TERM SHEET

Construction Phase Financing

The Vivekananda Education Megaproject

(Secondary Schools + Skill Development)

Hybrid Scheme

The Nataraja Foundation
Mumbai

Compendium of Financing Sources :

Construction of 30,000 New " Skills Development Centers + Secondary Schools " under PPP across 29 States & 7 Union Territories

Financing note submitted to
Ministry of Skills Development & Ministry of HRD, Govt. of India

12th Nov ' 2018

Projects by Architect : Shri. RL Kumar
Pictures Courtesy : Centre of Vernacular Architecture, Bangalore www.vernarch.com

Vivekanand Education Megaproject

CONSTRUCTION PHASE (2019 – 2028)

Executive Summary --- > Construction Phase Financing

The Nataraja Foundation
Mumbai

Financial Options For Raising Rs. **100.55** Lakh Crores over 10 years … from **12** different sources
Actual amount required is Rs. **14.95** Lakh Crores over a period of 10 years

A. Non Tax Based Financing

1. 3 % of Forex Reserves currently @ $ 393 Billion : Rs 72,000 Crores
2. Bidding Rounds : Funds raised via bidding rounds for the Vivekanand School in a cloud programme : Rs 4,739 Crores

3A. Un-Utilized Funds with Various Ministries at the end of each financial year : Rs 2,10,000 Crores

3B. Un-Utilized Development Aid (World Bank, ADB etc) : Rs 35,000 Crores

4. Coordinated CSR Funding (Discounted) : Rs 18,417 Crores
5. Equity Infusion by 30,000 Private Parties (PPP) : Rs 73,500 Crores
6. Calibrated Dis-Investment in PSUs 7.3 % of Market Cap: Rs 72,908 Crores

11A. Un-Utilized Secondary & Higher Education Cess (SHEC) Cess : Rs 83,497 Crores

Rs 5.70 Lakh Crores

B. Large Urban Equity Withdrawal Options

BIG SOURCES OF CAPITAL

7. PSU Owned Land Bank in Metro Cities (UEW) : Rs 2.916 Lakh Crores
8. New Enhanced Fee for Non Agricultural Land Conversion : Rs 21.872 Lakh Crores
9. New Enhanced Fee For Re-Zoning Urban Land : Rs 65.617 Lakh Crores

Rs 90.4 Lakh Crores

Government of India
Ministry of HRD
Ministry of Finance
Ministry of Skills Development

Parliament

~~Consolidated Fund of India~~

Indian & International Banks

Annuities / Receivables can be securitized @ 7.8 % Interest Rate to raise Rs **4.4** Lakh Crores upfront

Annuities with a NPV of Rs 4.4 Lakh Crores

Education Megaproject Escrow A / C

Education Megaproject Fund
Rs 14.95 Lakh Crores Required

Education Megaproject Fund Act

Indian Social Infrastructure Corporation (ISIC)

ISIC Act

Build 30,000 Secondary Schools and Teacher Sharing Infrastructure with another 6,21,805 Existing Govt. Schools

Rs / US $ Exchange Rate (12th Nov ' 2018)	:	72.9078
India 10 year Bond Rate (12th Nov ' 2018)	:	7.8 %
Repo Rate for RBI funds	:	6.5 %

C. Innovative New Fee / Tax based sources (Annuities) with Securitization option

10. Quantized TOBIN Tax on Forex Trns : Rs 1,49,086 Crores or Rs 22,018 Crores per year
11. New Graduate Tax on Employer : Rs 1.72,661 Crores or Rs 25,500 Crores / year
12. Securitization of Existing Flows

A. Education Cess @ 3 %
Rs 44,011 Crores (Total)
or Rs 6,500 Crores / Year

B. 20 % of NREGA Funds
Rs 74,481 Crores (Total)
or Rs 11,000 Crores / Year

National Highway Authority of India (NHAI) LOOKALIKE STRUCTURE

Education Megaproject Uses Familiar <u>NHAI Structure in Plug & Play Mode</u> to raise Rs 14.95 Lakh Crores for Expansion of The Secondary School System in India

The Vivekananda Education Megaproject

The Nataraja Foundation
Mumbai

TERM SHEET

Construction Phase Financing

Compendium of Financing Sources

for

Construction of 30,000 New Skill Development Centres & Secondary Schools under PPP across 29 States & 7 Union Territories

Note :

This Term Sheet specifies the possible sources of Finance for Construction of 30,000 New Skill Development Centres & Secondary Schools * under a PPP Framework across 29 States & 7 Union Territories. The note is intended to be a definitive source of information regarding non – conventional / non budgetary finance for nationwide Mass Education & Healthcare projects. The 12 non – conventional sources put together represent nearly Rs **100.55** Lakh Crores (if we Include accumulated SHEC cess of Rs 88,000 Crores) in financing which can be made available to Central, State & Local governments over the next 10 – 15 years for large Education & Healthcare schemes. The utilization of this massive resource could lay the foundation for India to enter the league of Developed Nations by 2028. This document (**Rev 00**) is protected under the Indian Copyright Act and has been prepared by the Nataraja Foundation (Mumbai) for use by Ministry of Finance, Govt. of India.

Rs / US $ Exchange Rate (12th Nov ' 2018) : 72.9078

* Including the associated Teacher Sharing infrastructure

Sl. No.	Source Description	Estimate of Total Possible Corpus (Crores of Rupees)	Amount Available Each Year (Crores of Rupees)	Remarks / Critical Assumptions
I	**Phase I Financing … (2019 - 2024)**			
1.	**Three Percent (3 %) of Indian Foreign Exchange Reserves .. As Long Term Soft Loan** (Currently Approx. US $ **393.13** Billion as of 02nd Nov ' 2018)	**72,000** 3 % of total forex reserves will be deployed for the construction of New Teacher Training Institutes and Secondary Schools in rural areas over the first five years of the megaprojects construction phase.	**14,400** Repo rate of 6.5 % + 1.5 % floating premium = 8 % cost of funds charged to school P & L's and accounted for in school vouchers	The Deepak Parekh Committee, in 2011, had recommended that an amount of US $ 2 – 3 Billion out of India's Forex Reserves ($ 270 Billion at that time) could be lent by the RBI to an Infrastructure Debt Fund. Now since the Foreign Exchange reserves have increased to US $ 393 Billion (Nov' 2018) , a much larger amount is possible as a Soft Loan. This amount is available for immediate deployment. India's foreign exchange reserves are currently parked in Govt. securities issued by central banks around the world (mainly the US Fed). The return on this US $ **393** billion forex reserve is around **2 - 3** percent each year which is very low in opportunity cost terms. By investing just a small percentage (**3** - **4** %) of this money in Teacher Training and in the construction of New Secondary Schools and Skills development centres (India is short of over **6,21,805** secondary schools) , the Government of India will, over the next 40 years, earn Rs. **2500** Crores for every Rs **1** Crore invested according to a recent Stanford University study by Prof. Eric A. Hanushek. According to the Stanford paper, a sum of **1** Million US dollars invested on a teacher centric education model, yields a Social and Economic impact of US $ **2.5** Billion over the next 40 years working lives of the students. **The Vivekananda Education Megaproject is therefore likely to provide the largest possible return on India's Forex Reserves.**

The Vivekanand Secondary Education Megaproject will provide the Largest Possible return in terms of Social Impact for an investment using India's Foreign Reserves.

We are currently parking this money in US Govt.Treasury bonds and similar securities where it is earning a 2 % to 3 % return. Instead if we use this money to improve Teacher Quality in India , the potential Financial & Social return is Rs 2500 for every Rupee spent over the following 40 year period … according to a Stanford University study.

Returning Capital + Interest :

As the Indian Economy Triples in size from a GDP size of US $ **2.5** Trillion in 2018 … to a US $ **7.5** Trillion economy by 2032, the entire soft loan of Rs **72,000** crores (US $ **9.875** Billion) can be easily returned with Interest to the RBI. In this specific case, the project documents mandate a Return or take out of RBI's soft loan using the cash paid by Equity investors in the Megaprojects bidding rounds for the 30,000 New Secondary Schools.

The Megaprojects " Teacher Centric " scheme is designed to attract the most qualified people to careers in education, thereby setting right a big Imbalance in Indian society. Investing in our own Teachers and Children is possibly the Biggest and Most Productive investment any Government can make.

To download all project documents & detailed calculations please visit : http://www.nataraja.org.in/Vivekanand_Education_Megaproject.htm

Financing Sources (Construction Phase)

Rs / US $ Exchange Rate (12th Nov ' 2018) : 72.9078

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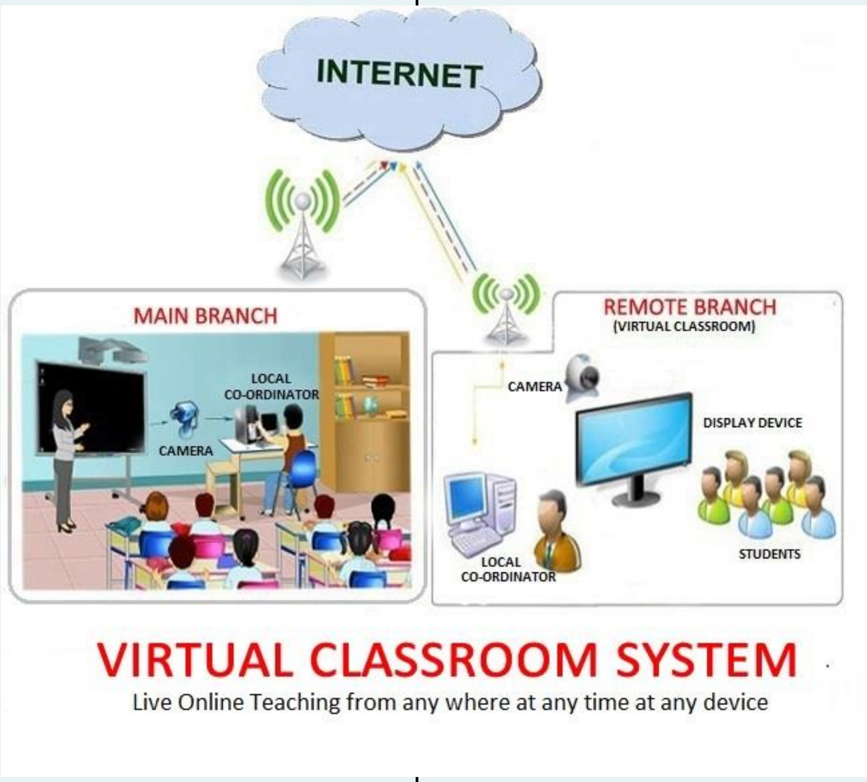
Mumbai

Sl. No.	Source Description	Estimate of Total Possible Corpus (Crores of Rupees)	Amount Available Each Year (Crores of Rupees)	Remarks / Critical Assumptions
2.	**Proceeds of Bidding Rounds for a License to provide 4G / 5G Data Connectivity & Content to 6,21,805 Schools under the Vivekananda School in a cloud programme**	**4,739**	**4,739** Entire Capital will be deployed immediately in the first year	**Raising money … from Vendor Bidding rounds.** The Govt. can charge Vendors a fee for the right of access to schools across India. - Under the scheme the Govt of India under a central assistance plan to states will provide the entire Capex for setting up the IT Infrastructure and School Hall / Building at 6,21,805 locations across 29 states and 7 union territories. - In addition, the central Govt. will also provide Operations financing support of Rs 62,526 / month per school for all schools covered by the Vivekanand School in a cloud. The monthly Opex charges consist of : 1. Video Conferencing App Rental charges per month 5,000 2. Data charges per month from Telecom carrier (Unlimited data) 1,500 3. Salaries for two teachers / instructors @ Rs 20,000 per month 40,000 4. Monthly Maintenance/IT support@ 12.5 % of Capex (4,34,500) ** 4,526 5. Management Incentive @ Rs 10,000 / month *** 10,000 **6. Total ballpark Opex 61,026** On a yearly basis therefore each of the schools represents a minimum revenue of Rs 7,32,312 Excluding externalities (additional revenue opportunities) such as Stationery and school consumables. The Govt. of India will be guaranteeing a pure profit of Rs **10,000 per month per school or Rs 621.8 crores** of pure profit in the first year and escalated at 3 % each year … to the (Telecom Company + EPC Contractor + School Management Company) Consortium for Building and Operating the Vivekanand Schools in a cloud. Management incentive of Rs 10,000 / month per school will be paid to the (Telecom operator + EPC Contractor + School Management Company) Consortium to Operate the School in the Cloud. This and other charges will be increased by 3 % each year to account for inflation. This guaranteed Management incentive of Rs 120,000 per year per school will form the basis of the Bid which will be securitized and paid upfront by the Contractor to win the right to run the network across 6,21,805 schools.



Financing Sources (Construction Phase)

Rs / US $ Exchange Rate (12th Nov ' 2018) : 72.9078

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Sl. No.	Source Description	Estimate of Total Possible Corpus (Crores of Rupees)	Amount Available Each Year (Crores of Rupees)	Remarks / Critical Assumptions
3A.	**Un-used Funds with various Ministries … at the end of each financial year** Source may potentially be used only for the first <u>three</u> years	**2,10,000**	**70,000** Capital will be deployed in first three years of the projects construction phase … after which the Ministries are likely to turn more efficient at identifying and executing various schemes.	A massive amount of Money committed in the Budget to various ministries remains un-utilized each year. It is being assumed here that Approx. **Rs 70,000** Crores will remain un-utilized by various ministries (Excluding Defence) each year. This money can be used to build Secondary Schools as <u>Education is linked to almost every ministry</u> in some way.
3B.	**Committed yet Un-used world Bank / ADB aid** (CAG Report - 2011)	**35,000**	**7000** Capital will be deployed in first five years	In a report tabled in parliament on the 18th of March 2011, the CAG had said that the total committed yet un-utilized external assistance to India was of the order of Rs **1,13,444** crore (US $ **15.56** Billion). This money had been committed by the World Bank / ADB and certain bilateral funds to development projects in India. The March ' 2011 CAG report had said that <u>inadequate planning</u> resulted in avoidable expenditure in the form of <u>commitment charges</u> amounting to over Rs **86** crore each year. This essentially means that the Indian Govt. (in 2011), did not have any identified projects to use this money and was in fact paying a <u>cash penalty</u> for non-utilization of funds. The Vivekananda Education Megaproject will construct **30,000** New Skills development centers & Secondary Schools across 29 States and 7 Union Territories. Since the project has many facets (<u>Education</u>, <u>Women & Child Development</u>, <u>Rural Development</u>, <u>Poverty Alleviation in Urban Areas</u>, <u>Environment</u> and <u>Water & Sanitation</u>), it will become eligible to utilize the money provided by Multilateral Investment Institutions under <u>almost any vertical</u> for which finance is provided by the multilateral development institutions.

In addition to the un-utilized funds with various ministries currently, there are also un-utilized funds that have been disbursed to various NGOs by the previous UPA Govt. According to the CAG, Rs 51,000 Crores was given to various NGO's under centrally sponsored schemes, bypassing the State Governments and has been <u>lying un-utilized</u> with NGO's during the tenure of the previous Govt.

The whereabouts of this <u>missing money</u> needs to be investigated, and if found, it needs to used in Social Projects such as Education.

Ministries spend as a % of plan allocation (Till Dec ' 2015)

Un-Utilized funds … Related to Skills Dev & Education	**Spent**	**Unspent**
1. Skill development & Entrepreneurship	33 %	67 %
2. Minority Affairs	38 %	62 %
3. Funds meant for SCs & STs (Various depts)	42 %	58 %
4. Housing and Urban poverty alleviation	18 %	82 %
5. Heavy Industries and Public Enterprises	24 %	76 %
6. Labour and Employment	29 %	71 %
7. Consumer affairs, food and public distribution	44 %	56 %
Unrelated Ministries …		
8. Defence	24 %	76 %
9. Overseas Indian Affairs	6 %	94 %
10. Tourism	40 %	60 %
11. External Affairs	42 %	58 %

The CAG report (2011) has outlined 16 sectors which sit on un-utilized external assistance. The larger sectors, among these include :

1. Urban Development	:	Rs. 23,883 crores
2. Agriculture and Rural development	:	Rs. 9,557 crores
3. Water Supply and Sanitation	:	Rs. 8,995 crores
4. Power	:	Rs. 7,959 crores
5. Roads	:	Rs. 11,617 crores

Ministries related to education.

Appropriate clearance to be taken from ADB / WB before re-allocation of funds to schools under " Related " heads

Besides, sectors like railways, health, environment and forestry, atomic energy and rural development too had substantial amounts of unutilized foreign assistance. As these are **2011** numbers … we have reduced the potential sums available under this mechanism from US $ **15.56** Billion … to US $ **5** Billion in 2018.

Financing Sources (Construction Phase)

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Rs / US $ Exchange Rate (12th Nov ' 2018) : 72.9078

Sl. No.	Source Description	Estimate of Total Possible Corpus (Crores of Rupees)	Amount Available Each Year (Crores of Rupees)	Remarks / Critical Assumptions
4.	**Coordinated CSR Funding (All India) :** However, according to a recent IIM Ahmedabad study, total CSR Funding in India today, has the potential to exceed Rs 25,000 Crores each year. This money is expected to accrue under Sec 135 of the Companies Act 2013, from a total of 16,352 companies identified as coming under its ambit, by the Indian Institute of Corporate Affairs.	**18,417** **Under Securitization Facility** Quantum of Funds that can be raised right now and spent over a 5 year period if just 40 % of expected cash flows in the 2019 – 2028 period, can be securitized at a 7.8 % discount rate.	**2,720**	The top 100 companies in India spent Approx. Rs **6800** Crores on CSR in fiscal 2017. On a realistic basis, assuming that 60 % of this Rs **6800** crores will be spent by companies through their own foundations / trusts, the balance 40 % or Rs **2720** Crores could be targeted and channeled by the Govt. into specific projects ... and monitored. The Vivekanand Education Megaproject with its diversified areas (Education, Women and Child Development, Rural Development , Poverty Alleviation in Urban Areas, Water and Sanitation / Swachh Bharat and even Environment & Forests) presents a substantially wide range of CSR options. This provides Corporates with a range of project areas within a single umbrella (Education Megaproject). We have assumed here that Rs **2720** Crores is available each year starting in 2019. If this yearly cash flow is securitized over a 10 year period @ 7.8 % (10 year bond rate), it will be possible to raise Rs **18,417** crores right now.
5.	**Private Promoter Funds For 30,000 PPP Schools @ of Rs 2.0 Crores per school for day schools and Rs 5.0 Crores per school for fully residential schools** **This money will be used to Pay back the Soft loan taken from the RBI (drawn from Forex Reserves) as mentioned in source 1 .** **Essentially, this money will be used to finance the taking out / paying back of the RBI soft loan**	**73,500** Total Collection = Rs 73,500 Crores	**73,500** Rs 73,500 Crores will be collected (conservative basis) as Equity from the promoters of the 30,000 schools. This is a conservative estimate as the Equity for Private Non Religious Trusts and Corporates will be higher. It is assumed that this equity will be collected over a ten year period.	This will essentially be the Equity infusion by private teacher and promoter groups in the 25,500 day schools and 4500 fully residential schools being set up under the Vivekanand Education Megaproject.. Groups of 5 - 10 Teachers will be encouraged to set up their own schools with private investor / scheduled bank backing. The Megaproject has been specifically structured to allow large number of qualified teacher groups (Teachers possessing graduate degrees & above) to set up their own schools with minimal project equity / cash infusion. This money will be collected from the winners of the bids in the bidding rounds. It will be paid upfront to the Govt. No Religious institution will be allowed in the bidding rounds. Private Trusts / Corporate groups will be allowed and so will NGO's but under no circumstances will any single religion be promoted to the exclusion of other faiths.

Financing Sources (Construction Phase)

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			For other promoter groups Equity amount will be more	Any school promoter group (among the bidders) found to be fronting for any religious group will be disqualified instantly. No subsequent transfer to a religious institution / community will be permitted. If subsequent to winning the bids any group is found promoting a particular religion, their concession to build and run the schools will be cancelled forthwith. All religions will be taught to the students in accordance with Swami Vivekananda's broad and inclusive philosophy, under electives that students can take as per their choice. The Equity infusion for NGO's, High net worth individuals and Corporates wanting to set up schools will be higher. However Teacher groups will be allowed to bid for schools by bringing in only rupees **2** Crores as equity. The Balance Rs **26.6** Crores (for day schools with full teacher accommodation) and Rs **70.74** Crores (for fully residential schools) will be provided from within the Megaproject's innovative financial structure (for teacher promoted schools). This kind of structure will allow attractive Equity IRR's for promoters of Schools, while Govt. retains ownership of projects and can change school managements if they do not perform. The bidding rounds and collection of project equity will be across 29 states and 7 union territories of the union of India.
6.	**Calibrated dis-investment in PSU's** … 6.08 % of a total PSU market capitalization of US $ 164 Billion (only listed PSU's considered) Information Source for PSU valuations : **http://www.bsepsu.com/mkt_capt.asp**	**72,908**	**7290.8**	All Govt. of India listed public sector undertakings including the 25 PSU Banks and their subsidiaries put together account for approx. **7.3** % of the total market capitalization of US $ **2.251** Trillion of the Mumbai Stock Exchange (31st Aug 2018) The 86 listed PSUs, of a total of 285 central PSUs therefore have a combined Market Capitalization of Approx. **164** Billion US Dollars. The Vivekanand Education Megaproject is looking to utilize this massive corpus / resource in an economically sustainable manner : 1. By Selling 6.08 % of the basket (US $ 10 Billion) over 10 years 2. By using this massive corpus as collateral for loans so as to reduce the interest rate on any loans taken **National Investment Fund (Use Existing Provision within Govt.)** There is already a provision of a National Investment Fund (which already exists within the Ministry of Finance) and has already been structured since 2005 to keep PSU disinvestment proceeds separate from the Consolidated Fund of India for investment in Education, Health and Employment Generation projects.

Financing Sources (Construction Phase)

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	Using PSU shares as a credit enhancement tool : All PSU shares can be transferred to a Special Purpose Vehicle (SPV) wholly owned by the Govt of India. This SPV can then be used for providing Loan Guarantees for Large Infrastructure Projects … to provide Credit Enhancement and helping to reduce the effective interest rate.			**Possible Comfort To Lenders (if required)** PSU Shares if bundled together in a special structure can serve as a very useful resource to bring down the interest rate of Loans taken on Large Infrastructure projects. Bundling of PSU stocks and using them as collateral for loans will provide comfort to lenders and save interest costs for the Govt. of India. This will essentially be equivalent to a Sovereign Guarantee without calling it as such.

Financing Sources (Construction Phase)

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7.	**Potential Urban Equity Withdrawal from PSU Land Banks in Metro Cities** (Mumbai, New Delhi, Chennai & Kolkata). In Addition PSUs own large tracts of land in cities like Bangalore, Pune, Hyderabad etc.	**2,91,631** (US $ 40 Billion)	**58,326** (US $ 8 Billion)	Central and State Government owned Public Sector Undertakings (PSUs) own very valuable land in cities like Mumbai, Delhi etc. The total value of Land Banks with the PSUs is easily of the order of Rs. **12** Lakh Crores or US $ **169.57** Billion. Govt. could maximize its earnings by raising FSI's on this land before selling it. It is proposed to cherry pick 3000 acres out of a total of 30,000 acres of PSU owned land for this purpose. The Largest land holdings outside of the railways are available with the Port Trust Of India which has over 50,000 Acres of Land, some of which is in large Urban Centers. The Railways also has approximately 10,000 Acres in cities and towns across India. Shared Selling : It is proposed to raise the FSI on this 3000 Acres of land from current levels of **1.5**…to between **6** and **9** before putting it on the market. 50 % of the money realized from the sale can be used to finance large public education and healthcare projects after paying the initial 50 % to the PSU. Even after the shared sale of this 3,000 acres for financing large national Education and Healthcare schemes, another 27,000 acres of prime land will still remain with Central & State PSU's. Of the balance 27,000 acres, another 10,000 acres can be used for earning annual lease rentals. This will provide a fixed income for Central / State governments, thereby helping them pay for the operations costs of state education and healthcare schemes, a majority of which will be in rural areas in the concerned states. The Designer of the Education Megaproject met Dr. Vijay Kelkar in 2010 and handed over to him a database of Land held by PSUs in Metros across India, together with their valuation. The idea of enhancing the FSI on land parcels and then selling them with some of the proceeds going to the PSU's was also discussed with him. Some of this was later included in the Kelkar Committee Report on fiscal consolidation, as the main source of Funds to help bridge the fiscal deficit. However its initial purpose as conveyed to Dr. Kelkar in 2010 was to finance the setting up of 30,000 New Secondary Schools across India.

We are assuming that Rs. **58,326** crores or US $ 8 Billion will become available each year, starting in 2020-21.

It is proposed that this money be withdrawn in 5 yearly installments (2021 to 2026) .

The sums so raised from the Shared Selling process need to be immediately moved to a Secure Escrow Account to finance mass Education projects.

Action Item for Ministry of Urban Development

As the sums of money that will be realized under this Urban Equity Withdrawal plan are huge, Ministry of Urban Development needs to issue a detailed note on procedure to be followed so that money is released from the Secure Escrow Account only after project milestones are achieved.

The money should preferably be released under a high court monitored process to prevent Scams / Leakage as has happened in a north Indian state where large sums were reportedly withdrawn after they were raised under a " Securitization Transaction ".

After this withdrawal, there was no money left for the next State Govt. when it wanted to execute projects as certain revenue streams were pledged under the securitization facility by the previous government to the banks and could not be used to fund new projects.

6 THE TIMES OF INDIA, MUMBAI SATURDAY, OCTOBER 31, 2015 TIMES

State revives Bandra govt colony redevelopment plan

Draft Proposal Outlines ₹70,000Cr Benefit For Govt, Global Tenders

Prafulla.Marpakwar @timesgroup.com

REAL ESTATE GOLDMINE

COST OF PROJECT: ₹30,000 crore

WHAT'S IN IT FOR THE STATE GOVERNMENT: ₹70,000 crore profit from commercial exploitation of land; 6,500 quarters for government officials; 15,000 sq m constructed area for government offices; 500 transit quarters; 250 guest house suites

BENEFITS LIKELY FOR DEVELOPER: ₹5,000-7,000 crore fee to manage project

AVENUES TO RAISE FUNDS: ₹57,000cr from sale of flats at market rate; ₹11,000cr from sale of affordable houses; ₹20,000cr from sale of commercial premises; ₹1,25,000cr from sale of restaurants and hotels

The government colony at Bandra (East) is spread over 93 acres

Mumbai: The cash-starved Devendra Fadnavis government has drafted an ambitious redevelopment plan for the Bandra government colony, spread over 93 acres of land, to mobilise around Rs 70,000 crore. Once the basic formalities are completed, the proposal will be placed before the cabinet subcommittee on infrastructure for approval.

A senior bureaucrat confirmed to TOI that L&T Realty had made a presentation before the chief minister on the colony's redevelopment. "We have studied the concept note submitted by L&T. In fact, it's a well-designed and acceptable plan. To ensure complete transparency, it has been decided to float tenders for project management consultants.

Once the consultant is finalised, it has been proposed to float a global tender for the project. We expect to complete the entire process in six months and start work by next June," the bureaucrat said.

The bureaucrat said the previous Congress-NCP government had proposed to redevelop the Bandra government colony and entered into an agreement with three leading developers. It was then proposed that the three developers will together pay Rs 1,300 crore to the government. Ownership of 73 acres of land was to remain with the government, while ownership of the remaining 20 acres of land was to be transferred in the name of the developer. Following a row over the proposal, the entire project was scrapped.

According to the new plan, after the project is completed the government will receive Rs 70,000 crore from the land's commercial exploitation but it will not remain the owner of the land. "We are facing an acute shortage of funds. If the project is approved, it will be a huge relief for the cash-starved government," he said.

The bureaucrat said it has been proposed to construct 6,500 quarters for government employees (3,00,000 sqm), 500 transit quarters (3,000 sqm), government offices (15,000 sqm), 250 guest house suites and services like schools and fire brigade stations. Land remaining after construction of the government component will be used commercially, with the aim of generating maximum revenue for the government. "We expect to mobilise Rs 70,000 crore from the project.

The project itself is expected to cost around Rs 30,000 crore, of which the cost of construction will be Rs 25,000 crore and Rs 5,000 crore will be the fee of the consultant," he said.

The Landmark L & T Project Proposal to the Govt. of Maharashtra … Just 93 Acres will release Rs 70,000 Crores … in Free Cash

Financing Sources (Construction Phase)

Rs / US $ Exchange Rate (12th Nov ' 2018) : 72.9078

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Mumbai

Sl. No.	Source Description	Estimate of Total Possible Corpus (Crores of Rupees)	Amount Available Each Year (Crores of Rupees)	Remarks / Critical Assumptions
8.	**New Enhanced Fee for Conversion of Agricultural Land to Non Agricultural (NA) Land at periphery of cities.**	**21,87,234** (US $ 300 Billion)	**2,18,723**	Land Conversion is a very large potential source of revenue for state & municipal governments which is currently being ignored. Land is a State subject and State Governments usually charge between **5 %** and **9 %** of the existing basic value of the agricultural land as a conversion fee or conversion tax (as in the case of Andhra Pradesh). This results in a huge loss of potential revenue to the State & Municipal Governments as the conversion fee of **9 %** is applied to the value of agricultural land. Actually, maximum appreciation in the value of land happens only after its conversion to " Non Agricultural " status … resulting is massive revenue loss to Govt. It has been estimated (**by others**) that the potential income for State / Municipal governments from a 10 % conversion fee (levied on land after conversion to NA) could be of the order of US $ **2 – 3** Trillion over the next 20 years. The Nataraja Foundation's Design Lab however takes a more conservative view and estimates potential State / Municipal Govt. earnings from levying the Land conversion fee on Non Agricultural land (i.e. after its conversion) at Rs. **21.87** Lakh crores across 29 states and 7 union territories over the next 10 years (i.e Rs **43.74** Lakh crores or US $ 600 Billion over the next 20 years). This value needs to be determined when this land is sold for the first time under its Non - Agricultural status and taxed on the basis of the proceeds received by the seller. Once the sale takes place, the original conversion fee charged on the value of the Agricultural land can be reimbursed. The Design Lab recommends that this money be used for the financing of large Education & Healthcare schemes & Smart City facilities. Executing on this idea could lead to India entering the league of developed nations within the next 10-15 years. The good way to do this is by deploying a small part of this massive amount of capital in capacity building projects like the Vivekananda Education Megaproject and its extensive Skills development programme.

We are assuming that Rs **2,18,723** crores / year can potentially become available each year, starting in 2021-22 when the necessary legislative / legal and administrative mechanism is put in place at the State Govt. and Municipal levels.

The sums so raised from the process need to be immediately moved to a Secure Escrow Account to finance mass Education , Public Healthcare & Urban Development / Smart City projects.

In India the " Urban Equity Withdrawal " concept can be used by intelligently drafting new legislation to capture revenue for the Govt while giving a substantial incentive to the private owners of land.

Action Item for Ministry of Urban Development

As the sums of money that will be realized under this Urban Equity Withdrawal plan are huge, Ministry of Urban Development needs to issue a detailed note on procedure to be followed so that money is released from the Secure Escrow Account only after project milestones are achieved.

A small amount of these revenue streams can also be securitized with the funds going into another Escrow account that is mapped to the securitization transaction.

The money in the Escrow Accounts should preferably be released under a high court monitored process to prevent Scams / Leakage as has happened in a north Indian state where large sums were reportedly withdrawn after they were raised under a " Securitization Transaction ".

After this withdrawal there was no money left for the next State Govt. when it wanted to execute projects as certain revenue streams were pledged under the securitization facility by the previous government to the banks and could not be used to fund new projects.

Financing Sources (Construction Phase)

Rs / US $ Exchange Rate (12th Nov ' 2018) : 72.9078

The Nataraja Foundation
Mumbai

Sl. No.	Source Description	Estimate of Total Possible Corpus (Crores of Rupees)	Amount Available Each Year (Crores of Rupees)	Remarks / Critical Assumptions
9.	**New Enhanced Fee for Re-Zoning Urban Land for Development of Smart Financial Centers**	**65,61,702** (US $ 900 Billion)	**6,56,170** (US $ 90 Billion)	India is set to see massive changes in the Urban Landscape over the next 20 years as **400** Million people across the country migrate from rural to urban areas. Re-Zoning of our cities and the creation of Smart Financial Centres present state governments and municipal corporations in 600 districts with a huge, Once in a Century Opportunity to re-invent the urban landscape and at the same time raise an almost unlimited amount of capital to finance the re-construction of towns and cities across India. The Nataraja Foundation's Design Lab proposes that a detailed Urban Planning Exercise be carried out in over 600 district headquarters and in each surburb of our Metro Cities. In this exercise certain areas in each suburb (within metros) and in each district, will be designated as New Commercial / Smart Financial centers by re-zoning them and increasing their FSI from 1.5 – 4.0 currently to between 8 – 12. **Proposed Local Govt. Scheme** Citizens / Owners of these properties could receive **70 %** of the increased valuation proceeds and the State / Municipal Governments will collect **30** % in cash once the properties are sold to new buyers or re-developed by the original owner and sold to buyers. The government share (30 % of the sales proceeds) will be used to finance large Education & Healthcare schemes and improve the city's infrastructure. This Fee based measure has the potential to raise approximately Rs **65.61** Lakh crores or US $ **900** Billion across 600 Indian cities (conservative estimate) over the next 10 – 15 years. **Big Opportunity for Indian / Foreign Urban Planners** Specific areas will be selected for Re-Zoning and Increasing FSI after a **100 year, detailed perspective plan** is prepared for each city / district headquarter. The objective of the exercise will be to turn our cities into smart cities through excellent planning and by reducing Transportation load.

We are assuming that Rs **6.56** Lakh Crores or US $ 90 Billion per year can potentially become available each year, starting in 2020 - 21 when the necessary legislative / legal and administrative mechanism is put in place at the State Govt. and Municipal levels.

The sums so raised from the process need to be immediately moved to a Secure Escrow Account to finance Mass Education , Public Healthcare & Urban Development / Smart City projects.

In India the " Urban Equity Withdrawal " concept can be used by intelligently drafting new legislation to capture revenue for the Govt while giving a substantial incentive to private owners of land.

Action Item for Ministry of Urban Development

As the sums of money that will be realized under this Urban Equity Withdrawal plan are huge, Ministry of Urban Development needs to issue a detailed note on procedure to be followed so that money is released from the Secure Escrow Account only after project milestones are achieved.

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Financing Sources (Construction Phase)

The Nataraja Foundation
Mumbai

Rs / US $ Exchange Rate (12th Nov ' 2018) : 72.9078

Sl. No.	Source Description	Estimate of Total Possible Corpus (Crores of Rupees)	Amount Available Each Year (Crores of Rupees)	Remarks / Critical Assumptions
9.	**Continued …** **New Enhanced Fee for Re-Zoning Urban Land for Development of Smart Financial Centers**			**Big Opportunity (Contd.)** As India has a severe shortage of town planners currently, it will be necessary to bring in sophisticated town planning skills from around the world. This will ensure that Indian cities leapfrog development cycles and deploy the latest in town planning practices. The net cost of using International talent in planning our cities will be just **2 % – 3 %** of Project cost. It is therefore far more economical to use the best town planning talent from abroad . Due to flawed policy, town planning was ignored in India for the last 60-70 years. Town planning skill sets in India therefore declined and our current set of town planners need proper training which is best provided by foreign experts. If we use our existing town planners to re-plan our cities, it will lead to a disaster and a loss of Lakhs of Crores worth of GDP due to very poor design / planning skill sets in the country at present. The Nataraja Foundation's Design Lab, is of the view that all roadblocks that hamper the bringing in of world class town planning skills from foreign countries, needs to be removed. **Re-Zoning Of Cities could Double Indian GDP** The net GDP gain from this one time re-zoning exercise alone has the potential to Double Indian GDP by 2028, besides raising large sums of capital for government to create state of the art infrastructure in Urban India. Re-Zoning of Indian cities will also set in motion new construction / commercial activity on a massive scale, creating millions of new jobs. By bringing in various clean technologies and promoting low carbon construction practices within the Re-Zoning related construction projects, Indian cities can become models of sustainable growth, providing massive employment opportunities while serving as the principle base for a " **Make in India** " Plan. Startup of large construction projects in India is therefore crucial for the achievement of the Prime Minister's " **Make in India** " plan.

Creating 60 Million new Jobs in Urban Areas by 2025

It is critical that all State Legislatures pass the 74th Amendment to the constitution before implementing this scheme.

Passing of this amendment will lead to the shutting down of illegal State Govt. Parastatials such as MMRDA (in Mumbai) and DDA (in New Delhi) which are working against the constitution of India . It is critical that MMRDA and DDA be shut down / converted to State PSU's and be made to compete with private companies to provide services to citizens. Their current " Development Authority " status is simultaneous with their " Project Promoter " status. This creates very serious conflict of interest issues and serious delays in project implementation (It takes 5 years to start up even minor projects in Mumbai). After shutting these organizations down / converting them to state PSU's , The " Development Authority " role should be returned to the Municipal Corporations which should have a directly elected and accountable mayor.

The existence of MMRDA and DDA have prevented India from producing the kind of political leadership that cities such as Paris (François Mitterrand), London (Boris Johnson) and New York (Michael Bloomberg) have produced.

Shutting down MMRDA and DDA and a mere passing of the **74th** Amendment to the constitution will result in the creation of nearly **60** million new jobs across India as Urban development projects are speeded up tremendously.

MMRDA and **DDA** and the bureaucrats within them are preventing **60** million new jobs from being created in India. Their social & economic cost is therefore extreme and they need to be shut down ASAP.

Financing Sources (Construction Phase)

The Nataraja Foundation
Mumbai

Rs / US $ Exchange Rate (12th Nov ' 2018)   :   72.9078

PART II Of Financing Plan … Securitization of New Tax Annuities (2019 - 2028)

This section proposes schemes to raise financing for the Vivekanand Secondary Education & Skill Development Megaproject through a system of Innovative New Taxes which are very low in terms of percentage tax that is to be levied. The yearly collections / expected cash flow streams will be Securitized with a group of domestic & international banks to raise money upfront for the project as required

Sl. No.	Source Description	Estimate of Total Possible Corpus (Crores of Rupees)	Amount Available Each Year (Crores of Rupees)	Remarks / Critical Assumptions
10.	**Levy of 0.02 % Quantized Tobin Tax on Forex Transactions**	**1,49,086** **Under Securitization Facility** This amount of Rs 1.49 Lakh crores or US $ **20.44** Billion can be raised immediately if the yearly annuity of Rs **22,018** crores or US $ **3.02** Billion is Securitized for 10 years at a discount rate of 7.8 % (Rate of 10 year GOI Bond) . A group of national / foreign banks can be brought in to execute this transaction.	**22,018** As an interim measure, Govt. of India could add a Surcharge on customs duty to mimic the Tobin Tax. This will make Tax administration easier.	Data collected at the end of 2016 indicates that the average daily Foreign Exchange trading volume in India was worth US $ **58** Billion, on a conservative basis, in that year. Total forex trade in India was therefore 58 X 261 working days = **15.138** Trillion. Former RBI Governor Dr. D Subbarao had in Dec ' 2009 hinted at the need for possible policy measures, including a Tobin Tax to discourage round tripping in the Indian Rupee which could lead to rupee appreciation, resulting in Indian exporters being rendered un-competitive in the International markets. It is therefore proposed to have a 0.02 % Tobin Tax (0.0002) on Forex transactions which will raise US $ **3.02** Billion or Rs **22,018** crores each year. If these cash flows are securitized for 10 years and discounted at 7.8 %, the new upfront capital available will be US $ **20.44** Billion. This money could be very useful in the construction of additional Secondary Education & Skills development facilities across 29 states and 7 union territories. The Tobin Tax is a very low tax which besides stabilizing the Indian rupee (as it moves towards full convertibility on the capital account) will also simultaneously help raise long term financing for social welfare schemes in Education & Healthcare. This will bring long term benefits for the Indian economy. Given that India is likely to be amongst the fastest growing markets in the world over the next decade, we do not expect business to move away from India due to the imposition of a Tobin tax. Since 90 % of the worlds forex transactions are cleared in just a few financial centers globally, it will not be difficult to impose this tax. Finally, in our calculations we have assumed that there are 261 trading days each year. The imposition of the Tobin tax has also been considered at the **G20** Meeting in 2009.

Financing Sources (Construction Phase)

Rs / US $ Exchange Rate (12th Nov ' 2018) : 72.9078

The Nataraja Foundation
Mumbai

Sl. No.	Source Description	Estimate of Total Possible Corpus (Crores of Rupees)	Amount Available Each Year (Crores of Rupees)	Remarks / Critical Assumptions
11.	**New Innovative Graduate Tax Levy** Suggestion by NV Varghese **(Reforming Indian Education – 1991)**	**1,72,661** **Under Securitization Facility** This amount of Rs 1.726 Lakh crores or US $ **23.68** Billion can be raised immediately if the yearly " identified " cash flow stream is Securitized for 10 years at a discount rate of 7.8 %.	**25,500**	This is a New innovative tax levy in accordance with a suggestion of NV Varghese (Reforming Indian Education - 1991) who proposed the levy of a Graduate Tax on Private Commercial organizations, who employ India's scarce resource of **68** Million graduates on whom Govt. of India has, over the last 40 - 50 years spent a lot of Money. We estimate that this graduate tax will raise Rs **25,500** crores or US $ **3.497** Billion each year for the government to plough back into Education. The Justification for this Tax Levy comes from the fact that commercial organizations employing India's limited number of graduates are taking full advantage of the increased productivity of these people without ploughing anything back into the system. For example it costs Govt. of India Rs **30** Lakhs to produce one IIT Graduate and another Rs **50** lakhs to produce one IIM Graduate. The Graduate Tax could potentially collect Approx. Rs **18,209** crores from the Organized Sector and another Rs **7,291** crores from the unorganized sector each year. Currently a Professional Tax is collected from the employee and it completely leaves the Employer out of the tax net whereas it is the Employer who is making a huge gain on an asset whose preparation is being financed by the Government. Employers need to be taxed because they are getting considerable productivity from these ready made assets without spending a single paisa on their education. It is being assumed here that the Rs **25,500** Crores to be collected each year represents just half of the true potential of this levy as a funding source. A similar tax needs to be levied on people immigrating abroad after completing their education at the expense of the Indian Taxpayer. The tax rate on such individuals needs to be higher and this needs to be levied at the time they seek clearances to immigrate abroad.

Assumptions :

We have assumed that the **3 %** of CTC levy will be applied within a system wherein each employee earns just Rs **2.5** Lakhs each year on average from the Employer who is bearing this Tax.

We believe that Companies will still pay this tax and not pass it on to their employees as there is an acute shortage of qualified people in India. We believe that organizations will not be able to pass this tax on to employees as they will be competing with each other in a rapidly growing economy where skilled manpower is a scarce resource.

It needs to be noted here that 100 % of this Graduate Tax Levy will go towards the construction of New Secondary Schools as there is a massive shortage of over 4 Lakh Secondary Schools in the country.

Calculation = (68 Million X 0.03 X 2,50,000 (Average salary) / 10^7) * 0.5 (Only 50 % will be paid by Employers)

Financing Sources (Construction Phase)

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Sl. No.	Source Description	Estimate of Total Possible Corpus (Crores of Rupees)	Amount Available Each Year (Crores of Rupees)	Remarks / Critical Assumptions
	PART III Of Financing Plan … Re-Allocation & Securitization of Existing Budgetary Provisions (2019 - 2028)			This amount does NOT include the Rs 83,497 crores of accumulated SHEC cess
	This section proposes the re-allocation of certain already existing taxation provisions to more effectively utilize them in the construction of New Skills development centers & Secondary Schools.			
12.				
A.	**Securitization of the existing 3 % Education Cess after moving it to a special Skills development & Secondary Education Escrow Account.**	**44,011** Under Securitization Facility	**6500**	The current collection of the Secondary and Higher Education Cess is in excess of Rs **6500** Crores each year. This money unfortunately is not being spent as no project has been identified for using it. The CAG had in its Dec ' 2017 report stated that of the Rs **83,497** Crores collected as Secondary & Higher Education Cess (SHEC cess) between 2006 - 07 and 2016 – 17 , no amount could be transferred to the Earmarked Fund because the schemes on which the funds could be spent had not been identified. This money can be used for the Education Megaproject. In addition, Govt. could consider collecting this Education Cess within a specially created Secondary Education Escrow Account and securitize these receivables to raise Rs **44,011** on an immediate basis to build more secondary schools under the aegis of the Vivekananda Secondary Education & Skill development Megaproject.
	The CAG had in its Dec ' 2017 report stated that of the Rs **83,497** Crores collected as Secondary & Higher Education Cess (SHEC cess) between 2006 - 07 and 2016 – 17 , no amount could be transferred to the Earmarked Fund because the schemes on which the funds could be spent had not been identified.			
B.	**Securitization of 20 % of MGNREGA funds … for constructing New Skills development centers & Secondary Schools in Rural Areas.**	**74,481** Under Securitization Facility	**11,000**	Currently MGNREGA has a yearly budget of Rs. **55,000** Crores in 2018. Under previous governments, this money was not being used to create Long term productive assets in rural areas. It is proposed to divert 20 % of MGNREGA funds to create Long Term Economic Assets (i.e. skill development centers / secondary schools) in rural areas. The highest return on capital comes from Education and Healthcare infrastructure creation, so given the massive shortage of Secondary Schools in rural areas, it is proposed to use this money to maximize rural impact through enhanced secondary education opportunities.
	Grand Total of Construction Financing Options **After Excluding BIG TICKET items 7 , 8 , 9 and existing budgetary items 3A, 3B and 12.**	**99,67,370** **5,63,311**	**11,77,887** **1,50,168**	Rs **1,50,168** Crores (One Lakh Fifty Thousand, One hundred and Sixty Eight Crores) can be made available each year for a project which will construct 30,000 New Secondary Schools Across 29 States and 7 Union Territories. Some of this money can be raised totally independent of either the Central or State Government Budgets and the money (except ,3A, 3B and **12** above) can be raised without diverting any funds from existing budgeted or committed government schemes. This amount does NOT include the Rs **83,497** crores of accumulated SHEC Cess.

About the Designer

The Nataraja Foundation
Mumbai

Ashish Puntambekar is a trustee of the Nataraja Foundation and heads its Design Lab. He has over 25 years of experience working with some of the finest talent globally in the Energy and Infrastructure sectors and specifically in the area of large Infrastructure project design and design thinking where he is a specialist.

He has been Lead Designer for the Defence Industrial Corridor (DIC) project which has recently received an investment commitment of Rs 40,000 Crores from the Govt of India in the Feb, 2018 union budget. The Prime Minister has personally launched this massive Defence equipment manufacturing project and two large DICs will now to be built at Bundelkhand and along the Chennai – Bangalore route in project mode. Likely commissioning date of both DIC's is Jan ' 2027.

Besides the Defence project, he has recently been the convener of an International Advisory Board (IAB) with Harvard Economists, Former G – 7 Finance Ministers, Foreign Ambassadors and Defence Analysts as members. His expertise in the Geopolitics of Petroleum, his deep understanding of Middle East history and politics and his knowledge of technology shifts in the Energy Industry have earned him a name in the energy analyst community internationally. He is also an expert invitee at the Asian Development Bank (ADB) where his work on Urban Equity Withdrawal based financing has been presented. He has also been an invitee speaker on TEDx to talk about ideas that can triple the size of the Indian economy by 2030-32. Apart from this he has written articles on Geopolitics, Energy Security & Military - Industrial strategy for the Indian Defence Review magazine.

Ashish has worked in a number of diverse roles. He started his career as a project engineer working in a large petrochemicals complex and then moved on to various increasingly senior engineering, business and senior management positions on assignments involving Power plants , Ports, LNG Terminals , Oil Refineries and Pipelines. He has also worked as an Energy Derivatives Trader for a period of 5 years where he has traded crude oil flat price and petroleum product derivatives on all major commodity exchanges and OTC Markets / Investment banks around the world.

Over the years, he has designed several multi billion dollar projects which are under active consideration by the Indian Government :

1. The Defence Industrial Corridor Project
2. The Vivekanand Secondary Education & Skills Development Megaproject
3. The Indian East Coast Energy Corridor Project
4. The Mumbai Megaproject – Eastern Waterfront and Artificial Islands
5. The Indian Healthcare Megaproject (Under development)
6. The Ganges River Basin Re-Juvenation Megaproject (Under development)

Strategic Objective : Ashish is the initiator and founder of the Construct India Mission which has received official sponsorship from the Ministry of Commerce, Govt. of India. Through his work and ideas the author seeks to make India the worlds largest construction market. The focus therefore is not just on robust project design, but also on financial innovation which is critical to bring these large projects to life … and in the process create approx. 65 Million New Jobs in India by 2027.

Of all the projects he has written, the Vivekanand Secondary education and skill development project is his flagship and favourite project. This is the project that can transform not just India, but the whole of South Asia through its broad and expansively tolerant philosophy which comes from Swami Vivekanand.

Ashish has a bachelors degree in Mechanical Engineering and a Masters degree in International Business.