TRAINING FUTURE ENVIRONMENT LEADERS

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The single biggest way to impact an organization is to focus on leadership development. There is almost no limit to the potential of an organization that recruits good people, raises them up as leaders and continually develops them

— John C. Maxwell

TRAINING TO BE A LEADER

Are leaders born or trained / developed to become one? Nature or Nurture? This question has been debated threadbare at many a forum. However, it should be adequately clear to the readers from the title of this paper itself that the author believes that true leadership comes about with suitable training. This is not to deny the fact that there are born leaders. On the contrary, there is much evidence of born leaders like Gandhi and Napoleon, to name a few, who rose to lead their followers to many a great struggle and victory when they were presented with the right environment. But the modern-day conviction seems to be that both these aspects of leadership are required to mould a good leader albeit it tilts more towards trained leaders.

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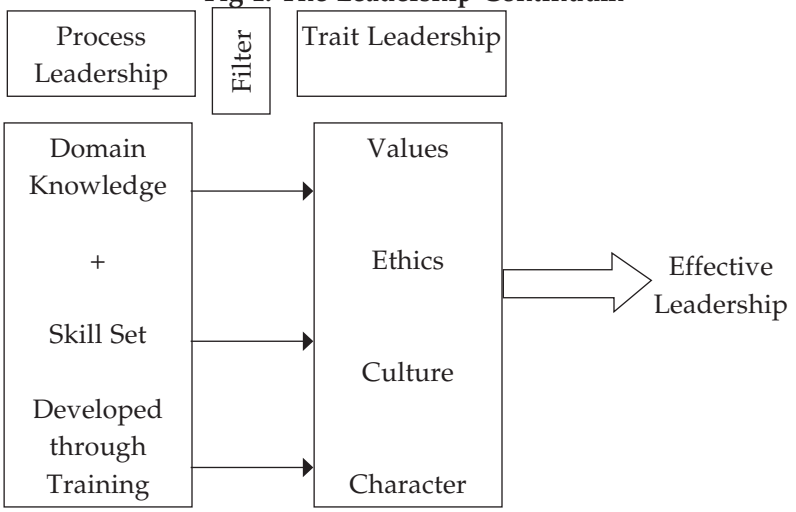
The root of the debate on whether leaders are born or developed is based on the way leaders are perceived in an organisation or the way they apply their leadership traits to lead a group of followers. The two ways in which leadership is exercised are: (a) by applying domain knowledge and skills, and (b) by using traits that can influence actions. The former is known as *Process Leadership* while the latter is called *Trait Leadership*. It is now believed that while the characteristic of leadership may be learned, the skills and knowledge used by the leader are filtered through his or her inbuilt traits such as values, ethics, culture and character. So even if knowledge and skills contribute directly to the *process* of leadership, the inbuilt attributes give the leader a certain uniqueness. This is how the two theories of the process of 'leadership-building' converge and make it 'whole.' It is, thus, critical that a born leader is bestowed with suitable skills and knowledge, to be able to lead effectively. From this conviction flow the contents of this paper, in which how this expertise may be built by suitable training, is covered, The intention of this paper is not to suggest any systemic changes in the modular training programme in vogue currently. The objective is to suggest a small addition to the course contents. This addition and the way to deal with the subject of environmental and resource efficiency would be different for trainees at different levels. This aspect would be covered in detail subsequently.

Fig 1: The Leadership Continuum



The desirability of having environmental leadership in the military establishment cannot be overlooked. Respect for resources, cost-consciousness, operational requirements and ethical/community considerations, all necessitate a military leader to be aware of the environment and to be able to operate in it harmoniously. Every organisation has a particular work environment, which dictates to a considerable degree how its leaders respond to obstacles and opportunities. This is brought about by its legacy of past leaders and the thought-process of its present ones. In his introductory remarks in the treatise on *Military Leadership*,[1] Air Cmde Jasjit has observed, "Clearly the primary business of the soldier is to fight: and that of his military leaders is to ensure that he fights **with maximum capability and effect, with minimum costs."** The highlighted text actually dictates the envisaged training needs of a military leader. The leader has to be trained in such a manner that he can deliver on both fronts – build the capability to fight and, at the same time, do it at minimum cost. Here 'cost' would apply as in the principle of war, "economy of effort'' —wherein human attrition has to be kept to the minimum while preparing

1. Air Cmde Jasjit Singh, ed., *Military Leadership for Tomorrow* (New Delhi: Knowledge World, 2009), p.ix.

Training is an imperative to impart knowledge, and, therefore, it has to be done rightly. Ineffective training just passes on information with no objective end-use.

for, and waging, war. Significantly, this aspect of the economy has not found greater resonance with authors who have contributed to this work.

A vacuum exists currently in the military leadership training in terms of imparting knowledge on resource efficiency. Security is still understood as safeguarding borders while concepts of human security are new to the young breed of military leaders in India. Knowledge is an important ingredient of leadership. The knowledge that is being imparted to future military leaders would allow them to instil similar values amongst their followers so as to mould the organisational behaviour pattern. Every contemporary military leader speaks about the subject of enhancing cost consciousness and respect for resources amongst the personnel placed below him. Due to lack of a coherent training programme on imparting knowledge on the subject, the leaders are presently not equipped to produce innovative solutions and approaches, when in a position to make interventions at various levels of the organisation. The efficiency programmes initiated by them are implemented in a stereotyped manner like running "save electricity" and "save fuel" programmes. Even the systemic changes which are brought about by a few military commanders on this front, end up strait-jacketing the system and lowering the overall quality of the output. Out of the box thinking on building resource-efficiency is difficult to come by as the present military training programme does not stress on this aspect during the formative years of the leader in the organisation, thus, not giving it the priority it deserves.

ESSENTIALS OF TRAINING METHODOLOGY

Training is an imperative to impart knowledge, and, therefore, it has to be done rightly. Ineffective training just passes on information with no objective end-use. Knowledge may be imparted by the processes of formal and informal learning, using different training methods. The terms formal and informal learning have nothing to do with the actual process of learning,

but are rather to do with the objectives and goals of the envisaged learning and the organisational structure that determines who gets to set these goals. In a formal learning environment, the training or education department sets the objectives; while informal learning implies that the learners themselves set their goals.

Training or dissemination of knowledge in the corporate sector is essentially carried out by a variety of methods. The training methodologies can be divided into three groups broadly, as shown below:

- Presentation method.
- Hands-on method.
- Group-building method.

The presentation method, to all intents and purposes, implies the method in which the trainees are merely passive recipients of information. The information includes facts and processes that are passed onto the trainees through lectures facilitated by audio-visual techniques, which have become an integral part of this method in the present times. The presentation may be given by a standard trainer, a guest speaker, a student presentation or even by a panel of specialists. By the use of this method, a large amount of information is presented in an organised manner, in the least time-consuming manner, and to a large group of trainees.

The hands-on method, on the other hand, requires the trainees to be actively involved in the learning process. There are various ways in which this method can be implemented. Mostly On-the-Job Training (OJT), use of simulators, and actual game play are techniques employed as part of the hands-on method approach. This methodology is considered a pivotal ingredient of training on physical processes that require a higher degree of the skill set. Apprenticeship programmes constitute a significant part of the overall hands-on training method. The trainer evaluates the learning process at every instance and even modifies the process as per the needs of the trainee. OJT is useful for *ab-initio* trainees or even when the skill set is sought to be enhanced by cross-training or while introducing new equipment/technology.

The group-building training method may be used when a trainee has already undergone the basic organisational orientation programme. It seeks to improve the trainee's personal skills as well as team work. It involves sharing experiences, building a coherent group structure even while understanding the underpinning interpersonal dynamics, thus, learning to evaluate the individual strengths and weaknesses. This allows the trainee to understand the rationale for allocation of responsibilities and work within a team. This method often involves learning by experimentation. It includes learning through team activities in unfamiliar, mostly outdoor, surroundings. It teaches conflict management and risk-factoring to the trainee.

ESSENTIALS OF TRAINING

Training methodologies are means to impart knowledge. To select one method over another, an appreciation of what constitutes an ideal training module is critical. While choosing a training methodology, the decision is weighed against the type of learning outcome that is being aimed for. The means adopted are dependent on the stage in the organisation at which the likely recipient of the knowledge is positioned. This is also contingent on the efficacy of the method in facilitating learning and transfer of knowledge. The training and development costs have to be evaluated so that they do not outweigh the benefits accrued from the process. Finally, the training has to be proven effective for it to sustain.

Application, end use, and conversion of knowledge into wisdom are ingredients of rightful training. Imparting knowledge for the sake of increasing the information base of the leader may be resorted to at senior positions but the same, if done for a relatively new entrant to the organisation may prove counter-productive. Thus, application and end-use are two of the most fundamental desired outcomes of any training programme. To guarantee these outcomes, a tiered and modular training schedule is implemented generally. The methodology of training and the knowledge contents of the module vary for different levels of trainees as well as for different job contents. Therefore, the training methodology for an

ab-initio pilot would be more of hands-on training and for an administrative officer within the Indian Air Force (IAF), the focus would be more on the presentation methodology. Similarly, the case study-based and role-play training methodology may be followed for a mid-level military commander but rarely for a junior level one. By now it must be clear that drawing up a training programme consists of (a) deciding the right training methodology; (b) designing the course contents; (c) the time required to be devoted for the learning imperative; (d) cost-benefit analysis; and, very importantly (e) the choice of the trainer to undertake the task. All these aspects would be covered while suggesting an effective training programme on the environment for the military, with the focus on the IAF.

TRAINING IN THE IAF

Before planning an intervention in an existing system, the rationale for its existence should be well understood. The IAF training curriculum is well thought out and has undergone many modifications as per the changing requirements of the organisation and for the optimisation of human resources, the trainees at different levels. At present, the officers' training in the IAF is divided into three distinct modules to suit the positional needs of its leaders. Positional need implies the learning objectives commensurate to the hierarchical position of the officer at the time of training. The course contents and the training format are so designed that they can be gainfully employed for professional competence and enhancing leadership projection by the officer. The focus is more on professional military and operational contents for obvious reasons and its knowledge base is sought to be augmented in the formative years of a military leader. The modular structure of the present leadership development training in the IAF is shown in a tabular form below (Table 1). Some modules of training are common to the three Services.

Table 1

Organisational Position of the Officer	**Training Courses**	**Course Focus Area**	**Training Methodology**
Ab-initio Cadets/ Junior Officers	At *ab-initio* training academies and other training institutes.	Introduction to Services training and development of professional knowledge.	Formal learning imparted essentially through presentation methods.
Mid-level Commanders	Air Staff course at Defence Services Staff College (DSSC), professional courses at specialist Services training centres.	Developing communication and professional competence, organisational values, staff work skills and working in a joint Services environment.	Formal and informal learning, imparted through presentation methods, game play and group building training methodology.
Mid to Senior Level Commanders	Higher defence management and command training aimed at strategic levels of decision-making.	To develop strategic thinking. Prepare for holding senior command positions. Enhance jointness. Develop military-civil interactions.	Presentation methods in parts. Game play and group building methodology. Through informal learning environment in most parts.

The training system in the Services is devised in such a manner that the requisite expertise and knowledge are available to a budding leader at the right time of his/her career. The knowledge is reinforced through retraining at suitable periods depending upon the expediency of the Services. As far as the training pattern is concerned, it is modular. Even though the pattern is being modified as per the changing needs of the organisation, change in the course contents is a very laborious and centralised process. The professional contents are easily modified as compared to the generalised contents of

training courses. This is due to the fact that the defence forces remain largely insulated from the socially pivotal issues of governance, mostly by design. Therefore, modification of the generalised contents remains a problem area, especially as domain knowledge on the subject is hard to come by in the normal course of events within the military.

During interaction with the training staff at Air Headquaters (HQ) in July 2011, it came to light that the IAF has recently introduced the subject of Right To Information (RTI) in the course contents for *ab-initio* officers as it was felt that they need to be suitably aware of their responsibility towards such an important social issue of the present times. RTI is a subject not directly related to national security but if the leadership is not suitably oriented towards it, the consequences can be irksome and the organisation may be put in an embarrassing situation. Such changes are the need of the hour as the operating environment of the military is changing very fast wherein its personnel are repeatedly faced with social dilemmas in the normal discharge of their duties. A few examples of such interactions are: during aid to civilians at the time of disaster management operations, top leaders facing the media at public forums and when they are confronted with the country's obligation towards issues not directly related to national security. An example of the latter is India's obligation under the Montreal Protocol to phase-out Ozone Depleting Substances (ODS), some of which are also used extensively in the military. Thus, the military's operations have to be managed even when these substances would not be available to them in the future. The present leadership within the military is still grappling with these issues while the budding leaders are not being trained to take decisions on such subjects.

KNOWLEDGE ON ENVIRONMENT

Military leadership needs to evolve with the changing times. This message is loud and clear from what has been stated above. Knowledge of the environment is an indispensable part of the military's preparedness. However, the 'environment' was perceived in more militaristic terms until now to incorporate the direct security connotations of various

interplays in proximity to the entity – nation/defence forces/defence personnel, etc. It did not include the physical changes taking place in the climatic environment that also had a direct and indirect bearing on the security matrix of the nation[2]. The cause and effect of climate change on the military has been well-documented. As mentioned above, a few effects are already being felt by us in the form of having to deal with the consequences of the national commitment to mitigation. A few others like control of Green House Gases (GHG) emissions would be faced by the nation in the near future; by extension, the military establishment cannot remain aloof from the measures that would be enacted by the government on this front.

To develop an environment leader, it would be necessary to arm him/her with broad knowledge on the subject, as shown below.

Module 1: Civic Issues

- Our Ecosystem.
  - Green House Effect (GHE).
  - Ozone Layer Depletion.
- Impact of Different Activities on our Environment
  - Civil Life: Carbon Footprints.
  - Military Activities: Carbon 'Bootprints' and Management of ODS.

Module 2

- International Environmental Agreements.
  - Kyoto Protocol and its Future.
  - Montreal Protocol: Success Story.
- National Legislation and Climate Change Mitigation Action Plans.
  - Central Government Action Plans: National Action Plan(s).
  - State Government Action Plans.

2. Manoj Kumar, *Environment Change and National Security* (New Delhi: Knowledge World 2011), Ch 1.

Module 3: Service Issues

- Organisational Structure and Orientation on Environmental Issues.
- Environment Change and its Impact on National Security.
- Organisational Policies and Programmes on Environment.

Module 4

- GHE: Mitigation and Adaptation Techniques: Future Roadmap.
  - Good Practices.
  - Green Military.
- Tools and Techniques for Assessment of Practices
  - Environmental Audits.
  - Involvement of the Cadre.

The training modules are centred on civic and Service issues pertaining to the environment. It is necessary that a foundation is laid down before the thought process develops towards seeking solutions on environmental issues. The overarching nature of the subject of environment lends itself to diverse fields where its application can be made and the cause and effect studied. It would obviously not be possible to cover the entire gamut of operations within the military where the good environmental practices can be applied. It would, thus, be necessary to lay down the framework of training on the subject. Sufficient space has to be given for the budding leaders to come up with their own solutions; care needs to be exercised so that the subject is not covered in such a manner that it supersedes operational efficiency or requirements and leads to a decrease in morale. This is akin to how the environmental issues are being dealt with currently in our country—almost a throwback to the licence 'raj' of yore. The basics of the subject should, thus, be covered, leaving the solutions to be brainstormed by the individual leader, depending upon the situation at hand. This brings us to the question of the position/level in which knowledge with regard to the modules given above should be imparted. The next section would throw light on this issue.

SUGGESTED TRAINING CAPSULES

The training pattern at various levels in the IAF has been covered in Table 1. Based on the training needs at different levels of the organisation, it has to be decided as to what modules, objectives, training methodology and actual course contents should be adopted at various levels of hierarchy. The course contents have to be decided keeping in mind the knowledge need, absorbing capability of mind, inquisitiveness, familiarity with the organisational ethos and, most importantly, the cost-benefit derived by the organisation while covering the subject at a particular seniority of the trainee.

Keeping the above factors in mind, it is felt that Modules 1, 2 and 3, that cover aspects of governmental responsibility/laws/legislation and the factual condition of their application in the military Services, should be covered during the *ab-initio* orientation training of the young leader. Once the rudiments of the subject have been covered at that stage, these subjects need to be revisited during retraining of the mid-level commanders. At that stage, Module 4 should also be covered in which the concept of 'green military' can be introduced. This is the time when knowledge on good practices of environment management being followed by the respective military organisations as well as other such organisations around the globe may be imparted. Involving the mid-level officers in role play as well as out of the box thinking on the subject can be encouraged for generating more solutions and developing independent thinking on such a critical social issue. The process of audit of various activities directed towards the application of environmental policies in the military would also find a place in this module. Improvements that may be accrued by the organisation once the lessons learnt during these audits are applied should be integrated in the course contents of Module 4. A major thrust area of the module would be participative training that would engage the officers in suggesting ways and means to involve the cadre in green forays.

Once a decision is taken on introducing different modules at a particular level of the organisation, suitable course contents need to be designed. It should be kept in mind that the field of environmental research and geo-politics surrounding it is in a transient phase, and witness to large variations

taking place in a short duration. It would, therefore, be prudent to devise a course structure that may be modified in real-time as these changes are taking place. A suggested pattern of course contents for these modules is broadly described below.

Module 1

- Constitution of the Ecosystem.
  - Flora and fauna.
  - Essentials of life on earth – clean air, water and temperature,
  - Green House Effect (GHE).
    - Green House Gases (GHG).
    - Harmony of nature to maintain equilibrium for sustaining life on earth.
  - Presence of Ozone Layer in Stratosphere.
    - Protection of life on earth from Ultra Violet (UV) rays
    - Chemistry behind formation and destruction of ozone layer.
  - History of environmentalism: from ancient India to present times.
- Impact of Anthropogenic Actions on the Environment
  - Industrialisation: Carbon emissions and their impact on the increasing GHE carbon footprints of various sectors Different approaches.
- Scientific Debate on Climate Change.
    - Role of Intergovernmental Panel on Climate Change (IPCC): The controversy and after.
  - Global Warming: Effect on exacerbation of class differences, sea level rise, water and food scarcity and effect on national security.
    - Human security in the ambit of national security.
    - Recognition of the problem by the global community: History of the debate.
    - Role of the military in enhancing carbon 'bootprints'
      - Resource consumption at what costs?
  - Use of Ozone Depleting Substances (ODS) by humans.
      - Refrigeration – CFC, HCFC, HFCs.
      - Fire Suppressants – Halons.

        - Solvents – Carbon Tetrachloride, etc.
    - Use of ODS in the military. Contribution towards destruction of the ozone layer. Lack of knowledge and communication gap.

Module 2

- International Efforts to Counter Environmental Degradation.
    - Kyoto Protocol: Common but Differentiated Responsibility: Background: United Nations Framework Convention on Climate Change (UNFCCC)
        - Control of a few GHGs.
        - Commitment of the developed countries: Failure of the protocol: US' inaction.
        - Bali Action Plan.
        - Group dynamics within the parties to the protocol: Developed, developing and small island nation states.
        - Fractured debate on the subject: Copenhagen and beyond: India's stand: Economic impact of Kyoto Protocol on the developed and developing countries: Perspective during global economic slowdown.
        - A brief on financial instruments under the Kyoto Protocol: Clean Development Mechanism (CDM) and its impact on India and China.
        - Adaptation needs: Funding mechanism under discussions at the international forum.
        - Sustainable development: Distant dream in the absence of breakthrough in renewable energy technologies.
            - Types of renewable energy sources in India.

    - Montreal Protocol: Need for the international agreement: An industry perspective.
        - India's commitment: Historical and present situations, National Ozone Units (NOU); Funding mechanism.
        - Situation in civil sector: Availability of halons.

- Phase out of HCFC: Defence forces preparedness.
- Impact on defence forces: Maintenance of legacy equipment.
- Search for alternatives: Paradigm shift.
- Readiness of alternatives with the industry: Reason for success.
- Interconnection between global warming and ozone depletion and vice versa.
- HFC inclusion in Montreal Protocol or Kyoto Protocol?: Current debate.

- Climate Change Mitigation Action Plans.
  - National communication to UN.
  - Environmental governance in India.
  - Migration: Concept of 'Climate Refugees' – Internal and human security issues.
  - Food and water security: Effect of global warming – sea level rise, rise in frequency of sudden climatic events: IPCC's latest report on the subject: India's take on scientific evidence on linkages of sudden events with global warming.
    - Uncertainty of timelines: Analysis of reasons for international 'complacency' on mitigation.
    - Challenge of managing agriculture with unpredictable weather patterns.
  - National Action Plans: Eight Action Plans for climate change mitigation: Present status
    - India's energy needs.
    - Implications for different states.
    - Role of Ministry of New and Renewable Energy (MNRE).
  - State Government Action Plans for Climate Change Mitigation: This subject may be covered only for one odd state such as Gujarat or Tamil Nadu as an example to inform about the role that states play in the entire gamut of policy implementation on climate change mitigation.
  - Monitoring agencies and criterion for implementation of action plans at different levels.

        - Role of judiciary.
        - What is Environmental Impact Assessment (EIA)?
    - Adaptation as a part of Action Plans. Need for adaptation in the Indian context. Funding as an impediment to adaptation strategy in developing countries.

The two modules described above deal completely with the social facet of environment management. This is the foundation of knowledge that needs to be laid first for a military officer. This foundation would assist him/her to draw a bridge between the policies being implemented in the civil sector vis-à-vis that being done in the military. There are lessons to be learnt by both sides. Most of the civil sector, being predominantly involved with social commitments, has well-drafted policies on climate change adaptation and environmental resilience. On the other hand, the military has fewer policies and directives on the subject at this juncture but their implementation, as is expected, assumes top priority and is carried out with military discipline and precision. Thus, only after understanding the national commitments on the subject and the international environmental focus, can a leader fully appreciate the canvas of activities involved while dealing with the subject. Extrapolating these activities for the military would be a leadership act that would require out-of the box thinking until training on the social system within the military matures. Only after the broad issues concerned with the environment are covered can the knowledge on their application and implications for the military be imparted. At that point in time, it would be crucial to inform the trainees on how the organisation perceives the issue and is geared to confront it. Imparting a realistic picture is critical. Only then, the progress made on both mitigation of, and adaptation to, climate change by the military, can be appreciated, thereby preparing itself to understand what is still left to be achieved.

Module 3

- Military and Environment.
    - Orientation of the organisation: Understanding of the environment issue amongst the military leaders – Need and application.

- Resource efficiency as the natural by-product of respect for the environment – actual case studies from the organisation.
- Management of ODS in the military.
  - Usage in maintenance and administrative infrastructure.
  - Halon banking.
  - ODS inventory management.
- Diplomatic initiative of showcasing organisational commitment towards a sensitive and contemporary social issue of environmental protection.

- Organisation chart of environment nodal points at all levels of the organisation. The level of interaction with other nodal agencies of the government dealing with the issue.
  - Responsibilities associated with each nodal point.
  - Training requirement for filling up specific environment-related appointments.
- Environment Change and National Security.
  - Effects of global warming viz sea level rise, melting of polar ice caps, water scarcity in the 'third pole' (Tibet), food shortage, vector diseases and international pressures on reduction of energy consumption. All these would cause:
    - Climate-linked migration leading to pressures on effective governance due to enhanced class and economic disparities. Enhanced poverty levels result in internal disturbance with the poor being used as fodder for vested interests.
    - Exacerbation of international fault-lines due to paucity of water. India-Pakistan Indus Water Treaty would be under pressure once the tributaries start drying up. Water-sharing is already a major issue between India and Bangladesh.
    - Opening of sea lanes due to polar ice melting. Impact on international trade and geo-politics. Security of channels of communication. Span of operations.
    - Impact on military medical services as vector-borne diseases become rampant and in new areas. Research and interaction

with civil counterparts to understand the impact on one's own troops at deployed locations.

- Unpredictable weather patterns would add another paradigm in operational planning and training.
- International pressure is mounting on stepping up mitigation efforts by high trajectory economies like India. It is a matter of time when this is bound to culminate in increased pressure on military installations to be more energy-efficient. Preparation for energy efficiency in a systemic manner without strait-jacketing the operations.

- Organisation's Environmental Policies.
  - Instructions to aircraft Base Repair Depots (BRDs) on management of halons used for filling aircraft fire extinguishing bottles.
  - Monitoring of fuel consumption on quarterly basis (more for budgetary purposes).
  - Waste Management.
    - Instructions for managing e-wastes.
    - Management of domestic wastes for furthering flight safety measures.
    - Instructions for managing industrial wastes generated in BRDs; not at the same level in operational formations.
  - Participative training on deciding the future roadmap: This should be the last part of this module. Beyond these relevant aspects, the trainees may be asked to submit an assignment on how, according to them, environmental mitigation could be enhanced within the military. Coherent ideas may be suitably rewarded and forwarded for follow-up akin to the flight safety model.

The course contents for Modules 1, 2 and 3 have been designed keeping in mind the requirements for an *ab-initio* trainee as well as for retraining of mid-level officers. The depth of the training curriculum may be suitably reduced depending upon the allotted duration of training and whether it is being used

as the syllabus for retraining or for the initial training programme. However, removing any particular subject may prove to be counter-productive; so that may be avoided. Normally, these three modules should be covered in a linear manner, following the presentation method. Improvisation in the third module to include case studies and encouragement for independent thinking should be given due emphasis. This could be given more focus in the retraining phase but it is also required to be adequately covered during the initial training of the military officers.

After completing the first three modules, a military officer may be considered to be trained on environmental matters so as to take independent decisions on these issues while working in any operational environment. However, policy drafting on any matter requires a different skill set. It is imperative that a conceptual level and strategic thought process is undertaken before long-term policies are drafted. This brings us to the next module (Module 4) which is aimed at developing such thought processes at the senior level hierarchy. It is meant to prepare them for indulging in some creative thinking and implementing wide-ranging reforms within the organisation for mitigation of, and adaptation to, climate change. They would also be ambassadors of these policies and would be expected to coordinate these policies with other organs of the government. The course content for this module is described below.

Module 4

- Good Environmental Practices in the Military: Transcending the mindset.
  - Requirement of overarching policy: The Indian Army in the lead.[3]
    - Ministry of Defence does not have a policy on the environment.
    - Indian policy-makers still do not include human security under the umbrella of national security.
  - Concept of Green Military: Peace-time initiative.

3. For more details, the Indian Army website may be referred http://indianarmy.nic.in/Site/From Templete/frmTempSimple.spx?MnId=Mn7z5DsNgvU=&ParentID=W4Xw5DL5GkM= accessed on July 15, 2011.

        - Top down approach for formation level policy on the environment preservation is a must.
        - Green buildings: Military Engineering Services working towards it: More requires to be done.
        - Direct actions like planting trees and disposal of municipal waste are priority areas.
        - Capacity building of future environmental leaders.
        - Showcasing social commitments undertaken by the military.
        - Training commitments should be made greener without impact on operational efficiency.
    - Adaptation to climate change or consequent national action plans requires future organisational policies to be made keeping in mind its adverse impacts.
        - Adaptation not yet a priority.
- Executing Good Environmental Policies.
    - Need for environmental audits to check the efficacy of policies
        - Training of auditors.
        - Rationale behind setting up benchmarks on the basis of which the audits have to be conducted.
        - Environmental audit process: Use of existing audit agencies
        - Results of audit: Reorientation of policies based on findings of the audit. The level of hierarchy that carries out the reorientation.
- Capacity building of cadre
    - Permeation of safe environment culture within
        - Knowledge empowerment as a means of furthering the reach of good environmental practices.
            - Information on ODS: Need for its management in the organisation.
            - Information of good practices being followed.
            - Information on environment organisational structure.
            - Waste disposal: Domestic and industrial.
        - Importance of rank and file to get involved with resource efficiency

- Importance of resource efficiency as a part of good environmental practices.
- Difference that their efforts can make in saving costs involved in operations.
- Case study-based teaching on resource efficiency in the respective organisation.

At present, there is no training on the subject for the lower seniority personnel within the military. This is likely to decrease the efficacy of implementation of policies, especially if all personnel are not on board with respect to the larger operational and social gains that are likely to be accumulated by implementing these policies. With the advent of the information age, the personnel can be easily motivated once their role in achieving the desired environmental objective is explained to them. This should be the focus of any training that is conducted for the workforce. Informal training methodology should be followed initially for conveying the message of building resource efficiency, leading to safeguarding of the environment. The target audience for such training would be mid-level non-commissioned ranks of the military. The message would be conveyed forcefully with the use of actual case studies that highlight how these policies would stand the organisation in good stead – operationally and to build a positive image.

EVALUATION OF TRAINING

Once a training schedule and its course contents have been worked out and implemented, it would be equally important to evaluate its impact and efficacy. Since continual improvement is a desired feature of any quality system, a feedback mechanism has to be inbuilt in the system loop, to enable advancements and optimisation. Normally, this evaluation of training is carried out in the Services in the form of a questionnaire that is given to each trainee after the programme and they need to give their quantitative or qualitative feedback on each aspect of the training in response – from the trainers to the course content, from the duration of the programme to

adequacy of focus on each area. Their views are also sought on any other subject that they would like to have covered in the training. After the trainees go (back) to the operational formations, the adequacy of their training level is sought from their superior officers. This also acts as a valuable tool in the hands of the training programme planners.

With regard to training on environmental matters, it would be practical to focus on feedback from the trainees as a group and as individuals. Feedback from superiors in the operational formations may not really work at this juncture, primarily due to the limited exposure of these officers to environmental issues. More than the established feedback pattern being followed at the moment, it would be better to see the recall value of the course contents and their application. One way that this could be done is to ask the officers (junior to mid-level) to write a paper on the subject within six months of reaching their units. The paper should be dedicated to practical solutions to environmental problems that are being encountered or observed within their formation. Some of these papers should be selected based on criteria such as the depth of the problem perceived, the practicality and innovativeness of the solution found and the overarching nature of the issue(s) discussed. These papers should then be brainstormed in the next course without revealing the formation's name. It would provide a good learning experience to the young leaders and prepare them to do some innovative thinking of their own. Some incentive may be provided to the best solution provider as a motivation. The type of solutions suggested would also provide feedback to the trainers on what actually has been assimilated by the trainees from the course. Improvements in the course contents as well as the knowledge imparting methodology should take into account the papers written by the former trainees as well as the ideas being generated through brainstorming on those papers. This may be treated as an immediate response and be covered in Module 3 as part of the case study. The environmental audit of a formation can also be used to examine the assimilation patterns of the trainees that have undertaken such training. Here it would be better to study the pattern rather than

individual progress. The idea is not to encourage learning by rote in this field but to encourage deeper thinking of the issue.

IMPORTANCE OF RIGHT MIX IN TRAINING

Military training has to focus on inculcating war-fighting abilities in the trainees. There is no denying that this should receive the highest priority. Growth of a leader in the military starts right from his/ her selection procedure where such traits are assessed. The leader is then imparted adequate military and organisational knowledge through various training means to become a complete leader for steering the organisation. However, till recently, the training process did not include many issues related to interaction with the civil society even if they affected the working of the military organisations. This process is now being forced to change due to the growing needs of the hour. There is a great need for the training to be made inclusive of contemporary societal issues like RTI, environment stipulations and media management at the *ab-initio* and mid-seniority level. Total growth of an officer can be ensured only by making the training all inclusive.

The evolution of an organisation can come about only if it invests in its future leaders. The starting point for the process is the change in the training pattern of its leaders. What has been attempted here is to suggest how the training mix can be suitably modified, to contemporise the knowledge base so as to assist in making a true leader. Only one subject of this additional mix has been suggested here: national and international environmental issues. There are a few other social issues, as mentioned in the previous paragraph, that may be included in the overall training curriculum of a military officer to make it more balanced. This is the need of the hour as there are many instances wherein the military commander finds himself short on the necessary expertise and skill set when faced with social issues that are cropping up with increasing regularity. This suggested training addition would not only result in making an environmental leader of the future but also make the military extract more 'value' while optimising 'effort'.