

Evaluation of NPA in Infrastructure Sector with focus on Road sector

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ABSTRACT

Infrastructure is a key driver of the Indian economy. Government of India (GoI) plans to invest INR 100 trillion over the next 5 years. Indian banking system is the backbone of Indian economy and can play crucial role to achieve this target. When it comes to fund infrastructure projects, the main problem faced by Indian banking system is problem of Non-Performing Assets (NPA). In FY19, the road sector accounted for 10% of total NPA (~INR 4 trillion) in Infrastructure sector. This accumulated NPA impacts credit disbursement capacity to infrastructure sector. In this paper, we have focused on evaluation of NPA in road sector and reasons for NPA in road sector. We have attempted to examine steps taken by the Reserve bank of India (RBI) at policy level to address NPA issue in the banking sector. We have also evaluated steps taken of Ministry of Road Transport and Highways (MORTH) to address concerns of banking system and their expectations from the ministry. Based on the outcome of the study, we would like to make suitable suggestions to address the concerns of banking system and control NPA in infrastructure sector in general and road sector in particular.

Keywords

NPA, RBI, MORTH, Indian Banking System

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Introduction

India is one of the emerging economies of the world. In fact, India is the second fastest growing economy after china with over 1.30 billion population, and if India wants to continue this growth trajectory than India need to invest huge amount of money in infrastructure. India seek to achieve USD 5 trillion economy within next few years. For this the Indian corporate, with the help of foreign corporate has to invest huge amount in Indian economy. Infrastructure is the key for any country to developed. For attracting the corporate giants India has to develop world class infrastructure. India pledge to invest about INR 100 trillion in next five years in infrastructure. But the obstacles on the path of achieving this is many including huge capital requirement, completion period, and other policies issues. Government alone wouldn't be able to invest such a big amount, private companies has to come forward and invest in infrastructure. When private company comes forward, alone with them come the Indian banking sector. Indian banking sector is the backbone of Indian economy. The main problem for banks, when it comes to fund the infrastructure projects is the problem of NPA. In 2001 the NPA in infrastructure sector was INR 95 billion which rose close to INR 4 trillion in 2019. Due to this NPA problem the credit disbursement capacity of the banks goes down, draining the channel of cash in the infrastructure industry. Thus, it has an adverse effect on the development of the country. Out of this NPA of 4 trillion, the road sector has around INR 400 billion of NPA that is 10% of the total NPA in infrastructure sector. Constructing world class road network is one of the basic needs for any country to developed. Government has tried many ways to narrow down this problem, but they are not able to do that. Policy makers has made changes in the PPP model to facilitate the private sector. But the problem is much deeper than it is anticipated. Making policy changes

has proven a temporary solution in the NPA problem, again after sometime the bad asset accumulates and turns into a NPA. As the infrastructure loan are a non-recourse type of a loan, and bank cannot seal the other asset of the company, it is practically impossible for a bank to take over the project on which the borrower has defaulted. And as they need money to continue the flow of liquidity in the market, they seek various helps from the governments and RBI which add up as a extra stress on the balance sheet of govt and RBI. Unless this problem of NPA does not find a feasible solution, this cycle will repeat itself

When there was a depression in 2001-2003, the main reason why the economy revive after that was the huge amount of investment in the so-called GOLDEN QUADRILATERAL. So, the point is, as and when economy has struggled the revival is only possible through investment in infrastructure. The mechanism of investing in infrastructure and getting the return on that in a desired time should be smooth, because if this mechanism gets stuck in a trap or a loop that will eventually make the sector paralysed than, reviving economy will be very tough. So, in a nutshell NPA which has been the biggest problem for this sector has to be solved with much more concerned, all the previous effort has not shown the desire results. There has to be a reform from the beneath of the system so that not only the Indian private players get attracted but also the foreign players get attracted in India for investing in infrastructure.

Literature review

As the loan granted turns into an NPA (Non-performing Asset), it represents miscalculation on both side of the transaction, and this miscalculation when neglected, get accumulated, and choke the credit supply channel. If high expectation of the growth does not materialise, bad loan accumulates, as borrower is unable to pay the loan. The

model of financing big-ticket infra project through taking loan from commercial banks should be scrutinize and some innovative mode of financing infra project should be explored. The issues in the financing the road project is the lack of prime security to the lenders. The land on which the road is constructed is owned by the government and the only right which the private party has is that of the collection of the toll on that road. On the right of toll collections, the loan is granted to the SPV, but this right is questionable as it depends on other factors. Placement of equity is also difficult when it comes to road infrastructure projects as they are highly risky project and expected returns against the risk taken is not encouraging. The financiers are involved in the project only after the contract is awarded to a particular contractor and as a result there is not much that can be suggested by the financier in the terms and condition of the contract. Infrastructure projects are not stalled due to financing issue but due to other administrative problem. But the effect of stalled project is directly seen on the finance aspect of the project. Though its seems that government has taken numerous steps to eliminate the unwanted administrative steps The road projects have to be made commercially viable, improve the market sentiment through continuance of reforms and effective governance on the part of government by making the procedure faster and efficient in implementation of the project. There are highway projects which are not receiving enough revenue because of the poor quality of the road. There are two main aspect in resolving the NPA problem the first is to immediately remove the accumulated bad loans and the other is a tricky one. It is to make reforms so that in the future NPA does not rise to the level of what it is today.

Research Methodology

As the data required for this research, is mostly available in public domain, no primary data collection was required and the data required was available through secondary data collection method. Every year government of India published the economic survey before the announcement of the union budget. In the economic survey there is a section available for road sector, the data required is collected from that section of the paper. Also, in that paper government mention the reason behind the increase of the NPA in road sector and what precautions has the government taken and what precaution government is planning to take to reduce the accumulation of the NPA. The other data required is collected from the various committee reports, like, the 19th report by ministry of road, transport and highway, 236th report on lending in infrastructure sector by department related to parliament standing committee and other such reports that are submitted in parliament and other government institution for the purpose of the drafting new policies. Data is also collected from other research paper which were publish by scholars in various conference. Some of the news article were also come across the research which had meaningful content required for the research.

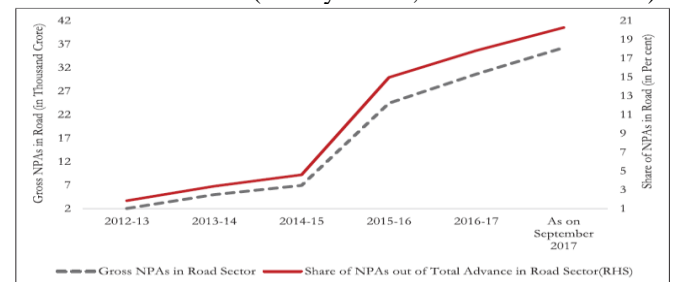
Findings And Analysis

Firstly, it is necessary to understand the meaning of Non-Performing Asset (NPA) for any bank. According to the

RBI any account which has not paid the loan instalments for 90 days or one quarter, can be declared as Non-Performing Asset, a 60 days’ notice has to be served and then also if borrower does not pay the instalments than that account is declared as NPA. For any road project to be undertaken, generally company constitute SPV (special Purpose Vehicle) for every project so that their original balance sheet does not get much affected. All the loans and subsidy (if any) are taken through that SPV. In case, the SPV fails to pay back banks the instalments amount than that account is declared as NPA.

According to the economic paper publish in the parliament in 2018, the NPA in road sector has increased to INR 36,596cr. According to the economic paper in the last five year the NPA in road sector has increased from INR 2,424.17cr to INR 36,596cr. During 2012-13 total loan disbursement to the road sector were Rs 127,430cr which increase to 180,277cr in 2017-18 that means that the loan disbursement has increase by 41% and the share of NPA in 2012 was 1.9% and the share of NPA in 2017-18 was 20.3% that means an increase of 970%. There was a sudden spike observe in the NPA of road sector in the year 2014-15 to 2015-16 Loan disbursement has increase for only 41% whereas the NPA has increase to 970%. This unequal distribution of NPA has raise the eyebrows in the industry and the private sector has become very cautious before investing the road project (Moneycontrol, 2018).

There are 482 stalled projects of highway which cost INR 317,373.9cr. out of these 43 projects face cost overruns and 74 projects face time overruns. Some of the projects under different phases of National Highway Development Program are delayed mainly due to problems in land acquisition, utility shifting, poor performance of contractors, environment/ forest/wildlife clearances, road over bridge & road under bridge issue with Railways, public agitations for additional facilities, and arbitration/contractual disputes with contractors. As project were awarded on PPP project, Gradually, the sector and projects came under stress due to a variety of reasons right from lending issues to lack of land acquisition to clearances not in place, etc. All these factors affected highway construction rate and eventually resulted in NPAs. Due to this private investment were not interested in road project and government has to increase the investment in the projects. During research the reason were found which has led to the accumulation of NPA in road sector (Moneycontrol, 2018).



Sr. no	Name of the banks	Total number of projects	Total exposure (cr)	NPA (crore)
1	IDBI	44	7885	4129.66

2	Central Bank of India	-	5120.15	-
3	Bank of Maharashtra	18	2260	463.77
4	Punjab National Bank	-	14274	484.18
5	Oriental Bank of Commerce	3	778.78	-
6	Bank of India	-	13890	2146
7	Union Bank of India	42	6128.74	558.06
8	State Bank of Patiala	32	1622	-
9	Dena bank	32	2627.49	108.01
10	State bank of India	240	19502	1986

Reason for accumulation of NPAs in road sector.

1) Diversion of funds - In few cases the physical progress of work is not commensurate with the financial progress. These are likely cases where the funds may not have been utilized towards the projects and concessionaires are finding it difficult to bring back the funds so diverted. And as a result, the projects are delayed and the concessionaries are not able to repay the loan amount (DEPARTMENT-RELATED PARLIAMENTARY STANDING COMMITTEE ON TRANSPORT, TOURISM AND CULTURE, 2016).

2) Bidding Process - According to the report of standing committee on Transport, it was observed that the long term loan disbursed for the road projects are turning into NPAs, they found that the bids made by the bidders for the projects are not made after detailed study and all the factors are not taken in due consideration before submitting the bid. It was also found that in some cases project were awarded in a hurry and the bidding committee did not took into notice some of the negative factors of the bidding companies like the technical incompetent and the financial incompetent. Like the company which does not have the technical competent for the construction for mountainous road is awarded the project than the quality of the road may get compromised and that can lead to less usage of that road and ultimately company does not get the enough revenue to repay the loan.

3) Reasons not attributed to concessionaire - The Authority has also defaulted in fulfilment of its conditions precedent in a number of cases due to Land Acquisition, Environment /Forest clearance /Utility Shifting /RoB issues (DEPARTMENT-RELATED PARLIAMENTARY STANDING COMMITTEE ON TRANSPORT, TOURISM AND CULTURE, 2016).

4) Refusal of banks to accept first charge of NHAI - For any languishing highway project in BOT (Toll /Annuity) mode that has achieved at least 50% physical completion, NHAI will provide financial assistance to complete the project subject to first charge on the Toll /Annuity receivables of these projects. However, the banks have refused to accept the first charge of NHAI and therefore no progress in implementation of this policy to complete languishing projects is being achieved

(DEPARTMENT-RELATED PARLIAMENTARY STANDING COMMITTEE ON TRANSPORT, TOURISM AND CULTURE, 2016).

5) High Cost of Interest during Construction (IDC) - when the project is delayed, whether due to concessionaire or authority the cost of debt increase due to which the project becomes un-viable and the financial calculation done by the private party fails and thus they are unable to repay the loan amount to the banks and other financial institution, resulting in NPAs.

6) Difficulty in sanctioning of extra debt in stalled projects - In projects where the concessionaire is already faced with delays, there is no possibility of obtaining additional debt to complete the project as the account in many cases may have already turned NPA.

7) Developers anticipating high level of growth - when the economic downturn occur in the country, traffic flow on the road decreases substantially. Due to the decrease in the traffic flow the revenue realization decreases for the company and comes at a much lower rate than anticipated. Due to this decrease in the revenue, concessionaire finds difficult in repaying the loan instalment to the banks and NBFCs resulting in NPAs.

8) Period of revenue collection - The current practice of financing large infrastructure projects based on revenue streams spread over 20 to 30 years, but with project debt having tenure of 10 to 15 years, is also unsustainable.

9) Loan sanctioned by banks more than total project cost estimated by NHAI - Banks grant loan to the SPV based on the project cost estimated by the SPV and not by the NHAI. SPV on average estimate the cost 35% higher than the cost of NHAI, they are exposed to high risk especially during the termination of the contract in the middle of the project. NHAI gives compensation based on their project appraised and not on SPV's appraisal (DEPARTMENT-RELATED PARLIAMENTARY STANDING COMMITTEE ON TRANSPORT, TOURISM AND CULTURE, 2016).

10) Corporate debt restructuring affect has been affected in many SPV debt - when the borrower is unable to service debt due to various reason, they proposed the lenders for the re-structuring of the debt. The first restricting of the debt does not affect the asset classification any such second exercise affect adversely the asset classification. For second such activity the account necessarily be declared as non performing activity.

11) Higher cost of financing - The lenders who provide major part of financing in the form of debt are concerned with the downside risks which influences the project progress and debt servicing capability and consequently to mitigate the risk of financing have enhanced the cost of lending to the sector.

12) Stress on existing road infrastructure loan portfolios of FIs - Reduced revenue realization due to economic slowdown affecting debt servicing by the Concessionaire as the contracted debt servicing obligations could not be met with the existing revenue. As the sector got affected, the lenders debt portfolio for roads came to have a disproportionately high level of debts. NPAs saddled banks with additional capital adequacy requirements, provisioning demands and income recognition restrictions.

13) Revenue model – Government has awarded the contract based on Public Private Partnership (PPP) model. According to PPP model Government agencies tie up with private agencies for development of infrastructure. In case of Highway projects in India, National Highways Authority of India (NHAI) acts as the project authority while projects are executed by various private agencies known as concessionaire. These concessionaires, apart from putting their own equity, depend heavily on bank finance. Revenue under this model to the concessionaire can be derived either by direct collection of toll by the concessionaire or by payment of annuities to the concessionaire by the Government. In the event of project delays, or shortfall in collection of toll, the risk of default to the lenders arises. In this model all the financial risk is bear by the private partner and as a result if there is a delay in the implementation of the project than private partner is not able to service the loan adding to the NPAs account to the bank, gradually discouraging banks and private players to take up such projects and government has to

14) Increase in the interest – Because the tenure of the loan is as long as 20 years the interest rate may be or may not be fixed. In case of floating interest rate if the interest rate increase than the cost of debt also increases, and if that increase debt is not accounted for than they may not be able to repay the loan instalments.

15) Type of loan – Generally the loan in such type of project is non-recourse type. That means lenders does not have any legal right on the other assets of the promoter and in case of default only the project on which the loan has been sanctioned can be undertaken by the banks. And for banks its seems practically impossible to undertake and maintain such huge projects without the expertise.

16) Bad quality of work – sometimes when the project is sub-contracted to the other contractor and proper supervision is not done by the main contractor and the quality of work is not appropriate than as the road comes into usage the wear and tear of the roads occurs rapidly, making it uncomfortable for the passenger, so passenger choose not to use that road and use another road to reach their destination. Due to this there is a decrease in the revenue realization than anticipated. Thus, the company may not be able to service the loans.

17) Political reasons – If development is not done along the road than there will be no traffic and there will be low revenue collection. So policy should be crafted to encourage the development along the road in order to get the revenue needed to service the loans.

Apart from this, main reason there are reasons that are case to case and that cannot be generalized. Like the road project in the Naxals affected area. Due to the fear of attack, people may avoid using that road, or the road constructed in the mountainous region, if due to heavy rainfall there is a huge land slide than the operation on that road may be halted for several days resulting in decrease of revenue. So, there are many such case to case problems, but majorly the account which get convert into NPA or bad loans are due to general reasons mentioned above. Governments has taken various steps to mitigate the problem of bad loans and bring back the confidence of private players and also of the banks and various other financial institution.

Steps taken by Government and RBI (Reserve Bank of India)

Governments has taken action to resolve the issue but it seems to be not enough as government has taken the steps on case to case basis and not tried enough to draft a more generalized solution for the problem.

1) The Ministry of Road Transport & Highways and National Highway Authority of India (NHAI) have been monitoring the stalled projects. Wherever physical completion is established, one-time fund infusion by NHAI is being done to revive stalled projects. The funds are being arranged through the common fund available with NHAI for development of roads. Further, in order to expedite completion of delayed projects, regular meetings are held with project developers, State Governments and contractors, concessionaires/contractors. Various steps have been taken for streamlining of land acquisition & environment clearances, exit for equity investors, premium re-schedulement, revamping of dispute resolution mechanism, frequent reviews at various levels etc (Chief Economic Advisor, 2018).

2) Furthermore now the projects are awarded on the Hybrid Annuity Model (HAM) in order to facilitate the faster implementation of the project and also it gives the confidence to private players as 40% of the funds are invested by government and private player has to managed 60% of funds, thus less equity from private player is needed during construction phase

3) Further, some innovative solution like monetization of projects through the Toll-Operate in Transfer model, securitization of toll revenue, adopting the 'Infrastructure Investment Trusts route, other innovative financing options including LIC, Long Term Pension Funds etc., have been taken to attract fresh capital from the market on the strength of already operational projects.

4) RBI has, wherever possible and wherever it has needed, has granted relaxation. In other countries where banks are not allowed to lend for more than seven years, in India RBI has allowed that. Takeover of finance is also allowed by the RBI. Generally, banks do not fund equity finance, but in the infrastructure projects, they do fund equity finance. RBI has asked banks to take into the account delays in completion of project and also consider the cost overruns. But everything is allowed by RBI in limit.

5) NHAI has decided that flexible restructuring of the infrastructure loans will be allowed for loan accounts which has an aggregate balance of more than INR 500cr. But there are such accounts where the aggregate balance is less than INR 500cr which are not receiving much assistance from the authority.

6) RBI has even asked the financial institutions other than banks to incentivise the lending from their institution in order to decrease the risk on banks of lending the road projects.

7) According to RBI 90 days guidelines cannot be relaxed as it is decided internationally and India has also signed Basel Convention. But RBI has allowed banks to fund even if it is NPA if the project seems viable to the banks.

8) RBI has allowed to convert the debt into equity, so that contractor can get out of the project in case of default.

9) Earlier loans granted to highway project were considered as un-secured loans. Such unsecured loans are riskier and also carries higher interest rate and also there is a limitation of exposure to such loans. At the recommendation of NHAI, Reserve Bank of India drafted their policy that the financial institution now will not consider loans sanctioned to highway project as unsecured loans, instead they are now kept under secured loans category. Due to this change in the classification road projects in India raise debt from a larger pool of money and also at lower interest rates.

10) NHAI also permitted complete disinvestment to private equity players in BOT projects. CCEA approved a policy in which the concessionaire or the developer can divest their 100 percent equity in all BOT projects, two years after the construction irrespective of year in which the contract was awarded, but with a condition that equity so disinvested will be invested in their other projects. This policy approved may help the concessionaire/developer to liquidate their asset and that liquidity so generated will be used in their other problematic projects.

11) NHAI has allowed to convert future cash flows in to security in BOT projects. In order to ameliorated the shortage of equity, NHAI has granted permission to the concessionaire of BOT projects that if their revenue is the surplus of their repayment obligation from their operational BOT projects than they can raise the subordinate loan of up to 30 percent of TPC of NHAI giving security of their surplus revenue from their already operational projects. This can be redeemed after COD of the project in achieved in 4 lane projects and in 6 lanes projects, construction is completed. But there are some limitations on use of this clause, like NOC has to be obtained from existing lender and utilization of proceeds exclusively for investment as equity in road sector project.

12) NHAI has also decided to update the Model Concession Agreement (MCA) for 4 laning DBFOT (Toll). The feedback was received from various stakeholders such has concessionaire, consultants, financiers and lenders, Developer, policymakers etc. A comprehensive study was carried out to review the MCA and addressed the problem of the stakeholder and an attempt is made to provide extra comfort to lenders and concessionaire, and also to clear some of the clause which in future may lead to dispute between two party.

Recommendation

India has a large network of roads and highway, and as a developing country the pace at which the roads and highways are constructed should be able to cope up with the other development of the country. For that the participation of the private sector should be maintained and should gradually be increased. Step should be taken to curb the accumulation of NPA in road sector, so that more and more private sector players invest in the road projects, and also, they achieved the desired return on their investment. This paper recommend some of the steps that can be taken along with other above-mentioned steps to ameliorate the issue of NPAs in road sector.

Land acquisition has been the biggest issue for the concessionaire, before the bidding process is taken up, at least 90 percent of the land should have been acquired so

that there is no delay in the implementation of the project. Also, if possible, it is better that all the approval should be granted before the project is sent for bidding. This will make the project more feasible for both the concessionaire and financial institution as there will be not much delay in the implementation of the project.

Another main reason is the project cost estimation, it was found that on an average there was a gap of 35% between the project cost estimated by the NHAI and the cost estimated by the concessionaire. The project cost estimated by the concessionaire was higher than the estimated cost of NHAI. Due to this there is delay in the implementation and there is cost and time overruns. Also, the concessionaire has to approach NHAI for redressal in absence of dispute settlement mechanism. Banks disbursed loan on the project cost estimated by concessionaire. There should be single project cost estimation on which all the stakeholders agree and financial institution should disburse loan on the same amount.

Also, in many cases it was found company which were awarded the project, where not big companies and also not financial competent for that project, this result in improper equity in promoter companies and finds difficult to get the equity that should be invested in the project. As the financial institution finds it difficult to finance, they either reject the project or tend to charge higher interest rate.

It was observed that the contract was awarded in hurry and that can compromise the technical aspect of the project, so a bidding committee should hire a 3rd party consultant which gave them report on which company is better from the perspective of the technical competent. This will not compromise the quality of the project and thus there will be no decrease in the revenue due to substandard quality. Overall, there should not be hurry in awarding the project and companies having both the financial and technical competent should be awarded the project. Also, there should be stricter barrier even on the promoter financial stability so that no project is awarded to any such promoter who is not capable of repaying the loans.

Generally financial institution are involve in the project once the project is awarded to a particular concessionaire, actually major financial institution and banks should be involve in the project from the point of the bidding, so that they can give suggestion from the contractual point of view onto how can they give some relaxation to the concessionaire on financial obligation, also while submitting the bid, the bidder should mention from which bank or financial institution they would get the loans for project and that particular lender should be allow to be in constant touch with how the project is implemented and the construction progress of the project.

The loan taken by the concessionaire are 15-20 years long and a lot of circumstances changes during this tenure, whereas the contract signed between concessionaire and NHAI/GoI is non-negotiable. Contract should be negotiable after some fixed period of time so that in case of financial instability the contract should be re-negotiated to aid the concessionaire and so that project does not convert into NPAs.

When the project is terminated by NHAI/GoI or the concessionaire, banks or other financial institution are not given any opportunity or any guarantee that the pending

loan will be repaid, financial institutions should get the guarantee that the money will be repaid at any cost and the party which terminate the contract should take the responsibility of repaying the money back to the banks.

In some cases it was found that the state authorities were putting obstacles in implementation of the project by not granting the permission for quarry and mines, such obstacles should be worked out at national level, and a national level institution should be formed that speed up such permission from the state authorities so that project does not face any delays.

Infrastructure loans are generally non-recourse type of loans, but in some project with high financial risk these loans should be recourse loan, so that if that account turns into NPA then banks have rights to seize other assets of the promoter in order to get their money back.

Government should try and sufficiently compensate the financial institution for the NPAs so that their confidence remains intact in lending to road sector.

The Model Concession Agreement should be re-casted as the old model was not accepted by bank, and it should be re-casted in a way that banks do not accumulate NPAs to such amount.

On the base of the asset quality of the banks, for every bank a particular level of NPA should be set, and if the banks cross that level then RBI should raise the flag and should ask banks from further lending it to the sector and clean up the accumulated NPAs before lending further to the sector.

It was observed that due to economic downturn the revenue realization for the project decreases substantially and thus they are not able to service the debt for more than 90 days and thus that account is put under the category of NPA, while preparing the financial model of the project, the projected future economic scenario should be considered and according to that revenue collection should be calculated so that there is a minimum damage on the revenue collection when country is facing a economic downturn.

NHAI should not act as a authority but instead act as a supportive authority to both financial institution/banks and concessionaire and should concentrate more on completing the half completed project rather than focusing on collecting revenue.

If revenue of any project which is at alarming level, and below that level if the project may become a NPA then such project should get relaxation in tax and other administration to reduce their expenditure. Relaxation should be given on case to case basis and for a limited period of time.

If the NPA of a particular company is rising even after taking all the necessary step, then government should order all the banks and financial institution to immediately stop all the lending to them, their ongoing projects should be taken over by the government or government may recommend another company to take over, and ask the previous company to reduce their NPA to substantial level before allowing them to take over the projects.

If the projects are getting delayed due to the reason not attributed to concessionaire, and if it is proved that due to that delay the promoters are facing financial instability and project turn into NPA then that concerned authority, due to

which the project has delayed should compensate the company for their loss.

The way companies and bond are giving ratings on the base of their riskiness, same way if possible major road projects should also be given rating, and higher the ratings lower should be the interest rate, and the nature of relaxation should also be given on the base of rating received by the projects.

Because of the surrounding development not done, sometimes it is observed that the company does not receive the projected revenue. For example, Jaypee Infratech Ltd has a NPA of INR 4000cr. The surrounded area where they constructed the road was not developed by the government and that result into a big revenue dip and the company was unable to service the debt, resulted into NPA. Some benchmark should be decided and the concessionaire doing road project above that benchmark should be made assured by the government for development of surrounding area and if government fail to develop that area then the company should be compensated for that.

Banks play a larger role in financing infrastructure projects in the country. Instead various institution and insurance companies should ask to invest in the road projects, this will share the risk between the banks and other financial institution.

Limitations

There are some limitation of this research paper. Firstly, this research was done on the secondary data published on various website and the report that were presented to government by various committee and ministry. No primary data collection was done for this research. On primary data collection, exact reason can be known from all the stakeholders regarding the issue of NPA in road sector. Also no reference of other countries were not taken when giving recommendation. This recommendation is limited only for the road sector and cannot be implemented to any other sector of infrastructure. Also, many stakeholders has to be consulted before taking any steps.

Conclusion

India has road network of 56.17 lakh km, which include expressway, national highway, state highway, major district road, other district road and other rural roads. Road sector has the highest contribution in freight movement compared to other mode of transport. So it is of utmost necessary that this sector face the minimum obstacles. Road sector will be the backbone of Indian infrastructure sector and will be playing a crucial role in making India a 5 trillion-dollar economy. Indian government pledge to invest INR 100 trillion in infrastructure sector. To invest such a large amount of money, it is utmost necessary that the financial health of private investor and financial institution remains acceptable.

NPA in the road sector has increase exponentially in the past few years, there are various reason due to which road sector NPA has been increasing in the country. NPAs problem can be attributed to reason such as diversion of funds, contract awarded in hurry, concessionaire bidding on over-ambitious price, delay due to liaison, higher interest during

construction, economic downturn, difference between the cost estimated by NHAI and the cost estimated by concessionaire, slow development of the surrounding area, sub-standard quality of the road and many other reason. Government of India and RBI has taken various steps to combat the situation such as securization of surplus cashflow, more relaxation even if the project seems viable to banks, change in the model concession agreement, NHAI infusing one time fund to stalled project, allowing private equity player to opt out of the project, government has decided to give more projects on HAM model, restricting of loans with aggregate more than 500cr, RBI has allowed to convert debt into equity, also infrastructure loans are now consider as secured loans.

This paper suggests some step which can be implemented with proper study. 90 percent land should be acquire before bidding the project, there should be single estimated cost between NHAI, concessionaire, lending institution, 3rd party consultant should be hire, inclusion of lending institution from the beginning of the process, contract should be negotiable, rating should be given to every road project, alarming level should be set for both lending institution and some other. The confidence of the private sector and lending institution should remain intact, because if private players investment reduces in road sector than government has to diverge funds from other schemes and invest in the sector. Road sector should be reviving so that Indian economy inflate and also can attract more private player to the sector.

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