Planning for Sound Defence Budgets

N. S. Sisodia*

A frequent criticism of India's defence budgets has been that they do not bear a meaningful relationship with defence plans. In the past, Five Year Defence Plans have almost never been finalized on time. As a result, defence budgets have had to be formulated in the absence of approved plans. It is not surprising, therefore, that there is a wide variance between provisions made in budget estimates and the actual expenditure. Lack of rigour in planning and delay in approval of Five Year Defence Plans are partly responsible for shortfalls under capital outlays each year.

To ensure that budgetary exercises serve as an effective tool of management and financial control, it is vital that defence plans are formulated and approved well in time. The annual budget exercises simply do not afford sufficient time and opportunity for detailed analyses needed for big ticket expenditure decisions. These exercises are more appropriately undertaken during the planning process and generally not possible within the limited timeframes available for annual budget formulation. Timely finalization of Five Year Defence Plans is thus critical for budget-making.

This essay is an attempt to analyze the principal problems besetting defence planning in India and to suggest some measures to address them, so that Five Year Defence Plans can become the basis for sound budget-making.

Planning sans National Security Strategy

An important issue raised time and again in India is that the country has no formal documents systematically articulating national security objectives, national security strategy and defence policy. This has been acknowledged by the Government in Parliament and its Standing Committee on Defence.¹

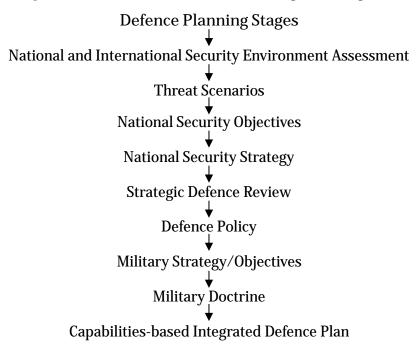
Ideally, long and medium-term defence plans should follow from a consensus-based and coherent articulation of national security objectives and strategy. These would be based on an assessment of India's security environment, threats and technological developments. Determination of national security strategy would also depend on the country's overall national interests, objectives and ethos.

As regards security environment assessments, some examples to consider are the American National Intelligence Council's assessment titled 'Mapping the Global

^{*}N. S. Sisodia is the Director General of the Institute for Defence Studies and Analyses (IDSA), New Delhi.

Future.' The more recent assessment has been brought out in the document titled 'Global Trends 2025: A Transformed World.' The formulation of these long-term assessments is an outcome of an intensive collaborative effort among strategic experts and intelligence professionals in the government, think tanks and universities. The Development, Concept and Doctrine Centre (DCDC) of UK MoD has undertaken a similar exercise and published a report called 'The DCDC Global Strategic Trends Programme 2007-2036.' For more specific guidance in defence planning, the UK MoD had brought out a Strategic Defence Review (SDR) in 1998. In the United States, the US Department of Defence publishes the Quadrennial Defence Reviews (QDR). The SDR was a one-off exercise which led to some major reforms. The QDRs, on the other hand, are undertaken periodically and thus have an incremental nature.

Periodic assessments of international, regional and national security environment are being carried out in India by intelligence agencies, defence forces and the Joint Intelligence Committee/National Security Council Secretariat. India's National Security Advisory Board (NSAB is group of strategic affairs experts) has also undertaken similar assessments from time to time. The findings and recommendations of these assessments now need to be synthesized at the level of National Security Advisor to produce a coherent document on India's national objectives and strategy. These could then constitute the basis of the nation's defence policy and objectives as well as capability development plans. If such exercises could follow a linear process, the model would look something like the figure below:-



In actual practice, the above process may not be linear, but iterative and complex. The chart only lays down the essential preparatory steps needed for sound defence planning. Absence of coherent national security objectives and strategy handicaps defence planners in India and they have to often resort to their own interpretations of a variety of statements and speeches which do not have the same sanction as formally approved documents. A former Chairman, Chiefs of Staff Committee has identified the "total absence of a central focus and direction, as far as the articulation/formulation of national interests and national strategy are concerned," as a major challenge for India's defence planners.²

The Scope of Strategic Defence Review

If the Ministry of Defence were to undertake a Strategic Defence Review, what should be its scope, so that it can facilitate the task of defence planners and managers? Some of the questions which such a review would need to answer should include the following:³

- What is the short, medium and long-term assessment regarding India's security environment? The assessment should identify both the conventional and non-conventional threats. It should particularly focus on the newer types of conflicts, surprises and unanticipated contingencies.
- What are India's strategic objectives and priorities?
- What are the missions and tasks that the country's armed forces may be required to undertake? In India's context, these would include the full-spectrum of warfare; yet realistic plans should be taken into account with the probability of each form of conflict.
- What should be the shape of the forces that will execute these missions and tasks and what changes are, therefore, required in the existing force structures and numbers? In particular, India's defence forces need to examine whether the existing structures created for conventional wars would continue to be useful in the future.
- What strategy is envisaged to attract, train, support and retain the right persons for the defence forces?
- What capabilities will be needed for the identified missions and tasks and what changes does this imply, taking into account the development and potential impact of new technologies likely to be available to defence forces as well as to India's friends and adversaries?
- What are the most efficient means to acquire and maintain those capabilities and what changes should be made to existing methods?

• Finally, what is the feasible and realistic level of expenditure to put the answers to all the preceding questions into practice, and what are the best ways to fund the expenditure.

Many of these issues are addressed by different agencies even at present but for more informed and cost effective planning decisions; a coordinated approach would be far more effective.

How much is enough for Defence?

How much money is enough for the defence of a country? This question, the title of the classic work of Alain C. Enthoven and K. Wayne Smith on defence plans and budgets in the US during 1961-1969, is a perennial dilemma confronting planners and decision-makers. There can, however, be no perfect answer to this question, as it would depend on a country's goals, resources and the judgment of its political leaders.

In the aftermath of India's independence, defence received a rather low priority. Having waged a successful non-violent struggle against the world's most powerful imperial power and determined to live in peace with all its neighbours, the Government of the day saw no need to lay particular stress on the armed forces. However, India's debacle in its war with China in 1962 jolted the leadership into a more realistic assessment of the threats facing the country. Thereafter, defence outlays were stepped up significantly. In the aftermath of the Cold War and during

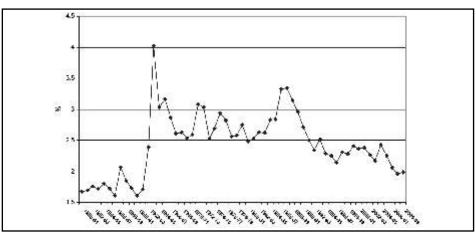


Figure 1: Percentage Share of Defence in GDP

Sources: Ministry of Defence, Defence Services Estimates for defence data; GDP figure are taken from Reserve Bank of India, *Handbook of Statistics Indian Economy*; and Ministry of Statistics and Programme Implementation, Central Statistical Organisation, *Advance Estimates of National Income*, 2008-09.

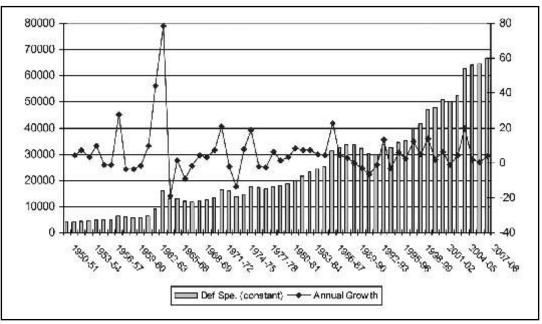


Figure 2: India's Defence Spending and its Annual Growth (%) at Constant (1999-2000) Prices

Sources: Ministry of Defence, *Defence Services Estimates* for defence data; GDP figures are taken from Reserve Bank of India, *Handbook of Statistics Indian Economy*.

the early nineties when the country's economy was under stress, the outlays as a share of GDP once again started declining. (See Figure 1 for year-wise defence outlays as a share of GDP). However, in terms of constant prices, defence expenditure has grown quite substantially since the early 1990s. (See Figure 2 below for defence expenditure at constant prices and its annual growth).

Allocation of resources for defence always poses a particularly difficult choice for political leadership in democratic countries. Every rupee spent on defence cannot be spent elsewhere for other priorities like poverty alleviation, health, education and infrastructure. Neglect of such vital needs in a developing nation creates internal fault lines, which are prone to exploitation by hostile actors outside. Recent history provides an example of cases where military strength alone has failed to guarantee security. The collapse of the Soviet Union is an oft-cited example. A nation's security also depends primarily on its comprehensive national strength, which includes its economic and technological prowess.

In the past, alternative criteria have been adopted to determine defence outlays. American political scientists, Glenn Snyder and Samuel Huntington in their classic

Note: Constant prices are calculated by using GDP deflator.

work on defence policy making under Presidents Harry Truman and Eisen; however have pointed that in calculating defence expenditure, they followed the 'remainder method'. Thus, they estimated tax revenues, "subtracted domestic spending and gave whatever was left over to defence".⁴

On the other hand, President Kennedy imposed budget ceilings on defence. Not able to explicitly clarify that additional funds were not available, civilian decision-makers began to reject programmes proposed by the military by arguing that they were unnecessary. The process thus "forced them to substitute their judgments for those of the military professionals and turned budget discussions into a test of Civil Military Relations".⁵

It has sometimes been suggested that defence outlays should be fixed as a percentage of GDP over an extended period of time to ensure adequate resources for defence. The Standing Committee on Defence (1995-96) in its Sixth report had proposed a long-term commitment of 4 per cent of GDP.⁶ The proponents of this school, however, seem to forget that fixing a percentage of GDP may not be rational, as it does not take into account the size of the country's economy. This standard is "just as disconnected from a net assessment of enemy threats as was the remainder method".⁷

In India's own case, it has been possible for the government to provide the required resources for modernization as its economy has grown rapidly over the past few years. A higher share of GDP is not particularly helpful, if the economy itself is doing poorly. At less than one per cent of GDP, Japan's defence expenditure is nearly twice that of India. While a share of GDP is a good way to make comparisons, finally a country's defence outlays must be determined in the light of a realistic assessment of the threats it faces and the capabilities it may actually need. More effective planning exercises will greatly ease the task of allocating resources for defence more rationally.

A Defence Reserve Fund for Modernisation

Another related issue concerning resources is the suggestion that a non-lapsable Defence Reserve Fund should be created outside the annual budgets to ensure regular flow of funds for modernization. There is insufficient justification for such a fund as substantial budget provisions meant for modernization are being returned unspent year after year and as the government has to resort to deficit financing. The knowledge that unspent money can be retained in a non-lapsable fund would adversely impact the speed of decision-making and might lead to complacency. There is sufficient flexibility in budget-making exercises to ensure uninterrupted flow of funds to vital projects, like a proper assessment of obligatory liabilities and earmarked outlays. Apart from this, given the requirement of parliamentary approvals for annual budgets, the propriety of maintaining such a reserve fund is doubtful. Thus, the remedy to this situation lies in more efficient planning exercises, which must provide for all essential defence needs, and in efficient procurement procedures.

Long-term Financial Commitments

Government's failure to commit itself to a series of long-term modernization plans for the Armed Forces and uncertainty about long-term availability of funds for such plans has been cited as a major handicap for defence planners.⁸ Given the longgestation of defence modernization plans and the risks attached to underfunding and delays, the expectation of services about long-term commitments is fully justified. However, the problem arises when indications given by Ministry of Finance about availability of funds for future periods are unacceptable to MoD/services and the process for negotiating higher outlays continues indefinitely. If defence plans take into account the possibility of alternatives and the costs and risks attached to them, resource allocation can become more rational and the process of negotiation can reach a successful closure. Decisions on resource allocation will have to be finally made by political leaders. What can improve the quality of these decisions is the rigour of the planning process, which should also propose alternatives to match different levels of defence outlays.

Synergy with Other Sectors

Since defence plans are a part of the Union Government's non-plan expenditure, there is at present no satisfactory mechanism to ensure inter-sectoral coordination with other sectors of national plans. Currently, efforts in this direction are mostly piecemeal and ad hoc. A more systematic attempt to coordinate defence plans with other related sectors, like surface Transport, Ports and Shipping, Civil Aviation, Information and Broadcasting, Telecommunications Industry and Science and Technology will optimize the value of money spent on defence and ensure more effective defence preparedness. A more deliberate systematic effort, therefore, needs to be made to co-ordinate programmes of defence and Five Year Defence Plans.

Capability-based Planning

In the past, defence planning both in India and elsewhere, has tended to be equipment or platform-centric rather than capability-based. Thus, modernization has been traditionally viewed in terms of acquisition of aircraft, fighting ships, submarines, artillery regiments, etc. Such defence plans were essentially an aggregation of services' projected requirements of weapons and equipment. This approach has led to acquisition of equipment, but not necessarily the relevant capabilities for a diverse range of threats. How is capabilities-planning different from traditional planning? Paul K. Davis defines the process as follows:

"Capabilities-based planning is planning, under uncertainty, to provide capabilities suitable for a wide-range of modern day challenges and circumstances while working within an economic framework that necessitates choices".⁹

Capabilities-based planning adopts an integrated approach, looking at complete capabilities, rather than discrete equipment; and makes choices among alternative capabilities for meeting the same threat or a set of threats. It focuses on outputs and outcomes instead of inputs. It considers costs and benefits of each alternative and selects what in the judgment of planners would be the most cost-effective alternative meeting the same objective. While doing so, it should look at the total cost of owning and maintaining a capability. This assessment would have to take into account the life-cycle costs of the capabilities no longer required. The process calls for a certain degree of ruthlessness and entails rigorous intra-service and inter-service prioritization.

Given the fact that in the future military forces may be needed less for conventional inter-state wars and more for entirely unanticipated surprises and shocks, there is a need for flexible and broad-based capabilities. These may have to be inter-services and inter-agency structures. While some effort is reported to have been made in India to move towards capabilities-based planning, the success so far has been limited. The former Chairman, COSC, Admiral (Retd.) Arun Prakash, who oversaw India's defence planning process till recently has stated that while a beginning has been made in "capabilities-based planning (especially in the Navy), cost-benefit analyses and life-cycle costing are still at an embryonic stage."¹⁰ Integrated capabilities-based planning can be truly effective once there is much greater integration amongst all the defence forces. This leads to the next important question of structuring our higher defence organization for proper planning.

Are the Organisational Structures Effective?

As mentioned earlier, in India, defence planning really began after the 1962 war with China and the first plan was formulated for the period 1964-69. A planning cell was set up in 1965 in the Ministry of Defence to take into account the broader dimensions of defence planning. However, this cell proved unequal to its task. In 1977, a Committee for Defence Planning (CDP) was set up under the Cabinet Secretary comprising the three Chiefs of Staff and officials of the Planning Commission. In 1979, a Defence Planning and Implementation Committee were established under Defence Secretary. It is at this stage that the Army, Navy and Air Force initiated the task of planning in right earnest.

None of the above structures, however, were able to manage planning exercises effectively and, therefore, in 1986, Defence Planning Staff headed by Lt. Gen. Level Officer was created under the Chiefs of Staff Committee. Its basic task was to coordinate plans developed by perspective planning directorates of the Army, Navy and Air Force.¹¹

Following the Kargil War, and a review of the national security setup, a Group of Ministers (GOM) recommended restructuring of the Higher Defence Organization. The GOM report observed serious weaknesses in the functioning of the Chief of Staff Committee (COSC) and in its ability to provide single-point military advice to the government, and relevant substantive inter-service doctrinal, planning, policy and operational issues, adequately. Regarding defence planning process, the report noted that it was greatly handicapped by the absence of a national security doctrine, commitment of funds beyond the financial year, a lack of inter-service prioritization and the requisite flexibility. In the context of COSC's deficiencies, the GOM's major recommendation was to create the institution of a Chief of Defence Staff assisted by a Vice Chief of Defence Staff, among other things, to "enhance efficiency and effectiveness of the planning process through intra and inter-service prioritization."

The recommendation for creating a CDS has not so far been implemented for the reason that such an important decision needs to be taken only after broad-based political consultations. However, an Integrated Defence Staff has been created as an interim measure. There are, of course, misgivings about the institution of CDS among the Armed Forces also, as evident from a number of statements and writings by high-ranking retired military officers. Understandably, the issue is highly contentious.

Whether or not, there is a Chief of Defence Staff (CDS), an effective system of interservice integration needs to be developed without any delay. Presently, the Chairman, Chiefs of Staff Committee, is not in a position to oversee long-term defence planning or its sustained implementation. In his own service, the Chairman COSC continues to perform an important operational role. He, therefore, simply does not have the time to preside over the rigorous, long-term exercises needed for sound planning. The Chairman, COSC is intimately identified with his own service and his choices regarding inter-service prioritisation are unlikely to be seen as unbiased. The proponents of the institution of CDS argue that this problem can be overcome by him, as the position will be held by rotation among different services, at least to begin with. In any case, the CDS will not be returning to his own service at the end of his own term. It is also pointed out that the Integrated Defence Staff is unable to function effectively as it has no teeth. It is further argued that the CDS invested with requisite authority is likely to help in planning of inter-services' operations.

In future, technology will play a critical role. Technology-intensive systems needed for modern warfare are both expensive and have a long gestation. It is important, therefore, that planning for capability acquisition in all the three Services is an integrated process, keeping in mind the integrated strategic doctrine. An integrated approach for systems like reconnaissance satellites, cyber warfare strategies, space wars, advanced light helicopters, unmanned air vehicles, among others would ensure the best value for money. It is in the above context that the Group of Ministers had noted that:

"Under the existing system, each Service tends to advance its own capability without regard for inter-Service and even intra-Service prioritization. Accordingly, one of the most vital tasks that the CDS would be expected to perform is to facilitate efficiency and effectiveness in the planning/budgeting process to ensure the optimal and efficient use of available resources. This could be carried out through intra-service and inter-service prioritization of acquisitions and projects".¹²

The case of 11th Defence Plan highlights the principal roadblock to timely finalization of defence plans. The Parliament's Standing Committee on Defence has attributed the continuing delay to lack of agreement regarding the financial outlay for the plan. The Ministry of Finance has proposed a defence plan outlay, based on year-on-year increase in the range of 8-10 per cent whereas the MoD has asked for an annual average growth rate of 12.35 per cent. And the tussle for resources continues. This stalemate is not unique to the 11th Plan; earlier plans had met a similar fate. Analyzing the problem a former Secretary (Defence Finance) A. K. Ghosh observes that a discussion about defence plans basically boils down to "the extent of financial commitment the Finance Ministry was prepared to make and whether it was acceptable to the Ministry of Defence."¹³

The reluctance or inability of Ministry of Defence/Defence Services to finalise the plans keeping in view the realistic financial outlays is a recurrent problem. It is difficult for the services to accept any ceiling as planning within such a ceiling, where some proposals considered vital would have to be rejected becomes a complex task for the Services or any other organization for that matter. The Chairman, Chiefs of Staff Committee does not have the requisite authority to decide on inter-service

prioritization, as it involves a reduction in the outlay of the affected service. The difficult task of making choices and trade-offs is then passed on to the Ministry of Defence. Any major changes in services' plans by the Ministry naturally evoke strong resistance from the services as civil servants of the Ministry do not normally have the relevant professional background. One of the problems mentioned by Admiral (Retd.) Arun Prakash is "a generalist and transient bureaucracy (of MoD) which lacks in depth comprehension of defence security issues." Thus, decision making with regard to defence plans can sometimes become a test of civil-military relationship between the armed forces, and the civilian bureaucracy in the ministries of defence and finance. It is argued that a Chief of Defence Staff would have both the professional expertise and the necessary authority to ensure inter-service prioritization within indicated financial ceilings. With freedom from pressing operational issues, and with the advantage of being able to view defence needs holistically from a distance, the CDS would be much better placed to guide integrated defence planning exercises than is possible now at the level of COSC.

A Defence Planning Board

An alternative to CDS which has been suggested and deserves some consideration is to setup a Defence Planning Board under the Chairmanship of Defence Minister with a strong staff of professional experts.¹⁴ The board could comprise retired Chiefs of Staff, scientists and industry representatives, a member from the Planning Commission, and other relevant experts. It can become effective only if it has a strong team of professional experts able to analyse and evaluate the Services plans with the relevant analytical tools. Its task would be to look after planning on a whole-time basis in close collaboration with the services, other relevant ministries and agencies, the planning commission and the Ministry Of Finance. However, such a board is likely to suffer from some handicaps. It may become detached from operational realities and lack credibility with services HQs, field formations and MoD. Perhaps, a carefully crafted mandate for the institution of CDS, which takes care of the specific circumstances of India and addresses aspects which are potentially problematic, can be a possible way forward.

Planning for Self Reliance

India today has the dubious distinction of being among the top two importers of defence equipment. Self-reliance in defence is vital, not because of ideological considerations, but because it is a necessary condition for strategic autonomy. No nation, however, friendly would be inclined to part with its cutting-edge strategic technologies and systems; these capabilities will have to be developed indigenously. Nor can one rely on uninterrupted supplies from foreign sources during the time of

conflict. A nation's military capability would, in the ultimate analysis, depend on its mastery of strategic technologies. Therefore, investment in defence research and development as well as production would need to be enhanced and the private sector more actively involved. Projects in defence R&D and production have a long gestation, and significant risks in terms of time/cost overruns and failures. Hence, they require much more careful planning as an integral part of defence plans. A committee setup under Dr. Vijay Kelkar in its April 2005 report to the government has made a number of important recommendations which need to be integrated in the defence planning process. The logic for their speedy implementation is compelling. Implementation of the suggested measures is expected to lead to significant increase in defence industrial production and a higher growth rate in manufacturing. The increase in job creation was estimated by the committee between 1.2 to 2 lakh. Based on life-cycle cost analysis, the annual savings on maintenance and support were projected by the Committee in excess of Rs. 4000 crores. Thus, time bound implementation of measures recommended in the report would lead to greater self-reliance (up to 70 per cent, instead of 30 per cent at present), benefits in terms of R&D, technology spin-offs, higher industrial growth, higher exports, increased competition for better value for defence, besides providing strategic depth to defence production.

Planning for Human Resources

An important challenge for defence planning is to develop appropriate human resources for the future. The Indian Army, particularly, is regarded as manpowerintensive. The combatant of the future would have to be much better equipped and trained in a wide variety of tasks and prepared to meet wholly unanticipated contingencies. The world-over armed forces are improving their teeth-to-tail ratio and becoming leaner and more effective. Consequent to the 6th Pay Commission, the share of revenue expenditure in defence budget has already increased to 61.31 per cent in 2009-10 from 54.5 per cent in the preceding year. The total wage bill has more than doubled from Rs. 21,892 crores in 2008-09 to Rs. 44,501 crores in 2009-10. This growing burden is likely to crowd out resources for modernization. In this context, a former Chairman, Chiefs of Staff Committee Admiral (Retd.) Arun Prakash observes, "There is an urgent need to substitute man-power with technology (airmobility, night-fighting capability, precision-guided weapons, surveillance and reconnaissance, network-centric warfare), and become lean." Given India's specific context and security environment, the scope for restructuring may be limited. Nevertheless, in the context of long term defence planning, the issue of man-power costs needs to be revisited.

There are two other issues relating to human resources which need to be addressed. *First*, for effective planning the analytical capability of defence Services and MoD

needs to be significantly enhanced. Even among 'military professionals,' expertise in relevant areas like operations research and systems analysis is extremely limited. Significant improvements in planning are not possible unless conscious steps are taken to create or develop a staff with requisite expertise.

Secondly, there is need to promote greater specialization among civilians in Defence Ministry to enable them to make substantive contribution to the defence planning process. Suggestions have been made in the past to carve out a special cadre of civil servants to staff ministries directly concerned with national security. A more practical alternative is intensive training and longer tenures in Ministry of Defence. Selected officials from armed forces can also be inducted in the Ministry, provided they do not have to go back to their parent service.

Conclusion

Defence requires investment of a significant share of the nation's resources. These resources need to be invested wisely as the attendant risks in terms of time and costs can be huge and in terms of nation's security, unacceptable. Defence planning therefore deserves as much attention as national planning. While defence planning processes in India are now well-established and have seen many improvements in recent years, there are problems, besetting the system. Greater attention is needed in the areas of formulating a national security strategy in a systematic manner; effecting greater synergy between defence and national plans; capabilities-based planning and greater integration among Services. Reforms in planning processes, supported by sound analyses would facilitate the task of financial allocations for defence plans and budget making, which would be based on carefully assessed needs rather than any other ad hoc criteria. Sound defence plans, formally approved well in time will lead to more efficient budget making, timely utilization of funds, value for money and speedy development of capabilities needed to safeguard India's security.

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- 1. Ministry of Defence, Standing Committee on Defence, (1995-96), Tenth Lok Sabha, "*Defence Policy, Planning and Management*", Lok Sabha Secretariat, New Delhi, April 1996.
- 2. Admiral (Retd.) Arun Prakash, Former Chiefs of Staff Committee in response to the author's questionnaire on the subject.
- 3. This questionnaire has been prepared on the basis of ideas presented by Alexander Nicoll in his paper *"Challenges in Defence Planning"*, at the International Seminar on Defence Finance and Economics, New Delhi, November 13-15, 2006.
- 4. For an analysis of different methods followed by US Presidents, see Richard K. Betts, *"A Disciplined Defence: How to Regain Strategic Solvency"*, Foreign Affairs, 86(6), November-December 2007, pp. 70
- 5. Ibid.
- 6. Ministry of Defence, Standing Committee on Defence, "*Defence Policy, Planning and Management*", Sixth Report, Lok Sabha Secretariat, New Delhi, 1995-96, pp. 37.
- 7. Richard K. Betts, "A Disciplined Defence: How to Regain Strategic Solvency", pp.79-80.
- 8. This problem has been underscored by Admiral (Retd.) Arun Prakash in his replies to the author.
- Paul K. Davis (ed.), "New Challenges for Defence Planning: Rethinking How Much Is Enough", RAND, Santa Monica, 1994; Idem, "Rethinking Defence Planning", John Brademas Centre for the Study of Congress, New York University, December 2007.
- 10. Admiral (Retd.) Arun Prakash's reply to a questionnaire sent by the author.
- 11. For a detailed discussion of evolution of defence planning processes and structures see V.P. Malik and Vinod Anand, "*Defence Planning: Problems and Prospects*", Manas Publications, 2006, pp. 24-26.
- 12. Report of the Group of Ministers on '*Reforming the National Security System*', Government of India, New Delhi, 2001, pp. 101.
- 13. Amiya Kumar Ghosh, "*Defence Budgeting and Planning in India: The Way Forward*", Knowledge World, New Delhi, 2006, pp. 224.
- 14. The suggestion has been made to the author in a discussion by Shri Amit Cowshish, Joint Secretary and Financial Advisor dealing with budget and plans in the MoD.