



Mr. Sunil Srivastava is working as Managing Director of a growing consultancy firm Balaji Railroad Systems Ltd (BARSYL). Electrical Engineer with Post Graduate qualification in Business Management, Sunil has about 22 years of professional experience covering marketing, business planning and project management of rail infrastructure projects in India, UK, Singapore, Malaysia and Bangladesh. Cross functional experience in conducting & coordinating project feasibility studies, commercial documentation, tender evaluation contract management, costing, and budgeting for railway projects covering urban transport, freight rail systems and passenger rail systems..

In a recent live-interaction (Industry Talks) with Metro Rail Today, he frankly talked on various initiatives and actions being undertaken by the Government of India towards making New India as five trillion economy.

Sir, you are a part of Railway Infrastructure for more than 20 years, kindly tell our viewers about your professional journey in Railway Industry. How did you get started in this Industry?

OK. That's a very straight and a nice question. I am, technically speaking, an outsider in the railway industry, rather both an insider and an outsider. Though I have never worked in the Indian Railway or any formal railway

company but then, yes, I have been a career Railway man for close to 30 years now. Way back in early 90s is when I decided that yes, railway was the place I enjoyed or I would like to make a career, for I belong to a family where this is the third generation technically in the Railways.

My father and grandfather were in the railways. Both my uncles from my mother's side again were in the railways. So, I think railway was in my blood and though I was before I got into the railway industry I was working for totally different Multinational company. But then I think I could not run away from railway and when I got this opportunity to head the BARSYL. The founders who set up BARSYL had invited me to join and take charge. I could not refuse but then there was no career then which I could think of, so I took the plunge and over all I feel that I think I have been, maybe the first one or the first non-railway man to make railway career way back about 30 years ago. So that is somewhere which I started, and journey has been very satisfying, I have enjoyed every bit of the journey. If I had to restart my journey, I think I would do the same thing again. I am lucky to have met number of very good people who taught me, who worked with me and who encouraged me. And that is something which I can never forget.

Whatever I am today is because of the inputs I have got both from within my Organisation, my team members or my seniors or the founders who were there, were like mentors to me. Because they have been, they were all from hard core railway and I was odd man out, trying to learn the railway, when they have mastered the railway. Despite that they had the patience to kind of hold my hand, encourage me pick up whatever I could, I tried my best I have learned a little bit of railway. I don't think I have still

mastered them, but then, yes, over these 30 years of my work. I have been lucky again to have interacted internationally with various industries leaders. Also, these opportunities this particular industry has given me the big opportunity to travel to close to about 25 countries, work in about 14 to 15 countries projects which we handle. So, all in all it's been very enjoyable and very satisfying till date.

The Ministry of Housing & Urban Affairs has recently told in Lok Sabha that a total of 34 Metro & RRTS projects with a total length of 1230 km are under implementation Phase. How do you view the progress of Mass Transit projects in India & what are the new opportunities Indian companies have in this sector?

The concept which the government is trying to do is commendable. If you compare India to something what happens in Europe or other developed countries, every city even if it's just said half the size of any city in India has a public transit system, be it 5 kms, be it 10 kms, but there is always a transit system which becomes the backbone of transport within the country. Since rail-based transit is considered green so not so many buses that is how so I think it's a very nice concept what the Government or Railways is actually trying to do, is definitely encouraging.

RRTS again is very new concept in India which connect surrounding cities from major cities within the range of about 200kms. And provide faster transport so that people actually dispersed in smaller towns have all the comfort of that, and still come to work, go back for business, within maybe 1 or 2 hrs travel time. All in all, conceptually all these are good. Though, yes, quite a lot are being planned in a hurry or implemented in a hurry without appropriate plan.

That is a bigger worry, that yes, while every city even our Govt. of India's guideline says that every city with population of over 10 lakhs should actually start planning for metro. And then as you grow, in the next five years' time or something like that so the idea is very good, but then the over planning and improvement can definitely be improved. So that there is better planning better implementation and may be appropriate kind of alignment and appropriate kind of network to suit needs of population. And that is something can be improved. So over all yes, opportunities for both construction companies, manufacturers, as well as consulting companies.

So, everybody has an opportunity because like you mentioned 33 metros right now, one RRTS, but may be in a couple of years 3 or 4 RRTS. So each of them would require consultants to do the planning, to do the design. They would require contractors to do the execution and they would require vendors, suppliers to supply various components, may be train sets, may be equipment, smaller equipment including some simple things like signages,

cement and steel. So the overall impact on the economy will be very large and the opportunity, which will open up for all these players is actually large and I think currently globally people are looking to India as one of the big opportunities in the rail sector, so definitely everybody is eyeing that and it is possible for everybody to benefit out of this.

According to the new Metro Rail Policy, the Govt is emphasising on the indigenisation in modern Railway projects following the provisions of the Make in India initiative. What are your views about standardization & indigenisation in the Metro Rail Systems? What is the impact of the same on the manufacturing & supply chain in India?

Yes, I think again the huge number which is visible to all of us definitely make sense if you produce locally, you would be able to cut down costs, you would be able to provide another new industry and another new avenue. So, I think the government concept which they are trying to promote, some amount of standardisation in terms of document has started. The Ministry of Housing & Urban Affairs (MoHUA) now had actually created some documents which are aiming towards standardisation, so that all metros have similar standard whereby it is easier for the manufacturers who start producing standardised goods and reducing cost on may be mass produced items. So as a concept, yes there are lot still needs to be done in this field, esp. in terms of manufacturing.

There are still large multinational manufacturers in India for whom these specifications & standards they follow are more of European standards, whereas the Indian requirement is different. So that is something which is right now in conflict and that is something I think where the government needs to step in and standardise. Looking at the huge market even European manufacturer or Western manufacturer or anybody from outside India looks at it as an opportunity and is able to do reengineering or developmental work because the market is so large. To give an example I think the Indian maker is equivalent to maybe half of the Europe if not all. That's a huge potential for any manufacturer or any new technology to come into India. Yes, but the effort would be large, they need to do that initial effort there to do to pick up the lower standardise it local conditions, but then once they are there.

I think the future is definitely there, because not just for immediate construction for maintenance, in future everywhere you will need these technologies. So the only thing is government needs to push it up, it needs more I think policies more friendly, or more I would say together with the manufacturer to what are their concerns why are they not coming forward to indigenise it so somewhere a little bit of push somewhere a little bit of stick so it has to be a carrot and stick kind of thing, but definitely

indigenisation is the way to go forward, since we are such a large market I think it makes sense to actually indigenise. problem would be with supply chain, yes because today the manufacturers who are global manufacturers have their supply chain also globally, so unless there is the Indian supply chain also developed simultaneously it would be futile to just have manufacturing. So even that has to be looked into and also that this entire supply chain right from the smallest component to the finished product, everything is set in motion, and everything is indigenised. It may not happen overnight, but definitely possible. You could start with small amount of overseas input or an expert input and then gradually reduce that to make a product of 100 per cent Indian. I think we have the technology; we have the engineers; we have the brain wave with us. It's only the hardware which now to be produced and make it successful. 'Train 18' was good example of that, it can be done, yes improvements are always possible, but yes, we could make an equally good trend in India. So that is something to be replicated now more in the metro sector.

Apart from Metro Rail projects the Govt is also working on making semi high speed Regional Rail corridors such as Delhi-Meerut RRTS. Do you think RRTS Corridors are another solution after Metro Rail for reducing road traffic in Indian cities.

Yes. In fact, RRTS is definitely the way forward. Globally most advanced countries and developing countries also have a mix of rail-based transport, it is not just long-distance train and just one metro. They have a mix of that, depending on what you want to offer the customer. Because the customer who is staying about 200 kms away cannot come by a slow train which takes him 5 hrs to come to place like Delhi. He would come in the morning finished his work and go back in the evening and that's when he will be happy to stay at his house wherever it is smaller town, but then if we are not able to provide that then he would rush to Delhi, overload a city like that and cause other issues for the city authorities. So RRTS is definitely something which most of them I would say are not just Europe, yeah most of the European countries certainly have that, they use RRTs then they come into the city and use metro system. What is required is to interconnect all of them. They can't be different. You can't have and RRTs station 2 kms away from metro station or 5 kms away and no inter connectivity there. So, it would actually be long distance train metro systems may be bus station and also altogether is the way to a plan so that it becomes truly multimodal kind of hub where people seamlessly travel from one form to other form of transport. So that it's accessible, there's no issue it's very comfortable for the user and then actually the benefits of all these things can come forward so by its own standalone.

Yes, it's a good thing but to make it successful and make everybody use it has to get integrated which is what the Delhi-Meerut RRTS which is right now under implementa-

tion already has plans to integrate it with the existing metro stations, so that people can come in and take up metro to go to their final destination. But the RRTS might not go all round the city, it could have one or two stops somewhere within the city. This definitely will make it happen and some of the other states have also seen the benefit, they are also planning that because yes, 2 or 3 important cities in the particular state need to be connected.

Today may be people are travelling by road or by bus which takes lot of time and people also becoming more eco conscious. Also, amidst lot of carbon gases and other things can definitely get eliminated. For ex a single train can easily carry about 700-800 passengers, it eliminates, if we take roughly 2-3 people in a car, so 200 cars can be eliminated on the road. This will help in reducing congestion, also provide better option to the customer or to the passengers to commute, be at home wherever they would like to be and still carry on with their businesses. Definitely RRTS and combination with metros is a way forward and a good thing to happen.

The Delhi Metro Rail Corporation, which is currently executing Phase 4 of Delhi MRTS, had last year changed its own training institute as training academy & now imparting training for the personnel of other Metro Rail projects in the country. Do you think it is sufficient to cater the training of manpower required for the upcoming Metro projects?

Training has been a very passionate subject to me. What Delhi Metro is doing is really commendable being of course the pioneer in the metro space. It's the right step they have taken. I think, they alone would not be able to meet the demand of the industry. It's too difficult for a single entity to actually meet the demand of what these numbers will throw now.

But today, quite a lot of the training is more on the Operation and Maintenance side, that is where the larger numbers are. Very little effort or thought has been given into pre-Operations. Are we training enough contractor personnel to take up railway contracts or do railway jobs? Are we training enough engineers to do the planning, are we training enough policy makers to actually look at urban planning with the metro and not really break over the heritage or cause trouble to these things, nobody is looking at that for training? Everybody is only looking at because the larger numbers of people are looking at how do I train drivers, station controllers, signal man and like that. So that is all fine but then again alone Delhi metro could may be train? how much ever they expand, they could train 100, 500 1000 of them but just to give you an example when you mentioned that 35 metros are coming up, each metro if you take an average of even 20 kms of metro would need almost about 35 to 40 trained people per kilometre, it's almost 600 people for each metro and that multiplied by 35 you will get the numbers.

Delhi metro alone may not be able to handle that though yes, they started, they expanded their facilities and everything but lot more metros will come and a lot more RRTS will come in, people will leave organisations, new people must be trained. More than that like I said nobody is training fresh engineers to get into the railway industry as such. That is something which is much more required, like what we have today we have highway engineers because colleges have started training courses on highway engineering. So, any highway stakeholder whether he is a contractor or consultant gets ready made trained civil engineer who has done maybe at least one year of highway engineering. But that kind of concept is not available for anybody in the railway industry. I can't go out and hire railway engineer. I have to look at somebody who's already working in a metro or railway and then poach him. That impacts both of them, somebody like Delhi Metro or other metro company might lose a resource person and I have to pay a higher price or not actually looking at developing people so the whole eco system remains static. There's no new or very few entrants coming into the ecosystem. The same old people are moving from one job to the other which is technically very bad for the industry because you are a growing industry you need to have new people coming in, younger blood coming in who are as enthusiastic about making his/her career within this industry than just picking up people from one organisation to other and just increasing salaries and paying, that is no way to actually look at a growing industry and plan for your manpower, so my bigger worry is that Delhi Metro is doing a good job, they have been visionary. That's fine but somebody above Delhi Metro needs to look at the holistic plan. Somebody like Ministry Housing & Urban Affairs, because they know how many railway projects are coming over the country. Forget the Indian railways, so what will that need because these projects have nothing to do with Indian railways. So Indian railways manpower is not available to them. So how will these be managed, how will these be constructed, that thought has to be given in accordingly more such institutions, more such Academic Institutions have to come into play. It's not just Delhi Metro which will be able to handle that.

In one hand Govt of India is promoting "Vocal for Local" for making India self-reliant and other sides Indian firms are prohibited to participate in major MRTS projects. For example, ICF Chennai, who had successfully developed the state-of-the-art semi high speed train Vande Bharat Express first time in India, was not given the opportunity to participate in NCRTC's Rolling Stock tender. What's your thought on this?

Sorry, You touched upon a very controversial subject, but yes, let me give my personal view I think it's a very sad decision that having an Indian company, with right kind of capability, but may be yes or not matching the multinationals one who have been there 30, 40, 50 years,

but then there is always a beginning and if Indian organisation esp. government public sector organisation do not hold hands and make our baby grow, "Who will"? Definitely not an American or Australian company, they will not come forward to support ICF, so I feel sad that Indian companies who have proven that yes, it's possible to develop something may be not the best, agreed, but then there is always possibility to improve.

There's always possibility to handhold them because if we don't do it, I don't think anybody else will come forward to do it. In fact, ISRO is a prime example, they are totally self-reliant because the government supported them totally and today to make the rocket or satellite, we don't need anybody else's help. Why is that happened, because the Govt. actually came forward and supported them wholeheartedly. So, that I think should be done, and again but we started off earlier looking at the huge market.

I think it's high time that Indian companies are given to grow to not just become, and this will not just help the Indian market, it will actually make them a good global player, because everybody understands and accepts today, that India is a quality and cost economic or cost-effective manufacturing base. That's why we have automobiles which are produced such large numbers in India. May be only 20 per cent actually are sold in India, but every major automobile manufacturer has base in India. If they were cheap nobody would do that. So, I think that's something we should definitely promote. I personally I felt very sad frankly when I read that news that we not allowed to participate.

I feel lot more Indian organisations should actually, should come forward and encourage efforts like this. Maybe what they could have done was, maybe not the entire lot, they could have always split the job, they could have given trial order allowed them to at least otherwise getting a technology partner, if the client was not sure about their capabilities, something like that. So maybe they could have been a delay for a few months, but I think in the long run it would have definitely benefitted the country.

Unfortunately, that vision I think has been lost by this decision. I only hope and pray, such decisions are not repeated by other organisations. That's my sort of very heart felt wish that this is not repeated. So yes, opportunities will come, and I am sure others will look at it in a more positive way and encourage Indian, because like you also rightly said 'Vocal for Local' does not mean just being vocal, you have to 'walk the talk', otherwise it's good in slogans. Now who will walk the talk, it is the decision makers who can walk the talk. You and I cannot take the decision unless we are in that position so definitely people need to talk not just put a poster of being vocal about local. We need to actually demonstrate that yes localisation is definitely something which is happening but overall, it

might hurt in the short term, it might hurt the multinational companies, which set up base here.

Any suggestion or thoughts you would like to share with our viewers concerning High Speed Rail projects in India & their approach towards it.

Again, these are my thoughts, High speed is needed in a large country like ours, there is no doubt about that because distances are so large. But then there is also a need to weigh the implementation or the planning in a very kind of unbiased way. Because at one end new technology has to come and it has to be done. But at the other end, economics are equally important. We need to see the cost economic benefit of that to the whole country, not just as a project, but overall, what could be the impact what it would get to the country. For ex. almost 50, 60 years ago when Japan planned their first high speed network. They looked at it that how will people reach Tokyo, when they are 600kms away, so they were very clear that unless those towns actually were developed this particular project has no meaning and they ensured that those towns were developed, and were provided with all the facilities, so there was boom in those towns, so that everybody thought that 'I'm in outskirts of Tokyo kind of thing because I can reach Tokyo in two hours', so nobody rushed into Tokyo because you'll see Japan is a very tight place, and less of space there, so people did not mind moving out, and automatically the economy there prospered. Lot more industries came up, so indirectly there was a benefit for the project or the government itself as a holistic one. That kind of planning is necessary.

Even in India it cannot be that because Delhi is the capital, I'm in Kolkata I need to connect the two so I will do it. No, unless these things have looked at that what is the economic benefit to the project but overall, to the country is there a direct or indirect benefit, which will derive out of that. so yes, showcasing technology is definitely good but then today what we are doing is not our technology, it is Japanese technology which is being showcased. So, maybe unless we develop our own high-speed rail or semi high speed like what you mentioned the ICF kind of thing showcasing that might be a good idea to implement the projects, so that globally people see that it's not just one flash in the pan, we are actually running the train and it's achieving the desired result and the kind of standard. So that's fine, but again a plethora of high speed while China can afford to do that yes, they can have maybe 6000kms or whatever of high-speed systems, for India I think we need to be cautious because There are very other priority areas so this is equally important, but then high speed, I would rather say, yes. Improving speed on existing systems making them better, making them more comfortable is much better option. so semi high speed in my opinion, increasing speeds from present 120kms, to just about 160, 180 kms or 200kms would be a marginal increase in cost

but provide almost the same benefit, as a so-called high-speed train would provide. So, my personal view would be that yes, we should go semi-high speed, look at how it's overall economic growth and how it is benefitting the economy and then may be some selected lines, yes. Because today air fares in India are competitive, so unless train traveller gets much more benefit than that, similar fare, he would not be very interested in paying, when flying from one point to the other in maximum of 2 hrs so that speed I don't think high speed will be able to cover. So that is one of the things majorly which needs to be looked at. Yes, are we actually able to provide that comfort, both in terms of cost, travel time and everything. Otherwise, I feel they would be white elephants, difficult to operate and maintain and they will then wither away, or quality will suffer. So there has to be a very careful kind of planning and if it is planned properly, definitely yes it can be made successful with host of other things. Holistic planning is what is required not just stand-alone planning.
