Achievements and biodata of Anil K. Rajvanshi

Dr. Anil Rajvanshi's pioneering rural development work for the last three decades has spanned a whole spectrum of areas affecting the lives of rural population: renewable energy based cooking and lighting; power generation from agricultural residues; renewable fuel production from agriculture; electric cycle rickshaws; water purification and effluent treatment through the use of renewable energy. In this, **he was the first person to promote the use of high technology for rural development – an idea that is in vogue nowadays.**

Born and raised in Lucknow, Dr. Rajvanshi went to the United States to pursue higher studies at the **University of Florida** following his bachelor and master's degrees in Mechanical Engineering from **I.I.T. Kanpur**. After receiving his PhD in 1979, he taught at the University of Florida for two and half years and then did something that young men of his age and education rarely did those days. He came back to India in 1981 to apply his training for developing rural India. Dr. Rajvanshi established the energy and sustainable development work at Nimbkar Agricultural Research Institute (NARI) at Phaltan, Maharashtra.

His main achievements are:

1. He is the principal author (1996) of national policy on energy self-sufficient Taluka which is being managed by MNRE. This is the precursor of National Biomass power plant program and was probably the inspiration behind PURA program.

2. Dr. Rajvanshi's group pioneered the development of electric rickshaws in 1990s. He was the first person to initiate a program of e-rickshaws in the country-which are in vogue nowadays.

3. He developed a unique program of improving cooking and lighting technology for rural areas. Consequently, his group developed the multi-fuel Noorie lantern, multi-fuel Lanstove and the whole issue of rural lighting and cooking technology strategy for the country.

4. He pioneered in late 1990s the concept of using ethanol as cooking and lighting fuel for rural areas. This strategy has been copied and promoted all over the world by institutes like World Bank and cooking stove Alliance of UN.

5. In early 1990s, his group at NARI set up the world's largest program on production of ethanol from sweet sorghum. Their sweet sorghum varieties have been tested in about a dozen countries. This work helped start the national program on sweet sorghum managed by ICAR, Government of India and being carried out in 5-6 universities.

6. He and his group pioneered the development of loose biomass gasification system. NARI was the first Institute in the world to develop 500 kW (thermal) sugarcane leaves gasifier in 1995. This development help spawn such development efforts all over India.

7. He has pioneered the development of low cost solar-based water purifiers and concept of rural restaurants.

8. His efforts have shown how a small rural S&T Institute working on shoestring budget can pioneer technologies for rural India; and has inspired similar efforts in India and the world.

Awards, publications, etc.:

In 2001, Dr. Rajvanshi received the prestigious Jamnalal Bajaj Award for the use of science and technology in rural India from Dr. Manmohan Singh. In 1998, he became the second Indian to be inducted in the U.S.-based Solar Hall of Fame. His efforts led to NARI getting FICCI Platinum Jubilee Award in 2002 from Prime Minister Shri Atal Behari Vajpayee. His work on ethanol lanstove was given the 2009 Globe Forum Award for sustainability research in Stockholm from HRH Crown Princess Victoria. In 2014, **he became the first Indian** to receive the Distinguished Alumnus Award of University of Florida, USA and is listed as notable alumni of IIT Kanpur. He has delivered prestigious endowed lectures and his achievements have been covered in mass media both nationally and internationally.

Dr. Rajvanshi has served on many committees like Planning Commission, Advisory Board on Energy, MNRE, MERC, etc. He has more than 160 publications, some of them in prestigious national and international journals, **seven patents**, four books, and various chapters in books. Recently he has written a human-interest story of his work on renewable energy at NARI and has made this book freely available in the hope of inspiring youngsters to work on rural development.
He has lectured and given keynote addresses at many universities in U.S.A. and India. He regularly gives inspirational lectures to a large number of students of prestigious institutes like IITs, NITs, IIMs, etc. Recently he has also published his autobiography.

Besides the technology work, Dr. Rajvanshi has great interest in spirituality and holistic development as evidenced by his book on the subject and his various writings which appear frequently in Speaking Tree (Times of India) and Huffington Post. Dr. Rajvanshi believes that **spirituality with high technology** should be the mantra of India's development and practices what he preaches. Thus, he lives a simple life in rural Maharashtra while developing high technologies for rural India. In essence, he is a spiritual engineer!

Detailed CV (pdf)
Biodata in narrative form.