



# Department of Environmental Science



(DST FIST Assisted)

## University of Kashmir



RANK 53

RANK 56

NIRF 2022

QS BRICS 2020

in collaboration with

## Government Degree College for Women, Sopore

is organizing a five day workshop on

# "Science-Policy-Society Interface"



Sponsored by

### SERB-DST under Scientific Social Responsibility (SSR)

from

(5-9<sup>th</sup> December 2022)



Prof. Shamim Ahmad Shah  
Dean School of Earth &  
Environmental Sciences  
University of Kashmir



Prof. Nilofer Khan  
Hon'ble Vice Chancellor  
University of Kashmir  
(Chief Patron)



Prof. F.A. Masoodi  
Dean Academic Affairs  
University of Kashmir  
(Patron)



Prof. Fayaz Ahmad  
Head, Department of  
Environmental Science  
University of Kashmir  
(Convenor)



Dr. Sami Ullah Bhat  
Sr. Assistant Professor  
Deptt. of Environmental Science,  
University of Kashmir  
(Coordinator)



Prof. Bashir Ahmad Parray  
Principle  
GDC, Sopore  
(Convenor)



Dr. Showkat Subhan Mir  
Assistant Professor  
Govt. Degree College, Sopore  
(Coordinator)

### Organizing Secretaries

Dr. Arshid Jehangir  
Dr. Mohammad Muslim  
Assistant Professor's  
Department of  
Environmental Science,  
University of Kashmir

### Organising committee

Dr. Mohammad Irshad  
Dr. Shams Ul Haq  
Dr. Moieza Ashraf  
Dr. Gazala Qazi

# Speakers



Prof. F.A. Masoodi  
Dean Academic Affairs  
University of Kashmir



Prof. A. R. Yousuf  
Former Expert member NGT  
Formerly Dean Academic Affairs and Dean  
School of Biological Science, UoK  
Formerly Director CORD and  
Head, Dept. of Environmental Science  
University of Kashmir



Prof. Z.A. Reeshi  
Former Dean Research  
Dean school of Biological Science  
University of Kashmir



Prof. Irshad Nawchoo  
Dean Research  
University of Kashmir



Mr. Khursheed Ahmad Ganai  
(IAS, Rtd)  
Former Advisor to Governor,  
J&K



Prof. M.S. Bhat  
Department of Geography &  
Disaster Management  
University of Kashmir



Prof. B.A. Ganai  
Director North Campus  
University of Kashmir



Prof. Mohd. Farooq wani  
Central Research Facility  
Centre (CRFC) NIT, Srinagar



Prof. Manzoor Ahmad Shah  
Professor  
Dept. of Botany,  
University of Kashmir



Prof. Shakil Ahmad Wani  
Formerly  
Director Education  
SKUAST-K , Shalimar



Prof. Ghulam Jeelani  
Dept. of Earth Science  
University of Kashmir



Prof. Farooz Ahmad Bhat  
Dean, Faculty of Fisheries  
SKUAST-K, Shalimar



Dr. Mukhtar Ahmad Khanday  
Director South Campus  
University of Kashmir



Dr. Anzar A. Khuroo  
Dept. of Botany  
University of Kashmir



Dr. Sami Ullah Bhat  
Dept. of Environmental Science  
University of Kashmir



Dr. Arshid jehangir  
Dept. of Environmental Science  
University of Kashmir





# Department of Environmental Science

(DST FIST Assisted)

## University of Kashmir

in collaboration with

## Government Degree College for Women, Sopore

is organizing a five day (5-9<sup>th</sup> December 2022) workshop on



RANK 53  
NIRF 2022

RANK 56  
QS BRICS 2020



# "Science-Policy-Society Interface"

Sponsored by

SERB-DST under Scientific Social Responsibility (SSR)

## Valedictory function

9<sup>th</sup> December, 2022



Prof. Bashir Ahmad Parray  
Principle  
GDC, Sopore  
(Convenor)



Prof. Irshad Nawchoo  
Dean Research  
University of Kashmir  
(Chief guest)



Prof. Azra N. Kamili  
Nodal Person, Department of Botany,  
Central University of Kashmir.  
Formerly Dean Biological Science, Director  
CORD and Head, Department of  
Environmental Science, University of Kashmir  
(Guest of honor)



Prof. Fayaz Ahmad  
Head, Department of  
Environmental Science  
University of Kashmir  
(Convenor)



Dr. Sami Ullah Bhat  
Sr. Assistant Professor  
Dept. of Environmental Science,  
University of Kashmir  
(Coordinator)



Dr. Showkat Subhan Mir  
Assistant Professor  
Govt. Degree College, Sopore  
(Coordinator)

### Organizing Secretaries

Dr. Arshid Jehangir  
Dr. Mohammad Muslim  
Assistant Professor's  
Department of Environmental Science,  
University of Kashmir

### Organising Committee

Dr. Mohammad Irshad  
Dr. Shams Ul Haq  
Dr. Moieza Ashraf  
Dr. Gazala Qazi

# Report on 5 day Workshop on Science-Policy-Society-Interface

Sponsored by

**SERB-DST under Scientific Social Responsibility (SSR) of two research projects**

**“Status, Threats and Challenges: Urgent Plea for Protection and Management of Freshwater Springs of Kashmir Himalaya” (PI- Dr. Sami Ullah Bhat) and**

**“Assessment of the Trophic and Economic Evaluation of a Ramsar site Wular Lake, in Kashmir Himalaya” ” (PI Dr. Showkat Subhan Mir, Govt Degree College for women Sopore & CO-PI Dr. Sami Ullah Bhat )**

**(5<sup>th</sup> to 9<sup>th</sup> December, 2022)**

.....

On Monday dated 5/12/2022, the University of Kashmir, in collaboration with the Govt. Degree College for Women in Sopore, began a 5-day workshop on the science-policy-society interface. The Government of India's SERB-DST is funding the workshop as part of two research projects titled "Status, Threats, and Challenges: Urgent Plea for the Protection and Management of Freshwater Springs in Kashmir Himalaya" and "Assessment of the Trophic and Economic Evaluation of a Ramsar Site at Wular Lake, in Kashmir Himalaya."

The Honourable Vice Chancellor of the University, **Prof. Neelofer Khan**, presided over the inaugural session of the workshop. In her presidential address, Prof. Neelofer Khan talked at length about the importance of synchronising research work with the needs of society. She also congratulated the organisers for holding the workshop and stressed the need for formulating a roadmap for organising programmes with societal connections. She also advised that the research problem should be pursued in sync with demand from the Govt. and Society and the research deliverables and recommendations thereof should be shared with the concerned Departments/agencies for its application and implementation. HVC also highlighted new initiatives and collaborations being undertaken by the university vis-à-vis the promotion of connect between Institution and the Society.

**Prof. Farooq Ahmad Masoodi**, Dean Academic Affairs at KU and workshop patron, emphasised the importance of restructuring research work to make it more "need-based" so that scientists can communicate with society. Prof. Shameem Ahmad Shah, Dean School of Earth and Environmental Science at KU, praised the SSR initiative in his address. He impressed upon the participants the need to collaborate with the local communities to identify their needs and make research more citizen centric.

**Prof. Fayaz Ahmad**, who is the Head of the Department of Environmental Science and the Workshop Convenor Director, greeted everyone and said that both faculty members of the Higher Education department and research scholars will benefit from the workshop.

PI of the project /Coordinator workshop **Dr. Sami Ullah Bhat**, provided an overview of the SSR initiative of the SERB-DST wherein the spirit of whole SSR is to infuse research enthusiasm and culture and offer infrastructure facility that vary widely throughout the country and scientific services to broad spectrum of **less endowed stakeholders** was elaborated. An important justification for **SSR** is the moral obligation of the scientific community of “**giving back**” the benefits that they derive from science to **less endowed stakeholders of science, technology and innovation as well as society.** The relationship between science and society is a two-way engagement and therefore **SSR is not only about scientific impact upon society but also about social impact upon science.** SSR as desired would **therefore strengthen the knowledge ecosystem and bring efficiency in harnessing the benefit of science for the society.** It would also bring about an attitudinal change in the mind-set and the work style of the scientific community, thereby enhancing the social outreach of our scientific community. Consequently, **SSR has the potential to fundamentally transform society by improving the lives of our citizens towards building a self-reliant Society.** Dr. Bhat laid emphasis that despite making a good progress in by country in STI (Science, Technology and Innovation), the transfer of scientific knowledge and its true benefits to society **remains an area of concern.** Therefore building a strong connection between science and society **assumes extraordinary importance.** Building synergy among all stakeholders and developing linkages between science and society **therefore should be accorded the top priority.** Dr. Bhat further drew the attention of concerned authorities during his introductory remarks that SERB- SSR guidelines 2022 have thrown a new challenge to the institutions for identification of Knowledge based institutions called **Anchor Scientific Institution (ASI)** for achieving SSR goals and prepare its SSR code of Conduct that **ensures transparency, diversity and equity.** In this scenario, it will not be out of place here if the competent authorities can think of having a separate **Dean**

**Policy, Consultancy and Outreach** in the University of Kashmir Srinagar as it exists in many Universities, IITs and NITs across the country. Dr Showkat Subhan Mir, Sr. Assistant Professor and PI/ Coordinator of the project presented Vote of thanks.

The inaugural session—apart from faculty members of the Environmental Science Department—was attended by various faculty members of different Departments of the University and research scholars and students from the Department of Environmental Science, Zoology, and CORD. 23 faculty members from different Govt. Degree colleges of Kashmir, UT, have registered and participated in the workshop.

Some of the key takeaways from the lectures of the resource persons and discussion thereof are as follows;

**Prof. F. A. Masoodi (Dean academic affairs KU)** initiated his presentation by defining the concepts of science policy versus science for policy and how these two aspects can be correlated to the society in general. Prof. Masoodi advocated that the scientific policy should be evidence based and all the stakeholders should be consulted while formulating these policy guidelines. Prof. Masoodi impressed upon the audience of workshop to participate in the feedback exercise by offering their valuable inputs regarding the various policies related education. Academics, research and outreach. Research findings must be shared with media persons, common people, and decision makers so that the benefit of the acquired knowledge can go to the grassroot level.

**Prof. A.R. Yousuf**, while talking about the “Implementation of Environmental Management Plan for Developmental Projects and role of Society” asserted that we need to be environmental stewards to encourage environmentally beneficial forms of development/ economic growth and to discourage the environmentally harmful activities. The learned speaker also stressed upon the development of research ethics/ professional ethics amongst the individuals, organizations undertaking the EIA so that the process serves the ultimate cause. Lastly, the speaker emphasized that there is need to sensitize the Society, NGOs and other Social Organizations to get actively involved in the EIA process to ensure sustainable Socio-economic development.

**Prof. Manzoor Ahmad Shah, Director DIQA and Professor Department of Botany, University of Kashmir**

The learned professor talked extensively on how science makes sense to common people and society. He highlighted the role of various global platforms such as IBPES, IPCC, Citizen Science platforms, Social media platforms, Science Policy Interface platforms etc. in

promoting the citizen science and the ways to utilize them for the greater benefit of the society and environment.

Professor Manzoor focused on the divide between science and society and urged on the need to engage with different media platforms for popularization of science and to bridge the gap for betterment of societies.

**Dr. Anzar A. Khuroo, spoke about the “Linking science to society: Learnings from last two decades of research”**

Dr. Anzar A. Khuroo stressed the importance of biodiversity conservation, noting that its services still contribute 50% of the world's GDP. Dr. Khuroo also discussed about the first-ever collaboration between IPBES and IPCC selected scientists in tackling biodiversity loss and climate change, as both are driven by human economic activities and mutually reinforce each other, and neither will be successfully resolved unless both are tackled together.

**Professor Ghulam Jeelani** while speaking in the workshop provided thoughtful insights about the spring ecosystem. He explained in detail the role of various factors like climate change, rapid urbanization, deforestation, land use change and change in precipitation in the drying up of a number of springs across Himalayan range and how it puts a population of 50 million people at the risk of water scarcity (water shortage) and loss of livelihoods. Prof. Jeelani also discussed in detail various measure like identification of recharge areas, artificial recharge, rainwater harvesting, increasing water pore interaction time and construction of check dams for the restoration and rejuvenation of springs

**Prof Zafar A Reshi (Dean Biological Sciences, KU)** while speaking on the “Science-policy interface in Jammu and Kashmir: Issues and Importance” stated that the human beings are facing several social ecological and economic challenges having unequal impacts on humans and thus requiring urgent and integrated responses. Learned speaker mentioned participatory model the preferred one to strengthen Science-Policy-Society interface. He also pointed out the reasons for this weak interface in the Institution like lack of motivation, relevance to policy and society, training in identification of research problem, pursuing good research problems, funds, enough quality researchers. Lack of vibrant and accountable institutional framework needs the attention of authorities which can deliver on long term basis on Science-Policy-Society interface.

**Prof. Farooz Ahmad Bhat, Dean, Faculty of Fisheries SKUAST-K,** spoke about the "Fisheries Sector in J&K: Towards Diversification-Means of Livelihood and Entrepreneurship." Prof. Farooz Ahmad Bhat began by discussing the extent and significance

of fish in a global context. He later on expanded on several facets of fish farming in respect to the present circumstance.

Prof Farooz Ahmad shared detailed insights about the integration of modern technologies to boost fish output in this region.

**Prof. Irshad Ahmad Nawchoo, Dean Research, University of Kashmir** during his presentation in the workshop discussed the concept of NEP, 2020 – a policy for seamless shaping of science, technology and innovation ecosystem, which is cutting-edge, collaborative, inclusive, relevant and aligned to our national priorities, to create new opportunities today while addressing the challenges of tomorrow. He said that NEP also emphasizes on developing a connection between academia, Research and Development, industry, start-ups etc. and most importantly, it focusses on concept of “science for people” and “people for science”. Prof. Nawchoo stated that the Society-science-policy interface is the key to an inclusive world.

**Prof. Mohd Sultan Bhat** while delivering his talk on “Community Awareness and Participation in Environmental Decision Making Progress” highlighted the theoretical approaches of public participation in the Environmental Decision Making. He discussed the two perspectives of the public participation, Process perspective and Substantive perspective. He further threw light on the concepts of rational elitism, corporatism, liberal democracy and Deliberative democracy. Lastly, he discussed the various problems of the public participation in environmental decision making, which included population, poverty, regional imbalances, illiteracy, low- level of technological pool and socio-economic backwardness.

**Prof. (Dr.) Shakil Ahmad Wani (former Director Education, SKUAST-K)** gave a detailed lecture on the basic scientific virtues for developing scientific acumen in research. The learned professor, who is an accomplished microbiologist, maintained that the basic virtues for developing scientific temper and outlook are a clear vision, deep thinking, speed of work, intensity of purpose, and confidence to project one’s results. The respected speaker said that knowledge and clear comprehension lead to wisdom which awakens the third eye within oneself to look for answers to problems.

**Prof. Bashir Ahmad Ganai (Director North Campus, KU)** spoke about the “Role of scientists in formulation of public policy” Whereas **Dr. Mukhtar A Khanday (Director South Campus, KU)** discussed at length about the role of mathematical modelling in decision making.



The workshop culminated with the certificate distribution among the participants. The valedictory function was attended by Prof. Bashir Ahmad Parray (Principal, GDC, Women's Sopore), Prof. Azra Nahaid Kamili (Nodal person, Department of Botany, Central University of Kashmir) and Prof. Irshad A Nawchoo (Dean Research University of Kashmir).

### **Summary of the report on workshop titled Science- Policy-Society Interface**

The workshop was held under the SSR initiative of SERB-DST of two research projects entitled "Status, Threats, and Challenges: Urgent Plea for the Protection and Management of Freshwater Springs in Kashmir Himalaya" and "Assessment of the Trophic and Economic Evaluation of a Ramsar Site at Wular Lake, in Kashmir Himalaya." which aims to spread the benefits of research beyond the borders of the direct beneficiaries especially to schools and colleges, universities and institutions in and around the location of the research. The initiative intends to effectively utilize the R&D infrastructure and expertise of researchers to benefit other S&T stakeholders and the society and embed a participatory, inclusive, and sustainable culture of social responsibility among research grantees. The SSR initiative focuses on infrastructure sharing, mentoring, and training, leveraging the experience of accomplished researchers to young mentor faculty, researchers, and aspiring research students, fostering research culture through research grantees who can act as facilitators in motivating students to pursue a research career, public outreach, and knowledge dissemination.

During the workshop the speakers gave an insight into the different stakeholders of any developmental project and emphasized that it is the public which is the most important and vital stakeholder amongst all as all the developmental projects in addition to the stated goals and objectives have unwanted consequences or social costs which are unplanned, unwanted and unanticipated. Hence, there is need to involve the society in environmental planning and decision making in order to minimize the negative societal impacts of any developmental activity/ project. The speakers further asserted that there is a requirement of environmental stewardship to encourage environmentally beneficial forms of development/ economic growth and to discourage the environmentally harmful developmental activities, which depends on how well we manage the earth's life support systems for our benefit and for the rest of the biosphere. The learned speakers of the workshop stressed that socioeconomic developmental race has caused shrinking of natural resources resulting in topographical changes of the planet and hence making the environment inhospitable for the biota. Unanimously most of the speakers stressed that our efforts of making this world a technological wonderland and

developed planet, we have landed ourselves in a world of waste with a variety of stresses like eutrophic stress, exploitive stress, disruptive stress and chemical and economic stress.

Further the resource person apprised the audience about the responsibilities/ duties of the Society, NGOs, and Social Organizations to make this process a success. The speakers pointed out that the cooperation and coordination of the common masses, NGOs and other Social Organizations are lacking which is a serious concern. The speakers emphasized that there is need to sensitize the Society, NGOs and other Social Organizations to get actively involved in the policy making process to ensure sustainable Socio-economic development. The resource persons also urged involving common man in the scientific research by integrating his traditional knowledge with the modern science. The scientific community was also stressed upon to share their findings with media persons, common people, and decision makers so that the benefit of the acquired knowledge can be shared. The speakers while sharing the common objective spoke about NEP, which also emphasizes on developing a connection between academia, Research and Development, industry, startups etc. and most importantly, its focus on the concept of “science for people” and “people for science” objective.

During the workshop it was focused to lay stress on the divide between science and society and it was urged to engage with different media platforms for popularization of science and to bridge the gap for betterment of societies. It was also highlighted that there is a close relationship between Government, academia, industry and society in science policy formulation. It was also emphasized that there is need to encourage environmental volunteerism, enhance science communication and organize more outreach programs.

Coordinator Workshop

**Dr. Sami Ullah Bhat**

## Major specific recommendations from 5 day Workshop on Science-Policy-Society-Interface

1. Presently there is a weak Science-Policy-Society interface in the institution and there is a great scope and need to organize such events on the said theme to give visibility to the research being conducted in the University.
2. The weak Science-Policy-Society interface is primarily because of lack of motivation, relevance to policy and society, training in identification of research problem, pursuing good research problems, funds, enough quality researchers. This can be addressed by having a vibrant and accountable institutional framework which can deliver on long term basis on Science-Policy-Society interface.
3. Such events can further enhance our network, linkage, outreach and understanding regarding the relevant research problems to be pursued in the University.
4. Despite having rich research ecosystem in the University, the transfer of scientific knowledge and its true benefits to society remains an area of concern which can be addressed by identifying the research strongly linked with societal needs.
5. SERB- SSR guidelines 2022 have thrown a new challenge to the institutions, it will be in the interests of this institution to have separate **Dean Policy, Consultancy and Outreach** in the University of Kashmir Srinagar as it exists in many Universities, IITs and NITs across the country.

Coordinator Workshop

**Dr. Sami Ullah Bhat**

## LIST OF PARTICIPANTS

Five days workshop organized by Department of Environment Science, University of Kashmir Srinagar in collaboration with Govt Degree College for women Sopore on Science-Policy-Society interfaces under Scientific Social Responsibility (SSR) from 5-9 December 2022.

S.NO.	Participant Name	Affiliation	Phone number	e-mail ID
1.	Dr. Ab. Qayoom Mir	GDC, Hajin	9906736790	<a href="mailto:qayoommir@rediffmail.com">qayoommir@rediffmail.com</a>
2.	Dr. Shazia Lone	GDC, Kupwara	9906835333	<a href="mailto:loneshazia@gmail.com">loneshazia@gmail.com</a>
3.	Dr. Ummer Rashid Zargar	GDC(B), Anantnag	7006876568	<a href="mailto:uzsummer2@gmail.com">uzsummer2@gmail.com</a>
4.	Mr. Sayar Yaseen	GDC, Shopian	7889311835	<a href="mailto:sayarevs@gmail.com">sayarevs@gmail.com</a>
5.	Mr. Imran Qadir	GDC(W), Anantnag	7006746912	<a href="mailto:simranqadir@gmail.com">simranqadir@gmail.com</a>
6.	Dr. Parvaiz Ahmad	GDC, Tangdhar	9596266750	<a href="mailto:parvaiz.ak@gmail.com">parvaiz.ak@gmail.com</a>
7.	Mr. Haroon Rashid Boked	GDC, Tangdhar	9596034243	<a href="mailto:profhrboked@gmail.com">profhrboked@gmail.com</a>
8.	Dr. Bazigha Badar	Amar Singh College, Sgr.	9419526810	<a href="mailto:badarbazigha@gmail.com">badarbazigha@gmail.com</a>
9.	Dr. Aftab Ahmad Bhat	GDC, Beerwa	9419552539	<a href="mailto:aftabbaziz@gmail.com">aftabbaziz@gmail.com</a>
10.	Dr. Asiya Nazir Khan	GDC, Pattan	9906717598	<a href="mailto:asiyashereen@yahoo.co.in">asiyashereen@yahoo.co.in</a>
11.	Mr. Mohammad Salim Bhat	SKM College, Zakura	9419086966	<a href="mailto:saleem8282@gmail.com">saleem8282@gmail.com</a>
12.	Mr. Mudasir Yousuf	GDC, Chadoora	7006375567	<a href="mailto:malik9204@gmail.com">malik9204@gmail.com</a>
13.	Dr. Gh. Mohi Ud Din Gujree	GDC(W), Sopore	9797702113	<a href="mailto:dggmdin@gmail.com">dggmdin@gmail.com</a>
14.	Dr. Viqar-u-nisa	North Campus, KU	9906629235	<a href="mailto:nissaviqar@gmail.com">nissaviqar@gmail.com</a>
15.	Dr. Rayees Ahmad Magray	GDC(W), Kupwara	9906444943	<a href="mailto:rayeesmagray006@gmail.com">rayeesmagray006@gmail.com</a>
16.	Mr. Mohmad Abass Bhat	GDC, Bandipora	9906860606	<a href="mailto:abbassali14@gmail.com">abbassali14@gmail.com</a>
17.	Dr. Qazi Ashiq Hussain	S. P. College, Sgr.	9797187844	<a href="mailto:qahussaink@gmail.com">qahussaink@gmail.com</a>
18.	Mrs. Abroo Ali	GDC Allochi Bagh, Srinagar.	7006442816	<a href="mailto:abrooali98@gmail.com">abrooali98@gmail.com</a>
19.	Mr. Zahid Hussain Najar	GDC, Handwara	7006616116	<a href="mailto:profzahnajar@gmail.com">profzahnajar@gmail.com</a>
20.	Mr. Abdul Basit Reshi	GDC, Dooru	7006576043	<a href="mailto:shymabasit@gmail.com">shymabasit@gmail.com</a>
21.	Dr. Altaf Ahmad	Zoology, KU	7006058267	<a href="mailto:altaf@uok.edu.in">altaf@uok.edu.in</a>
22.	Dr. Javeed Ahmad Parray	GDC, Iddgah	7051504187	<a href="mailto:javid06@gmail.com">javid06@gmail.com</a>
23.	Dr. Malik Zubair Ahmad	Earth science, KU	9622402376	<a href="mailto:malikzubair.amu@gmail.com">malikzubair.amu@gmail.com</a>
24.	Mr. Zubair Ahmad Wani	GDC, Kulgam	7006562615	<a href="mailto:wanzubair666@gmail.com">wanzubair666@gmail.com</a>
25.	Dr. Sartaj Ahmad Ganaie	GDC(B), Anantnag	9906808993	<a href="mailto:sartajsultan@gmail.com">sartajsultan@gmail.com</a>
26.	Mr. Mansoor Ahmad Lone	GDC, Ganderbal	7006934941	<a href="mailto:mansoorlone28@gmail.com">mansoorlone28@gmail.com</a>