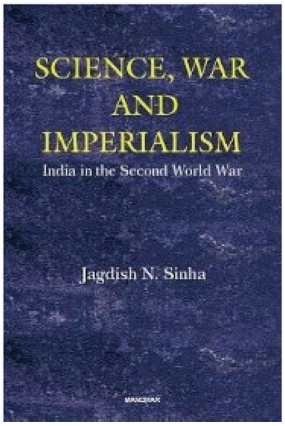

Science, War and Imperialism: India in the Second World War. Jagdish N. Sinha. Manohar Publishers and Distributors, 4753/23 Ansari Road, Daryaganj, New Delhi 110 002. 2023. 294 pages. Price: Rs 1495. ISBN 978-81-960546-0-1.

I recently read *Science, War and Imperialism: India in the Second World War* amid the ongoing Russia–Ukraine and Israel–Gaza conflicts. The book highlights the link between science and technology (S&T), the increasing lethality of wars, and the impact of wars on funding for S&T. Throughout history, technology has always been closely linked with wars, and science became even more intertwined during the Second World War. Since then, S&T has made wars much more dangerous and potentially destructive than ever before. Despite efforts to prevent them, these advancements have been disappointing, and now we find ourselves on the brink of a third catastrophic event.

This publication by Jagdish N. Sinha is of great importance, as it uncovers many secrets of the Second World War. It sheds light on the power plays between participating nations and how they diverted S&T from its intended purpose of serving humanity. Wars are often viewed as political victories or defeats, with their economic consequences being a secondary concern. However, what is often overlooked is the socio-psychological cost of war and the significant role that S&T play in it.

From this perspective, Sinha's book comprehensively covers the Second World War, India and British imperialism. It begins with the Swadeshi Movement, through the First World War, and the hectic activities of the 1930s towards harnessing S&T for national reconstruction in tune with the nationalist aspirations before the focus is turned to the Second World War. In the seven well-organized chapters, the author discusses several aspects of the pre-war colonial policy towards S&T in India, its working during the Second World War, the post-war reconstruction, and, finally, the policy shift by the colonial government to give way to the nationalist aspirations and plans for an independent India.

The book dwells on the British imperial policy, the Allied operations, and the indigenous nationalist concerns to harness science for national reconstruction, impacting science, the scientists, politics and society in India. Here, the author talks in detail about the most productive and socially committed endeavours of Indian scientists in the 1930s and 40s, coming together with the nationalist leaders at the National Planning Committee to work towards national reconstruction on modern lines and towards freedom. Their professional initiatives and international liaison with their fraternity, which is empathetic to India, are reassuring aspects of this account. He deliberates in considerable detail, probably for the first time, the social functions of science in colonial India, referring to the similar movement in the West and the interests in India of its leaders, like J. D. Bernal, A. V. Hill and P. M. S. Blackett.

Similarly, the entry of the USA into Indian affairs through the American Technical (Grady) Mission (1942) inaugurated a phase when Indians looked to democratic America for help instead of imperial Britain. Some Indian scientists not only took up the nationalist agenda after the Quit India Movement of 1942 but also came closer to Axis Powers like Germany and Japan. M. N. Saha was constantly spied on his movements.

All along, the author is mindful of his core concern – Did science advance in India like in the developed West? It did not. However, it is pleasantly surprising that Indian scientists like C. V. Raman, M. N. Saha, H. J. Bhabha, S. N. Bose, J. C. Bose and many others made their world-class contributions, despite many limitations, during this period. How? in-between, Sinha has brought in several issues concerning science for social progress – the indigenous versus western science, the role of scientists in the national reconstruction and the freedom movement.

The chapter on 'Science for War' provides a beautiful review of the growth of technical education stimulated by the war, as the war-time Technicians Training Scheme aimed to produce about 80,000 persons annually for the army. But the things of lasting value were the creation of the CSIR and the activation of older organizations like the Imperial Agricultural Research Institute (Delhi), Forest Research Institute (Dehradun) and Imperial Veterinary Research Institute (Mukteshwar). Other measures included promoting medical science and public health, the IITs, and the River Valley projects. Equally important was conceptualization and introduction of the Five-Year Plans to develop India with the help of modern S&T.

The chapter on 'The sciences in the doldrums' briefly accounts for various sectors like Energy research, electricity generation, coal mining, water resources, defence research, aviation and operational research. The author, however, regrets the absence of indigenous knowledge and traditional industries from both the colonial and the nationalist agendas (as seen even in the Scientific Policy Resolution).

With massive documentation drawing on the original sources culled from the major repositories in India and archives of the Allied countries in Europe and North America, the book touches upon many issues, probably for the first time, giving new insights for future research in the broader framework of the science–society interface. Its elaborate bibliography is sure to help aspiring researchers in the subject. As with his other works in social history of science in the past years, J. N. Saha's present book provides a good account of India's first-half of the last century. It remains the first and the only book on its specific theme. Its earlier version was published by Brill (Leiden/Boston, 2008), but it could not reach Indian readers because of its exorbitant price (currently selling for up to Rs 45 thousand). The South Asian edition published this year is affordable to a wider audience. This interdisciplinary work will likely attract scholars from various disciplines from the pure and social sciences.

G. PARTHASARATHY

School of Natural Sciences and Engineering,
National Institute of Advanced Studies,
Indian Institute of Science Campus,
Bengaluru 560 012, India
e-mail: partha@nias.res.in