

Economic Growth and Development
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Lecture – 15
Introduction to Human development (Putting people first)

Hello and welcome to week 6 and lecture 15 of the NPTEL MOOCS course on Economic Growth and Development. We have so far looked at the central issues surrounding the study of economic growth. How economists have theorized about economic growth? What are the basic models of economic growth? And, we have also looked at some of the debates and arguments that the growth strategists have put vis-a-vis, the development strategists. Starting today's class, we will enter into the domain of what we have come to know as human development? And, the discourse of human development has grown enormously over the period of last 2 decades, 2 and half decades.

And, so much so, that there are human development by itself has become an interdisciplinary study, but the roots of some of the concepts and theories that surround the concept of human development are still very are still grounded in the discipline of economics. And therefore, any discussion on economic growth is incomplete without taking into consideration the discussion about human development. One of the central emphasis of this discourse or paradigm of human development is on putting people first, and not just on national incomes overlooking the distributive aspects of a national incomes.

In this class we will have 2 parts, in the first part of this class I will discuss some of the frameworks that need to be kept in mind, when we study the issue of development or when we negotiate with the concept of development. Because, development means different things to different people and because it means different things to different people, different policy analysts or development analysts also we will take different frameworks to frame different kinds of policies on human development.

So, in the first part of today's class, we will look at how frameworks matter. What are these different frameworks that we are talking about and in this first part we will also

take a look at one of the case studies, we will understand frameworks with the help of a case study from China.

In the second part of today's lecture, we will see how the human development theorists or human development analysts have dealt with some of the assumptions of growth economists. And, how the and the experiences of the developing countries over the past 20 years or so, has dispelled these assumptions and rightly so. So, in the second part we will look at what are these assumptions and how and why these assumptions have been dispelled over a period of time.

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Normative, Positive and Predictive Approaches to Human Development

Analysis of development is of various kinds. Development programs and policies are analyzed on **normative** or ethical i.e. based on **value judgment** – when they clarify how groups **ought to** behave in order to create improvements in human lives. For e.g. should public policy aim at increasing economic growth only? Or should it give equal consideration to providing people free access to education? Such questions involve value judgments about what should be done.

But development also needs learning from past experiences and analyzing present data. This is referred to as **positive approach (what is it)**.

Development also needs to check future, in other words able to **predict** how a situation could be changed.

Thus, Development has three framework approaches – **normative, positive and predictive**. All the three are interconnected.

Normative frameworks matter!

When, we look at frameworks that are generally 3 frameworks or approaches to human development that we consider. And, this has been worked out from a very long time. The approaches are normative approach, a positive approach, and a predictive approach, and these 3 are the different frameworks within which different development policies are framed.

Now, as I have already said development as we have come to know today means different things to different people. For some development means sustained increases in standards of living or increases in the amount of assets that an individual has access to, for some others it may mean liberation from oppression. And for while many others look at the modern term of development as a form of neocolonialism and actually go to the extent of despising it or rejecting it.

Now, still so, development is basically a holistic project which takes into consideration social, political, economic, and spiritual development. Often you might have heard of development of a child or development of a software so, which basically means that development is an unfinished agenda and something that needs to be completed. So, essentially this term development is ambiguous and is quite value laden.

And therefore, it legitimately involves various kinds of analysis, and based upon this understanding of how development is multifaceted we come up with the we posit these 3 different frameworks that I have just shown you on the slide, the normative framework, positive framework and the predictive framework.

The normative framework falls within the domain of what is called value judgments or something which has an ethical standpoint. Now, development policies or public policies are considered to be normative when, they are based on value judgments. So, in other words we are asking questions such as should public policy aim at increasing economic growth only or should it give equal consideration to providing people free access to education. And, such questions involve value judgments about what should be done? The policy makers the development analysts need to have a very ethical standpoint with regard to what economic policy needs to be adopted it at a given point of time.

But, often development also requires experience from the past. So, which means that as we have seen in the last few classes, I have taken a lot of reference to empirical studies, and how the data analysis based upon these empirical studies give us certain conclusions or conclusive evidence as to how growth or development needs and development needs to be formulated? So, often there is a need to learn from past experiences and analyze the present data.

So, this falls under the domain of what we generally know as data analysis hypothesis testing, or various kinds of descriptive analysis of a given body of data. So, we are asking the question what is it, what exists or what is it that we are trying to solve here? And, this is a very positive approach or a scientific approach to looking at a development.

Now, policymakers often also need to predict how a situation could change in certain ways. For example, a development analyst might ask the question, that how many given, how many poor households exist in a country. If there is a 5 percent rise in economic

growth over a period of time, then how many people living below the poverty line will come down or what will be the amount of decline in the number of people living below the poverty line?

Now, such kinds of questions require a predictive analysis. And, social scientists and economists often enter into predictive analysis to be able to come up with some kind of picture of the future, ecological economists, climatologists, often enter into these kinds of predictive analysis to be able to plan for the future, depending upon the resources that is available in hand today.

So, these 3 frameworks normative frameworks, positive framework and predictive frameworks, they basically ask distinct questions. But, these questions may also be interconnected; there is no reason for them to be disparate from each other. So, what essentially happens in the case of development analysis is that, one needs to have a positive and a predictive analysis to be able to consider or identify the normative framework within which this analysis can be implemented. And, vice versa often, we begin with a normative analysis or a normative framework and then move on to positive and predictive frameworks.

Let me take an example. Suppose you must have heard of a infrastructure projects taking place being implemented in different parts of the country. And, suppose a certain bridge needs to be conducted in a certain locality and a lot of consumer or individual information needs to be collected for the for deciding, whether and how the bridge needs to be conducted.

So, in this case what we what policymakers are doing is they are collecting a lot of data with regard to the individuals states and preferences, whether they are willing to pay for a certain bridge or whether the government will have to pay for the infrastructure cost. And based upon the data that has been collected from the locality a decision is taken regarding, how the bridge needs to be constructed. And, who will be the users, whether tax need to be collected from the people who are users of this infrastructure project and so on and so forth. And, here what we are doing is the positive analysis.

So, based upon a positive analysis we are deciding, whether or not to go ahead with a certain infrastructure project, but if we take an example of how the beginning point is a normative framework? If you take the example of affirmative action that is taken in

different parts of the country, or the policy of reservation that is carried out in India. For example, you would see that it starts from the basic premise of or the objective of promoting social justice.

And, based upon the premise of social justice; there are certain social, political, and economic policies that are formulated with regard to what are the benefits that will be derived by different sections of the population? What are the benefits that that will be derived by the vulnerable sections of the population or the marginalized sections of the population.

So, in this case we are beginning with a normative analysis first and then moving on to do a positive, we are utilizing a positive framework, because we are deciding what are the benefits, what are the economic benefits that should go to these marginalized sections of the population. Also, if I have to take another example, sometimes for describing the severity of poverty in our country, it is essential to describe the severity of a poverty of a country.

Because, when we are conceptualizing the concept of development, what we are essentially doing here is to, look at the improvements in the quality of life of people. And, the and of course, poverty is one of the biggest obstacle for in for improvement of the quality of life of people.

So, here one needs to make a value judgment about, how poverty is to be conceptualized? If poverty is conceptualized only as lack of incomes then; obviously, accept a different kind of an economic policy needs to be formulated. However, if poverty is conceptualized as having unmet basic needs, then a different kind of a economic policy needs to be formulated.

So, the point I am trying to make here is that normative approach or normative frameworks are central to the shaping of development policies, but of course, it is not sufficient to create it. And therefore, normative frameworks matter a lot and there are certain core issues, when we are looking at normative recommendations for development. There because there is an uncertainty of difficulty in prediction about whether or not an economic policy need to be taken up.

Because, we do not know because the future is uncertain so, if we are trying to take up a certain financial policy today we do not know how the markets are going to react in the future. So, there is always a trade off with regard to development policies or being carried out. Similarly, if we are asking questions how can one take action on climate change? Whether, we should have more of solar energy, or wind energy, or nuclear energy. These are questions that we do not know which energy policy will be the best option, because there is a lot of uncertainty about the future. Now, in addition to uncertainty tradeoffs are also more or less than norm than an exception in the context of a development policy.

For example, in yesterday's class on the general lecture on whether to follow a growth mediated security strategy of development or a support led security strategy of development, we were dealing with this dilemma of which strategy will have or will make greater demands on the national incomes of the country. Similarly, we can ask the questions like should farmers in India be encouraged to produce BT cotton or bio fuels for the supermarkets of for the European supermarkets.

Now, the trade off here is that while it does create employment for some farmers in India. It also has the trade off of shifting of agricultural land form from production of food crops to non-food crops. And, which gives rise to a situation of food insecurity within the country. It may also give rise to various kinds of carbon emissions and are we as a developing country ready to bear the costs of economic development of the so, called developed countries.

Similarly, we can ask questions as to should the ministry of human resource development of India invest more on primary education, secondary education, or higher education. So, essentially what we are what I am meaning to say here is that policymaking often involves tradeoffs between the pursuit of 2 valuable objectives. Now, there is another difficulty for policymaking and that is that there are deep interconnection certain different kinds of policies, as I was just taking the example of bio fuels or production of goods for the European supermarkets.

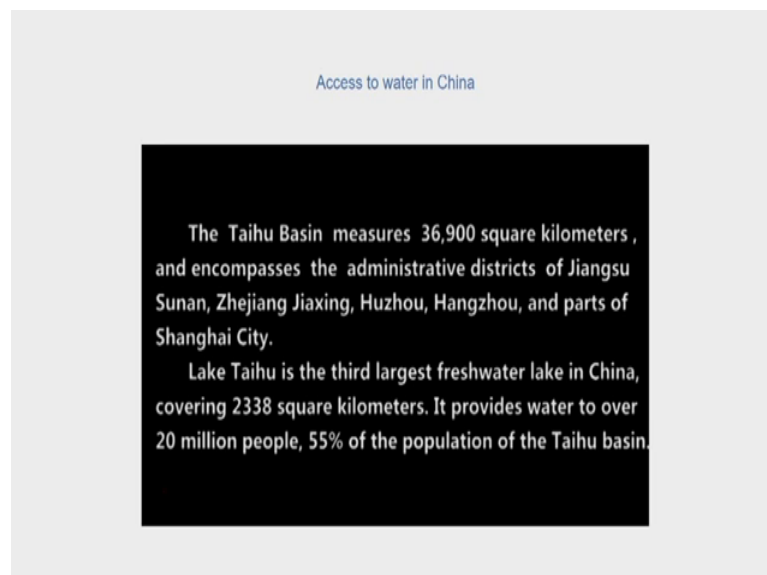
Now, while on the one hand the one of the trade off while on the one hand the objective is to create incomes within the country. The trade off also is that we are creating a situation of food insecurity probably, by diverting agricultural land from the production

of food crops to non-food crops. So, it is essential that policy is navigate between different social, between different contexts, whether they are political, social, economic or cultural. And therefore, these development is a complex process, it is a complex phenomenon and ideas about what development should be it matters.

But, different ways of understanding what development should improve lead to different policies and consequences? And so, economic and social tradeoffs they give us ample reason to believe that normative frameworks matter. Now, to take the discussion of a frameworks ahead, let us discuss case study, which had been in the news of in the middle of 2000s around 2004 to 2005. When, there was a lot of discussion regarding green GDP calculations in China. And, I have taken reference to this in one of my earlier classes, when I was looking at the economic indices of development and we looked into the concept of green GDP.

So, I have chosen to look up the case study with regard to China, in which a certain lake was polluted and what are the questions that this kind of a pollution that gives rise to? So, let us first have a look at a small video on this pollution of this lake Taihu in the Wuxi province of China, and then we will look at some of the questions here.

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Access to water in China



Blue-Green Algae Outbreak in Lake Taihu

The 2007 blue-green algae outbreak in Lake Taihu disrupted the domestic water supply of millions of citizens in Wuxi.

Control of blue-green algae since 2008 has alleviated eutrophication of the Taihu water body. However, hazardous emissions from industry have not received sufficient attention.

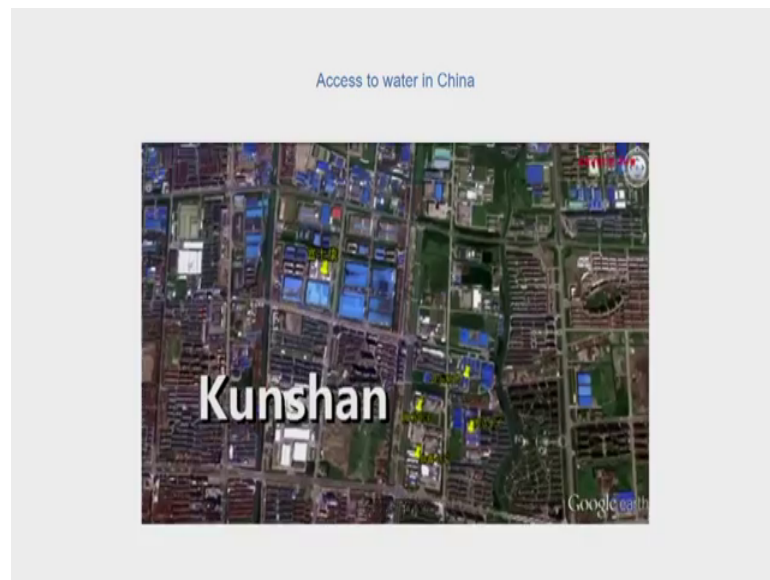
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Access to water in China

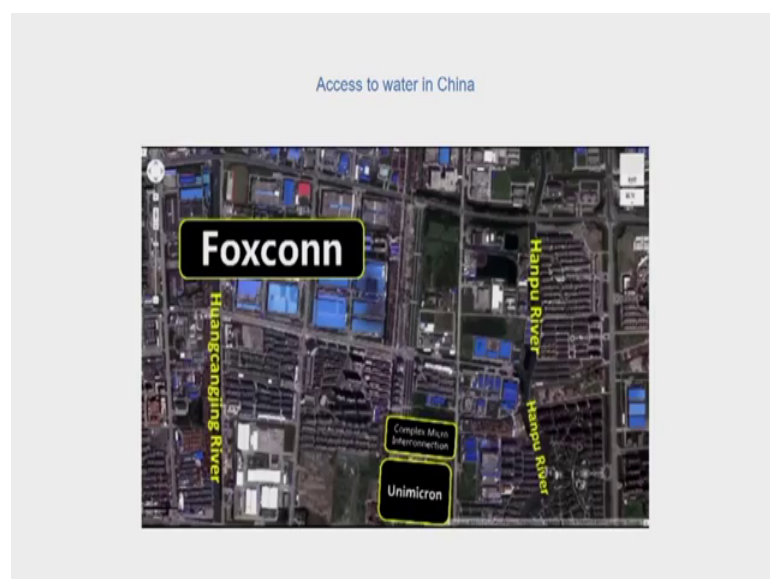


Who is Polluting the Taihu Basin ?

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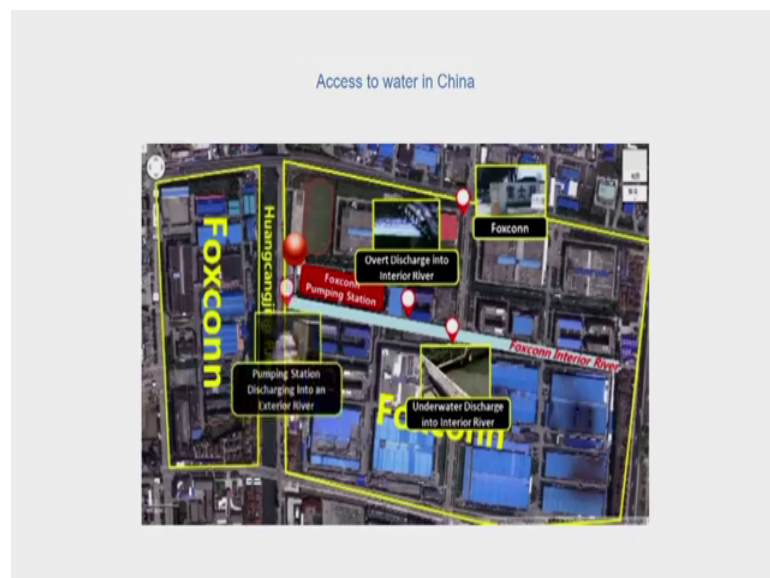
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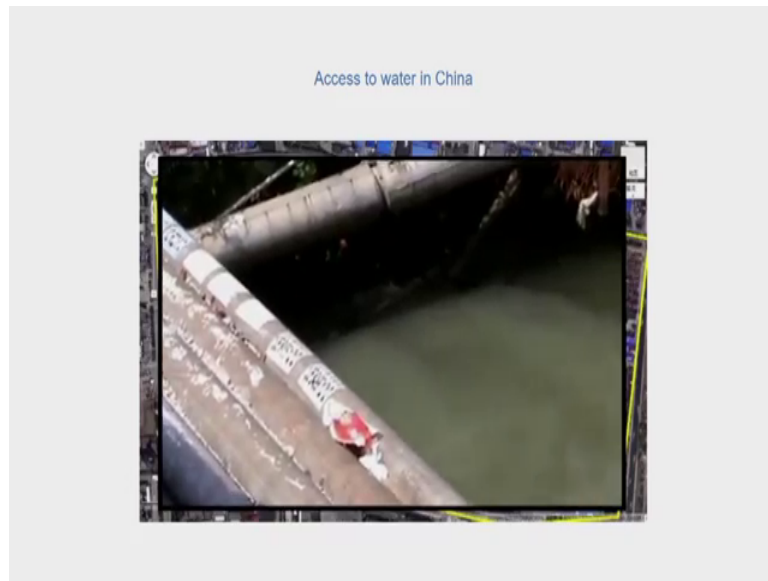
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Access to water in China

Nickel can be an indicator of pollution from the electroplating industry. Foxconn's interior river flows through the Foxconn factory area. On-site investigators have not discovered other corporations discharging into Foxconn's interior river apart from Foxconn itself.

Results from the sampling compared with NOAA sediment quality standards ERM values:

Copper:	523mg/kg	Exceeds standard by almost 2 times
Nickel:	2060mg/kg	Exceeds standard by 40 times

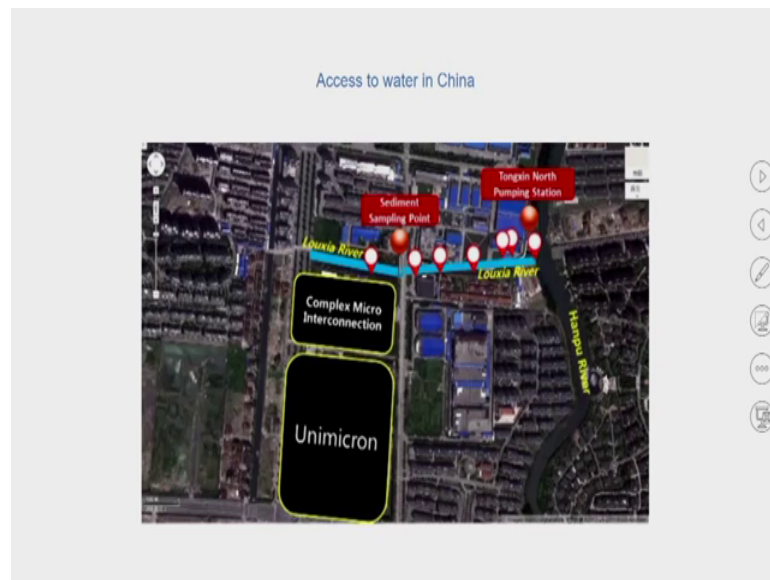
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Access to water in China



Foxconn Pumping Station Discharging Into the Huancangjing River

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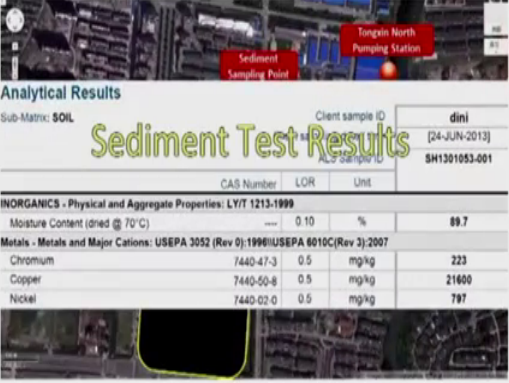


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Access to water in China



The image shows a screenshot of an analytical results report. At the top, there is a header 'Access to water in China'. Below it is a satellite map of an industrial area with a red label 'Tongxin North Pumping Station' and a red box labeled 'Sediment Sampling Point'. The main title of the report is 'Sediment Test Results' in large green letters. Below the title, it says 'Analytical Results' and 'Sub-Matrix: SOIL'. There is a table with columns for 'CAS Number', 'LOR', and 'Unit'. The report is dated '24-JUN-2013' and has a client sample ID 'dini'. The results are categorized into 'INORGANICS - Physical and Aggregate Properties: LY/T 1213-1999' and 'Metals - Metals and Major Cations: USEPA 3052 (Rev 0)-1996/USEPA 8010C(Rev 3)-2007'. The results table shows:

Parameter	CAS Number	LOR	Unit	Value
Moisture Content (dried @ 70°C)	---	0.10	%	89.7
Chromium	7440-47-3	0.5	mg/kg	223
Copper	7440-50-8	0.5	mg/kg	21600
Nickel	7440-02-0	0.5	mg/kg	797

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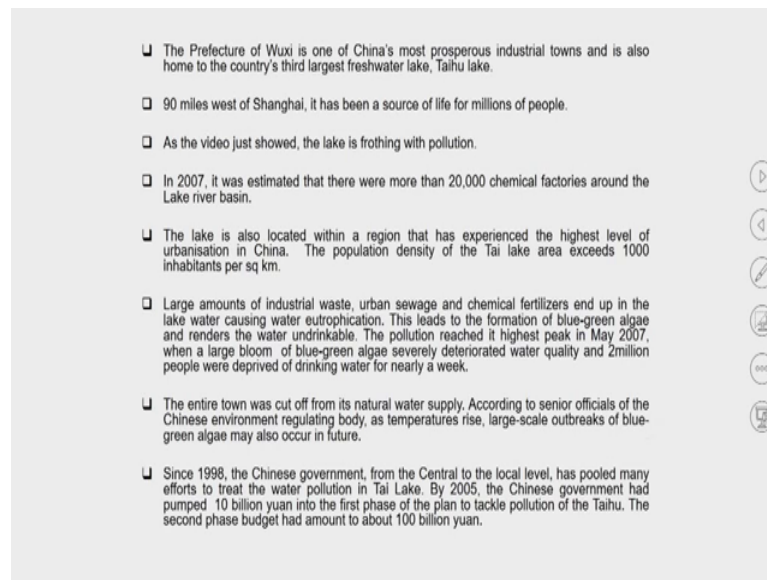
Access to water in China

Copper can be an indicator of pollution from the PCB industry. PCB corporations along the Tongxin River include Unimicron and Complex Micro Interconnection. Unimicron's production volumes are very high.

Results from the sampling compared with NOAA sediment quality standards ERM values:

Nickel: 797mg/kg	Exceeds standard by 15 times
Copper: 21600mg/kg	Exceeds standard by 80 times

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- ❑ The Prefecture of Wuxi is one of China's most prosperous industrial towns and is also home to the country's third largest freshwater lake, Taihu lake.
- ❑ 90 miles west of Shanghai, it has been a source of life for millions of people.
- ❑ As the video just showed, the lake is frothing with pollution.
- ❑ In 2007, it was estimated that there were more than 20,000 chemical factories around the Lake river basin.
- ❑ The lake is also located within a region that has experienced the highest level of urbanisation in China. The population density of the Tai lake area exceeds 1000 inhabitants per sq km.
- ❑ Large amounts of industrial waste, urban sewage and chemical fertilizers end up in the lake water causing water eutrophication. This leads to the formation of blue-green algae and renders the water undrinkable. The pollution reached it highest peak in May 2007, when a large bloom of blue-green algae severely deteriorated water quality and 2million people were deprived of drinking water for nearly a week.
- ❑ The entire town was cut off from its natural water supply. According to senior officials of the Chinese environment regulating body, as temperatures rise, large-scale outbreaks of blue-green algae may also occur in future.
- ❑ Since 1998, the Chinese government, from the Central to the local level, has pooled many efforts to treat the water pollution in Tai Lake. By 2005, the Chinese government had pumped 10 billion yuan into the first phase of the plan to tackle pollution of the Taihu. The second phase budget had amount to about 100 billion yuan.

So, let me summarize this small video for you the state of Taihu lake basically epitomizes Chinas development process in the past 3 decades. This lake is located in the prefecture of Wuxi, which is Chinas most prosperous industrial towns. And is also home to the country's third largest freshwater lake which is the Taihu Lake, it is 90 miles west of shanghai and it has been a source of life for millions of people.

In 2007, it was estimated that there were more than 20000 chemical factories around the lake river basin. And, the lake is also located within a region that has experienced the highest level of urbanization in China.

And, considered the fact here that over the period of last 3 decades starting from the period of 1980s, China has seen an unprecedented rise in their growth rates in national incomes, and this has been topic of our discussion in the last few classes, when I discussed Branko Milanovic paper about, how the Chinese growth rate alone was sufficient to bring down the inequality world inequality rates over a period of 1980 to about 1998.

Now, the population density of the Tai lake or the Taihu Lake area exceeds 1000 inhabitants per square kilometer. Large amounts of industrial waste urban sewage and chemical fertilizers end up in the lake water causing, water eutrophication. And, this leads to the formation of blue green algae and renders the water undrinkable. And, this pollution of the lake Tai reached it is highest peak in May 2007, when a large bloom of

blue green algae severely deteriorated water quality and 2 million people were deprived of drinking water for nearly a week.

The entire town was cut off from its natural water supply. And, according to senior officials of the Chinese environment regulating body as temperatures rise large scale outbreaks of blue green algae may also occur in future. Now, look at some of the estimates here since 1998, the Chinese government from the central to the local level has pulled many efforts to treat the water pollution in this lake. By 2005, the Chinese government had pumped about 10 billion Yuan into the first phase of the plan to tackle pollution of the Taihu, and the second phase budget had amounted to about 100 billion Yuan.

Now, we also know that for a long time now growth in GDP has been seen as the only relevant indicator of development achievements. And, according to a report by the ministry of environment protection published in 2006, the cost of environmental degradation caused by water pollution amounted to 286 billion Yuan in 2004, while environmental degradation caused by air pollution cost 219 billion Yuan. And, total pollution related losses accounted for more than 3 percent of aggregate local GDP.

Now, consider this. The opportunity cost of inaction is undoubtedly very high; in economics they generally calculate what is the opportunity cost of an act. So, if we are acting on a certain environmental pollution that has taken place, that leads to a certain monetary cost, but if we are not acting on a certain event, then what is the opportunity cost that arises because of not acting on it. What are the different costs? What are the damages that take place because of inaction. So, the opportunity cost of inaction is undoubtedly very high in this case and not investing tackling a pollution now will result greater economic losses in future.

So, while China has achieved extraordinary progress in the in the recent years, the environmental challenges are the with along with other kinds of challenges are likely to grow. And, this calls for major shifts in Chinas development policies. And, it is normative assumptions about what constitutes development. And, it is in this context that we argue that normative frameworks matter and they lead us to a certain basic quest to ask basic questions about certain tradeoffs here, between economic growth and quality of

life. Between policies that favor different groups of people between the short term and the long term.

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Trade-offs

- Are poor people better off because of economic growth?
- On what grounds should their quality of life be assessed?
- Does economic expansion go hand-in-hand with a more limited access to safe water?
- Is developing more and more chemical factories in the Prefecture of Wuxi in China a desirable way to generate higher income and employment?
- Is this the only criteria which should guide policy decisions?
- Is the expansion of air travel to be encouraged on the premise that its contribution to the country's economic output is necessary?
- How are economic benefits to offset environmental and social costs?
- Is displacement justified?

Two sets of questions being asked here.
One set relates to *how the policy decision will affect economic output?*
Second set relates to *how the policy will affect people's quality of life - negatively or positively?*

So, we are asking questions such as are poor people better off because of economic growth? On what grounds should their quality of life be assessed? Does economic expansion go hand in hand with a more limited access to safe water? Is developing more and more chemical factories in the prefecture of Wuxi in China a desirable way to generate higher income and employment? Is this the only criteria which should guide policy decisions? Is the expansion of air travel to be encouraged on the premise that it is contribution to the country's economic output is necessary?

How are economic benefits to offset environment and social costs? What are the economic benefits to offset environmental and social cost and is displacement justified? In these kinds of questions, which are basically the tradeoffs we can see here are 2 sets of questions being asked by different groups. And, each relying on certain normative assumptions about what matters, and what policy should be pursued, one set of question relates to how the policy decision will affect economic output?

So, basically the question is that how much of the chemical companies in Taihu lake region contributing to Chinas economic growth are safe. And, the second set of questions relate to how the policy will affect people's quality of life, whether it will affect positively or negatively. In other words we are asking the question, if economic growth

will enable the Chinese to live life the value such as living a healthy life free of contamination concerns.

So, this case study the of the Taihu lake here sufficiently illustrates what is considered to be development. And, what is seen as a policy to improve people’s lives and we also see that it is inextricably linked with values about what matters? So, whether development aims to improve economic growth alone or it should also advance human rights, human agency or human flourishing.

There are implication and the implications are both practical and far reaching. And, this through this case study we, are trying to drive home the point that normative frameworks are very important, before we get into economic growth calculations, economic growth estimates or even before deciding what is the rate at which a country should grow.

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Common assumptions related to economic growth

Assumption 1: A high GDP per capita is necessary for human flourishing

	Saudi Arabia	Uruguay	Russia	Costa Rica	Vietnam	Morocco
GDP per Capita (PPP US\$)	15,711	9962	10,845	9481	3071	4555
Adult Literacy (%)	82.9	96.8	99.4	94.9	90.3	52.3
Female Literacy (%)	76.3	97.3	99.2	95.1	86.9	39.6
Life Expectancy (years)	72.2	75.9	65	78.5	73.7	70.4
Under 5 Mortality (0/00)	26	15	18	12	19	40
Political Rights/Civil Liberties	7/6	1/1	6/5	1/1	7/5	5/4
Human Development Index	0.812	0.852	0.802	0.846	0.733	0.646

Now, let us get to the second part of this lecture now, in which we are we will look at some of the assumptions related to economic growth and how the human development analysts have a dealt with these assumptions, how they have challenged these assumptions based upon the experiences of the developing countries.

Some of these issues we have taken in the last few classes, for example in the last general lecture on the dreze and sen book on hunger and public action. We also looked at how there should be some scope for public action or public support? And, how there are

countries who have not waited to grow, unwarrantedly and then looked at the issues of creation of basic capabilities or basic needs for it is people. Whereas, they have very diligently and deliberately tried to create basic capabilities of people first and then try to balance the idea of economic growth and development.

Now, let us critically examine several assumptions about economic growth and its contribution to human flourishing or development. One of the first assumption which we have dealt earlier also is that a high GDP per capita is necessary for human flourishing. Now, the first assumption is basically saying that economic growth is desirable, because it raises people's income and hence their quality of life. Now, this is something that we have devoted a substantial amount of time in our last classes in which we discussed the 2 strategies as I have just mentioned.

So, now we know that in many cases it may be true, but there is no automatic or straightforward connection between a high GDP per capita and the ability of people to flourish. So, this table here illustrates the link between GDP and some dimensions of human flourishing, such as a health, education, and political freedom. In the case of 6 countries Saudi Arabia, Uruguay, Russia, Costa Rica, Vietnam and Morocco. The indicators we have considered is GDP per capita in purchasing power parity US dollars, adult literacy rate, female literacy rate, life expectancy in years under 5 mortality political rights civil liberties and human development index.

Now, one of the questions that might arise in your mind is that why we have selected only these indicators. And, there is a sizable literature that goes in that have in the discourse of human development, that has gone into explaining why the selection of certain indicators. And, which we will come to when we are doing the human development index, but this table here in this table we are comparing 2 countries each we country, we are comparing Saudi Arabia and Uruguay, Russia with Costa Rica and Vietnam with morocco.

Now, if you see here Uruguay has a much lower GDP per capita than Saudi Arabia. The first row Uruguay has a GDP per capita of 9962 US dollars in purchasing power parity whereas, Saudi Arabia has more than 15000 in US dollars. So, Uruguay has a much lower GDP per capita than Saudi Arabia yet people live longer in Uruguay. If, you look

at the life expectancy in years the life expectancy in Uruguay 75.9 compared to Saudi Arabia's 72.2.

So, people in Uruguay live longer than they do in Saudi Arabia. Similarly, women are more literate if you look at the female literacy rate 97 percent in Uruguay compared to 76 percent in Saudi Arabia, fewer children die prematurely. So, if you look at the under 5 mortality rate it is 15 in Uruguay compared to 26 in Saudi Arabia, political and civil rights civil liberties are maintained far better in Uruguay than in Saudi Arabia. So, which means that people have the right to vote and the freedom of expression and association are fully respected in Uruguay than in Saudi Arabia.

Similarly, if you contrast Russia with the Costa Rica you will see that Russia is wealthier, but it is people live much shorter lives the Russian GDP per capita is more than 10,000 us dollars Costa Rica's is 9481. But the life expectancy there is a huge difference between the life expectancy of the number of years an average individual in Russia lives compared to that in Costa Rica 65 versus 78.5, the political rights and civil liberties are also better maintained in Costa Rica than in Russia. The under 5 mortality rate is also much better in Costa Rica than in Russia.

If, you look at the 2 countries Vietnam and Morocco you will see that Morocco has a higher GDP per capita than Vietnam, but it is illiteracy rates in IMR are much higher. So, the adult literacy rate in Vietnam is 90 percent compared to Morocco's 52 percent, female literacy rate in Vietnam is 86 percent more than 86 percent compared to Morocco's just about 40 percent. People live lesser in Morocco for lesser number of years in Morocco; life expectancy is about 70 compared to Vietnams 73 and so on.

Now, when these all of these countries are arranged according to the HDI index the, Human Development Index the last row of this table, the wealthier countries in terms of GDP per capita are not necessarily better off when human dimensions such as health and education are taken into account. Here, Saudi Arabia and Russia the 2 richest countries in terms of economic development are ultimately poorer than Uruguay and Costa Rica in terms of human development. So, this first assumption that a high GDP per capita necessarily leads to human flourishing has been sufficiently challenged, by the experience of the developing countries or the empirical studies based upon these human development indicators of the past few years.

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Assumption 2: Families with a good income will not be deprived in other dimensions

		Education		Nutrition/Health	
		Children	Adults	Children	Adults
Percent of people who are <i>not income poor</i> but are <i>capability deprived</i>	India	43	60	53	63
	Peru	32	37	21	55
Percent of people who are <i>not income poor</i> but are <i>not capability deprived</i>	India	65	38	53	91
	Peru	93	73	66	94

Let us look at the second assumption. The second assumption is that families with a good income will not be deprived in other dimensions of a development. Now, this is another widespread assumption that not being poor in terms of income means not suffering from a lack in other matters to such as health and education, but empirical data often tell another story.

Now, this is a study that was carried out by in Peru and India by (Refer Time: 33:24) and Stuart in 2013. And, they concluded that those who were poor in terms of income, but not necessarily the same people who were poor in terms of education or nutrition. So, they obtained the following results in India, 65 percent of children who belong to households, below the poverty line or the monetary poverty line were not educationally poor in other words they were enrolled in primary schools.

In Peru 93 percent of children belonging to monetary poor households, were not enrolled at who were not educationally poor and 66 percent were not nutritionally poor. However, 43 percent of children in India, who did not belong to monetary poor households were not enrolled at school. If you, look at the first row here these are the percentage of people who are not income poor, but our capability deprived.

So, in India 43 percent of children were not going to school in Peru 32 percent in spite of not being income poor not going to school. In among the adults 60 percent in India in spite of not being income poor were not going to school, in terms of nutrition in spite of

not being income poor 53 percent of children were undernourished and 21 percent in Peru, 63 percent and 55 percent among the adults. And, of course, if we divide these category children into males and females we will of course, find the number of females who are deprived of nutrition in spite of not being income poor will be much higher than the males.

The second row here, talks about percentage of people who are not income poor, but are not capability deprived. So, these are 65 percent of children who are enrolled in schools are not income poor and in spite of this in spite of this fact are enrolled in schools, 93 percent a very high percentage of children who are not income poor, but they are have been enrolled in schools.

Similarly, if you look at the nutrition indicators here a 53 percent of children, they are not income poor, but they are not undernourished as well and 91 percent of adults here are not income poor, but are also not capability deprived.

So, what does this mean? This means, that having an income or belonging to a non-poor household does not guarantee, that your basic capabilities will be intact your basic capabilities of being of being educated or basic capabilities that arise out of being educated or being healthy will be kept intact. Because, often what happens is in a country where people do have access to basic incomes or incomes are guaranteed. The public services themselves might not be functional, as a result of which you know children and adults may not have access to basic capabilities.

A very a good example of this is the number of dropouts among girl children, in the rural areas of India, where both girls children from income and non-income or income poor and not income poor households, drop out of schools because of the absence of a very basic infrastructure of toilet facility not being available in primary schools.

So, the number of dropouts among girl children is very high in the rural areas of India, because of the absence of basic infrastructure in schools. And, this has got nothing to do with whether or not there is income; there is a sufficient incomes in the households of these girl children.

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Assumption 3: Economic growth will automatically reduce other kinds of poverty, such as malnutrition.

- ❑ In recent years India and China have been celebrated as economic successes.
- ❑ Chinese growth rate has been almost solely responsible for bringing down the number of people living on usd 1 a day
- ❑ So it has been assumed that sustained and high economic growth rates have had a tremendous impact on other kinds of poverty
- ❑ For eg. in spite of India's growth experience, in 1998-99, 47 percent of children under the age of 3 were undernourished.
- ❑ In 2005-06, 46 percent of all children under 3 remained malnourished.
- ❑ Between 1998-99 and 2005-06, anaemia among children had risen from 75 to 79 percent.

The third assumption that we look at is it is often said that economic growth will automatically reduce other kinds of poverty such as malnutrition.

Now, in recent years India and China, they have been celebrated as an economic success. And, we know that the Chinese growth rate has almost solely been responsible for bringing down the number of people, living on us dollar one a day. So, it has been assumed that sustained and high economic growth rates have had a tremendous impact on other kinds of poverty. But as the case study that we just saw has shown that, economic very high economic growth rates have led to massive environmental damages in a particularly urbanized province of China.

So, it is rather counterintuitive that economic growth will automatically reduce other kinds of poverty. And, without going so far if we look at the examples from India itself this assumption sounds like a myth. Because, we know that the India's growth story has accelerated particularly in the 1990s and the 2000s, and 90s have and the early 2000s have been a period of very high growth rates in India.

Now, in spite of India's growth experience in 1998-99, 47 percent of children under the age of 3 were undernourished and in 2005-6, the number was more or less the same you could say that the number of malnourished children under 3 was stagnated, it was about 46 percent, which means that even though the growth rates in India were rising. It had no effect on the number of malnourishment or the extent of malnourishment in India.

So, there was a distribution failure. So, between 1998-99 and 2056 anemia among children had also risen from 75 to 79 percent. These figures are based upon the data collected from the national family health survey. So, of course, there is no automatic connection or straightforward connection, economic growth need not necessarily reduce other kinds of poverty such as malnutrition.

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Assumption 4: Data for income and expenditure are better than other poverty data

- ❑ Income data in developing countries are often considered less accurate than consumption data, and are also more volatile. Therefore their chances of reflecting sustained living standards is less reliable.
- ❑ Both consumption and income data have to be generated item by item with varying recall periods, leading to potential errors.
- ❑ Much consumption maybe from non-market sources and the imputation of market prices to these is not straightforward.
- ❑ Challenges wrt purchasing power parity rates across rural-urban areas or countries, construction of 'equivalent' incomes for households of different sizes, and determination of poverty lines.
- ❑ Coverage and quality of non-monetary data has improved in the last two decades.
- ❑ Regularized household surveys in developing countries have increased steadily since the 1980s.
- ❑ A number of efforts to strengthen the capacities of national statistical offices have led to an increase in sample and data quality.

The fourth assumption is with regard to data for income and expenditure. And, it is often said that the data for income and expenditure are better than other poverty data. And therefore, it makes sense to have sophisticated in an analysis done on income and expenditure data. And, the critics of non-monetary indicators of development argue that income and expenditure data are the most reliable indicators of development, but in fact, income and expenditure or expenditure data are subject to a number of serious and widely recognized difficulties. To begin with income data in developing countries are often considered less accurate than consumption data and are also more volatile.

So, therefore, the chances of reflecting the income estimates chances of reflecting sustained living standards is less reliable. So, for example, in a country like India, where you have a formal sector and overwhelmingly large informal sector, where people do not have access to regular incomes, and they do not pay an income tax. To expect that accurate estimates of their incomes can be collected or is being registered somewhere is an overestimation. So, income data in developing and this is true of many developing

countries of the world, where there is a very large informal sector and also the reporting of incomes is not correct.

So, therefore, we cannot with a lot of confidence say that income data will definitely reflect the sustained living standards of a people. The second reason which poses a challenge to this assumption is that, both consumption and income data have to be generated item by item with varying recall periods.

And therefore, this may lead to potential errors. In the India for example, we carry out national sample survey organizations households our way for consumption expenditure. And of course, there is a reference period which is taken for collection of this data. And, this requires that the respondent recall, what is the amount of consumption that has taken place or occurred over a period of this reference period. And, then report and this and this recall itself leads to errors there is no certainty that this data is absolutely reliable.

The third challenge to this assumption is that a lot of consumption in the rural areas or even in the urban areas take place from non-market sources. So, not everything that is being consumed is bought from the market. People are not because markets are inefficient; markets are not functioning properly, in the context of developing countries particularly. So, not everything is bought from the market, some of it may come from homegrown production, some of it may come from social transfers, some of it may come as in the form of benefits from various kinds of NGOs. So, it is not straightforward.

So, usually in consumption expenditure surveys, what we do is we impute a market price to the amount consumed from different sources, if they are not coming from market sources. And, this imputation of a market price also leads to potential errors. So, the fact that much of the consumption is coming from non-market sources may also lead to errors. There are also challenges with respect to purchasing per parity rates across rural urban areas or countries and therefore, to be able to construct an equivalent income for households of different sizes and determination of poverty lines.

Anybody who is who has who is conversant with the idea of poverty lines and who has been who has seen how poverty lines are calculated estimated? And, how it has a problem of pegging it to certain year in a country knows that, how difficult it is to come up with a poverty line which is applicable to different regions within a country. For example, in India every state has a different poverty line and because of the amount of

data required to be able to come up with a more representative poverty line it is not updated annually.

So, there is a lot of time lag with respect to the estimates that come up based upon this poverty line. And, this is one of serious challenge with respect to this assumption that data on income and expenditure are better than other poverty line or poverty data. One of the things that has happened particularly with the progress of the human development discourse of the human development paradigm in the last 20 years or so, is that the coverage and quality of non monetary data has improved in the last 2 decades.

So, today we have a lot of nutrition indicators which we which was not available in the 1980s or the 1980s, we have a lot of education data, which is available we have a lot of data on political and civil rights that is available, but was not available earlier.

So, there is a lot of non-monetary data, which has come up and which can sufficiently reflect on the state of development of individuals and regions within a country. And, additionally regularized household service in developing countries have increased steadily since the 1980s, and when I was in the class on inequality, when we were discussing Branko Milanovic paper on does the world have a middle class and we were analyzing the world inequality vis-a-vis.

Inequality within countries of different countries, within countries we made reference to the fact that, because household surveys on income and expenditure is increasingly being available since the 1980s. It has now become possible to have a more representative indicator than just looking at average GDP growth or just a GDP per capita within a country.

So, because of the regularized household service in developed developing countries, we the data quality with regard to various aspects of development are now available. And that posed a serious challenge to the assumption the data for income and expenditure are better than other poverty data. And, one of the last points within this assumption also is that a number of efforts to strengthen the capacities of national statistical offices have led to an increase in sample and data quality. And in fact, I would argue to go to the website of the human resource development office of the human develop of the UNDP to be able to see the amount of data, that has been collected based upon the human development indicators.

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Assumption 5: It is easier to promote economic growth than human flourishing

❑ William Easterly, 2001 "The Lost Decades: Developing Countries' Stagnation in Spite of Policy Reform 1980-1998", Journal of Economic Growth, Vol 6, No 2. pp. 135-157.

"In 1980-98, median per capita income growth in developing countries was 0.0 percent, as compared to 2.5 percent in 1960-79. Yet...policies like financial depth and real over valuation, and initial conditions like health, education, fertility, and infrastructure generally improved from 1960-79 to 1980-98. Developing country growth should have increased instead of decreased, according to the standard growth regression determinants of growth. The stagnation seems to represent a disappointing outcome to the movement towards the 'Washington Consensus' by developing countries."

❑ World Bank's landmark 2005 report titled "Economic Growth in the 1990s: Learning from a Decade of Reform" observed that growth performance was uneven across developing countries and lower than anticipated.

❑ The 2008 Commission on Growth and Development examined the countries that achieved high and sustained growth to establish what had caused it, and found considerable diversity in strategies.

❑ The point is that although policy makers in the 1980s and 1990s had thought that the determinants of growth were clear – macroeconomic stability, trade liberalization, privatization, deregulation, financial liberalization and better public sector governance – growth proved to be 'elusive'.

Another assumption is that it is easier to promote economic growth than human flourishing, because it is easy to see how incomes move over a period of time? The focus should be on promoting economic growth than on other important indicators of human development. To this assumption the research coming from the World Bank itself busts this assumption that it is not so.

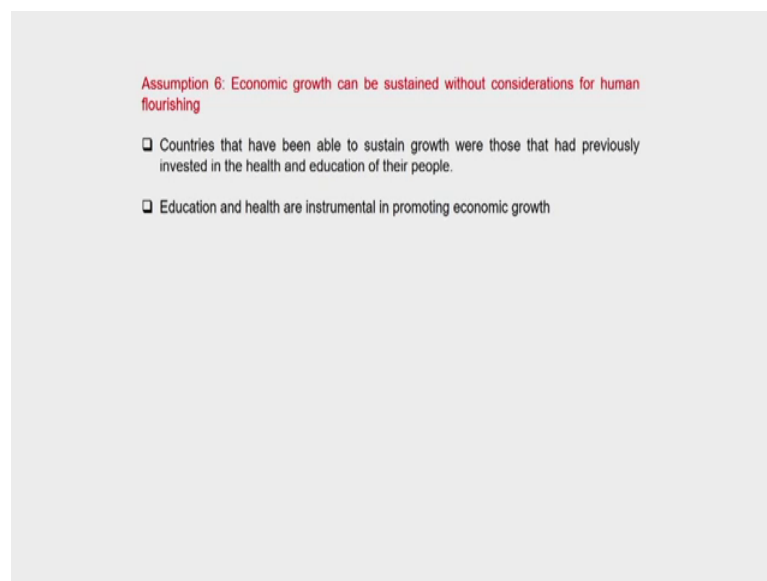
A classic paper on the last decades developing country stagnation in spite of policy reform 1980 to 1988, which appeared in the journal of economic growth and was written by William Easterly very succinctly points out the failure of the Washington consensus, and how in spite of the economic reforms process growth seems to have stagnated and rather deteriorated, while it should have increased.

So, the quote from his journal paper between the period 1980 to 1998 median per capita income growth in developing countries was 0 percent as compared to 2.5 percent between the period 60 to 79. And, yet policies like financial depth and real overvaluation and initial conditions like health education fertility and infrastructure, generally improved from 60 to 79 to 80 to 98. So, developing country growth should have increased instead of decreased according to the standard growth regression determinants of growth. And, this stagnation seems to represent a disappointing outcome to the movement towards the Washington consensus by developing countries.

A similar report brought out by World Bank in 2005 titled economic growth in the 1990s learning from a decade of reform, they observed that growth performance was uneven across developing countries and lower than anticipated. And in fact, even long back in 1989 with the publication of hunger and public action, where we have already seen that how countries have been able to provide basic needs to it is people in spite of not registering very high rates of economic growth.

So, the point is that although policymakers in the 1980s and 90s had thought that the determinants of growth were very clear. That macroeconomic stability trade liberalization, privatization, deregulation, financial liberation and better public sector governance are the determinants of economic growth. But, economic growth seemed to have proved elusive in the words of William Easterly for a majority of developing countries.

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The last assumption is with regard to that economic growth can be sustained without considerations for human flourishing. And, this is one of the important arguments put forward by the growth puritans who say that economic growth is more desirable and desirable, because it can be sustained.

And, we need not give much importance to human development indicators, but experience has shown us that countries that have been able to sustain growth were those that had previously invested in health and education of it is people for example, in South

Korea, that we had discussed in yesterday's class even Kuwait. That had invested a lot in it is people before going on to maintain very high rates of growth. And of course, it is it we know that education and health are instrumental in promoting economic growth.

So, to end today's class human flourishing and impact of policies and people's lives are the fundamental concerns of human development. This whole discourse and paradigm of human development puts people first, and when we are trying to conceptualize the development policy or even when we are trying to conceptualize the very concept of development.

There are certain questions that should come to our mind we should ask ourselves the question, what do we understand by the term development? We should draw a picture of our own conception of development. And, we should look at what are the normative frameworks within which our conceptualization of development fits. And, then we can go on to discuss to understand what are the main ideas and concepts that guide public policies in our own country to begin with.

So, to sum up this is an introductory this was an introductory class on human development, in which it is important to understand why normative frameworks matter? And, how the human development paradigm has diverged or created a niche for itself by, questioning the determinants of growth and questioning the normative framework within which economic growth was analyzed.

And, why it is important to look at different kinds of normative frameworks and then decide what policies should be framed accordingly. In the next class we will look at the connections between human development and capability approach. We will try to see what are the basic concepts that surround this concept of capability approach, which is at the root of the progress of the idea of human development.

Thank you.