

LETTER OF MOTIVATION

I grew up in a farming family in the semi-arid district region of Haryana, India, a region known to be agriculturally backward compared to otherwise being agriculturally one of the best states in the country. Since my childhood, I have observed my father and uncles irrigating the fields at midnight and ploughing them before sunrise to produce a bounty of food to feed the country. Furthermore, I have been very close to Mother Nature through many natural phenomena, such as the birth of a massive Banyan tree from a minute seed and beautiful butterflies from dull pupae, which have always fascinated me profoundly. That is why I chose to study agriculture after completing high school.

After high school, my passion for agriculture led me to succeed in the entrance exam for Chaudhary Charan Singh Haryana Agricultural University (CCSHAU), one of India's top state agricultural institutes. During my undergraduate studies, I have taken a variety of courses related to agronomy, soil science, soil-water engineering, agricultural microbiology, crop physiology, and sustainable agriculture and gained solid conceptual knowledge. Additionally, I actively participated in numerous training sessions and workshops throughout my undergraduate career that covered a variety of subjects, including remote sensing, GIS, soils, and statistically analysing data.

Because I have a habit of starting to prepare early to achieve my goals, I chose to get some ground-zero experience and actively involve myself with my senior colleagues in their Master's and Ph.D. research work. I used to visit the field with them and collect soil and water samples, and finally, I joined the soil lab in the Department of Soil Science at my college. Since graduate school requires a lot of experimentation and research, I've spent a lot of time in the lab researching different physical, chemical, and biological properties of soil and water and examining soil profiles in the field to obtain real work experience. It gave me a foundation to learn more about conducting research, preparing reports, and writing analytically. In addition, with the help of a supervisor, I can independently organize and carry out field and laboratory investigations. I would take advantage of the chance to carry out the research ideas independently and produce successful outcomes. I'm particularly interested in lab research, where I can operate a variety of instruments and equipment for the plant, soil, water, and microbiological investigation. I am capable of conducting my statistical analysis and data interpretation. Additionally, I can successfully contribute to the writing of the results in the form of a paper. Once I am in the profession, I can make a significant contribution by resolving the difficulties of clients, farmers, and others.

The perfect blend of high-quality coursework and state-of-the-art research facilities offered in the graduate programme at the Pennsylvania State University makes it an ideal place to pursue a career in soil science. I believe studying here will broaden my horizons and satisfy my curiosity about cutting-edge research and advanced techniques and technologies. It will provide me with a global platform to meet and interact with experts and scholars of soil science, which will hone my expertise in this field and provide me with a global outlook. I can empathise with the research interests of Dr. Sridhar Komarneni. If given a chance, I would like to join his lab and work under his supervision. I would regard my admission to this esteemed institute as an honor, and I hope to match the high expectations of the university and add great value to the research being undertaken at the university.

I am aware that Pennsylvania State University expects very high standards from its students. I believe that my enthusiasm will enable me to meet those expectations. My consistency in all previous academic and extracurricular activities is what gives me confidence when I say this. What I would like to stress most, however, is the fact that I have that positive mental attitude, discipline, perseverance, and motivation that are necessary to drive any kind of research. I believe my

theoretical and practical knowledge of soils would actively contribute to the sustainability goal of this position. Therefore, I am very clear about applying to the Pennsylvania State University. An assistantship, besides providing financial support as seen fit by the university officials, would provide me with valuable research experience and place me in good standing in my career and future leadership roles.

Thank you for reading!

Sakshi Goyat