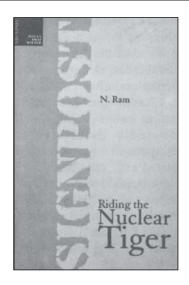
BOOK REVIEW



Riding the Nuclear Tiger

N. Ram

Left Word Books, 1999, Rs 60, pp 120

Review: O A.K. Babul

EFT Word Books has begun its new series "Issues that Matter" with this important analysis of India's nuclear weapons policy by N.Ram, editor of Frontline. He calls the BJP's nuclear stance 'pseudo-weaponization' because he believes they have radically altered the far more flexible and effective policy followed by all other Indian Governments since Independence. Whatever position the reader takes on India's nuclear policy, there is much to learn from the research that Ram has done with T. Jayaraman, a theoretical elementary particle physicist who has written extensively on the scientific and technological aspects of India's weaponisation programme. This brief pamphlet sized essay is packed with facts hard to obtain elsewhere. It will be an education for most readers, and can help us choose a realistic and effective nuclear weapons policy.

This review will be limited mainly to discussing chapters 5 and 6, which deal with nuclear capability and weaponisation. Ram's argument is plainly written and concise:

➤ The BJP's propaganda presents the Pokhran II explosions as a great scientific and technological

- achievement. Ram shows that in the contemporary world of science, as stated by eminent physicist Freeman Dyson, "Nobody with pretensions to be considered a serious scientist finds professional fulfillment in proving that he can design a bomb as competently as the Americans. Even in scientifically backward countries, young people of talent now know that nuclear weapons have ceased to be a scientific challenge." (page 61)
- > Senior Indian government nuclear scientists in the fields of research and development have illegitimately strayed into the political realm and instigated the government to conduct further tests. Some of this decades-old campaign is well documented by Ram. He shows, for example, "direct evidence that the DAE [Department of Atomic Energy] leadership went over to an active advocacy of testing weaponization, building up a strong internal pressure to discard the earlier Indian policy line of conditional self-restraint on the nuclear option" (page 64). The scientists presented 'options' to the government as though
- nuclear weapons policy was purely a question of technology development, whereas it actually involves crucial political questions. Ram is forthright in expressing outrage against these prominent government nuclear scientists for their devious political plotting and extensive substitution of manipulative public relations campaigns for factual scientific opinions. In N.Ram's view, "They have independently contributed to the dangerous illusions of [nuclear weapon] strength, invincibility and deterrence." (page 66)
- Ram questions the achievements of Pokhran II. The BJP claims that after the Pokhran II tests it will not be necessary from a scientific and technological angle to do any further tests. Therefore, they claim, India is now ready to sign the CTBT with a "proven ready nuclear weapons force in place" and deploy a minimal credible nuclear deterrent. However, in order to know what the statement means we ought to know what our weapon capabilities are: "while the fundamental physics laws that govern the behaviour of nuclear weapons are well-known actual

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- weapon performance involves a lot of detail that cannot be worked out completely from first principles." (page 68)
- > "From the beginning, the total yield of the May 11 explosions has been the subject of controversy. The main challenge has come from seismologists in the United States: their estimates of the total yield of the May 11 tests are significantly lower than the DAE's claims. The Indian nuclear establishment's contention that the American seismologists have not taken into account the simultaneous nature of the explosions, which would have led them to make a lower estimate, was challenged by B.K. Subbarao, [nuclear scientist; see MANUSHI 108]. The controversy is yet to be satisfactorily settled; it clearly awaits an independent and unbiased scientific analysis of the conflicting claims and independent analysis of the seismic data." (page 70)
- ➤ N Ram's analysis provides strong evidence that the "Pokhran II tests and the computer simulation that can be done based on that data will be insufficient to validate designs of either thermo-nuclear weapons [hydrogen bombs] or boosted fission weapons.... Quite clearly, thermo-nuclear weapons capability has not been established by India's nuclear establishment... Current capabilities amount to only moderately reliable safetyuntested weapons of the plutonium-based implosion type without too much leeway in the choice of delivery systems... Such capability hardly merits the description of "a minimal credible nuclear deterrent" (page 72). Ram joins the increasing chorus of international nuclear experts when he says, "As for the current official

- Indian claims to thermonuclear power status they are unlikely to carry any weight in international expert circles." (page 74)
- > "Hope for the future lies partly in the fact that, for all the extravagant claims made by the nuclear energy establishments and chauvinistic politicians, nuclear weaponization in both countries is likely to proceed slowly. There is time for new political leaderships in both countries to display the wisdom and the political courage necessary to draw subcontinent back from the brink of grave nuclear folly." (page 90)

Reading Ram's book and his cogent arguments against our nuclear weapons policy inevitably leads the reader to question the wisdom of India's nuclear weapons strategy no matter what the reader's personal political beliefs. This reviewer is led to the following conclusions:

- ➤ A small group of self interested sarkari scientific bureaucrats have misinformed the nation and the political leadership of the true significance and the actual outcomes of the Pokhran II tests.
- > India's previous policy since Pokhran I of maintaining a capacity for making nuclear bombs without actually doing so had given it a strategic advantage in the Indo-Pak conflict because India has an overwhelming advantage in terms conventional forces and Pakistan could not have relied on a military strategy based on an untested nuclear capacity. Pokhran II provided an international cover for Pakistan to test its own nuclear capabilities and therefore aided them in neutralising to some extent India's large advantage in conventional weapons.

- India has insisted that settlement of the Kashmir dispute must be the result of bilateral Indo-Pak negotiations. Nevertheless, after Pokhran II and Chagai the inevitable political consequences will force India eventually to participate in internationally mediated negotiations.
- The disorganised confrontational statements of the BJP coalition government released publicly following Pokhran II identifying Pakistan and China as the reasons for the need for nuclear weaponisation raised the stakes between India and China to hitherto unreached levels while leaving India in reality completely vulnerable to China's far superior nuclear weapons.
- Easily contested claims to have tested a thermonuclear device indicating that India currently has the ability to produce hydrogen bombs has caused many international scientists to doubt not only this claim but, by analogy, all other nuclear weaponisation claims of the Indian government. The failure of the Indian government to unequivocally demonstrate to the international scientific community its capacity to build and deploy a hydrogen bomb casts a pall over the self congratulatory noises made by the BJP government and the prizes and awards and promotions bestowed upon our self proclaimed heroes of the sarkari nuclear establishment.

Though the BJP coalition has been misled or has chosen to believe the *sarkari* scientists' version of the results of Pokhran II, the consequences for India of relying on this version of what was achieved are serious, and may eventually be truly disastrous.

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