

Third Party Evaluator's Opinion on Tuticorin Port Dredging Project

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Effect

The most prominent aspect of the project clearly lies in the prompt and cost-saving execution of the components that primarily yield the project effects (channel and harbour dredging), with significant gains in freight volumes in 1997 (May through December) itself and accompanied by a large (23.5%) saving in planned costs. The savings in project cost holds a lesson perhaps as to the gains that can be had from a well designed bidding process.

In estimating the physical gains from the project effects, I have compared the average figures for freight handled in 1995 and 1996 and compared them to the average in 2001 and 2002. What emerges is that total freight handled has risen by 42.5% in tonnage terms, while the total shipping tonnage (GRT) has risen by 37.1% and the maximum vessel size by 42.7%. It also turns out that the number of vessels calling at the port increased by 47.6% – a factor larger than the gains on the other handling parameters. Average waiting time fell by as much as 23.1%.

There are indications that the dredging project has been able to nearly double the port capacity. This follows from the fact that if the increased number of port calls (1.476) is multiplied by the increased maximum vessel size (1.427), the cumulative expansion should have been 110.7%. This follows from one of the justifications for the project which is that low available draught in the channel and harbour was responsible for “vessels (being) forced to operate by limiting their payloads ... efficient port management was hampered due to the high frequency of cargo traffic from reduced carrier vessels and the small volume of cargo being off-loaded per landing” [p.1 of *Field Survey (August 2003)*]. However, following on the completion of the project, the biggest expansion was in the number of vessels, which factor was larger than that of the total freight handled or total shipping tonnage or even of vessel size. If payload restriction was to be mitigated by the project, one would have expected freight volume expansion to have much exceeded the number of port calls.

A possible explanation as to why the fully capacity expansion effect of the project has not manifested itself yet, is that there might be an absence of adequate demand. In terms of type of cargo, container freight has risen by 171% in both tonnage terms and volume (TEU) terms. General cargo has gone up 79.3%, but dry cargo which is still the *most important* category has risen by only 25.7%, while liquid cargo has actually *declined* by 2.1%. The *Field Survey (Aug 2003)* notes that “gross cargo handling volumes are lower than initial forecasts” resulting in port dues being “26% lower” than expected and hence a lower FIRR (p.7).

Given that water depth at 2.5km point was 13m (p.4), the extent of dredging has enabled the port to maximise capacity in so far as draught is concerned. The construction of a new berth and container yard should be able to create more offsetting shore-based capacity to cater to growing container, general and dry cargo handling demand. Aside from the fact that positive economic externalities have materialized as in the case of significant financial savings by Tuticorin Thermal Power Plant (p.8), the materialization of even a 13.3% FIRR on the basis of actually realised freight volumes within three years after project completion, for what is a very long-term port capacity augmentation, is an *exceptional achievement*. Given that India's external trade is rising at a rapid pace, the current demand limitations facing the Tuticorin Port are bound to ease in the years to come and the full benefits of the project would come into play, *albeit* over a longer period of time than might have been visualised originally.