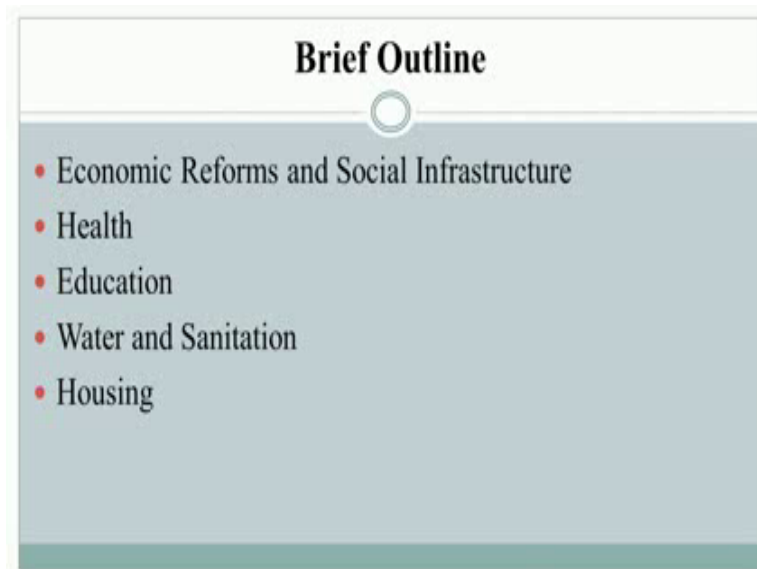


Infrastructure Economics
Department of Social Sciences
Prof. Nalin Bharti
Indian Institute of Technology Madras

Module - 08
Lecture – 31
Social Infrastructure in Post Reforms India

Let me begin with the new topic Social Infrastructure in Post Reforms India.

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The brief outline of this discussion is how India has realised the benefit of social infrastructure in the post economic reform era. After that we will also touch the different area of social infrastructures, such as education, before education we will first discuss the health, will have the discussion on water and sanitation, will have the discussion on housing and then I will conclude that how entire economic reform process has started the new type of infrastructure, especially in the social sector in the post-reform era in India.

So, economic reforms and social infrastructure is basically interlinked. The experiences from many newly industrialized countries as we have discussed in our previous lectures, that they were not really developed just because of the physical infrastructure growth, but they have really developed because of the social infrastructure, which they have developed in the field of health, education, sanitation and also in case of urban planning and utilities.

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Economic Reforms and Social Infrastructure

- Social indicators are equally important with other macroeconomic indicators.
- India realized the need for social infrastructure to compliment economic reforms.

So, when we say the social indicators, health is... varieties of health indicators are the part of the social indicators. Literacy, number of schools, number of hospitals and number of primary schools, number of high schools and these are the indicators which show that how really a country and economy is investing in these social sectors. The level of drinking water, safe drinking water, the way poor people are having their housing facility, how much government is really supporting for that and so, this type of indicators are basically the indicators where policy makers today find that, what improvement we have done from the past.

So, social indicators are equally important with other macroeconomic indicators as we have seen in many successful examples of the world today. These countries are not really developed, because of their constant development only in the physical infrastructure sector, but also in varieties of social sectors which led them in the globalised world.

So, India at the time of 1991 and after that there were many debates in the... among the economist that India is not only weak in terms of physical infrastructure, but India is constantly weak in the social infrastructure sector and if India has to really improve its identity at the global level, if India had to really catch up the benefits of the global integration, then in that case India has to really work upon the complementariness of the social infrastructure with the physical infrastructure.

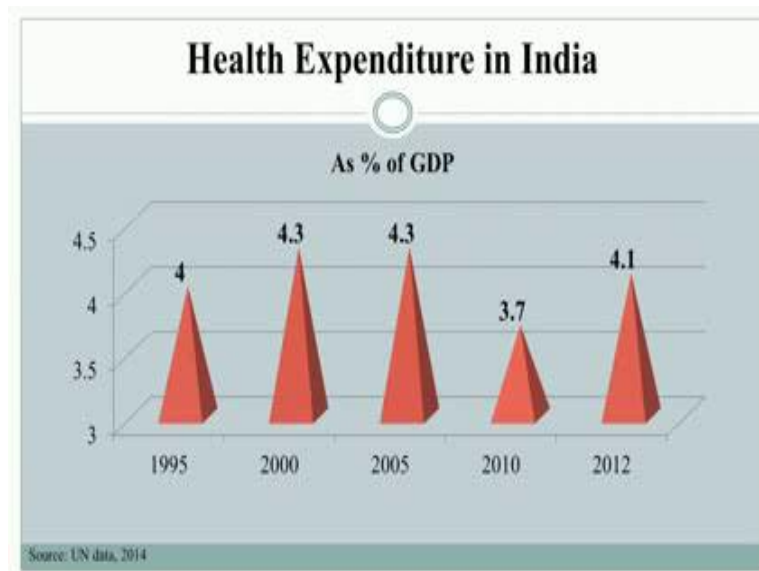
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Reforms in Health

- Revised National Health Policy 2002 was initiated by the Ministry of Health and Family Welfare, Govt. of India
- Public expenditure on health in India was only 33% in 2012
- Only 4.8% of total government spending was incurred on health
- India had only 0.7 physicians per 1000 population in 2012

So, reforms in the health sector, if we can see the reforms in health sector that Revised National Health Policy 2002 which was initiated a long time after the economic reforms process has really included many other steps. Only 4.8 percent of the total government expending was incurred on health. India had only 0.7 physicians per 1000 population in 2012 that shows a very bad level of contribution in the health sector.

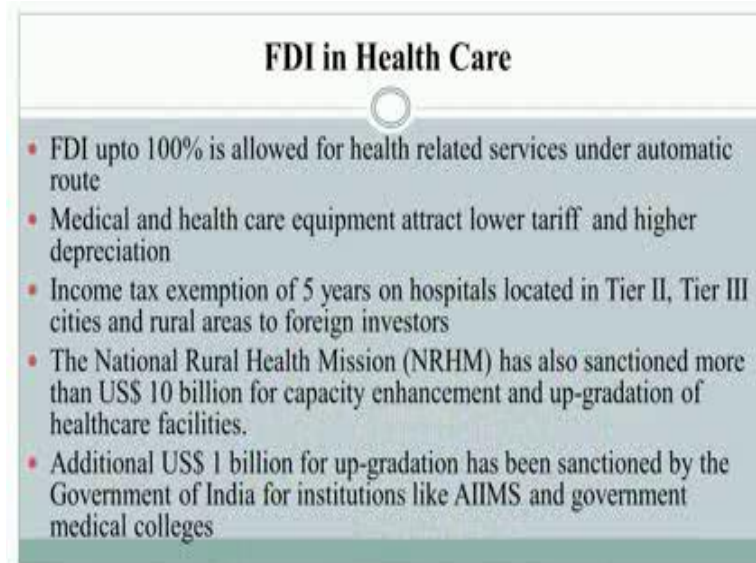
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If you can see the percentage of GDP expenditure on health, we are finding here from 1995 to 2012, the expenditure has little bit increased from the previous level of post

reform, where we have seen that the expenditure on health was sometime not even 1 percent, sometime around 2 percent. Now, we are finding that due to the more emphasize on the health expenditure, government has really realised to contribute more expenditure on the health and on an average, we are finding that it was from 1995 to 2012, we are finding that government has constantly worked upon such expenditure and it was around 4 percent.

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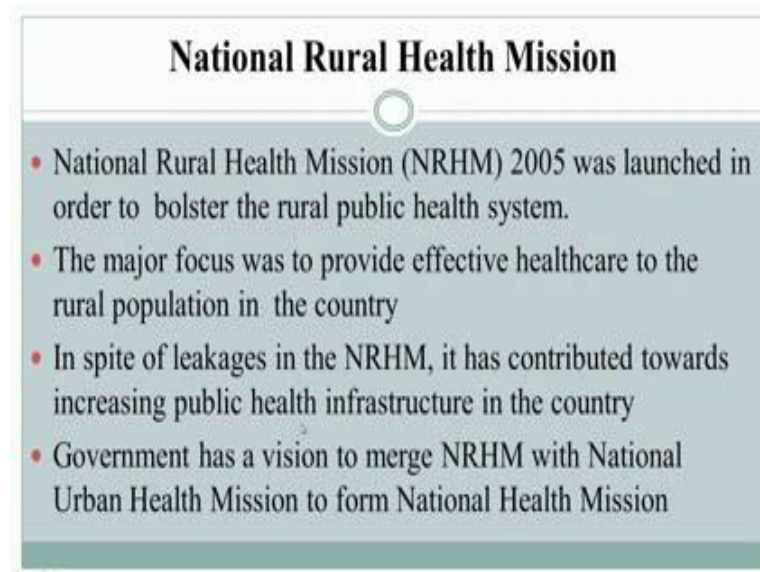
FDI in Health Care

- FDI upto 100% is allowed for health related services under automatic route
- Medical and health care equipment attract lower tariff and higher depreciation
- Income tax exemption of 5 years on hospitals located in Tier II, Tier III cities and rural areas to foreign investors
- The National Rural Health Mission (NRHM) has also sanctioned more than US\$ 10 billion for capacity enhancement and up-gradation of healthcare facilities.
- Additional US\$ 1 billion for up-gradation has been sanctioned by the Government of India for institutions like AIIMS and government medical colleges

So, FDI in health care, if we can see the one of the part of the reform 100 percent FDI is allowed for health related services under automatic route. Medical and health care recruitment attract lower tariff and higher depreciation, income tax exemptions for those health, those hospitals for the 5 years was also provided to the hospitals located in tier 2 and tier 3 cities and rural areas to foreign investor.

The National Rural Health Mission has also sanctioned more than 10 billion dollar for capacity enhancement and up-gradation of the healthcare facilities. At the same time, additional 1 billion dollar for up-gradation has been sanctioned by the government of India for institutions like AIIMS and government medical college.

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National Rural Health Mission

- National Rural Health Mission (NRHM) 2005 was launched in order to bolster the rural public health system.
- The major focus was to provide effective healthcare to the rural population in the country
- In spite of leakages in the NRHM, it has contributed towards increasing public health infrastructure in the country
- Government has a vision to merge NRHM with National Urban Health Mission to form National Health Mission

In case of health, we also find that National Rural Health Mission 2005 was launched in order to improve the rural public health system. At the same time the major focus was to provide effective health care to the rural population in the county through this scheme. In a spite of leakages in the NRHM, it has contributed towards increasing public health infrastructure in the country that is one of the big achievements for this country, because before that, there were really mismatched between the demand and supply of the rural infrastructure especially in the health sector. Government has a vision to merge NRHM with National Urban Health Mission to form the National Health Mission.

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Reforms in Education

- Government of India has decided to create more than 100 community colleges in coming years.
- Public Private Partnerships (PPP) and Tax concessions are provided in education sector
- Foreign Educational Institution (Regulation of Entry and Operation) Bill 2010 has been introduced to open doors for reputed foreign universities and attract investments in education sector.

After discussing health, we cannot really ignore the government of India which has decided to create more than 100 community colleges in coming years. A public private partnership and tax concessions are provided in education sector and Foreign Educational Institutions Bill 2012 has been also introduced to open doors for reputed foreign universities and to attract the investment in education sector.

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Year	Public Expenditure (% of GDP)
1991-92	3.80
2000-01	4.28
2005-06	3.45
2008-09	3.78

Source: MHRD, Govt. of India

Public expenditure on education, if we can see here compared to 1991-1992 which was 3.8 percent has increased in 2000 to 2001 at the level of 4.28. In 2005 and 2006, we found the investment has increased at the level of... decrease little bit at the level of 3.45 and 2008-09 again decreased compared to the 2001 level 3.78. This expenditure also shows that on health and education, India has almost equal weightage and we find that close to 4 percent expenditure as a part of GDP is on health and expenditure in the post economic reform era. Literacy rate has improved not only in rural sector, but also in the urban sector.

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Literacy Rate			
Year	Rural (%)	Urban (%)	Total (%)
1991	36	67.2	52.21
2001	59.4	80.3	64.83
2011	67.8	84.1	74.04
% Increase in in 2011 over 2001	14	5	14

Source: MOSPI, Govt. of India

The India's overall literacy rate which we can see here in 1991, we find that the overall literacy rate was 52.21 percent, in that 36 percent in rural area and 67 percent in urban area. While in 2001, we find that only in rural area, the literacy rate was around 59.4 while in urban area, it was 80.3 percent. The total literacy rate has improved from previous level of 52 percent to 64 percent.

While in 2011, we do find that the literacy rate has improved in total 74 percent around and while there is a improvement in the urban literacy at the level of 84 percent and in rural literacy, it has around 67 percent. So, percentage increase in 2011 over 2001, if one can see that we have the fast increase in literacy due to the various programmes in rural India, that is around 14 percent, in urban it is around 5 percent, the total percentage is 14.

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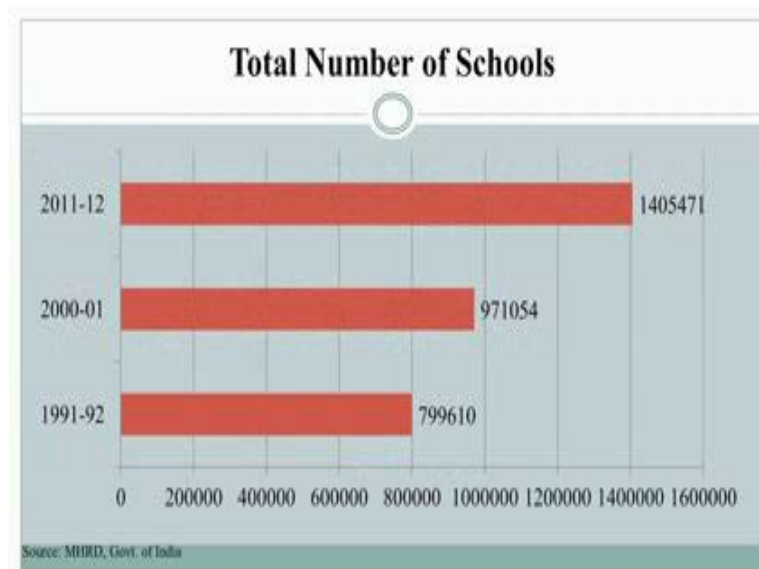
RTE Act 2009

- The Main objective of The Right of Children to Free and Compulsory Education (RTE) Act, 2009, was
- to provide free and compulsory education of all children in the age group of 6-14 years
- It lays down the norms and standards relating to buildings and infrastructure at school level

Read more on <http://mhrd.gov.in/rte>

The credit goes to recent act Right to Education Act 2009. The main objective of the Right to Children to Free and Compulsory Education Act 2009 was to provide free and compulsory education for all children in the age group of 6 to 14 years. It also lays down the norms and standards relating to building and infrastructure at school level. Apart from other norms about how to provide the education to the children at the gross root level.

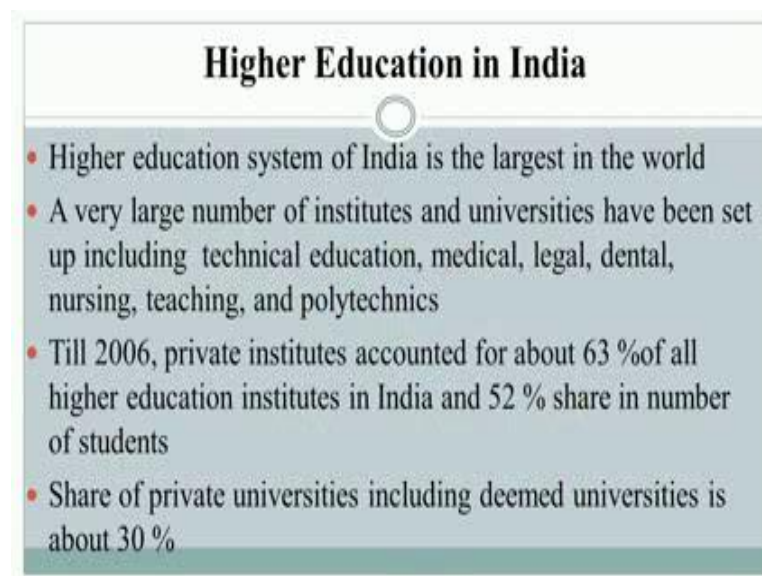
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The numbers of schools, if you can see in 2011 and 2012 compared to 1991 and 1992 we do find that the improvement is in a much better way; almost it is close to 80 percent growth in the number of schools in reformed India. So, when we have started reforms and when we are little more mature in our reform, we find out that the number of schools has really increased and this is because of the government constant expenditure as a part of GDP in education.

So, in case of higher education, higher education system of India is the largest in the world, a very large number of institutes and universities have been also setup including technical education, medical, legal, dental, nursing, teaching and polytechnics.

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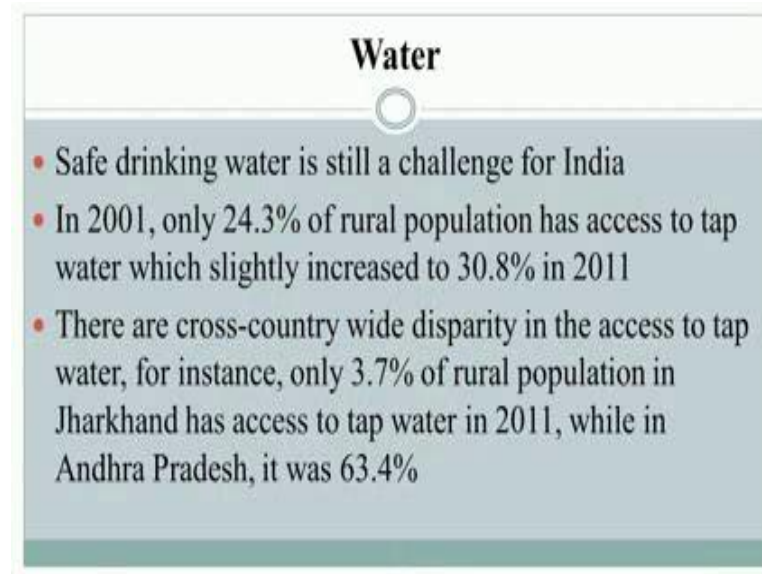
Higher Education in India

- Higher education system of India is the largest in the world
- A very large number of institutes and universities have been set up including technical education, medical, legal, dental, nursing, teaching, and polytechnics
- Till 2006, private institutes accounted for about 63 % of all higher education institutes in India and 52 % share in number of students
- Share of private universities including deemed universities is about 30 %

Till 2006, private institutes accounted for about 63 percent of all higher educational institutes in India and 52 percent share in number of students. So, the share of private universities including deemed universities is about 30 percent in the higher education in India. This shows a very better, what are very better education facility in India.

Now, coming ahead, going ahead to the water and other facilities, other infrastructure we are finding here, that the safe drinking water is one of the major challenge for India, not in the reform India, but from the pre reform and after the independence.

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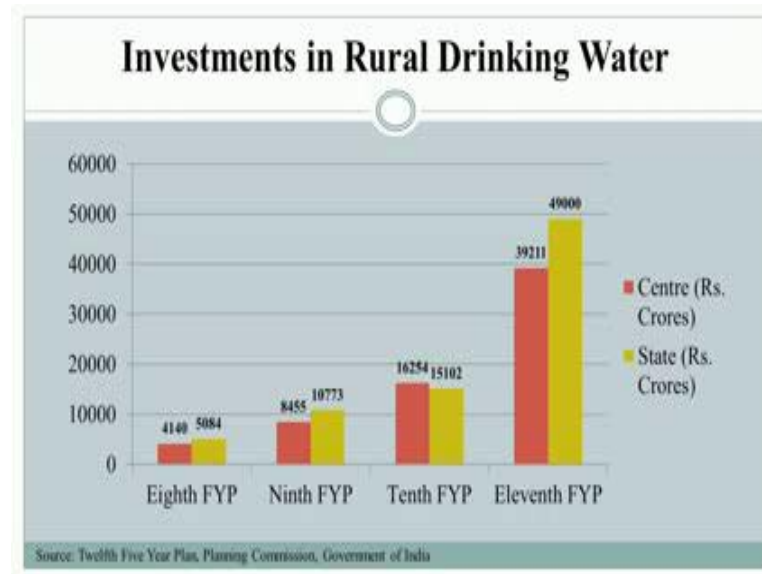
Water

- Safe drinking water is still a challenge for India
- In 2001, only 24.3% of rural population has access to tap water which slightly increased to 30.8% in 2011
- There are cross-country wide disparity in the access to tap water, for instance, only 3.7% of rural population in Jharkhand has access to tap water in 2011, while in Andhra Pradesh, it was 63.4%

And we also find that, India being a vast economy and having a big populated economy is just still facing this challenge as one of the bigger challenge. In 2001, only 24.3 percent of rural population has access to tap water, which slightly increased to 30.8 percent in 2011. There are cross-country wide disparity in the access to tap water. For instance only 3.7 percent of rural population in Jharkhand has access to tap water in 2011, while in Andhra Pradesh it was 63.4 percent.

So, we find that there is a wide range of disparity in terms of getting the very important part of our life that is water. And, if the statistics of Jharkhand is 3.7 that is one of the alarming percent for India, because this is one of the trivial state, where we can see that the public expenditure has or the private support has not really worked especially in the water sector, while in a state like Andhra Pradesh or in a state like other literate and other developed states, the condition of, even in sanitation and water is much better.

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So, investment in rural drinking water, if we can see the contribution of a state and centre in 11th 5 year plan was much by the state, less by the centre. While in 10th plan, we find that the centre has more provided fund compared to the state. In this particular slide, the red colour shows the central government expenditure in crore rupees, while the yellow colour shows... bar diagram shows the state level expenditure in rural drinking water.

Compared to 8th 5 year plan, where we have seen that 8th and 9th we are seeing that the state government has really more expenditure than the central government. Only the 10th 5 year plan we are seeing here that only central government has more expenditure compared to the state government work. In all 8th, 9th, 10th and plan and 11th plan, we are finding that more drinking water facility expenditure on more drinking water facilities provided by the state government.

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Sanitation

- Providing sustainable sanitation is one of the major challenges before India
- The Indian Government is committed towards achieving MDGs and universal sanitation coverage in the country by the year 2022
- The current rural sanitation coverage is only 32.7 %
- New strategies and approaches have been formulated by the Ministry of Drinking Water and Sanitation
- Nirmal Bharat Abhiyan (NBA) initiated in April 2012 for achieving total sanitation
- NBA is a community-led and people-centered approach based on post-achievement incentives

So, after this we can also see here the providing sanitation facilities. Providing substantial sanitation is one of the major challenge today, also one of the major challenges was at the time of economic reform also. So, the Indian government is committed towards achieving Millennium Development Goal and universal sanitation coverage in the country by 2022. The current rural sanitation coverage is only 32.7 percent that is very low figure. At the same time new strategies and approaches have been formulated by the ministry of drinking water and sanitation.

Nirmal Bharat Abhiyan initiated in April 2012 for achieving total sanitation. Nirmal Bharat Abhiyan is a community-based and people centred approach based on the post achievement incentives. But, at same time we also find out that there are initiatives by the government of India today in the name of Swachh Bharat Abhiyan and this is also this is again the part of the previous steps taken by the previous government.

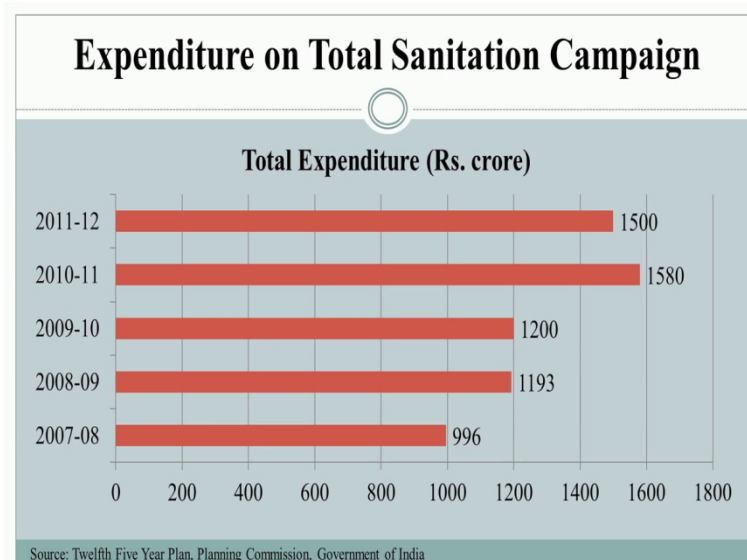
But, this particular sanitation scheme again needs proper attention at the state level and proper support by the state level, at the same time a private infrastructure support is also needed. Because government alone really take care of the entire expenditure and entire coverage of the sanitation for the vast population of India.

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So, total sanitation campaign was launched in 1999, the total sanitation campaign increased sanitation of coverage from 22 percent in 2001 to 31 percent in 2011. The Gram Panchayats have been encouraged by introducing Nirmal Gram Purashkar in 2005 that attended 100 percent sanitation coverage. This progress; however, is unsatisfactory still 600 million people in India are under open defecation.

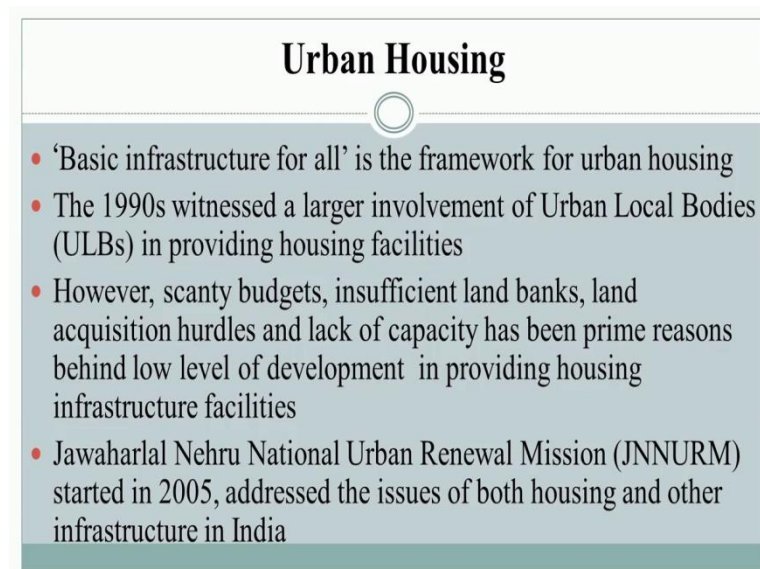
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So, expenditure on total sanitation campaign, if we can see here, we will have a very increasing data compared to 2007 and 2008. We are finding that in 2008-2009 we have

much increased data; again we have increased expenditure in 2009-2010. We have a very high level of expenditure in 2010-2011, but little less in 2011 and 2012. So, after this week and also see here the basic infrastructure for all is the framework for urban housing in which the 1990's witnessed a large involvement of urban local bodies in providing housing facilities.

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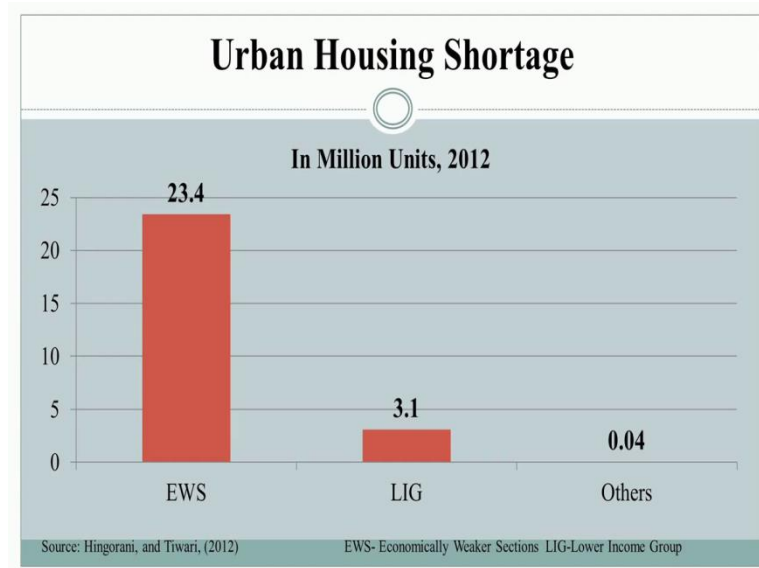


Urban Housing

- 'Basic infrastructure for all' is the framework for urban housing
- The 1990s witnessed a larger involvement of Urban Local Bodies (ULBs) in providing housing facilities
- However, scanty budgets, insufficient land banks, land acquisition hurdles and lack of capacity has been prime reasons behind low level of development in providing housing infrastructure facilities
- Jawaharlal Nehru National Urban Renewal Mission (JNNURM) started in 2005, addressed the issues of both housing and other infrastructure in India

However, a scanty budget and insufficient land banks and acquisitions hurdles and lack of capacity has been prime reasons behind low level of development in providing housing infrastructure facilities. Jawaharlal Nehru National Urban Renewal Mission started in 2005 addressed the issue of both housing and other infrastructure in India.

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Urban housing shortage if we can see here that in million units 23.4 for EWS and at the same time 3.1 million units and others 0.04 million units in 2012.

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To Conclude

- Public Expenditure on health and education is not adequate for meeting the growing demands of people
- Providing safe drinking water, sanitation and urban housing are still a big challenge for India
- Huge investments are needed from the private sector, both domestic as well as foreign

So, to conclude this, public expenditure on health and education is not adequate for meeting the growing demands of the people. We need a better public private partnership here, a different models to really control the huge demand especially in the social infrastructure sector, such as the providing safe drinking water, sanitation and urban housing, which is still a big challenge for India. So, huge investments are needed from

the private sector, both domestic private sector, as well as the foreign or international private sector.

So, India which is really looking for a better way of reforming the economy, this type of reforms cannot ignore the expenditure on the social sector and at same time when we say expenditure... total expenditure, this total expenditure is not only the private expenditure, but it is also the combination with the public and private both. So, when we are getting the investment in the PPP mode, especially in the physical infrastructure development we do have very less projects in the social infrastructure development projects.

So, government may have to think again for providing a new type of avenues for those investors in coming days, so that more better investment may be received. At the same time the better utilisation and better owners attempt is needed to really have a better India and a better Swachh Bharat.

Thank you.