CURRICULUM VITAE (CV) | PROF. DR. VISHNU PRASAD PANDEY

1. Name: Vishnu Prasad Pandey, PhD

2. Date of Birth: 1979-06-13 **Nationality:** Nepali

3. Education:

Degrees/Diploma Obtained	Institution/University	Date (from)- Date (to)	Place, Country
Dr. Eng. (Integrated River Basin Management)	University of Yamanashi Kofu	2007-2010	Japan
M. Eng. (Water Engineering and Management)	Asian Institute of Technology (AIT)	2005-2007	Thailand
B. Eng. (Civil Engineering)	Institute of Engineering, Tribhuvan University, Nepal	2000-2004	Nepal

4. Membership of Professional Associations:

2021 – 2023	Member	Engineering Cluster Committee, University Grants Commission (UGC), Government of Nepal
2021 – todate	Associate Editor	Journal of Hydrology: Regions Studies (Impact Factor=5.023), a peer-reviewed Journal of Elsevier.
2020- 2023	Editor-in-Chief	Journal of Engineering Issues and Solutions, a peer-reviewed publication of Nepal Engineers' Association (https://www.nepjol.info/index.php/joeis)
2019 - 2023	Governing Board Member	Nepal Engineering Council, Government of Nepal
2017.02 – 2018.05	Member	Technical Advisory Committee, 8th Asian Regional Conference on Irrigation and Drainage, 2-4 May, 2018, Kathmandu, Nepal.
2015.01	Member	Scientific Committee, International Conference on Climate Change Innovation And Resilience For Sustainable Livelihood (Climdev15: http://climdev15.0rg), 12-14 January, 2015, Kathmandu, Nepal
2014.10 – 2016	Editor	"Groundwater Environment in Asian Cities: Concepts, Methods and Case Studies", a book to be published by Elsevier
2014.10	Convener	"National Conference on Energy Economics and Sustainable Development (CEESDev2014)" held at Asian Institute of Technology and Management (AITM), Kathmandu, 22 October 2014.
2014.08	Member	Scientific Committee, iWISE2014 (The International Conference on Water Informatics, Sustainability, and Environment) organized by SCIENCE Target in Ottawa, Canada. 26-28 August, 2014.
2015 – 2019	President	Center of Research for Environment Energy and Water (CREEW) (www.creew.org.np)
2013.12 – todate	Vice-President	Center of Research for Environment Energy and Water (CREEW) (www.creew.org.np)
2012-2014	Editor	"Climate Change and Water Resources", a book published by CRC Press, Taylor and Francis group.
2012-	Member, Editorial Board	International Journal of Environment and Sustainability (IJES), Science Target Inc. (http://www.sciencetarget.com/site/index.php/editorial-board-ijes-2)
2011-2012	Editor	"*Kathmandu Valley Groundwater Outlook*", a book published jointly by Asian Institute of Technology (AIT) in Thailand, The Small Earth Nepal (SEN) in Nepal, Center of Research for Environment Energy and Water (CREEW) in Nepal and International Research Center for River Basin Environment of University of Yamanashi in Japan.

2011-2012	President	Nepal Engineers' Association (NEA) – Japan Center
2011	Chair	*Program Committee* of a symposium on "*Utilizing lesson learnt from the study of Japanese technologies for the development of Nepal*", 17 July, 2011, Tokyo, Japan
2010-	Member	International Association of Hydrological Sciences (IAHS) (ID: 9632)
Jan-Apr, 2009	Secretariat	*International Symposium on Environment, Energy and Water in Nepal: Recent Researches and Direction for Future*, 31 March – 01 April, 2009, Kathmandu, Nepal.
2009-	Reviewer	Regular reviewer of several international journals such as *Water Resources Management*, *Environmental Earth Sciences*, *Water Science and Technology*, *International Journal of Water Resources and Environmental Engineering*; *Hydrological Sciences Journal*; *Journal of Arid Environment; IWA Conferences*; etc.
2009-2010	Member	*Publication Committee,* Nepal Engineers' Association Japan Chapter (NEA-JC), Japan
2009	Co-Chair	*Organizing Committee* of "*The 3rd NEA-JC Annual Workshop on Current and Future Technologies*", 8 November, 2009, Tokyo, Japan
2008-	Member	American Geophysics Union (AGU) (ID:11084191)
2008-	Member	International Water Association (IWA) (ID: 00985012)
2006-2007	President	Nepal Engineers' Association (NEA) – Bangkok Center
2005-	Member	Nepal Engineers' Association, Nepal (ID: 6490 'Civil')
2005-	Member	Nepal Engineering Council, Nepal (ID: 3843 'Civil', 'A Category')

5. Other Trainings:

18-22 Jan, 2023	Designed and implemented a training program on "AquaCrop for Crop Water Requirement and Crop Yield Modeling" to the participants from WRRDC, Government of Nepal, as a **Team Leader and Resource Person**.
19-23 Dec, 2022	Designed and implemented a training program on "Hydrological Modelling using Soil and Water Assessment Tool (SWAT)" to the participants from WRRDC, Government of Nepal, as a **Team Leader and Resource Person**.
13-15 Aug, 2016	Organized a training course on "Quantifying climate change impacts on water and agriculture sectors" for 11 participants from seven countries (Afghanistan, Bangladesh, India, Nepal, Pakistan, Thailand, Vietnam). Role: Training Coordinator and Resource Person (for selected modules)
20-24 July, 2016	Organized a training course on "Climate services for water, agriculture and food sectors" for the participants from Ministry of Agriculture Development (MoAD), Nepal. Role: Training Coordinator and Resource Person (for selected modules)
7-11 Mar, 2016	Participated a "Training for Trainers Program on Urban Climate Change Adaptation and Resilience" organized by USAID Adapt Asia-Pacific and Asian Institute of Technology (AIT).
21-22 Dec, 2015	Organized "3rd International Young Researchers Workshop on River Basin Environment and Management" held in Naresuan University, Thailand. Role: Member of organizing committee and international scientific committee.
19-20 Nov, 2015	Organized an International Expert Workshop on "Towards Urban Water Security in Southeast Asia: Managing the Risks of Extreme Events" held in Phnom Penh, Cambodia. Role: Coordinated entire event right from concept development to implementation as technical/communication focal point
7 Oct, 2015	Organized a stakeholder's workshop on "Addressing non-economic loss and damages associated with climate change: Learning from the recent past extreme climatic events for future planning" held at Asian Institute of Technology (AIT), Thailand. Role: Facilitator
Apr-Aug, 2015	Organized three training sessions, each of two-week duration, related to irrigation feasibility and design for senior irrigation engineers from Ministry of Energy and Water (MEW), Afghanistan. Role: Training Coordinator and Resource Person (for selected modules)

22 Oct, 2014	Organized a national conference on 'Energy Economics and Sustainable Development (CEESDev)" held at Asian Institute of Technology and Management (AITM), Nepal; Collaborators: five institutions; Participants: 80; Role: Convener
7-17 Sep, 2014	Designed, implemented, and serve as resource person for a 30-hour professional training program "GIS application in water resources management", held at Asian Institute of Technology and Management (AITM), Nepal
16-23 Jul, 2014	Organized a 21-hours training on "Capacity Building on the Use of Geo-spatial Tools" organized by Geospatial Research Center, Asian Institute of Technology and Management (AITM), Nepal and also contributed as Resource Person (for GIS). My contribution was in developing a training manual and conducting training as a Principal Resource Person for 4 days, mainly for GIS application part.
6-16 Jul, 2014	Resource Person to a 30-hours training on "SWAT – Soil and Water Assessment Tool, a Hydrological Model" to 15 participants. The training was organized by Center of Research for Environment Energy and Water (CREEW) during 6-16 July, 2014. My contribution was partial.
12-17 Jun, 2014	Resource Person, on behalf of "Development Support Consult Pvt. Ltd.", to a 5-days training on "Planning, Design and Cost Estimation of River Training Structures" for officers from Department of Soil Conservation and Watershed Management". The training was held during 12-17 June, 2014 and my part was focused on estimation of peak discharge and design of spurs.
22 Mar, 2014	Organized the "Fifth National Symposium on Challenges and Opportunities for Sustainable Management of Groundwater Resources of Kathmandu Valley" held in Kathmandu, Nepal. Role: Member of Organizing Committee.
16-17 Jan, 2014	Organized "Regional Workshop on Enhancing the groundwater management capacity in Asian cities through the development and application of groundwater sustainability index in the context of global change" held at AIT, Thailand.
19-23 Sep, 2011	Organized a "*Training on BTOPMC, a distributed hydrological model*" held in Kathmandu, Nepal; Also contributed as Resource Person (partial).
Jul 2011	Coordinator cum resource person for the GIS Seminar Series entitled "*GIS application in water resources management*" organized regularly by ICRE-University of Yamanashi
Nov 2010	Shortlisted and invited for an interview for a *faculty position in Hydraulic Engineering and River Basin Development at UNESCO-IHE Institute for Water Education*, Delft, the Netherlands
Sep 2010	Panelist*,* Groundwater Workshop in IWA World Water Congress (19-24 Sep, 2010), 23 Sep 2010, Montreal, Canada*. Title: Promoting an Integrated Vision for Urban Groundwater*.
May 2010	Participated in an *experiential action-based "Getting to Know You More Seminar"*, conducted by an "*Alliance of Double A Companies*" to recruit 10 best AIT graduates suitable for their companies. More than 150 people had participated, about 15 were selected for interview and 10 got job offer and I was one of them
Aug-Dec, 2006	Served to Asian Institute of Technology (AIT) Community as a "*Coordinator of Environmental Management Committee of Student Union*", August 2006 Semester
13 Feb, 2004	*Coordinator* of a national seminar on "*Policies and qualities of engineering education in Nepal, Problems of Engineering colleges and possibilities and employment*" organized by Technical Students' Association of Nepal (TSAN), 13 February, 2004

6. Countries of Work Experience:

Indonesia, Japan, Laos, Nepal, Thailand

7. Languages:

S.No	Language Skills	Level of proficiency ***(Good, Fair, Poor)***		
	Language	Speaking	Reading	Writing
1	English	Good	Good	Good
2	Nepali	Good	Good	Good

8. Employment Record:

From: December 2020 **To:** Till this date **Employer:** Institute: Department of Civil Engineering, Pulchowk Campus, Institute of Engineering, Tribhuvan University, Nepal **Positions held:** Professor – Civil Engineering (Water Resources) Summary: Teaching (e.g. hydrology, irrigation, climate change and water security, etc.), Research, Students Supervisor (Master and PhD), Design and Implement various training programs in the areas of water, irrigation and climate change.
From: October 2019 **To:** December 2020 **Employer:** International Water Management Institute (IWMI), Nepal Office **Positions held:** Regional Researcher – Water & Climate Summary: Conceptualize, design and implement projects related to water resources, irrigation, climate resilience in the broad areas of water security and food security.
From: March 2018 **To:** January 2019 **Employer:** International Water Management Institute (IWMI), Nepal Office **Positions held:** Acting Country Representative Summary: Take charge of the IWMI-Nepal office, while contributing as a Researcher in various research for development projects related to water and irrigation.
From: November 2016 **To:** September 2019 **Employer:** International Water Management Institute (IWMI), Nepal Office **Positions held:** Researcher – Hydro(geo)logy/Water Resources Management Summary: Hydrological analysis by developing hydrological models for watersheds in western Nepal under the projects like Digo Jal Bikas (DJB, USAID-funded), BCRWME (ADB-funded), and others; Coordinate with project partners (incl. IWMI, Kathmandu University, Duke University and others) and project members scattered in various countries (e.g., Germany, Laos, Sri Lanka, Nepal, and South Africa) to ensure smooth running of the DJB project with timely submission of deliverables; Research and publishing in the areas of expertise.
From: January 2016 **To:** November 2016 **Employer:** Asian Institute of Technology (AIT), Thailand **Positions held:** Research Engineer and Affiliated Faculty Summary: To carryout research in the areas of hydrology and water resources; irrigation; develop research proposals for funding; co-supervise graduate students; teach to undergraduate and graduate programs.
From: March 2015 **To:** December 2015 **Employer:** Asian Institute of Technology (AIT), Thailand **Positions held:** Research Fellow and Affiliated Faculty Summary: To develop books titled "Groundwater Environment of Asian Cities: Concepts, Methods and Case Studies (Publisher: Elsevier)" and "Water-energy-food nexus: Principles and Practices (Publisher: AGU/Wiley)"; carryout research in the areas of hydrology, water resources, irrigation, and water-energy-food security nexus; co-supervise graduate students; teach to undergraduate and graduate programs.
From: July 2013 **To:** March 2015 **Employer:** Asian Institute of Technology and Management (AITM), Lalitpur, Nepal **Positions held:** Deputy Program Coordinator and Research Faculty Summary: To teach, coordinate research activities, run civil and infrastructure engineering program as a deputy coordinator, and continue research and professional activities in the areas of water resource. Courses taught are: Hydropower Engineering; Hydrology; Irrigation Engineering; Water Supply Engineering; Hydraulics; Fluid Mechanics; Praxis-II
From: October 2010 **To:** June 2013 **Employer:** Interdisciplinary Center for River Basin Environment (ICRE), University of Yamanashi, Japan (Global COE Program of University of Yamanashi) **Positions held:** Postdoctoral Researcher Summary: To design and implement interdisciplinary research; involve in collaborative research with other members within and outside the group; informally guide PhD student(s) under the Global COE Program, among others. I was also involved in research activities related to hydrological modeling, hydro-climatic trend analysis, impact of climate and land cover change on hydrology and water resources, water poverty analysis, water footprint analysis of agricultural products, groundwater markets, estimation of groundwater recharge using vadoze-zone models, etc.

From: June 2007 **To:** September 2007
Employer: Asian Institute of Technology (AIT), Thailand (Vulnerability assessment of freshwater resources in Asia, funded by UNEP)
Positions held: Research Associate
Summary: To collect/pre-process/analyze secondary data and prepare draft report for the Ganges-Brahmaputra-Meghana (GBM) River Basin in South Asia

From: January 2005 **To:** August 2005
Employer: Pioneer Architects and Consulting Engineers, Kathmandu, Nepal (Feasibility study of micro-hydro projects in several districts of Nepal)
Positions held: Micro-Hydro Engineer
Summary: : To carry out hydrological and socio-economic survey, analyze data, and prepare reports for selected Micro-Hydro Projects in Nepal

From: March 2005 **To:** June 2005
Employer: Rural Reconstruction Nepal (RRN), Kathmandu, Nepal (Rural Community Infrastructure and Livelihood Support Program (RCILSP), funded by DFID)
Positions held: District Engineer
Summary: : To identify, design, implement and lead rural infrastructure development projects (e.g., irrigation systems, water supply schemes, school buildings, agricultural roads, etc) at a district in western Nepal

From: January 2005 **To:** March2005
Employer: Himal Energy Development Company, Bhaktapur, Nepal (Feasibility study of micro-hydro projects in Nepal)
Positions held: Micro-Hydro Engineer
Summary: : To carry out hydrological and socio-economic survey, analyze data, and prepare reports for selected Micro-Hydro Projects in Nepal

From: May 2000 **To:** July 2000
Employer: Environmental and Engineering Consultancy, Kathmandu, Nepal (Fourth Rural Water Supply and Sanitation Sector Project: Preparation of District Profiles and Development Plans, funded by ADB)
Positions held: Junior Engineer
Summary: : To conduct Field survey for hydrological and socio-economic data collection to prepare inventory of available water sources, existing water supply schemes, and need of additional schemes in central and western Nepal.

CONCURENT POSITIONS (Time sharing)

From: Oct 2025 **To:** todate
Employer: Centre for International Relations (CIR), Tribhuvan University, Nepal
Positions held: Executive Director
Summary: To lead the centre on administrative aspects; and strengthen TU with internationalization

From: Feb 2025 **To:** Oct 2025
Employer: Center for Applied Research and Development (CARD), Institute of Engineering, Tribhuvan University, Nepal
Positions held: Director
Summary: To lead the center on administrative aspects; to design, acquire resources and implement research and capacity building projects in the areas related to water and climate change; look after international coordination/relation of IOE/TU

From: Feb 2022 **To:** Feb, 2025
Employer: Center for Water Resources Studies (CWRS), Institute of Engineering, Tribhuvan University, Nepal
Positions held: Deputy Director
Summary: To co-lead the center on administrative aspects; to design, acquire resources and implement research and capacity building projects in the areas related to water and climate change

From: Jan 2014 **To:** December 2014
Employer: Asian Institute of Technology (AIT), Thailand
Positions held: Adjunct Faculty
Summary: : To teach courses related to water engineering and management (e.g., Praxis-I, Praxis-II; Fluid Mechanics; and Hydraulic Structures) to its undergraduate program offered at NEF-CCN campus in Nepal; and co-teach Groundwater Development & Management course to post-graduate program at AIT Main Campus, Thailand; Co-supervise student's thesis work together with AIT faculty members

From: Jan 2014 **To:** Till this date
Employer: Institute of Engineering, Tribhuvan University, Nepal

Positions held: Visiting Faculty Summary: To teach "Water Resources Planning and Management" and "System Mathematics" to M/ Eng. (Water Resources) students.
From: Jan 2012 **To:** March 2015 **Employer:** Center of Research for Environment Energy and Water (CREEW), Nepal **Positions held:** Coordinator of 'Groundwater PRA (Priority Research Area) Summary: To design overall research direction/plan for the Groundwater PRA, identify potential projects and suggest ideas for proposals, contribute to organize groundwater-related events (e.g., national groundwater symposiums), guide/mentor junior staffs, and provide strategic inputs to develop CREEW, among others. CREEW works in close collaboration with ICRE of Uni. of Yamanashi. Executive Director: Dr. Rabin Malla

9. Academic Administration-related Experiences

Date	Role
Sep 2023 - todate	Member, Academic Council, Tribhuvan University, Nepal
Jul 2023 - todate	Standing Committee Member, Civil Engineering Subject Committee, IoE/TU
2022 – 2022	Member of a UGC-formed Committee for developing "Guidelines for Harmonizing B.E./B. Arch. Entrance Exam Across the Universities in Nepal" led by Dean of Institute of Engineering, TU and having Deans (Engineering) of Other Universities in Nepal. I was representing Nepal Engineering Council in that meeting and played an instrumental role in drafting the guideline.
2021 – todate	Member of "Engineering Cluster" of University Grant Commission (UGC) of Nepal
2021 – todate	Member of Departmental Research Committee (DRC), Department of Civil Engineering, IoE, TU
Feb 2022 – todate	Deputy Executive Director, Center for Water Resources Studies, IoE, TU
2019 – 2023	Governing Board Member of Nepal Engineering Council (NEC), Government of Nepal. While being with NEC, I led two important committees, namely, University Committee and Exam Committee. The exam committee, under my leadership, made preparation and took the first License Exam to authorize for professional practice in the history of Nepal.
2013-2015	Deputy Program Coordinator, BE Civil & Infrastructure Engineering Program of AIT at AITM College, Khumaltar

10. Work Undertaken *(clearly showing role played, duration of input, complexity of work undertaken, and core competencies)*
Name of assignment or project: xxx **Year**: July 2025 – July 2028 (Intermittent Inputs) **Location:** Nepal **Client:** Food and Agriculture Organization (FAO), UN **Positions held:** Member of MTR Team **Activities performed**: Contribute in designing evaluation frameworks and questions, participate in series of stakeholder engagement, FGDs, KIIs, at National, Province, Local and field levels; Observation of implementation at field level; Synthesize the findings, and submit MTR report to FAO and GCF.
Name of assignment or project: Mid-term Review (MTR) of GCF-funded Project "Building a Resilient Churia Region in Nepal (BRCRN)" **Year**: August 2024 – January 2024 (Intermittent Inputs) **Location:** Nepal **Client:** Food and Agriculture Organization (FAO), UN **Positions held:** Member of MTR Team **Activities performed**: Contribute in designing evaluation frameworks and questions, participate in series of stakeholder engagement, FGDs, KIIs, at National, Province, Local and field levels; Observation of implementation at field level; Synthesize the findings, and submit MTR report to FAO and GCF.
Name of assignment or project: TA-10172 REG: Building Adaptation and Resilience in the Hindu Kush Himalayas – Bhutan and Nepal – Hydrology and River Morphology Expert (57059-001) **Year**: Feb 2024 – Oct 2024

Location: Nepal **Client:** Asian Development Bank **Positions held: Hydrology and River Morphology Expert** **Activities performed**: Lead hydrological and climate change impact assessment component for Yangri and Larke Water Supply Projects, which are sub-components of Melamchi Water Supply Project.
Name of assignment or project: Designing and implementing course modules on Water-Energy-Food-Ecosystem (WEFE) Nexus [Phase-2] **Year**: May 2023 – Dec 2023 **Location:** Nepal **Client:** Alliance for Bioversity International & CIAT (ABC) **Positions held:** Team Leader and Water Resources Expert **Activities performed**: Developed course modules and implement them for capacity strengthening on WEFE nexus – i) for policy/decision-maker; ii) professional course to be offered as summer/winter course, iii) 9-credit contents to be integrated with existing curriculum at a university
Name of assignment or project: Enhancing water security in Kathmandu Valley through collaborative research and capacity strengthening (Phase 1) **Year**: Jan 2023 – Jan 2028 **Location:** Nepal **Client:** Kathmandu Valley Water Supply Management Board (KVWSMB), Government of Nepal **Positions held:** Team Leader and Groundwater Expert **Activities performed**: Lead in designing and implementing the projects ensuring timely delivery; technical lead as a groundwater expert.
Name of assignment or project: Third party monitoring of effluent water quality at Guheshwori Treatment Plant **Year**: Sep 2022 – Sep 2023 **Location:** Nepal **Client:** Kathmandu Valley Water Supply Management Board (KVWSMB), Government of Nepal **Positions held:** Team Leader **Activities performed**: Lead in designing and implementing the projects ensuring timely delivery; coordination with client, experts and related stakeholders.
Name of assignment or project: Soil erosion, reservoir sedimentation and slope stability assessment of Dhap Dam **Year**: June 2022 – Sep 2023 **Location:** Nepal **Client:** Project Implementation Irrigation Unit (PIIU), Department of Water Resources and Irrigation, Government of Nepal **Positions held:** Team Leader and Water Resources Expert **Activities performed**: Lead in designing and implementing the projects ensuring timely delivery; technical lead as a hydro(geo)logist.to assess seepage
Name of assignment or project: Connecting dots in daily climate data: Developing and applying gridded observed data to assess climate extremes, impacts on agriculture, and adaptation strategies **Year**: Jun 2022 – Dec 2024 **Location:** Nepal **Client:** Research Directorate, Research Coordination and Development Council, Tribhuvan University, Nepal **Positions held:** Team Leader and Hydrologist **Activities performed**: Lead in designing and implementing the projects ensuring timely delivery; technical lead as a hydro(geo)logist.
Name of assignment or project: Inundation study and flood hazard mapping of flood-prone areas in transboundary region using real cross-section survey and InSar satellite data **Year**: Sep 2022 – Jun 2023 **Location:** Nepal **Client:** Water Resources Research and Development Center (WRRDC) **Positions held:** Team Leader and Hydrologist **Activities performed**: Overall lead of the study including study design, overall framing of activities, methods and outputs, coordination with client and stakeholder, supervise/coordinate a team of experts for timely delivery of outputs, contribute as a hydrological modeler.

Name of assignment or project: Hydrological assessment of four target watersheds in the Karnali River Basin (as a part of Karnali Water Security Activity, KAWAS, funded by USAID)
Year: Aug 2022 – Jan 2023
Location: Nepal
Client: International Water Management Institute (IWMI)
Positions held: Senior Hydrologist (Consultant)
Activities performed: Develop hydrological models for four target watersheds in the Karnali Watershed; project future climate and land us/cover change; assess impact of land use/cover and climate change in hydrology and water balance.

Name of assignment or project: Developing curriculum for Water-Energy-Food-Ecosystem (WEFE) Nexus
Year: July 2022 – Mar 2023
Location: Nepal
Client: Alliance for Bioversity International & CIAT (ABC)
Positions held: Team Leader
Activities performed: Developed three types of curriculum for capacity strengthening on WEFE nexus – i) for policy/decision-maker; ii) professional course to be offered as summer/winter course, iii) 9-credit contents to be integrated with existing curriculum at a university

Name of assignment or project: Multi-hazard vulnerability and risk assessment (MHVRA) in Lower Dudhkoshi Watershed
Year: Dec 2021 – Dec 2023
Location: Nepal
Client: Department of Forest and Soil Conservation and UNDP (DCRL Project)
Positions held: Team Leader and Hydrologist
Activities performed: Lead a team of expert to assess MHRA and evaluate impacts on various sectors including agriculture/irrigation.

Name of assignment or project: Impact assessment of Kulekhani 1, 2 and 3 HEPs on water resources, socio-economy, and livelihood
Year: Dec 2021 – May 2022
Location: Nepal
Client: Water Resources Research and Development Center (WRRDC)
Positions held: Team Leader & Water Resources Expert
Activities performed: Overall lead of the study including study design, overall framing of activities, methods and outputs, coordination with client and stakeholder, supervise/coordinate a team of experts for timely delivery of outputs.

Name of assignment or project: Damage assessment of Melamchi Headworks and Hazard Mapping of the Catchment (SC 117543)
Year: Nov 2021 – todate (intermittent)
Location: Nepal
Client: Asian Development Bank (ADB)
Positions held: Consultant Hydrologist
Activities performed: Review of hydro-met data, hydrological modelling, flood flow analysis, provide inputs to overall assessment of Melamchi Water Supply Project from the perspective of risk assessment and recommendation for the next step.

Name of assignment or project: Resilient Hydropower & Disaster Risk Management in Nepal's Arun Valley
Year: Apr 2021 – todate (intermittent)
Location: Nepal
Client: World Bank
Positions held: Short-term Consultant (STC) – Water Resources Advisor
Activities performed: Strategic advice to the study team "Resilient Hydropower & Disaster Risk Management in Nepal's Arun Valley" as Water Resources Advisor to the World Bank; technical backstopping as and when necessary; support NDRRMA in establishing a Knowledge Hub for Disaster Risk Management in Hydropower Sector in Nepal (DRM-Hydro-Hub); etc.

Name of assignment or project: Study of water resources in Siddhababa Area
Year: Apr 2021 – Jul 2021
Location: Nepal
Client: Provincial Planning Commission, Lumbini Province

Positions held: Team Leader and Sr. Hydrologist
Activities performed: Technical and administrative lead of the entire project; overall design of the study, includes models, overall framework, etc.; supervise technical staffs for performing field and desk-related activities; quality assurance of output; timely delivery of the outputs.

Name of assignment or project: Water-Induced Disaster Risk Management Planning in Nepal
Year: Dec 2018 – Nov 2021
Location: Nepal
Client: IDRC
Positions held: Co-Principal Investigator (and Lead from IWMI side) and Water & Climate Specialist
Activities performed: Assist Principal Instigator (PI) in project design, implementation and management; take a lead in analyzing natural roots of water-induced disaster (WID), impacts on irrigation/agriculture and other sectors, and contribute to other activities and outputs related to social and developmental roots; provide technical support (in the areas of water and irrigation) for designing capacity building activities; develop/produce knowledge products such as peer-review articles; disseminate the knowledge through presentation at national/international forums.

Name of assignment or project: Hydrology Review of Betan Karnali Hydropower Project (688 MW) for Updated Feasibility Report
Year: Jul-Aug 2020
Location: Nepal
Client: Betan Karnali Sanchayakarta Hydropower Companay Ltd. (BKHEP)
Positions held: Senior Hydrologist/Reviewer
Activities performed: To review project hydrology from the stand point of data quality, their pre-processing, analysis, interpretation, and estimation of flow duration curve, design discharge and design floods; Prepare summary report.

Name of assignment or project: Project Hydrology Analysis of Mugu Karnali (1902 MW) Storage Hydro-electric Project
Year: Mar-Aug 2020
Location: Nepal
Client: Vidyut Bikas Company
Positions held: Senior Hydrologist/Member of Technical Support Group (TSG)
Activities performed: To collect and pre-process hydro-met data; check for data quality and correct as required; analyze project hydrology, including analyzing trends in river discharge, mean-monthly flows, flow duration curve, and design floods of various return periods; estimate probable maximum flood (PMF) and flood hydrographs; develop chapter on "Project Hydrology".

Name of assignment or project: Solar Irrigation for Agriculture Resilience (SoLAR)
Year: Sep 2018 – Dec 2020
Location: Nepal, India, Bangladesh and Pakistan
Client: SDC (host Institution: IWMI)
Positions held: Project Manager (for Nepal
Activities performed: take lead for conducting various activities in Nepal during project design (or Entry) phase (e.g., national stakeholder consultations; review of national/sub-national policies; mapping and evaluation of solar promotion models; baseline survey and gender analysis, and provide inputs for developing detailed project document for next phase) and implementation phase.

Name of assignment or project: Developing climate resilient livelihoods for local communities in Western Nepal (Anukulan X – BRACED)
Year: Jul 2018 – Mar 2019
Location: Nepal
Client: UKAid (through iDE-Nepal)
Positions held: Project Leader (from IWMI side)
Activities performed: To take overall lead of the project for effective mobilization of five experts to evaluate effectiveness of climate resilience interventions in the project area; critical analysis on institutionalization of Multi-Use Water Systems (MUS) and evaluate Local Adaptation Plan of Actions (LAPAs) from GESI-lens.

Name of assignment or project: Project Hydrology Analysis of Phukot Karnali Hydro-electric Project (625 MW)
Year: Jul-Oct 2018
Location: Nepal
Client: Vidyut Bikas Company
Positions held: Senior Hydrologist/Member of Technical Support Group (TSG)
Activities performed: To collect and pre-process hydro-met data; check for data quality and correct as required; analyze project hydrology, including analyzing trends in river discharge, mean-monthly flows, flow duration curve, and design floods of various return periods; estimate probable maximum flood (PMF) and flood hydrographs; develop chapter on "Project Hydrology".

Name of assignment or project: Nepal Resilience Portfolio (MEL) – Supporting Climate Smart Development & Effective Disaster Risk Management (Implementation phase)
Year: Jun 2018 – Mar 2019
Location: Nepal
Client: DFID
Positions held: Project Leader (IWMI-side)
Activities performed: To contribute in developing overall project strategies, provide inputs on periodic reports, and supervise research activities conducted as a part of the project.

Name of assignment or project: Building Climate Resilience of Watersheds in Mountain Eco-Regions (BCRWME)
Year: Jan 2018 – Jun 2019
Location: Nepal
Client: ADB
Positions held: Hydro(geo)logist
Activities performed: To assess spatio-temporal pattern in spring discharge and its link to rainfall events; characterize hydrology of the two spring-fed micro-watersheds in Western Nepal and develop report/publications

Name of assignment or project: Assessment of groundwater storage potentials in Mid-Hills of Koshi River Basin, Nepal
Year: Feb 2017 – Apr 2018
Location: Nepal
Client: ICIMOD
Positions held: Senior Hydrologist
Activities performed: To contribute in shaping overall research framework as well as streamlining hydrological and hydrogeological aspects of the groundwater storage potential estimation; Contribute in developing publications.

Name of assignment or project: Study of hard rock aquifers in hilly area of central region of Nepal [Dhading]
Year: Mar – Jul, 2017
Location: Nepal
Client: Water Resources Research and Development Center (WRRDC), Department of Irrigation, Government of Nepal
Positions held: Team Leader and Senior Hydrologist
Activities performed: To take overall charge of the project for identifying and mobilizing experts; Contribute in shaping research framework as well as hydrological and hydrogeological aspects of the groundwater storage potential.

Name of assignment or project Digo Jal Bikas (DJB)
Year: Nov 2016 – Mar 2019
Location: Nepal
Client: IWMI, Duke University (USA), Kathmandu University (Nepal), Nepal Water Conservation Foundation (Nepal);
Positions held: Project Coordinator (i.e., Dy. Chief of Party) and Hydrological Modeler
Activities performed: To characterize basin hydrology under current and future conditions by developing hydrological models and climate change impact assessments for three watersheds in western Nepal; Coordinate with project partners and project members scattered in various countries (e.g., Germany, Laos, Sri Lanka, Nepal, and South Africa); Develop regular project reports to donor.

Name of assignment or project: Adaptation to groundwater vulnerability of Asian Cities climate change: Developing capacity to bridge the science and policy interface
Year: Aug 2016 – Jun 2017
Location: Nepal
Client: APN; Partners/Collaborators: DGR (Thailand); IGES (Japan); WAPDA (Pakistan), DWRPI-SV (Vietnam); and others
Host institution: Asian Institute of Technology (AIT), Thailand.
Positions held: Co-Project Leader
Activities performed: To develop background paper for the first regional workshop; prepare customized framework as well as a set of draft indicators for groundwater vulnerability assessment to climate change; Facilitation of regional workshops; Report preparation and publishing

Name of assignment or project: Building Capacity and Strengthening Community Participation for Water Resources Management and Wetland Ecosystem Restoration in the context of Climate Change in Lower Songkhram River Basin, Thailand
Year: Jan 2015 – Oct 2016
Location: Nepal
Client: HSBC Bank and WWF
Positions held: Hydrological Modeler/Climate Change Specialist
Activities performed: To analyze historical trends in hydro-climatic variables; project future climate change in the study area; set-up, calibration and validate hydrological model in SWAT; Assess impacts of climate change on hydrology and water resources.

Name of assignment or project: Training Program on Climate Services for Water, Agriculture and Food Sectors
Year: July 2016 – July 2016
Location: Nepal
Client: Ministry of Agriculture Development (MoAD), Government of Nepal;
Positions held: Training Coordinator and Resource Person:
Activities performed:
To develop design curriculum/materials and implement it; Coordinate with the client, participants and resource persons; Contribute as a resource person for selected contents; Develop training completion report.

Name of assignment or project: Review of project hydrology of Nam Phak Cascade Hydropower Projects, Lao PDR
Year: Aug – Sep, 2016
Client: ILF Consulting Engineering (Asia) Ltd.
Position held: Senior Hydrologist
Activities performed:
To review project hydrology from the stand point of data quality, their pre-processing, analysis, interpretation, and estimation of flow duration curve, design discharge and design floods; Prepare summary report.

Name of assignment or project: Pre-feasibility study of hydropower projects (4 projects) in Huapan Region, Lao PDR
Year: Feb – Aug, 2016
Client: ILF Consulting Engineering (Asia) Ltd.
Position held: Senior Hydrologist
Activities performed:
To collect and pre-process hydro-met data; check for data quality and correct as required; analyze project hydrology, including analyzing trends in river discharge, mean-monthly flows, flow duration curve, and design floods of various return periods; develop the chapter on "Project Hydrology" for the pre-feasibility study report.

Name of assignment or project: Review of project hydrology of Manna Mini Hydropower Project, Indonesia
Year: Feb – Apr, 2016
Client: ILF Consulting Engineering (Asia) Ltd.
Position held: Senior Hydrologist
Activities performed: To review project hydrology from the stand point of data quality, their pre-processing, analysis, interpretation, and estimation of flow duration curve, design discharge and design floods; Prepare summary report.

Name of assignment or project: Pre-feasibility study of Manna Tanjung Shakti Hydropower Project, Indonesia
Year: May-July, 2016
Client: ILF Consulting Engineering (Asia) Ltd.

Position held: Senior Hydrologist
Activities performed: To collect and pre-process hydro-met data; check for data quality and correct as required; analyze project hydrology, including analyzing trends in river discharge, mean-monthly flows, flow duration curve, and design floods of various return periods; develop the chapter on "Project Hydrology" for the pre-feasibility study report.

Name of assignment or project: Implementation of WMO-GFCS project in South Asia
Year: Apr 2016 – Mar 2017
Client: Regional Integrated Multi-Hazard Early Warning System for Africa and Asia (RIMES), Thailand (Funding: The World Meteorological Organization, WMO)
Position held: Technical Consultant for Climate Services
Activities performed: To review the status of application of climate services (mainly weather forecast products) in various sectors in South Asian Countries and identify capacity building gaps; develop training curriculum to enhance the capacity for utilizing climate services; develop training curriculum for user sectors on climate information translation to various applications.

Name of assignment or project: Training Program on Irrigation Feasibility and Design (TA-648)
Year: Apr-Dec, 2015
Client: Ministry of Energy and Water (MEW) Afghanistan (Funding: World Bank; Host Institution: AIT
Position held: Training Coordinator and Resource Person
Activities performed: To design training modules/materials for the three different training courses, each of two-weeks duration, related to feasibility study and design of irrigation projects; Coordinate with the client, participants, and the resource persons; Contribute as resource person for selected contents; Develop training completion report.

Name of assignment or project: SEA-EU-NET (Phase-2)
Year: Mar 2015 – Oct 2016
Client: The Seventh Framework Programme (FP7) of European Union (EU) (Host Institution: AIT, Thailand)
Position held: Research Fellow
Activities performed: To design, coordinate and implement an international expert workshop on "Towards Urban Water Security in Southeast Asia: Managing the Risks of Extreme Events" (the event was held in Phnom Penh, Cambodia during 19-20 November 2015); To develop a book titled "Water-Energy-Food Nexus: Principles and Practices (Publisher: AGU/Wiley)"; Carryout research in the areas of water-energy-food nexus.

Name of assignment or project: Assessing groundwater resources in Kathmandu Valley using isotope techniques
Year: Jan-Jun, 2015
Client: Kathmandu Valley Water Supply Management Board (KVWSMB), Nepal (Host Institution: Cross Momentum Engineering Pvt. Ltd.)
Position held: Team Leader & Water Resources Specialist
Activities performed: To design project concept, implementation plan, and execute the project; Review of existing literatures related to isotope application in groundwater resources, synthesize them, and suggest future outlook and furthering the water research using isotopes; Report preparation and presentation to the client

Name of assignment or project: Developing a watershed management plan of Ghodaha Khola Sub-watershed, Rupandehi District, Nepal
Year: May-Aug, 2014
Client: Department of Soil Conservation and Watershed Management, Government of Nepal.
Host Institution: Engineering and Education Services (e2 Services
Position held: Team Leader/Water Resources Expert
Activities performed: To design the project activities and implementation plans; Coordinate field visit and activities; Conduct stakeholders meeting to ensure public participation in developing the watershed management plan; Prepare technical report

Name of assignment or project: Budhi Gandaki Hydropower Project Under Climate Change Uncertainty – An Assessment of Hydro-sociality (Nepal)
Year: Feb 2014 – Jan 2015
Client: Nepal Academy of Science and Technology (NAST), the Government of Nepal (Funding: ADB; Host Institution: AITM, Nepal)
Position held: Senior Hydrologist/Water Resources and Climate Change Expert
Activities performed: To analyze hydrology and water resources in the Budhi Gandaki River Basin; Develop project report

Apr 2014 – Mar 2015	Synergies between Disaster Risk Reduction (DRR) and Climate Change Adaptation (CCA)	**Climate Change and Disaster Expert/Collaborator**: To customize study framework for Nepal; Identify suitable projects related to DRR and CCA for analyzing the synergies; Review project reports and prepare a set of questionnaire; Carry out field work; Develop project report for Nepal.	Donor: APN Client: IGES-Japan
Sep 2013 – Aug 2014	Enhancing groundwater management capacity in Asian Cities through Development and Application of Groundwater Sustainability Index in the context of Global Change	**Groundwater Expert/Collaborator**: To develop background paper for the 1st regional workshop; prepare customized framework as well as draft indicators for groundwater sustainability; Contribute in developing project report; Take initiatives to develop an edited book titled "Groundwater Environment in Asian Cities: Concepts, Methods, and Case Studies"	Donor: APN
May 2014 – Mar 2015	Hydro-microbiological approach for water security in Kathmandu Valley, Nepal	**Dy. Project Manager and Secretary (Nepal Side)**: To coordinate with several project partners (government agencies, academic institutions, NGOs and Japanese university) on behalf of the Project Manager; Assist Project Manager in designing and conducting project meetings/workshops; Develop project reports	Donor: SATREPS (Science and Technology Research Partnership for Sustainable Development) Program of the Government of Japan Host Institution: AITM, Nepal
Apr 2013 – Feb 2015	Upper Hugdi Hydropower Project (5 MW)	**Senior Hydropower Expert (Member of Technical Team)**: To review project hydrology and hydropower designs prepared by the Consultant and provide inputs for its further improvements; Provide technical inputs in design optimization of hydropower project; Represent client in the technical meetings related to the project.	Client: Sahas Hydropower Company Limited, Nepal
May-Sep, 2007	Vulnerability Assessment of Freshwater Resources in Ganga-Brahmaputra-Meghana (GBM) river basin, South Asia	**Research Associate**: To collect, pre-process and analyze secondary data; analyze and synthesize water resources vulnerability indicators for the tributaries of the Ganges in Nepal; Develop a short report of the vulnerability of water resources system in Nepal	Donor: United Nations Environment Programme (UNEP) Host Institution: Asian Institute of Technology (AIT)
Jun-Aug, 2005	Feasibility study of micro-hydro projects in several districts of Nepal	**Micro-Hydro Engineer**: To carry out and hydrology and socio-economic survey and analyze data for selected Micro-Hydro projects in Nepal; Prepare report for client	Client: Pioneer Architects and Consulting Engineers, Kathmandu, Nepal
Mar-Jun, 2005	Rural Community Infrastructure and Livelihood Support Program (RCLISP)	**District Engineer**: To identify, design, implement and lead rural infrastructure development projects (e.g., water supply systems, irrigation canals, school buildings, agricultural roads, etc.) at a district in Western Nepal	Donor: DFID Client: Rural Reconstruction Nepal (RRN), Nepal

Jan-Mar, 2005	Feasibility study of micro-hydro projects in Nepal	**Micro-Hydro Engineer**: To carry out and hydrology and socio-economic survey and analyze data for selected Micro-Hydro projects in Nepal; Prepare report for client	Client: Himal Energy Development Company, Bhaktapur, Nepal
May-Jul, 2000	Fourth Rural Water Supply and Sanitation Sector Project: Preparation of District Profiles and Development Plans	**Junior Engineer**: To conduct Field survey for hydrological and socio-economic data collection to prepare inventory of available water sources, existing water supply schemes, and need of additional schemes in central and western Nepal	Donor: ADB Client: Environmental and Engineering Consultancy, Kathmandu, Nepal

11. List of all Publications:

A. Books and Monographs

1. 2021: Pandey V.P., Shrestha S., Wiberg D. (Eds). Water, Climate change, and Sustainability. Wiley.
2. 2020: Shrestha SD, Pandey VP, Khanal A, Rana SB (2020). Groundwater in Kathmandu Valley: Status, Challenges and Opportunities. Publisher: Kathmandu Valley Water Supply Management Board (Under finalization).
3. 2017.08: Salam PA, Shrestha S., Pandey VP, Anal AK (Eds.) Water-Energy-Food Nexus: Principles and Practices. AGU-Wiley Geophysical Monograph 229. ISBN: 978-1-119-24313-7. (August 2017).
4. 2016.02: Shrestha S., Pandey VP, Shivakoti BR, Thatikonda S (Eds.) *Groundwater Environment in Asian Cities: Concepts, Methods, and Case Studies*. Elsevier. ISBN: 978-0-12-803166-7.
5. 2014.05: Shrestha S., Babel M.S., Pandey V.P. (Eds.) *Climate Change and Water Resources*. CRC Press (Taylor and Francis Group), ISBN: 13: 978-1-4665-9467-8.
6. 2012.08: Pandey V.P., Gautam B.P., Bhattarai R. *Pre-feasibility study of small hydropower projects: a case study of Upper Dordi, Nepal*. Lambert Academic Publishing. ISBN: 978-3-659-201213-1.
7. 2012.03: Shrestha S., Pradhananga D., Pandey V.P. (Eds.). *Kathmandu Valley Groundwater Outlook*. Publisher: AIT/SEN/CREEW/ICRE-UY. ISBN: 978-9937-2-4442-8.

B. Book Chapters (Peer-Reviewed)

1. Onsomkrit A., Babel M.S., Shinde V.R., Pandey V.P. (2021) Assessing Water Security at District Level: A Case Study of Bangkok, Thailand. In: Babel M., Haarstrick A., Ribbe L., Shinde V.R., Dichtl N. (eds) Water Security in Asia. Springer Water. Springer, Cham. https://doi.org/10.1007/978-3-319-54612-4_12
2. 2020: Pradhan P., van Koppen B., Khadka M., GC RK, Rajouria A., Pandey VP. (2020). Community institutions in water governance for sustainable livelihoods. (Submitted as a book chapter)
3. 2020: Pandey VP, Shivakoti BR, Shrestha S, Wiberg D. (2020). Localizing and mainstreaming global initiatives on water, climate change and sustainable development. In: Pandey VP, Shrestha S, Wiberg D (Eds.) Water, Climate Change and Sustainability. Wiley Publication. (Chapter 1). Accepted.
4. 2017.08: Pandey VP, Shrestha S. Evolution of the nexus as a policy and development discourse. In: Salam PA, Shrestha S., Pandey VP, and Anal AK (Eds.). Water-Energy-Food Nexus: Principles and Practices. AGU-Wiley Publication. pp 11 - 20 (Chapter 2).
5. 2017.08: Salam PA, Pandey VP, Shrestha S, Anal AK. The need for the nexus approach. In: Salam PA, Shrestha S., Pandey VP, and Anal AK (Eds.). Water-Energy-Food Nexus: Principles and Practices. AGU-Wiley Publication. pp 3-10 (Chapter 1).
6. 2016.02: Shrestha S., Pandey VP. Water Environment in Central and East Asia: An Introduction. In: Shrestha S., Pandey VP, Telakonda S., Shivakoti B. (Eds.). *Groundwater Environment in Asian Cities – Concepts, Methods, and Case Studies*. Elsevier Publication. pp 339-343. (Chapter 15)
7. 2016.02: Pandey VP, Shrestha S. Water Environment in Central and Southeast: An Introduction. In: Shrestha S., Pandey VP, Telakonda S., Shivakoti B. (Eds.). *Groundwater Environment in Asian Cities – Concepts, Methods, and Case Studies*. Elsevier Publication. pp 187-191. (Chapter 9)
8. 2016.02: Pandey VP, Shrestha S., Thatikonda S. Water Environment in South Asia: An Introduction. In: Shrestha S., Pandey VP, Telakonda S., Shivakoti B. (Eds.). *Groundwater Environment in Asian Cities – Concepts, Methods, and Case Studies*. Elsevier Publication. pp 41-46. (Chapter 3)

9. 2016.02: Pandey VP, Shrestha S. DPSIR framework for evaluating groundwater environment. In: Shrestha S., Pandey VP, Telakonda S., Shivakoti B. (Eds.). *Groundwater Environment in Asian Cities – Concepts, Methods, and Case Studies*. Elsevier Publication. pp 17-37. (Chapter 2)
10. 2016.02: Shrestha S., Pandey VP. Groundwater as an environmental issue in Asian cities. In: Shrestha S., Pandey VP, Telakonda S., Shivakoti B. (Eds.). *Groundwater Environment in Asian Cities – Concepts, Methods, and Case Studies*. Elsevier Publication. pp 3-15. (Chapter 1)
11. 2015.03: Shivakoti BR, Pandey VP. *Climate change adaptation and disaster risk reduction synergies of interventions in Nepal*. In: Prabhakar, S.V.R.K., P. Ofei-Manu, D.S. Solomon, B. R. Shivakoti (Eds.) An inductive approach for the evidence of climate change adaptation and disaster risk reduction synergies of interventions: Challenges and opportunities. Research Report 2015. Hayama, Japan: Institute for Global Environmental Strategies. pp 57-71. (Chapter 6).
12. 2014.05: Pandey V.P., Manandhar S., Kazama F. Climate change vulnerability assessment. In: Shrestha S., Babel M.S., Pandey V.P. (Eds.) *Climate change and water resources*. CRC Press (Taylor and Francis Group), pp. 183-208. (Chapter 7)
13. 2014.05: Manandhar S., Pandey V.P., Kazama F., Kazama S. Economics of climate change. In: Shrestha S., Babel M.S., Pandey V.P. (Eds.) *Climate change and water resources*. CRC Press (Taylor and Francis Group), pp. 153-182. (Chapter 6)
14. 2013.10: Pandey V.P., Kazama F. Application of Groundwater Sustainability Infrastructure Index (GSII) to evaluate groundwater sustainability in the Kathmandu Valley, Nepal. In: *Yamamoto et al. (Eds.) Southeast Asian Water Environment* 5. IWA Publishing. pp. 19-26. (Chapter 3)
15. 2012.09: Manandhar S., Schmidt-Vogt D., Pandey V.P., Kazama F. Religion, indigenous knowledge and climate change in a Mountain region: a case study of Thini Village, Mustang, Nepal. In: Veldman R.G., Szasz A., Haluza-DeLay R. (Eds.) *How the world's religions are responding to climate change: social scientific investigations*. Routledge Publishing. pp 37-46. (Chapter 2)
16. 2012.03: Pandey V.P., Kazama F. Groundwater storage potential in the Kathmandu Valley's shallow and deep aquifers. In: Shrestha S., Pradhananga D., Pandey V.P. (Eds.) *Kathmandu Valley Groundwater Outlook*. Publisher: AIT/SEN/CREEW/ICRE-UY. pp 31-38. ISBN: 978-9937-2-4442-8. (Chapter 4)
17. 2012.03: Nakamura T., Chapagain S., Pandey V.P., Osaka K., Nishida K., Shrestha S., Kazama F. Shallow groundwater recharge altitudes in the Kathmandu Valley. In: Shrestha S., Pradhananga D., Pandey V.P. (Eds) *Kathmandu Valley Groundwater Outlook*. Publisher: AIT/SEN/CREEW/ICRE-UY. pp 39-45. ISBN: 978-9937-2-4442-8. (Chapter 5)
18. 2012.03: Khanitchaidecha W., Shakya M., Pandey V.P., Kazama F. Attached growth system for NH_4-N removal from groundwater in Kathmandu Valley. Shrestha S., Pradhananga D., Pandey V.P. (Eds.) *Kathmandu Valley Groundwater Outlook*. Publisher: AIT/SEN/CREEW/ICRE-UY. pp 64-73. ISBN: 978-9937-2-4442-8. (Chapter 8)

C. Peer Reviewed Journal Papers

1. 2025: Karn M, **Pandey VP**, Basnyat DB (2025). Evaluation of peaking time variation in power generation of a cascaded hydropower system: A case study of Arun River. Journal of Engineering Issues and Solutions, 4 (1): 30-40.
2. 2025: Talchabhadel, R., Panthi, J., **Pandey, V.P**. *et al. (2025).* Yesterday's extremes, today's new normal: flood risk in the Kathmandu Valley, Nepal. *Nat Hazards* (2025). https://doi.org/10.1007/s11069-025-07524-5
3. 2025: Acharya S, Sharma N, Shrestha D, Dulal KH, Adhikari N, **Pandey VP** (2025). Evaluating the socio-economic risks of a potential GLOF from Dudh Pokhari Lake in Nepal's Everest region Natural Hazards Research. doi: https://doi.org/10.1016/j.nhres.2025.08.001
4. 2025: Jian Z, Yang Q, Shao J, Wang G, **Pandey VP** (2025). Spatiotemporal variation in NDVI in the Sunkoshi River Watershed during 2000-2021 and its response to climate factors and soil moisture. Water, 17 (15): 2232. doi: https://doi.org/10.3390/w17152232.
5. 2025: Poudel GP, Lamichhane S, **Pandey VP** (2025). Integrating regionalization and modelling techniques for assessing climate change impacts on flood inundation in ungauged catchments. Results in Engineering, 27: 105995. doi: https://doi.org/10.1016/j.rineng.2025.105995
6. 2025: Adhikari, S., Lamichhane, P., Karki, J., Mishra, S., Rana, D., Mandal, A., ... **Pandey VP**, Pokharel, B. (2025). Analyzing Extreme Precipitation during the Prolonged Summer Monsoon of 2022 in Nepal: Insights from Hourly Observational Data. *Journal of Institute of Science and Technology*, *30*(1), 179-188.

7. 2025: Bhattarai S, Banjara P, **Pandey VP**, Aryal A, Pradhan P, Al-Douri F, Pradhan NR, Talchabhadel R. (2025). Quantifying the cooling effects of blue-green spaces across urban landscapes: A case study of Kathmandu Valley, Nepal. Urban Climate, 61: 102493. doi: https://doi.org/10.1016/j.uclim.2025.102493
8. 2025; Lamichhane S., Karki N., **Pandey VP**, Joshi P, Dawadi S. (2025). Leveraging remote sensing for exploring climatic and hydro-geomorphic linkages to flooding: A case of Bagmati River in Central Nepal. River Research and Applications, 41 (4): 953-965. doi: https://doi.org/10.1002/rra.4413
9. 2025: Zuber Md., Kalauni N., Shrestha N., **Pandey VP**, Pokharel B. (2025). Cereal yield and water requirements in response to irrigation and soil fertility management in a changing climate: a case of Tulsipur, Western Nepal. *Journal of Water and Climate Change* 1 March 2025; 16 (3): 837–859. doi: https://doi.org/10.2166/wcc.2025.543
10. 2025: Chaulagain S, Lamichhane M, Chaulagain U, Gyawali S, Shrestha S, Pandey, V.P. (2025). Evaluating Different Drought Products for Assessing Drought and Implications on Agriculture in Nepal. Results in Engineering, 25: 104205. doi: https://doi.org/10.1016/j.rineng.2025.104205
11. 2025: Banjara P, Shrestha PK, Pandey VP, Sah M, Pandey P (2025). Quantifying agricultural drought in the Koshi River basin through soil moisture simulation. *Journal of Hydrology: Regional Studies*, 57: 102132. Doi: https://doi.org/10.1016/j.ejrh.2024.102132
12. 2025: Ghimire P, Karki S, Pandey VP, Pradhan AMS (2025). Mapping spatio-temporal dynamics of irrigated agriculture in Nepal using MODIS NDVI and statistical data with Google Earth Engine: A step towards improved irrigation planning. *International Journal of Applied Earth Observation and Geoinformation*, 136: 104345. Doi: https://doi.org/10.1016/j.jag.2024.104345
13. 2024: Chapagain S.K., Pandey V.P., Sangol S., Guenther E. (2024). Operationalizing Resource Nexus: a systematic review from water perspective. *SNF* **32**, 15. https://doi.org/10.1007/s00550-024-00553-x
14. 2024: Lamichhane S., Karki N., Pandey V.P., Joshi P., Dawadi S. (2024). A synergic approach using the model and remote sensing data for flood monitoring in under-observed transboundary rivers. *Journal of Hydroinformatics*; jh2024056. doi: https://doi.org/10.2166/hydro.2024.056
15. 2024: Khatri D., Pandey V.P., Lamsal G.R., Baniya R. (2024). Climate change impact on hydropower generation and adaptation through reservoir operation in a Himalayan River, Tamor. *Journal of Water and Climate Change*; 15 (9): 4631–4646. doi: https://doi.org/10.2166/wcc.2024.246
16. 2024: Awal, A., Bhattarai, U., Pandey, V.P., Bhattarai P.K. (2024). Downstream impacts of dam breach using HEC-RAS: a case of Budhigandaki concrete arch dam in central Nepal. *Environ Syst Res* **13**, 37 (2024). https://doi.org/10.1186/s40068-024-00358-3
17. 2024: Pandit, A., Batelaan, O., Panta, S. K., Pandey, V. P., & Adhikari, S. (2024). The Gendered Implication of Declining Spring Sources in the Rangun Watershed Area. *Far Western Review*, *1*(2), 101-116. doi: https://doi.org/10.3126/fwr.v1i2.62134
18. 2024: Banjara P, Bhattarai S, Pandey VP, Talchabhadel R. (2024). Spatiotemporal characterization of heatwaves on an urban center using satellite-based estimates. Theoretical and Applied Climatology. doi: https://doi.org/10.1007/s00704-024-05026-1
19. 2024: Aryal A, Pandey VP, Talchabhadel R, Thapa BR (2024). Hydro-climatic extremes in a medium range river basin in Western Nepal: Learning from analysis of observed data, *Stochastic Environmental Research and Risk Assessment,* 38 (1), 85-105. doi: https://doi.org/10.1007/s00477-023-02552-8
20. 2024: Aryal S, Ghmire S, Tiwari S, Baaniya Y, Pandey VP (2024). Evolution and future prospects of hydropower sector in Nepal: A review. *Heliyon*, 10 (10) E31139. doi: https://doi.org/10.1016/j.heliyon.2024.e31139
21. 2024: Pandit A, Batelaan O, Pandey VP, Adhikari S (2024). Depleting spring sources in the Himalayas: Environmental drivers or just perception? *Journal of Hydrology: Regional Studies*, 53, 101752. doi: https://doi.org/10.1016/j.ejrh.2024.101752
22. 2024: Danegulu A, Karki S, Bhattarai PK, Pandey VP (2024). Characterizing urban flooding in the Kathmandu Valley, Nepal: the influence of urbanization and river encroachment, *Natural Hazards*. Doi: https://doi.org/10.1007/s11069-024-06650-w
23. 2023: Shrestha, A., Subedi, B., Shrestha, B., Shrestha A., Maharjan A., Bhattarai, PK, Pandey VP (2023). Projected trends in hydro-climatic extremes in small-to-mid-sized watersheds in eastern Nepal based on CMIP6 outputs. Clim Dyn (2023). https://doi.org/10.1007/s00382-023-06836-1
24. 2023: Pandey VP, Shrestha, N, Urfels A., Ray A., Khadka M., Pavelic P., McDonald AJ, Krupnik TJ (2023). Implementing conjunctive management of water resources for irrigation development: A framework applied to the Southern Plain of Western Nepal. Agricultural Water Management, 283 (1): 108287. doi: https://doi.org/10.1016/j.agwat.2023.108287

25. 2023: Karki N., Shakya NM, Pandey VP, Devkota LP, Pradhan AMS, Lamichhane S. (2023). Comparative performance of regionalization methods for model parameterization in ungauged Himalayan watersheds. Journal of Hydrology: Regional Studies, 47: 101359. doi: https://doi.org/10.1016/j.ejrh.2023.101359
26. 2022: Pradhan P., Khadka M., GC RK, van-Koppen B, Rajouria A, Pandey VP (2022). Community institutions in water governance for sustainable livelihoods. Waterlines, 41 (3): 1-14. doi: http://dx.doi.org/10.3362/1756-3488.21-00017
27. 2022: Bhattarai, T.N., Ghimire, S., Aryal, S., Baaniya, Y., Bhattarai, S., Sharma, S., Bhattarai, P.K., Pandey, V.P. (2022). Projected changes in hydro-climatic extremes with CMIP6 climate model outputs: A case of rain-fed river systems in Western Nepal. Stochastic Environmental Research and Risk Assessment, 37(3): 965-987. doi: https://doi.org/10.1007/s00477-022-02312-0
28. 2022: Dangol, S., Talchabhadel, R., Pandey, V.P. (2022). Performance evaluation and bias correction of gridded precipitation products over Arun River Basin in Nepal for hydrological applications. Theoretical and Applied Climatology, 148, 1353-1372. doi: https://doi.org/10.1007/s00704-022-04001-y
29. 2022: Orr, A., Ahmad, B., Alam, U., Appadurai, A.N., Bharucha, Z.P., Biemans, H., Bolch, T., Chaulagain, N.P., Dhaubanjar, S., Dimri, A.P., Dixon, H., Fowler, H.J., Gioli, G., Halvorson, S.J., Hussain, A., Jeelani, G., Kamal, S., Khalid, I.S., Liu, S., Lutz, A., Mehra, M.K., Miles, E., Momnlanch, A., Muccione, V., Mukherji, A. Mustafa, D. Najmuddin, O., Nasimi, M.N., Musser, M., Pandey V.P., Praveen, S., et al. (2022). Knowledge priorities on climate change and water in the Upper Indus Basin: A horizon scanning exercise to identify top 100 research questions in social and natural sciences. Earth's Future, e2021EF002619. doi: https://doi.org/10.1029/2021EF002619
30. 2022: KC, B., Schultz, B., Mohssen, M., Chau, H.W., Pandey V.P. (2022). Assessing effective pasture root depth for irrigation scheduling by water balance and soil moisture monitoring. Irrigation and Drainage, 71(4): 971-979. Doi: https://doi.org/10.1002/ird.2708
31. 2022: Gautam D., Adhikari, R., Gautam, S. Pandey, V.P., Thapa, B.R., Lamichhane, S; Talchabhadel, R. Thapa, S. Niraula, S. Aryal, K.R., Lamsal, P., Bastola, S., Sah, S.K., Subedi, S.K., Puri, B., Kandel, B., Sapkota, P., Rupakhety, R. (2022). Unzipping flood vulnerability and functionality loss: tale of struggle for existence of riparian buildings. Natural Hazards, 119: 989-1009. doi: https://doi.org/10.1007/s11069-022-05433-5
32. 2022: Kafle, K., Uprety, L., Shrestha, G., Pandey, V.P., Mukherji, A. (2022). Are climate finance subsidies equitably distributed among farmers? Assessing socio-demographics of solar irrigation in Nepal. Energy Research & Social Science, 91 (September 2022), 102756. doi: https://doi.org/10.1016/j.erss.2022.102756
33. 2022: Bhattarai, R., Bhattarai, U., Pandey, V. P., Bhattarai, P. K. (2022). An artificial neural network-hydrodynamic coupled modeling approach to assess the impacts of floods under changing climate in the East Rapti Watershed, Nepal. Journal of Flood Risk Management, e12852. doi: https://doi.org/10.1111/jfr3.12852
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D. Conference Proceedings (selected; * Speaker)

1. 2018.04: Pandey V.P., Dhaubanjar S., Bharati L., Thapa B.R. (2018) Climate Change and Water Availability in Western Nepal. In: Proceedings of National Seminar on Nature for Water. 28 Mar 2018. Nepal Academy of Science and Technology (NAST), Mahendranagar, Nepal. pp 8-19.
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3. 2013.09: Manandhar S., Pandey V.P., Kazama F. Is people's perception really important in climate change studies? In: *Proceedings of the 21st Symposium on Global Environment*, 17-18 September 2013, Tohoku University, Sendai. pp 127-130.
4. 2012.11: Pandey V.P., Manandhar S., Kazama F. Water poverty analysis of selected river basins in Nepal. In: *Proceedings of Hydrology and Water Resources Symposium 2012*, 19-22 November, Dockside, Cockle Bay, Sydney, Australia. pp 127-130.
5. 2012.11: Manandhar S., Pandey V.P., Kazama F. An Integrated framework to assess climate change impacts on water resources and evaluate adaptation options. In: *Proceedings of The 10th International Symposium on Southeast Asian Water Environment*, 8-10 November, Hanoi, Vietnam. pp 33-42.
6. 2011.12: Manandhar, S., Pandey, V.P. Application of YHyM/BTOPMC to evaluate hydrological responses under changing climatic conditions: a case of a snow-fed river basin in Western Nepal. In: *Proceedings of The 9th International Symposium on Southeast Asian Water Environment*, 1-3 December, Bangok, Thailand. pp 383-390.
7. 2011.10: Manandhar S., Pandey V.P., Kazama F. Evaluation of Water Poverty Index (WPI) in different physiographic regions within a river basin in western Nepal. In: *Proceedings of The 4th IWA-ASPIRE Conference and Exhibition*, 2-6 October 2011, Tokyo, Japan.
8. 2010.11: Pandey V.P., Kazama F. Simulation of near-to-natural groundwater flow dynamics in Kathmandu Valley using GETFLOWS: preliminary results. *Poster presentation at International Symposium on "The University of Yamanashi Global COE Program (UY-GCOE) as an International Academic Hub for River Basin Research"*, 29-30 November, University of Yamanashi, Japan.
9. 2010.10: Manandhar S., Pandey V.P. Analysis of trends in climate variability indices: a case study of Kali Gandaki River Basin (KGRB), Nepal. In: *Proceedings of the 8th International Symposium on Southeast Asian Water Environment*, 24-26 October, Phuket, Thailand. pp 103-108.
10. 2010.07: Pandey V.P., Shrestha S., Kazama F. A GIS-based approach for estimating spatial variation in groundwater storage volume and potential areas for groundwater development. In: *Proceedings of 5th IWA Young Water Professionals Conference (YWPC2010)*, 5-7 July, University of New South Wales, Sydney, Australia.
11. 2009.05: Chapagain S.K., Nakamura T., Shrestha S., Pandey V.P., Kazama F. Stable isotope characteristics of groundwater in Kathmnandu Valley-Nepal. *Poster Presentation, Japan Geophysics Union Meeting (JGPM)*, Tokyo, Japan. May, 2009. (Ref. H128-P007).
12. 2009.04: Pandey V.P., Chapagain S.K., Kazama F. Groundwater environment of Kathmandu Valley in central Nepal: Driver, Pressure, State, Impact and Response (DPSIR). In: Bruthans-Kovar-Nachtnebel (eds.) *Proceedings of 2nd International Multidisciplinary Conference on Hydrology and (HydroEco'2009)*, 20-23 April, Vienna, Austria. pp 19-22.
13. 2009.04: Pandey V.P., Chapagain S.K., Kazama F. Kathmandu Valley aquifer, Nepal: groundwater development and sustainability. In: *Proceedings of International symposium on Environment, Energy and Water in Nepal: Recent Researches and Direction for Future*, 31 March – 01 April 2009, Kathmandu, Nepal. pp 31-38.
14. 2009.04: Nakamura T., Kazama F., Chapagain S.K., Pandey V.P., Osada Y., Shrestha S. Isotopic approach for groundwater studies. In: *Proceedings of International symposium on Environment, Energy and Water in Nepal: Recent Researches and Direction for Future*, 31 March – 01 April 2009, Kathmandu, Nepal, pp. 23-30.
15. 2008.10: Pandey V.P., Kazama F. Effect of scale on adaptive capacity of water resources system: a case study from a Nepalese river basin. In: *Proceedings of the 6th International Symposium on Southeast Asian Water Environment*, 29-31 October Bandung, Indonesia. pp 123-131.

E. Selected Non-Referred Publications (essays, reports, theses, and others)

1. 2017.08: Pandey V.P., Salam P.A., Shrestha S., Anal A.K. Working towards a sustainable future. EOS, 98. doi: https://doi.org/10.1029/2018EO078989. Published on 16 August 2017. Available online at: https://eos.org/editors-vox/working-towards-a-sustainable-future
2. 2012.08: Pandey V.P. and Magome J. A report on ICRE GIS Seminar Series, 2010-2011. *Annual Report of Global COE Program/University of Yamanashi*, pp. 205-206.
3. 2012.08: Pandey V.P. and Magome J. A report on BTOPMC Training in Nepal (19-23 September, 2011, Kathmandu, Nepal). *Annual Report 2011 of Global COE Program/University of Yamanashi*, pp. 211-212.
4. 2010.09: Pandey V.P. Development of methodology to evaluate long-term adaptation strategies in sustainable groundwater management. *Doctoral Dissertation*, Global COE Program, University of Yamanashi, Japan.
5. 2010.02: Pandey V.P. and Kazama F. Climate change impacts on water resources in Nepal: a review. *NEA-JC Newsletter*, 3(2): 3-6. Available online at: http://www.neajc.org/links/NEA-JC-NewsLetter201004-Y3-2.pdf
6. 2007.05: Vulnerability assessment of freshwater resources: a case study of Bagmati River Basin. *M.Eng. Thesis*, Asian Institute of Technology (AIT), Thailand.

F. Research Impacts

- **Total Citations to the Published Works**: 4466 (Google Scholar: 19 August, 2025)
- **The h-index of the Published Works**: 38 (Google Scholar: 19 August, 2025)
- **The i10-index of the Published Works**: 75 (Google Scholar: 19 August, 2025)

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14. Short Para on Self [or Brief Profile]

Prof. Vishnu Pandey has a background in Civil Engineering and specializes in the areas of hydrology, water resources, flood risk, climate change impacts, and adaptation. He is currently a Professor (Water Resources) with the Department of Civil Engineering and Deputy Executive Director at Center for Water Resources Studies, Institute of Engineering IOE), Tribhuvan University, Nepal. He is a recipient of various awards and recognitions including Young Scientist Award from Nepal Academy of Science and Technology (NAST) in 2018. He also served as a Governing Board Member of Nepal Engineering Council (2019-2023); and a Member of "Engineering Cluster" of University Grant Commission (UGC) of Nepal (2021-2023). He is currently serving as a Member of Academic Council of Tribhuvan University in Nepal (2024- todate), Departmental Research Committee (DRC) of Civil Engineering Department, IoE/TU (2021-todate), Standing Committee Member of Civil Engineering Subject Committee of IoE/TU (Jul 2023 – todate), and Subject Committee Member of Civil Engineering of various universities in Nepal.

Before joining University, he was with International Water Management Institute (IWMI) as "Water & Climate Specialist", where he worked as water and irrigation specialist in various projects. Has has successfully completed assignments with ADB, World Bank, FAO and other international organizations too. In a recent assignment with FAO, Prof. Pandey also worked as mid-term review (MTR) specialist for the very first GCF project in Nepal. He is also taking a lead role in developing a concept note for GCF Project, focusing on responding to compound and cascading disasters. He has experience of working in Japan, Thailand, and Nepal and has been involved in various types of research and development projects related to various aspects of water. There are over 100 publications to his credit, 75 of them are peer-reviewed papers in international journals. He is continually engaged in capacity building as well. Prof. Pandey has successfully designed and implemented water and irrigation-related training programs for a wide range of participants from Nepal and abroad. Prof. Pandey completed Bachelor in Civil Engineering from IOE Pulchowk Campus (Nepal), M. Eng. (Water

Engineering and Management) from Asian Institute of Technology (AIT, Thailand), and PhD in Integrated River Basin Management from University of Yamanashi (Japan).