

Vikram Sarabhai – A scientist's scientist

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I first met Vikram Sarabhai in 1966 soon after he had taken over as Head of the Department of Atomic Energy following the premature and unfortunate demise of Homi Bhabha. I had known earlier his wife, the famous Bharatnatyam dancer, Mrinalini. From 1966 onwards I have been in close touch with the Sarabhai family, although Vikram himself passed away suddenly at Thiruvananthapuram in December 1971. He had spoken at the dedication of the Nuclear Research Laboratory at IARI and he left for Thiruvananthapuram the following day. Thus we lost two of our eminent scientists – Homi Bhabha and Vikram Sarabhai soon after the other.

Vikram was a man of great vision and had dedication to national development. When asked why a poor country like India should go for high technology, he replied, 'But we are convinced that if we are to play a meaningful role nationally, and in the community of nations, we must be second to none in the application of advanced technologies to the real problems of man and society.' In addition to maintaining the momentum of progress in the area of atomic energy, Vikram started paving the way for one of the most effective Space Research Organizations. ISRO is now making us all proud by undertaking very challenging tasks like landing on the moon.

When Vikram became the Head of the Atomic Energy Department he told me that we should mobilize all new technologies for the benefit of small and marginal farmers. For this he felt there is need for more irrigation facilities. Extending the area under irrigation will need more power to pump the groundwater. Therefore he gave attention in an integrated way to agriculture, irrigation and power generation. He warned against complacency in his Lal Bahadur Sastri Memorial Lecture (April 1969, IARI, 'How green is our revolution'). In fact many new projects during the late 60s were developed at the insistence of Vikram. He wanted progress not only in agriculture, but in every economic field on the principle of inclusive growth, so that the benefits will be widespread.

Fortunately for me he was a close friend and guide. We shared many visions of the India of the future. He came to Delhi all the way in December 1971 for participating in the inauguration of the Nuclear Research Laboratory which he helped to develop with financial support from UNDP.

When Vikram and I were going round in 1967 the wheat fields of Delhi state he was fascinated by the new

opportunities for wheat production in India. He mentioned to me that the news of this scientific breakthrough should be communicated to every farmer – whether large or small. He felt that the only way to achieve this is to mobilize the tools of television. He told me that we should go to the Prime Minister (Smt Indira Gandhi) and inform her about the exiting new opportunities in agriculture opened up by science and technology. He had good access to the Prime Minister and we went to her house to inform her about the possibility of launching an agricultural revolution starting with wheat and rice. She immediately mentioned to her Secretary that the Secretary Information and Broadcasting should be requested to launch a Krishi Darshan Programme on Doordarshan. She further said 'please inform him that it should be inaugurated on Republic Day'. This was done and Krishi Darshan became a powerful tool for the spread of knowledge concerning agricultural progress.

Vikram was very keen to develop a method of forecasting crop yields. Also he wanted to mobilize remote sensing for mapping the spread of diseases. We both decided that the first major application of remote sensing could be for studying the spread of the root wilt disease in coconut in Kerala. Later, we used it for making an advanced estimate of potential yield of the crops in Anantapur (dry farming) and Patiala (irrigated farming). The predicted and actual yields were very close to each other and this gave the push to the application of the Remote Sensing technology. The coconut root wilt disease became the first major plant disease to be studied in India in detail using remote sensing.

Among Vikram's unique qualities, I should mention that he desired to see progress not only in atomic energy, but in every field of agriculture, industry and medicine. He was not the one committed only to a narrow discipline in which he was interested. He encouraged his son (Kartikaya Sarabhai) to start an Institute for promoting harmony between human kind and nature. He laid the foundation at Sriharikota for starting a Centre for launching satellites.

When he suddenly passed away in Thiruvananthapuram in 1971, all scientists in this country felt that they had lost a friend, philosopher and guide. The best tribute we can pay to him is to follow his principle of harnessing science for public good.

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