Yet, policymakers in the developing countries are so inclined to improvement in the broad general infrastructure, i.e., enhanced supply of electricity, improvement in roads, improvement in port facilities, etc. The development of critical sector-specific infrastructure are largely overlooked. Failure to address sector-specific infrastructure problems leads to a scenario where a large number of potential inclusive-growth enhancing sectors fail to enjoy the benefit from the improvement in broad general infrastructure, and thus ends up with ‘entitlement failure’. The second article on “How does improvement in infrastructure affect economic growth?” emphasizes on how infrastructure plays a pivotal role in stimulating long-run economic growth. This article constructs an Infrastructure Index for 133 countries over the period from 1990 to 2012. In constructing the index, the article applies PCA method on four indicators including electric power consumption, energy use, fixed broad internet subscriptions and mobile cellular subscriptions. The article uses this index in the cross-country panel regressions and finds that improvement in such infrastructure index significantly boosts economic growth, and thus infrastructure development should be an essential element in the ‘inclusive growth’ agenda for a country. The 3rd page of the current issue consists of an interview of Dr. Sanjay Kathuria on linkages between infrastructure development and economic growth. 4th page includes SANEM’s 9th anniversary celebration and other events of January 2016.

How to tackle ‘entitlement failure’ in infrastructure?

Selim Raihan

In the discourse on infrastructure and economic growth the dominant area of discussion is on the quantity and quality of infrastructure and how countries differ in these respects. While most of the countries emphasize a lot on investing in raising the quantity (and quality) of infrastructure, there is a fundamental concern whether rising supply of infrastructure ensures the access to infrastructure. This problem is manifested through the fact that due to a variety of reasons enhanced supply of infrastructure may not solve the problem of ‘entitlement failure’ in terms of effective access to infrastructure, as the people/sectors in dire need of improved infrastructure may not have the access even with an increased supply. There appears to be a consensus among researchers and policy makers that infrastructure is a key contributing factor to economic growth. The importance of infrastructure for economic development originates from the fact that it provides both final consumption services to households and key intermediate consumption items in the production process. The deficiency of some of the most basic infrastructure services is an important dimension of poverty; and therefore, increasing level of infrastructure stock has a direct bearing on poverty reduction. Furthermore, while it is generally accepted that economic diversification is a necessary condition for a sustained and long-term growth of the economy and job creation, infrastructure development is a prerequisite for economic diversification. What is the significance of economic diversification as far as ‘inclusive growth’ is concerned? If inclusive growth is defined as the inclusiveness in economic opportunities, economic diversification can help attain inclusive growth. However, several supply-side constraints related to weak infrastructure can restrict economic diversification. Some of these constraints are broadly ‘general’ in nature and some are critically ‘sector-specific’. Interconnection and complementarities between general and sector-specific infrastructures are key elements for increasing service efficiency, supporting the adoption of innovative technologies, promotion of economic diversification and supporting inclusive growth.

Yet, policymakers in the developing countries are so inclined to improvement in the broad general infrastructure, i.e., enhanced supply of electricity, improvement in roads, improvement in port facilities, etc. that the development of critical sector-specific infrastructure are largely overlooked. Embrarking on developing broad general infrastructure are relatively easy, whereas solving sector-specific infrastructure problems involves identifying priorities in the policy making process and addressing a number of political economic issues. Failure to deal with sector-specific infrastructure problems leads to a scenario where a large number of potential inclusive-growth enhancing sectors fail to enjoy the benefit from the improvement in broad general infrastructure, and thus end up with ‘entitlement failure’. One such example is the leather industry in Bangladesh which accounts for around one billion US$ in exports and which has huge potentials in generating employment and growth by increasing export of higher value-added products. However, this sector has not yet reached its full potential primarily due to operating constraints stemming from its production base in Hazaribagh of Dhaka city where there are minimal waste management systems and inadequate industrial layout planning.

The Hazaribagh-centric tannery industry is now legally bound to relocate all the factories to a new environmentally compliant tannery estate (under construction) on the outskirts of Dhaka city. However, such relocation has been stuck for many years with unresolved decisions on cost sharing of various components of the new industrial estate. Yet, there is no denying the fact that unless this relocation is effectively done, the leather sector will continue to suffer from ‘entitlement failure’ despite significant improvements in broad general infrastructure. Factors responsible for such entitlement failure include the lack of resources to undertake sector-specific infrastructure development, lack of reliable data to determine finance and manpower requirements of projects, lack of infrastructure development framework that adequately delineate links between general and sector specific infrastructure requirements, inadequate planning, inadequate supporting institutions, and unstable political environments.

However, on top of all these, the major critical factor behind the failure to address sector-specific infrastructure problems is the inability of the political system to deliver a political consensus around strategic plans for such sector-specific infrastructure and stable policy frameworks to support their implementation.

How to deal with this entitlement failure? A major part of the sector-specific infrastructure problems needs to be solved through public investment. The priorities in the industrial and related policies need to be realigned to the country’s long term economic growth strategy in the changing world economy. There is a need for generating political capital for such realignment. However, the task of developing such infrastructure facilities cannot be left to the government alone. It is binding on policy makers to come forward with strategies and mechanisms to encourage private sector participation in such sector-specific infrastructure developments. Such mechanisms should not only provide paper strategies, but also practical ways of turning into tangible projects through the provision of adequate finance.

Dr. Selim Raihan. Email: selim.raihan@gmail.com
How does improvement in infrastructure affect economic growth?  
Selim Raihan and Sunera Saba Khan

Infrastructure plays a decisive role in stimulating long-run economic growth. An increase in the level of infrastructure stock directly helps in reducing poverty and accelerating productivity. Infrastructure also contributes to the development process through the provision of intermediate consumption items for production as well as final consumption services for households. It contributes to growth through generating new jobs, creating cohesive spillover benefits and attracting further investments through crowding in effects. Empirical studies also corroborate the relationship between different infrastructural indicators and growth.

In the present article, we have constructed an Infrastructure Index to observe the growth-infrastructure nexuses from a broader perspective. With a view to observing nexus we have constructed the Infrastructure Index for 133 countries. It should be noted that the South Asian countries’ rank as some of the bottom most countries, which clearly indicates dissatisfactory performance in their infrastructure development. This poor performance clearly depicts that the region has huge electricity shortages and very low energy use, which together takes into account more than 60% weight of the Infrastructure Index. In order to explore the association between infrastructure and economic growth we have run a series of fixed effect panel regressions where aggregate output Y at time t is produced using other capital, infrastructure capital and labor. Our data covers the time period between 1990 and 2011 and we have a balanced panel data set. We have chosen a long panel over other models as infrastructure is expected to have a long-term effect on growth. Output is measured as real GDP at constant 2005 national prices (in million 2005 US$), other capital is measured as capital stock at constant 2005 national prices (in million 2005 US$), and labor is measured as the number of persons engaged (in millions). The data of real GDP, capital stock and labor is obtained from the Penn World Table 8.1. We have taken natural logarithm for all variables except the infrastructure variables. We have carried out five individual sets of fixed effect regressions. The first set of regressions included real GDP, the Infrastructure Index, capital stock, and labor. The result shows strong, statistically significant and positive relationship of labor, capital stock, and Infrastructure Index with real GDP: a 10% increase in labor supply increases real GDP by 3.5%; a 10% increase in capital stock increases real GDP by 6.2% while a 10 unit increase in the Infrastructure Index raises real GDP by 1%. Analogous to the first set of regressions, in all of the successive regressions, after controlling for capital stock and labor, we find a highly significant influence of sub-components of Infrastructure Index over real GDP growth. It is observed that, a 10 unit increase in the electric power consumption raises real GDP by 1.3%; a 10 unit increase in the energy use raises real GDP by 1.7%; a 10 unit increase in the fixed broad internet subscribers brings about 1.6% increase in real GDP; and finally, a 10 unit increase in the mobile cellular subscriptions boosts real GDP by 1.6%.

Furthermore, to capture the regional differences between ‘South Asia’ (SA) and ‘East and South-East Asia’ (ESEA) with regard to impact of infrastructure over growth performances we have constructed our regressions using a least squares dummy variable model (LSDV). It is observed that in case of South Asia a 10 unit increase in Infrastructure Index results in a 3.1% rise in their real GDP, whereas, a 10 unit increase in Infrastructure Index results in a 1.2% increase in real GDP in ESEA. A reason for such difference in the size of the coefficients may be due to the differences in the level of development of infrastructure between SA and ESEA. As SA is well behind ESEA in terms of infrastructure development, improvements in infrastructure will bring about a larger positive effect on growth in SA than in ESEA.

The aforementioned analysis points to the fact that improvements in infrastructure significantly contributes to economic growth, and therefore, investment in infrastructure is an essential pre-requisite pediment. Hence, to opt for the ‘inclusive growth’ agenda, supply side bottlenecks should be addressed promptly. Policies should be given to the development of infrastructures that can create highly adhesive ‘crowding in’ effect for private sector investment.

Dr. Selim Raihan. Email: selim.raihan@gmail.com  
Sunera Saba Khan. Research Associate, SANEM  
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“public investment in infrastructure crowds in private investment”

SANEM interviews Dr. Sanjay Kathuria on the linkage between infrastructure development and growth. Dr. Kathuria is a Lead Economist in the World Bank’s Trade and Competitiveness Global Practice, and the Coordinator for Regional Integration in South Asia, based in Washington, D.C. Until August 2012, he was the Bank’s Lead Economist for Bangladesh, based in Dhaka. In 23 years at the World Bank, he has worked in South Asia, as well as the Latin American and East European regions. He describes his goal as helping in the quest for deeper engagement amongst the economies of South Asia. Prior to joining the World Bank, he was a Fellow at the Indian Council for Research on International Economic Relations in New Delhi. His research interests include issues relating to economic growth, international trade and trade policy, foreign investment, competitiveness, technology development, fiscal policy, and financial sector development.

SANEM: Why is infrastructural development so crucial for growth and development?

SK: Infrastructure includes both hard infrastructure, such as roads and bridges, as well as soft infrastructure, such as education and health. Infrastructure is a critical part of the investment climate in the country, and enables the private sector to invest in manufacturing, services and agriculture, and create jobs. Another way to look at this is to say that public investment (to the extent that infrastructure is created by government) will crowd in private investment. An infrastructure deficit in a country can penalize growth and job creation. I can do no better than quote from the words of the Growth Commission: “No country has sustained rapid growth without also keeping up impressive rates of public investment—in infrastructure, education, and health. Far from crowding out private investment, this spending crowds it in. It paves the way for new industries to emerge and raises the return to any private venture that benefits from healthy, educated workers, passable roads, and reliable electricity.” (The World Bank. 2008. “The Growth Report: Strategies for Sustained Growth and Inclusive Development”, pp. 5-6. The World Bank, Washington DC)

SANEM: How does infrastructural development help export diversification?

SK: In many ways. Better roads can get export products faster to the ports. Better rural roads can allow farmers to have access to ports. Improved and better functioning ports can reduce the cost and time taken to access export markets. Efficient and adequate power supply can ensure more competitive export production. Better communications infrastructure can facilitate efficient exchange of information between the vendors and central producers. A better educated labor force can be more skilled and productive and so can increase efficiency and allow production of more sophisticated products.

SANEM: Is there any linkage between regional value chain and infrastructural development? What measures the South Asian countries should be taking for greater connectivity among the countries?

SK: Regional value chains are dependent, among other things, on smooth in and out flow of goods. For example, a producer in Kolkata should consider a vendor in Dhaka as a viable source of inputs as a vendor in, say, Jamshedpur. This can only happen if there is seamless connectivity between the producer and the vendor-which requires good transport connectivity, very efficient border procedures (a soft infrastructure) so that goods are not held up at the border. A zero duty trade regime would also be very helpful in allowing smooth flows of goods in both directions. Also, trade and investment are very closely linked, so country policies should encourage intra-regional FDI, which is part of their soft infrastructure. Again, to give an example, a Kolkata based garment manufacturer can invest in Chittagong, import yarn from Ludhiana, and export garments from its Chittagong facility back to India as well as to the rest of the world. Therefore, priorities for regional value chain development include transport connectivity-roads, river and rail transport; trade facilitation at the border; moving speedily on SAFTA so that there is genuine zero duty trade between countries in the region; and ensuring that the policy regimes in South Asian countries encourage intra-regional investment so that companies can exploit comparative advantage in their neighboring countries. At present, South Asia has massive infrastructure needs, and it would be fair to say that most countries in the region have significant infrastructure deficits, including in roads, education and health, among others.

SANEM: What are the policy lessons that the South Asian countries should be adopting from the East Asian countries with respect to infrastructural development? Can PPP (public private partnership) be a tool for the development of infrastructures?

SK: East Asian countries, broadly speaking, reaped very strong dividends from investment in both hard and soft infrastructure. This led to the popular sobriquets “East Asian Tigers” and the “East Asian miracle.” They devoted very significant budgetary resources to such investments. According to the Growth Commission, fast-growing Asia (during the early 1970s to the early 2000s) invested about 5-7 percent of GDP in physical infrastructure, with China, Thailand and Vietnam investing more than 7 percent of GDP. Hence, South Asian countries would need to create more fiscal space for infrastructure investment. PPPs can support the development of infrastructure, but many countries tend to underestimate the complexity of putting in place a sustainable PPP framework. However, PPPs cannot substitute for critical public investment. They can play a supporting role. Success stories can be seen in areas such as power generation plants.

SANEM: What is the role of World Bank in developing infrastructure in the South Asian region?

SK: The World Bank Group takes a holistic view of a country’s development, and so accords priority to key gaps in infrastructure as well as policies and institutions. In South Asia, you would see significant World Bank Group support to energy, national and rural roads, education, health, and policy and institutional support in these and other sectors.

SANEM: Thank you so much for your time.

SK: You are most welcome.

Review

Working Paper No. 44

Contribution of Microfinance to the Gross Domestic Product (GDP) of Bangladesh

Sanjay Kathuria
S. R. Osmani
M. A. Baqui

December 2015

The paper made the first systematic attempt at measuring the contribution of microfinance to the GDP of Bangladesh. To capture the overall effect of microfinance over GDP a Computable General Equilibrium (CGE) model was applied using Social Accounting Matrix (SAM) of Bangladesh (2012), supplemented by household survey data on the reach and uses of microfinance. In response to the raised question “what would have been the GDP of Bangladesh if the MFI-capital did not exist”, the paper’s estimate suggests that microfinance has contributed somewhere in the range of 8.9-11.9 percent of the GDP and somewhere in the range of 12.6-16.6 percent of rural GDP through direct and indirect effects. However, the paper also noted that the effect of microfinance depicted in the estimate is a conservative one as it disregards the issues of reduction in underemployment, consumption smoothing, dynamic gains in terms of productivity enhancement, and long-run socio-economic impacts of women empowerment created by the MFIs.
SANEM-DFID Capacity Building Workshop on “Cutting Edge Research on Economic Growth”
SANEM, in collaboration with DFID, is going to organize a Capacity Building Workshop on “Cutting Edge Research on Economic Growth” on 19th February, 2016 at BRAC Centre Inn, Mohakhali, Dhaka. The objective of the workshop is to build capacity of young researchers on different cutting edge issues including economic growth and growth modeling. To know more about the workshop, please visit the link below: http://sanemnet.org/call-for-application-sanem-dfid-workshop/

SANEM Annual Economists’ Conference 2016
SANEM is going to organize its First Annual Economists’ Conference on “Bangladesh: Way towards a Middle Income Country” to be held on 20th February, 2016 at BRAC Centre Inn, Mohakhali, Dhaka. The objective of the conference is to promote quality economic research among academicians, researchers, policy advocates, students and young aspiring economists. To know more about the conference, please visit the following link: http://sanemnet.org/2965-2/

Training Program held at FBCCI, Dhaka
A training program on Non-Tariff Barriers and Non-Tariff Measures Environment in SAARC countries was held during January 10-13, 2016 at FBCCI, Dhaka. The inauguration was followed by welcome remarks by Professor Jayakar Rao Guttty and Professor Enelli Murali Darshan from Indian Institute of Foreign Trade. The aforementioned professors conducted the training program. Dr. Md. Khairuzzaman Mozumder (Deputy Chief of Party, USAID Bangladesh Trade Facilitation Activity) carried out a session on “Trade Facilitation: Perspective Bangladesh”. The program ended on 13th January with an overall evaluation of the training program. Two research associates of SANEM, Ms. Sunera Saba Khan and Mr. Md. Abdur Rahim attended the training program.

BIMSTEC Foundation Lecture-2016 held at BIMSTEC Secretariat, Dhaka
The first BIMSTEC Foundation Lecture-2016 on “The Importance of Documenting Pre-1500 Bay of Bengal Regional Integrations and Contested Agencies Relative to the Present” was held on 31st January, 2016 at BIMSTEC Secretariat, Dhaka. The lecture was delivered by Dr. Kenneth R. Hall (Professor of History, Ball State University, USA). Dr. Gowher Rizvi (Adviser for International Affairs to the Honorable Prime Minister of Bangladesh) was the Chief Guest for the event. Dr. Farazi Binti Ferdous (Fellow, SANEM) and Ms. Sunera Saba Khan (Research Associate, SANEM) participated in the event.

Discussion held at BFTI, Dhaka
A discussion on “Market Access and Brand Creation Potentials of Ready-made Garments of Bangladesh” was held on 5th January, 2016 at the BFTI Conference Room, Dhaka. Chief Executive Officer of BFTI, Mr. Ali Ahmed, provided the welcome address. Mr. Md. Lokman Hossain Akash (Sr. Vice President, CIS-BCCI) presented on “Brand Creation Potentials of Ready-made Garments of Bangladesh”. It was followed by another presentation on “Brand and non-brand product price gap: Opportunities and challenges for Bangladesh” by Md. Shoaib Akhtar (Research Associate, BFTI). Panel discussants for the session were Mr. Md. Siddiquar Rahman (President, BGMEA), Mr. Zahir Uddin Ahmed ndc (Additional Secretary (Export), Ministry of Commerce) and Mr. Shubhshash Bose (Vice-Chairman, Export Promotion Bureau). The session came to an end with open floor discussion and responses by the paper presenters. Dr. Farazi Binti Ferdous (Fellow, SANEM) and Mr. Md. Abdur Rahim (Research Associate, SANEM) attended the discussion.

SANEM celebrated its 9th Anniversary
SANEM team celebrated its 9th anniversary on 23rd January 2016 at SANEM Office, Gulshan-2, Dhaka. It was attended by honorable guests, ex-research associates, SANEM employees and their family members. Dr. Selim Raihan (Executive Director, SANEM) provided special remarks at the beginning of the ceremony. Amongst the well-wishers that were present were Dr. Taiabur Rahman (Professor, Department of Development Studies, University of Dhaka), Dr. Abu Eusuf (Professor, Department of Development Studies, University of Dhaka), Dr. Kazi Maruful Islam (Associate Professor, Department of Development Studies, University of Dhaka) and Dr. Sayema Haque Bidisha (Associate Professor, Dept. of Economics, University of Dhaka), who shared their thoughts and remarks on the journey SANEM has embarked on so far and their personal experiences that came from being affiliated with SANEM. The SANEM team is looking forward to a more global approach in their future endeavors. The celebration began with cutting a cake and it was followed by dinner.

SAARC-ADB Meeting held in Maldives
SAARC-ADB Second Special Meeting on Regional Economic Integration Study (Phase-II) was held during 27-28 January 2016 in Hotel Jen, Maldives. The opening statement was provided by Ms. L. Savithri (Director, Economic, Trade, and Finance Division, SAARC Secretariat) on behalf of Secretary-General of SAARC. A presentation was carried out by the Heads of Delegations from Member States on implementation of the identified recommendations of the study. Dr. Selim Raihan (Executive Director, SANEM) provided a presentation on the timelines for implementation of the identified recommendations of the SAARC-ADB Regional Economic Integration Study. The program concluded with discussion on future course of action and recommendations.

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SANEM Research Associate embarked on a new journey
Ms. Israt Jahan (Research Associate, SANEM) went to attend the second semester of her Master’s degree program on 23rd January, 2016. She got enrolled in Master in Applied Labour Economics for Development that is jointly organized by the University of Southampton, UK. The main objectives of the workshop were meeting of the Work Packages team from Ghana, India and Bangladesh, to review work completed since the 3rd Consortium Workshop, analyzing and comparing results of recent research and discussion of key issues, followed by detailed planning for next six months work. Dr. Selim Raihan, (Executive Director of SANEM) presented his findings on the Socio-Economic Context of the Delta and the I-O Table of Bangladesh, the chair of the session being Samuel Codjo from the University of Ghana.

SANEM is a non-profit research organization registered with the Registrar of Joint Stock Companies and Firms in Bangladesh. Launched in January 2007 in Dhaka, it is a network of economists and policy makers in South Asia with a special emphasis on economic modeling. The organization seeks to produce objective, high quality country- and South Asian region-specific policy and thematic research. SANEM contributes in governments’ policy-making by providing research supports both at individual and organizational capacities. SANEM has maintained strong research collaboration with global, regional and local think-tanks, research and development organizations, universities and individual researchers.