



Two Days National Seminar

Environmental Challenges and Sustainable Development in Himalayan Region in 21st Century





About the Seminar

Mountains, which encompass nearly 24% of the earth's total land surface and are home to approximately 14% of the world's population, have long been marginalized from the viewpoint of sustainable development of their natural resources and inhabitants. Mountain ecosystems, as well as mountain communities are threatened by the impacts of global environmental changes, particularly climate change. Depletion of natural resources, land use intensification and globalizing economy, lead to ecological imbalances and economic un-sustainability, and an increasing proportion of food, livelihood and health insecure populations in the mountains. This is clearly reflected in the deepening anxiety over the disruption of ecological balance and the well-being of their inhabitants. However, in recent years, our understanding of the problems of mountainous areas and our approach to their development have been changing fast. This seminar will help to understand the complex relationship between the environment and sustainable development in mountainous ecosystems and discover the adaptation strategies, practices, and major barriers to adaptation planning in the Kumaun Himalayan region. Also, this would pave the pathways for future academic and research-based studies.

About the College

Government Degree College Kanda is ocated in a small hillock village called Kanda, in district Bageshwar of the newly curved state Uttarakhand in Kumaun Lesse Himalaya. It is at a distance of 28 km from the nearest railhead Kathgoam, Haldwani Although being situated in a remote rural area, it abounds in the beauty of nature with plenty of forest cover, rich flora and fauna and faces snow-capped Nanda Dev provide opportunities for higher education in an unserved remote rural area. College offers UG courses in all three disciplines, Humanities, Science and Commerce and PG Political Science



 Traditional Water conservation and management measures in Uttarakhand.

LIVITINAN TITLIVILS

- Forest and Biodiversity (Forest Resource Management and Biodiversity Conservation)
- Soil conservation and land use Management Measure
- Climate change adaptation in water, agriculture, forest, food, health, livelihood and tourism sectors.
- Environment impact assessment.
- The nature-based solution to environmental problems.
- Sustainable livelihood and environmental management.

NATIONAL SEMIN on **ENVIRONMENTAL** CHALLENGES AND SUSTAINABLE DEVELOPMENT

TWO DAYS

IN HIMALAYAN REGION IN 21st CENTURY

(15-16 MARCH 2023)

Organised by

GOVERNMENT DEGREE COLLEGE KANDA (BAGESHWAR)

In collaboration with



UTTARAKHAND SCIENCE EDUCATION AND RESEARCH CENTRE (USERC), DEHRADUN





Environmental Challenges and Sustainable Development in Himalayan Region in 21st Century

on

(15-16 March 2023)

Venue: Conference Hall Govt. Degree College Kanda (Bageshwar)

Name:	
Designation:	A company and a
Department:	
Institution/ Organization:	<u> </u>
Address:	<u> </u>
Mobile No.:	
E-mail:	
Are you presenting a paper (yes/ no): Title of the research paper:	
Registration Google Form Link: <u>click here</u>	in I

Signature of the pa

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Important Dates:

Last date for submission of abstracts: 12th March 2023

Two Days National Seminar Report

Topic: - Environmental Challenges and Sustainable Development in Himalayan Region in 21st century.

Introduction:- Environmental Challenges such as climate change, loss of biodiversity, Lack of waste management, over use of natural resources, soil depletion, plastic pollution, melting ice caps, waste disposal and many more affect every human, animal, and nation on this planet. Sustainable development aims to promoting the kind of development that minimizes environmental problems and meets the needs of the present generation without compromising the ability of the future generation to meet their own needs. Sustainable development always encourages us to conserve and enhance our resources, by gradually changing the manners in which we develop and use technologies.

Objectives of Seminar:-

- 1. To create awareness among students, local People, Academician, Researchers about Environmental challenges.
- 2. To popularize the use of commonly available medicinal plants and to conserve the associated traditional knowledge in sustainable manner.
- 3. To introduce four pillars of sustainability social, human, economic, environmental.
- 4. To discuss with people about environmental problems and find out their solutions.
- 5. To give knowledge about the use of forest products for livelihood without harming environment.
- 6. To find out/discuss with entrepreneur about employment using minimum resources available in Himalayan region.

S. No.	Name of Resource person	Designation and Address	
1.	Prof. P.C.Tiwari	Emeritus Professor, D.S.B. Campus Nainital and Senior research Fellow ICSSR	
2.	Dr. K.S. Kanwal	Senior Scientist, G.B. Pant NIHE, Kosi Katarmal, Almora	
3.	Mr. Kishan Singh Malara	Environmentalist and social activist, Bageshwar	
4.	Mr. Chandra Shekhar Pandey	Entrepreneur, Chourso village , Garur Bageshwar	
5.	Mr. P.P.S. Verma	Tech. Off. CIMAP, Purara	
6.	Dr. Kamal Pande	Asst. chief tech. off. KVK Kafligair	

7.

Program Schedule (15thMarch 2023) (Day- 1) Venue: Rusa Hall, Government Degree College Kanda, Bageshwar

10:00-11:00	Inaugural Session hosted by Dr. Vinod Sah, Lightening of lamps &Welcome of Delegates Welcome address by Dr. Madhulika Pathak (Principal GDC, Kanda,		
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10:00-11:00	Welcome address by Dr. Madhulika Pathak (Principal GDC, Kanda,		
10:00-11:00			
10:00-11:00	Bageshwar)		
	Guest lecture by Prof. Anita Rawat Director USERC		
	Guest lecture by Prof. C.D. Suntha Director Higher Education		
	Theme presentation by Dr. Uma Pandey Padalia		
	High Tea (11:00-11:10)		
	Technical Session: I		
	(Hosted by: Mrs. Bharti & Ms. Neetu)		
C	hairpersons: Mr. P.P.S. Verma & Prof. Madhulika Pathak		
	Rapporteur: Dr. Hemlata Bisht and Sachin Agrawal		
11:10-12:00	Popular Lecture by Prof. P.C. Tiwari, Emeritus Prof. and Senior research		
	Fellow(ICSSR)		
12:00-12:30	Invited Lecture by Dr. K.S. Kanwal, Senior Scientist, G.B. Pant N.I.H.E.		
	Kosi Katarmal, Almora		
12:30-1:15	Keynote Address by Kishan Singh Malara, Environmentalist		
01:15-1:30	Oral / Poster presentation by Participants		
	Lunch Break(1:30-2:00)		
	Technical Session: II		
	(Hosted by: Mrs. Bharti & Ms. Neetu)		
(Chairpersons: Prof. P.C. Tiwari & Prof. Premlata Kumari		
	Rapporteur: Dr. Hemlata Bisht and Sachin Agrawal		
2:00-2:45	Invited Lecture by Mr. P.P.S. Verma, Technical Officer CIMAP, Purara,		
	Garur, Bageshwar		
2:45-3:15	Keynote Address by Mr. C.S. Pandey, Entrepreneur, Bageshwar		
3:15-4:15	Oral / Poster presentation by Participants		
	Tea Break		

First day activities:-

First day Seminar activities:- The first session of the two days National Seminar in Government Degree College, Kanda Bageshwar started with the lightening of lamp by Chief Guest Prof. P.C. Tiwari and Principal Government Degree College, Kanda Dr. Madhulika Pathak. The welcome address was delivered by Dr. Madhulika Pathak, Principal of Govt. Degree College, Kanda to the Director of USERC, Prof. Anita Rawat and Director of Higher Education Prof C.D. Suntha, Chief Guest Prof P.C. Tiwari, Invited distinguished speakers and all the participants were given a warm welcome in the welcoming address. Director of USERC Prof. Anita Rawat delivered best wishes for National Seminar and discussed about current situation of Environmental problems, Climate changes and depletion of Natural Resources and discussed about the sustainable utilization of natural resources. The Director of Higher Education Prof. C. D. Suntha, delivered his blessings and best wishes for the National Seminar and emphasized for sustainable development of Uttrakhand Himalaya. The theme and schedule of the two days National Seminar was presented by the Convener of the Seminar Dr. Uma Pandey Padalia. The Programme was hosted and by Dr. Vinod Sah Asst. prof. GDC, Kanda, Miss Neetu Asst. prof. GDC, Kanda and Mrs Bharti Asst. Prof. GDC, Kanda, Bageshwar.

Technical session I started with the lecture of Chief Guest Professor P. C. Tiwari Emeritus Prof. and Research Fellow ICSSR. He delivered his lecture on topic "Environmental Changes and Sustainable Development in Himalaya: Key Challenges and Possible Options." Where He discussed about the Process of Sustainable Development, Natural disasters generated by Climate change, migration, Natural Calamities caused by urbanization, in detail.

Main Point of lecture of Chief Guest Prof. P.C Tiwari:-

• He discussed that mountains cover nearly 24% of global area and are home for 14% world's population. Uttrakhand mountain have still largest proportion of world's forests and biodiversity. Mountains constitute source of freshwater for nearly 70% of the World's population. Mountains attract approximately 15-20% of the global tourism as strength them by communities have very diverse culture and rich traditional knowledge.

- Climate change is disrupting hydrological system of Himalayan Rivers and increasing frequency and severity of extreme events and increasing vulnerability of large population to water, food, health and livelihood insecurity in South Asia.
- He also focused that the need of identify the local institutions and strengthening them through capacity building, and improve access to and coordination among institution for sustainable development.
- He discussed Climate Change: An Emerging Threat to Natural, Economic necessary to identify and map local institutions and strengthen them through their capacity building, and improve to have coordinating in institution working on same cause to sustain environment.
- New Urban Agenda (NUA) should reinforce achievement of SDGs; COP 21 Climate Agenda; Sendai Framework for Disaster Risk Prevention and Addis-Ababa Action Agenda (AAAA) on Financing for Development. AAAA provides a new global framework for financing sustainable development by aligning all financing flows and policies with economic, social and environmental priorities.



Chief guest P.C. Tiwari, Emeritus Prof. and Research Fellow ICSSR

The invited speaker Dr. K. S. Kanwal, senior scientist G.B. Pant N.I.H.E. Kosi Katarmal has delivered his lecture on topic **"Biodiversity Conservation and Forest Management in the Himalayan Region under Changing Climate."** Where he discussed about the main causes of Global Climate change, forest fire, migration, urbanization and adaptation.

Main Point of lecture of Key note speaker Dr. K S Kanwal:-

- He focused that Himalayas are home to some of the most stunning landscapes in the world. They are also home to some of the most vulnerable communities that are being impacted by climate change. Climate change is one of the most significant challenges that humanity is facing today. It is already having a significant impact on our planet's ecosystems, and it is likely to get worse in the years to come.
- He discussed the Himalayan region is especially vulnerable to the impacts of climate change. The region is home to a vast array of flora and fauna, including several endangered species. Climate change is causing a shift in the distribution of these species, leading to their displacement or extinction. Additionally, the melting of Himalayan glaciers is leading to the formation of glacial lakes, which pose a significant threat of flooding to the surrounding communities.
- Sustainable development practices can help to reduce the impact of climate change on the region's ecosystems and communities. These practices include promoting renewable energy sources, adopting sustainable agricultural practices, and encouraging ecotourism.
- He discussed in context to Uttarakhand, several initiatives have been undertaken to promote sustainability and biodiversity conservation. The state government has launched several projects aimed at promoting sustainable tourism, including promoting home stays and eco-tourism activities. Additionally, the state has initiated several projects to protect and restore degraded forests and improve the livelihoods of local communities.



Senior scientist K.S. Kanwal, G. B. Pant institute Kosi Katarmal, Almora

Then third lecture of technical session I delivered by Famous Environmentalist and social worker Mr. Kishan Singh Malra popularly knows as "VRISHKYAKA MITRA". He has established Devki Vatika in large area for plant conservation. He discussed about the appropriate plantation time, seeding time, flowering and harvesting time and medicinal plants and their uses.

Main Point of lecture of Famous Environmentalist Kishan singh Malra:-

- He discussed that plant should be grown according to climatic conditions of that particular region and also grow different plant like Banjh, Oak, Uteesh, Devdar. These plants will conserve water in Himalayan region.
- Natural resources should be use for fulfillment of minimum requirement for saving them for future generations.
- Human population is increasing rapidly, due to this all natural resources being affected.
- He discussed, Muga silk plant is alternative option for employment as well as environmental conservation
- He also insisted to revive our old water resources like Naule, Dhare and other water resources for our future generations.



Famous Environmentalist and Social worker Kishan Singh Malra

At the end of technical session I participants presented their Research paper and discussed about climate change, causes of climate change, meaning of Sustainable Development. Lunch break has been taken on 1:30 to 2.00 pm.

First keynote speaker of the technical session II was Mr. C S Pandey. He is famous Entrepreneur and working on real ground of Sustainable Development. He produced different natural products

which are available in the market as "Him natural". He has started a "Home stay" namely Bhramri "Home Stay" by using natural recourses like bamboo tree and stones.

Main Point of lecture of Famous Entrepreneur Mr. C S Pandey:-

- He discussed about to get sustainable development by adopting integrating Farming, Organic farming and alternate options of non-biodegradable products.
- He discussed in detail about different kind of natural products, medicinal plants and practical aspects in human life.
- He discussed the method of making organic products like chamomile tea, lemon grass tea, "Bichhu Ghas" tea, Ashwgandha powder, kiwi and apple production and other home made products in Himalayan region
- He also discussed employment is a biggest problem for new generation. But there are many ways to decrease it. In upper Himalayan region many options for employment in the field of Medicinal and Aromatic Plants and integrated and organic farming. He also introduced to the participants to self made products "Him Naturals" to the market.



Famous Entrepreneur Mr. C.S. Pandey

In technical session II Next keynote speaker was Mr. P. P. S. Verma, Tech. Officer From Central Institute for Medicinal and Aromatic plants, Garur, Bageshwar. He discussed about climate change, the main reason for biodiversity loss in Uttarakhand. He also discussed about environment challenges, wild life sanctuaries, National parks, types of plantations. He delivered his lecture on topic "Cultivating MAPs for a Resilient Future: A Pathway to Sustainable Development and Biodiversity Conservation in Hills of Uttarakhand".

Main Point of lecture of Keynote Speaker Mr. P P S Verma:-

- He discussed that the hills of Uttarakhand, are home to a rich and diverse ecosystem, which provides a range of ecological services and supports the livelihoods of many local communities. However, the region is also facing numerous challenges, including climate change, unsustainable agricultural practices, and loss of biodiversity. In response, a growing movement is emerging to promote the cultivation and use of Medicinal and Aromatic Plants (MAPs) as a means of achieving sustainable development and biodiversity conservation..
- MAPs have been traditionally used for medicinal, culinary, and aromatic purposes, and have been an important part of the region's cultural heritage for centuries. By cultivating MAPs, local communities can generate income, reduce dependence on unsustainable agricultural practices, and contribute to the preservation of the region's unique ecological and cultural heritage.
- The cultivation of MAPs also has a significant impact on biodiversity conservation. Many MAPs are wild-harvested from natural forests, which puts pressure on these ecosystems and can lead to the depletion of certain plant species.



Keynote Speaker Mr. P. P. S. Verma, Tech. Officer, CIMAP, Garur, Bageshwar

(16thMarch 2023)

(Day- 2)

Venue: Rusa Hall, Government Degree College, Kanda, Bageshwar

10:00-10:30	Release of college magazine "PRAYAS" hosted by Dr. Vinod Sah			
	HIGH Tea (10:30-10:40)			
	Technical Session III			
	(Hosted by: Mrs. Bharti & Ms. Neetu)			
	Chairpersons: Prof. P.C. Tiwari & Dr. Vinod Kumar			
	Rapporteur: Mr. Parveen and Mr. Bharat Ram			
10:40-11:00	Lecture by Lecture by Mr. Kailash , Asst. Prof. Hindi (GDC, Kanda)			
11.:00-11:30	Invited Lecture by Dr. Kamal Pande, Asst Chief tech. Officer, KVK Kafligair,Bageshwar			
11:30-12:00	Kamgan, Bagesnwar Key Note Lecture by Dr. Vijay Arya, Asst. Prof. Botany(GDC, Kanda)			
12:00-1:30	Oral / Poster presentation by Participants			
	Technical Session IV			
	(Hosted by: Mrs. Bharti & Ms. Neetu)			
	Chairpersons: Prof. Madhulika Pathak & Dr. Kamal Pande			
	Rapporteur: Mr. Parveen and Mr. Bharat Ram			
2:00-2:45	Invited Lecture by P.C. Tiwari, Emeritus Prof. and Senior research Fellow(ICSSR)			
2:45-3:00	Oral / Poster presentation by Participants			
	HIGH Tea (3:00-3:15)			
	Valedictory address by Principal GDC Kanda			
0.15.4.00	Announcement of Awards by Prof. P.C.Tiwari			
3:15-4:00	Outcome of seminar and future recommendation by Mr. Parveen and Dr.			
	Hemlata Bisht Vote of thanks by Dr. Uma Pandey Padalia			
	Plantation and Tea Break			

Second day Activity of the National seminar:-

The national seminar was started with the welcoming of all guests by Dr. Vinod Sah Asst. Prof. Anthropology GDC, Kanda, Bageshwar. And offering a momento to honour them for their outstanding contribution in field of environment. The first session of the second day was started with the lecture of Mr. Kailash (Asst. Prof.) department of Hindi, G.D.C, Kanda entitled "**पर्यावरण के क्षेत्र में साहित्य का योगदान व महत्व**". He discussed the connection between Vedic literature, Poetry of Kalidas and Environmental Issues. The presentation was praised by all.

Technical session III was started under the chairmanship of Professor P. C. Tiwari and Dr. Vinod Kumar. The first lecture of technical session III delivered by Dr. Kamal pande (Assitant Chief Technical Officer and In charge Krishi Vigyan Kendra Kafligair, Bageshwar). He discussed about **Effect of Global Warming in different crops** and **Environmental CHALLENGES AND SUSTAINABLE DEVELOPMENT IN HIMALAYAN REGION IN 21st CENTURY**.

Main Point of lecture of Keynote Speaker Dr. Kamal pande:-

- His research outcomes was that in north western Himalaya majority of areas comes under rained agriculture, which is favourable for growth and development of white grubs. A grub is the larval stage of scarab beetle. More than 75 species of white grub have been recorded in Uttarakhand, but *Anomala dimidiat*, *Holotrichia longipennis* and *Holotrichia seticollis* have been reported as the dominant white grub species in this state. The damage caused by the grub under rained conditions may vary on an average 10-30 % to sometime complete crop failure
- He discussed as per his research 1.32 lakh beetle were trapped between June to Oct 2022 in the first year of installation of VL White Grub Beetle Trap -1. The data also showed that maximum trapping of white grub beetles was concentrated from second week of July to third week of August; while in first week of June and last week of October, it was the minimum.
- According to his research, Increasing a large number of larva's and insects in winter season in agriculture crop is a great sign of global warming.
- He discussed about Environmental Challenges and it method to minimize them by Community Participation and Continuous Technological Innovations.



Invited guest Dr. Kamal pande, Asst. Chief Tech. Officer, KVK, Kafligair, Bageshwar

In Technical session III the next lecture was delivered by Dr. Vijay arya (Assistant Prof Botany) present the lecture on topic **"Impact of anthropogenic activities on lichens of Uttarakhand".** He discussed about the effect of global warming on different species of lichen. The key points of lecture are followings.

- His research findings was that about 1.9 Kg per year lichen biomass is burnt with fuel wood in Dwarahat region. So there is an urgent need to conserve these economically potential lichens or else they may extinct due to such man made activities in the future.
- Grazing, fuel wood collection should be banned in degraded forests for their better regeneration.
- Alternative means of lichens such as leaves, barks and other ingredients of higher plants should be used for preparing spices, dyes, perfumes etc.

Then lunch was started on 1:30 pm to 2.00. After lunch Technical session IV was started on 2.00 pm.

The Chief Guest Prof. P.C. Tiwari Presented the lecture on Sustainable Development in technical session IV. He delivered lecture on International collaboration and associated it with the sustainable development. He elaborated different aspects of International collaboration i.e. opportunities for entering into International collaboration, short term,long term research and collaborative research with foreign institutions. He also explained about how to get financial support for participating in International conferences.

He also focused on method of proposal making to get different research fellowship and let us know about International agencies for funding like commonwealth scholarship and fellowship program, USEFI, DAAD, Japan foundation, British Council etc



Chief Guest Prof. P.C. Tiwari Delivering his lecture In National Seminar

Last of the technical session IV research paper presented by Researchers, faculties of different Colleges. The research papers were focused on different aspects of sustainable development, role of education and sustainable development, biodiversity and its conservation, environmental challenges in Himalayan region, impact of Rainfall variability in food production, adapting agriculture to climate change in Himalaya, water management as crucial factor for sustainability, water resource management in Himalayan Region, role of good agriculture practices in conservation of soil, impact of climate change on agriculture, natural disaster in Himalayan region, effect of water pollution on human behavior and other papers were on sustainable development and environmental challenges.

The valedictory session was Addressed by The Principal GDC Kanda, Bageshwar Dr. Madhulika Pathak. Vote of thanks given by Dr. Uma Pandey Padalia (Convener) and Mr. Kevalanand Pandey (co- convener).

The National Seminar aimed on Environmental Challenges and Sustainable Development in Himalayan Region in 21st Century was concluded with a pledge to save the Himalayas by sustainable development and conserving to the mother nature.

Gallery of National Seminar:







National Seminar on newspapers:-



संवाद न्यूज एजेंसी

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कांडा/बागेश्वर।

राजकीय महाविद्यालय कांडा में उत्तराखंड विज्ञान शिक्षा एवं अनुसंधान केंद्र के सहयोग से दो दिवसीय राष्ट्रीय संगोष्ठी का आगाज हुआ। संगोष्ठी में 21 वीं सदी में हिमालयी क्षेत्रों में सतत विकास और पर्यावरण संबंधी चुनौतियां विषय पर विचार विमर्श किया गया।

उच्चशिक्षा निदेशक डॉ. सीडी सुंठा और यसर्क की निदेशक प्रो. अनीता रावत ने वर्चुअल संबोधन करते हुए पर्यावरण संरक्षण के लिए सबको मिलकर काम करने पर जोर दिया। वक्ताओं ने पर्यावरण संरक्षण के लिए सामूहिक सहभागिता से कार्य करने पर जोर दिया। गोष्ठी के बाद महाविद्यालय परिसर में पौधरोपण भी किया गया।

राष्ट्रीय संगोष्ठी का शुभारंभ



राष्ट्रीय संगोष्ठी का शुभारंभ करतीं प्राचार्य डॉ. मधुलिका पाठक। संवाद

महाविद्यालय की प्राचार्य डॉ. मधुलिका पाठक ने किया। छात्राओं ने सरस्वती वंदना और स्वागत गीत प्रस्तुत की। प्राचार्य डॉ. पाठक ने कहा कि हिमालयी क्षेत्र में पर्यावरण संरक्षण के लिए निरंतर कार्य की जरूरत है। कि प्रकृति से संबंध स्थापित करने के यवाओं को पर्यावरण संरक्षण में विशेष भागीदारी निभानी होगी।

सेवानिवत प्राध्यापक प्रो. प्रकाश

चंद्र तिवारी ने कहा कि पर्यावरण संरक्षण के लिए लोगों को आवश्यकतानुसार क्रियाकलापों में परिवर्तन करना होगा। वरिष्ठ वैज्ञानिक डॉ. केएस कनवाले ने कहा बाद ही पर्यावरण संरक्षण और संवर्धन किया जा सकता है। वृक्ष पुरुष किशन सिंह मलड़ा ने

पर्यावरण संरक्षण को रोजगार से जोड़ने की भी की जाए कोशिशः : पांडेय

अधिक से अधिक पौधरोपण करने और पेड-पौधों की सुरक्षा संतान की तरह करने की बात कही। वक्ष पुरुष किशन सिंह मलड़ा ने अधिक से अधिक पौधरोपण करने और पेड-पौधों की सुरक्षा संतान की तरह करने की बात कही।

सीमैप के वरिष्ठ तकनीकी अधिकारी प्रवल प्रताप सिंह वर्मा ने जैव विविधता को बढ़ाने और उद्यमी सीएस पांडेय ने पर्यावरण संरक्षण को रोजगार से जोड़ने की बात कही। गोष्ठी में डिग्री कॉलेज गरुड़ की प्राचार्य डॉ. प्रेमलता कुमारी, डॉ. उमा पडलिया, केवलानंद, डॉ. विनोद साह ने भी विचार रखे।

VO TITI

Utilization Certificate

1. Title of the Proposal: ENVIRONMENTAL CHALLENGES AND SUSTAINABLE DEVELOPMENT IN HIMALAYAN REGION IN 21st CENTURY

2. Duration of the Proposal: 02 DAYS

3. Name of the Institution: GOVERNMENT DEGREE COLLEGE KANDA, BAGESHWAR

4. Principal Investigator: Dr. UMA PANDEY PADALIA

5. Sanction Letter & Date: 30TH SEPTEMBER 2022

6. Total sanctioned amount that was available for Expenditure (Rs.): 50000/-

7. Actual expenditure incurred during the financial year (upto 31st March): 50000/-

8. Balance Payment (Rs.): 5000/- (reimbursed)

UTILISATION CERTIFICATE

Certified that the amount of Rs 50000 against the sanctioned amount of Rs. 50000 with USERC letter no USERC/2022-23/349 for a period of 02 day has been utilized and remaining (unutilized/ to be paid) nil has been surrendered (vide Challan No.....).

Signature of PI Date: 17 03 2023

(for Govt. Institution) मजकीर महाविद्यालय काण्डा (बागेश्वर)

Sign, with Seal of Registrar/FO/AO Sign, with Seal of Charted Accountant (for private Institution)

Sign. With Seal of Head Date: भारतमय महाविद्यालग 17103/23 10 (21) 910

Statement of Expenditure

- 1. Sanctioned Letter No: USERC/2022-2023/349
- 2. Total Sanctioned Amount:50000/-
- 3. Grant received: 45000/-
- 4. Total Expenditure:50000/-

S.N.	Sanctioned Heads	Funds Allocated	Expenditure incurred	Balance
1.	T.A. & Honorarium	20000/-	20000/-	Nil
2.	Stationary & Banners	10000/-	10000/-	Nil
3.	Consumable items, Food-	20000/-	20000/-	Nil
4.				

Amount to be refunded/reimbursed (whichever is applicable): Rs 5000/-

Signature of PI Date: 17/03/2023 Sign. with Seal of Registrar/FO/AO (for Govt. Institution) गजकीर महाविद्यालय काण्डा (बागेश्वर) Sign, with Seal of Charted Accountant (for private Institution)

Sign. With Seal of Head Felt Internation Date: 17.03, 2023



Outcomes of the National Seminar:-

- The National Seminar on "Environmental Challenges and Sustainable Development in Himalayan Region in 21st Century" was an important event in which experts, scholars, and policymakers were discussed to the challenges the Himalayan region is facing in terms of environmental sustainability and sustainable development.
- The Himalayan region is one of the most ecologically sensitive areas in the world, and it is facing several environmental challenges that threaten its sustainability. These challenges include deforestation, land degradation, climate change, and biodiversity loss. These environmental challenges have serious implications on the livelihoods of people living in the region, as well as on the overall ecological health of the region.
- The objective of the Seminar was to explore ways in which sustainable development can be achieved in the Himalayan region, environmental challenges that are currently being faced. The seminar focused on topics such as sustainable agriculture, renewable energy, biodiversity conservation, and ecosystem management, Natural Resources.
- The National Seminar provided a platform for knowledge sharing and collaboration among experts, scholars, and policymakers working in the Himalayan region. It is hoped that the seminar lead to the development of practical solutions and strategies that can be implemented to address the environmental challenges and achieve sustainable development in the Himalayan region.
- Ultimately, the goal of the national seminar was to contribute to the preservation of the ecological integrity of the Himalayan region and to promote sustainable development that benefits both the people living in the region and the environment as a whole.
- MAPs may be better options for sustainable development in uttrakhand. These are an ideal option for farmers in the hills of Uttarakhand, where are able land is limited and prone to erosion. Additionally, MAPs require less water and fertilizer than other crops, making them more sustainable and less resource-intensive.
- In conclusion, climate change, biodiversity, and sustainability are critical issues that need attention in the Himalayan region of Uttarakhand. It is crucial to promote sustainable development practices and biodiversity conservation efforts to ensure the sustainability of the region and the well-being of its communities.

Principal Govt. Degree College Kanda, Bageshwar Dr. Uma Pandey Padalia P.I./ Convener (National Seminar) Govt. Degree College, Kanda