

## Summer Field School [Online] on MOUNTAIN ECOSYSTEMS AND RESOURCE MANAGEMENT Ivano-Frankivsk Region, Ukraine :: 19-28 September, 2021

### **DELEGATE PARTICIPANT'S PROFILE**



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**Highest Education** 

#### **Personal Statement**

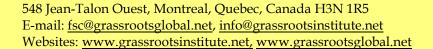
### Ph.D. (Botany)

Dear colleagues! First of all I extend my heartfelt thanks to the Himalayan University Consortium (HUC) for providing me this opportunity to participate in the forthcoming Summer School on 'Mountain Ecosystems and Resource Management' as a delegate participant. I hold a Ph.D. in Botany with specialization in Forest Ecology and Biodiversity from North-Eastern Hill University (NEHU), Shillong, Meghalaya, India. My Ph.D. thesis was on 'Structural and functional responses of landscape elements to anthropogenic land-use changes in Cherrapunjee plateau'. Currently, I am working at G.B. Pant National Institute of Himalayan Environment, North-East Regional Centre (Arunachal Pradesh, India) as a scientist. My academic interests include biodiversity, traditional knowledge systems of selected indigenous communities of northeastern India as well as rural livelihood development through sustainable utilization and conservation of local bioresources. I am also involved in various extension and outreach programmes such as green skill building programmes for local students and unemployed youths; training and capacity building of local farmers and women self-help groups (SHGs) in low-cost agricultural technologies, value-addition and marketing of local agricultural produce and species of wild



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	edible plants. Published articles in peer reviewed journals,
	book chapters and popular articles on various topics of
	ecology, biodiversity, medicinal plants and traditional
	knowledge. Also participated and presented papers in various
	national and international platforms.
Paper/Presentation Title	Agro-Biodiversity and Natural Resource Management in
(Unpublished Research or	Traditional Agricultural Systems of Northeast India
Review or Field Work)	
Keywords	Indigenous communities; Agriculture; Traditional knowledge;
	Sustainable farming
Abstract (100-300 words)	Physiographically, the North-eastern region of India can be
,	categorized as the Indian Eastern Himalaya covering about
	52% of the total Eastern Himalayas. The Eastern Himalaya is
	recognized as a 'Centre of Plant Biodiversity'; 'Eastern Asiatic
	Regional Centre for Endemism' and also comprises one of the
	'global biodiversity hotspots'. Moreover, the region is
	culturally diverse with over 39 million people and over a
	hundred culturally-distinct ethnic communities. Rain-fed
	agriculture is the main livelihood source supplemented by
	gathering of wild edible fruits and vegetables form nearby
	forests and farm fallows. The traditional ecological knowledge
	(TEK) associated with these practices is preserved in the form
	of stories, songs, folklore, proverbs, beliefs, rituals, community
	laws, local languages and other forms of oral traditions.
	Traditional agriculture in NE India follows mixed cropping
	pattern through multi-cropping, crop rotation, use of
	multipurpose N-fixing trees, along with protection of semi-
	domesticated and wild biodiversity, including medicinal
	plants, wild edible fruits and vegetables, fodder plants and
	other useful species. Presently, there has been a gradual
	shifting from subsistence cultivation to commercial agriculture
	driven by market forces and modernization, leading to
	transition from traditional agriculture to mono-culture
	plantations of cash crops. This has resulted in reduced
	cultivation of local crop varieties and disappearance of the
	associated TEK. Therefore, the present study attempts to
	review contribution of traditional agricultural practices to
	Teview continuation of traditional agricultural practices to





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	agro-diversity conservation and sustainable natural resource
	management. Relevant traditional practices such as include
	shifting (Jhum) cultivation systems, bamboo-drip irrigation,
	paddy-cum-fish cultivation, traditional agroforestry systems
	of different indigenous communities residing in different
	states of NE India were mentioned in this review. It is
	undeniable that TEK was developed by communities through
	many centuries by trial and error methods to conform to the
	local climate, topography, ecology and socio-cultural
	relevance to the concerned indigenous community. This
	knowledge, therefore, has a great scope for improvement by
	integration with scientific knowledge for transforming into
	sustainable agricultural systems in the face of climate change
	adaptation and mitigation of the vulnerable mountain
	communities of the Himalayan region.
More Information	www.gbpihed.gov.in/portal/view_users_profile.php?profile_
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