

A passion for science

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Growing up in a small town in Comilla, Bangladesh Dr. Nasrin Akter Ivy is the youngest among the three siblings. Born in an educated family, her parents recognized her great talents not only in academic studies but also in other areas like debate and cultural performances. They encouraged her to explore further and go beyond the boundaries. Ivy continued to excel in her academics.

Her own interest in agriculture stemmed from her curiosity about science when she was in high school. Ambition drove her to pursue Bachelor of Science in agriculture. She got married in the very first year of her BSC degree and soon her first child was born. A new struggle began for Ivy to maintain a balance between her family and education. But with immense support from her husband and family, Ivy conceded with outstanding grades and awards. Hence, when it came to choosing her major in Master's program, she decided to take the most challenging and feared subject: Plant breeding and genetics. Meanwhile, she joined Bangladesh Agricultural Research Institute (BARI) as the scientific officer and contributed in the variety development of maize.



Mounting up the ladder, in 2004 Ivy joined Bangabandhu Sheikh Mujibur Rahman University (BSMRAU) former IPASA, as the assistant professor and never had to look back. Even the birth of her second child could not stop her. Ivy said 'it was very difficult coming to this end being a mother of two young children. I can still remember those days working in the crop trial fields when my elder son waited at the end of the aisle gazing at his mother with sad eyes and

endless anticipation. I left cooked rice for my children to eat for lunch which got spoiled in the summer heat and kept them starved through the day. My children always supported me during my difficult times and even today. I owe a lot to them’.



Self-confidence and the scope of getting creative with research in developing new time demanding crop varieties for the country encouraged Ivy to pursue her PhD in Genetics and Plant Breeding. In 2008, she successfully completed the program with Bangladesh Prime Minister’s scholarship. Today, she is an esteemed Professor in the Department of Genetics and Plant breeding at BSMRAU, one of the most renowned agricultural universities in Bangladesh, teaching both undergraduate and postgraduate students, supervising research, conducting research programs on grain legumes and hybrid technology of aromatic rice, radish and other vegetable crops.



One of her most remarkable achievements in recent times was the development of the country's first aromatic hybrid rice variety also rich in zinc and iron. The variety is also twice as productive as its low-yield indigenous counterparts. The development came at a time when Bangladesh has been struggling in aromatic rice export market due to lack of price competitiveness owing to low-yield potentials.

In Bangladesh, stunting and underweight prevails about 37% and 31%, respectively in children of under-five. During the six years of research and trials Dr. Ivy looked for ways to add more micronutrients into the variety and conventional breeding through 'Biofortification' seemed to be the best solution. With a support from HarvestPlus, pioneer in Biofortification, the research became successful and the variety was released in 2016, named as 'BU Aromatic Hybrid Rice'. It has got 22mg/kg zinc and 10mg/kg iron compared to 15mg of zinc and 7/8mg of iron in most other available rice varieties. Dr. Ivy now acts as an advocate of Biofortification in many national and international forums especially at the policy level discussing nutrition for women and children.

Acknowledging the stereotype of women's capacity in contributing for science, Ivy said 'it is of great importance to raise the profile of women in science for a number of reasons. First, to inspire young women currently considering their options at school; second, to provide role models for women already studying science but uncertain whether they should pursue it further; and third, for justice. Women's representation in science and engineering declines further at the graduate level and yet again in the transition to the workplace. I strongly encourage my female students to pursue their passion in research and development'. She believes that it is still a lot more difficult and demands hard work and sincerity for women to

reach the same goal as men. Women have succeeded in science as a result of their drive, and often family support.