

# What geographic and temporal contexts characterize this STS innovation?

Biochemical engineering got extra push due to some extraordinary circumstances that took place in 1943. India experienced the great famines in the early '40s. Almost, 2-3 million people lost their lives due to starvation during these famines. The socio-economic context and humanitarian crisis in the region compelled the scientists to take up research in applied sciences. At least for the time being, there was less focus on the fundamental research. These efforts culminated in the form of large scale revolutions in the fields of agriculture and dairy products. They are known as a 'Green Revolution' and 'Operation Flood' respectively in the country. The external demand generated by these large scale revolutions brought the focus on Biochemical Engineering as an emerging discipline in life sciences. Applied research programs such as Biochemical Engineering viewed as potential field research that can provide solutions to the crisis.

## 'Scaling up' the Biological Processes

*The Emergence of Biotechnology in India: Collaboration, Contestation and Non-Western Perspective*



सत्यमेव जयते

प्रधान मन्त्री भारत

PRIME MINISTER,  
INDIA.

MESSAGE

Bio-mass energy has immense potential for our country and considerable significance in our search for more renewable sources of energy. It is important for us to work on it.

I am glad to hear of the proposed International Symposium on Bio-Conversion and Biochemical Engineering and send my good wishes for its success.

*Indira Gandhi*  
(Indira Gandhi)

New Delhi  
February 27, 1980



Tyagi, Abhinav and Anuj Tyagi. 2019. "'Scaling up' the biological processes" In *The Emergence of Biotechnology in India: Collaboration, Contestation and Non-Western Perspective* created by Abhinav Tyagi and Anuj Tyagi. In *Innovating STS Gallery Exhibit*, curated by Aalok Khandekar and Kim Fortun. Annual Meeting of the Society for Social Studies of Science. New Orleans, USA, Sept 5. <https://stsinfrastructures.org/content/innovating-sts/essay>.



Society for Social Studies of Science (4S)

