

Statement of Purpose

Masters in Plant Health in Sustainable Cropping Systems

I, Pranjal Saini, was born in the small town of Roorkee, Uttarakhand, India. My family had relocated to Varanasi in 2008, after my father's appointment as a professor in the Department of Chemical Engineering at Banaras Hindu University, one of the best engineering institutes in India. My mother was a supervisor at a government-run Anganwadi centre, providing childcare services to the rural community. My elder sister is currently pursuing a master's degree.

While in school, I received several prizes and certificates for competitions like the Science Fest, French Olympiad, etc. I performed well in mostly all my subjects, maintained high grades and was praised by my teachers for the effort and hard work I put in. I also had several co-curricular interests like playing basketball, chess, badminton, etc.

I completed my bachelor's from Banaras Hindu University, where I enrolled in the top-ranking agriculture program in India. Since my admission in 2020, I have maintained a high CGPA of 8.2 while studying subjects like Sustainable Agriculture, Agrometeorology and Climate Change, Soil Science, Plant Physiology, Statistics, Journalism, Remote Sensing, etc. I also obtained a keen knowledge of Calculus through the Mathematics class in my first-year curriculum, and also Statistics Methods, and Agricultural Informatics in my first and third year respectively.

From my Bachelor's degree, I bring a solid foundation in environmental sciences and resource management to the program. I have a deep understanding of agricultural systems, sustainable practices and utilization of natural resources. Throughout the course, I have developed proper analytical skills which are crucial in addressing complex issues facing us today. As a passionate advocate for sustainable agriculture, I am excited to apply for the Erasmus Mundus Master's Degree in Plant Health in Sustainable Cropping Systems (Plant Health). With a Bachelor's degree in Agriculture, I have developed a strong foundation in agricultural sciences, and I am eager to further my knowledge and skills in plant health and sustainable cropping systems through this esteemed program.

Growing up in India, I witnessed first hand the challenges faced by farmers due to pests, diseases, and unsustainable agricultural practices. These experiences sparked my interest in finding solutions that promote both environmental sustainability and food security. Throughout my undergraduate studies, I delved deep into various aspects of agriculture, including crop production, plant pathology, and integrated pest management.

The program's focus on sustainable cropping systems and plant health management is especially exciting for an Indian agriculture student like myself, as it directly addresses the pressing issues facing agriculture in India mentioned above.

The Erasmus Mundus Plant Health program aligns perfectly with my academic interests and career aspirations. The curriculum's interdisciplinary approach, which combines plant pathology, entomology, agronomy, and environmental science to address the problems facing modern agriculture, really appeals to me. Furthermore, having the chance to attend several internationally recognised universities will provide me with a richer educational experience.

The course curriculum can help me get a more comprehensive understanding of plant health and sustainable cropping systems. The foundation for more complex subjects like pest ecology, plant

disease epidemiology, and crop protection techniques will be laid by these modules. My ability to apply theoretical knowledge to actual agricultural scenarios will be enhanced by the addition of practical training and hands-on experience gained from laboratory work, fieldwork, and research projects. This will equip me with the skills necessary to effectively address the challenges of sustainable crop production.

I wish to pursue my Master's degree from an international university rather than from a university in my home country India. Even though there are a lot of prestigious universities here, the teaching techniques used are very theoretical. I want to experience a much more practical-focused program, which would help me further my goal of doing a PHD and going down the route of research. Moreover, the number of seats for admission are minimal compared to the country's population, making it a one-in-a-million chance to get admitted to such institutes. Also, the educational qualifications and experiences from an international university are more valued as it is backed up by international exposure and quality of studying. I believe that exploring overseas education would add value to the Indian context in multiple ways.

Therefore, for my career to flourish, I want the best education possible, which I can only receive from world-class educational institutes located abroad. The quality of education is far better in international universities as their methodology comprises more practical learning. Furthermore, the curriculum of Indian institutes is not updated regularly, which leads to students studying old content year after year. Hence, I would like to study abroad to get international exposure and better infrastructure for my education. The opportunity of being involved with multiple universities and research institutes would help provide insights into specific challenges and solutions which are relevant to India's climate, soil conditions, and agricultural practices. I can learn from the experiences of highly esteemed faculty and peers from around the globe, apply best practices to Indian agriculture, and build networks which would help me in furthering my goal of being a valuable asset to my country through the path of research.

Pests pose a major threat to Indian agriculture, affecting crops like rice, wheat, cotton, and vegetables. The program covers entomology, focuses on insect identification, biology, and control methods. I'll have the opportunity to learn about sustainable pest management approaches, such as biological control, cultural practices, and pheromone-based techniques, which are crucial for reducing pesticide use and conserving natural enemies. During my bachelor's degree, I learned of unsustainable farming practices like monocropping and intensive tillage which reduce soil fertility and productivity. Climate change has caused unpredictable weather patterns, which severely affect the yield of the crops grown in India. Such issues have made me realize how necessary it is to learn of better sustainable methods of agriculture and how to find ways of using our limited resources in an efficient way. In my course of Sustainable agriculture, I learned of a few ways on how to tackle the problems which we our nation, and at large, the world faces. But theory can only get you so far. I want to indulge in practical-based learning and make an actual positive impact on the society through my learnings.

After I graduate, I would like to further study and pursue a PHD because it would help me start or continue research in a field I'm passionate about and allow me to contribute to the world by finding solutions to the problems of exploitation which our resources face. I will be able to gain professional work experience and build a strong profile that will help me excel in my career. And eventually, studying from an international university will help me get even better and financially stable jobs.

Pranjal Saini