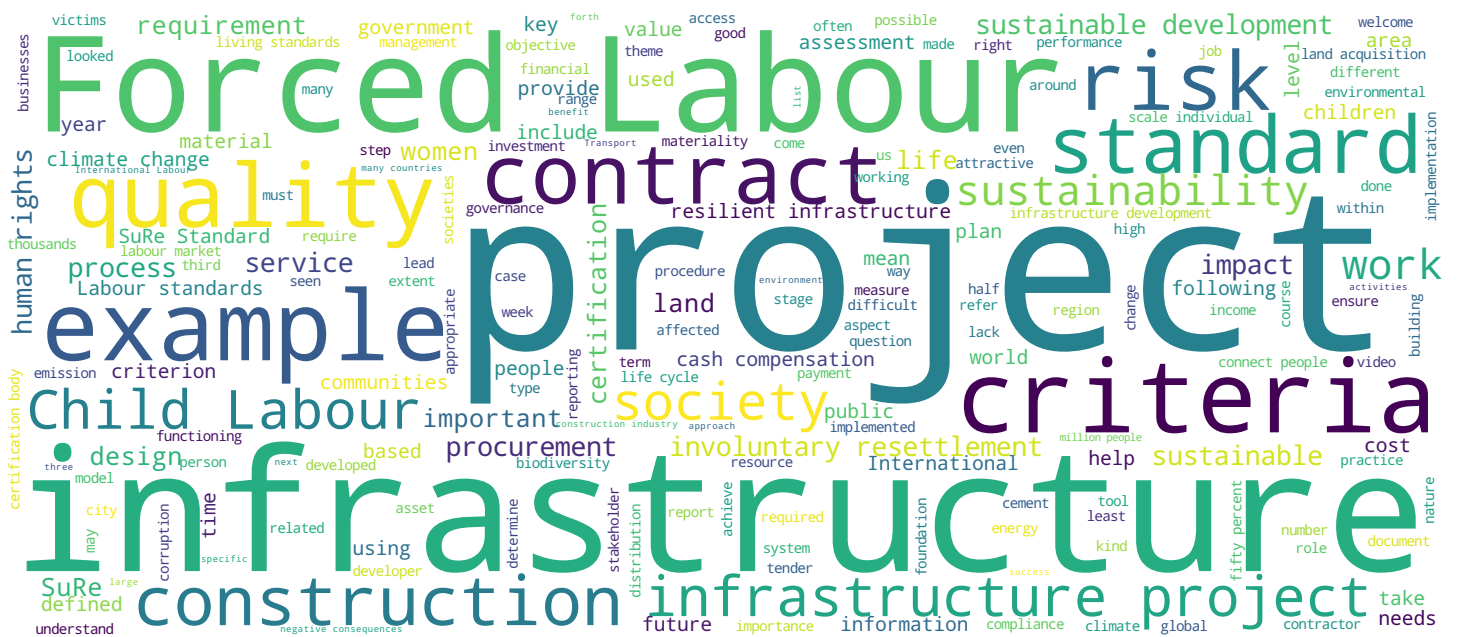


Prof. Dr. Bruno Oberle & Dr. Katharina-Maria Rehfeld





- Introduction
- Infrastructure provides Foundations
- Infrastructure contributes to a sustainable society
 - Challenges: Forced Labour
 - Challenges: Involuntary Resettlement
- Conclusion

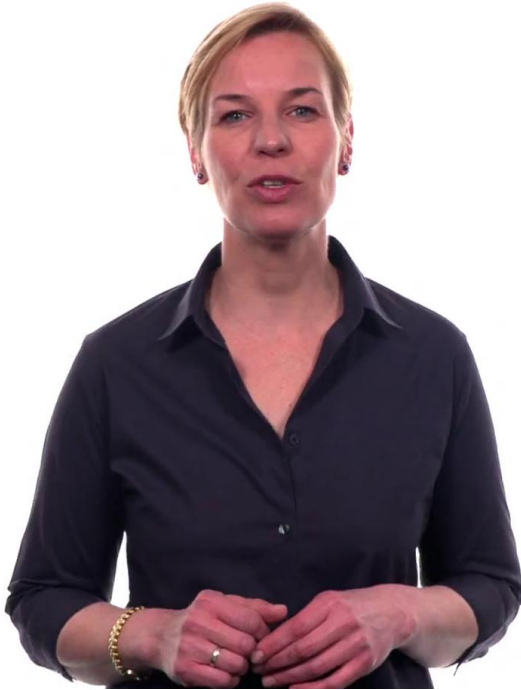
Hello and welcome to week two of our course. This week we will look at the social dimensions of infrastructure and discuss positive and negative impacts infrastructure might have on different levels and areas of the society.

Notes

Summary



0m 05s



- Considerations on social aspects of infrastructure arise from its very nature:
 - Infrastructure helps to connect people
 - Supports better quality of life
 - Helps to increase income and living standards

Considerations on social aspects of infrastructure arise from its very nature.

Notes

Summary



"Infrastructure is the sum of all physical assets, equipment and facilities or the basic facilities services installations needed for the functioning of a community or society"

Let's recall the definition of infrastructure which we introduced in week one. Infrastructure is a sum of all physical assets, equipment or the basic facilities services and installations needed for the functioning of a community or a society.

Notes

Summary





- Considerations on social aspects of infrastructure arise from its very nature:
 - Infrastructure helps to connect people
 - Supports better quality of life
 - Helps to increase income and living standards

A functioning and resilient infrastructure is the foundation of every successful community. Infrastructure operates within the society. It provides a foundation for ensuring modern socio-economic activities and for satisfying the needs of societies. That is, infrastructure helps to connect people, supports better quality of life and helps to increase income and living standards.

Notes

Summary



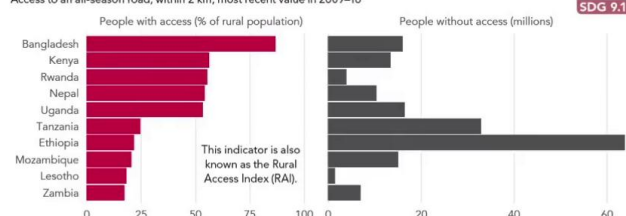
0m 40s



- Infrastructure connects and gives access to important services and markets.

Infrastructure supports communities. Without access to an all-season road, people are cut off from crucial services and markets.

Access to an all-season road, within 2 km, most recent value in 2009–16



Note: Data available for only 10 countries.

Source: World Bank 2016. <http://hdl.handle.net/10986/25187>

World Bank (2018): SDG Atlas 2018

<http://datatopics.worldbank.org/sdgateas/SDG-09-industry-innovation-and-infrastructure.html>

In the following, we will discuss foundations that are provided by infrastructure for the society. Infrastructure connects and gives access to important services and markets; roads, bridges, ports, information technology, electrical grids and so on and so forth. They connect people, businesses and organizations, support the cooperation and communication. Looking at roads for example is only one element of infrastructure; the anticipated result chain is usually as follows. Improvement of physical accessibility would contribute to increased travel demand to markets. Schools and health services; this would in turn contribute to improved education, better health and increased business opportunities.

Notes

Summary

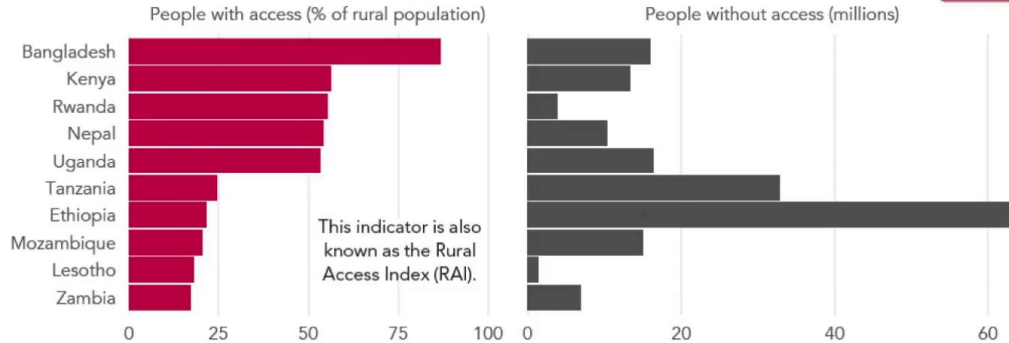


1m 07s

Infrastructure supports communities. Without access to an all-season road, people are cut off from crucial services and markets.

Access to an all-season road, within 2 km, most recent value in 2009–16

SDG 9.1



Note: Data available for only 10 countries.

Source: World Bank 2016. <http://hdl.handle.net/10986/25187>

World Bank (2018): SDG Atlas 2018

<http://datatopics.worldbank.org/sdgateas/SDG-09-industry-innovation-and-infrastructure.html>

Data published by the World Bank, however, exemplifies that in most of the developing countries only about fifty percent or even less of the population has access to all-seasoned roads within the realm of two kilometers away from its home. However, without access to an all-season road people are cut off from crucial services and markets.

Notes

Summary

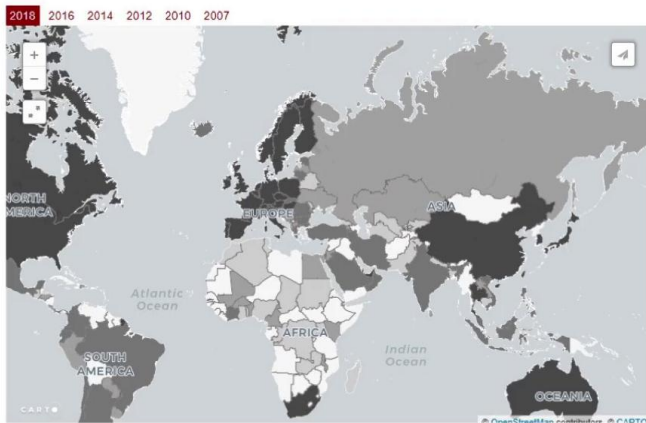


1m 57s

Infrastructure provides Foundations

- Infrastructure contributes importantly to a better quality of life.

Global Rankings 2018



World Bank (2018): Global Rankings
<https://lpi.worldbank.org/international/global?order=Infrastructure&sort=asc>

Country	Year	LPI Rank	LPI Score	Customs	Infrastructure	International shipments	Logistics competence	Tracking & tracing	Timeliness
Germany	2018	1	4.20	4.09	4.37	3.86	4.31	4.24	4.39
Japan	2018	5	4.03	3.99	4.25	3.59	4.09	4.05	4.25
Sweden	2018	2	4.05	4.05	4.24	3.92	3.98	3.88	4.28
Netherlands	2018	6	4.02	3.92	4.21	3.68	4.09	4.02	4.25
Austria	2018	4	4.03	3.71	4.18	3.88	4.08	4.09	4.25
Singapore	2018	7	4.00	3.89	4.06	3.58	4.10	4.08	4.32
United States	2018	14	3.89	3.78	4.05	3.51	3.87	4.09	4.08
United Kingdom	2018	9	3.99	3.77	4.03	3.67	4.05	4.11	4.33
Switzerland	2018	13	3.90	3.63	4.02	3.51	3.97	4.10	4.24
United Arab Emirates	2018	11	3.96	3.63	4.02	3.85	3.92	3.96	4.38
Finland	2018	10	3.97	3.82	4.00	3.56	3.89	4.32	4.28
France	2018	16	3.84	3.59	4.00	3.55	3.84	4.00	4.15
New Zealand	2018	15	3.88	3.71	3.99	3.43	4.02	3.92	4.26
Belgium	2018	3	4.04	3.66	3.98	3.99	4.13	4.05	4.41
Hong Kong, China	2018	12	3.92	3.81	3.97	3.77	3.93	3.92	4.14

Infrastructure contributes importantly to a better quality of life. Numerous studies analyze the quality of infrastructure of countries, regions or cities. By establishing rankings based on the quality of infrastructure, these studies generally assumed that the quality of life increases with more elaborate and developed infrastructures. This study for example ranks more than hundred cities according to the quality of infrastructure.

Notes

Summary





- Selection of estimations that take into account various factors, among which infrastructure plays a vital role.
- OECD Better Life Index
 - <http://www.oecdbetterlifeindex.org>
- Quality of Life Ranking
 - https://www.numbeo.com/quality-of-life/rankings_by_country.jsp
- MERCER Quality of Living Survey
 - <https://www.mercer.com/newsroom/2018-quality-of-living-survey.html>

This is also reflected by indices such as the OECD better living index, the Quality of Life index or the MERCER quality of living ranking. Such indices are empirically estimations which take into account various factors among which infrastructure plays a vital role.

Notes

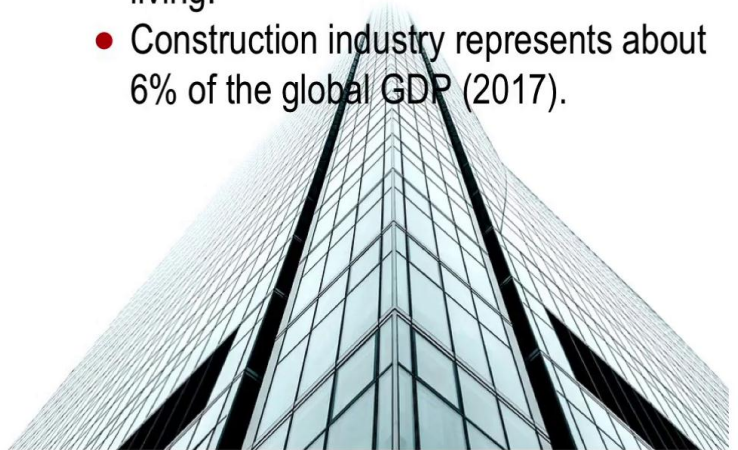
Summary



2m 52s



- Infrastructure creates jobs, raises income level and thereby standards of living.
- Construction industry represents about 6% of the global GDP (2017).



We understand that the lack of infrastructure leads to cutbacks or limitations for the society and communities. However, at the same time the existence of infrastructure might have undesirable work consequences too. Roads do not only connect people, they also mean more traffic, noise and dust during the construction and implementation phase. Force relocation are just another example of negative consequences of infrastructure projects. Wind turbines and electrical towers can lead to falling property prices. A report from Transport for quality of life from 2008 looked at the impact of a range of road construction projects on local residents in the UK. They found that the distance at which traffic noise caused the disturbances for residents, was heavily underestimated by developers and much greater than actually assumed. Another benefit of infrastructure development is the creation of jobs and income which can lead to higher living standards. The existence of a good infrastructure leads to a higher quality of life with then, it's the more economic success and this is more attractive to businesses and organizations and therefore, people who want to work for those businesses and organizations.

Notes

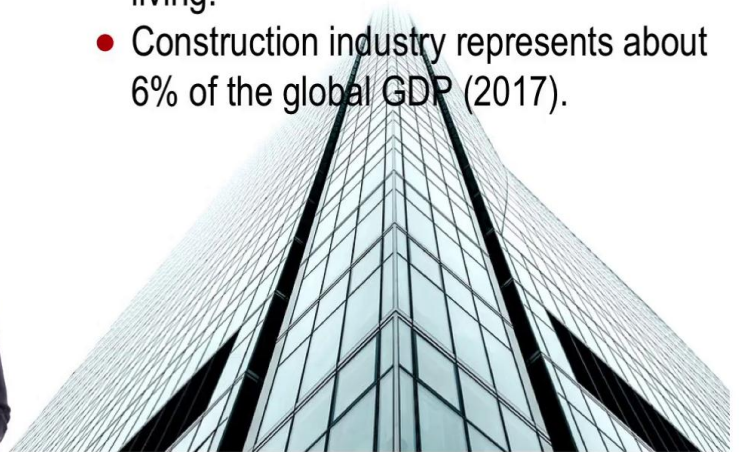
Summary



3m 12s



- Infrastructure creates jobs, raises income level and thereby standards of living.
- Construction industry represents about 6% of the global GDP (2017).



A poor infrastructure on the other hand, leads to lower quality of life and therefore, a lower attractiveness for both people and businesses. Especially a city's or region's sanitation system which includes waste removal, infused infrastructure, levels of infectious disease, air pollution, water availability and quality, can have dramatically negative effects on its societies and communities. Finally, jobs are being created because of the development, operation and maintenance of the infrastructure itself. The construction and infrastructure sector is an industry in its own. The construction sector is in many regions and countries among the largest economic sector, a major employer and an important contributor to the gross domestic product. According to the International construction market survey, the construction industry represents six percent of the global GDP.

Notes

Summary



4m 36s

Infrastructure contributes to a Sustainable Society Global21



Human rights and the SDGs



More than 90 % of the Sustainable Development Goals (SDGs) targets are linked to international human rights and labour standards.

The Danish Institute for Human Rights (2017)
<https://www.humanrights.dk/our-work/sustainable-development/human-rights-sdgs>

The sustainability paradigm is deeply rooted in values such as fairness, equality and non-discrimination. Sustainable development aims at social inclusion and should serve all people, requires that economic benefits are widely shared and that everybody should have a chance for proper health care and education, to only name a few social targets of sustainable development. In essence, these are core human rights and labour standards. The Danish Institute of Human Rights points out that there is a high degree of convergence between human rights and the 2030 agenda for sustainable development. Ninety percent of the sustainable development goal targets are linked to International Human rights and Labour standards. In other words, sustainable development can contribute substantially to the realization of human rights and Labour standards and so can sustainable and resilient infrastructure development.

Notes

Summary



5m 38s

Table 2.3. Estimated number of victims of forced labour exploitation in the private economy by sector and region

Region	Domestic work	Agriculture, forestry and fishing	Manufacturing, construction, mining and utilities	Total
Asia Pacific	2,900,000	1,040,000	1,000,000	7,900,000
Latin America and the Caribbean	150,000	360,000	90,000	2,000,000
Africa	170,000	1,130,000	50,000	2,500,000
Middle East	270,000	10,000	160,000	400,000
Central and South-Eastern Europe and CIS	100,000	470,000	550,000	1,100,000
Developed Economies and EU	30,000	530,000	460,000	1,000,000
Total	3,440,000	3,530,000	7,170,000	14,200,000

Source: ILO

Components may not add up to the total because of rounding

International Labour Organisation (2014)

https://www.ilo.org/wcmsp5/groups/public/-/ed_norm/-/declaration/documents/publication/wcms_243391.pdf

Forced Labour Definition:
 "All work or service which is exacted from any person under the threat of a penalty and for which the person has not offered himself or herself voluntarily"

Throughout the complete life cycles, sustainable and resilient infrastructure has to meet human rights and International Labour standards. In the following we will specifically introduce aspects such as Forced Labour and involuntary resettlement. Forced Labour takes different forms including debt bondage, trafficking and other forms of modern slavery. The victims are often the most vulnerable of our societies. These are women and girls forced into prostitution, migrants trapped in debt bondage or farm workers kept there by clearly illegal tactics and paid little or even nothing. Although Forced Labour is universally condemned, the International Labour Organization estimates that 20.9 million people around the world are still in Forced Labour, more than half of whom are women and girls. Shockingly, the available data indicate that numbers of people in Forced Labour are not decreasing but even seem to be on the rise. In article two of the ILO's Forced Labour convention from 1930, Forced or Compulsory Labour is defined as, "All work or service which is exacted from any person under the threat of a penalty and for which the person has not offered himself or herself voluntarily".

Notes

Summary



6m 47s

Table 2.3. Estimated number of victims of forced labour exploitation in the private economy by sector and region

Region	Sectors			Total
	Domestic work	Agriculture, forestry and fishing	Construction manufacturing, mining and utilities	
Asia-Pacific	1,900,000	1,040,000	4,970,000	7,900,000
Latin America and the Caribbean	650,000	360,000	190,000	1,200,000
Africa	570,000	1,130,000	840,000	2,500,000
Middle East	270,000	10,000	160,000	400,000
Central and South-Eastern Europe and CIS	30,000	470,000	550,000	1,100,000
Developed Economies and EU	30,000	530,000	460,000	1,000,000
Total	3,440,000	3,530,000	7,170,000	14,200,000

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International Labour Organisation (2014)

https://www.ilo.org/wcmsp5/groups/public/---ed_norm/---declaration/documents/publication/wcms_243391.pdf

It can occur when work is forced upon people by state authorities, by private enterprises or by individuals. That means Forced Labour covers a wide range of cohesive labour practices which occur unfortunately, in all types of economic activity and in all parts of the world. Based on a statistical estimation, the ILO assumes that more than seven million people are victims of Forced Labour in the construction, manufacturing, mining and utility sector. The ILO emphasizes that this distribution should be seen and treated as the working hypothesis was the sole purpose of estimating the illicit profits from Forced Labour. Nevertheless, this distribution was assessed with existing estimates and ILO knowledge on the patterns of Forced Labour worldwide and gives an idea about the potential number of victims with regard to the construction industry.

Notes

Summary



8m 10s



- Forced Labour is often a consequence of discrimination.
- Barriers and discrimination can compel parents to the labour of their children.
- Global number of children in child labour has declined.
- Yet, the ILO assumes that there are still 168 million children in child labour.
- Child labour deprives children of their childhood, their potential and their dignity.

Often Forced Labour is a consequence of discrimination. Millions of women and men around the world are denied access to jobs or offered lower pay simply because of the ethnicity, status, religion, sex, sexual orientation and so on and so forth. The list of aspects why people are discriminated for, is long. The discrimination of certain groups faced in the labour market makes them highly vulnerable to abuses such as Forced Labour. Barriers to decent jobs often compare parents to the labour of the children to make ends meet. Significant progress has already been made to avoid the elimination of Child Labour in the last two decades; however, many challenges remain. Overall the global number of children in Child Labour has declined by one-third since the year 2000. Yet the ILO assumes that there were still 168 million children in Child Labour where half of them around 85 million are in hazardous work. Child Labour is defined as work that deprives children of the childhood, the potential and the dignity and that it is harmful to the physical and mental development of the child. Child Labour, therefore, refers to work that prevents children from the opportunity to end school or to attend school regularly or forces them to leave school prematurely, for example.

Notes

Summary



9m 09s



- Forced Labour is often a consequence of discrimination.
- Barriers and discrimination can compel parents to the labour of their children.
- Global number of children in child labour has declined.
- Yet, the ILO assumes that there are still 168 million children in child labour.
- Child labour deprives children of their childhood, their potential and their dignity.

In its most extreme forms Child Labour involves children being enslaved, separated from the families, exposed to serious hazards and illnesses or left to live for themselves often on the street of large cities and often at a very early age.

Notes

Summary



10m 45s

Involuntary resettlement is one of the highest social risks for the sustainability of infrastructure as it might disrupt economic and socio-cultural structures.

People who are displaced might undergo tremendous stress.



So discrimination can have many manifestations, it is often subtle and insidious, undermining people's dignity in their future. A key to the success of promoting equality in the labour market is the active involvement of workers, organizations, employers' organizations and other stakeholders. Infrastructure development often requires the acquisition of privately owned land by the government. Every country in the world has legislations which enable their government to appropriate private property for public purposes. Such land acquisition often results in involuntary resettlement. Involuntary resettlement can refer to displacement and resettlement. These are two distinct but related processes. Displacement is a process by which development projects cause people to lose land or other assets or access to resources. This may result in residential dislocation, loss of income with other adverse impacts. Resettlement generally refers to the process by which those affected are assisted in the efforts to improve or at least to restore the incomes and living standards. Involuntary resettlement is one of the highest social risks when it comes to ensuring that the infrastructure project is sustainable as it might disrupt economic and socio-cultural structures. People who are displaced might undergo tremendous stress.

Notes

Summary





- Challenges when applying monetary compensation:
 - Evaluating the worth of property to determine the amount of payment
 - The timing of the payment
 - Determining additional noncash compensation where cash alone is not appropriate.
 - Compensation money not enough to purchase a comparable home/land.
 - Cash compensation might disproportionately favour certain interest groups.

When involuntary resettlement is unavoidable, a resettlement plan must be prepared to ensure that the affected people receive fair and adequate compensation and rehabilitation. Those plans also have to acknowledge that people might be differently affected by land acquisition. The extent and the implications of involuntary resettlement are diverse and variable depending on the nature of the project and density of population being affected. The size of a deplace population may vary from only a few thousands to tens of thousands of people. Most countries have land acquisition laws that require prompt and adequate monetary compensation for persons who lose their land and property. However, cash compensation has many negative consequences, particularly for tribal and other marginal populations. Tribal economies are in large part non-monetized based on reciprocal exchange of goods and services. Therefore, people are not well accustomed to managing cash. There were, however, significant issues related to monetary compensation; first, evaluating the voice of property to determine the amount of payment, second, the timing of the payment and third, determining non-cash compensation where cash alone is not appropriate.

Notes

Summary



12m 41s



- Challenges when applying monetary compensation:
 - Evaluating the worth of property to determine the amount of payment
 - The timing of the payment
 - Determining additional noncash compensation where cash alone is not appropriate.
 - Compensation money not enough to purchase a comparable home/land.
 - Cash compensation might disproportionately favour certain interest groups.

In many countries market value of the land being acquired is used as a determining factor in calculating compensation. However, a displaced person may find it difficult to acquire comparable land with the compensation money because of limited land market or higher value of land in the relocated area where prices can double or even triple almost overnight. Finally, cash compensation just proportionally benefits some interest groups such as landlords. Landlords profit more from relocation because much of the land is either sharecropped or remains uncultivated making the cash compensation more attractive to rich farmers who then reinvest in the non-agricultural sector. Landless labourers are often the hardest hit group in the relocation process due to the lack of ownership and entitlement to land. In many countries, such as Bangladesh, India and Pakistan, landless people constitute fifty percent of the total rural population. In such good circumstances there is often customary recognition of use right but cash compensation to landless displaced is always inadequate.

Notes

Summary



14m 10s



Planning resettlement must begin early on in a development project. It should be based on information as accurate as possible about the scale of displacement impacts and consequences on the life and livelihood of the people, the extent of loss of assets and destruction of infrastructure and services. Since completely avoiding dislocation is sometimes difficult, the importance of carefully assessing the scale of disruption and preparation of a plan for resettlement can hardly be overemphasized. The key to any successful resettlement program lies in defining and development mechanisms of people's participation in planning and implementation. This will further facilitate social cohesion and the development of a sense of community among the resettlers. We can see from our discussion that infrastructure is not a luxury that can be implemented once a country is developed; it is rather a necessity for supporting and creating a sustainable environment in which the society can thrive.

Notes

Summary



15m 28s