

Chapter 6:

Conclusion



6.1 Conclusion

The Navy's force levels are on the decline. This has ironically come at a time when the responsibilities of the Navy are growing significantly and there is an urgent need to arrest the decline in its maritime capability. Due to the decommissioning of ships, and absence of fresh inductions, the force level with respect to frigates / destroyers, in particular, has dipped with only 84 *per cent* of ships as against the minimum prescribed number of 'A' number of platforms under this category. Another problem that the Navy is facing is the high average age of these platforms. To overcome the gaps in the desired number of ships and the existing force level, time bound shipbuilding and induction is inescapable. To this end, MoD and Indian Navy have embarked upon a sizable shipbuilding programme.

As such, the performance of the indigenous ship-building capability is critical to Navy achieving operational efficiency and preparedness. Although India has attained a credible capability in warship-building over the years, the three Defence PSU shipyards tasked with this responsibility, i.e. MDL, GRSE and GSL, differ widely in their role, areas of strength and outputs. Put together, the present ship building capacity of these Defence PSUs based on past averages is close to four ships per year – a number too low to meet the expectations of Navy. More importantly, the core competency for construction of frontline frigates and destroyers is presently available only with MDL. The other two yards have historically constructed smaller vessels or vessels with proven design.

Warship building, on its own, is a complex, time-consuming and iterative activity. Nonetheless, the extent to which Indian Navy ship-building projects are delayed and the scale of under-estimation reveals a deeper malaise.

The warship building projects starts in right earnest only after competent financial authority sanctions the project. Given the quantum of funds required, the CFA is Cabinet / CCS. Audit noticed that not only were the costs projected to the CCS simplistic, ad-hoc and based on incorrectly estimated build period, the planned weapon and equipment package were also preliminary and at best indicative.

Thus, along with the cost estimates and build period that have to be revised substantially, the equipment and weapon package also undergo substantial changes later. Late changes in weapon and equipment package had a cascading impact on the ship building project, as it entail changes in ship design as well as on actual receipt of items. The aspect of non-finalization of weapons and equipment package at the start of the project was in deviation of internationally accepted norms of 'designing ship around the weapons and sensors' wherein the weapon and sensors are selected and finalized first and the ship is designed to accommodate selected items. Late finalization of this package was attributable to non-availability of initially selected items, emerging of better alternatives and delays in indigenization efforts.

Audit review of warship building in the Indian context has revealed that Indian Navy follow a pattern of telescopic design. Thus, the shipbuilding projects of naval ships follow a concurrent design approach. Later and frequent changes in it lead to a situation where freezing of designs and consequently construction were delayed.

Despite having a very limited pool of shipyards which are capable of large warships construction, no attention was given to ensure that shipyards were provided with the necessary infrastructure to enable them to complete the ships on cost and time once they were nominated. The infrastructure development programmes were started late and also suffered from delays leading to a situation where these projects will be either completed after or during the ship building project for which they were sanctioned by Government.

Overall, the project management also left much to be desired. The contracts signed late, rendering weak contractual management of costs

and timelines. The exercise in control and monitoring was also rendered ineffective since costs and timelines remained fluid for substantial parts of the duration of project. Additionally, there are multiple responsibility centers in the IHQ (IN), depending upon their role and responsibility towards shipbuilding but without a single control point which would enforce co-ordination and overall control. Weak financial controls were also noticed which permitted excess release of funds to shipyards for longer periods without actual use.

The procurements of the equipments etc. were also delayed and suffered from inefficiencies such as lack of adequate competition and transparency.

Overall, though India has credibly demonstrated its capability in indigenously construction large capital naval warships and is one of the few Navies in the world capable of designing and building warships, however, performance in this area has to be improved not only because of the magnitude of resources required for the effort, but also the operational preparedness of Indian Navy depends on an efficient and effectively managed warships construction projects.

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