

It's really unfortunate to see most of the agencies squarely blaming trenchless technology for road collapses in Delhi, in an attempt to divert attention from their own working mechanisms and flaws therein. It's like blaming a matchstick for fire, or a knife for a murder.

Trenchless technology is a proven technology to lay cables and pipelines without having to dig, and hence has been adopted, welcomed, and extensively used all over the world. The technology, in-fact, helps in maintaining the roads, which otherwise need to be dug up every time a new cable installation is required. In many parts of the world, trenchless technology is being used to PREVENT road collapses, by providing reinforcement to aging pipes.

In India, Trenchless Technology is being extensively used for laying pipes and cables, and it was only after realizing the benefits of this technology, that various agencies decided not to give permissions for traditional trenching methods on critical areas, and insisted on use of only trenchless technology.

Trenchless technology is in extensive use in India since 1995, and has never ever been responsible for road collapses. It is therefore a natural question as to how such an established and extensively used technology suddenly can become cause of road collapses.

Let's first examine the reasons cited by various agencies, as per media reports, linking trenchless technology with road collapses:

Reason-1: Cavities left behind in the ground (bore path) resulting in road collapses.

Answer: A basic knowledge of Geo technical Engineering will refute this allegation. A small diameter bore with an overburden of 1.5-2 meters, can never ever cause a collapse.

Reason-2: Seepage through pits along the bored path, resulting in soil erosion and resultant collapse

Answer: The installation through trenchless method requires entry and exit pits, which are refilled and restored once the work is over. These pits are generally on side pavements (not on the road) and hence filling and restoring them is relatively simpler. Imagine an installation done using traditional method of cut and cover, digging the complete road. What would be the kind of restoration required in such a case is anybody's guess.

The fact therefore is that use of trenchless technology in fact helps in maintaining the roads, which otherwise would be dug again and again.

So what are the possible reasons for the road collapses, particularly this year? Had any technology been responsible for it collapses would have been happening every year. The answer to this therefore becomes obvious, it's not the technology but the approach, methodology and practices of agencies implementing the projects in a hurried manner.

Any construction project has critical components of planning and design, executed either by the client or responsible consultants appointed by the client. Planning and design required for trenchless projects involve carrying out subsurface investigations for soil types, stratification, presence of existing utilities,

etc., and then deciding based on the information gathered on type of tools to be used and entire methodology of execution. Contractor is then supposed to execute the project as per prescribed methodology under supervision of client/ contractor. This critical component of planning and design seem to be missing in the projects being executed lately.

Trenchless Industry in India is well organised, and IndSTT plays an important role in bringing all the stake holders on a common platform. Detailed codes of practices have been developed for clients, but unfortunately these codes are not being followed in practice.

The need of the hour therefore is to use this problem as an opportunity, an opportunity to contemplate and make improvements. Passing the buck will not help anyone. Client agencies need to have a re-look at their approach of bypassing the critical steps of planning and design, and take corrective action. IndSTT has always been willing to support and provide all the necessary assistance towards the same.

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