MILITARY MANPOWER: MANAGING QUALITY AND COSTS

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The manner in which India's military manpower structure has evolved over the past 30 years has created serious problems with regard to both *quality* and *costs*. Our forces have become, on the average, six years older than they were 30 years ago and the military pension bill, as a percentage of the pay bill, has quadrupled in the same period. Some recognition of these danger signals is visible today among those responsible for keeping the forces modernised and in fighting trim as well as those responsible for managing the country's finances. But there is, as yet, no serious impetus for change. The comfort stemming from our superiority over Pakistan, the decline of defence expenditure as a percentage of gross domestic product (GDP) as a result of our faster-growing economy, the military's traditional conservatism and a disinclination to study how other countries manage their military personnel have all contributed to this.

This paper argues that the Indian military's all-regular structure is primarily responsible for its accelerated 'greying' as well as its out-of-control pension bill, and that these problems cannot be meaningfully addressed without bringing in a substantial short service component. Many of the steps taken in the past to improve military service conditions have done unintended harm to both manpower quality and manpower costs. If we persist along past lines, our forces

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will grow still older and our pension burden still higher. Both combat fitness and the defence budget will continue to suffer. We need a new approach. The approach suggested in this paper centres on restructuring our forces with a 35 per cent component of regulars, all serving to the age of 60, and a 65 per cent component of short servicemen serving five to eight years.

This paper is divided into the following sections:[1]

- The Trodden Path.
- The Present Structure and Quality.
- The Needs of the Future.
- Training, Experience and Expertise.
- A Second Career.
- The Concerns.
- The Present Structure and Costs.
- Towards a Better Structure.
- Transition Issues.
- An Action Approach.

THE TRODDEN PATH

Our past efforts at improving the conditions of military service have revolved largely around:

- Improving compensation.
- Raising retirement ages.
- Enhancing promotion prospects.

The military's pay needs are examined by pay commissions that are basically geared to examine civil service issues. Pay commissions work by equating military ranks to civil service grades. This makes it difficult to take into adequate account some factors crucial to the military such as early retirement, more stressful working conditions and limited upward mobility. As a result, the military feels that it is not being compensated fairly. The government, on the other hand, is worried about major financial repercussions because of the huge

1. In revising this paper the author has benefited from the views expressed at the Defence Manpower Seminar held at the Centre for Airpower Studies, New Delhi June 24-25, 2006 and some statistics provided by the Centre for Air Power Studies.

numbers involved.

The efforts to lengthen engagement periods and raise retirement ages have no doubt conferred some material benefits, but have had an adverse effect in the combat fitness area. Our forces today are not only about six years older than the forces that fought the 1971 War, but they are also between five and eight years older than the forces of major powers. In the army, which accounts for over 80 per cent of the military manpower, the initial service engagement for combat stream soldiers was raised from 7 to 10 years in 1965, to 15 years in 1976 and 17 years in 1979.

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In the British days and in the first two decades after independence, India was able to persist with an initial (and mostly non-extended) engagement period of seven years. In those days, when the soldiery came from a semi-literate peasant society, it was possible for a released soldier in the age group of 25-28 to go back and resume his briefly interrupted village life. The secondary level education and the small gratuity that the army gave were enough to give him a head start in his village. But societal conditions changed and it became increasingly difficult to return to the land.

The lengthening of initial engagement of combat soldiers from 7 to 10 years in 1965 was a palliative measure taken on account of this growing difficulty. This raised the release age group to 28-31, but still did not provide for a pension. It was the extension of the initial engagement to 15 years in 1976 that gave a small pension to everyone. But this also raised the release age to 33-36. Neither the opportunity to serve in the army till one's mid-thirties nor the benefit of a small pension thereafter did much to improve the material condition of the soldier. Under growing pressure, the initial engagement period was further extended to 17 years in 1979, but this was hardly more than an anodyne.

It must be recalled that from the mid-1960s, the army was facing a serious dilemma with regard to personnel below officer rank (PBOR). There was the

need to keep the forces young but also the very pressing need to do something to alleviate the conditions of men facing impoverishment at the end of their engagement. Many senior army officers who were closely involved in these decisions at that time now feel that the decisions to extend engagements in this manner, based on humanitarian considerations, did great long-term damage to the fighting fitness of the army[2].

Thirty years have passed since pension became assured to PBOR. But this has not helped much. Released soldiers still need to seek a second career — but now in their late thirties or early forties when their family responsibilities are at their peak. Officers leave about a decade later, but they too have to look for a second career. On the average, PBOR today have a working life about 18 years shorter than their civil service counterparts, and officers about eight years shorter. Raising retirement ages has thus led to a situation where it has neither been possible to improve the material conditions of servicemen to civilian levels nor maintain the earlier youthfulness of the forces.

Much the same has happened with the efforts to better promotion prospects through the creation of more higher-rank vacancies. In the decade after independence, the departure of the British kept the promotion belt moving reasonably fast. And during the decade following 1962, the large expansion of forces kept the belt moving. But by the mid-1970s, the promotion situation had turned grim for both officers and PBOR. During this period, dissatisfaction in the forces rose not only because of their worsening condition in objective terms, but also because the balance in career prospects between the military and the civil services (including the police) was being changed to the disadvantage of the former.

Unlike the civil services, it is not easy for the armed forces to improve promotion prospects by proliferating senior jobs. The forces have a rank-job correlation emanating from the organisational logic of fighting formations which is apparent from the largely common pattern seen the world over. Our attempts at injecting additional senior vacancies (such as making full colonels command battalions) have not proved successful. On the one hand, career opportunities in the forces are still well below those in the civil services, and, on the other, the

2. Lt. Gen. M.L. Chibber PVSM, AVSM and Lt. Gen K. Balaram PVSM are two distinguished such officers.

proliferation of higher ranks has led to some devaluation of rank and possibly some weakening of the command system. It has also led to personnel getting less satisfaction from promotions than they used to earlier.

The civil services, without a command-dictated organisational structure to constrain them could go for large scale upgradations which they increasingly did after the concept of cadre reviews was introduced to take care of their promotion prospects. The military sought to get on this bandwagon in 1979 but after a couple of cadre reviews they found that ranks were getting depreciated in an undesirable manner. There was also the problem, particularly in the case of PBOR, that a substantial portion of 'workers' had now become 'supervisors', creating a role imbalance within units. Memories of what had happened then have faded and once again there is a push for upgradations.

At the time of the first cadre review, some had felt that a better approach than proliferating senior ranks was to give people higher pay without conferring the rank that went with it. There was organisational logic in this thinking, but it did not cater adequately to the needs of the individual. While they were happy to get more pay through measures such as extended pay-bands, few in the forces were willing to accept that higher pay was a reasonable substitute for higher rank. The latter gave a military man a lot more than money. It gave him responsibility, authority, perquisites, privileges, standing within the forces and prestige outside. A higher pay grade by itself gave none of these.

In an effort to improve promotion prospects. the armed forces do use short service engagements, but this has been confined to officers. There are no short service engagements for PBOR who constitute nearly 96 per cent of military manpower. In the case of officers too, short service induction is carried out in a very limited manner, largely confined to non-combatant categories. Moreover, there have always been strong pressures to give permanent commission to those who come through the short service channel, and this is often done negating the purpose of short service entry. This problem is currently being highlighted in the context of women officers[3].

3. This paper has used male terminology throughout. This has been done to facilitate easy reading, and not because of any underplaying of women's role in the forces.

THE PRESENT STRUCTURE AND QUALITY

What is special about the armed forces with regard to the quality of manpower is the crucial need for physical fitness. And physical fitness is, above all, a function of age. Armed forces the world over, therefore, try to keep themselves young and they do this mainly by encouraging early retirement and through short service engagement. Early retirement is not a problem in societies where job opportunities are good. In many developed countries, early release is also facilitated by other means. In the case of officers, opportunities for post-graduate academic education are liberally offered while on active duty and this makes the transition to a second career easy. In the case of PBOR, highly subsidised higher education is facilitated on release in addition to opportunities for distance learning while in service.

Some variation of national service was once the norm in both the North Atlantic Treaty Organisation (NATO) and Warsaw Pact countries. It fell into disfavour when educational levels and job opportunities rose in those countries and military service became unpopular. Yet, national service is still very much there in small militarily-efficient countries like Israel, Singapore and Switzerland. It continues in major countries like Russia, Turkey and Germany. Moreover, in countries like the US and the UK where draft and national service have been given up, the average length of initial engagement is generally between three and six years.

In the Indian armed forces, the average officer now retires in his early fifties and the average PBOR in his early forties. This, as noted earlier, has resulted in the military's average age going up by about six years over the last three decades. We now have junior commissioned officers (JCOs) in their mid-forties commanding platoons, and colonels in their early forties commanding battalions. In most combat efficient armies, like those of the US and the UK, the platoon commanders are in their early or mid-twenties and battalion commanders in their mid-thirties. Similar differences in the age structure are visible in the case of the navy and the air force as well. These differences in age profiles are far from insignificant, although in our anxiety to improve service conditions, we have tended to gloss them over.

Besides training, the two key factors that determine quality in the forces are

the intrinsic attributes of a person at the time of entry and the level of motivation experienced while he is in service. These two factors, in turn, are influenced by job satisfaction, career progression, pay and benefits, job stress, and the prospects for a second career. Job satisfaction is a key issue, and in our forces it has come to have a broadly inverse relationship with age. One rarely sees an officer or jawan in his twenties who is dissatisfied with his job. They all visibly enjoy their work, and in the case of officers, the responsibilities they are called upon to shoulder.

It is only when they get into their thirties that problems begin. At this stage, those in their age cohort in the civil services and in the private sector begin to move into more responsible jobs. Concurrently, promotions also slow down in the military. A major in his mid-thirties finds that those in his age group in the civil services have generally climbed a level higher. What is more, while he faces a 40 per cent possibility of being left behind at the next promotion, his civil service counterpart is assured of sailing through. He also knows that the relative situation will get still worse as he grows older.

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Sharply diminishing billets as one climbs the military hierarchy make it inevitable that many competent men get stuck at the lower reaches of the pyramid, leading to job frustration and disenchantment. What is worse, uncertainty of promotion caused by high elimination rates gives rise to play safe attitudes and undesirable careerism. Because rank is so important, the failure to make a promotion becomes a traumatic experience and results in de-motivating and de-energising nine out of ten excellent men at some point in their career. The large number of representations put up on account of non-selection for promotion, and the smaller yet sizeable number of cases that end up in courts are proof of the malaise in this area.

Then there is the matter of job stress. Military life is necessarily tough. There are hazards to life and limb, physical and mental stress, unstructured and

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extended working hours, abridgement of citizen rights, disciplinary restrictions, heightened transfer turbulence and the like. It is easier for young men unencumbered with family commitments to cope with these than it is for older, family men. Field service and frequent transfers, which one had cheerfully taken in one's stride as a bachelor, become more stressful when one is married and has children. As one progresses through one's thirties and forties, the situation gets worse. Good education for one's children now becomes a major concern. So does, increasingly, the wife's need for a career of her own. Stable life in urban locations, which the military finds difficult to provide, has now become a seriously felt need, unlike the case some years ago.

Finally, there is the issue of a second career, which is a special need of the military. Despite the raising of retirement ages, most people in the forces have to look for another career. In the civil services, everyone can serve till 60, and in the private sector even longer. Moreover, because of his longer service, the civil servant generally gets a higher pension despite some extra weight given to the military. So, in spite of their pensions, most people in the military have to work 10 to 20 years after leaving the forces. But forties and fifties are not good age groups to embark on a second career. Also, the skills that over three-quarters of military men acquire have only limited transferability to the civilian world. While the need for a second career is built into the armed forces, the opportunity to succeed in it is denied to the majority.

As one can see, these factors – job satisfaction, career progression, pay and benefits, job stress and second career prospects – all have a direct and consequential relationship with the age factor. All five do not bother a military man while he is in his twenties, but they all do when he gets older. T*here is thus a great deal of advantage to be gained if the years in the military are shortened.* It will translate into greater attraction for a military career and, therefore, better quality

at the point of entry, as well as greater contentment and, therefore, greater motivation while in service.

The ageing of our forces has also had more direct consequences. Physical fitness is an obvious crucial requirement in the military. And it is well established that physical fitness begins to decline gradually in the late twenties and more rapidly in the mid-thirties. Today, about 70 per cent of the military is above the age of 27, and about 30 per cent above the age of 37. Growing old also has a negative impact on certain desirable *mental attitudes* in the forces such as offensive spirit and the willingness to take risks.

The changes in rules during the last 30 years permitting nearly everyone to earn a pension, and the raising of retirement ages, have made our forces the *oldest* among those of major military powers. The difficulties created by the rising age structure are not limited to the domain of physical fitness. There are related problems in areas like training and family pressures. We are increasingly becoming a military of *middle-aged family men* distracted by matters like wives' jobs, children's education and such—a careworn force in which much effort is expended on internal administration and welfare.

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THE NEEDS OF THE FUTURE

Whether we continue or not with the current approach to manning, the demands placed on our forces, particularly PBOR, are set to change in a big way. Having reached the threshold of great power status, India has to mould its forces with a longer term vision. We have to look beyond Pakistan and internal security, and develop forces with greater employment flexibility and greater reach. Such a shift will call for the accelerated infusion of not only advanced hardware and concepts, but also of people with the ability to handle

them. Popular literature on RMA (revolution in military affairs) focusses on hardware and systems, but the deeper story is about the *reconfiguring and retraining of people to make the concepts and hardware of RMA exploitable*. This is a factor that must be seriously borne in mind when we look at the future pattern of our military manpower

India's future forces will need people with *much greater capacity to absorb technology*. This is particularly so in the case of our army which constitutes the vast bulk of our military manpower[4]. In the case of officers, matters are manageable because everyone has a bachelor's degree and they have all come through a demanding selection process. But in the case of PBOR, who are educated only up to the 10th class and mostly in indifferent schools, there are problems. *The infantry soldier, who is now considered semi-skilled, will have to be a highly skilled person in tomorrow's military.*

One of the notable changes occurring in the armed forces worldwide is the narrowing of differentials in the academic backgrounds of officers and PBOR, and between different trades among PBOR. The aspirations of PBOR are also changing. This change, already very visible in our navy and air force, will inevitably grip the army too. At least 80 per cent of PBOR of the future forces will have to be *highly skilled*. For this, they would need to be appropriately qualified academically, which means at least 12th class, given the standards prevailing in most of our schools.

During the last 20 years, the only two major militaries in the world whose personnel strengths have grown, instead of shrinking, are India's and Pakistan's[5]. The personnel strengths of American, British and other European forces have all come down—by an average of 35 per cent. In Russia, the numbers are down by 60 per cent compared to the 1990 Soviet figures. China's numbers are down by about 30 per cent[6]. These reductions are attributable not only to diminutions of threat but also to deliberate efforts to reduce numbers by

4. Of the 14.52 lakh servicemen currently in the Indian armed forces, 12.62 lakh (86.9 per cent) are in the army, 0.54 lakh (3.7 per cent) in the navy and 1.34 lakh (9.4 per cent) in the air force.
5. India's strength today is 14.5 lakh and Pakistan's 7.1 lakh. Reserve and paramilitary forces have been excluded.
6. The current strength of US forces is 14.3 lakh, down from 21.3 lakh in 1989. The current strength of British forces is 1.9 lakh and of French forces 2.1 lakh. The Russian strength is 10.3 lakh and the Chinese strength 22.5 lakh. In all cases, reserves and paramilitary forces have been excluded.

increasing *per capita* combat power.

An effective method long used in advanced countries to achieve manpower reduction is to combine the functions of operator and maintainer through multi-skilling. We too have tried to do this but have been unsuccessful *largely because our inadequately qualified operators have found themselves unable to take on maintenance work.* This again shows how important it is to raise the educational standards of our operators, or combatants.

In the advanced countries, changes are constantly being effected in the areas of unit structures, trade structures, training, and organisation to increase the punch delivered per head. Modular forces that can interface in many different ways to suit different requirements are being created. In parallel, there is the trend towards forces operating in a more interdependent fashion to synergise capabilities. Then there is the concept of net-centric (rather than platform-centric) operations where hierarchies are de-emphasised. *With decision-making devolving to lower levels, each future combatant has to be much more empowered than his counterpart today*, not only in terms of his own primary role but also in terms of peripheral understanding and interface management. The quality demanded of each military person – officer and PBOR – is inexorably rising. We need to take this on board seriously.

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Historically, manpower economisation has not been a priority in the Indian military, just as it has not been on the civil side. A major reason is the fact that the per head hardware costs in the army have been fairly low. It has been different in the navy and the air force, but even in their case, the manning levels of ships and air squadrons have always been, and continue to be, significantly higher than in advanced countries. As our hardware quality and operating patterns catch up with those of advanced militaries, there will have to be both a reduction in numbers and an increase in skill levels.

When examining the kind of manpower structure we need in the future, it is worth noting that *future forces will have to cope with continually changing skill structures*.

We must also recognise that young minds have a learning advantage over older minds that is no less than what young bodies have over older bodies in the area of physical skills.

Not only will skills have to be constantly upgraded within a particular trade, but the trades themselves will have to evolve and mutate. Fixed trade structures that one has been accustomed to will have to give way to more flexible ones. In these circumstances, if people are taken in for long durations, they will find themselves needing to acquire quite different skills as the years pass. This will call for frequent re-training, much of it outside the original skill area. If, on the other hand, people are taken in for shorter periods, then their initial training can be structured to meet the job needs of the period ahead.

We must also recognise that young minds have a learning advantage over older minds that is no less than what young bodies have over older bodies in the area of physical skills. In upgrading technology skills in the military, there are clear gains to be had if the people involved are young. Moreover, the academic background of students in India is continually improving. An entrant to the forces in 2007 will be more technically current than one who had entered in 2002. Regular turnover enables the forces to take advantage of this reality.

Turnover of personnel is also important for another reason. We cannot know today with great clarity what ought to be the size and shape of our forces a decade from now. The forecasting of overall numbers itself is difficult, but estimating the numbers needed in various skill categories is virtually impossible a decade in advance. Those numbers will depend on the equipment that comes in and the tactical concepts that get developed. If one has inflexible numbers generated by long tenures, one will encounter far greater manning difficulties than would be the case if one can select appropriate newcomers. But for this to be possible, one needs short tenures. *Circulation of personnel creates the flexibility needed in manpower restructuring*.

TRAINING, EXPERIENCE AND EXPERTISE

The *expertise* that armed forces need is acquired through both training and on-job

experience. In general, the role of training in the creation of expertise, relative to on-job experience, has increased over the years. This has come about mainly because of the acceleration in the induction of new technologies which, in turn, alters job requirements rapidly. In a modern military force, an adequate level of technical academic background is necessary to permit effective absorption of training. Two aspects are particularly important with regard to the training of future forces:

- The relationship of training to subsequent employment.
- The relationship of training to current job needs.

In a military like ours where the norm is a 20 to 30-year career, it becomes necessary to provide broad-based training to everyone, particularly officers. This is because those serving for long periods will be called upon to fill several different types of job. This inevitably results in a *low correlation between training inputs and subsequent employment*. This would not be the case if the employment period is shorter, say five to eight years. In that situation, it will be possible to employ a person within a narrow field of skill throughout and so structure his training inputs in a targeted manner to meet the needs of that field. Function-specific training imparted in this manner can speed up competence creation significantly.

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The relationship between training and *current* job needs is also important. Job needs in the military change continuously because of the march of technology. The pace of change is greater today than it was a decade ago and it will be greater still a decade from now. Because of this, the matter of *knowledge obsolescence* has acquired an importance that was not there in more sedate times. The training inputs that a 25-year career PBOR gets, mostly in the early years of his career, l*ose their relevance progressively* as years pass. It is different in the case of five- or eight-year career men. Training does not get outdated within such short periods.

Training and on-job experience do not of course constitute separate paths to

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expertise creation. Training has always to be supplemented by on-job experience. But the idea of an earlier era that once a soldier is given some broad initial training he will be able to cope with changes in equipment and concepts largely by himself is no longer true. Both new entrants as well those who have been in the forces for many years need to be trained (or re-trained) when equipment changes. A relevant question is which of the two will need more training. It could be argued that a person with experience in an earlier generation of equipment will be able to cope easier. It could also be argued that a younger person with a more updated technical-academic background will cope better. Much will depend on the extent of technology change.

Methods of military training in advanced countries have changed enormously in the last two decades. Simulation, once reserved for expensive training such as of pilots, is now used to train virtually everyone. Moreover, simulation is no longer limited to individual training. Full mission simulators where teams and whole units can be trained are increasingly in use. Modelling and simulation have now advanced to the stage where entire battles can be simulated—not at the gaming level of the past, but in a manner where each individual can experience his specific environment. Full mission simulators are now available not only for force-on-force conventional warfare but even for anti-insurgent and anti-terrorist warfare.

What is more, simulation is no longer limited to training institutions. With sufficient computers, assured connectivity and adequate bandwidth, networked tactical training and mission rehearsal capability are now available to combat units and formations even when they are operationally deployed. Exploiting the ability to merge real and virtual worlds, it is now possible to push integrated yet distributed training directly into operational units. All this may seem unreal and far-fetched when large parts of our army are still engaged in raw, elemental anti-terrorist and counter-insurgency warfare. Yet, these are the kind of training technologies *that not only need to be incorporated but also lie within relatively easy grasp*

of a software power like India.

There can be little doubt that young people with good academic backgrounds will be able to cope with such hi-tech training methods better than older, less educated men. This is a point that ought to be carefully weighed while considering the usefulness of less experienced but better educated men vis-à-vis more experienced but less educated men. Today's training tools are able to compress dramatically the periods needed to gain experience through the creation of 'artificial' experience. Such artificial experience is increasingly provided in advanced militaries through appropriate mixes of live, virtual and constructive training. As a consequence, *expertise creation is now leaning more on training inputs than on experiential learning.*

India's existing military training infrastructure was largely created in times when the educational standards outside were very low, and substantial, highly structured in-house training was unavoidable. Long equipment change cycles of those days also made it possible to ensure that trainer skills and instructional equipment stayed current for long periods. But in the emerging context, where combat equipment and their methods of tactical exploitation are set to change rapidly, this approach to training is becoming less and less viable. There is a need today, well recognised in advanced countries, to shift away from standardised, instructor-controlled training to the self-paced, individual-centric type. These changes again confer an advantage on the younger, more currently-educated learner.

A SECOND CAREER

Despite lengthened engagements and raised retirement ages, over 95 per cent of PBOR and over 85 per cent of officers find it necessary to seek post-retirement work. Being able to stay in the forces till one's forties or early fifties has made military men better off financially at the time of retirement than was the case earlier. But this has had adverse fallout too for them in that it is more difficult to find new jobs in the age groups they are leaving now. In today's job market, *the younger the job seeker, the better his job prospects*. Because of this, most servicemen, except those possessing marketable skills in fields like information technology

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(IT), merchant marine and civil aviation, are hesitant to take the plunge.

The forces are keen to get the 15 or 20 years of service which minimum pension calls for. This is partly because of the premium placed on experience and partly because of the high investment in training. *While a service of 15 to 20 years is arguably in the interests of the organisation, it is not in the interests of the individual.* For the latter, the advantageous length of service is either the civil service pattern of serving till the age of 60 or a short stint that enables him to leave in his mid or late twenties – an age young enough to embark on a good civilian career. This conflict of interest between the organisation and the individual in the matter of when to leave the service must be recognised.

Three broad approaches are generally talked about when it comes to tackling the problem of second career. The first is the in-house solution, where people from combatant billets are proposed to be moved to non-combatant billets in their late thirties or early forties. There are at least four difficulties with this approach. One, if there is to be, say, an 18-year career in a combatant stream followed by another 18 years in a non-combatant stream, then one would need equal numbers of billets in both streams. But this is not the case as the combatant streams are larger. Two, jobs in the forces cannot all be separated on the basis of the need for physical fitness. Because of the spatially integrated manner in which forces function, most billets termed as non-combatant ones also require high levels of physical fitness. Three, if people are re-streamed into non-combatant categories later in life, it is inevitable that non-combatants will have a higher rank-structure than combatants, particularly in the case of PBOR. Finally, ex-combatants are unlikely to possess the skills needed in many non-combatant roles, particularly where technical knowledge is needed.

The second approach, often proposed by the Services, is to transfer military men laterally into civil services after 15 to 20 years of service. Transfer of PBOR

to police and paramilitary forces is particularly favoured. But this fails to take into account the fact that these forces too require fairly high levels of physical fitness and they cannot be manned primarily by middle-aged men. While transfer to other civil services does not pose the problem of physical fitness to the same level, there is the difficulty of lack of appropriate training and experience on the part of incoming servicemen.

The third approach, currently the one least favoured in the Services, is to give some starting "capital" – in the form of education and money – to those departing so that they can find their own way in the civil world. The absence of marketable skills is a formidable problem here. Service in the forces equips only a small percentage, particularly in the case of PBOR, with the skills valued in the civilian world. It is necessary, therefore, that those leaving the forces are enabled to acquire such skills.

The forces should also negotiate with the authorities to give "work credits" to departing servicemen—as is given in most foreign universities—so that the length of post-release education can be reduced.

The market value of PBOR will significantly improve if they join the forces with a 12th class education (as proposed) instead of the 10th class education they have today. With a 12th class qualification they will be in a good position to compete if they are given enough money and some preference in admissions to pursue a degree or some other advanced course. In the case of officers who even now have a degree, the same kind of support for post-graduate education should be given. The forces should also negotiate with the authorities to give "work credits" to departing servicemen—as is given in most foreign universities—so that the length of post-release education can be reduced.

Both PBOR and officers could also be given some preferential treatment in recruitment to civil services and other public sector jobs, both at the Centre and in the states. If our forces go in for serious outsourcing of services as is done in advanced countries, the departing short servicemen will also be in high demand in companies providing such services. But neither of these two avenues should

be regarded as the primary path to the launch of a second career. That path should be created by ensuring that departing servicemen possess good education as well as the skills gained in a hi-tech military. If this is done, it will put them in an excellent position to compete in the open job market. They will have the further advantages of being young enough to acquire additional skills, not being burdened with family responsibilities and not having too high expectations from the first civilian job.

THE CONCERNS

The viability of a manpower structure where a large proportion of officers and PBOR, say two-thirds of the total, leave the forces after a short stint of five to eight years has not been seriously examined in our country so far. Nevertheless, the fact that this approach is very different from the one followed in our country since World War II generates *prima facie* concerns. A major cause of worry is the possibility of expertise getting diluted. But this worry is largely overblown. As we saw earlier, *most advanced countries are able to generate the needed expertise in their forces with relatively small percentages of long termers*.

There is also the concern that those serving short stints will not be able to develop the kind of commitment and *esprit de corps* that is a notable feature of our forces today. Some worry that the psychological underpinnings of the forces might get damaged. Those who see the military as a different way of life unsurprisingly see advantage in catching newcomers young and keeping them in for long periods. The army, with its strong regimental system, tends to worry more on this score than the other two Services. But the reality is that *most advanced-country armed forces have large components of non-career men and they manage the commitment problem quite effectively.* If we study the military manpower structures of other countries in depth, we are likely to find reassurance on this score.

In our army, great importance is attached to the regimental system. Not only is regimental spirit regarded as a battle-winning attribute, but the generation of that spirit is considered to require long years of service within the regiment and within a specific battalion. Great store is placed on the coaching and mentoring that goes on in units. But it is worth noting in this regard the changes that have

occurred in the British Army from which we had copied the regimental system. During the downsizing that has gone on in that army, many regiments – 200 or more years old – have disappeared through mergers and disbanding. Similarly, many famous training institutions of British forces – some over 100 years old – have either disappeared or have had their functions recast. Yet, the British military continues to be one of the finest in the world. Clearly, there are ways in which *élan* and *esprit de corps* can be retained while modifying organisations to suit the needs of changing times.

In this connection, we have to reckon with the fact that the Indian Army has a long history and long-established traditions. The JCO system, the 'class' based regiments and much more are part of this. It is worth recalling that the army went in for 10th class combatant-stream recruits several years after police and paramilitary forces had, and that the shift was made primarily in the interests of securing a higher pay classification. The army's preference for lower educated recruits at that time stemmed from the belief that men from the villages made better soldiers than those from urban areas[7]. This is cited only to point out the strong conservative streak that exists and which makes many people uneasy of changes.

There are concerns of a different order too – such as whether we are capable of managing an organisational change of this scale. Some think that while the suggested structure will be an improvement over the present one, it may not be practically feasible for us to get there. They fear turmoil in the units till the new pattern gets established. Others doubt our ability to provide *targeted training for specific jobs which is a key element of the proposed structure*. These and many others are valid concerns, but change management of the scale suggested has been carried out in the forces of many countries many times. Even in India, the huge expansion of the army during 1963-67, when its strength went up from 3 lakh to 8.5 lakh, had called for a change management challenge no less serious than the one being discussed.

Finally, many – in all the three Services – are concerned with the fact that the

7. It was seriously felt that the "natural field craft" possessed by the villager was more valuable than the education that a townsman could bring. Also, that a less-educated recruit was more amenable to discipline.

The argument goes, even if the revised structure would lead to a younger and more current military a decade or two from now, it does not address the problems of today.

suggested approach does not offer anything to those already in the forces. The majority of those already in are too old, and in the case of PBOR, not educated enough, to make an easy transfer to civilian life in the manner the new recruits will be able to. Therefore, the argument goes, even if the revised structure would lead to a younger and more current military a decade or two from now, it does not address the problems of today. It is this concern about the need to take care of those already in the forces that leads many to prefer other approaches such as upgradations and raised retirement ages. There is no doubt that this is a very relevant concern that needs to be seriously addressed.

THE PRESENT STRUCTURE AND COSTS

This paper has so far been examining the issues concerning the quality of our forces. This section looks at the other key factor in the management of military manpower – the matter of costs. It is worth noting at this point that during the past 20 years, the rate of growth of manpower expenditure on serving and retired personnel has (when peaks and troughs are smoothed) stayed consistently higher than the rate of growth of the defence budget.

The cost of personnel in any organisation is determined by two factors:

- Numbers.
- Per capita costs.

Till now, our efforts at lowering manpower costs have concentrated on reducing numbers. The chief means of reducing numbers are the substitution of manpower with technology, organisational innovations and outsourcing. We have tried all three, but with discouraging results so far. The reasons for this are many, *but the fundamental one is that to reduce numbers it is necessary to increase per capita effectiveness*, and we have not been able to do this in a notable manner. There are other problems too. For example, low intensity warfare is a commitment that our

army has had to constantly meet, despite the efforts to make it a wholly paramilitary force responsibility. And low intensity warfare, despite the best technological inputs, remains a manpower intensive business.

The other method of reducing personnel costs is to lower per capita spending. Today, when we are being confronted with an exploding pension bill, *the most effective way to achieve this is to reduce the numbers that have to be paid pension*. Rising pension burden is now a major worldwide concern, with every passing year making the situation grimmer. The problem is particularly acute in the case of the armed forces because of their *more adverse ratio of working years to post-retirement years*.

The costs of military manpower are largely determined by:

- Active service costs.
- Training costs.
- Post-release costs.

Is it possible to reduce active service costs without reducing the numbers? It can be reduced if per capita costs are brought down. And this in turn can be achieved if the average number of years served are brought down because compensation is linked to years of service. If one also takes into account factors like married accommodation and other expenses towards dependents, the average yearly outgo in respect of a thirty-year career man will work out to about 50 per cent more than that for a five-year career man. If our military is restructured with a mix of 35 per cent regulars and 65 per cent short servicemen, *the overall costs of active duty personnel will come down by about 25 per cent*.

As for training costs, if 65 per cent of men serve only five years, the numbers to be trained at the entry stage will obviously go up, in fact, by about five times.

As for training costs, if 65 per cent of men serve only five years, the numbers to be trained at the entry stage will obviously go up, in fact, by about five times. But the increase in costs on this account will be balanced by the much shorter initial training periods of five-year servicemen. There will also be no mid-career training for them. The overall training costs under the proposed scheme will, therefore, not

The increase in pensioners on account of rule changes is now tapering off, but the steadily increasing lifespans will continue to push numbers up.

be more than what they are today.

The biggest saving will come in post-release costs. Thirty years ago, in 1976, only 35 per cent of PBOR were drawing pension. Today, nearly 100 per cent are. The pension bill, which was 18 per cent of the P&A bill then, is 73 per cent of it today[8]. The P&A bill of servicemen today is Rs. 18,217 crore and the pension bill is Rs. 13,224 crore. It is estimated that the military pension bill will exceed the military P&A bill around 2015. The increase in pensioners on account of rule changes is now tapering off, but the steadily increasing lifespans will continue to push numbers up. It is worth noting that the pension bill of today's 19 lakh military pensioners amounts to nearly half of the total pension bill of the central government.

Under the proposed scheme, only 35 per cent of servicemen will draw pension, and that too only after they have all reached the age of 60. Even after allowing for generous gratuities for the others, the total post-release benefits bill (which includes medical cover for pensioners and their families) comes to only about 45 per cent of what it is today. In other words, there will be a saving of 55 per cent. Together, *the 25 per cent saving in active duty costs and the 55 per cent saving in post-release costs will lead to a 35 per cent reduction in overall personnel costs.*

From the costs point of view, another major advantage of the proposed structure is that the yearly turnover of personnel will more than triple – from about 60,000 to about two lakhs. This will enable the forces to trim their numbers much more easily than at present if circumstances permit such a course. With that level of turnover, P&A and other personnel-related expenses will become much less a *committed* outgo than they are today. This will provide valuable *flexibility* in managing defence expenditure.

TOWARDS A BETTER STRUCTURE

The basic conclusion the foregoing analysis leads one to is that *reducing the average*

8. During this period, the number of military pensioners has risen from 9 to 19 lakh.

length of service is the key to improving quality and reducing costs in the armed forces. But this is not something that can be achieved through minor changes. It calls for a major restructuring of our military manpower. The proposal made in this paper is to restructure our forces with a 35 per cent component of regulars, all serving to the age of 60, and a 65 per cent component of short servicemen serving mostly for five years, and in some cases for eight years. The regulars will broadly follow the same pattern of service as it exists today, with the following changes:

- Personnel will serve in combat units only till the age of 50. Thereafter, till the retirement age of 60, they will serve in training, staff and administrative billets.
- With the base of the pyramid shrinking by 65 per cent, promotion opportunities for the regulars – both officers and PBOR – will become three times what they are today and that too without any debasement of rank.
- The 35 per cent of jobs that the regulars fill will all be high challenge ones.
- Gaining much greater satisfaction from work and also freed from resettlement worries, the performance level of the average regular will rise markedly.

The 65 per cent short service component will be structured as under:

- Officers will be taken in after graduation in the age group of 21-23. PBOR will be taken in after the 12th class in the age group of 18-20.
- Eighty-five per cent of officers and 90 per cent of PBOR will serve five years, including training periods of 6 to 12 months. Fifteen per cent of officers such as pilots, and 10 per cent of PBOR such as technicians will serve eight years, including training periods of 15 to 24 months.
- Throughout their service, all five-year short servicemen shall serve in one job or two closely related ones. Eight-year men shall serve in two or three closely related jobs. Initial training will be tailored to meet the needs of the specific billet or billets that each short serviceman is earmarked to fill.
- This approach, complemented by double-banking for a couple of months at the time of changeover, can lead to a high level of competence creation.
- The number of short servicemen released each year will be about 9,000 officers and 150,000 others. Eighty-five per cent of officers will be released

in the age group of 26-28 and 15 per cent in the age group of 29-31. Ninety per cent of PBOR will leave when they are 23-25 years old and 10 per cent when they are 26-28.

Those leaving will be given substantial gratuities to help pursue higher education or private sector careers. Some preference should also be given to those who apply for government and public sector jobs because of the benefit the civilian sector will gain through the infusion of toughened, disciplined, nationally-integrated men from the armed forces.

From the perspective of the armed forces, the 35 per cent of regulars will provide managerial direction and system-level understanding of issues, while the 65 per cent of short servicemen, trained narrowly but with the latest skills, will bring up-to-date knowledge in fighting and technical areas.

From the perspective of the armed forces, the 35 per cent of regulars will provide managerial direction and system-level understanding of issues, while the 65 per cent of short servicemen, trained narrowly but with the latest skills, will bring up-to-date knowledge in fighting and technical areas. In a manner of speaking, the regulars will provide a stable structural framework on which a constantly upgraded canvas of short servicemen will be spread.

Two questions deserve some preliminary answers at this stage: one, why is the split between regulars and short servicemen set at 35:65; and two, why are the suggested short service periods five and eight years? As far as the 35:65 split is concerned, the following are the basic considerations that have gone into it:

- A broad estimate of the number of jobs requiring multi-faceted military experience (like command and key staff jobs) as well as jobs requiring system expertise such as higher level maintenance and training billets has led to a percentage figure of 35.
- The percentage of men serving over six years in many advanced militaries is seen to be in the range of 25 to 40.

- Regulars, both officers and PBOR, will be able to get a rewarding career in the forces if their numbers are limited to about a third of the total.

As for the suggestion that 85 per cent of officers and 90 per cent of PBOR serve five years, and 15 per cent of officers and 10 per cent of PBOR serve eight years, the following are the factors considered:

- Cost-effective training is the biggest consideration. Examples of many countries show that 85 per cent of short service officers and 90 per cent of short service PBOR need to be trained only for six to twelve months, or an average of nine months. Five years of service should achieve adequate return on a training investment of nine months.
- The jobs requiring longer periods of training – 18 to 24 months – have been estimated at about 15 per cent of short service officers and 10 per cent of short service PBOR. In their case, an eight-year service period should give an adequate return on training investment.
- The interests of individual short servicemen must also be a strong consideration. *If their interests are not taken care of, the forces will not be attractive to them*. Short servicemen would want to leave young enough so that they can pursue a second career – in most cases, after two or three years of post-release education.
- PBOR will need to leave at a younger age than officers as they will not have degrees when they leave.
- Those who serve for eight instead of five years will not be disadvantaged because their longer training (18-24 months against 6-12 months) will give them a better start in the job market.
- Keeping the years of service low also helps in keeping the percentages of married men low.

To sum up, the approach suggested in this paper is geared to achieve the following principal benefits:

- Reduction of the average age of combat forces by about eight years, with its positive impact on *physical fitness, mental attitudes and learning ability*.
- More up-to-date training.
- Better educated PBOR who are critically needed for technologically

advanced forces.

- Reduction of married personnel by about 60 per cent.
- Greater motivation and contentment.
- Reduction in overall military personnel costs by about 35 per cent.

There will be lesser benefits too, such as:

- A reserve force of under-40 men that would be twice the size of the active force
- Infusion of some trained, disciplined men into the civil sector

TRANSITION ISSUES

It is obvious that one cannot move from a structure of near total careermen to one of two-thirds short servicemen in a hurry. If nothing is done to speed up the transition, the full changeover will take about 25 years for officers, and about 18 years for others. But these transition periods can easily be halved through golden handshake schemes which, as it felicitously happens to be the case here, will largely pay for themselves. This is because those coming in will need to be paid much less than those going out.

Since the transition, even if accelerated through golden handshake schemes, will take at least 10 years to achieve effective (about 80 per cent) completion, there will be no abrupt changes to the way the forces function at present. Changes will be gradual, *giving plenty of time to plan and execute change management* with the help of studies and feedback. While it is possible, and undoubtedly advantageous, to incorporate organisational and other changes to achieve greater efficiency as the short servicemen come in, there will be no compulsion to implement such changes. In fact, if it is so decided, organisational structures and manning plans can remain exactly as they are today.

Short servicemen will initially come into the Services at a rough rate of 60,000 a year, which number represents about 5 per cent of the total manpower. These newcomers can be distributed among a large number of units in which case their impact will be little in each unit. Alternatively, they can all be channelled in large numbers to a few units. If the latter approach is adopted, only about 7 percent of units will be undergoing transition at any time. Even if

the departure of existing personnel is speeded up through golden handshake schemes, no more than 15 per cent of total units will be in a state of flux. This is a manageable level of 'disruption'.

A major project that will have to be carefully planned and implemented is the creation of new training systems for short servicemen. Given the training management expertise available in the forces, this should not pose serious difficulties. The training capacity already available in our institutions is adequate for the new structure because the increase in the number of trainees will be offset by reduced training durations.

The biggest transition challenge will lie in ensuring that the departure of the existing personnel (through normal retirement and golden handshake schemes) is carried out in a manner that takes care of the interests of both the organisation and the departing personnel. This is an area where some heavy human resource development (HRD) consultancy is needed. But one thing is clear - *it will be unwise to be niggardly with the golden handshake schemes*. The benefits that will accrue from restructuring shall be so substantial that generosity will reap great returns.

AN ACTION APPROACH

Structural changes of the order suggested in this paper need to be examined from a variety of angles, including military, financial, technology exploitation, HRD, change management and futurology. A useful first step would be to establish *whether the present manpower structure is capable of meeting the future needs of India's armed forces and whether the personnel costs being incurred today are acceptable.* Only if the answer to at least one of the two questions is in the negative will there be a need to look for alternatives to the present structure.

If it is decided to seek an alternative model, then it is desirable that the search is conducted in a scientific and comprehensive manner. While 'informed opinion' is no doubt essential to carry out this work, it will not be advisable to rely primarily on it. It is impossible, even for the very well informed, to visualise how changes of this nature and magnitude will impact on the various facets of the military's functioning – in the short, medium and long term. *Some high quality*

modelling tools supported with sophisticated software will be essential. Such tools will enable a wide range of options to be looked at and assessed – objectively, quickly and with quantitative accuracy.

The needed tools can be easily developed by contracting out the work. For these tools to be used effectively, it will be necessary to also have a good deal of data in several areas. Much of this data is unlikely to be readily available, and it is likely to take a long time to generate them through bottom-up collection. For the purpose of the task being discussed, however, the needed database can be created fairly easily through *a well-designed sampling plan*. This work too can be largely contracted out.

Finally, a multi-disciplinary expert group will be necessary to carry out the study. Their initial work will include the guiding of model development and database creation. Later, when the necessary database is created and modelling capability acquired, the group can move to the substantive work of analysis, evaluation and alternative building.