# FINANCING SUSTAINABLE DEVELOPMENT

## CIVIL SOCIETY PERSPECTIVE ON ASIAN INFRASTRUCTURE INVESTMENT BANK

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HEINRICH BÖLL STIFTUNG INDIA

# Financing Sustainable Development:

Civil Society Perspective on Asian Infrastructure Investment Bank

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# FINANCING SUSTAINABLE DEVELOPMENT:

## Civil Society Perspective on Asian Infrastructure Investment Bank

# PREFACE

Multilateral Development Banks have a pivotal role to play in steering development finance in the developing world. Over the years the Bretton Woods System has been at the forefront of leading the narrative on financing and has delivered projects that are worthy of appreciation and criticism. With the uni-polar world losing its relevance and the emergence of middle-income countries to occupy the traditional spaces of Global North, there has a perceptible shift in the trajectory through the birth of new initiatives and endeavors at the behest of Global South. The Asian Infrastructure Investment Bank is one such initiative that has gained momentum in the corridors of financing world infrastructure and realization of sustainable goals. The bank came into being in 2015, under the aegis of the Chinese Government to focus on financing sustainable infrastructure across developing world and Asia. Many commentators have noted that the bank's emergence has been an answer to the narrowed foresight of the Bretton Woods and other financial institutions of Asia such as the Asian Development Bank (ADB). The Asian Infrastructure Investment Bank sets itself on a grand agenda to act as vehicle in delivering critical development goals that are necessary for achieving the 2030 Agenda. Poised on the premise of facilitating green financing, building minimal governance structures for aiding development and holding no-tolerance for corrupt practices , the bank swears by the adage of 'Clean, Lean and Green' as an indicator to mark its receptivity and transformative governance that will build on the experiences of existing Multilateral Development Banks. The AIIB categorically institutes itself as a bank of the Global South and emphasizes on its role to catalyze finance for building successful units of sustainable infrastructure. Current projections indicate that the world faces a massive infrastructure financing deficit which if not realized will result in critical shortfall of national governments to end poverty and achieve Sustainable Development Goals. The situation in South Asia is even more worrisome, with financing not reaching the last mile beneficiary and observable leakages in the system that have not functioned up to the mark.

In this first attempt to analyze the working of the bank by any civil society organization, Voluntary Action Network India the apex body of Voluntary Organizations in India has set on a path to contextualize the frameworks, policies and try to comprehensively understand the modalities of the Bank. It is important and noteworthy to understand the role of Civil Society in interfacing with such institutions. The research also attempts to spell out the

various indicators and positive outcomes of the bank to associate with Civil Society, as institutional insulation do not result in efficacious results. Additionally an important aspect of the study is to sensitize Civil Society to hold institutions of such eminence to accountability and transparency standards. This dictates from the fact that Civil Society has traditionally supported investments which are sound, efficient and effective but equally opposed modalities which are clouded in secrecy and compromise on basic human rights. With the AIIB, gaining foothold in India, there will be a need for mobilizing Civil Society to actively pursue dialogue, consultation and interface with the bank and attempt to converge civil society platforms of different regions where the bank has made its footprints.

In the last I wish to thank the support of Heinrich Boll Stiftung, in providing us the financial support to accomplish this study. I would also like to thank Arjun Phillips, Program Manager, VANI for drafting, managing and writing the study.

Best Regards

Harsh Jailti
Chief Executive Officer

# EXECUTIVE SUMMAY

The objective of this research is undertaken to comprehensively understand the role of the Asian Infrastructure Investment Bank in the galaxy of diverse Multilateral Development Financing Institutions who have a rich history of supporting development projects across the world. The AIIB's entry is premised on the context to support and minimize the infrastructure gap in the developing world, most notably Asian countries. The Bank understands itself to be course corrector, in the sense it seeks to build on the experiences and challenges of existing banks such as World Bank, International Monetary Fund, Asian Development Bank and other institutions. A detailed analysis of the bank's institutional, governance architecture and its policies is also included.

The bank has competitively managed to position itself in developmental projects around the world and has had groundswell of support from countries who have subscribed to its shareholding structure. The emphasis of the Bank is to critically promote sustainable infrastructure through active support cross-sectoral ventures that will mitigate climate change effects, increase access in energy, transportation and catalyze on private sector financing to achieve results. In order to fully fathom the extent of its activities, the research has undertaken to study four case studies which include two of AIIB's projects in India and two projects funded in Egypt and Azerbaijan. At least 21 investment projects have been undertaken by the across the world majorly focusing on Energy Sufficiency and Access, Rural and Urban Connectivity, Facilitating WASH etc.

The AIIB is a relatively new entrant into the MDB family and has been articulated on providing citizen engagement and leveraging its Environmental and Social Framework policies for assessing and completing its projects. A major focus of this study is intended to apprise Civil Society of the modalities, thrusts and themes focused by the Bank and review the various gaps and deficits in thematic areas focused by the bank. In the long run it is envisioned that AIIB establishes a forum as in the case with World Bank and IMF where Civil Society participation can utilize its platform to provide critical input on policy coherence.

Due to the bank's major projects ending in 2022, there is not enough data to comment on the outcomes of its investments. However it is intended that through this report, multi-stakeholders involved in the AIIB processes can be influenced to hold the institution accountable to its policies and structures and that better outcomes can produced as mandated in the various strategies of the bank.

# CONTENTS

# ABBREVIATIONS

| | |
|---|---|
| ADB | ASIAN DEVELOPMENT BANK |
| AH | ASIAN HIGHWAY |
| AIIB | ASIAN INFRASTRUCTURE INVESTMENT BANK |
| APEPDCL | ANDHRA PRADESH EASTERN POWER DISTRIBUTION COMPANY LIMITED |
| APSPDCL | ANDHRA PRADESH SOUTHERN POWER DISTRIBUTION COMPANY LIMITED |
| APTRANSCO | ANDHRA PRADESH TRANSMISSION CORPORATION |
| ASEAN | ASSOCIATION OF SOUTH-EAST ASIAN NATIONS |
| BRICS | BRAZIL RUSSIA INDIA CHINA SOUTH AFRICA |
| CAREC | CENTRAL ASIA REGIONAL COOPERATION |
| CMGSY | CHIEF MINISTER GRAM SADAK YOJANA |
| CPEC | CHINA-PAKISTAN ECONOMIC CORRIDOR |
| CSO | CIVIL SOCIETY ORGANIZATION |
| EBRD | EUROPEAN BANK OF RECONSTRUCTION AND DEVELOPMENT |
| ESF | ENVIRONMENTAL AND SOCIAL FRAMWORK |
| ESMF | ENVIRONMENT AND SOCIAL MANAGEMENT FRAMEWORK |
| ESS | ENVIRONMENTAL AND SOCIAL STANDARDS |
| ESSA | ENVIRONMENTAL SOCIAL SYSTEMS ASSESSMENT |
| FDI | FOREIGN DIRECT INVESTMENT |
| FPIC | FREE PRIOR & INFORMED CONSENT |
| GAP | GENDER ACTION PLAN |
| GDP | GROSS DOMESTIC PRODUCT |
| GHG | GREEN HOUSE GASES |
| GMS | GREATER MEKONG SUB-REGION |
| GREAT | GREEN RESILIENT EFFICIENT ACCESIBLE AND THRIVING |
| HVDS | HIGH VOLTAGE DISTRIBUTION SYSTEM |
| IBRD | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT |
| ICT | INFORMATION AND COMMUNICATION TECHNOLOGIES |
| IDB | INTER DEVELOPMENT BANK |
| IDFC | INTERNATIONAL DEVELOPMENT FINANCE CORPORATION |
| IMF | INTERNATIONAL MONETARY FUND |

| | |
|---|---|
| IPF | INVESTMENT PROJECT FINANCING |
| IPPF | INDIGENOUS PEOPLES POLICY FRAMEWORK |
| IRM | INDEPENDENT REVIEW MECHANISM |
| IWT | INLAND WATER TRANSPORT |
| MDB | MULTILATERAL DEVELOPMENT BANK |
| MPRRDA | MADHYA PRADESH RURAL ROADS DEVELOPMENT AUTHORITY |
| NDB | NEW DEVELOPMENT BANK |
| NDC | NATIONAL DETERMINED CONTRIBUTIONS |
| NGO | NON-GOVERNMENTAL ORGANIZATION |
| NRSP | NATIONAL RURAL SANITATION PROJECT |
| OBOR | ONE BELT ONE ROAD |
| PAP | PROJECT AFFECTED PERSONS |
| PPI | PUBLIC PRIVATE INVESTMENT |
| PPIAF | PUBLIC-PRIVATE INFRASTRUCTURE ADVISORY FACILITY |
| PPP | PRIVATE-PUBLIC PARTNERSHIP |
| PPP | PUBLIC PRIVATE PARTNERSHIP |
| PRC | PEOPLE'S REPUBLIC OF CHINA |
| RE | RENEWABLE ENERGY |
| SASEC | SOUTH ASIA SUB-REGIONAL ECONOMIC COOPERATION |
| SC | SCHEDULED CASTE |
| SDG | SUSTAINABLE DEVELOPMENT GOALS |
| SIMP | SOCIAL IMPACT MANAGEMENT PLAN |
| SRSSP | SUSTAINABLE RURAL SANITATION SERVICES PROGRAM |
| ST | SCHEDULED TRIBE |
| TANAP | TRANS-ANATOLIAN NATURAL GAS PIPELINE PROJECT |
| UN | UNITED NATIONS |
| UNCTAD | UNITED NATIONAS COUNCIL FOR TRADE AND DEVELOPMENT |
| UNESCAP | UNITED NATIONAL ECONOMIC SOCIAL COUNCIL OF ASIA PACIFIC |
| US | UNITED STATES |
| WB | WORLD BANK |
| WDI | WORLD DEVELOPMENT INDICATORS |

# LIST OF FIGURES

# Chapter 1

## Introduction to the Asian Infrastructure Investment Bank

Multilateral Development Financial Institutions (DFIs) are pivotal vehicles for delivering development financing in the pursuit of economic transformation. Globally these institutions have rendered a vital service towards funding of regional and global aspirations and have been stimulants for creating demand-driven economies and ensuring growth through strategic investments[1]. Post World War II, it was realized that capital investment was required for spurting growth and that specialized financial institutions with a sole mandate on development instead of commercial leanings would accomplish this objective and in turn create a multiplier effect[2]. This in turn resulted in the creation of World Bank and the International Monetary Fund which collectively came to be known as Bretton Woods Institutions. Over the years, a litany of development banks have come into existence notably- Inter-American Development Bank, European Bank for Reconstruction and Development, European Investment Bank, African Development Bank, Asian Development Bank and the New Development Bank. However the domination of the West and the authority of the dollar coupled with an accentuated bureaucracy bred disenchantment within the Global South that criticized the Bretton Woods's institutions of an autocratic demeanor (Richard Peet, Beate Born, Kendra Fehrer, 2003)[3]. The disenchantment is not only limited to the governance and institutional architecture but is fraught with economic considerations considering that development financing through the existing institutions has not lived up to expectations (Stiglitz 2002, Rajan 2008).

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1 *The Role of Development Banks in Promoting Growth and Sustainable Development in the South, UNCTAD, 2016*

2 *The Role of Development Banks in the 21st Century, Nicholas Bruck*

3 *The Unholy Trinity: World Bank, IMF and WTO, 2003*

This propelled a debate that development financing needed a larger spread of hands as attested by the Intergovernmental Committee of Experts on Sustainable Development Financing, 2014 that global safety net to eradicate extreme poverty in all countries (measured as increasing incomes of the poorest to the $1.25-a-day standard) is about $66 billion annually and that infrastructure investment globally requires at least $5 trillion–$7 trillion per year. In 2016, the United Nations Conference on Trade and Development released its report *The Role of Development Banks in Promoting Growth and Sustainable Development in the South,* stating the there was a discernible need for establishing newer development banks in global south that would be more effective in achieving development targets and prioritize financing in specific sectors.

The Asian infrastructure Investment Bank (AIIB) was conceived to be such an institution that will boost the strength of multilateral development organizations and promote infrastructure development and economic growth in the Asia-Pacific region. In October 2013, Chinese President Xi Jinping on the sidelines of his visit to Indonesia ideated on the creation of Asian driven infrastructure bank[4]. The formal establishment of the bank was realized on 25th December 2015 with China having voting share at the AIIB (28.7%) and India to its second with (8.3%) followed by Russia as its third largest shareholder[5]. The bank's Articles of Agreement (AoA) critically aspire to-foster sustainable economic development, create wealth and improve infrastructure connectivity in Asia by investing in infrastructure and other productive sectors; and (ii) promote regional cooperation and partnership in addressing development challenges by working in close collaboration with other multilateral and bilateral development institutions[6]. The bank established by China has an authorized capital of $100 billion with 20% paid-in and 80% callable and currently has a membership of at least 84 countries that includes the likes of G-7 countries such as United Kingdom, Germany, France and Canada[7]. China's contribution towards the bank is at $50 billion, while India is the second-largest shareholder, contributing $8.4 billion. The Bank is headquartered in Beijing, China and headed by Jin Liqun[8], a former Chinese vice minister of finance, Chinese sovereign wealth fund chairman, and ADB vice president.

Three thematic interventions have been identified for creating an enhanced focus in conformance to the vision of the bank and suitably have a nuanced optics of its business focus and portfolio- sustainable infrastructure, cross-border connectivity and private capital mobilization. In 2017, the bank rolled out its Business Plan that stressed on - Sharpening the Bank's Strategic Focus and Shaping its Corporate Brand, Scaling-Up Support to Clients

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4 *Only Connect, Oct 4th, 2013, The Economist*

5 *Asian Infrastructure Investment Bank plans to issue first USD Bonds, January 7, 2018, Financial Express*

6 *Articles of Agreement, AIIB*

7 *Facts & Figures: AIIBs Two Year Journey, January 16th, 2018, XinhuaNet*

8 *Jin Liqun chosen as president-elect of AIIB, August 26, 2015, Ministry of Commerce, People's Republic of China*

and Refining the Programming Approach, Bolstering Financial Sustainability and Paving the Way for Market Access and Continuing Institution Building[9].

The Asian Infrastructure and Investment Bank is envisioned to be an 'Asian centric' multilateral development organization that will alleviate infrastructure gaps through fostering active partnerships with other MDB's such as the World Bank, Asian Development Bank and New Development Bank. The bank's objective of securing financial resources for attaining infrastructure needs of Asia by balancing development and social necessities has been expressively captured by its credo- 'Clean, Lean, Green'- where 'Clean' means no corruption, 'Lean' symbolizes efficiency and 'Green' stresses on environmental sensitive policies. Infrastructure investment covers all aspects of physical and tangible services rendered through Transport, Information and Communication Technologies, Power and Electricity[10].

China's geo-political ascendancy has been widely accepted to be a result of its liberalization and globalization policies post 1978 that accelerated its economic expansion and paved the way for its bolstered role in the global order. The GDP growth of China has witnessed a remarkable progress that has allowed it lift an approximate 800 million out of poverty and has been recognized by the World Bank to be the fastest sustained expansion by a major economy in history[11]. The emergence of China as a global player in international finance and commerce owing to its trade surplus and an increased FDI influx resulted in an increase in its GDP/Export ratio and facilitated in accumulating foreign exchange reserves of at least US $2 trillion[12]. Strong exports and the acceptance of being the retail leader of the world easily allowed China to fix its debt situation and tackle domestic social-climatic problems[13]. China's focus on its manufacturing sector led to the increase in its non-agricultural Total Factor Productivity Index a direct outcome of the diminishing its state enterprises and unshackling the vestiges of the command economy[14]. However the trend is not sustainable and there has been a decline in the Total Factor Productivity index owing to high over-capacity problems that impelled the Chinese Government to utilize these capacities by investing in infrastructural projects such as the AIIB, OBOR and BRICS Bank[15]. It is no secret that developing countries have been critical of governance regime of the IMF

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9 *2018 BUSINESS PLAN AND BUDGET, AIIB*

10 *Discussion Paper Third International Conference on Financing for Development Addis Ababa, Ethiopia 13-16 July 2015*

11 *China's Economic Rise: History, Trends, Challenges, and Implications for the United States, Wayne M. Morrison Specialist in Asian Trade and Finance February 5, 2018*

12 *China's Economic Growth Trajectories and Evolving Institutions Jun Zhang, 2008, UNU WIDER*

13 *China's Economic Growth Looks Strong, Maybe Too Strong, January 18th 2018, New York Times*

14 *THE ECONOMY OF PEOPLE'S REPUBLIC OF CHINA FROM 1953 Anton Cheremukhin Mikhail Golosov Sergei Guriev Aleh Tsyvinski, National Bureau of Economic Research*

15 *China's Rise as Regional and Global Power- The AIIB and OBOR, July 15th 2015, David Dollar, Brookings*

and World Bank and China has been vociferous of its discontentment.[16] China's ambitions are not hidden from public discourse- that through a careful admixture of foreign and economic policy it has been trying to create its footprint across Asia by creating Renmibi zone in an effort to counter US domination in the Bretton Woods[17]. Commentators have observed that the AIIB is a Chinese effort towards establishing its regional hegemony by supplementing its other initiatives such as the One Belt One Road (OBOR) and countering America's sphere of influence in Asia[18].

The OBOR has attracted varying commentaries purporting the initiative as a geo-political manifestation that strategically postures China's regional intervention in the Eurasian region and creates new linkages with the Caucasus and the Eastern Europe[19]. The OBOR's strategic vision has churned a host of concerns with countries such as India and Vietnam that have expressed reservations with the project[20]. India especially has been lukewarm to the response of OBOR emanating primarily because of its sustained objection to China-Pakistan Economic Corridor (CPEC) on the grounds of encroachment and violation of territorial integrity[21]. This has not deterred India from setting aside from investing in the Asian Infrastructure Bank and being the largest borrower with an accounted six projects worth $1.2 Billion[22]. China has also maintained responded the AIIB's commitment to non-partisanship and non-interest in promoting competition[23] as is evident with India's participation in the bank's governance and being the top borrower while sharing a tense bilateral relationship[24].

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16 *China Creates a World Bank of Its Own, and The US Balks, December 4th, 2018, The New York Times*

17 *Beijing's Challenge to the World of Bretton Woods, October 31 2014, Financial Times*

18 *The AIIB and China's soft balancing against the US pivot in Asia, September 19th, 2017, Australian Outlook, Australian Institute of International Affairs*

19 *The Silk Road: A political marketing concept for World Dominance, Werner Fasslabend, European View*

20 *China's OBOR initiative may create political and economic instability in South Asia, May 4, 2017- Economic Times*

21 *CPEC encroaches on India's sovereignty and territorial integrity, June 27, 2018, Hindu Businessline*

22 *India seeks $2.4 Billion from the AIIB, June 25, 2018, LiveMint*

23 *China Focus: AIIB no rival to other MDBs, Door Always Open for the US & Japan, January 16th, 2018, Xinhua*

24 *A Tough Year for China-India Relations, January 4th 2018, The Diplomat*

# Chapter 2

## Panorama of Global Infrastructure Trends

Infrastructure investment covers all aspects of physical and tangible services rendered through Transport, Information and Communication Technologies, Power and Electricity[25]. Currently infrastructure investment faces a deficit of $1.0 trillion–$1.4 trillion per year (Bhattacharya and Romani, 2013) and at the Asia region as noted by the Asian Development Bank's report on *'Meeting Asia's Infrastructure Needs' –"Asia's investment needs will require $26 trillion from 2016 to 2030, or $1.7 trillion per year, if the region is to maintain its growth momentum, eradicate poverty, and respond to climate change. Without climate change mitigation and adaptation costs, $22.6 trillion will be needed, or $1.5 trillion per year".*

Physical infrastructure is essential for manufacturing, services, trade and even human capital, while rising incomes and rapid urbanization drive demand for electricity, transport, telecoms and housing. Infrastructure can also raise the quality of human capital, which is a key factor in our long-term growth models. Improvements in the quality and quantity of infrastructure have a disproportionately positive impact on the poor, and thus play a vital role in reducing income inequality. The World Bank estimates a 1% increase in infrastructure stock is associated with a 1% increase in GDP[26]. In particular, more governments are placing greater emphasis on the development of infrastructure projects and, in recognition of the unprecedented level of capital needed to meet growth objectives there is greater interest in private sector involvement and public-private partnerships (PPPs). Yet, from the private sector perspective, the flow of PPP deals is inconsistent and, in many markets, is constrained by politics, making it difficult to build long-term businesses around the hope that this opportunity will materialize.

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[25] *Discussion Paper Third International Conference on Financing for Development Addis Ababa, Ethiopia 13-16 July 2015*

[26] *Building the World: Mapping Infrastructure Demand, 2008, Goldman Sachs*

## A) Infrastructure Investment as an Enabler

Infrastructure investment facilitates as an enabler for advanced economies and those at the early stages of development alike. In developing economies, as roads are built, reliable electricity installed and clean water made available to all, infrastructure can have a truly transformative impact on the lives of citizens and the prospects of businesses. In more mature economies too, keeping pace with demand, and building new and upgraded infrastructure, is integral in efforts to sustain economic growth. Infrastructure investment is essential for eradicating poverty and is a catalyst for producing holistic development paradigms (Pouliquen, 2000). Economic Growth is recognized to be a direct outcome of investment in tangible goods that acts as an enabler towards the promotion of economic security and overall development of a nation[27]. Investment in infrastructure is a key driver of economic prosperity in any economy and is widely used by Governments to hold back the tide of populist agendas[28]. Infrastructure is both a cause and a consequence of economic growth, making it a key aspect of our long-term projections.

The positive relationship between infrastructure development and poverty has been widely established through various empirical investigations that investment in non-military public utilities leads to increase in aggregate productivity (Aschauser, 1989). Similarly it has been acknowledged in academic circles of the determinant role of investment in transport infrastructure in reducing poverty (Setboonsarng, 2005) and relative impact of road building leading to development (Kwon, 2005). The impact of physical infrastructure investment on poverty is generally relative in comparison to investment in social infrastructure that is strategically positioned for reducing qualitative aspects of poverty eradication (Ogun, 2010).

## B) Current Trends for Infrastructure Investment

According to Bhattacharya et. Al, 2012 Investment in infrastructure is integral for emerging markets and low income economies in order to streamline economic humps, respond to urbanization pressures, achieve development goals and mitigate environmental risks. However According to Fay et. Al, 2011 for achieving these goals there will be required investments of between $1.25-1.5 trillion per year (2008 constant prices), or 5-6% of developing country GDP, to sustain economic growth. At an expected GDP growth rate of 4% per year, this would imply investments of $1.6-2.0 trillion annually by 2020. However a McKinsey study estimated that US$3.3 trillion needs to be invested each year to 2030 in order to support current growth rates[29].

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[27] *Infrastructure, Poverty Reduction & Jobs, International Labor Organization, www.ilo.org*

[28] *Emerging Trends in Infrastructure, 2017, KPMG*

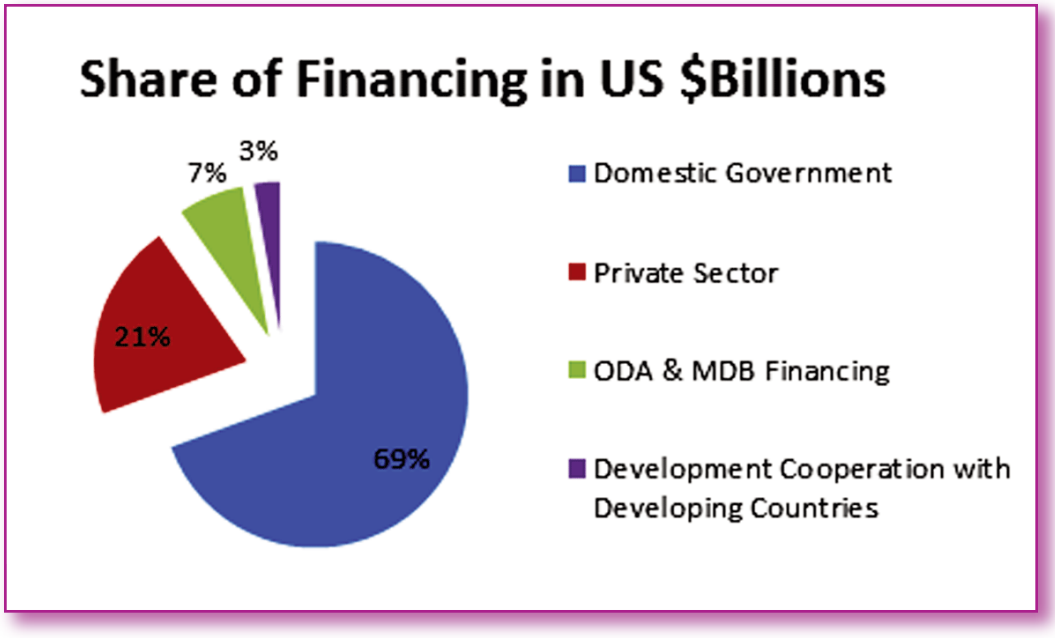
[29] *Bridging Infrastructure Gaps, June 2016, Mckinsey*

In 2016 the Report by Asia Development Bank on Infrastructure Investment, Private Finance, and Institutional Investors: Asia from a Global Perspective it was noted that the last 20 years witnessed an expenditure of 3.8% of world GDP on infrastructure, which comes to an equivalent of $2,400 billion. Infrastructure spending trended down in the developed world from 3.6% of GDP in 1980 to 2.8% in 2008, but grew in emerging economies from 3.5% to 5.7% of GDP. This rise was primarily driven by East Asia while Latin America in particular lagged behind.

The infrastructure investment by governments currently corresponds to almost 4% of global GDP which results in an annual gap in worldwide infrastructure investment of nearly US$1 trillion or a 27% shortfall[30]. Therefore for achieving the infrastructure targets and maintaining the momentum of growth it will be critically important for an inclusive financial architecture that contains private resource mobilization, effective fiscal expenditure by governments and blended financing.

Figure 1

**ANNUAL FINANCING OF INFRASCTUCTURE BY GOVERNMENTS - $0.8-0.9 TRILLION (2013 ESTIMATES)**




*Estimates based on Bhattacharya et. Al, 2012*

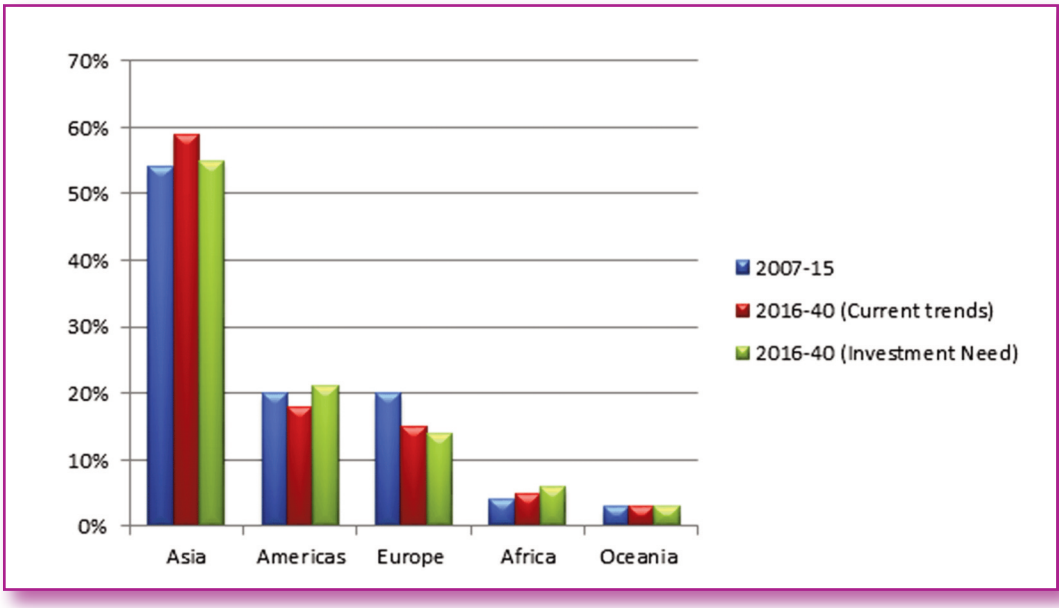
[30] *BRIDGING THE INFRASTRUCTURE GAP: ENGAGING THE PRIVATE SECTOR IN CRITICAL NATIONAL DEVELOPMENT BENEFITS, RISKS AND KEY SUCCESS FACTORS*

## C) Future Projection for Infrastructure Consumption

The projection for the next thirty years is clear that Asia will achieve dominance in the global infrastructure market. By 2040 Asia will account for 54 percent of global infrastructure investment needs in comparison to 22 percent for the Americas. Overall four countries account for more than half of global infrastructure investment requirements to 2040: China, the US, India and Japan. China alone is estimated to account for 30 percent of global infrastructure needs. For the next 20 years at the Asia region alone investment needs will require $ 20 trillion for cumulative investment requirements. South Asia currently requires infrastructural investment to

Figure 2

**REGIONAL SHARE OF GLOBAL INFRASTRUCTURE INVESTMENT**




*Source: Global Infrastructure Outlook*

Figure 3

**KEY INFRASTRUCTURE PRIORITY AREAS (US $ DOLLARS)**

| SECTORS | Expenditure US (per year) | % total |
|---|---|---|
| ENERGY | 374 | 51 |
| TRANSPORT | 225 | 31 |
| TELECOMMUNICATION | 96 | 13 |
| WATER & SANITATION | 35 | 5 |

*Sources: Infrastructure for Seamless Asia, ADB (2009) and Stone (2008);*

*The Global Competitiveness Report 2011-2012, World Economic Forum*

tune of US$1.7 trillion and US$2.5 trillion (at current prices) to plug its deficits[31], Infrastructure Financing will require significant investment over the next 15 years to a figure of at least around US$90 trillion.

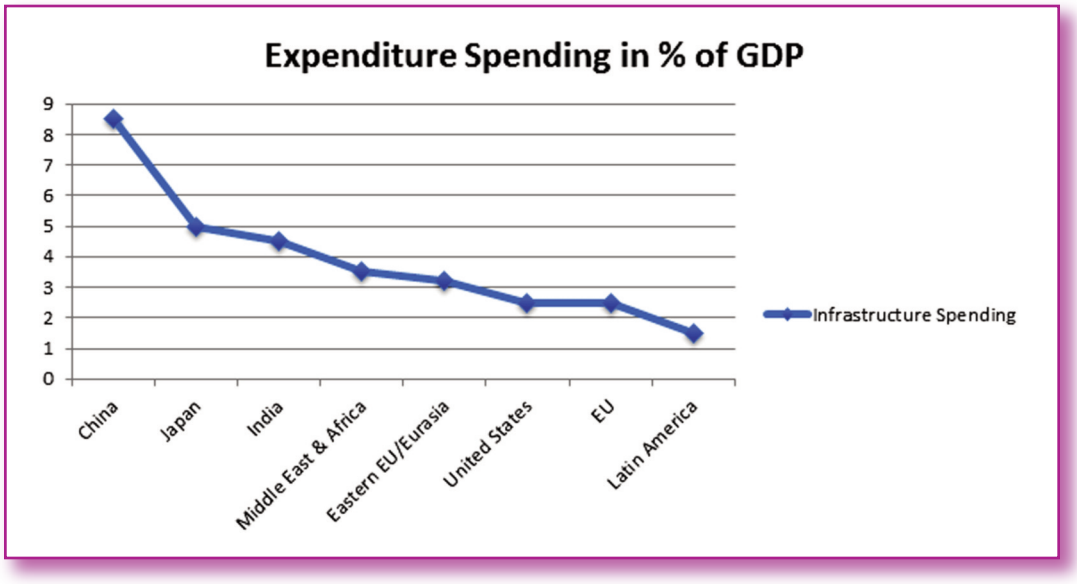
The demand for such investment is due to the outmoded infrastructure in developed economies and higher growth and structural change in emerging market and developing countries, especially due to rapid urbanization. With regard to social needs, a rough estimate of the cost of a global safety net to eradicate extreme poverty in all countries (measured as increasing incomes of the poorest to the $1.25-a-day standard) is about $66 billion annually[32]. The global South will account for roughly two-thirds of global infrastructure investment (or about US$4 trillion per year). This requirement offers a great opportunity to "leapfrog" the inefficient, sprawling and polluting systems of the past[33].

## D) Challenges for Financing

At least four primary challenges emerge in meeting the increasing global demand for infrastructure.

Figure 4

**REGION WISE EXPENDITURE SPENDING ON INFRASTRUCTURE**




*Source: McKinsey 2013*

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[31] *Infrastructure Gap in South Asia Infrastructure Needs, Prioritization, and Financing- Luis Andrés Dan Biller Matías Herrera Dappe, World Bank Working Papers*

[32] *Laurence Chandy and Geoffrey Gertz, "Poverty in Numbers: The Changing State of Global Poverty from 2005 to 2015", Global Views Series, No. 18 (Washington, D.C., The Brookings Institution, 2011)*

[33] *The Sustainable Infrastructure Imperative, New Climate Economy Report 2016*

1) First, since the 2008 financial crisis, many governments have faced severe fiscal challenges and are hence cutting down on investments.

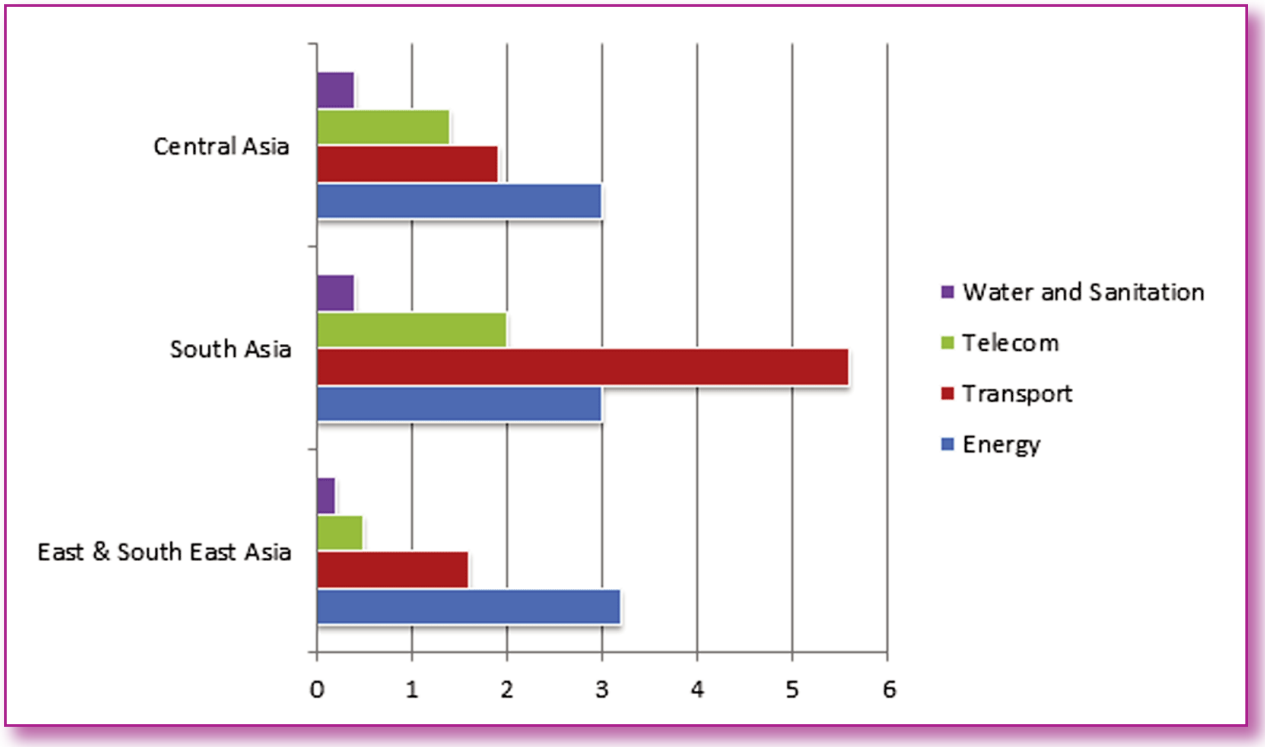
2) Second, private investors are reluctant to commit capital to long-term, risky projects. As such, the bearish stance of the public and private sectors is limiting investments, as suggested by the overall drop in infrastructure investments across G7 nations between 2008 and 2014.

3) Thirdly, it will become challenging for governments to balance trade-offs between long term requirements over short term expediencies. As focusing on particular investment project can result in lock-in periods

4) Political will have to be mustered up by national governments to engineer economic reforms that may cause short-term disruptions.

Figure 5

**INFRASTRUCTURE INVESTMENT NEEDS ACROSS ASIA 2010-2020 (% OF GDP)**




*Source: Bhattacharya 2013*

## TACKLING INFRASTRUCTURE GAPS IN THE SOUTH ASIAN REGION

**South Asian Region has a large infrastructure gap compared with other regions.**

- ***Electricity access.*** **In SAR only 71 percent of the population enjoys the benefits of electricity access, ahead of SSA at 35 percent, but way behind the rest of the regions at above 90 percent.**
- ***Improved sanitation access.*** **In this category, SAR (39 percent) is at the bottom. Open defecation seems to be one of the most salient issues facing the region, with 680 million people (i.e., 41 percent of the population) relying on it in 2011.**
- ***Improved water access.*** **The South Region provides water access to 90 percent population. However the quality and quantity of improved water may be in question. Most of the access to water is through public stands; only 25 percent of the population has access to piped water and 24/7 water supply is a rare exception in South Asian cities.**
- ***Telecom access.*** **In terms of telecom access (measured as fixed and mobile lines per 100 people), South Asia ranks low.**
- ***Transport access.*** **Using total road network per 1,000 people, SAR has 2.9 km which is close to other regions such as EAP (2.5 km), SSA (2.5 km), and MNA (2.8 km), but well below the world average (4.7 km), ECA (8 km), and North America (24 km).7 Furthermore, the transport infrastructure suffers from serious shortcomings (such as lack of intraregional connectivity between the national road networks, unrealized potential for rail and inland water freight transport, and inadequate road and rail connectivity of ports with hinterlands). These limitations turn transport infrastructure into a hindrance for regional and international trade, as investment climate surveys indicate.**

# Chapter 3

## Institutional Architecture of the AIIB

AIIB's genesis commenced on the premise of 'clean' governance which meant that the bank would build on the positive aspects of its fraternal institutions and avoids bureaucratic entanglements that have come to occupy Breton Woods's institutions[34]. The Zedillo Commission Report[35] that suggested reforms for the World Bank- became integral for the formulation of the banks governance structures and had been carefully analyzed by the Chinese Government to replicate examples of 'good governance' when structuring the AIIB[36].

The Asian Infrastructure Investment Bank's governance is akin to other Multilateral Development Banks with a three-tier level architecture consisting of a Board of Governors, Board of Directors and President. The Board of Governors is the Bank's highest authority, composed of one Governor appointed by each member, meeting annually. The Board of Directors steer the direction of the general operations of the Bank composed of Directors elected by one or more Governors representing particular members. The President, elected by the Board of Governors, conducts the current business of the Bank, under the direction of the Board of Directors[37].

### A) Governance Structure of AIIB

The Board of Governors is vested with the overall authority of the Bank and mandated to hold an annual meeting that is called by the Board of Directors. The operations of the bank are well articulated in its Articles of Agreement that state:-

1. A majority of the Governors shall constitute a quorum for any meeting of the Board

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[34] *Slimming the Bretton Woods duo, March 16th 2000, The Economist*

[35] *The Zedillo Commission Report on World Bank Reform: A Stepping Stone for the G-20 Summits in 2010, Johannes Flinn, Brookings.edu*

[36] *One Belt, One Road: Can China Overcome the Obstacles, CCR Advisory Group*

[37] *Governance of the Asian Infrastructure Investment Bank in Comparative Context, Natalie Lichenstein, AIIB Yearbook 2018*

of Governors, provided such majority represents not less than two thirds of the total voting power of the members.

2. The Board of Governors shall by regulation establish procedures whereby the Board of Directors may obtain a vote of the Governors on a specific question without a meeting and provide for electronic meetings of the Board of Governors in special circumstances.
3. The Board of Governors, and the Board of Directors to the extent authorized, may establish such subsidiary entities, and adopt such rules and regulations, as may be necessary or appropriate to conduct the business of the Bank[38].

### A.1 Institutional Difference Between AIIB & other MDB's

One major point of difference between the existing MDBs and the AIIB is that the latter has non-resident board directors who are primarily involved in approving the Bank's strategy, annual plan and budget; establishing policies; taking decisions concerning Bank operations; and supervising management and operation of the Bank and establishing an oversight mechanism[39].

Secondly a country's voting power in the AIIB is aligned with the total amount of capital subscription undertaken by the country this in effect puts the country's with the largest shareholding having larger voting powers[40]. China with the largest subscription has the veto power . The capital stock to countries is allocated by "the relative share of the global economy of members within the regional and non-regional groupings[41].

## B) Membership

Membership in the AIIB is categorized into regional and non-regional members with the exception of Taiwan and North Korea. Regional members are those located within areas classified as Asia and Oceania by the United Nations. Other than the normative of not allowing non-sovereign entities by other MDBs, the AIIB allows for non-sovereign entities to apply for AIIB membership, assuming their home country is a member. The AIIB has 57 founding members. Over half of the members of the ADB have joined the AIIB and only two of the European ADB members have so far not joined (Belgium and Ireland). According to AIIB officials, approximately 25 additional countries are expected to join in 2017[42].

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38 *Articles of Agreement, AIIB*

39 *https://www.aiib.org/en/about-aiib/governance/board-directors/index.html*

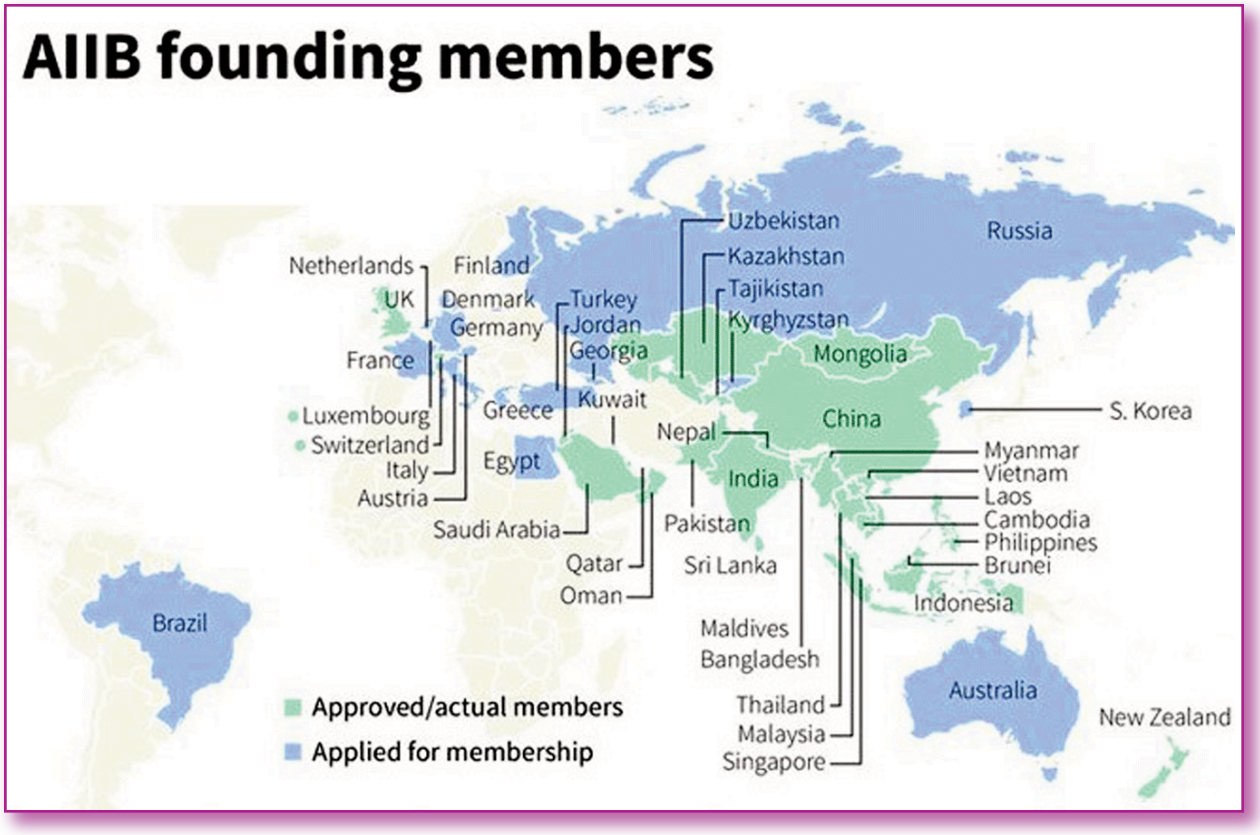
40 *Ibid*

41 *The Asian Infrastructure Investment Bank: Multilateralism and Membership Diffusion, 9th June, 2017, Siyao Li*

42 *Asian Infrastructure Investment Bank, Martin Weiss, Congressional Research Service*

## C) Voting Rights

Voting in AIIB is in conformance to MDB practice of weighted voting, rather than equal votes for each member. The total voting power of each AIIB member consists of the sum of its share votes, basic votes and, in the case of a Founding Member, its Founding Member votes[43]. As Natalie Lichenstein, has listed the voting rights of




*Source:BusinessWorld*

different members the following is an excerpt from her *Governance of the Asian Infrastructure Investment Bank in Comparative Context.*

- *Share votes-* Share votes are equal to one vote for each share of stock held by a member. Larger shareholders consequently hold more share votes, and, as a result, rules for the allocation of capital subscriptions have an impact on relative voting power. Share votes are common in the MDBs, and underpin the weighted voting system that differentiates them from many other international organizations.
- *Basic votes-* Basic votes are the same for each member, and are a common but not universal feature in MDBs. Basic votes provide an element of voting power that recognizes the equality of members, in contrast to the differentiated

[43] *AIIB Charter*

economic weight of members usually reflected in share votes. For AIIB, the exact number of basic votes is recalculated each time voting power is determined, to meet the requirement that the total number of basic votes allocated to all members must always equal 12 percent of total votes. The number of basic votes assigned to each member changes with changes in the number of share votes and Founding Member votes, and in the number of members. Basic votes have the effect of increasing the relative voting power of smaller shareholders (above their shareholding percentage) while reducing the relative voting power of larger shareholders (below their shareholding percentage). In AIIB (and ADB and IBRD), basic votes are set as a percentage, because setting basic votes as a fixed number of votes specified in the Charter in other cases has meant that a member's basic votes stayed the same while share votes increased with subscriptions to stock. Using a fixed number gradually reduced the weight and benefit of basic votes.

- *Founding Member votes-* Founding Member votes are fixed at 600 votes per member. Founding Member votes are assigned to those Signatories who become Founding Members by completing membership requirements before the deadline set in the AIIB Charter.

## D) Operational Policy[44]

The Operational Policy on Financing, which outlines the bank's financing policies and sets out the following conditions that must be satisfied for the AIIB to invest in a particular project:

- The project submitted to the Bank should contain defined development objectives consistent with the bank's stated purpose, and those objectives must permit appropriate evaluation of the project's impact;
- The project must provide for specific productive activities necessary to meet development objectives;
- Alternative sources of finance, particularly private capital, must not be available for the project on terms and conditions that the AIIB considers reasonable; and
- The project must comply with the other requirements of the operational policy and other AIIB policies.
- Broadly, the AIIB's financing activities can be broken down into sovereign-backed financing and financing which is not sovereign backed. Sovereign-backed financing means either a loan to a Member; a loan which has been guaranteed by a Member; or a guarantee that covers debt service defaults under a loan that are

[44] *https://www.aiib.org/en/policies-strategies/_download/operation-policy/policy_operational_financing_new.pdf*

caused by government failure to meet a specific obligation in relation to the project or by a borrower's failure to make a payment under the loan, and is accompanied by an indemnity by the Member to the AIIB. Non-sovereign-backed financing is any financing that does not fall within the definition of "sovereign-backed financing," as outlined above.

- In determining whether to grant sovereign-backed financing, the AIIB will assess whether the project's impact on the member's fiscal sustainability is acceptable. The bank will place significant weight on debt sustainability analyses conducted by the International Monetary Fund and the World Bank. It will also assess whether the project contains acceptable oversight arrangements that provide reasonable assurances that the proceeds will only be used for the stated purposes of the financing.
- The policy also outlines terms and conditions that must be included in the transaction documents for loans, including specific remedies, external debt reporting, and adherence to the general conditions as stipulated by the AIIB board from time to time. Significantly, the AIIB will not generally require specific security from a loan recipient that is a member, though it may require security if it is required by a co-financier. Loans to non-members may require security.
- The policy provides the AIIB with significant leeway when granting non-sovereign-backed financing, although it explicitly states that market-based principles will be applied. Loans may be granted to project companies on a limited-recourse basis or directly to the project company's sponsor (usually, the majority shareholders of the project company). The policy stipulates that loans will be based on standard template term sheets, loan agreements, and other relevant financing documentation.
- Provided that the investment conditions are acceptable, the policy permits direct equity investments from the AIIB to either public- or private-sector companies. This form of investment may be particularly beneficial if the registered share capital of the project company must exceed a certain threshold.

# Chapter 4

## Assessing the Environmental and Social Framework of AIIB

According to the AIIB- the Environmental and social sustainability is a fundamental aspect of the Bank's support for infrastructure development and enhanced interconnectivity in Asia. The Bank envisions the Environmental and Social Framework (ESF) as a system that supports the Bank and its clients in achieving environmentally and socially sustainable development outcomes. This is achieved through integrating good international practice on environmental and social planning and management of risks and impacts into decision-making on, and preparation and implementation of, Bank supported Projects. The AIIB developed its Environmental and Social Framework based on the experiences of existing DFI's such as the World Bank and IMF.

### A) Key Features of the ESF[45]

AIIB clearly makes mention of Integration of Environmental and Social Sustainability. One of the overarching aims of the AIIB is to support infrastructure and interconnectivity which in turn promote economic growth and lead to quality of living. Consistent with the Sustainable Development Goals (SDGs), the Bank recognizes the need to address the three dimensions of sustainable development – economic, social and environmental. The Bank recognizes the principles of sustainable development in the identification, preparation and implementation of Projects.

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[45] *AIIB, Environmental & Social Framework, 2017*

## Inclusive Policies for Development

AIIB views social development and inclusion imperative indicators for achieving sound development. According to AIIB inclusion results in empowering people to participate in, and benefit from, the development process in a manner consistent with local conditions. Inclusion encompasses policies to promote equity of opportunity and nondiscrimination, by improving the access of poor, disadvantaged and disabled people to education, health, social protection, housing, environmental quality, infrastructure, affordable energy, water and sanitation, employment, financial services and productive assets. It also focuses action to remove barriers against vulnerable groups, who very often do not reap benefits from development process.

## Space for Participatory Decision Making

Environmental and social sustainability cannot be effective enough until and unless their integration is achieved in policies and Projects. For holistic coverage of outcomes decision-making processes with stakeholders is critical for gauging environmental and social risks and impacts and be the benchmark for identification, preparation, implementation and evaluation of all Projects.

## Effective Implementation & Monitoring of Projects

Multilateral Development Banks have a long history and experience in assisting clients to manage environmental and social risks. Effective implementation of environmental and social management plans are key drivers for achieving impacts for projects that deliver on sustainable development. AIIB commits in supporting Client-side implementation for Projects, through active field-based supervision, monitoring and verification, implementation support and institutional strengthening.

## Multi-stakeholder Engagement

Multi-stakeholder consultations are essential tools for making projects concurrent with transparency and implementation by clients. The Bank lays stress on consultations across the timeline of the projects and focuses on inclusive, accessible and transparent. Stakeholder engagement is conducted in a manner commensurate with the risks to, and impacts on, those affected by the Project.

## Balancing and Promoting Gender Equality

AIIB commits to gender equality for successful and sustainable economic development. Clients are supported to identify risks and assess implementation strategies through gender balance approach. The Bank encourages Clients to enhance the design of their Projects in an inclusive and gender-responsive manner

to promote equality of opportunity and women's socioeconomic empowerment, particularly with respect to access to finance, services and employment, and otherwise to promote positive impacts on women's economic status, with particular regard to financial resources and property ownership and control.

## B) Outline of the Environment and Social Framework

The Environmental and Social Framework of AIIB comprises mainly of two pillars-

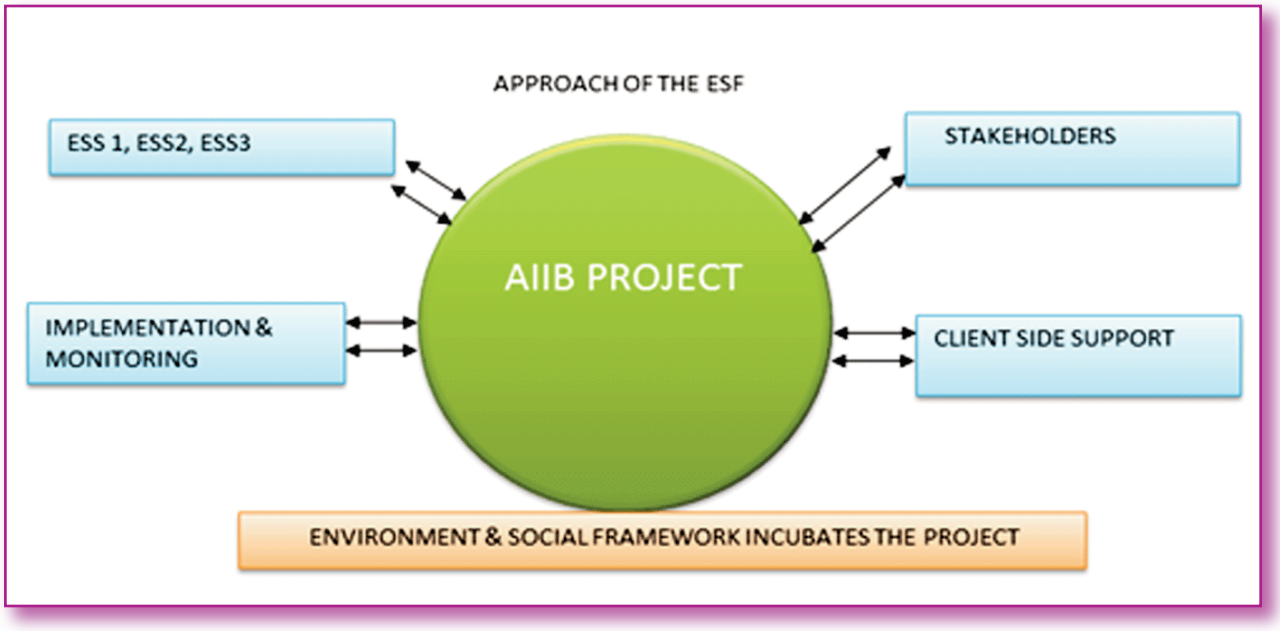
1) The Environmental and Social Policy: This comprises mandatory environmental and social requirements for each Project.

2) Environmental and Social Standards are associated mandatory requirements containing the following indicators :

- ESS 1: Environmental and Social Assessment and Management
- ESS 2: Involuntary Resettlement
- ESS 3: Indigenous Peoples

Figure 6

**THE ENVIRONMENTAL & SOCIAL FRAMEWORK**



### OBJECTIVES OF THE ENVIRONMENTAL AND SOCIAL FRAMEWORK

- **Projects should objectify institutional aims in addressing environmental and social risks and impacts**
- **Developing strong safeguard for cushioning the bank and its investors on account of operational and reputational risks produced by environmental and social risks of projects**
- **Ensure the environmental and social soundness and sustainability of Projects.**
- **Support integration of environmental and social aspects of Projects into the decision-making process by all parties.**
- **Provide a mechanism for addressing environmental and social risks and impacts in Project identification, preparation and implementation.**
- **Enable Clients to identify and manage environmental and social risks and impacts of Projects, including those of climate change.**
- **Provide a framework for public consultation and disclosure of environmental and social information in relation to Projects.**
- **Improve development effectiveness and impact to increase results on the ground, both short- and long-term.**
- **Support Clients, through Bank financing of Projects, to implement their obligations under national environmental and social legislation (including under international agreements adopted by the member) governing these Projects.**

## C) Due Diligences and Risk Assessment

The AIIB determines the Project's risks through categorization process. Categorization follows in determining highest environmental or social risk, including direct, indirect, cumulative and induced impacts in the Project area. The Bank conducts a review of environmental and social risks and impacts associated with the Project, regardless of the categorization being considered. As an element of the categorization process, the Bank may conduct field-based review of the Project to provide for a refined understanding of the environmental and social risks and impacts and support the Client's preparation of a site specific approach to assessment of these risks and impacts.

## D) Environmental and Social Assessment

### Environmental and Social Assessment

In the initial phases of the project, Clients are required to prepare the process of

assessment converging on environmental and social risks accruing in implementation of projects. However, in some countries the legislation and procedures require separate environmental and social documents, making the preparation of an integrated environmental and social assessment difficult to achieve. In such cases, the Bank reviews the environmental and social documentation prepared by the Client to ensure that it provides for assessment of both environmental and social risks and impacts, as well as provisions for mitigation and monitoring.

## Conducting Scoping of the Project

A preliminary scoping is undertaking which scans the scope and depth of the nature and magnitude of the Project's potential environmental and social risks and impacts. The environmental and social assessment applies a mitigation hierarchy to: (a) anticipate and avoid risks (b) where avoidance is not possible, minimize or reduce risks and impacts to acceptable levels; (c) once risks and impacts have been minimized or reduced, mitigate them; and (d) where residual risks or impacts remain, compensate for or offset them, where technically and financially feasible.

## Involuntary Resettlement

The Bank screens each Project to determine whether or not it involves Involuntary Resettlement (which covers both physical and economic displacement, as defined in ESS 2). Where it is not feasible to avoid Involuntary Resettlement, the Client is required to ensure that resettlement activities are conceived and executed as sustainable development programs, providing sufficient resources to enable the persons displaced by the Project to share in Project benefits.

## Impact on Indigenous People

Each project is subjected to determine whether or not it would have impacts on Indigenous Peoples. During the course of the screening, opinions and judgments of social scientists is solicited. The bank also undertakes the view of Indigenous Peoples concerned and the Client. If the Project would have spillovers on Indigenous Peoples, the Client is responsible for preparing an Indigenous Peoples plan or IPPF. The evaluation markers for determining the impact are: (a) the magnitude of the impact on Indigenous Peoples' customary rights of use and access to land and natural resources; socioeconomic status; cultural and communal integrity and heritage; health, education, livelihood systems and social security status; and indigenous knowledge; and (b) the vulnerability of the affected Indigenous Peoples. The Indigenous Peoples plan complements the broader coverage of social risks and impacts in the environmental and social assessment and provides specialized directives to address specific issues associated with the needs of affected Indigenous Peoples.

## E) Addressing Structural Gaps in the Environmental & Social Framework

A host of arguments have been leveled against the bank's Environmental and Social Framework that criticize the bank's architecture. There three primary structural deficits that have to be addressed by the AIIB in the implementation of its Environmental and Social Framework. These include-

a) The need for expanding the scope of consultations with local communities and adhering to Free, Prior, Informed, Consent (FPIC) as laid out in national and international laws[46].

b) There will be a need to invent a framework for integrating international standards laid out by the bank and the national laws of the country[47].

c) Diminish the use of thermal based technologies incorporated in the Energy Strategy and move towards greener technologies for environmental safeguarding.

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[46] *Is the AIIB really 'Clean, Lean and Green'?, Lowell Chow, August 2, 2017, The Diplomat*

[47] *AIIB releases draft environmental and social safeguards opens consultations, Lean Alfred Santos, 16 September 2015, devex.com*

# Chapter 5

## Thematic Priorities of AIIB

### Strategic Integration and Programming

The AIIB has underlined a comprehensive objective to accomplish the conceptualization of an Asia level Financial Institution that will solely look into the resource generation of infrastructure creation. The bank has identified that client side demands progressively shape its thematic pursuits which are organically linked to the objective and mission of the bank. The following are listed below-

A) ***Investing in Sustainable Infrastructure*** – Promoting green infrastructure and supporting countries to meet their environmental and development goals.

B) ***Cross-country Connectivity*** – Prioritizing cross-border infrastructure, ranging from roads and rail, to ports, energy pipelines and telecoms across Central Asia, and the maritime routes in South East and South Asia, and the Middle East, and beyond.

C) ***Private Capital Mobilization*** – Devising innovative solutions that catalyze private capital, in partnership with other MDBs, governments, private financiers and other partners[48].

Additionally the Bank stresses on devising a sector strategy that targets energy infrastructure that will enhance electricity access to clean, safe and reliable electricity for millions of people in Asia. To implement the strategy, the Bank will support its members to do their part as expressed in the Paris Agreement to, "hold the increase in the global average temperature to well below 2 degrees Celsius above pre industrial levels and pursue efforts to limit the temperature increase to 1.5 degrees Celsius".

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[48] *www.aiib.org/en*

It will achieve this by aligning its support with its members' national energy investment plans, including their nationally determined contributions (NDC) under the Paris Agreement[49].

## A) Investing in Sustainable Infrastructure

Rapid economic transformation taking place in the developing world has succeeded in raising millions out of poverty through streamlined investment in infrastructure utilities. However as the pace of development builds momentum there is a clear trade-off between economic gains and decline in natural resources. Rising instances of climate-change, water pollution and increasing urbanization patterns have contributed to unprecedented levels of environmental degradation. The cumulative effect of these problems has the capacity to hinder growth patterns achieved so far and future projections. It therefore becomes imperative that pattern of growth correspond to the pace of growth which imply that sustainable development will have to sharpen its strategic vision through the promotion of cutting-edge, cost effective, non-conventional technologies. Similarly infrastructure development will have to follow the principle of 'do-no-harm' policy and have to capability to deliver reliable and affordable infrastructure services that are critical for sustainable development, and a necessary condition for reaching Sustainable Development Goals. It is on this context that AIIB has mandated to lay its thrust on integrating investment in sustainable infrastructure as facilitator towards achieving a holistic and inclusive economic agenda. In keeping with the SDGs, the Bank seeks to address all three dimensions of sustainable development – economic, social and environmental – in a balanced and integrated manner. There are several reasons why not enough investments are being made in sustainable infrastructure to reach the two-degree goal, and also why there is not a sufficient number of overall infrastructure investments. Sustainable infrastructure is often more capital-intensive, which makes (low-cost) finance – such as that which can be provided or facilitated by development banks – even more important (Bhattacharya et al., 2016; New Climate Economy, 2016). For facilitating green infrastructure the AIIB has underlined the credo for its sustainable infrastructure financing that-

- Promotes the conservation of energy, water and other resources
- Supports sustainable land use management
- Encourages making best use of green growth and low-carbon technologies, renewable energy, cleaner production, sustainable transport systems and sustainable urban development[50]

The SDG Goal 9 lays emphasis on governments to find sustainable solutions for meeting qualitative and quantitative demand of citizens. With over half the world

[49] *Financing Asia's Future, AIIB's Annual Report, 2017*

[50] *AIIB Annual Report, 2016*

population now living in cities, mass transport and renewable energy are becoming ever more important, as are the growth of new industries and information and communication technologies[51]. The need for developing sustainable infrastructure becomes more apparent-

- Globally 2.4 billion people lack access to basic sanitation, and almost 800 million people lack access to clean water[52].
- Existing stock and use of infrastructure produces more than 60% of the world's greenhouse gas (GHG) emissions[53]
- Some 60% of the area expected to be urbanized by 2030 has yet to be built; $57 trillion in global infrastructure investment will be required between 2013-2030[54]

## A.1 Need for Investing in Sustainable Infrastructure

### *Clean Water and Sanitation*

Investments in water and sanitation services result in substantial economic gains; in developing regions the return on investment has been estimated at US$5 to US$28 per dollar. An estimated US$53 billion a year over a five-year period would be needed to achieve universal coverage – a small sum given this represented less than 0.1% of the 2010 global GDP[55]. It is estimated that more than 600 million people in Asia and the Pacific lack access to safe drinking water, and nearly 2 billion people lack access to adequate sanitation facilities[56]. Increasing water scarcity and pollution are compounded by economic growth, population pressures, and increased urbanization.

The Asia Water Watch 2015 report, published by the Asian Development Bank (ADB) and partners in December 2005, estimated that annual investments of at least $8 billion would be needed. In 2014-15, Low and Middle Income Countries (LMICs) received the bulk of official development flows to water and sanitation (40%) and Asia was prioritized as a recipient region, receiving 45% of total official financing to water and sanitation, followed by Africa (27%), America (18%) and Europe (6%). it is estimated that an additional USD 1.5 billion of private resources were mobilized in 2012-15 for water and sanitation. By 2050, global water demand is projected to increase by 55%, mainly due to growing demand from

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51 *UNDP, 2015*

52 *United Nations, World Bank*

53 *New Climate Economy Report, 2016*

54 *McKinsey and Company, 2013 Infrastructure productivity: How to save $1trillion a year*

55 *World Water Report, United Nations, 2015*

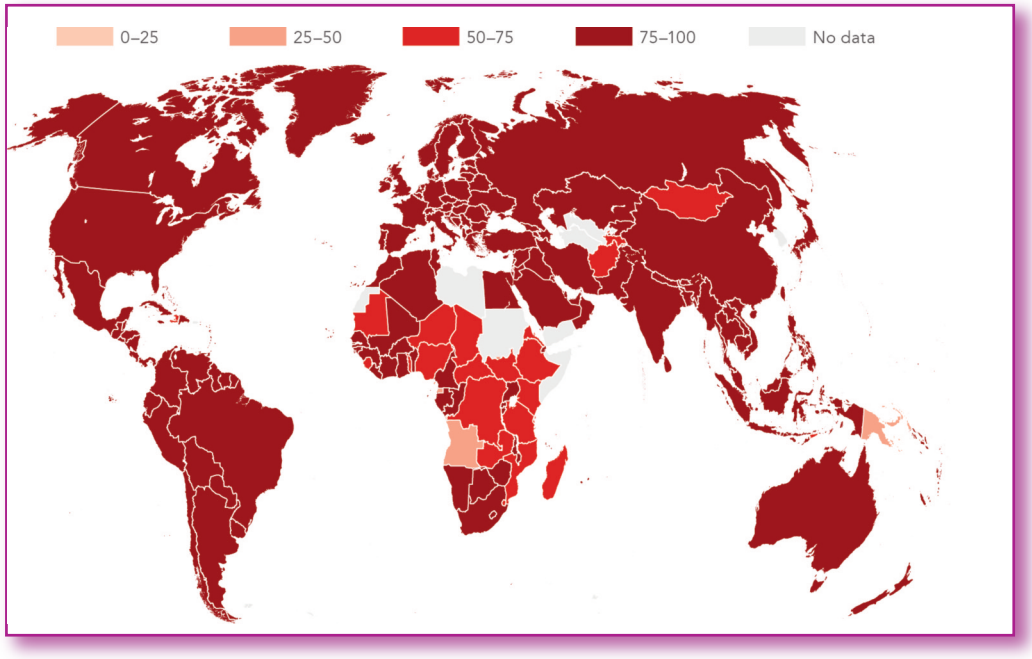
55 *Ibid*

56 *Ibid*

manufacturing, thermal electricity generation and domestic use, all of which mainly results from growing urbanization in developing countries[57].

Figure 7

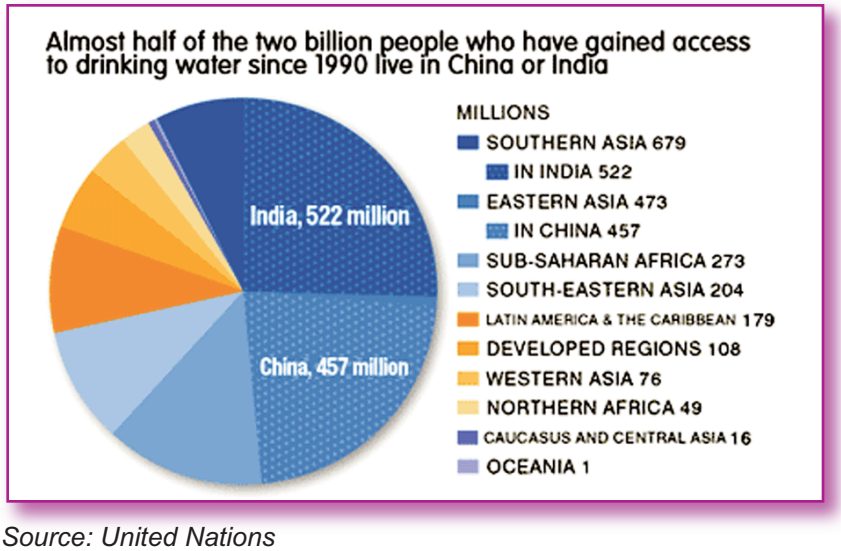
**SHARE OF POPULATION WITH ACCESS TO AN IMPROVED WATER SOURCE, 2015 (%)**




*Source: World Health Organization/United Nations Children's Fund Joint Monitoring Programme for Water Supply and Sanitation; WDI*

Figure 8

**NUMBER OF PEOPLE WITH ACCESS TO DRINKING WATER**




*Source: United Nations*

[57] *Financing Water & Sanitation in Developing Countries: Key Trends and Figures, OECD*

## A.2 Urbanization

Currently more than half of the population lives in urban areas and 1.5 million people are added to the global urban population every week[58]. In 2010, the Asia-Pacific region's urban population amounted to 754 million people, which is more than the combined population of the United States of America and the European Union. Now, almost half of the population, namely 45.5 per cent in the region, is living in urban areas. Urbanization rates in Asia and the Pacific vary widely by sub region. While the Pacific has more than 70 per cent of its population living in urban areas (mainly driven by Australia and New Zealand with urbanization rates above 85 per cent), in South and South-West Asia only 34 per cent of the population lives in urban areas. Overall it is expected that the urbanization rate in the whole region will reach 50 per cent in 2026[59].

According to the UN Habitat Report: Urbanization and Development: Emerging Futures- *"The new urban agenda should promote sustainable cities and human settlements that are environmentally sustainable and resilient, socially inclusive, safe and violence-free, economically productive; and better connected to and contributing towards sustained rural transformation. This is in line with the 2030 Agenda for Sustainable Development, especially Goal 11: to make cities and human settlements inclusive, safe, resilient and sustainable."*

Key Pointers-

- 2.11 billion people in Asia live in urban areas
- Asia is 48 per cent urbanized and home to 53 per cent of the world's urban population
- Asia has become a global powerhouse, generating close to 33 per cent of world output in 2010

### *Financing Urban Infrastructure*

According to the Asian Development Bank while estimates vary widely, but somewhere near $100 billion a year worth of new urban infrastructure will be needed to fill prior gaps and keep pace with this unprecedented urban growth. Total financing requirements for water supply, sanitation, solid waste

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[58] *https://www.pwc.co.uk/issues/megatrends/rapid-urbanisation.html*

[59] *Urbanization Trends in Asia and Pacific, UNESCAP, 2013*

management and slum upgrading in urban areas was estimated at $25 billion per annum from 2006 to 2010 at 2003 prices. The figure goes up to $50 billion if urban roads are included and to $59 billion if mass transit is added. An estimated $32 billion will need to be added to this figure each year for maintenance of the physical urban infrastructure stock[60].

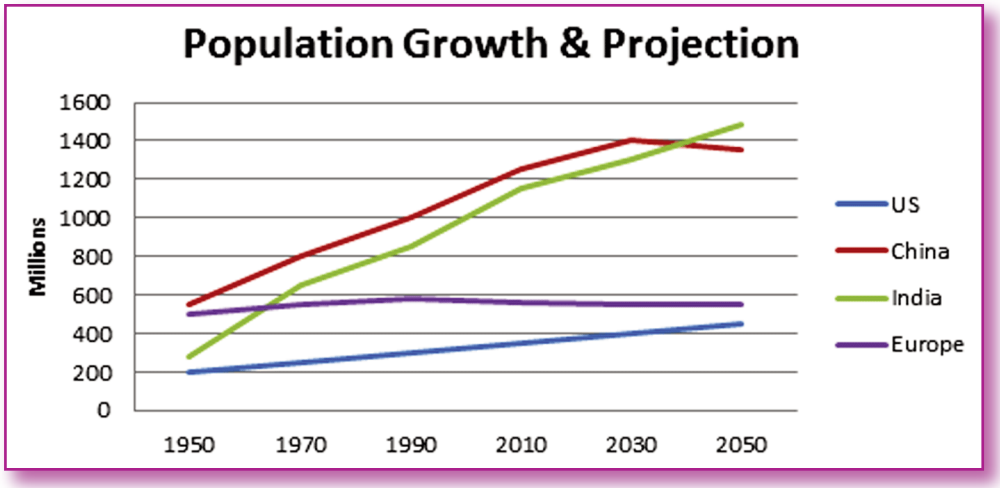
## *Challenges for Sustainable Urbanization*

There are certain challenges that will have to be effectively managed these relate to

- Providing equal access to resources and urban public services which manage to alleviate poverty
- Manage environmental hazards accruing from climate change and having risk-assessment plans with anticipation and mitigation components
- Urban expansion will have be carefully planned and not seen as encroachment on biodiversity
- a low-carbon world calls for changes to resource consumption and an effective if gradual shift to more sustainable societies.

Figure 9

**POPULATION GROWTH & PROJECTIONS**

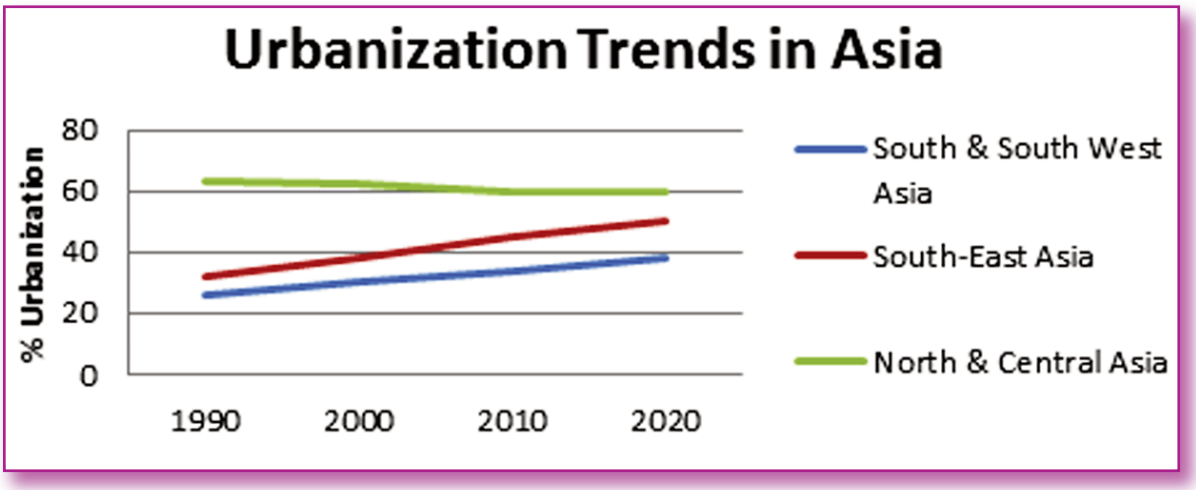



*Source: United Nations*

[60] *https://www.adb.org/results/financing-urban-infrastructure-and-city-development-asia*

Figure 10

URBANIZATION TRENDS IN ASIA




*Source: United Nations, Department of Economic & Social Affairs, Population Division (2012)*

*World Urbanization Prospects (2011)*

## A.3 Focus of AIIB for Investing in Sustainable Infrastructure

AIIB emphasized that challenges posed by climate change and supports its clients in their transition towards a low-carbon future. Hence major priorities of AIIB investments are based in generating renewable energy and efficiency, climate mitigating investments that diminish greenhouse gas emissions, and investments that help countries become more resilient to climate change. The AIIB's vision and implementation for investing in sustainable infrastructure is also juxtaposed to its Environmental & Social Framework and derives its referential standards from the IDFC Green Finance Mapping[61].

As part of its Sustainable Cities Strategy- the AIIB has prepared a draft strategic document on its intended priorities for developing Asian cities. The document calls for aligning aspirations and the broader global goals, such as the Sustainable Development Goals, New Urban Agenda, Paris Agreement on Climate Change, and Sendai Framework for Disaster Risk Reduction, AIIB's long-term vision is to support cities in Asia to be economically, environmentally and socially sustainable, by being green, resilient, efficient, accessible and thriving (GREAT)[62].

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[61] *IDFC, Green Finance Mapping, 2015*

[62] *Strategy on Sustainable Cities, AIIB, 2018*

Investment areas: Infrastructure investments in cities can be broadly categorized into four areas based on their objectives:

1) *Enhancing urban mobility:* Includes investment in metro systems; bus rapid transit systems; infrastructure supporting electric vehicles; pedestrian and non-motorized transport facilities; multi-modal hubs; transit-oriented developments; and urban roads
2) *Improving basic infrastructure and city resilience:* electricity distribution; water supply; sewerage; solid waste management; urban drainage; flood protection; and green buildings.
3) *Promoting integrated development:* industrial parks; special economic zones; commercial business districts; neighborhood (slum) upgrading; urban redevelopment/regeneration; new city/district developments; and satellite cities.
4) *Building freestanding health and education facilities:* include freestanding public: schools; universities; hospitals; and clinics.

AIIB will prioritize investments in three of the abovementioned areas under this strategy (a) enhancing urban mobility; (b) improving basic infrastructure and city resilience; and (c) promoting integrated development. To the health and education facilities the AIIB adds a caveat stating while these are important for the sustainable development of cities, it is viewed that such facilities are better managed through a sectoral program/approach given the high degree of specialized expertise and policy dialogue required in these sectors. However notwithstanding the above; where health and education facilities are part of a more comprehensive/multi-sectoral integrated development that the Bank is considering to finance, AIIB will support the building of such facilities under this strategy, as part of the broader integrated development[63].

## What constitutes Green Finance?

**According to the International Development Finance Club- "Green finance" comprises "Climate finance" and finance for "Other environmental objectives", with "Climate finance" being composed of "Green energy and mitigation of greenhouse gases" and "Adaptation to climate change". "Other environmental objectives" refer to environmental protection and remediation related projects in the field of water, air and biodiversity.**

[63] *Strategy on Sustainable Cities, AIIB, 2018*

## A.4 Case Study of Sustainable Rural Sanitation Services Program in Egypt[64]

On 28th September 2018, The Asian Infrastructure Investment Bank's (AIIB) provided a sovereign loan to the Egyptian government for USD300 million for improve rural sanitation services for 892,000 people in 178,000 rural households in selected governorates in the country. The project is jointly financed with the World Bank. The World Bank would support both physical infrastructure and institutional and policy strengthening components. AIIB would only support the physical infrastructure component.

### *Project Description*

The project aims to bolster the efforts of the Egyptian Government's National Rural Sanitation Program that was launched in 2014 as a key Presidential priority with a delegated amount of USD 14 billion. The NRSP aims to achieve 100 percent sanitation coverage of 4,700 villages and 27,000 satellites, with an estimated population of 42 million, by 2037, primarily through conventional sewerage systems and WWTPs. Based on the degree of sanitation needs, the initial focus of the NRSP is to improve access and services to 769 villages in seven governorates. Water and Sanitation Companies (WSCs) in these governorates have many unserved settlements, which contribute highly to the discharge of untreated wastewater into the Al-Salam Canal and Rosetta branch of the Nile River. To provide sanitation coverage to the selected governorates, the World Bank (WB) is supporting the Government through the Sustainable Rural Sanitation Services Program (SRSSP). Besides increased coverage, the main objective of SRSSP is to strengthen institutions and policies to ensure improved and sustainable sanitation services.

The AIIB supported SRSSP-2 comprises creation of physical infrastructure component, which will provide sanitation services to about 175,000 households in 133 villages of five governorates; namely, Dakahliya, Sharkiya, Damietta, Menoufya, and Gharbiya. Primary activity will be involved in construction of new or expansion/rehabilitation of existing wastewater treatment plants; construction and upgrading of pumping stations; and construction of integrated sewerage networks consisting of collectors and pumping mains. The SRSSP-2 will also ensure that inhabitants of satellites located between the villages where the main sewers pass are also serviced. The SRSSP-2 also comprises a component to strengthen the related institutions and policies for the WSS sector,

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[64] *Egypt: Sustainable Rural Sanitation Services Program , 2018, www.aiib.org*

by: (i) improving the governorate-level WSCs' operational systems and practices; (ii) strengthening the national WSS sector framework, including the sector's institutions, policy, and monitoring and evaluation framework; and (iii) introducing an Investment Project Financing (IPF) component for Technical Assistance on strategic sector issues (which would be subject to the WB's policies applicable to IPF rather than those applicable to PforR).

### *Project Objective and Expected Results*

The objective of the SRSSP is to strengthen institutions and policies to increase access and improve rural sanitation services in selected governorates in Egypt. This will be accomplished through implementing key sector and institutional reforms together with rehabilitation and construction of integrated infrastructure for collection, treatment, and disposal of household sewage. Program implementation will be from January 2019 to December 2023 (5 years)

### *Environmental and Social Assessment*

For this particular project, it was interesting to note that the AIIB did not conduct its Environmental and Social Systems Assessment (ESSA), as the World Bank had conducted an assessment in accordance with its PforR Policy. Due to the difference in scope and methodology from the Environmental and Social Safeguard Policies used by the WB for conventional sector investment project financing, the AIIB used WB's environmental and social procedures applicable to the PforR Policy as specifically applied to the SRSSP-2.

## B) Cross-Country Connectivity

Connectivity forms the backbone for facilitating trade and economic development. In Asia, there are very few countries which have developed the means and strength to build world-class and resilient transportation systems. The Asia region is characterized by increased economic growth promoted through international trade, foreign direct investment and global and regional production networks, as well as global value chains. These drivers, in turn, were bolstered by progressive liberalization of trade, expansion of the maritime transport sector and diffusion of information and communications technologies and the Internet. The consequence of these developments resulted in the growth of small and large scale companies to establish linkages. However many Asian countries continue to face a surmountable challenge in terms of accessing external markets due to high cost. As a consequence these transportation systems are responsible for spillover of negative effects. Into the future, trade and transport connectivity within the region will continue to be important,

particularly as countries look towards regional markets to counterbalance the slowdown in the global economy. At the same time, new drivers of growth are expected to shape future patterns of economic and social development in the region, and with them, other types of regional networks will become increasingly important. Given that the effectiveness of each network is increasingly dependent on the connectivity of other networks, it is clear that any analysis of regional connectivity can no longer be confined to one or other type of network.

As noted by the Asian Development Bank, ESCAP and the United Nations Development Programme in the publication entitled *"Asia Pacific Aspirations: Perspectives for a Post2015 Development Agenda, the region still has unacceptable levels of poverty"* [65]. Almost two thirds of the world's poor, as measured by the $1.25 poverty line, live in this region. Despite large populations of China, India, Indonesia and Pakistan, there are currently more poor people living in middle income countries than in low-income countries. There are also large numbers of people living just above the extreme poverty line, or in "near poverty": if $2 per day is used as a benchmark, the number of poor people doubles from 743 million to 1.64 billion. In other words, about 40% of the region's population subsists on less than $2 a day. However as estimated in the Economic and Social Survey of Asia and the Pacific 2014, inequality has declined in some countries since the early 1990s, but has increased in some larger economies, including China, India and Indonesia[66].

The role of Intra-regional trade in galvanizing connectivity accounts for more than 50% of Asia's total trade. With the global economy currently undergoing a significant rebalancing, the world is now looking increasingly to Asia to play a central role in sustaining global growth. Its ability to play this role will inevitably depend on further growth in intra-regional economic activity, and this in turn will of course hinge on improvements in physical connectivity. In a nutshell, that means much more efficient transport systems, along with simpler, smoother border and customs procedures for getting people and goods from point A to point B and beyond, quickly and without difficulties[67].

## B.1 Contribution of Sectors

It is to be noted that contribution of infrastructure has been particularly observed in the transport, energy and telecommunications sectors[68]. At the

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[65] *Asian Development Bank, United Nations Economic and Social Commission for Asia and the Pacific, and United Nations Development Programme. Asia-Pacific Aspirations: Perspectives for a Post-2015 Development Agenda – Asia-Pacific Regional MDGs Report 2012/13*

[66] *United Nations Economic and Social Commission for Asia and the Pacific, Statistical Yearbook for Asia and the Pacific 2013.*

[67] *Regional Infrastructure Connectivity: What, How and When? Stephen Groff- ADB Blogs*

national level, public investment has been shown to have a direct impact on GDP growth, with some analyses suggesting that, on average, a 1% increase in the stock of infrastructure lifts GDP by 1% (World Bank estimates). These critical infrastructure networks have stimulated growth by providing domestic enterprises with access to a greater pool of resources and markets, thereby enabling them to scale up their production and reach a broader consumer base. Recent research also shows that improved telecommunications have enhanced the access of rural communities to information and financial services[69].

### *B.1.1 Transportation*

Transport infrastructure has seen a significant improvement with variation observed on the modes of transportation (UNESCAP 2006a). Countries with coastlines are more accustomed towards using major ports, while internal land transport systems are not always properly linked due to a deficit in structural policies and architectures that link different transport modes and logistics networks. In terms of building Physical transport infrastructure, some countries in the Asian and Pacific region have made major strides in expanding their road networks, with an estimated 300,000 km of roads being added every year over the past decade[70]. The AIIB has released a Transport Strategy in which it recognizes that transport infrastructure market is huge for Multilateral development banks (MDBs) and bilateral financing currently account for around USD20-25 billion in transport projects per year, a relatively small share of the market. AIIB will focus on the market segments suitable for the bank to deliver the best infrastructure development outcomes within its mandate and with its comparative advantages[71].

#### *Roads and Railways*

Significant progress can be seen, for example, in the ongoing development in Asian Highway routes and other roads of national importance; major expansion of rail networks and growth of freight transportation by rail (particularly in People's Republic of China, India, Islamic Republic of Iran, Indonesia, and the Russian Federation); limited investment in intermodal facilities such as dry ports and container terminals; and investment in the improvement of rural transport

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68 *Asian Development Bank and Asian Development Bank Institute, Infrastructure for a Seamless Asia*

69 *"In Papua New Guinea, mobile banking brings savings and safety to farmers", 23 September 2013, International Finance Cooperation*

70 *UNESCAP, REGIONAL TRANSPORT CONNECTIVITY FOR SUSTAINABLE DEVELOPMENT, 2013*

71 *Transport Sector Policy, AIIB, 2018*

infrastructure. The Asian Highway Network comprises of 143,000 km of highways in 32 countries Recent data on the status of AH routes shows that between 2006 and 2010, there has been some progress to improve quality of Asian highway routes, the proportion of the roads under class III fell to 7% of the total network, or 11,500 km (ESCAP). The establishment of minimum standards under the Intergovernmental Agreement on the Asian Highway Network has helped countries to raise progressively the quality of their major international highways. However, there is still scope for upgrading the quality of the network, particularly from below class III to class III. There are several regional/sub-regional initiatives that aim to develop better transport connectivity within Asia. Similarly The Trans-Asian Railway Network comprises of 114,000 km of railway lines in 28 member States 2009[72]. There are number of missing links in the railway network (Figure 6) most of which are concentrated in South and South-East Asia. Total investment needs for their development is around US $ 25 billion. There is much scope to improve transport connectivity in North-East Asia12. Major infrastructure projects in Asia are to trade with one other and develop the benefit for all and bind Asia closer together.13 This includes, amongst others, the Association of South East Asian Nation (ASEAN) Connectivity initiative, Central Asia Regional Economic Cooperation (CAREC) Program, Greater Mekong Sub-Region (GMS) Cooperation Program, One Belt One Road Initiative, and the South Asia Sub-regional Economic Cooperation (SASEC) Program.

## *Seaports and Maritime Connectivity*

Seaports have expanded rapidly over the last decade and a half. Singapore was the world's busiest port in 2007, narrowly ahead of Shanghai. The ports of the PRC, together with those of Hong Kong, China and Taipei, China, accounted for more than 28% of world container port throughput in 2007. Maritime transport has already taken major share of international transport. Considering the emission generated through conventional transportation modes there are clear benefits of moving freight from road to non-road mode. Inland water transport has advantages of being more energy efficient than railway for per tonne-km, but there are limited inland water transport (IWT) routes available in Asia. Navigable Rivers such as

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[72] *There are now 29 parties to the Intergovernmental Agreement on the Asian Highway Network and 16 parties to the Intergovernmental Agreement on the Trans-Asian Railway Network.*

[73] *Liao, C.H., P.H. Tseng, and C.S. Lu, Comparing carbon dioxide emissions of trucking and intermodal container transport in Taiwan Province of China, Transportation Research Part D, 14(7) (2009) 493-496.*

Mekong, Ganga, and Padma are not utilized for freight transport in a substantial way; mostly IWTs are being used for traditional passenger transport. The revival of water transport could take some share from road transport and reduce emissions to a significant extent. Use of coastal shipping and trucks instead of distribution by trucks alone led to 60% less emissions resulting from efficiency of coastal shipping[73]. Revival and improvements of canals and rivers routes through channelling, dredging, widening to increase capacity, and the addition of river ports are some of improvements required. There is further potential of modal shift through coastal shipping.

### *B.1.2 Energy*

Around 1.1 billion people worldwide still live without access to electricity. Lack of access to energy limits opportunities and impedes economic and social development. Therefore, promoting access to reasonable and consistent energy is elemental to driving sustainable economic growth. An important aspect about energy resonates with its reliability. Energy Security has experienced periodic episodes of price volatility. Similarly the health risks associated with primary energy consumption have been responsible for extreme pollution having fallouts such as environmental risks that affect health and wellbeing of the population. Asia has been fertile ground for pushing forward rapid economic advancement and at the same time experienced adverse climate change risks. Populous Asian countries, are already experiencing floods, devastating storms and drought, and they will face higher risks if climate threats are not mitigated. Thus with an expected increase in population over the years there has to be concomitant increase in investment in environmentally compatible energy solutions. During the next 20 years, 93 percent of the growth in global energy demand will come from developing countries. Asia's share of global primary energy supply will increase from 35 percent in 2008 to 44 percent in 2030, with nearly all of the growth coming from developing Asian economies. China and India are the largest energy consumers, with combined shares of 86 percent of coal use and 81 percent of oil use. Both countries will continue to play a dominant role in the region's (and world's) energy consumption for the next 20 years[74].

The AIIB recently came out with its draft paper – "Strategy for Sustainable Energy in Asia", in which it spelled its financing strategy to target energy efficiency, sufficiency and intensity[75]. In its 6 point principle (as shown in

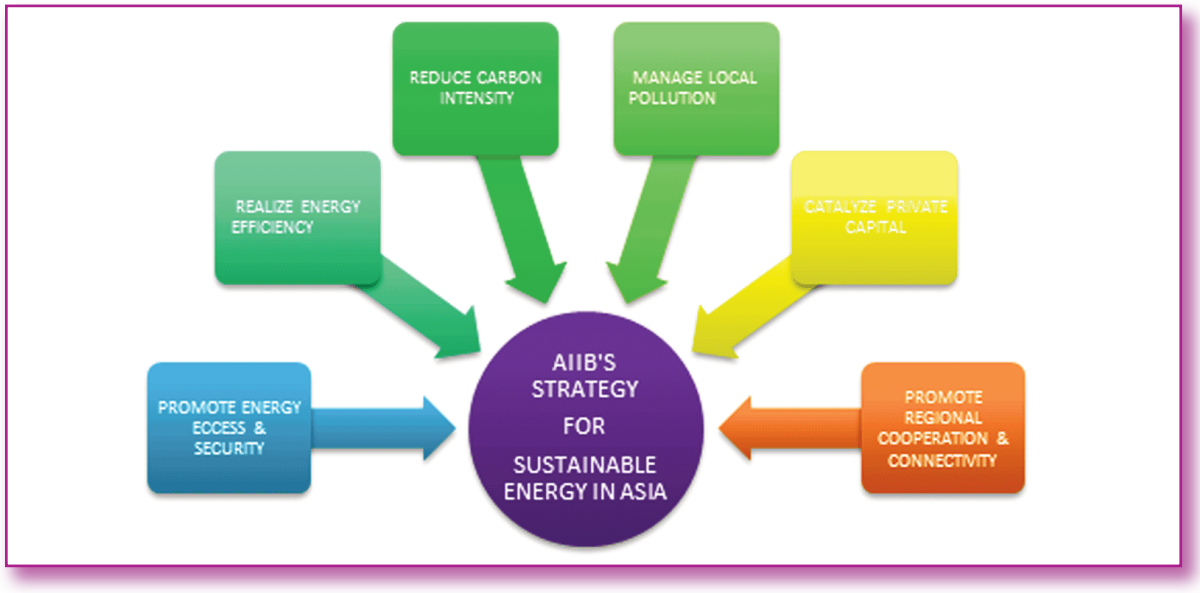
[74] *Energy Trends in Developing Asia: Priorities for a Low Carbon Future*

[75] *"Sustainable Energy in Asia", AIIB, 2018*

figure) the bank will catalyze on partnerships and mobilization to realize the vision of sustainable energy.

Figure 11

**AIIB'S STRATEGY FOR SUSTAINABLE ENERGY IN ASIA**




AIIB's area of focus for targeting energy[76] –

1 Focus on Transmission and Distribution- The indispensability of power grids for servicing energy and its business credibility of not reaping losses is integral for the Bank's vision for Energy Access and aligned to SDG 7.

2) Energy Efficiency Investments- Central to the reduction of climate change affects is the need for investing in greener technologies. AIIB focuses to refurbish existing capacities, design utility-driven final use green products,

3) Investing in Renewable Energy- RE investments are essential to limit CO2 emissions. The Bank will support clients to develop intermittent RE—hydropower, wind, solar, and other sources—to reduce fossil fuel consumption and increase access to modern energy through decentralized generation, and mini- and micro-grids.

4) Local and Regional Pollution- There is an imperative need to reduce local and regional pollution in urban centers. AIIB will strategize and partner with Clients to formulate workplans, assessments of projects that mitigate pollution.

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[76] *"Sustainable Energy in Asia", AIIB, 2018*

5) Fossil Fuel Generation- AIIB will finance investments that are demonstrably compatible with a country's transition toward sustainable, low-carbon energy and internationally agreed targets. Supported fossil fuel-based generation facilities would be expected to use commercially available least-carbon technology.

### *B.1.3 Case Study of Trans-Anatolian Natural Gas Pipeline (TANAP) Project, Azerbaijan*[77]

On 21st December 2016, The Board of Directors of the Asian Infrastructure Investment Bank (the Bank) approved a loan of US$600 million, the largest so far, for the construction of a natural gas pipeline from Azerbaijan through Turkey. The Bank is co-financing this project with a number of other multilateral development banks, including the World Bank Group, and other commercial entities.

Once completed, the Trans Anatolian Natural Gas Pipeline Project (TANAP) will transport natural gas from fields in Azerbaijan into Turkey and then onto markets in Southern Europe. Investment in this energy infrastructure project is crucial for integrating Azerbaijan with new markets and enhancing energy security for Turkey, while also benefitting Europe. The construction of this pipeline will also create numerous employment opportunities in Azerbaijan and Turkey[78].

**DATA POINTS**

- **60 % pollution is a direct consequence of fossil fuel consumption**
- **From 2000 to 2016, the proportion of the global population with access to electricity increased from 78 per cent to 87 per cent, with the absolute number of people living without electricity dipping to just below 1 billion.**
- **The share of renewables in final energy consumption increased modestly, from 17.3 per cent in 2014 to 17.5 per cent in 2015. Yet only 55 per cent of the renewable share was derived from modern forms of renewable energy.**
- **Global energy intensity decreased by 2.8 per cent from 2014 to 2015, double the rate of improvement seen between 1990 and 2010.**
- **Based on current trends, the renewable's share is expected to reach 21% by 2030 – well short of the SDG 7 target and climate alignment.**
- **The current rate of global energy efficiency progress (measured by improvement in energy intensity) falls far short of the annual rate of 2.7% needed between now and 2030**

*Source- un.sustainabledevelopment.org*

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[77] *Trans-Anatolian Natural Gas Pipeline Project, AIIB, 2017*

[78] *AIIB approves $600 million to support energy project in Azerbaijan, https://www.aiib.org/en/news-events/news/2016/20161222_001.html*

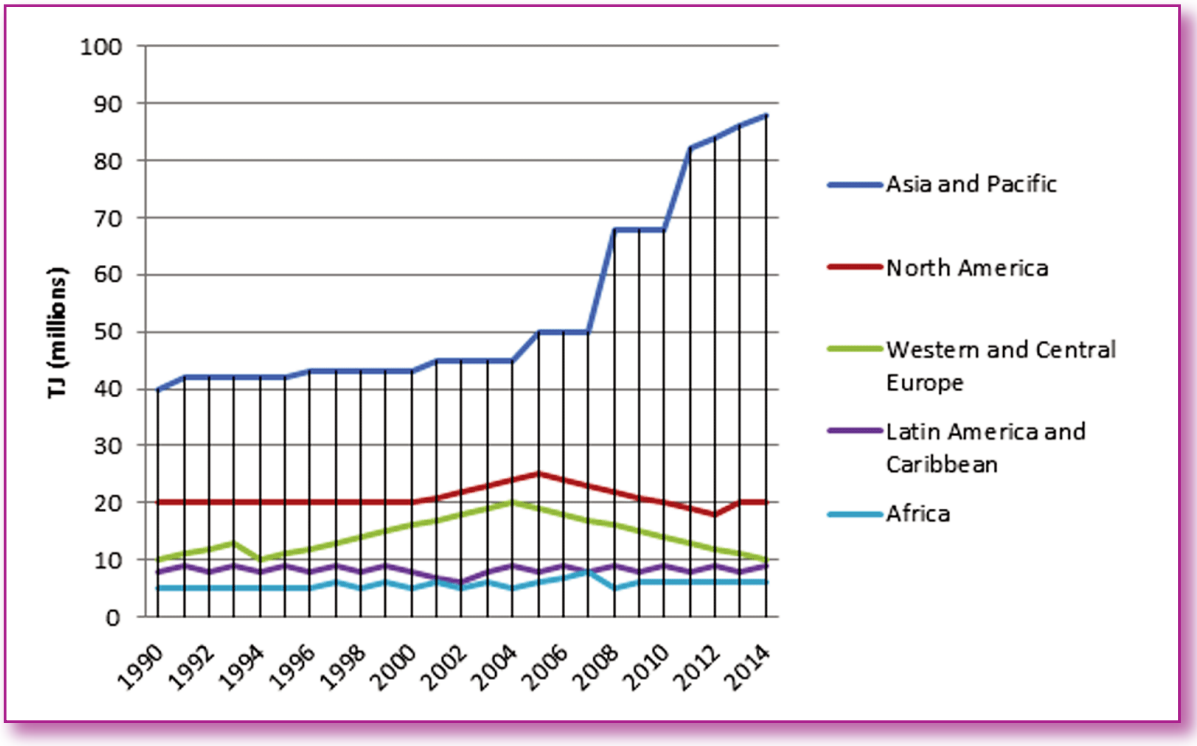
Figure 12 **INDICATORS AT A GLANCE FOR DEVELOPING ASIA AND THE WORLD (2008)**

| Indicators | Southeast Asia, China and India | World | Developing Asia as a % of world total |
|---|---|---|---|
| **Demographics** | | | |
| Population (millions) | 3,033 | 6,688 | 45% |
| GDP (billion constant 2000 US dollars) | 4,329 | 40,482 | 11% |
| GDP/ Capita ( thousand constant 2000 US dollars per percent) | 1.42 | 6 | 24% |
| **Energy** | | | |
| Total Primary Energy Supply (millions tons of oil equivalent, or Mtoe) | 3,292 | 12,271 | 27% |
| Coal | 1,749 | 3,315 | 53% |
| Oil | 698 | 4,059 | 17% |
| Gas | 222 | 2,596 | 8.6% |
| Nuclear | 22 | 712 | 3.1% |
| Hydro | 66 | 276 | 24% |
| Biomass, Waste and Others | 490 | 1,314 | 37% |
| Primary Energy Demand Per Capita (tons of oil equivalent or TOE/person) | 1.09 | 1.83 | 60% |
| Primary Energy Demand Per GDP (TOE/constant 2000$) | 760 | 303 | 250% |
| **Electricity** | | | |
| Electricity Generation (TWh) | 4,990 | 20,183 | 25% |
| Coal | 3,452 | 8,273 | 42% |
| Oil | 119 | 1,104 | 11% |
| Gas | 413 | 4,303 | 9.6% |
| Nuclear | 83 | 2,731 | 3.0% |
| Hydro | 910 | 3,208 | 28% |
| Biomass Waste and Others | 14 | 565 | 2.5% |
| Electricity Generation Per Capita (kWh/population) | 1,602 | 3,017 | 53% |
| Electricity Generation Per GDP (TWh/billion constant 2000 US dollars) | 1.12 | 0.49 | 230% |
| **CO2 Emissions** | | | |
| Total CO2 Emissions (Mt) | 8,974 | 29,260 | 31% |
| CO2 Emission/Capita (tCo2/ capita) | 2.96 | 4.37 | 68% |
| C02 Emissions/GDP (tCO2/million constant US 2000) | 2,073 | 722 | 290% |

*Source: International Energy Agency*

Figure 13

INDUSTRIAL GROWTH TRENDS FROM 1990-2014




*Source: International Energy Agency (IEA), UNESCAP, UN Statistics*

## *Project Description*

The project is the 1,850 km TANAP pipeline system running across Turkey to transport 16 bcm per annum of natural gas produced at Shah Deniz 2 field at Azerbaijan. Out of the 16 bcm per annum of natural gas transported through the project, Turkey will consume 6 bcm per annum and the remaining 10 bcm per annum has been contracted by several European gas traders for the South Eastern Europe market, mostly Italy.

## *Project Objective and Expected Results*

The objective of the project is to integrate Azerbaijan with regional and European energy markets by strengthening its connectivity and transit role and to improve the energy supply security of Turkey and South Eastern Europe. The direct beneficiary of the project is TANAP Do algaz letim Anonim irketi – i.e., TANAP Natural Gas Transmission Company, a private company established under the Turkish Commercial Code to implement the TANAP project and own and operate the TANAP Pipeline System upon project completion. The ultimate beneficiaries are the citizens of Azerbaijan and natural gas consumers in Turkey and South

Eastern Europe. Georgia will also be a beneficiary as part of the agreement on the transportation of Shah Deniz 2 gas through its territory to the Turkish border.

### *Environmental and Social Assessment*

As the World Bank is the co-financier for the project AIIB has decided to use the WB's environmental and social safeguard policies (Safeguard Policies) since (i) they are consistent with the Bank's Articles of Agreement and materially consistent with the provisions of the Bank's Environmental and Social Policy and relevant Environmental and Social Standards; and (ii) the monitoring procedures that the WB has in place to ascertain compliance with its Safeguard Policies are appropriate for the Project. Four of the WB's safeguard policies have been applied to the Project: OP/BP 4.01 Environmental Assessment, OP/BP 4.04 Natural Habitats, OP/BP 4.11 Physical Cultural Resources, and OP/BP 4.12 Involuntary Resettlement. Under the WB's Safeguard Policies the Project has been assigned Category A.

## C) Mobilizing Private Finance

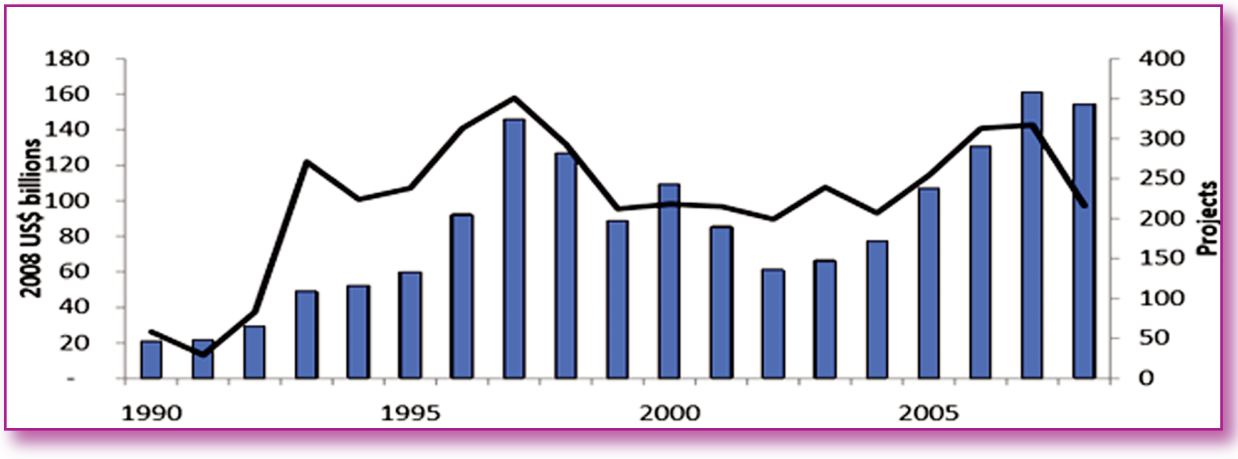
There is a huge gap on the current demands and needs for financing infrastructure around the world and becomes difficult to attain critical SDGs by 2030. The United Nations Conference on Trade and Development stated in its 2014 World Investment Report that global annual spending on economic infrastructure is lower than $1 trillion and will need to rise to between $1.6 and $2.5 trillion annually over the period 2015-2030 (United Nations Conference on Trade and Development, 2014). Bhattacharya, Meltzer, Oppenheim, Qureshi and Stern (2016) have estimated that $75-$86 trillion would need to be invested in infrastructure globally over the next 15 years. Most of the investment will be required in emerging markets and developing countries, with the highest growth rate in demand being projected for Africa. Asia continues to account for the largest share of infrastructure demand. Attracting private finance for infrastructure investments has posed as problem. Furthermore, there is the traditional economic problem that private markets have failed to provide sufficient large-scale infrastructure investments, for example because they are unwilling to fund long maturities, especially at large scale. The World Bank notes that Private Participation in Infrastructure (PPI) has increased steadily since the 1990s – at an average pace of 13% per annum. Furthermore, private sector now supplies 20%-25% of infrastructure financing in developing countries, according to World Bank and other estimates, with public funds and official development assistance still bearing 75%-80% of the cost.The Asian crisis led to a 5 year hiatus, during which PPI slowed down quite substantially.

However PPI flows eventually recovered, reaching a peak of $160 billion in 2007. Governments in developing economies have been increasingly interested in attracting private capital for infrastructure investments. The Public-Private Infrastructure Advisory Facility (PPIAF) records "private participation in infrastructure" (PPI) in low and middle income countries, this includes PPP projects but also privatizations and other forms of private participation. . For South Asia, there were 1,090 projects, with a total volume of $383 billion (of which around 85% in India, 9% in Pakistan, 3% in Bangladesh, and 2% in Sri Lanka). The sector breakdown is 42% energy, 33% telecoms, 25% transport, and very little in water and sewerage; 76% were greenfield projects, 19% concessions, and 5% divestitures. Overall private participation in infrastructure has been growing over the years in emerging markets. In the East Asia Pacific region, PPI is only 0.1%–0.2% of GDP, and well below the global average. South Asia showed a strong up and down movement with a peak in 2010. PPPs have become an alternative financing mechanism in some places but many countries do still make very little or no use of PPPs. With the exception of India, PPP volumes are still small in Asia in absolute and comparative terms[79].

## C.1 AIIB's Strategy for Achieving Private Finance in Projects[80]

Figure 14

**PUBLIC PRIVATE INVESTMENT OVER THE LAST 20 YEARS**




*Source: PPIAF and World Bank*

[79] *Infrastructure Investment, Private Finance and Institutional Investors: Asia from a Global Perspective, ADB, 2016*

[80] *Strategy on Mobilizing Private Capital for Infrastructure, AIIB, 2018*

In 2018, the AIIB released its strategy document on "MOBILIZING PRIVATE CAPITAL FOR INFRASTRUCTURE". The Bank reiterates its mandate to support the plugging of infrastructure gaps in Asia through an admixture of innovative private financing tools. The Bank underlines that private sector has the capacity to play a more substantial role in narrowing the infrastructure financing gap and AIIB will work through a framework to consistently define, calculate and jointly report on Private Capital Mobilization with other Multilateral Development Banks. As a means to achieve its vision for financing infrastructure in Asia, the AIIB has developed a three pronged activity approach-

i) Activity 1– Pursue transactions based on discussion with other MDBs. These typically involve co-financing with other MDBs.

ii) Activity 2– Developing relations with project sponsors to finance stand alone AIIB project

iii) Activity 3– Prioritize potential investments and sectors based on their readiness for private sector investment through spurting new markets and deal flow.

When pursuing such opportunities, the Bank will evaluate risk carefully and ensure that appropriate measures are put in place to mitigate and manage such risks. Nevertheless, the AIIB has a strong starting position, having received triple A ratings from Moody's, Fitch and S&P (AIIB, 2017a). The AIIB also considers blended finance options with private-sector investors and is pursuing many projects in such formats.

# Chapter 6

## India & AIIB

India decided to join the Asia Infrastructure Investment Bank in April 2015[81] and has come to occupy the second largest shareholding in the Bank after China[82]. In June 2018, India hosted the second Annual General Meeting of the Asia Infrastructure Investment Bank in Mumbai which was inaugurated by Prime Minister Narender Modi[83]. Prior to the Annual General Meeting, a curtain-raiser ceremony was organized in New Delhi which was visited by India's Finance Minister, Urban Infrastructure Minister and Minister for Road, Transport & Highways. At the Annual General Meeting in Mumbai the AIIB announced a slew of investments towards developing infrastructure utilities in India. These included –

1) Provisioning $200 million towards the National Infrastructure Investment Fund (approved)
2) $475 million towards developing the Mumbai Urban Transport Project-III
3) Andhra Pradesh Rural Roads Project
4) Andhra Pradesh Urban Water Supply and Septage Management Improvement Project
5) Amaravati Sustainable Capital City Development project.
6) Madhya Pradesh Rural Connectivity Project (approved)
7) Gujarat Rural Roads (approved)
8) Andhra Pradesh 24x&- Power for All(approved)
9) Transmission System Strengthening Project(approved)
10) Morgan Stanley India Infrastructure Fund (approved)[84]

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81 *India joins China-led AIIB as a founding member, LiveMint, April 16, 2015*

82 *China-India likely to be the biggest shareholders in AIIB, Reuters, May, 22, 2015*

83 *India to host 2018 AIIB Annual Meeting, June 16, 2017, https://www.aiib.org/en/news-events/news/2017/20170616_004.html*

84 *AIIB to pump $200 million in India's Infra Fund, June 25, 2018, The Times Of India*

The total investment sought by the Government of India is $2 Billion whereas the actual approved investment for the six projects stand at $1.2 Billion with another $1.9 Billion pending approval[85].

## A) Assessing AIIB's projects in India

### A.1 Case Study of Andhra Pradesh 24x7- Power for All[86]

#### *Project Objective*

To increase the system capacity to deliver electricity to customers, and to improve the operational efficiency and system reliability in distribution of electricity in selected areas in the State of Andhra Pradesh. The Project aims to support the implementation of the 24x7 Power for All plan in State of Andhra Pradesh, by:

- Strengthening the transmission and distribution network;
- Increasing network capacity and thereby increasing the distribution companies' ability to reliably service growing demand;
- Reducing AT&C losses
- Supporting operational reforms to improve the commercial performance of the state's distribution companies

*Total Project Cost:* US$ 571 million

*Financing plan:* Govt. of Andhra Pradesh- US$ 171 million, World Bank (IBRD)- US$ 240 million AIIB- US$ 160 million

*Implementation* Period- Start Date: August 18, 2017 End Date: June 17, 2022

#### *The Need for the Project*

The Project focuses on improving operational efficiency in transmission and distribution system which will increase the supply of affordable, reliable electricity to households, industries and businesses in Andhra Pradesh. The project will inevitably contribute to economic development of the State. The Power For All, is a primer for successfully demonstrating the impact of the project in the country and the region. AIIB's investment augments the GoI's

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[85] *Beijing led AIIB approves $1.2Bn loans to India, 12 June, 2018, EconomicTimes*

[86] *Project Document on Andhra Pradesh 24x7-Power for All*

'Power for All program' -Ayushman Bharat, through scaling up investments in the power sector to supply 24x7 electricity to residential, commercial and industrial consumers by 2019. The total investment envisaged for the state under the 'Power for All' program- a quarter of the investments are required in the generation segment and the remaining three fourths in the transmission and distribution segments. The Government of Andhra Pradesh expects to draw significant private investment in generation through independent power producers to double the installed generation capacity in the State from 8,300 MW in 2015 to 16,000 MW in 2019. However, private investment is not expected to be available in the transmission and distribution segments since the assets are owned by the public sector utilities.

The implementation of the project is divided into four components-

### *Component 1: Power Transmission System Strengthening*

This component includes priority investments in 220 kV, 132 kV, 66 kV, and 33 kV power transmission and sub-transmission lines and associated substations for system augmentation. An outcome of this component it is intended to reduce overall transmission system losses and increase the transfer capability of the State's transmission network.

### *Component 2: Smart Grid Development in Urban Areas*

Government of India has launched the Smart Cities Mission which aims to identify and develop a few selected cities across India as smart cities. It is expected that these cities would set examples in the country that can be replicated and thus catalyze creation of similar Smart Cities in various parts of the country. The implementation agency is in the process of finalizing the list of cities in Andhra Pradesh to be covered under this initiative. This component would support investments in smart grids and underground cables in the selected cities. These investments would include smart meters on selected consumers, distribution SCADA, automated sub-stations, and ring main units. It also includes investments on distribution network strengthening and augmentation (33kV and 11kV) in urban areas to meet the growing power demand, reduce technical & commercial losses, improve operational efficiency and increase the system reliability especially in coastal towns prone to natural calamities.

### *Component 3: Distribution System Strengthening – Rural*

This component would support strengthening and augmentation of low voltage distribution network (33kV and below) and construction of high voltage distribution system (HVDS) in rural areas, particularly in the districts of Anantapur, Kurnool, East Godavari and West Godavari. The state of infrastructure in these districts is poor and the majority of power transformers, distribution transformers and feeding lines are overloaded leading to frequent outages and high technical losses. As advised by the State, the AT&C losses in Anantapur and Kurnool districts are 18.31% and 10.78%, respectively.

### *Component 4: Technical Assistance for Institutional Development and Capacity Building*

This component would (a) improve the project management capabilities and commercial performance of the Andhra Pradesh distribution utilities by (i) developing, upgrading and integrating APEPDCL's and APSPDCL's ICT infrastructure, (ii) if and when required by the Bank, support supervision of contracts by hiring project management consultants, and (iii) strengthening APEPDCL's and APSPDCL's institutional capacity and human resources' skills in the core areas of utility management and operation; and (b) enhance the engineering capabilities of the Andhra Pradesh transmission company by (i) investing in software and testing instruments, and (ii) supporting capacity building activities for APTRANSCO's officials.

### *Key Environmental and Social Issues:*

The safeguard policies are instituted under World Bank are (i) OP/BP 4.01 Environment Assessment, (ii) OP/BP 4.11 Physical Cultural Resources, (iii) OP/BP 4.10 Indigenous Peoples, and (iv) OP/BP 4.12 Involuntary Resettlement. To ensure compliance with the policies concerning safeguards management, the Project has adopted a framework approach since all investment packages have not yet been identified. Subsequently, the State has prepared an Environment and Social Management Framework (ESMF) which is a generic document that serves as a framework and can be adopted for all T&D projects of the State. The ESMF incorporates the essence of "The Right to Fair Compensation in Land Acquisition, Resettlement and Rehabilitation Act 2013" and Indian Constitution's Fifth Schedule provision related to protecting the interest of the tribal people. The ESMF also addresses the environmental and biodiversity concerns including potential infringement with local drainage systems apart from construction related safety and O&M related disposal of

wastes. It also includes cost of training both at the corporate and field level and development of training modules.

*Social Safeguards:* The ESF takes cognizance of Andhra Pradesh's population of 49.5 million (12.72 million households) which is highly diverse in terms of its social, cultural and economic profile. The state has about 17% SC (Scheduled Caste) and 5.5 % ST (Scheduled Tribe) population. Geographically the State is also heterogeneous having a coastal belt, uplands, forest lands and significant flood plains. The State has about 30 % urban population with majority of its people living in rural areas.

*Gender Aspects:* In congruence with the WB's mandate to address gender issues, a Gender Action Plan has been prepared. The Gender Action Plan (GAP) has been prepared with the following objectives: (i) promote women's participation; (ii) maximize project's benefits to women; (iii) minimize vulnerability due to loss of land / livelihoods / accesses; and (iv) security hazards. The Gender Action Plan is envisaged at two levels. Firstly, at the project level, through capacity building to ensure that the staff have the necessary capacity to identify and integrate gender issues in the subproject cycle. Second, at the community level, ensuring participation and that the views of the womenfolk are effectively addressed while implementing the Project. The M&E arrangement for the Project has indicators to monitor the implementation of the GAP.

*Public Consultations and Citizen Engagement:* The Project has adopted citizen engagement plan that includes (i) Consultations with all the relevant stakeholders; (ii) moving beyond consultations into consent in the tribal areas; (iii) external bodies overseeing the conducting of Assessments and Social Impact Management Plan (SIMPs); (iv) sharing of all the plans and engaging in extensive discussions and deliberations with all the stakeholders, especially project-affected persons (PAPs); (v) multilayers of grievance redressal arrangements; and (vi) full adoption of India's Right to Information Act. The M&E arrangement provides for indicators reflecting on citizen engagement.

*Environmental Aspects:* The Project components mainly include strengthening and augmentation of the existing power supply system including replacement of overhead wires with underground cables, power transmission and distribution equipment, by the IAs. The key environmental concerns are related to clearance/felling of trees within the right of way (RoW) for transmission lines and substation sites, incidental impacts on local fauna, infringement of localized fluvial systems - where substation construction may impede drainage, safety of workers and communities living in the vicinity of project site. The operational phase impacts could arise from indiscriminate use and disposal of

batteries, transformer oil, e-waste and in case of circuit breaker – Sulphur Hexa Fluoride (SF6) gas handling.

## A.2 Case Study of Madhya Pradesh Rural Connectivity Project[87]

### *Project Objectives/Brief Project Description*

The objectives of the Project are to improve durability and accessibility, and enhance resilience to climate change of the gravel surfaced rural roads in Madhya Pradesh while building the capacity of the state to manage its rural road network and road safety. The planned activities under the proposed Project are:

(i) Road upgrading, construction and maintenance, including surface sealing of gravel roads (approx. 10,000 km) and provision of alternate connectivity (approx. 510 km);

(ii) Institutional development through implementing a rural road asset management system and strengthening design and research and quality assurance capacity of MPRRDA

(iii) Road safety management capacity development with road accident data management system and pilot comprehensive road safety program;

(iv) Design, implementation and management support.

### *Total Project Cost:*

*Total Project Cost:* USD502.00 million:

*Share of Financing:* AIIB = USD140.00 million (28%), WB (IBRD) = USD210.00 million (42%), GoMP = USD152.00 million (30%)

*Implementation :* Period- May 15, 2018 – December 31, 2022

### *The Need for the Project*

The Project aims to create sustainable and safe last-mile connectivity to small villages while improving mobility of the rural population of Madhya Pradesh. The project will trigger economic development in the state through the creation of active linkages. An intended outcome of the project is that livelihoods of the rural population will be improved through the expansion of

[87] *Madhya Pradesh Rural Connectivity Project, AIIB, 2018*

income earning opportunities through better farm-to-market road connections.

The project aims to augment the durability of the gravel-surface roads constructed under the CMGSY. Due to the short life-span of gravel roads and their quick deterioration reliability of these roads are suffers immensely resulting in service providers, such as public transportation operators, educational institutions, hospitals, traders, etc. being reluctant to bring essential services to small villages. In addition, gravel roads represent a health and traffic safety hazard due to dust pollution. As such the project aims to improve rural connectivity of the roads of Madhya Pradesh by building sealed roads. The benefits of sealed roads are the following:

(i) All weather-roads thereby improve rural economy by reducing transport costs, minimizing post-harvest losses, and providing more economic opportunities to villagers, especially women;

(ii) Prompt emergency response in time (ambulance, firefighting, police, etc.) and easier access to the health care system

(iii) Lower maintenance and vehicle operating costs

(iv) Fewer adverse environmental impacts, and improved health and safety, especially for maternal health;

(v) Reduced teacher absenteeism and increased school enrollment and attendance, especially of girls

The primary beneficiaries are the estimated 1.5 million rural people inhabiting 5,640 villages, who use the rural roads daily for social and economic activities. These include geographically or culturally isolated communities – such as the SC, ST, people living below the poverty line, youth, and vulnerable sections of society, including women, elderly and people with disabilities – to ensure equity in benefit distribution. More children, especially girls, are expected to enroll in higher education programs and school attendance is expected to improve. Additional off-farm employment opportunities outside the villages may also become available as road access to nearby cities improves. The secondary beneficiaries are police, MPRRDA staff, and service providers such as educational institutions, hospitals, public transport operators, etc. In addition, the Project and future maintenance works will generate further employment and new economic activities for villagers.

## *Key Environmental and Social Issues:*

The Bank has decided to use the WB's Environmental and Social Safeguard Policies (Safeguard Policies) since (i) they are consistent with the Bank's Articles of Agreement and materially consistent with the provisions of the Bank's Environmental and Social Policy and relevant Environmental and Social Standards; and (ii) the monitoring procedures that the WB has in place to ascertain compliance with its Safeguard Policies are appropriate for the Project. Under the WB's Safeguard Policies, the Project has been assigned Category B. Three of the WB's Safeguard Policies have been applied to the Project. They are OP 4.01, Environmental Assessment; OP 4.04, Natural Habitats; and OP 4.10, Indigenous Peoples.

*Gender Aspects:* Women, across all age groups, are specifically affected by the lack of rural roads, at the village level, which prevents rural communities from contributing to and benefiting from the national growth process. High maternal mortality rates, for example, have been directly attributed for decades to the 16 inability of pregnant women to travel easily and safely to medical facilities to obtain adequate pre-natal care or delivery assistance, due to lack of transport connectivity. Connectivity at the village level also has a significant impact on attendance and retention in primary and pre-primary schools, girl children suffering more because they are kept at home out of concerns for their safety. Girl students in rural areas also are impeded from pursuing secondary education for the same reasons. Once such microlevel connectivity is ensured through the proposed Project, women and girls will be able to access infrastructure and services for health, nutrition and education. Further, the many women in rural MP who are engaged in SHGs and other entrepreneurial initiatives promoted by government and nongovernmental organizations (NGOs), will benefit from the proposed Project to advance their activities and support their efforts toward economic self-sufficiency.

# Chapter 7

## Addressing Financing Gaps & Creating Inclusive Institutional Mechanisms for AIIB

For achieving its mission and vision to finance infrastructure around Asia and the developing world, the AIIB will have to invest in infrastructure to a tune of US$ 26 trillion over 2015-30 to stem the demand[88]. The AIIB's Strategy for "Mobilizing Private Capital" makes mention of the increased demand that will outdo supply, providing the bank ample opportunity to position itself in the global infrastructure market. However a crucial requirement for the bank will be to address the qualitative aspects of it projects and ensure that their optimum utilization benefits a larger target groups and does not produce adverse spillover effects.

A critical aspect of sustaining the momentum of sustainable infrastructure will necessitate in meeting the SDGs and the goals of the Paris Agreement. Moreover, sustainable infrastructure also helps to improve resilience to deal with natural disasters and the impacts of climate change. Nevertheless, sustainability will depend on the local context, and a positive short-term improvement might not be the most sustainable solution in the long-term (New Climate Economy, 2016). Renewable-energy investments are keys to closing the global sustainable infrastructure gap: $13.5 trillion is expected to be invested overall between 2015 and 2030 in low-carbon infrastructure (Bhattacharya et al., 2016). To support this goal, the expert commission of the New Climate Economy recommends that multilateral, bilateral and national development banks and other development finance institutions (DFIs) double their investments in sustainable infrastructure (New Climate Economy, 2016).

It is also vital to take into account that that the worldwide stock of existing infrastructure is worth about US$ 50 trillion, which is of the same order of magnitude as the global stock market capitalization (US$ 55 trillion) and comparable, to a certain extent, to the global GDP (US$ 72 trillion). This existing stock offers a tremendous opportunity to narrow the

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[88] *McKinsey & Co, Bridging Global Infrastructure Gaps, 2016.*

infrastructure gap if governments are capable and willing to optimize the operations and maintenance (O&M) of their infrastructure assets[89].

## A) Essentiality of Sustainable Infrastructure in being a Multiplier

Brauch 2017[90], takes note of the multiplier effect of Sustainable Infrastructure in creating a host of utilities that can be characterized as co-benefits (including with respect to governance and the achievement of climate change mitigation and adaptation goals), which are generated by sustainable infrastructure projects throughout their lifecycle these include-

### A.1 Economic Co-Benefits Infrastructure that is economically sustainable is expected to:

a) Optimize value for money economy-wide, for governments, investors, taxpayers and (where applicable) users

b) Create employment across skill and income levels

c) Help boost green economic development through the creation of core infrastructure needed by various economic sectors.

d) Increase productive foreign direct investment (FDI) and domestic value added.

### A.2 Social Co-Benefits Infrastructure that is socially sustainable is expected to:

a) Generate income, particularly for low-income households. b) Create jobs, including the generation of new specialization related to green jobs

b) Build skills and provide for mid-career up-skilling and re-skilling, especially in relation to improved productivity and green and clean technologies.

c) Contribute to the reduction of poverty and socioeconomic inequality

d) Meet and exceed compliance with core labour standards and human rights, contributing to improvements in working conditions

e) Be inclusive, affordable and accessible to all economic strata in cities and rural areas

f) Provide for accessible and inclusive grievance and dispute settlement mechanisms available to all stakeholders affected by the infrastructure project, free of intimidation or retribution.

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89 *Strategic infrastructure: Step to Operate and Maintain Infrastructure Efficiently and Effectively, World Economic Forum, 2014*

90 *Contracts for Sustainable Infrastructure: Ensuring the economic, social and environmental co-benefits of infrastructure investment projects, Martin Brauch, 2017, IISD, Heinrich Boll Stiftung*

### A.3 Environmental Co-Benefits Infrastructure that is environmentally sustainable is expected to:

a) Limit and lower air, water, soil and all other forms of pollution. · Provide for the stewardship of ecosystem

b) Contribute to ecosystem and biodiversity management and conservation

c) Promote and use clean and environment-friendly technologies

d) Mitigate greenhouse gas emissions, consistent with the climate change goal under the Paris Agreement (that is, holding the increase in the global average temperature to well below 2˚C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5˚C above pre-industrial levels).

e) Contribute to the transition to a low-carbon economy and to the decarbonization of the energy system (that is, moving away from fossil fuels and toward renewable energy: solar, wind, biomass and hydropower)

While a host of these indicators are included in the Environment and Social Framework of the AIIB there will be a need to qualify them as measurable targets that can be used to assess the viability and feasibility of the project in terms of the overarching mandate of each project.

## B) Mainstreaming Human Rights Framework in Infrastructure Investment

Human Rights become a core issue in the overall framework of infrastructure investments since the end beneficiaries of every project are the general population. However integrating this paradigm within the strategy documents of MDBs becomes elusive and is only relegated to the processes and checklists of the project design. While there is ample justification for infrastructure being an enabler in alleviating poverty, ushering growth and producing productive outcomes for society, there have been dearth of examples where large scale economic displacement caused by the creation of 'economic corridors'. The room for human error in the project design, operational phase and implementation can result in large scale human rights violations that have been safeguarded under international and national laws. The United Nations "Baseline Study on the Human Rights Impacts and Implications of Mega-Infrastructure Investment, 2017" is an essential document that captures and builds on the various aspects of including a robust Human Rights framework for investment projects. As a means of studying the impact of mega-infrastructure projects on human rights the document makes note of how human rights in the course of implementing projects may become compromised through-

1) *The Role of Public Private Partnership-* PPP's are not aligned to social outcomes and ultimately resort to raising efficiency through profitability and cutting jobs

2) *Flawed Designs-* Many of the plans reflect an outdated and potentially destructive model of industrialization based on liberalized markets and borders, export specialization and natural resource extraction.

3) *Weak Accountability Mechanisms-* Accountability in the public governance of infrastructure means responsibility for the relevant government agencies to account to each other, as well as to those they govern. Accountability mechanisms at all levels should comply with due process and human rights requirements and should not be compromised in the quest for quick implementation of projects.

4) *Governance Challenges and Lack of Strong, Harmonized Global Standards-* The governance of cross-border infrastructure projects is seriously impaired by a lack of harmonized policies, laws, standards and rules, which leads to each country applying its own laws or importing different standards. The result is a patchy, inconsistent and unpredictable regulatory landscape[91].

### B.1 Bringing in Alternative Assessments

A study of alternatives helps to achieve that goal by first determining how the project in question compares with alternative options for the same goal as measured against technical, economic, financial, environmental, and social criteria, and then examining whether the proposed configuration of the project is optimal. Other mitigation measures that can be applied during the project design stage include the careful selection of project sites and routes to avoid their being located in sensitive areas, reduction of the number of camp followers, the development and implementation of a proper contract-awarding system, specification of the green credentials required of head construction contractors, and engagement with project-affected people and communities and other concerned stakeholders in public consultation and disclosure processes in order to determine proper compensation and resettlement settlements and plans[92]

## C) Effective and Renewed Safeguard Mechanisms

According to Humphrey 2016 in "Time for a new approach to environmental and social protection at multilateral development banks", the existing auditing mechanisms and safeguards utilized by the MDB's have not been industrial in their working, resulting

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[91] *Baseline Study on the Human Rights Impacts and Implications of Mega-Infrastructure Investment, 2017*

[92] *Policies and Measures to Mitigate the Potential Environmental Impacts of Cross-Border Infrastructure Projects in Asia, ADBI*

in protecting the interests of the banks from criticism. The environmental and social safeguard approach that are in vogue with major MDBs need to address conceptual frameworks and practical impediments. There is also a need for integrating MDBs to focus on using country systems thereby encouraging countries to fully respect and implement its own laws and regulations and strengthen them through use. There are structural weaknesses in the existing safeguards of the MDBs such as-

a) Safeguards are imposed over and above national laws, which raise serious questions about sovereignty, country ownership and the degree to which a country has the right to define its own approach to these issues based on its priorities and socioeconomic context.

b) Safeguards at the major MDBs are one-size-fits-all, legalistic and inflexible policies covering every MDB project in every borrowing country, an approach that does not recognize the vastly different quality of legal frameworks and enforcement capacity across developing countries.

c) Safeguards are time-consuming and expensive, and these costs are borne by the borrower.

d) Non-borrower MDB shareholders – who can dictate policies at the major MDBs through their voting power – have felt free to impose safeguard standards that in some cases exceed requirements in their own countries[93].

Therefore it becomes integral for new development institutions such as AIIB to adapt to a flexible and innovative structure of environmental and social protection safeguards that does not overlap with the legislatures of developing nations and works to safeguard communities and beneficiaries under the shelter of their domestic laws[94].

## D) Instituting Civil Society Forums for Multi-Stakeholder Participation

Civil Society plays a pivotal role in holding Multilateral Development Banks accountable to their policies, frameworks and provides critical assessment on investments through usage of various social auditing tools. Bretton Woods and a host of MDBs have had varying degrees of Civil Society engagements that have progressively sought to create a progressive architecture for channelizing concerns, issues and agendas. The United Nations, World Bank and World Trade Organization provide constitutional arrangement for Civil Society participation.

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[93] *Time For A New Approach to Environmental and Social Protection at Multilateral Development Banks, Chris Humphrey, 2016, ODI*

[94] *It is to be noted that AIIB, has a sound Environmental and Social Framework that takes into consideration the effect of the projects on the local population. An example of safeguarding communities through domestic legislatures is visible in the Project Document developed for the Madhya Pradesh Rural Connectivity project where Scheduled Castes and Tribes have determined as an indicator for ESF.*

While the Asian Infrastructure Investment Bank has no structure for Civil Society participation yet there has been a space accorded to providing Non-Governmental Groups to interact with the staff of the bank. In June 2018, prior to the Annual Board Meeting of the Bank, Civil Society Organizations from across India were invited to interface and get insights on its various activities and frameworks. Hence Civil Society participation will be an important platform for the bank in order to leverage its investment portfolio and also source grassroot data for assisting in its Environmental and Social Assessments when undertaking projects.

## D.1 Importance of Civil Society Participation

Based on the various experiences of Civil Society engagements with MDBs, the following observations will be necessary indicators for the AIIB to follow as a roadmap.

a) *Increases Accountability of the MDB and builds credibility-* As in the case with many Multilaterals across the world, interaction with Civil Society results in greater accountability of the bank's modalities that in effect aid in enhancing the credibility of an institution[95].

b) *Achieving Policy Coherence-* Civil Society engagement facilitates a comprehensive dialogue, linkage that helps in achieving critical policy coherence,

c) *CSO interaction facilitates achievement of critical goals-* Civil Society Organizations contribute MDB's to identify critical geographies, primary beneficiaries which can have the effect of achieving certain goals[96].

d) *CSO's can table innovative ideas-* Engagement of Civil Society can contribute towards providing innovative ideas to the Bank to evolve investment strategies that may be financially profitable as well as socially beneficial to local communities

e) *Providing professional expertise and increasing capacity for effective service delivery-* Especially in environments with weak public sector capacity, in post-conflict situations or in humanitarian crises[97].

f) *Provide Capacity Building to local beneficiaries on utilizing infrastructure-* Civil Society Organizations can help in capacity building exercises for local beneficiaries and create an income-generating schemes through the multiplier effects enabled by projects financed by the MDB. Capacity building and institutional development support can act to improve human and social capital required to support effective poverty reduction.

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95 *Civil Society and IMF Accountability, Jan Aart Scholte, University of Warwick*

96 *Issues and Options for Improving Engagement between World Bank and Civil Society, World Bank, 2005*

97 *Rajesh Tandon, 2018*

## D.2 Building on Experiences of other MDB engagement with Civil Society

It is suggested to AIIB, to create a dedicated mechanism for Civil Society engagement within the institutional architecture of the bank which can contribute in enhancing the bank's social sensitivity towards its projects and investments. The sustained efforts of NGOs and civil society organizations have drawn attention to the environmental impacts of the MDBs' activities, particularly in the energy sector. Indigenous civil society and NGO groups have emerged across Asia, particularly in its democracies, advocating for environmental and social considerations to be more material to decision making in the region[98].

Following the mechanism of the European Bank of Reconstruction & Development (EBRD) the AIIB, can create a consortium like forum for engagement and identify key tiers for engagement such as- outreach and information disclosure; dialogue; consultations; and cooperation[99].

Over the years Civil Society engagement with Multilateral Development Banks has overseen different strategies to address specific issues. While many MDB's have instituted structures for dialogue and advocacy, others lack these platforms or remain inept at dealing with issues. The experiences of engaging with different MDB's can be an established principle for AIIB to work out concerns of local population, communities and geographies. A quick perusal of engagement processes employed by different MDBs can be a suggested to AIIB to build a robust engagement process.

a) *Engagement Mechanism of Asian Development Bank:-* The Asian Development Bank has its own NGO Policy which states *"Developmental NGOs can be regarded as private organizations entirely or largely independent of government, not created for financial and material gain, and addressing concerns such as social and humanitarian issues of development, individual and community welfare and well-being, disadvantage, and poverty, as well as environmental and natural resources protection, management, and improvement"*

   ADB's cooperation with NGOs/CSOs generally is realized through two parallel streams: strategic or thematic institutional cooperation and operational cooperation.

   At a strategic or thematic level, ADB considers NGOs and other civil society bodies as important stakeholders and/or development partners. At the operational level, ADB pursues cooperation with NGOs/CSOs in the design, implementation, and monitoring of ADB-supported project and technical

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98 *Asia, MDB's and Energy Governance, Smitha Nakhooda, Overseas Development Institute*

99 *THE EBRD'S ENGAGEMENT WITH CIVIL SOCIETY: ROADMAP (2017-20)*

assistance activities. As part of its institutional structure for engaging Civil Society the ADB outlines - *Institutional Openness to NGOs, Institutional Action Plan, Institutional Arrangements for NGO Cooperation, Internal Capacity Under which ADB should strengthen its internal capacity for NGO cooperation, especially the strengthening of staff skills, External Capacity Building:* As specified under ADB's existing policy, ADB should provide capacity building and institutional development support for NGOs, and for governments to strengthen their relationships with NGO[100].

b) *Engagement Mechanism of African Development Bank:-* The African Development Bank employs a CSO Regulatory Framework for interfacing with Civil Society. The specific objectives of the framework are to (a) strengthen the Bank's capacity to build cooperative working modalities with CSOs, (b) promote staff interactions with CSOs in a way that enhances the Bank's work and contributes to the effectiveness of its support RMCs, and (c) provide operational guidance for the Bank's headquarters, regional resource centers, country offices, and project staff.

The framework highlights broadened engagement with civil society and AfDB action to strengthen the capacity of CSOs. It also suggests four areas in which collaboration with CSOs could be particularly important: integrated environmental and social safeguards systems, the Independent Review Mechanism, and work in fragile Regional Member Countries.

The AfDB's engagement structure is divided under three heads- *Corporate Level Engagement: which use Civil Society Organizations as peer reviewers of Bank's stated policies, Regional level Engagement:* where Civil Society are used for input on thematic areas and Operational Level Engagement: CSOs involvement in project results monitoring, engaging CSOs/NGOS in project implementation and Partnership between CSO and the Bank Independent Review Mechanism (IRM)[101].

c) Engagement Mechanism of Inter-American Development Bank:- The Inter-American Development Bank facilitates ConSoC is a platform for collaboration and consultation promoted by the IDB Group and integrated by a group of Civil Society Organizations (CSOs) in each country, each selected based on the role that it plays and involving one or more of the development strategy pillars agreed to by the governments of each country[102].

The IADB has also devised a strategy for augmenting Citizen Participation in Bank's Activities in which it employs a variety of participatory procedures the Bank has been able to "learn by doing" and amass valuable experience with

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100 *The Asian Development Bank's Development Cooperation with Civil Society, Grant Cutis, ADB NGO Forum, 2004*

101 *Framework for Enhanced Engagement with Civil Society Organizations, African Development Bank Group,*

102 *https://www.iadb.org/en/civil-society/civil-society-consulting-groups-consocs%2C7238.html*

public participation. These include- stakeholder consultations, inclusive and focused group surveys, thematic and sectoral stock-taking discussions and advisory groups of Civil Society Organizations (ConSoC's)[103].

## E) Recommendations for AIIB in creating Civil Society Engagement Process

Based on the experiences of various MDB's, the AIIB can learn from the existing modalities that aim to have multi-stakeholder participation and civil society liaison. In the line up to its 2nd Annual General Meeting in India, the AIIB had convened various stakeholder consultations with Civil Society groups across India[104]. The AIIB has consistently maintained its commitment towards mutli-stakeholder partnerships and inclusive discussions that can foster effective development. Currently the AIIB has not adopted any policy for civil society participation and usually relies on institutional policies such as the 'Complaints Handling Mechanism' and the 'Environmental and Social Framework'. It therefore falls impending on the bank to design a robust structure for Civil Society interface that can provide myriad of suggestions on institutional review, developing country strategies and outline engagement processes. The bank can weigh the advantages of such interventions that are provided below-

1) *Adopt a policy for Civil Society engagement-* The necessity to include opinions and inputs of Civil Society emerges from the stated focus of the bank on financing infrastructure to achieve holistic development. The Bank needs to design a consultation framework that will incorporate suggestions and issues during the project adoption and operational phases.
2) *Prepare Country Strategies with Civil Society-* Each geography presents a new challenge that needs detailed analysis and strategies for implementation. Through dialogue and convening with Civil Society of those specific countries, AIIB can factor in on deficits and prepare country strategies in the proposal phases of the project.
3) *Integrate Review of Existing Policies with External Agencies-* Every policy is subjected to change and evolution. Similarly while the AIIB is relatively new entrant in the multilateral universe and believes in building on the gaps of existing development banks, there will emerge a necessity to review institutional procedures within the bank which will require the inputs and critical assessments of Civil Society.
4) *Adopt Policy for Civil Society as facilitators for Capacity Building-* AIIB's sustainable development projects will require the expertise of Civil Society to build capacities of local communities and beneficiaries. It has been observed that unless local capacity building exercises are provided to clients on the operability there can be serious risks associated with the quality of asset[105].

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[103] *Strategy For Promoting Citizens Participation in the Bank's Activities, Inter-American Development Bank. 2004*

[104] *http://www.uniindia.com/india-to-host-3rd-annual-meeting-of-board-of-governors-of-aiib/business-economy/news/1074671.html*

[105] *Strategic Infrastructure Steps to Operate and Maintain Infrastructure Efficiently and Effectively, World Economic Forum, 2014*

# Chapter 8

## Conclusion

The Asian Infrastructure Investment Bank has an undertaken an onerous task of financing the infrastructure deficit in the Asian region. The Asia region will witness key challenges in its run up to achieving critical Sustainable Development Goals that can majorly be achieved through strategic investment in economic and social infrastructure. The institutional policies and the frameworks incorporated by the bank in order to supplement a holistic coverage of its investments are noteworthy and build on the experiences of other Multilateral Development Banks such as the World Bank and International Monetary Fund and other development banks such as the New Development Bank, African Development Bank etc. It will be highly interesting to see how congruent the bank functions to China's rising geo-political significance.

The report elaborates on the key thematic areas pursued by the bank and role that can be facilitated by AIIB in progressing towards its vision. The need for catalyzing and harnessing resources through innovative mechanisms such as PPP's and PPI's remain a challenge for the bank. Similarly the bank has to tread a careful balance of maintaining its commitment to green financing and providing the needed transition to low carbon-economies. Additionally the bank will have to succeed with a strategy that provides strategic investment in renewable energy. In the context of cross-connectivity across regions, the bank will have to be careful of investing in infrastructure that does not confront essential human rights and institute proper mechanisms of accountability that are made to take stock of concerns of local communities and beneficiaries. Currently the bank has undertaken projects that are supported through blended financing with other MDB's, it will be crucial to see how AIIB delivers on singular projects and investments. The report demonstrates that for achieving essential baseline targets of financing sustainable development there will be an imperative to mainstream participatory consultations with Civil Society, aggrieved parties and groups which can further the objectives of the bank. Furthermore it will be highly

productive for the bank to develop its customized tools for studying the assessment and indicators based on its ESF.

There will be a need for the bank to expand the scope of its gender-policy in its investments. It is to be noted that the bank has recently undertaken its investment projects and therefore non-availability of impacts and post-project observations make it difficult to assess the qualitative and quantitative positives delivered. For a future civil society assessment, it will be important study the impacts and challenges that have confronted the bank. The pipeline of projects currently with the bank is to be completed in 2022. The bank will also need to involve a roadmap assessing the viability and feasibility of its institutional policies and integrate them harmoniously that can produce effective outputs.

Over and above the bank aims to fulfill the aspirations of the Asia region and has received a receptive response from an array of countries with India being one, who has sought financing to a tune of USD 2 Billion. As more and more countries join the bank, the bank's geographical diversification will be critical for maintaining the fulcrum of strategic investment and posturing development cooperation in the region.

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