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Walking through clouds and rains

Medha Khole

My father, a man of ethics, paid the highest regard to values and education through his entire life. He had studied Science up to graduation and was a post-graduate in Law, the subject closest to his heart, which he studied with particular reference to human psychology. He was the chief mentor in my life. He never possessed any traditional ideas about the lives of his daughters, and encouraged me and my sister to acquire the highest education in our respective fields. He cultivated in me the urge to learn and enjoy the pleasure of learning. I was born and brought up in a Hindu Middle-class family in Pune. I studied in Marathi medium which is my mother tongue and when I passed the tenth class examination, I had a great inclination to study literature. But, I scored 88% marks in the examination and all my school friends had decided to study science so I too took admission for science at Fergusson College, which is one of the most reputed colleges in India. In the next two years, I developed very strong aptitude for science and I continued for B.Sc. Course in Fergusson College. It was during these three years period that I started liking Physics very much, particularly, Quantum Mechanics. My professors were sincere and taught us well. I

enjoyed the practicals. Though initially I used to be quite nervous, but I learnt the joy of discovering theory taught in class or read in books, coming alive in practical classes and the principles learnt being actually visible through experiments. After completion of B.Sc. in Physics from the University of Pune with a high academic record, I pursued the studies for M.Sc. in Physics at the University of Pune. My father's encouragement stimulated me for taking up this course.

After acquiring a First Class M.Sc. degree in Physics in 1989, I appeared for state and national civil services examinations. My primary interest was to serve society and I felt that the civil services would be the best way to do this. I enjoyed studying for these examinations, and was selected twice for Group A Gazetted Officer through the state civil examination. I worked for a brief period in the Income Tax Department. There was no connection to science in this job, but I enjoyed there also. Meanwhile, I was selected as a Group A Gazetted Officer by Union Public Service Commission and I opted for the India Meteorological Department. I underwent training in meteorology for one year and was introduced to the fascinating research world of meteorological science.

Meteorology is truly an interdisciplinary science involving Physics, Mathematics, Statistics, Geography, Environmental Science and allied fields. I got to understand the applied nature of the science of Meteorology and its direct bearing on all of us through the impact of weather and climate. After training, I worked as a weather forecaster in the Area Cyclone Warning Centre, Mumbai for about a year and a half and gained experience in various aspects of operational weather forecasting, including cyclone warning. Thereafter I was posted at the Meteorological Office at Pune in 1994 and worked in the Research Unit for over 8 years. During this tenure, I used to teach various subjects in Meteorology to trainees at the Regional Meteorological Training Centre of World Meteorological Organization (WMO) at Pune. This helped me understand basic concepts of Meteorology and provided me an opportunity to be in constant touch with the subject. I started working on the variability of Indian monsoons, and published my

research in national and international journals. I also presented some of the research results in various seminars, at national as well as international levels. I completed my doctoral thesis based on the variability of Indian monsoons and its linkage with the phenomenon of El Nino Southern Oscillation (ENSO) and submitted it to University of Pune, and was awarded the Ph.D. degree by University of Pune in the year 2001.

I have continued my research in the field of Monsoon Variability, ENSO, Natural Hazards and allied areas of Meteorology. At present, I work as the Director in charge of Weather Central, Pune. This centre issues weather forecasts for 36 meteorological subdivisions of India, twice daily, for all the 365 days of the year. The work of weather forecasting is extremely challenging. In a tropical country like India, the unpredictability of the weather is very high as the governing forces are different than those in the higher latitude countries. In view of the issues of Climate Change, Global Warming and related issues, public awareness in the area of Meteorology has grown tremendously in recent years. At present there are many misconceptions about the science of weather and climate in the society, owing primarily to inadequate information about the subject. From both these points of view, there is wide scope for outreach activities. I work in this area as well, delivering public lectures, and by writing articles.

I have not come across any particular difficulties while pursuing my career in science. I developed a strong liking for science and research during my college days; this widened my outlook and has developed in me logical and rational thinking and an objective outlook. A career in Science has also had a positive impact on my personality. Through sustained research interests and effort I was able to get the doctorate degree 11 years after the completion of M.Sc. course.

Had I not opted for education in science, I might have taken up the study of Marathi literature. My life, as it has turned out, is different, to some extent, from the one what might have been expected for some of my background and circumstances. I find that literature – a subject dear to me from my school days – provides me the strength to face difficult moments and offers me

perspective on my choices. I feel satisfied with my career so far and can see many goals to be achieved in the future. A scientific career has been very rewarding experience and I feel that I would not have liked to do anything else.