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## **Data Analysis on Capacity Building for School students in Dehradun on Ganges River**

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### **ABSTRACT**

It covers the proceedings of the capacity building programme as developed for school students. The workshop was conducted in various schools in which they were told about key aquatic species in River Ganga such as turtles, dolphins, fishes, crocodiles, gharial, etc. A questionnaire was handed over to students to fill their answers. The major aim was to ascertain their outlook, awareness and perception towards River Ganga. Findings depict that maximum are aware of 'Namami Gange' Programme. Maximum of them believes River Ganga to be important for its biodiversity. Observation shows that River Ganga is a habitat for various species. Most of them have participated in rituals at River Ganga such as Ganga Arti, death ceremony, mundan sanskars, etc. Many of them have taken bath in River Ganga. Maximum of them are of the view that its water is not clean.

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### **INTRODUCTION**

Capacity refers to the capacity to carry out specific duties and roles in an effective, efficient, and long-term manner. Individually and collectively, sufficient capability at both the individual and organizational levels is critical to achieving any growth goal.

Individuals, organizations, and societies gain, strengthen, and sustain the ability to create and achieve their own development goals through time through the process of capacity development. Capacity building is defined as "improving students' abilities to act sensibly and efficiently under their own direction." The Ganga is a sacred and historically significant river in India. The Ganges meets the Alaknanda, Bhagirathi, and Devprayag rivers in Devprayag. The Ganga, India's longest and second-largest river, is the world's second-largest river. About 40 percent of India's population lives in 11 states that rely on the Ganga for drinking water and agricultural irrigation. The Ganga is home to a rich range of plants and animals, including the severely endangered Ganges River Dolphin (*Platanista Gangetica Gangetica*) and the endangered Ganges River Dolphin (*Platanista Gangetica Gangetica*) (*Gavialis Gangeticus*). The Ganga river basin has a high biodiversity, with over 140 freshwater fishery species, 90 amphibian species, and five bird-supporting habitats found nowhere else on the planet. In the upper Ganges River, 40 zooplankton species, four crustaceans, 15 mollusks, 51 insects, 83 fishes, four Riverine Ecosystem Indicator Species (Gharial and Dolphin), 12 freshwater turtles, two crocodiles, and 48 aquatic bird species have been identified.

Dam building, pollution, rituals, agricultural and industrial waste, and other factors all pose a threat to the Ganga. They think that it is the responsibility of every Indian citizen to keep the Ganga clean so that the declining aquatic species can be recovered and future threats avoided. It is also the obligation of the government and relevant authorities to take the required steps to address this issue.

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### **LITERATURE REVIEW**

One of the cornerstones of development is the concept of capacity building (Blokland, et al., 2011). "Increasing the ability of people and institutions to do what is needed of them" is what capacity building entails (Honadle, 1981). Capacity building usually focuses on specialized management challenges, such as financial management, organizational growth, grantsmanship, and service integration, depending on the scope and interests of the capacity builders. Capacity building is an adaptable and endogenous process that must be tailored to the aims and requirements of the target group (Ubels, 2010). The terms 'capacity building' and 'capacity development' refer to a variety of actions that can be used to grow or change the direction of your organization. Capacity development is a broad notion that encompasses a variety of challenges, including not only the development of individual talents, but also relational capacity, or the interaction between actors (Woodhill & Ubels, 2010). Although the notion is most widely employed in NGOs for international development, the principles, ideas, and practice are applicable to any non-profit organization. It is a technique for continual improvement aimed at establishing a long-term organization. Capacity building is a set of activities, initiatives, and results aimed at improving and

utilizing people's, organizations', and institutions' skills and capabilities at the local, national, regional, and global levels, with the goal of sustaining progress (Morshed & M. M. R., 2006). It is a broad concept that encompasses a number of topics, including not only the development of individual skills, but also relational capacity, or the interface between actors (Woodhill & Ubels, 2010). It is the process of enhancing and developing human and institutional resources. It is basically about increasing organizational effectiveness, knowledge, and skills.

The existence of indicator species like the Gharial and Dolphin in the Ganges has been jeopardized by high demand and competition for natural resources on the planet (Behera, et al., 2014). Human activities in the Ganga Basin are threatening various riverine indicator species, including direct slaughter, indiscriminate fishing, and river pollution. Throughout the last several decades, human perturbations and anthropogenic disturbances have resulted in dramatic population decreases in a variety of species (Behera, et al., 2014). It is thought to be heavily polluted in current times. In 2007, it was ranked as the sixth most polluted river in the world (Rai, 2013). The pollution levels in the Ganga contribute 9-12 percent of Uttar Pradesh's total disease burden (Rai, 2013). The amount of coliform bacteria that develops as a result of dumping human and animal bodies exceeds 2 lakh MPN, compared to the National Water Quality Standard of 5000. (Rai, 2013).

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## OBJECTIVES

- 1) To explore students outlook towards Ganga's importance as well as direct and indirect services received thereby.
- 2) To assess analytical and general ability of students regarding 'Namami Gange' Programme and ecological balance of Ganga Basin.
- 3) To realise the importance of Government Planning and Action Policies to rejuvenate its original pristine status.

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## SIGNIFICANCE OF THE STUDY

Capacity Building is the need of the hour to ensure that the students developed as enlightened citizens and also participate in development missions. Passing out from the educational institutions, certain capacities are required to be built in them. The ingredients for capacity building must be embedded right from the beginning of the student's life from primary education to higher education. Special attention should be drawn to well elaborated and adapted Capacity Development.

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## RESEARCH METHODOLOGY

### Descriptive research:

This study focuses on primary data collected through survey of students.

### Sample design:

The target groups were 150 students from various schools and institutes. The workshop was held at KV IMA, Dehradun, KV ONGC, Dehradun, Vanijaya Institute, Dehradun, Vidhya Niketan School, Dehradun, Physics Academy, Dehradun. The time series data is collected from students aged 11 to 17.

### Instruments used:

The quantitative data is gathered using SPSS 14.0. MS Excel has been used for tabulation and data analysis as well.

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## STATISTICAL DATA ANALYSIS AND FINDINGS

		Frequency	Percent	Valid Percent	Cumulative Percent
<b>Valid</b>	<b>Good</b>	14	9.3	9.3	9.3
	<b>very good</b>	30	19.9	20	29.3
	<b>Excellent</b>	106	70.2	70.7	100
	<b>Total</b>	150	99.3	100	
<b>Missing</b>	<b>System</b>	1	0.7		
<b>Total</b>		151	100		

It represents student's response towards the workshop. Thereby, maximum graded workshop as excellent with highest frequency of 106.

		Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	Religious Biodiversity	12	7.9	8	8	
	culture and heritage Livelihood	78	51.7	52	60	
	Agriculture	15	9.9	10	70	
	all mentioned	13	8.6	8.7	78.7	
	Others	13	8.6	8.7	87.3	
	Unsure	5	3.3	3.3	90.7	
	can't tell	2	1.3	1.3	92	
	Total	1	0.7	0.7	92.7	
	Total	11	7.3	7.3	100	
	Missing	System	150	99.3	100	
	Total		1	0.7		
Total		151	100			

It represents student's outlook towards importance of River Ganga. Biodiversity of River Ganga attained the maximum frequency i.e. 78 and least were unsure regarding its importance with frequency 1.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	supply of sediments and nutrients				
	freshwater	15	9.9	10	10
	fisheries	30	19.9	20	30
	Food	9	6	6	36
	Medicines	4	2.6	2.7	38.7
	Freshwater				
	groundwater rechg	33	21.9	22	60.7
	All	12	7.9	8	68.7
	Unsure	12	7.9	8	76.7
	no direct serv	3	2	2	78.7
	can't tell	4	2.6	2.7	81.3
Total	28	18.5	18.7	100	
Total	150	99.3	100		
Missing	System	1	0.7		
Total		1	0.7		
Total		151	100		

It represents student's response towards direct services received from River Ganga. However, freshwater attained maximum frequency i.e. 33 as direct service received from Ganga and least frequency was attained by medicinal resources obtained from Ganga.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Earnings sense of	16	10.6	10.7	10.7
	peace habitat for species	17	11.3	11.3	22
	All	75	49.7	50	72
	Unsure	9	6	6	78
	no indirect serve	6	4	4	82
	can't tell	7	4.6	4.7	86.7
	Total	20	13.2	13.3	100
		150	99.3	100	
Missing	System	1	0.7		
Total		151	100		

It represents indirect services received from River Ganga. However, habitat for species attained maximum frequency i.e. 75 as indirect service received from Ganga.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		89	58.9	58.9	58.9
	Arti	3	2	2	60.9
	Death ceremony	2	1.3	1.3	62.3
	Emission of ashes	1	0.7	0.7	62.9
	Lighting of diya's	1	0.7	0.7	63.6
	Mahakumb	1	0.7	0.7	64.2
	Mundan	4	2.6	2.6	66.9
	Puja	49	32.5	32.5	99.3
	Puja and Arti	1	0.7	0.7	100
	Total	151	100	100	

It represents student's attitude towards name of rituals conducted by them in Ganga. Puja attained maximum frequency i.e. 49 and emission of ashes, lighting of diya's, Mahakumb as well as Puja along with Arti obtained least frequency i.e. 1.

## CONCLUSION

The River Ganga is impounding with pollution and environmental threat. It's in the interest of Public and Government to organise awareness programs recurrently conducted nationwide. Awareness workshops were conducted in various schools in Dehradun. Such awareness workshops was organised to

aware students regarding 'Biodiversity Conservation and Ganga Rejuvenation'. During the exercise they were taught and asked about the various aspects concerning Ganga and their perception and outlook suggests that anthropogenic threats is one of the major threat to River Ganga such as construction of dams, industrial waste, developmental activities, agricultural waste and rituals is polluting Ganga. Under the category of natural threat to Ganga, climate change was given least points. Concerned with the direct services received from Ganges, most of them accept that River Ganga provides freshwater and freshwater fisheries, followed by medicinal services and groundwater recharge. Half of them observed that Ganga is indirectly a habitat for various species like Fishes, Turtles, Gharial, Crocodiles, etc. Maximum of them are well-awarded about Ganga Action Plan.

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