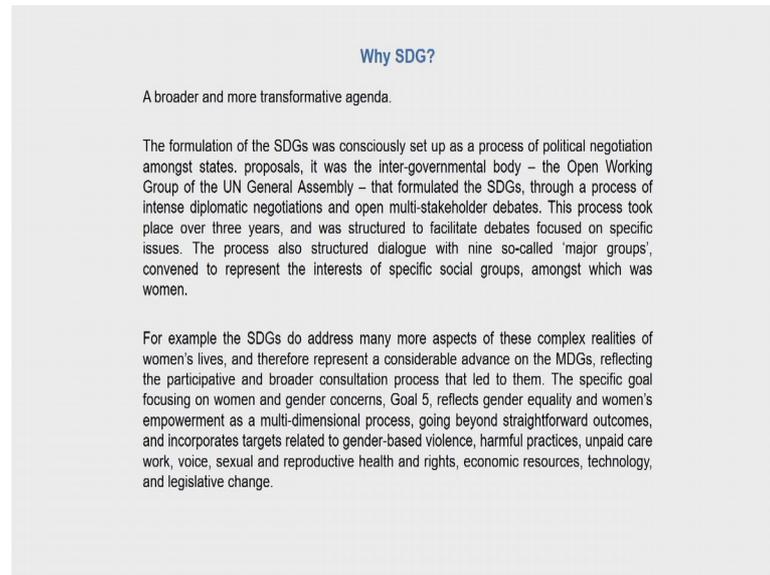
Why SDG?

A broader and more transformative agenda.

The formulation of the SDGs was consciously set up as a process of political negotiation amongst states. proposals, it was the inter-governmental body – the Open Working Group of the UN General Assembly – that formulated the SDGs, through a process of intense diplomatic negotiations and open multi-stakeholder debates. This process took place over three years, and was structured to facilitate debates focused on specific issues. The process also structured dialogue with nine so-called 'major groups', convened to represent the interests of specific social groups, amongst which was women.

For example the SDGs do address many more aspects of these complex realities of women's lives, and therefore represent a considerable advance on the MDGs, reflecting the participative and broader consultation process that led to them. The specific goal focusing on women and gender concerns, Goal 5, reflects gender equality and women's empowerment as a multi-dimensional process, going beyond straightforward outcomes, and incorporates targets related to gender-based violence, harmful practices, unpaid care work, voice, sexual and reproductive health and rights, economic resources, technology, and legislative change.

Why SDG's? They are more broader and they are more transformative in their agenda. Formulation of SDG's was consciously set up as a process of political negotiation among states, proposals were invited by intergovernmental bodies. Open working groups of UN general assembly. They formulated SDG's so process of intense diplomatic negotiations and multi stakeholder debates.

So, in that sense they the process structure dialogue with major groups convene to represent the interest of specific social groups amongst which was women. So, SDG's address many more aspects of these complex realities of women's life and therefore, represent a considerable advance on the MDG's.

Limitations of SDG

There is a risk that the most transformative goals and targets would be neglected in implementation through selectivity, simplification, and national adaptation.

With 17 goals and 169 targets, which handful will receive policy attention, and mobilise effort and resources? Selectivity could lead to neglect of goals and targets that would address structural issues.

Another risk is the process of national adaptation. This reduces the political pressure on national governments to address the political causes of poverty and inequality. It can then be an invitation to water down the ambition of the SDGs. For Example - Implementation of the inequality goal is particularly challenging, as it is one of the few goals that requires a major change in course from the trends of the last decade (Nicolai et al. 2015). As suggested earlier, challenging inequality involves questioning and shifting the economic model that has been promoted over the last decade. This goal will prove as problematic and challenging as Goal 5: this, too, involves profoundly questioning power and the current economic model.

However, there are certain limitations of SDG's that are being highlighted, that there is a risk that most transformative goals and targets would be neglected in implementation through selectivity, simplification and national adaptation. So, in this class we began discussing multidimensional poverty, what is the significance of looking at multidimensional poverty, how assessing deprivations is equally important as assessing achievements, and how assessing deprivations can give us a sense of the intensity of poverty in different regions of the world.

And also how it can inform policy making, as to have better policies can be made with regard to addressing deprivations, rather than taking rather than rejoicing in the achievements that countries have achieved over a period of time. Now, based on the multidimensional poverty index and the illustration that we saw with regard to how the multidimensional poverty index is calculated; we also get a notion of how flexible the indicators of multidimensional poverty indices are. And, how it can be well suited to the needs of regional levels or sub national levels, where different kinds of MPIs can be constructed with different cut offs given to different indicators depending upon the level of development at a certain region is in.

We also looked at the MDG's and the SDG's, how the MDG's and SDG's, how the how there is a shift from MDG's to SDG's and how the SDG's have become a more broader in the transformative agenda unlike the MDG's. And we very briefly looked at little some

of the political concerns with regard to the shift from the MDG's to the SDG's. In the next class we will look at gender mainstreaming and how gender mainstreaming came to be, and how that is an important there is an important focus as far as development concerns are concerned in the recent times.

And in this context, we will also look at the gender inequality index which was calculated by the UNDP. And what are the implications of looking gender inequality index, what does it inform us. And that will be the last lecture of this course followed by a summarize, summary lecture which will end the course. See you in the next class.

Thank you.