## APIL K C

Email: apil@umich.edu || Phone: +1-7343304769

Address: Kusunti, Lalitpur, Nepal ||ORCID: 0000-0001-9313-040X

Passionate researcher in urban resilience, spatial politics, and the equitable built environment. Published scholarly journals in post-disaster reconstruction and urban resilience. Proven experience in developing and implementing various research methods as ethnographic studies. Taught and trained students in architecture and urban planning. A strong advocate of good governance, urban resilience, and inclusive urbanization. Accomplished multiple planning projects coordinating with multidisciplinary experts.

## **Education**

- Ph.D. in Urban and Regional Planning (2023-2027), University of Michigan, Ann Arbor, Research Focus: My research focuses on equitable urban resilience. My dissertation explores how different stakeholders perceive and respond to the challenges and opportunities of climate change adaptation in cities. I am passionate about advancing knowledge and practice on urban sustainability and social justice.
- Master of Science in Urban Planning, (2012-2015), Pulchowk Campus, Institute of Engineering, Tribhuvan University, Nepal
   <u>Dissertation title:</u> Role of Urban Governance in Comprehensive Planning: Actors and Participation Research Grant (DAAD) at the Cologne University of Applied Science, Köln.
- **Bachelor of Architecture,** 2012, Pulchowk Campus, Institute of Engineering, Tribhuvan University, Nepal Dissertation title: Cultural Restoration of Pachali Bhairay

### **Research Interests**

- Spatial Politics
- Urban Governance
- Urban Resilience
- Political Economy
- Disaster and Climate Change
- Equitable and Inclusive City
- Community Planning
- Urban Morphology

## **Professional Experience**

# **Team Leader**

**2023 Feb – Aug 2023** 

Urban Park Pvt. Ltd.

Client: DAI- MinErgy Privat Limited/ SWITCH Asia Program under EU

Project Name: Baseline Study on Operational Energy consumption of Buildings in Nepal Successfully mobilized enumerators, reviewed survey questions, and instructed regional supervisors. Ensured the quality of data collection, conducted research analysis, and finalized the comprehensive analytical baseline report. Project gave larger perspective of energy usage of building in different bio-

climatic zones and shall serve as key evidence for energy efficient building design guidelines.

**Project Coordinator** 

2023 Jan - Jun 2023

Urban Park Pvt. Ltd.

Client: DT Global International Development UK Ltd

Project Name: Accelerating Private and Public Investment in Infrastructure Component (APPIIC) Conducted a comprehensive background study on similar guidelines in order to gather relevant insights. Collaborated closely with IBN officials, actively seeking their input and conducting consultations to understand their specific requirements. Developed a comprehensive set of Environmental and Social Safeguard Guidelines for IBN, encompassing the entire project lifecycle from inception to implementation. Engaged IBN officials for their valuable comments and feedback, incorporating their insights into the final revisions of the guidelines. Successfully finalized and presented the revised Environmental and Social Safeguard Guidelines.

## **Project coordinator / Disaster Risk Reduction Specialist** Urban Park Pvt. Ltd.

2022 Feb- Oct 2022

Client: DAI- Tayar Nepal/ USAID

Project Name: Support on establishment of housing construction support service center to facilitate building permitting process in Dullu municipality.

Led and coordinated the establishment of the Housing Construction Support Service Center in Dullu Municipality. Provided comprehensive information on the building permit process and conducted thorough reviews of building permit application forms for individuals seeking to construct new houses. Supported the maintenance of a roster of trained masons and engineers registered on the municipality's website. Successfully established the housing construction support service center, including collecting pre-approved designs, displaying, and distributing information materials. Trained municipality staff to ensure project continuity and sustainability. Resulted in streamlined building permitting process and enhanced support for housing construction in Dullu Municipality.

## **Project coordinator / Disaster Risk Reduction Specialist** Urban Park Pvt. Ltd.

2021 June- Dec 2022

Client: DAI- Tayar Nepal/ USAID

Conceptualized and synthesized the work plan for disaster risk reduction on flooding and landslides in the western region of Nepal, i.e., Birendranagar and Dullu. Integrated the DRR mitigation structures with livelihood and social enterprise development through bio-engineering works. Conducted urban financing and livelihood training for municipal officers and project community members.

## **Individual Consultant World Bank Group**

2021 March- Oct 2021

Short-Term Consultant at the World Bank for an assignment with SAR- Climate Change and DRM. Assigned to review current NBC Code revision and means of implementation in the changed scenario at local levels through different government levels. Investigated the impact of new NBC on the implementation of building design and permit system and advised the socio-economic impact of the increased safety in building design technology.

## **Project Co-Ordinator** CEMECA-BEAM-RIDEC JV (Urban Park Pvt. Ltd.)

Jan 2020- Dec 2020

Client: Department of Urban Development and Building Construction, Government of Nepal

Administered and executed the work plan in preparation for the Integrated Urban Development Plan (IUDP) for 18 municipalities in eastern cluster of Nepal. Conducted various stakeholder meetings and key

informant surveys in alignment with the comprehensive plan of the municipalities. Coordinated teams of urban planners, architects, engineers, social mobilizers, and environmental experts to work closely with Municipalities and DUDBC, Government of Nepal. Led team in formulating thematic development plans for the project, including the multi-sectoral investment plan and Institutional development.

# • Strategic Planning Consultant CEMECA-BEAM-RIDEC JV (Urban Park Pvt. Ltd.)

Feb 2018- Dec 2019

Client: Department of Urban Development and Building Construction, Government of Nepal/World Bank

Assessed and formulated indicative plans for four municipalities in the Eastern-Terai region of Nepal and coordinated multi-disciplinary experts under the *Urban Governance and Infrastructure Improvement Project*. Conceptualized financial and institutional capacity of Municipalities through infrastructure addition and other means. Established the infrastructure prioritization criteria negotiating the socio-political interest of the local and objective of the national urban agenda.

# • CBDRRM Co-Ordinator

Dec 2016 – Feb 2018

**Oriental Consultants Global** 

Client: JICA Nepal and Government of Nepal

Administered and monitored a community-based disaster risk management project under "The Project for Assessment of Earthquake Disaster Risk for the Kathmandu Valley in Nepal (ERAKV), Japan International Cooperation Agency (JICA) Technical Assistance Project. Formulated strategic plans for the DRR institutional setup at local government and implementation plan of DRR in alignment with Sendai Framework.

# • Program Evaluator/ Urban Planner

Oct 2016- Dec 2016

Client: WWF Nepal/ USAID

Facilitated as a researcher to team leader Dr. Sanjaya Uprety for a WWF project, which involved the evaluation of the projects and programs carried out by WWF in the earlier stage of years in the field of livelihood, climate change, reconstruction, and biodiversity, through green recovery project.

#### • Urban Planner - Individual Consultant

Aug 2016- Oct 2016

Client: UNDP, Nepal

Facilitated as an urban planner with team leader Dr. Ajay Chandra Lal in strengthening National Building Code implementation and governance of local government in the post-disaster reconstruction process after the 2015 Gorkha Earthquake. Examined and recommended action plans for three municipalities.

## Researcher/ Urban Planner UNDP, IOE & CEPT University

**Sept 2015- July 2016** 

Client: Government of Nepal, Ministry of Urban Development

Planned and prepared a "Re-cluster Manual" after accomplishing the Re-clustering Project of Majhigaun, Melamchi, Nepal. Convinced the Ministry of Urban Development and National Reconstruction Authority to consider the document a policy document for Post-Disaster Rehabilitation. Manual is conceptually owned in making crucial disaster-level national decisions by the National Disaster authority in Nepal.

# • Urban Planner

Jun 2015 - Sept 2015

**EcoCoDe Nepal Pvt. Ltd.** 

Client: Department of Urban Development and Building Construction, Government of Nepal

Delivered a land pooling project with an implementation plan while coordinating with multi-disciplinary experts and stakeholders. Convinced stakeholders and expedited the implementation of the project for timely completion.

## **Professional Training**

- DAAD Alumni Seminar: "Resilient Flood Risk Management," October 14th -18th, 2019, Cologne, Germany. TH Köln, Cologne,
- Workshop- "Training for Engineers and Planners on Risk Sensitive Land Use Planning" from 1st-6th November 2015- organized by KVDA, UNDP-CDRMP, NSET, and We-link-Genesis.
- Organized Seminar on "Role of local knowledge and indigenous technologies in Nepal's postearthquake rebuilding process" on June 21 at IOE on behalf of IUDPR.

• 4 Months **Research Exchange** (October 2014- January 2015) at German University, Cologne University of Applied Sciences, Fachhochschule Köln Cologne, Germany

- 2013 Osaka Invitational Program for Short-term Overseas **Trainees in Architecture and Arts (Ando Program)** Sept. 26 to Oct. 23, 2013, Osaka, Japan
- East Asia Project study and sustainable design camp, July-August 2013 Kirtipur Kathmandu

## **Scholarly Publications**

### Peer-Reviewed Publications

- Sharma, K., KC, A., & Pokharel, B. (2022). Status and Challenges of Reconstruction of Heritage Structures in Nepal After 2015 Gorkha, Nepal Earthquake. In Heritage & Society (pp. 1–24). Informa UK Limited. https://doi.org/10.1080/2159032x.2022.2126229
- Fekete, A., Aslam, A. B., de Brito, M. M., Dominguez, I., Fernando, N., Illing, C. J., **KC**, **A**. K., Mahdavian, F., Norf, C., Platt, S., Santi, P. A., & Tempels, B. (2021). Increasing flood risk awareness and warning readiness by participation But who understands what under 'participation'? In International Journal of Disaster Risk Reduction (Vol. 57, p. 102157). Elsevier BV. https://doi.org/10.1016/j.ijdrr.2021.102157
- KC, A., Sharma, K., & Pokharel, B. (2017). Performance of Heritage Structures during the Nepal Earthquake of April 25, 2015. In Journal of Earthquake Engineering (Vol. 23, Issue 8, pp. 1346–1384). Informa UK Limited. https://doi.org/10.1080/13632469.2017.1360225
- Sharma, K., **KC**, **A.**, Subedi, M., & Pokharel, B. (2018). Challenges for reconstruction after Mw7.8 Gorkha earthquake: a study on a devastated area of Nepal. In Geomatics, Natural Hazards and Risk (Vol. 9, Issue 1, pp. 760–790). Informa UK Limited. https://doi.org/10.1080/19475705.2018.1480535
- Sharma, K., KC, A., Subedi, M., & Pokharel, B. (2018). Post Disaster Reconstruction after 2015 Gorkha Earthquake: Challenges and Influencing Factors. In Journal of the Institute of Engineering (Vol. 14, Issue 1, pp. 52–63). Nepal Journals Online (JOL). https://doi.org/10.3126/jie.v14i1.20068

### **Publications (Under review)**

- KC, A, Spatial Changes in Kathmandu Valley: A review through political perspective, 2021, Submitted to International Journal of Urban and Regional Research (under review)
- Sharma, K., KC, A., and Parajuli, R.R. (2020). Field investigation on the performance of building structures by the 2019 windstorm in the Central South of Nepal. Structures (in review).
- Sharma, K., KC, A., and Parajuli, R.R. (2020). Reconnaissance study of the infrastructure impacted by the 2019 windstorm in the Central South of Nepal. Journal of Performance of Constructed Facilities, ASCE (in review).

#### Conference Publications & Presentation

- KC, A. (2015): Dhungedharas (Stone Water Conduits) of Kathmandu valley, Kobe School of Design Graduate Conference, Oct. 2015, Kobe, Japan
- KC, A. (2015): Issues in Modern Architecture at Awaji Island, Hyogo, Japan
- Invited presentation at **Martin Chautari** on "Policy and Standard vs. Practice: A Case Study of Urban Roads in Kathmandu Valley" Kathmandu, Nepal, 14 August 2018.
- Invited presentation at **Martin Chautari**, "on Inclusive City Planning: Current Practices and Future Strategies" Kathmandu, Nepal, 10 January 2016.
- KC, A., Shrestha, S., Shrestha, G., & Dahal, R. (2014). Street Vendors in Kathmandu Durbar Square: Use and Management of space for Informal Activity. Lalitpur: Department of Architecture and Urban Planning, Urban Informal Sector- Final Seminar Presentation.

## Policy reports, and articles

- "Reconstruction Process Manual: Resettlement in Post-Disaster Scenario," for the Ministry of Urban Development/ National Reconstruction Authority, with a research team from IOE, UNDP, and CEPT University.
- "Rapid Evaluation: Post-earthquake Green Recovery and Reconstruction Work by the Hariyo Ban Program." WWF Nepal, Kathmandu, Nepal.
- Policy notes on conducting a weekly program of "Architect Speaks: at the Society of Nepalese Architects.

- Commentator on NIURS Discussion Series: Oriental Knowledge of City Planning, 2nd July 2020
- Moderator on the thematic session related to City Planning and Transportation, CDEN, 2020 Feb. 23-24
- काठमाडौंमा अझै २० लाख जनसंख्या थप्ने सहरी विकास (Politics and Urbanization), Setopati National Online News portal, Feb 15, 2018.
- Heritage and History, Republica National Daily Newspaper, February 6, 2018.
- Five I's in Nepal's Development, The Rising Nepal National Daily Newspaper, February 2, 2018.
- Walking over the roads, Setopati National Online News Portal, December 12, 2016.
- Peer reviewer on International Research Journal of Architecture and Planning & Journal of Earthquake Engineering

## **Teaching And Mentoring**

➤ Institute of Engineering- Department of Architecture and Urban Planning, Pulchowk Campus
Teaching Assistant, M.Sc. Urban Planning, Masters of Disaster Risk Reduction, Masters of Energy
Efficient building

Course:

Research Methodology (2014-2020), Survey and Information (2016-2017), Community-Based Disaster Risk Reduction (2018,2019)

Advised 5 Post-graduate students on inclusive city planning infrastructure and land use planning for their research thesis. Counseled primarily on developing research framework, methodology, and refining literature review.

> Institute of Engineering- Department of Architecture, Thapathali Campus

Assistant Professor, Bachelor's in Architecture Course: Design Studio (2015- 2023), Design Theory (2015- 2023), Urban and Human Settlement Planning (2015- 2023) Thesis Advisor for 6 IOE undergraduates (2020-2023)

## **Online Courses:**

- Cities X: The Past, Present, and Future of Urban Life: Harvard X Urban101x (EDX)
- Future Cities- ETHx: FC-01x (EDX)
- Sharing Cities: Governance and Urban Sustainability (Coursera)
- Studying Cities: Social Science methods for urban Research: Erasmus University Rotterdam (Coursera)

# **Awards And Grants**

- DAAD Alumni Seminar 2019 "Resilient Flood Risk Management" October 14<sup>th</sup> -18<sup>th</sup>, 2019, Cologne, Germany
- CNRD Master Research Exchange. October 2014- January 2015 (4 Months DAAD Research Grant) at Köln, Germany
- Awarded as 2013 Ando trainee for Japan scholarship (1 Month program at Osaka, Japan)
- Merit Scholarship for 2-year Master's degree in Urban Planning, at Pulchowk Campus, IOE, Tribhuvan University, 2007-2012
- Merit Scholarship for 5-year Bachelor's degree in Architecture at Pulchowk Campus, IOE, Tribhuvan University, 2007-2012

#### **Skills**

• Arc GIS / QGIS | SPSS | AutoCAD | Revit Architecture | Sketch up | Adobe Photoshop | Illustrator. |

## **Contribution to Professional Societies**

- General Secretary at 14th Executive Committee Society of Nepalese Architects (SONA) '2021-2023.'
  - Organized International conventions and attended various international programs representing SONA.
  - Contributing to the formulation of Urban Act 2023 from the built environment perspective.
  - Initiated an online magazine from SONA- "The Built Culture," to reflect on the development of a built environment in Nepal. Crucial for architects and planners.
- Life Member at Regional & Urban Planners Society of Nepal (RUPSON).
  - Contributed to topics and issues raised by RUPSON in the urban development of Nepal.
- Executive Member of 12<sup>th</sup> Executive Committee at SONA '2016-2018'
- Registered Architect at Nepal Engineering council "1070" Architecture"
- Life Member at Society of Nepalese Architects (SONA) 671
- Life Member: Nepal Engineers Association- 14348 "Architect"

## References

Prof. Dr. Jibaraj Pokharel, jibaraj@gmail.com

M.Sc. Thesis Supervisor

Former Dean at the Institute of Engineering

Former Vice Chancellor National Academy of Science and Technology (NAST)

Dr. Jagadish Chandra Pokharel, jagadishcpokharel@gmail.com

Professional and Academic Advisor

Former Vice-Chairman, National Planning Commission

Prof. Ar. Rajesh Thapa, rtacnepal@gmail.com

President, Society of Nepalese Architect