

# INTERPRETING THE LEBANON WAR OF 2006

JASJIT SINGH

The war between Hezbollah and Israel in Lebanon in the summer of 2006 has been called by different nomenclature, from being the “second” or the “sixth” Lebanon War, etc. Even as the war progressed, within weeks it was clear that while its military performed professionally, even Israel itself believed that it had lost the war — lost because it did not win — to Hezbollah, the non-state terrorist entity which controlled southern Lebanon (after Israel’s withdrawal six years earlier) and had expanded its political influence in the country, but did not control the Lebanese government or its policies.

Israel was “ill-prepared” for this war largely because this war was different from what it had experienced in the past, but not so different that it would provoke serious reexamination before or during the war.<sup>1</sup> Hezbollah, perhaps itself not fully realising it, had set in motion what can only be called a **semi-conventional war** — a war that goes beyond mere terrorism by non-state groups and counter-terrorism or any classification like low-intensity conflict that could apply to forms of sub-conventional wars; nor was this a normal conventional war between organised militaries. Such guerrilla war with modern stand-off sophisticated weapons had been perfected during the past few years by Iran’s Islamic Revolutionary Guards Corps (IRGC). More important was the asymmetry, not only in capabilities, but also in strategic terms, where Hezbollah sought a politico-strategic objective through

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Air Commodore **Jasjit Singh**, AVSM VrC VM, is former Director, IDSA, and currently Director, Centre for Air Power Studies, New Delhi.

1. Efraim Inbar, “Strategic Follies: Israel’s Mistakes in the Second Lebanese War,” *BESA Perspectives Paper*, no. 21, September 10, 2006.

this semi-conventional war, while Israel looked for military-operational goals essentially through a conventional war to provide political outcomes.

For Hezbollah, victory was not to be measured by the military exchange ratios, territory captured and/or degradation/decimation of Israeli military capabilities. Obviously, given the very high professionalism of the Israeli Defence Force (IDF) and its high-technology weapons and equipment, this would have been a grossly unrealistic objective. What Hezbollah sought to do was to inflict maximum and sustained pain and damage which Israel would find difficult to bear, and ensure its own survival long enough to claim that it had won, because Israel had not been able to destroy it.

Israel, on the other hand, having repeatedly imposed dramatic military

Map 1



Source: Map Resources. Adapted by CRS (K. Yancey8/7/06)

victories over the well-equipped and organised military forces of the Arab states, individually (as against Syria in 1982) and collectively (as in 1967 and 1973) had got used to dealing with ideological-nationalist terrorism waged through single and small group fighters for the past nearly a quarter century. Its military, especially the Israeli Air Force (IAF), had evolved ways and means of employing air power effectively in counter-terrorist roles, undertaking pin-point air strikes, and had performed well although civilian casualties and destruction of infrastructure remained a negative aspect. But



the way Hezbollah organised and fought a near conventional war with guerrilla characteristics with a force of highly trained 6,000 troops and modern weapons was different.

For the past five years or more of the *intifada*, the focus of thinking was almost entirely on low-intensity conflict operations (LICO), in responding with modern high-technology military conventional means to a sub-conventional war. After the Israeli withdrawal from south Lebanon in 2000, the focus of operations also shifted primarily to the occupied territories, and more recently, to stabilising them, and to withdrawal of settlements from these areas. These were the debates one heard in Tel Aviv and Jerusalem, even while delivering a lecture on the combination of conventional and sub-conventional war that Pakistan had waged against India in Kargil.

## THE BACKGROUND

The territory that now constitutes Lebanon has had a tortured history, especially for the past five decades. From ancient times to now, it has been the battlefield for external powers ranging from the imperial to the regional ones, whether transiting to other regions or fighting for this land itself. Alexander's armies marched through this territory, and so did Napoleon's; and the US Marines landed here at least twice (the first time on beaches full of bikini clad sunbathers while the British paratroopers landed next door in Jordan to shore up the Hashemite king, and the second time in 1983, soon to withdraw after 241 Marines were blown up in a terrorist strike on their barracks in Beirut) during the Cold War. On the other hand, this had historically been a peaceful country till the wars and armed conflict of the past five decades tore apart its fabric of being the nearest thing to a heavenly territory on earth.

The wars that Lebanon has experienced since 1975 cover an amazing diversity that may give a false impression of only a warring society living in the country. History has been witness to a Lebanese-Palestine War, a Lebanese-Lebanese, a Palestine-Syrian, a Palestinian-Israeli, a Lebanon-Syrian, a Syrian-Israeli, and a Lebanese-Israeli War, with the US employing military force on occasion, and a total of perhaps 70 groups, entities and countries having been involved in these wars.

During this period, the country has been partially or fully occupied by Syria, Israel, and the Palestine Liberation Organisation (PLO) for prolonged periods, with fighting and violence becoming an endemic part. But for the purpose of our present examination, it may be useful to look at the 1982 War and the recent one. Both were fought by Israel, the former against the PLO, supported by Syria, and the latter by the Lebanese Hezbollah group, supported by Iran and Syria. In the former case, Israel achieved an astounding military victory neutralising a capable and well-equipped Syrian military within hours.<sup>2</sup> Among other responses, Iran was reported to have sent a 650-strong expeditionary force of volunteer Pasdaran Revolutionary Guards to Lebanon, which established its headquarters in the city of Baalbek, in the Syrian controlled Beqa'a Valley in July 1982, ostensibly to fight the Israelis.<sup>3</sup> But it was the subsequent occupation of southern Lebanon by Israel and frequent use of military power inside Lebanon for the next 18 years that created politico-strategic complications for Tel Aviv, which it had apparently not emerged from when the war started on July 12.

Israel's efforts to create an alternate force to ensure control of southern Lebanon through a pro-Israel 2,500-strong militia called the South Lebanon Army, disintegrated and dissipated within hours of Israeli withdrawal from south Lebanon on May 22, 2000. Its place was taken over by Hezbollah, the Shia guerrilla group headed by Hassan Nasarallah, and 1,700 men of the South Lebanon Army surrendered to it. A massive cache of arms fell into the hands of Hezbollah which promptly started to consolidate its position. It built numerous tunnels, prepared positions and conducted sporadic firing across the Israeli border. It had earlier used Katyusha rockets to fire at Israeli territories in 1993 and 1996; and this became more frequent, though every time in small numbers. At the same time, Hezbollah built up its base in Lebanon as a credible *national* political party with social and welfare programmes which extended equally to non-Shia communities without distinction or discrimination; and it even had two Cabinet ministers in the government.

2. For an account of the 1982 air war, see Jasjit Singh, *Air Power in Modern Warfare* (New Delhi: Lancer International, 1985).

3. *The Lebanese War*, a comprehensive account of the Lebanese War starting from 1975, based on numerous accounts at <http://www.cedarland.org/war.html>



## THE WAR

The 34-day war between Israel and Hezbollah ended with a UN-brokered ceasefire in which both sides claimed victory. The difference is that Israel went into public introspection and rigorous debate on whether it had fought the war the right way, on the strategy and tactics used, the issues of the success or otherwise of Israeli deterrence, and so on, while Hezbollah revelled in celebrations of victory, even as Lebanon bore the tragic costs of the war in the destruction of its population centres, infrastructure, and the death of over 1,100 civilian men, women and children. It is obviously too early to find definitive answers so close to the events, especially when authentic information is not easy to come by. We must, therefore, treat the following interpretation of events and actions as somewhat tentative at this stage.

It is not intended here to go into a chronological account of the war or its details, but to look at certain key aspects that defined the nature of the war and the way it was conducted by the two sides. While the root causes of the war go back decades, the immediate spark was the kidnapping of two Israeli soldiers by Hezbollah on July 12, 2006. Such kidnappings had been happening over the years where both sides employed punitive strikes against each other, Israel essentially by air power and discrete special operations, while Hezbollah employed artillery, guerrilla attacks and Katyusha rocket strikes. But it needs to be remembered that Israel is extremely sensitive to casualties in general, and even far more sensitive to its citizens, especially military persons, being taken hostage.

What triggered a larger war was the massive — often described as “disproportionate” — military response by Israel within twenty-four hours.<sup>4</sup> The IDF hit Beirut international airport, targets in the capital city of Beirut, infrastructure (including electric facilities, water sewage treatment plants, 25 fuelling stations, roads totalling nearly 650 km in length, 73 bridges, 900 commercial structures, up to 350 schools, etc.)<sup>5</sup>, especially to apply pressure on

4. For discussion on the subject, see Amichai Cohen, “Proportionality in the Modern Law of War: An Unenforceable Norm, or the Answer to our Dilemma?” *BESA Perspectives paper*, no. 20, August 15, 2006; Gedon D. Remba, “Are Israel’s Military Operations in Lebanon Proportional? Is Israel Guilty?” July 21, 2006 at <http://www.zionism-israel.com/log/archives/00000170.html>

5. Guardian Associated Press, “Mideast War by the Numbers,” *The Guardian*, August 18, 2006, at <http://www.guardian.co.uk/worldlatest/story/0,-6022211,00.html>

the Lebanese leadership, isolate Lebanon from supplies from Syria and Iran, neutralise missile launch sites and launchers, Hezbollah command, control and communications nodes, and tried hard to take out its leadership, albeit without success. The IAF flew an estimated 15,500 sorties (averaging 456 sorties per day) and attacked nearly 7,000 targets in the war. It did not lose any combat aircraft, though it lost four helicopters – one to a Hezbollah anti-tank missile, two to mid-air collision, and one to friendly fire. The IDF fired nearly 100,000 rounds from tanks and artillery guns, besides 2,500 shells fired by the navy, and it lost 119 soldiers (and suffered 41 civilian casualties). Lebanon (a country of 3.8 million people) reported 1,110 civilians killed and 3,700 wounded, and nearly 1,000,000 displaced during the Israeli bombing. It also estimated the total damage to buildings and infrastructure to be in the order of \$3-6 billion with about 150,000 residences destroyed.<sup>6</sup>

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estimated to possess around 13,000-20,000 such short range rockets and missiles of different types supplied by Syria, Iran, Russia and China which included a range of modern anti-tank and infantry weapons. It is not clear how many weapons of various categories Hezbollah launched, except that

as many as 3,970 to 4,228 rockets were known to land on Israeli territory and targets. Nearly 92 per cent of these were 122 mm Katyusha type artillery rockets with a 30-kg warhead and with ranges of 20-odd km. An estimated 23 per cent of these rockets hit built-up areas, primarily civilian in nature. The scale and intensity of fighting on both sides can be gauged from the fact that as many as 160 Israeli cities (including Haifa, Hadera, Nazareth, Tiberias, Nahariya, Safed, Afula, Kiryat Shmona, Beit She'an, Karmiel, and Maalot), towns, villages, *kibbutzim*, and *moshavim* besides Druze and Arab villages were hit by Hezbollah missiles and rockets. And strikes on such an extensive scale for the first time in

6. This would imply that one in six families lost its residence as a consequence of the Israeli air strikes.



Israeli history have been a major cause of the angst and anguish in Israel, and the claims of "victory" by Hezbollah.

After the initial Israeli response, Hezbollah declared an all-out military alert. Hezbollah was considered in Israel to be a trained, skilled, well-organised, highly motivated force that was equipped with the cream of the crop of modern weaponry from the arsenals of Syria, Iran, Russia, and China.<sup>7</sup> The Lebanese satellite TV station Al-Manar reported that the attacks had included a Fajr-3 and a Ra'ad 1, both liquid-fuel missiles developed by Iran. Hezbollah also engaged the IDF in guerrilla warfare from well fortified positions. The bulk of these IDF attacks comprised small, well-armed units often facing hundreds of sophisticated Russian-made anti-tank guided missiles (ATGMs).

While Hezbollah rockets and missiles caused only 41 civilian casualties, these were kept low possibly because hundreds and thousands of civilians (as much of a quarter of the total population) had vacated northern Israel, vulnerable to missiles, and/or used shelters to protect themselves.<sup>8</sup> Hezbollah is believed to have lost around 30 per cent of its fighters in the 34-day air and ground war — an attrition it was likely to make up in a short time in view of the perceptions of its "victory." Hezbollah shot down only one helicopter and that too with an anti-tank missile. Fixed wing aircraft of the IAF were delivering their weapons from medium altitudes and remained out of range of surface-to-air weapons that Hezbollah held and used. There were vague reports of a combat aircraft being shot down. It seems that what the IAF lost was one F-16 after it lost its tyre/wheel on take-off.

The most dramatic success of Hezbollah was the crippling of an Israeli Navy Sa'ar-5 corvette (INS *Hanit*) and the sinking of a Cambodian merchant ship on July 14 by two Chinese made Iranian modified C-802 anti-ship sea skimming missiles fired almost concurrently from the Lebanese coastline, achieving an SSKP (single shot kill probability) of one. The damage to the corvette might have been more severe if the missile's warhead had actually

7. David A. Fulgham and Douglas Barrie, "The Iranian Connection," *Aviation Week and Space Technology*, August 14, 2006, pp. 20-22. Also see <http://www.globalsecurity.org/military/world/iran/mrl-iran-specs.htm>.

8. Jeffery White, David Makovsky, and Dennis Ross, "Lessons and Consequences of the Israel-Hezbollah War: An Early Assessment," *Policy Watch* # 1144, Special Policy Forum Report, September 2006.

exploded; even then, it was rendered unfit for operations and had to be towed back to port for repairs. The successful over-the-horizon targeting of the two ships, apparently assisted by Lebanese coastal radars, is symptomatic of the nature of the war: sophisticated anti-ship missiles, characterising an aspect of this "semi-conventional war."

On the other hand, amidst the "failure" of air power and the strategic "follies" of Israel, some key elements failed to receive adequate attention. There is no doubt that Israel did not succeed in stopping the rocket attacks on its population. But, on the second day of the war, the IAF, in a 34-minute air action, destroyed 59 medium range missile launchers inside Lebanon.<sup>9</sup> By all accounts, this amounted to as much as 70-90 per cent of Hezbollah's medium range ballistic missiles being knocked off before they could be used. This also must be seen in the context of the 1991 Gulf War when Iraq launched 91 Scuds on Israel and Saudi Arabia beginning with the first day of the war. The US-led coalition rapidly concentrated its full efforts in neutralising the launchers and missile capabilities of Iraq without success, as much as the Allied bombing had not succeeded in stopping German V1/V2 attacks in World War II. In fact, Scud-hunting (as the campaign came to be called), failed to hit even one mobile launcher, leave alone stop the attacks in spite of the US devoting over 18,000 sorties (representing the highest proportion of air effort devoted to any single target system) to this mission.

While doubts have been expressed about whether this completely neutralised Hezbollah medium range missile capability (which it probably did not given that Hezbollah had resorted to a great deal of deception, dispersal and camouflage) the fact is that none of these missiles was launched against Israel's major cities like Tel Aviv and Jerusalem which would have caused Israel major distress. One can only speculate on the reasons for the non-use of medium range ballistic missiles since there is evidence that Hezbollah attempted to drop explosives on targets deeper inside Israel. The IAF successfully intercepted and shot down three Hezbollah unmanned aerial vehicles (UAVs), at least two of which were armed with high-explosive payload on an ostensible mission to drop them over Tel Aviv or other such major target.

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9. Ibid.



Israel mounted some small scale commando raids in the beginning, and launched significant ground action with a three brigade-strong force across the border only on July 23, a good ten days after the beginning of the war. These troops encountered heavy fighting, ambushes and use of sophisticated anti-tank weapons (of seven different types), with great tactical acumen displayed by Hezbollah fighters. Some of the (Russian-made) anti-tank missiles are believed to be capable of penetrating some of the thickest steel armour protection used by modern armies.<sup>10</sup> A total of 46 Merkava tanks was estimated to have been hit besides another 14 armoured vehicles. Four of these were damaged by large landmines, killing 12 crewmen due to lack of underbelly armour protection.

Israel finally launched a robust ground operation across the border just two days before the UN-brokered ceasefire was to come into force.

### ISRAEL'S STRATEGIC FAILURES?

What we are trying to understand here are the main factors that led to the perceptions and/or reality of the failure of Israel. The main criticism revolves around the following issues:

- Israel pursued a flawed strategy largely because the top political leadership had no previous military experience.
- Israel relied on air power to defeat Hezbollah rather than sending in major ground forces into south Lebanon; and when the ground forces were sent in, it was a question of too little and too late.
- The above line of criticism is linked to the fact that the Chief of General Staff General Dan Halutz, an IAF officer appointed to the post almost inevitably held by an army officer in the past, was instrumental for this failure of military strategy.

However, we would like to pursue our enquiry from a somewhat different perspective.

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10. Israeli analysts were cited as stating the missile could penetrate steel armour of 70-cm to 1,200-cm thickness: see Fulgham and Barrie, n.7, p.10.

## WAR AIMS

The principles of war in all countries have held the principle of "selection and maintenance of aim" as one of the central and most important principles under which military power has to be employed. The essence of the war aims may be summarised broadly as follows:

1. Destroy Hezbollah.
2. Restore the credibility of Israeli deterrence after the unilateral withdrawals from Lebanon in 2000 and Gaza in 2005.
3. Force Lebanon to become and act as an accountable state, and end the status of Hezbollah as a state within a state.
4. Recover alive the two soldiers that Hezbollah had captured.

These aims are broadly borne out by other Israeli sources.<sup>11</sup> It is obvious that such grandiose aims like destruction of Hezbollah through military means would pose serious challenges without a prolonged war and large scale casualties since Hezbollah was known to have modern weaponry and had prepared well, including in fortified positions. Hence, what could have been attempted was a limited punitive war; and limited wars produce limited results rather than absolutist effects like "destruction" of a highly trained, well-equipped dispersed guerrilla force of nearly 6,000 fighters deeply committed ideologically for martyrdom in the name of religion.

The military aims and objectives flowing from these politico-strategic aims

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(especially the first two) were, no doubt, as grossly unrealistic. What assumptions led to the formulation of the over-ambitious aims is not really clear beyond speculation in some quarters that this was linked to a potential strike by the US/Israel on Iranian nuclear facilities. However, little evidence to support such a theory has emerged so far. On the other hand, it is clear that a

11. For example, see Avi Kober, "The Second Lebanon War," *BESA Perspectives Paper*, no. 22, September 28, 2006, p. 5.



fundamental mismatch in military aims and employment of military power took place, with the consequence that expectations raised by public articulation (some have called the prime minister's pronouncements in this regards "Churchillian") of the politico-strategic goals have been a major factor in promoting the perception that Israel lost the war.

One of the factors that pushed Israel to launch an immediate air strike was also the belief that its deterrence had lost credibility. If this was the belief held for quite some time, as emanating from the Israeli withdrawal from Lebanon six years ago and more recently from Gaza, then adequate preparations to restore that credibility should have been a pre-condition of the military action. The decision to launch massive air strikes on Lebanon, with the land forces not prepared for the follow-up action on the ground becomes even more inexplicable. On the other hand, the previous Chief of General Staff, Lt. Gen. Moshe Ya'alon, who served as deputy and then chief for five years before Dan Halutz was appointed last year, with his characteristic bluntness says that the IDF (as long as he was heading the IDF) had been very clear that "there was no military action which could smash or pulverize Hezbollah."<sup>12</sup> Ya'alon has gone on to say in relation to the military aims and objectives "Because the goals of the war were not defined and because no one clarified what the army is capable of doing and what it cannot do, the pursuit began of an impossible achievement." This is not only a serious indictment of the IDF, but also has crucial lessons for the higher defence management. Did the component/force commanders provide their inputs or were their views overruled in an organisation (headed by the Chief of General Staff) akin to a Chief of Defence Staff (CDS) system?<sup>13</sup> This takes us to the second aspect.

But one last point needs mention. In the Indian case, where the army had been extensively involved in counter-terrorism for two decades (before Kargil) and hence, the dominant view was to treat even the military aggression in the Kargil sector in 1999 as "militant" *jihadi* "infiltration" (also as a significant component even by the Kargil Review Committee), the Indian Air Force was more concerned about

12. Ari Shavit, interview with former head of the IDF Lt. Gen. Moshe Ya'alon, "No Way to go to War," in *Haaretz*, September 14, 2006, at <http://www.haartz.com/hasen/objects>

13. For a historical examination of the Chiefs of Staff Committee system, see Jasjit Singh, "Management of Our Defence: Role of COSC" *Air Power*, vol. 3, no. 2, Summer 2006 pp. 1-28.

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the risk of regular military operations by Pakistan. In Israel, it was the other way round. The Israeli Air Force has been the spearhead of counter-terrorism and the army has been increasingly limited to the role of special operations (performed exceedingly well). Hence, the question of an air force man at the top rather than an army man is less valid, and the issue of a wider and dominant belief system more the key factor in shaping

Israeli responses and strategies. Hence, while the air force performed exceedingly well (as in the past) and the army special operations were conducted in the most professional manner, Israel was seen to lose since it was fighting the wrong war against a highly motivated enemy that fought above the level of terrorism but below the level of a regular conventional war.

### **FIGHTING THE LAST WAR**

Military history is replete with examples of planners and commanders preparing to fight the "last war." There are historically and intrinsically valid reasons for it (like the traditional conservativeness of militaries, the hesitancy of militaries to reform after victories, etc.) which we need not go into here for want of space. The last war Israel had been facing and fighting for nearly one generation was the war against terrorism. And Israel had come to rely almost exclusively on its air force for counter-terrorism by refining precision strike based on state-of-the-art intelligence and RSTA (reconnaissance, surveillance and target acquisition). Israeli leaders, like many before them, faced the problem of pervasive mindset, which had come to believe that terrorism was the primary threat and counter-terrorism the main military mission.

Israel had been militarily defeating its Arab adversaries convincingly and even dramatically in the wars since its inception. The last major conventional military-to-military war it had undertaken was in 1973 when, in spite of the strategic surprise that Egypt and Syria had achieved, it was able to recover ground and threaten Cairo before a ceasefire ended the war. This in turn led to the Camp David process. And



the last major military operation that had been undertaken by the IDF was in 1982 in its war against the PLO, ensconced in Lebanon, when the Syrian military tried moving forward to intervene. In a brilliantly dramatic air dominance campaign in June 1982, the IAF shot down 86 Syrian fighters over Beqa'a Valley in Lebanon in less than 48 hours and also stopped Syrian armoured forces moving before they could even engage Israeli ground troops. But that was 24 years ago.

For the past quarter century, Israeli security had not faced any serious **conventional military threat**. The PLO had been evicted from Lebanon, thus, eliminating any potential threat of being used as the spearhead for military action. Egypt was satisfied with the return of its territories, and heavily under US influence, armed with American weapons. Syrian capabilities kept eroding, especially after the collapse of the Soviet Union. Iraq was fully preoccupied with its war against Iran during the 1980s and after that with Kuwait and the following war with the US-led coalition in 1991. In any case, it would never have been easy for Iraq to pose a conventional military threat to Israel due to geographical factors physically separating it from Israel. After 1991, Iraq was under massive sanctions, watched and constrained by the no-fly-zones and hundreds and thousands of air strikes, followed by the war in 1993. Turkey was a friendly country. Saudi Arabia, with its relationship with the United States and various military limitations, was never in a position to directly threaten Israel.

Given this background, the focus progressively shifted to using military power for the immediate and pervasive threat: that of terrorism. Hence, the belief that it did not really face the threat of a matching conventional war; and consequently, that the main threat that the country had to deal with was what may be termed as a **sub-conventional** war, that is, the challenge of dealing with terrorism albeit with sophisticated weapons;<sup>14</sup> and Israel had perfected the ways and means of dealing with it over the decades.

14. The Indian military-political leadership had also fallen victim to the same phenomenon when faced with the unique conventional war in Kargil in the summer of 1999 when New Delhi policy-makers agonised for nearly a month on the identity of the invaders. See Jasjit Singh, *Kargil 1999: Pakistan's Fourth War for Kashmir* (New Delhi: Knowledge World, 1999); and then army chief General V.P. Malik, *Kargil: From Surprise to Victory* (New Delhi: Harper Collins, 2006), not to mention the official Report of the Kargil Review Committee, *From Surprise to Reckoning* (New Delhi: Sage, 2000)! Pakistan has also persisted with its deeply held belief systems that led one of the more perceptive observers (former information secretary to Ayub) to express this with some anguish soon after the 1999 Kargil War (see Altaf Gauhar, "Four Wars and One Assumption," *Nation* (Karachi), September 5, 1999).

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The basic approach to the Hezbollah threat, therefore, was that of counter-terrorism. The counter-terrorism strategy was expansively focussed on the Gaza Strip and the West Bank. Hezbollah kept firing Katyusha rockets into Israel. Their inaccuracy and the limited numbers used till the recent war, kept them more at a

nuisance level than a military challenge (more on this later). Israel kept pursuing technological solutions; but as Ya’alon says, the economic costs of pursuing a more aggressive approach were seen as counter-productive in cost-benefit terms.

But it became rapidly clear that Hezbollah had decided to fight differently, which is best described as a “semi-conventional war” or a modern guerrilla war with stand-off precision strike weapons. The weapons used were all military ones; and it seems to have been much clearer on its war strategy than Tel Aviv. Of course, it had an intrinsic advantage: all it had to do was manage to survive and appear to remain undefeated. Its vulnerabilities were turned into its strength. For example, one of the major stated objectives of Israel was to pressurise the Lebanese government to force Hezbollah to give up terrorism and have the Lebanese military take over southern Lebanon. But the political, social and humanitarian activities of Hezbollah before and during the war had created an environment in Lebanon far more in favour of Hezbollah than against it. Extensive bombing of civilian targets by the IAF compounded the tragedy and misery of the people; in turn, proving greater (not less) support for Hezbollah. Incidents like the bombing of civilians at Qana only added to the process. As it is, large scale bombing of population centres has historically hardened the resolve to oppose the bombing rather than succumb to it.

The end result was that the two sides were fighting a war at different planes, with different strategies, seeking to exploit asymmetric vulnerabilities in targeting different centres of gravity (CoGs): Israel targeted Hezbollah’s military assets and infrastructure, while Hezbollah targeted Israel’s civilian community. The effect, for a variety of reasons, was that Israel ended up imposing large



numbers of civilian casualties and destruction of civilian infrastructure, while Hezbollah managed to impose some military casualties, but relied on Israel's sensitivity to losses of life and property.

**Historically, it was force employment and not the generally believed newer military technology and/or sheer numbers and size of the forces that mattered.**

What we witnessed in reality from the Hezbollah side were the shades of Sun Tzu and Mao's "People's War" strategy where Hezbollah provoked Israel to react strongly, then fight its forces inside the territory Hezbollah controlled and had prepared with strong defences against armour, etc., counter-attacked with guerrilla tactics and forces with sophisticated weapons, while continuing to inflict damaging strikes on Israeli core vulnerability: its civilian population. Gen. Ya'alon asserts that Israel's war strategy was faulty. One has to raise the inevitable question: since the centre of gravity of the terrorists as well as of counter-terrorism is the population, did Israel ignore this central factor? Or it was simply a case of faulty assessment of how the population would respond?

It is in this context that Israeli military force employment has come under severe criticism, especially inside the country, giving signs to observers outside of near trauma, with the recently retired head of the IDF saying that this was "no way to fight a war." There has been a near global consensus for decades about the great professional force employment acumen of the Israeli military that has been the envy of many professional modern militaries. And this was seen as a major factor in providing deterrence against residual military threats. While many specific elements could be identified even at this early stage soon after the war, the only rational explanation at the broader level is that force employment was not consistent with the (unrealistic) aims of the war, that it was derived from the dominant experience of the past quarter century, but above all, that force employment was not tailored to a correct assessment of how the enemy would fight in spite of excellent intelligence about the specific capabilities of the enemy being known.

In fact, there have been strong arguments, based on empirical evidence, that historically, it was force employment and not the generally believed newer

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military technology and/or sheer numbers and size of the forces that mattered.<sup>15</sup> This is not to imply that technological advantage in weapons and equipment does not confer a distinct advantage on the possessor, or that sheer superiority in numbers is irrelevant in wars. Preponderance of technological superiority and/or numbers would always matter; and the specific area of technological/force size advantage matters even more where it is related to the enemy's

vulnerabilities. What it implies is that force employment synergises these two in relation to that of the enemy. Hence, **force employment has to be relevant to the enemy's forces and force employment doctrine and strategies/operational tactics.** This is where Israel faltered, especially in relation to political-military aims and objectives in not assessing the enemy's force employment methodologies in spite of having almost all the information on what all Hezbollah held in terms of numbers and technological quality. It fought Hezbollah as a terrorist entity rather than a semi-military force fighting with shades of Mao's "People's War" doctrine and Iran's Islamic Revolutionary Guard Corps strategies, especially with missiles.

### **THE CHALLENGE OF THE "UNKNOWN/IGNORED" WEAPON**

Military history and strategy have tended to either belittle or simply pay little attention to the role and effects of conventionally armed ballistic and cruise missiles and rocket attacks. In the absence of rigorous analysis/assessments, professional militaries, which focus heavily on high-technology systems, precision strikes and kinetic shock effect, have tended to dismiss them as of little or no military utility. On the other hand, every time rockets and missiles (and for that matter, air power itself, not to talk of artillery) have been used, especially

15. Stephen Biddle, *Military Power: Explaining Victory and Defeat in Modern Battle* (New Jersey: Princeton University Press, 2004).



when in sufficient numbers, they have achieved disproportionate political-psychological impact. Military history and tactics are full of incidents of inaccuracies being compensated for by mass. Reflect for a moment on its politico-strategic impact if Saddam Hussein had been able/willing to fire the 91 Scuds that he fired over 42 days in a concentrated doze within, say, a 12-hour period during the 1991 Gulf War? Concentration of force (mass x firepower) has been part of the principles of war in most countries; but we often tend to forget the relationship between its capabilities in time and space. For example, the same quantity and quality of firepower delivered within different time spans would produce different military-psychological effects.

But looking back at the employment of missiles of various types in modern times, we need to recall the impact of German V-1 and V-2 bombs although rockets were first used apparently by the Mongols. Their effective use by Tipu Sultan against British troops during the siege of Seringapatam (India) in 1799 led to British attempts to develop a system for the Royal Artillery. But the dictum of Colonel William Congreve (who designed the British rocket system) of the "facility of firing a great number of rounds in a short time, or even instantaneously" as the key factor for success was not always followed till the Germans launched 10,492 240-km range V-1 rockets/cruise missiles on Britain's cities (3,531 penetrated air defences), and 3,195 far more difficult to intercept 350-km range V-2 ballistic missiles in World War II.<sup>16</sup> In spite of overwhelming bombing efforts with near total air superiority, air strikes against launch sites were ineffective. The missiles, as the Scuds in recent times, were inaccurate and less than 50 per cent reached the target area, with nearly one-third V-1s being shot down by air defences. The military impact was not effective. But the concentration of fire created a powerful political and psychological impact, forcing the Allies to alter the invasion (of Europe) plan to capture launch sites and factories.

Iran faced a serious political-psychological situation in the 1987-88 "war of the cities" when Iraqi modified Scuds kept falling in downtown Tehran, virtually leading to the Iranian decision to seek a ceasefire (when Iranian forces were still

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16. Kenneth Macksey, *The Penguin Encyclopedia of Weapons and Military Technology* (London: Penguin Books, 1993) p. 350.

**"The IDF was leaning on air activity against Hezbollah, rather than activities on the ground, so as to reduce casualties."**

across the border) since life in Tehran had come to a grinding halt. This was probably the lesson that its Revolutionary Guard Corps used in equipping and training Hezbollah. Saddam Hussein again fired his Scuds in single shots, launching, on an

average, less than three per day on targets as far apart as Israel and Saudi Arabia. Their military utility was highly questionable. But they created an enormous political-psychological impact, and the US-led coalition devoted an enormous amount of effort to neutralising the threat without being able to knock out a single mobile launcher. On the other hand, ballistics missiles and Katyusha rockets were fired in thousands in Afghanistan since 1980, both by the Mujahideen groups fighting the Soviets and Afghan government in Afghanistan, supplied by the Central Intelligence Agency (CIA) through Pakistan's Inter-Services Intelligence (ISI), as well as by the Kabul government against the Mujahideen, even across the border with Pakistan. Pakistan's next proxy spearhead, the Taliban, kept using them later on against the Mujahideen.

But the political-psychological impact in Afghanistan was much less than in the other cases, probably due to lower sensitivities to human casualties and urban destruction than in Western democracies. And Israel's extreme sensitivities to casualties were well known, especially after the Iraqi missile attacks in the 1991 Gulf War. The then Israeli Chief of Staff Shaul Mofaz had stated in 1999 that "the IDF was leaning on air activity against Hezbollah, rather than activities on the ground, *so as to reduce casualties*"<sup>17</sup> (emphasis added).

It is, therefore, surprising that Israel apparently did not take into account the full import of such sustained attacks (as it turned out, nearly 150 rockets/missiles per day during the 34-day war) with rockets and missiles (with a reserve of another 12,000-16,000) although Hezbollah had used these against it during the previous years.

17. Avi Kober, "Western Democracies in Low Intensity Conflict," in Efraim Inbar, ed., *Democracies and Small Wars* (London: Frank Cass, 2003), p 12. Kober writes that this policy goes back to the late 1970s, and says that that then Chief of Staff Ehud Barak had asserted in 1993 that Israel preferred using massive fire instead of manoeuvring forces on the ground during the 1993 Operation Accountability against Hezbollah in southern Lebanon.



At one level, the problem is typical: it takes a lot of time (and money) before effective counter-measures are evolved/adopted against a new type of technological and/or operational threat. Israel was developing anti-missile systems for shorter range threats. Some of these plans, especially against short range missiles, had not received high priority since the costs were high and the level of protection low (at least with initial capabilities). Gen. Ya'alon, when asked about the Nautilus programme, expressed the real dilemma, that "it was extremely expensive and of limited results. It could only have protected a city here and a city there. If Israel invests a fortune to sew up a protective suit for each citizen and turns itself into a bunker state, it will not survive economically."<sup>18</sup>

There can be little doubt that Israel would, sooner rather than later, develop an anti-missile anti-rocket system that can handle a range of incoming missiles, from unguided Katyusha type rockets to long range ballistic missiles and various categories of cruise missiles. Israel had been developing its Arrow ATBM (anti-tactical ballistic missile) system to defend against medium and intermediate range ballistic missiles of the 300-km Scud and longer range weapons. Its air force rapidly destroyed over 90 per cent of Hezbollah's fixed launchers for longer range missiles. The existence of rockets and missiles of ranges below these levels was known for decades. But the short time of flight, their very small size, very low trajectory and apogee, and the very minimum infrastructure and skills for launching them make their location and interception extremely problematic. And the challenge for a country extremely sensitive to casualties, which it had been emphasising publicly, was a natural invitation to the enemy to target this vulnerability by sustained concentration of force; and Hezbollah did exactly that, forcing Israel to pursue a war strategy that it had been perfecting and pursuing for more than two decades. This, incidentally, also made it more predictable and easier for the enemy to build and implement a counter-strategy targeting its vulnerabilities.

## FAILURE OF INTELLIGENCE ASSESSMENTS

Israel is credited with one of the world's best intelligence systems, in the IDF as well as in Mossad, in information collection, analyses/assessments, and covert

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<sup>18</sup>. Shavit, n. 12.

action. It is fairly clear that Israel had been acquiring and collating information and intelligence about Hezbollah activities, especially in south Lebanon, its building of strong points, fortified bunkers, tunnels, etc. Or, for that matter, the accumulation of massive quantities of sophisticated anti-tank weapons on one side, and nearly 15,000 rockets and missiles, ranging from the unguided Katyushas to the 220-km range ballistic missiles, on the other. And this too when skirmishes between the two continued to take place regularly, including firing of Katyusha rockets across the border into Israel, except that the density of firing was low prior to the war in 2006. This is exactly where the core problem may be identified: assessment of the enemy's strategy and tactics which would need to be factored into one's own if the enemy is to be defeated. This is particularly important in relation to one's own vulnerabilities that the enemy must be expected to exploit (if it has made its assessments correctly).

This is the central issue in asymmetric warfare where victory and defeat finally depend on one side's ability to generate favourable asymmetry in time and space related to the other side's vulnerability. Preponderance in size, superior technology, the strategy of indirect approach, turning the enemy's flanks, greater manoeuvre and mobility, interdiction of logistics, and so on, are methods and means which finally take one side or the other to victory or defeat. Intelligence assessments, however made, are the core of formulation of military strategy and tactics, and, hence, of force employment. And this, surprisingly, turned out to be Israel's Achilles' heel.

Here there is greater uncertainty and ambiguity in understanding why Israel failed to make the right assessments about the way Hezbollah would fight, in spite of having sufficient information, and its own analytical capabilities. From what little is known, Israel had maintained an internal, but separate, institutional mechanism to question the intelligence assessments – something few intelligence systems are known to do. Then why the failure?

The main factors which probably led to this situation have been spelt out above: that of pervasive belief creating a mindset across the board, in and outside the IDF. For example, Efraim Inbar, a leading strategist and head of the BESA Centre for Strategic Studies in Tel Aviv, while making India an exception (which



the Indian Army leadership was loath to do itself, at least till Kargil) concluded a few years ago, "The main security challenges of contemporary Western democracies are small wars, often called low-intensity conflicts."<sup>19</sup> This was, no doubt, correct, particularly in Israel's case.

But the issue of how it gets fought remains a major challenge since it should be expected to be implemented differently by different people and by the same people in different contexts. We were witness to Gen. Pervez Musharraf, faced with the prospects of even a limited conventional war in 2002 by India in response to escalation of Pakistani sponsored terrorist attacks (especially on the Parliament in December 2001) threatening to unleash a massive "unconventional" war. This was interpreted by most as a threat of use of nuclear weapons (in which the end result would have been the annihilation of his country). But what he, no doubt, meant was swarming by as many as 150,000 trained and well-equipped fighters with very high levels of religious motivation. Nawaz Sharif, even as the chief minister of Punjab state of Pakistan at that time had made a similar threat twice in February 1990, of launching 10,000 "civilians" across the border into India; and others actually organised such a force in 1994 which he as the elected prime minister of Pakistan was forced to curb by force before a crossing could be effected.

Innovation is central to achieving favourable asymmetry in war; and innovation must be expected at all times, since whether it succeeds or not depends not only on the innovator but equally on the counter-innovator. This is where military-related assessments have become even more crucial in modern warfare. This is, no doubt, why many in the Chinese military have been advocated unrestricted warfare, but within the basic formulation of a "local-border war" fought with high technology weapons and systems. This is also what makes the traditional debate of air power versus "boots on the ground" irrelevant to the real issues. It is in this context that signs of a semi-conventional way of fighting wars were visible for some time before the Lebanon War.

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19. Inbar, ed., n.17 p. vii.

Terrorist/guerrilla groups had been increasingly acquiring weapons and tactics of military specifications at least since the war in Afghanistan during the 1980s. Call it a change in the nature of terrorism or a change in the nature of conventional wars, the shift from conventional to sub-conventional wars was clear since at least the Vietnam War. But in the Iraq War we witnessed the shift to what can only be referred to as a semi-conventional war, with Iraq's special forces providing resistance to US troops, delaying their advance. The war showed that the superior American military made short shrift of Iraq's elite Republican Guards even in a massive dust storm that would have normally hidden their relocation. But dealing with the Saddam Force was a harder task since it was targeting an American vulnerability — casualties. The fighting line between the two fighting forces became diffused, with 30 American Army helicopters being hit by small arms before they could deliver their weapon load and had to abort an important mission. The failure to destroy the Taliban/Al Qaeda in Afghanistan and their reemergence has taken place due to their conducting a semi-conventional war. And we are likely to experience more of this in the future, especially where a state sponsors such wars through "non-state actors", equips them and trains/directs them as Pakistan has been doing through the ISI with the Mujahideen/Taliban to its west and *jihadi* groups to its east, or Iran did to Hezbollah through its IRGC.

### SOME INTERPRETATIONS

We are still too close to the events leading up to the Lebanon War and its conduct to make a definitive prognosis of its implications for the future. But it is possible to conclude at this stage that the Hezbollah-Israeli War would have profound implications for the future of armed conflict and war in general, and the security of the Western Asia/Persian Gulf region in specific which has been in turmoil since the Mujahideen War in Afghanistan which accelerated after the Iran-Iraq War. This, in turn, has enormous implications for international peace and security and Indian core interests, not to talk of the other great powers of the world. It would, thus, be puerile to look at the war in terms of the "air power versus boots on the ground" debate, although the changing nature of capabilities



in the air and ground must be studied closely.

Information at this early stage is limited; but even a great deal of what comes out in the future is likely to be biased, doctored and sketchy. But there are enough empirical indicators in respect of the war to arrive at likely consequences and conclusions for the future. Some of these are embedded in the examination of the issues in this paper. Others are briefly outlined below:

**The Hezbollah-Israeli War would have profound implications for the future of armed conflict and war in general, and the security of the Western Asia/Persian Gulf region in specific.**

- Perhaps the most important and clearest implication of the war would be to trigger a “ripple effect”, setting in motion multiple trends into the future. The most crucial of these is the high probability of the Hezbollah strategy of semi-conventional war being adopted by other countries and their sub-state institutions to undertake war through proxy(s). Iran and/or Syria may be tempted to employ this in the future in other scenarios.
- Pakistan already has extensive experience in its ISI (an extension of its army), with enormous resources drawn from the narcotics trade, and procurement of sophisticated weapons, including rockets and missiles of a large variety,<sup>20</sup> now with a vastly expanded and sophisticated capability banking on its official and non-official arms manufacturing capabilities. The ISI in particular has extensive expertise and experience in equipping, training, managing, and directing proxy wars (through the Mujahideen in Afghanistan against the Kabul government and the Soviets during the 1980s; through the Khalistanis in Punjab from 1983-1994; through *jihadi* entities and groups like Lashkar-e Tayyeba, Harkat al-Ansar, Harkat ul-Mujahideen, etc. in Jammu & Kashmir since 1988; through the Taliban against its own creation, the Mujahideen, in Afghanistan after 1993; and support to Osama bin-Laden and Al Qaeda). The question must be squarely

20. The recent attempt at a coup by military people against Gen. Musharraf was reportedly based on an attempt at “targeted killing” of Musharraf by rockets to be fired at his residence.

addressed: are we likely to face a Hezbollah-model of semi-conventional war in the coming years? If so, how are we going to fight and win it?

- One of the most significant after-shocks of the Mujahideen War in Afghanistan in the 1980s and Soviet military withdrawal by 1989 was the rapid spread of a belief that the Mujahideen had defeated a superpower! This was particularly conspicuous among elites in Muslim countries; and “*jihadi*” terrorism titled differently in different places, erupted from the Balkans to the Philippines. It is useful to recall that the first terrorist attack on the World Trade Centre (New York) took place in 1993. With the sole superpower, the United States in a quagmire in Iraq, and Israel seen to be defeated by Hezbollah trained and equipped by the Iranian Revolutionary Guard Corps, seen as Tehran’s “Western Command,” there is every possibility that this would trigger broader support for, if not actual growth of, armed violence in the name of *jihadi* terrorism across the globe, to usher in a “new world order.”
- The war has enormously strengthened Iran’s self-confidence and its leverages in the international and regional arenas. If it can engineer Hezbollah fighting Israel to a (ceasefire) standstill, it can certainly defend itself against a powerful military power. Any US and/or Israeli strikes against its nuclear facilities, leave alone a war, if it was feasible option at all (which I have maintained, it was not), now stands ruled without catastrophic consequences all round.<sup>21</sup> We must be careful not to rush to a conclusion that this implies that Iran would pursue nuclear weapons acquisition. It has used its nuclear programme for political purposes so far, and is likely to keep doing so with greater confidence and high pressure diplomacy.
- The influence of the United States on the world stage has been on the decline for a large number of factors. Its overwhelmingly superior military power has been a major factor in sustaining the reality and perceptions of its super power. The terrorist attacks by Al Qaeda on 9/11 had laid bare its vulnerabilities. Now, after its inability to overcome armed resistance in Iraq,<sup>22</sup> and the Israeli stalemate in

21. It is quite likely that North Korean decision to test a nuclear weapon at this time was influenced by the Lebanon War and its outcome, increasing Pyongyang’s leverages.

22. The United States has experienced the highest level of casualties of its troops in Iraq during the three months following the Lebanon War.



Lebanon, perceptions are bound to grow about superior military power not being as invincible as generally believed.

- In specific military terms, serious rethinking will be required on the issue of mere reliance on high-technology "RMA" (revolution in military affairs) and force-multipliers. Israel possessed all these, and produces a great deal of the systems that are needed for them, but found that it

faced shortages of combat aircraft as well as helicopters (so much so that C-130 Hercules transport aircraft had to be brought in to supply troops in the battlefield across the border\*). Precision strike once again highlighted the criticality of target acquisition and, hence, accurate time-sensitive intelligence related to the enemy's actions and capabilities within the time required to acquire and hit the target.<sup>23</sup> It would be more appropriate to revert to the two-decade old terminology of RSTA (reconnaissance, surveillance and target acquisition) as compared to the more current ISR (intelligence, surveillance, reconnaissance) which places target acquisition outside this mission.

- It is sobering to reflect on the reality that Hezbollah's network-centricity and exploitation of intelligence were of a very high order and its command and control system survived directed air strikes throughout the 34-day war. Israel had developed systems to reduce the sensor-to-shooter time to 90 seconds; but Hezbollah had evolved its rocket force employment to remain within 80 seconds from positioning, launch and camouflage. This was an added advantage of using simple, small size Katyusha rockets, with numbers making up for inaccuracies.
- The strategy for the use of weapons and tactics in war must obviously take into account the centre of gravity (CoG) of the enemy. Identifying the vulnerabilities of the enemy is part of identifying and focussing on CoG. But

**In specific military terms, serious rethinking will be required on the issue of mere reliance on high-technology "RMA" (revolution in military affairs) and force-multipliers.**

\* There is an obvious necessity for a comparative cost-effectiveness analysis of fixed wing aircraft versus helicopters for airlift and battlefield support.

23. A simple OODA loop would be an insufficient formulation to seek. The better framework is a "Comparative IDA Cycle" as propounded by Ajay Singh, "Time, the Fourth Dimension of War," *Joint Force Quarterly* (USA) 1995.

**Semi-conventional war is best defined as an organised military-type force which is not the legal instrument of any state, though probably supported by a state (mostly through its intelligence agencies or its sub-state forces like IRGC, ISI, etc.) and equipped with sophisticated weapons and equipment for fighting a conventional war with guerrilla characteristics.**

specific focus on the enemy's as well as own centre of vulnerability (CoV) is critical in modern warfare. For example, Katyusha rockets and Scuds ballistic missiles were used extensively in the Afghanistan War in the 1980s and even after that. But the sensitivities to such attacks in the country and the forces deployed was far less than those of Israel.

#### **EMERGENCE OF "SEMI-CONVENTIONAL" WAR**

The war has produced a variation of the wars we have been used to, by interposing a new type of war between traditional military-to-military conventional war and sub-conventional war (through religious-ideology driven terrorism, insurgencies, and so on). This can only be termed as semi-

conventional war which is best defined as an organised military-type force which is not the legal instrument of any state, though probably supported by a state (mostly through its intelligence agencies or its sub-state forces like the IRGC, ISI, etc.) and equipped with sophisticated weapons and equipment for fighting a conventional war with guerrilla characteristics.

This type of war has been evolving since the 1980s Afghanistan War (if not the earlier Vietnam War). What is important for national defence and international peace and security are the challenges this would throw up in the future; hence, the need to study it in deeper detail. Much greater political-military-diplomatic synergy would be needed to defeat such a war by a competent enemy. There is need to undertake objective studies and analyses of the strategies, tactics, technologies, etc. likely to be involved in this type of war.

The war in Lebanon makes it amply clear that challenges to national defence



are becoming even more complex than normally accepted. It is also clear from the Israeli experience that once a semi-conventional war starts, there will be little time and opportunity to innovate force employment and weapons and equipment. It is instructive that Israel had to seek urgent supply of weapons from the United States within ten days after the war started since it had started to run out of ammunition and weapons (while Hezbollah had rockets and other wherewithal to carry on for months). Such wars are much more likely to last longer than what most modern militaries are planning for; and the sheer extension of the duration of the conflict could force an adverse decision, leading to a ceasefire or even defeat.

The obvious agency to undertake this task in India is our Defence Intelligence Agency. But it would require a substantive upgradation if it is to undertake such tasks. Relying on short tenure career officers is not the best way to approach the study and analyses/assessments of complex defence issues for the 21st century. At the very minimum, the Defence Intelligence Agency would need at least 200 analysts working on such studies.

### **ROLE OF AIR POWER**

The war, for the first time, raised questions about the Israel Air Force concepts and capabilities to provide the requisite deterrent and to achieve the military objectives it set out to achieve. The picture has been muddled a great deal by directing the criticism along the lines that the "failure" of the IDF to win was caused by the fact that the IDF chief was an air force person (which had happened for the first time). Historical evidence in general and the recent wars in particular had demonstrated an increasing role for air power that had led some people to claim that air power alone can achieve the military effect necessary for a "victory." The war in Kosovo in 1999 has been the favourite example cited to support this view. The most vocal conclusion derived now is that victory in war cannot be achieved without "boots on the ground" and, hence, this was Israel's main failure. The air versus ground forces debate, that seemed to have tilted in favour of air power after Afghanistan and Iraq, is once again ready to swing to the other side.

**The short range rockets and missiles of the Katyusha and other varieties were the ones that Israel found almost impossible to defeat.**

What is often forgotten is that much of the projection of air power as the supreme instrument of military power after the Cold War was in sections of the Western politico-strategic literature. And it has been difficult to escape the conclusion that this was related to the tremendous asymmetric

advantage that the Western developed countries enjoyed in the air and the aerospace technological superiority that it entailed, and this advantage was rationalised, reinforced and even exaggerated to derive political, psychological, hegemonic capabilities. A spin-off for casualty-sensitive countries was also the surgical application of military power that dramatically reduced, if not virtually eliminated, own casualties. In all such cases in the recent history of the performance of air power, the adversary had no air power or it was eliminated early on, providing a crucial asymmetry in an important area of military capabilities, which provided expanded options.

If one was to judge on the basis of casualty exchange ratios, the IAF did extremely well. It undertook 15,500 sorties, striking at something like 7,000 targets in the 34-day war. It did not lose a single combat aircraft. It lost four helicopters: one to Hezbollah (anti-tank missile fire), two to a mid-air collision, and one to friendly fire. Israel lost 119 soldiers to combat on the ground. The Israeli air strikes resulted in enormous damage to Lebanon's infrastructure. But the fulcrum of the war were the Katyusha and other short and medium range missiles that Hezbollah launched into Israel.

The Israeli Air Force knocked out nearly 90 per cent of the medium range missile launchers in a 34-minutes air strike blitz. This was a crucial Hezbollah capability that could have had a enormous negative impact on Israel, and its neutralisation was a tremendous gain for Israel early on in the war. And the fact that this could have been achieved only by the air force needs to be noted. But the short range rockets and missiles of the Katyusha and other varieties were the ones that Israel found almost impossible to defeat. Their small size, short pre-launch preparation time (reportedly reduced to 60 second from the time the



launcher moved to launch position to launch and then withdrawal of the launcher) made their location, target acquisition and strike extremely problematic. And since these were being launched at an average rate of around 150 rockets a day, their political-psychological impact is what created the impression of Israeli failure.

For those who may be surprised by Hezbollah's rocket and missile firing into Israel would do well to remember that they were used fairly extensively during the Afghanistan War in the 1980s and even after that. Kabul city was frequently hit by rocket attacks fired by the Mujahideen (and later the Taliban). However, for a number of reasons, they had not created the type of concerns that we witness in Israel where the angst was more due to a sense of helplessness to stop them rather than only the damage caused. Israel had been victim of Katyusha rockets by Hezbollah earlier also, though they had been used in the past in ones and twos. Israel was working on developing a technological solution to counter such attacks. But this was proving to be prohibitively expensive and incapable of providing a viable defence.

This reality may yet prove to be the major problem for defence against such short-to-medium rocket and missile attacks in the future, especially by non-state actors. Politico-diplomatic arms control and non-proliferation measures had simply ignored this type of threat and the INF (Intermediate Nuclear Forces) Treaty focussed only on eliminating land-based ballistic missiles above the range of 500 km in Europe, while the MTCR (Missile Technology Control Regime) of 1987 covered missiles above the range of 300 km. Typical of the lessons of history, it is this window of below 300-km range rocket/missile that has been exploited by Hezbollah for its offensive war. We in India would have to pay special attention to the ways and means of effectively dealing with such a threat which is more than likely to face us in the future.