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## -Please let us know why you went to university or graduate school in Japan, why you decided to become a researcher, and how you came to work at NIES.

When I was an undergraduate student, I learned about the risks and mechanisms of global warming and climate change during a seminar held at Delhi University in India. In that seminar, I gained an understanding of how small islands and numerous countries are vulnerable to the effects of global warming, climate change, and various natural disasters. This real-world issue deeply fascinated me to do research on environmental issues so that I can contribute to science as a researcher and enhance the awareness to preservation of our natural environment through my research.

I chose to pursue my studies in Japan because it is known as a country prone to natural hazards, where many researchers and scientists focus on hazards-related study. This environment motivated me to select Japan and Hokkaido University as the ideal place to pursue my research goals as a PhD student. After successfully completing my PhD in Environmental Science from 2014-2017, I continued my research journey by joining Hokkaido University as a research fellow. In this role, I actively contributed to the Ecological Network Initiatives led by the International Long-Term Ecological Network (ILTER) and provided my expertise to the development of the Global Nutrient Cycle (GNC) Calculator Tool, a project led by the Global Partnership on Nutrient Management (GPNM).

I discovered a project at NIES that aligns closely with my past and current research interests. This project focuses on spatial and temporal biodiversity assessment and climate change adaptation, which is close to my research passions. The goal of this project and opportunity to contribute to such an important project motivated me to join NIES in June 2022.

#### -What's your specialty? Please let us know about details of your researches and works at NIES.

My past research has primarily focused on hazard assessment and forest landscape integrity using earth observation datasets. Currently, I am working on two projects focusing on the forest ecosystem at the national scale in Japan, 1) The first project aims to understand how different disturbance regimes and dynamics impact the forest ecosystem to minimize associated risks and 2) conducting research on tree phenology as an indicator of climate change response at the national scale in Japan, with the goal of understanding the impact of climate risk on tree phenology using various vegetation indices based on earth observation data. This research is closely aligned with climate change adaptation and biodiversity conservation goals, which are central to NIES projects. These two projects also align with global environmental agendas such as the Sustainable Development Goals (SDGs), the Post-2020 Biodiversity Framework, and the Paris Agreement.

# -Please tell us about any climate change adaptation efforts or related research in your home country

I would like to share two best practices/efforts currently taking place in India to mitigate climate risk and address climate change adaptation.

The first relates to Agro-forestry practices, which involve a land use system that integrates trees, crops, and animals. In 2014, India became the first country to adopt the National Agroforestry Policy (NAP), aimed at promoting employment, productivity, and environmental conservation. As a result, Agro-forestry practices now fulfill almost half of the country's fuelwood needs. This nature-based and ecologically friendly approach enhances the economic value of farmers, aids carbon-neutral growth, mitigates climate risks, and combats desertification.

The second effort focuses on mitigating climate change risks through a mass movement called Lifestyle for Environment (L.I.F.E). This initiative was introduced by Prime Minister Narendra Modi at COP26 in Glasgow in November 2021. India's message to the world is that mindful and deliberate resource utilization is essential, as opposed to mindless and destructive consumption.

### -Would you mind if we ask about your future prospects?

Well, environmental issues such as climate change risk and biodiversity loss are already visible around the world, However, the implementation and policies to combat such environmental issue is biased or not sufficient. Therefore, my future goal is to join a policy-oriented or policyimplementing research institution where I can apply my research experience on the ground and share my expertise with local communities around the world. This could include organizations like the UN or JICA, among others.