

# Jarumi Kato-Huerta

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#### WORK EXPERIENCE

25/08/2022 - CURRENT Italy

#### **UNIVERSITY RESEARCH ASSISTANT UNIVERSITY OF TRENTO**

Assistance and support on the European Commission *Horizon Europe research and innovation* project **SELINA - Science for Evidence-Based and Sustainable Decisions about Natural Capital under Grant agreement No 101060415.** 

1. Deputy lead in the coordination activities of Work Package 8, which aims to develop case studies to support ecosystem services knowledge in evidence-based public decision-making processes.

Website https://project-selina.eu/

01/10/2022 - CURRENT Trento, Italy

#### **UNIVERSITY TEACHING ASSISTANT UNIVERSITY OF TRENTO**

Within the Master's program of *Territorial and Environmental Engineering* at the Department of Civil, Environmental and Mechanical Engineering, I am currently a teaching assistant for the course "Nature-based solutions for Urban Sustainability", which focuses on:

- 1. Understand contemporary sustainability issues in urban areas and the role that nature can play for more livable, resilient and healthier cities;
- 2. Analyze the supply and demand of ecosystem services provided by urban green and blue spaces by applying suitable mapping and assessment methods;
- 3. Understand the main typologies of nature-based solutions and the key principles for effective and context-specific planning, design and implementation;
- 4. Assess the environmental and socio-economic impacts of nature-based solutions through quantitative and qualitative indicators;
- 5. Critically review and discuss current thinking and experiences in cities and landscapes in Europe and around the world.

03/03/2023 - CURRENT

## **RESEARCH FELLOW NATURA NETWORK**

Fellow in the European node of the Nature-based Solutions Global Roadmap which will assess knowledge, challenges, and opportunities for innovation in research and practice within and across the world regions

15/04/2024 - 30/09/2024 Bolzano

#### **UNIVERSITY TEACHING ASSISTANT FREE UNIVERSITY OF BOLZANO**

Within the Master program of Environmental Management of Mountain Areas, I was employed as a teaching assistant for the course *Environmental Impact Assessment* 

01/11/2018 - 12/07/2022 Italy

#### **DOCTORAL RESEARCHER** UNIVERSITY OF TRENTO

- Researched the integration of environmental justice in Latin American Urban Climate Action plans by applying quantitative and qualitative content analysis
- Prepared a Nature-based solutions planning exercise in Las Palmas de Gran Canaria based on the distributive environmental justice index results and ecosystem services assessment
- Developed a composite Distributive Environmental Justice Index (DEJI) to assess spatial environmental justice conditions. This indicator was further applied in the insular city of Las Palmas de Gran Canaria (Spain).
- Performed mapping and assessment of ecosystems and their services to analyse their supply and demand
  patterns in an insular context as part of the project MOVE-ON (From case studies to anchor projects- setting the
  ground to advance MAES in Europe's overseas) with Grant Agreement No. 07.027735/2019/808239/SUB/ENV.D2

- Organised and conducted participatory workshops and online seminars for the MOVE project (MOVE: Facilitating MAES to support regional policy in overseas Europe: mobilising resources and pooling stakeholders).) with Grant Agreement No. 07.027735/2018/776517/SUB/ENV.D2
- Reviewed the state of the art on environmental justice and urban Nature-based solutions in specialised scientific literature.

**Department** Department of Civil, Environmental and Mechanical Engineering | Website https://planes.dicam.unitn.it/

01/2015 - 10/2015 Mexico

#### **UNIVERSITY RESEARCH ASSISTANT METROPOLITAN AUTONOMOUS UNIVERSITY**

- Conducted qualitative assessments methods for the economic valuation of ecosystem services from Natural Protected Areas in arid zones
- Prepared landscape assessments to report on the visual quality in the Natural Protected Area *El Charco del Ingenio*
- Conducted an Environmental Impact Assessment at the regional level to determine the impact of the modernization of the road *Apaxtla de Castrejón-Técpan de Galeana* along the stretch *El Caracol-Ylacotepec*.
- Conducted an EIA at the regional level to determine the environmental impact of the *Hacienda el Marqués project* in El Marqués, State of Querétaro, Mexico.
- Responsible for the use of Geographic Information System (GIS) to support the assessment tasks through the spatial analysis of geometries.

**Department** Department of Environmental Management

06/2014 Mexico

#### **UNIVERSITY RESEARCH ASSISTANT METROPOLITAN AUTONOMOUS UNIVERSITY**

• Responsible for data quality, control and safety during fieldwork activities for the census of the specie *Carnagea gigantea* in the Biosphere Reserve El Pinacate y el Gran Desierto de Altar in Sonora, Mexico. This research was carried out as part of the project "Ecology and exploitation of vegetal resources in the semiarid zones of Mexico"

**Department** Department of Ecology

#### EDUCATION AND TRAINING

01/2018 - 12/07/2022 Trento, Italy

**PHD IN CIVIL, ENVIRONMENTAL AND MECHANICAL ENGINEERING** Department of Civil, Environmental and Mechanical Engineering, University of Trento

Thesis Concept and methods for integrating Environmental Justice and Nature-based solutions in cities

09/2016 - 08/2017 Edinburgh, United Kingdom

MSC IN ECOSYSTEM SERVICES School of Geosciences, University of Edinburgh

Thesis Social Inclusion in Payment for Ecosystem Services in Mexico. Is it possible and should we do it?

09/2011 - 06/2015 Mexico City, Mexico

BSC IN BIOLOGY Department of Environmental Management, Metropolitan Autonomous University

Thesis Valuation of ecosystem services and environmental externalities in the town of San Miguel de Allende, México

#### LANGUAGE SKILLS

Mother tongue(s): **SPANISH** 

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production Spoken interaction		
ENGLISH	C2	C2	C2	C2	C2
ITALIAN	C1	C1	C1	C1	B2

#### DIGITAL SKILLS

Microsoft Office: proficient user of Word, Excel and Powerpoint

**Graphic enhancement** 

Adobe Illustrator | Basic AutoCAD

**GIS** 

OGIS | ArcGis | GRASS GIS

**Statistics** 

R Coding | Basic Matlab

**Qualitative data analysis** 

Analytical software (MaxQDA, NVivo, UCINET, SPSS)

#### PUBLICATIONS

#### Peer-reviewed research articles

Cybèle, C., <u>Kato-Huerta, J.</u>, Montero-Hidalgo, M., Burkhard, B., Grimoire, R., Sica, F., & Sieber, I. M. (2024). Using cocreation to build knowledge on cultural ecosystem services – A tiered approach for enhanced regional economic development of Réunion Island. *Ecosystem Services*, 68(June). <a href="https://doi.org/10.1016/j.ecoser.2024.101638">https://doi.org/10.1016/j.ecoser.2024.101638</a>

Adem Esmail, B., Anderson, C. C., Bast, S., Cortinovis, C., Suleiman, L., <u>Kato-Huerta, J.</u>, Högström, J., Balfors, B., Arciniegas, G., Geneletti, D., Mörtberg, U., & Albert, C. (2024). Geodesign to advance boundary work in urban planning: A study in Stockholm focused on nature-based solutions. *Ambio*, 285–304. <a href="https://doi.org/10.1007/s13280-024-02083-8">https://doi.org/10.1007/s13280-024-02083-8</a>

Barton, D. N., Immerzeel, B., Brander, L., Grêt-Regamey, A. <u>Kato-Huerta J.</u>, Kretsch, C., Clech, S. Le, Rendón, P., Seguin, J., Coyote, M. V. A., Almenar, J. B., Balzan, M. V., Burkhard, B., Carvalho-Santos, C., Geneletti, D., Goñi, V. G., Giannakis, E., Liekens, I., Lupa, P., ... Villosalda, M. (2024). Increasing uptake of ecosystem service assessments: best practice check-lists for practitioners in Europe. *One Ecosystem*, 9. <u>https://doi.org/10.3897/oneeco.9.e120449</u>

<u>Kato-Huerta J.</u> & Geneletti, D. (2023). Analysing the treatment of environmental justice and nature-based solutions in the Urban Climate Action Plans of Latin American metropolitan areas. *Local Environment*. <a href="https://doi.org/10.1080/13549839.2023.2221431">https://doi.org/10.1080/13549839.2023.2221431</a>

<u>Kato-Huerta J.</u> & Geneletti, D. (2023). Environmental justice implications of Nature-based solutions in cities: a systematic review of approaches, indicators, and outcomes. *Environmental Science & Policy*. Part of the special issue *Design, Plan and Govern Just Cities within Nature-based solutions*. https://doi.org/10.1016/j.envsci.2022.07.034

<u>Kato-Huerta J.</u> & Geneletti, D. (2022). A distributive environmental justice index to support green space planning in cities. *Landscape and Urban Planning*. <a href="https://doi.org/10.1016/j.landurbplan.2022.104592">https://doi.org/10.1016/j.landurbplan.2022.104592</a>

Sieber M. I., Montero-Hidalgo M., <u>Kato-Huerta J.</u>, Rendon P., Santons-Martín F., Geneletti D., Gil A., Trégarot E., Lagabrielle E., Parelho C., Vergílio M., van Beukering P., Bayley D., Arbelo M., Casas E., Duijdam S., Cillaureen E., David G., Dourdain A., Haroun R., Martín-García L., Otero-Ferrer F., Palacios-Nieto E., Pelembe T., Marechál J., Burkhard B. Mapping and assessing ecosystem services in Europe overseas: A comparative analysis of MOVE case studies. *OneEcosystem*. <a href="https://doi.org/10.3897/oneeco.7.e87179">https://doi.org/10.3897/oneeco.7.e87179</a>

2022

## **Book chapters**

Geneletti, D., Cortinovis, C., Orta-Ortiz, M. S., <u>Kato-Huerta, J.</u>, Longato, D., Falco, E. Mainstreaming Nature-based Solutions in cities through performance-based planning: A case study in Trento, Italy in Mahmoud I. H., Morello E., Geneletti D., Lemes de Oliveira F. (eds) *Nature-based Solutions for Sustainable Urban Planning: Greening Cities, Shaping Cities*, Springer International. DOI: 10.1007/978-3-030-89525-9\_2

2022

#### **Scientific Reports**

Geneletti, D., Cortinovis, C., Orta-Ortiz, M. S., <u>Kato-Huerta, J.,</u> Longato, D., Falco, E. Promuovere soluzioni basate sulla natura nelle città attraverso la pianificazione prestazionale: un caso di studio in Arcidiacono, A., Di Simine, D., Ronchi, S., Salata, S. (a cura di), pianificazione prestazionale: un caso di studio". In: Arcidiacono, A., Di Simine, D., Ronchi, S.,

Salata, S. (Eds.) SUOLO, SERVIZI ECOSISTEMICI E INFRASTRUTTURE VERDI: Metodi, ricerche e progetti innovativi per incrementare il Capitale naturale e migliorare la resilienza urbana., Roma: INU Edizioni - ISBN: 978-88-7603-233-2

2021

## **Conference Proceedings**

Tomaskinova, J.; Geneletti, D.; Grace, M.; Dicks, L. V.; Collier, M.; Sapundzhieva, A.; Stoev, P.; Alcantara Valero, A. F.; Longato, D.; <u>Kato-Huerta, J.</u>; Orta-Ortiz, M. S.; De Santis, L.; Balzan, M. V., ReNaturing Malta: Developing a capacity-building strategy for the mainstreaming of Nature-Based solutions in *EDULEARN21: 13th International Conference on Education and New Learning Technologies: Conference Proceedings*, Valencia: IATED, 2021, p. 8975-8984. - (EDULEARN PROCEEDINGS). - ISBN: 978-84-09-31267-2. Atti di: EDULEARN21, Online, 5th-6th July 2021.

#### NETWORKS AND MEMBERSHIPS

08/2021 - CURRENT

**Equity in Ecosystem Services research** 

Member of the thematic group Equity in Ecosystem Services research (TWG20) of the Ecosystem Services Partnership

#### HONOURS AND AWARDS

2020

## Study grant for doctoral students - University of Trento

Study grant for doctoral students not entitled to doctoral grant and enrolled on the Doctoral School in Civil, Environmental and Mechanical Engineering for working on research and capacity-building activities in the projects MOVE (Facilitating MAES to support regional policy in overseas Europe: mobilising resources and pooling stakeholders) and MOVE-ON (From case studies to anchor projects- setting the ground to advance MAES in Europe's overseas).

11/2017

MSc degree in Ecosystem Services obtained with Merit - University of Edinburgh

Second class honours upper division (2.1)

01/2016

Scholarship for Master's or PhD studies – Mexican National Council of Science and Technology (CONACyT)

01/2016

Complementary Scholarship for Postgraduate studies - Secretary of Public Education (Mexico)

10/2015

#### Academic Merit Medal - Metropolitan Autonomous University

best GPA of the 2011-2015 cohort in the Bachelor of Science in Biology

06/2014

Academic excellence scholarship - Secretary of Public Education (Mexico)

#### ORGANISATIONAL SKILLS

## **Chair and moderator at International Scientific Events**

Co-chair at the Session Assessing ecosystem conditions, services, and biodiversity in Urban Nature Plans: targets, methods, and indicators at the 5th ESP Europe Conference in Wageningen, The Netherlands, 18-22 November 2024

Chair at the session Integrating Nature-based Solutions in Spatial Planning for Tackling Climate Change and Biodiversity Loss in Latin American Urban and Peri-urban Contexts at the 4th ESP LAC 2023 Conference in La Serena, Chile, 06-10 November 2023

Co-chair at Session 08b: *Applications of ecosystem services assessments in different contexts* of the Ecosystem Services Partnership 3<sup>rd</sup> European Conference *Ecosystem Services, Science, Policy and Practice in the face of Global Changes*, Tartu, Estonia, 7-10 June 2021

#### CONFERENCES AND SEMINARS

18/10/2024

Enhancing Justice Dimensions for Integrated Ecosystem Assessment: Implications for Decision-Making

5th ESP Europe Conference in Wageningen

08/11/2023

Enhancing Transdisciplinary Knowledge Co-production for Effective Uptake of ES-Evidence: Insights from the SELINA Project

Fourth Ecosystem Services Partnership Conference of Latin America and the Caribbean

09/10/2023

**Environmental Justice concerns in Urban Climate Action Plans: Insights from Latin American Cities** 

Fourth Ecosystem Services Partnership Conference of Latin America and the Caribbean

14/06/2022 - 17/06/2022

Application of a Distributive Environmental Justice Index for urban Nature-based solutions planning

Alternet Conference: Transformative Changes for Biodiversity and Health, Ghent, Belgium

09/2021

Le soluzioni basate sulla Natura come strumento di adattamento ai cambiamenti climatici

All4Climate event *Soluzioni basate sulla Natura per l'adattamento ai cambiamenti climatici.* Associazione Culturale e Ambientalista Nour / Università di Verona, Verona, Italia

07/2021

Developing an Environmental Justice Index in urban areas to prioritise the implementation of Nature-based solutions: the case study of Las Palmas de Gran Canaria

3<sup>rd</sup> Sure World Conference Cities as Social-ecological systems, Society of Urban Ecology, Póznan, Poland, 7-9 July 2021

06/2021

A spatial environmental justice index to prioritise the implementation of nature-based solutions in cities

Ecosystem Services Partnership 3<sup>rd</sup> European Conference *Ecosystem Services, Science, Policy and Practice in the face of Global Changes*, Tartu, Estonia, 7-10 June 2021

27/10/2020

La justicia Ambiental y los servicios ecosistémicos como factores de planificación para las Soluciones Basadas en la Naturaleza en áreas urbanas

Regional Conference of the Ecosystem Services Partnership in Latin America and the Caribbean *Trascendiendo el estudio de los Servicios Ecosistémicos hacia la Transdisciplina e Incidencia,* Mexico City, Mexico

07/02/2020

Nature-based solutions and Environmental justice

ReNature Training Course Nature-based solutions in urban planning, University of Trento, Italy

10/2019

Environmental justice and nature-based solutions in cities: A conceptual framework

Ecosystem Services Partnership 10th World Conference (ESP 10) session *Advancing urban ecosystem service assessments for more inclusive and just cities.* 

10/2018

Drugs and violence in times of sustainability: the socio-environmental conflict of drug trafficking in Latin America

Third Latin-American Congress of socioenvironmental conflicts. The University of Veracruz. General Direction of Biological and Agricultural Sciences. Veracruz, Mexico.

11/2016

## Landscape assessment in the Natural Protected Area "El Charco del Ingenio

First International Congress of Natural Protected Areas, organised by the National Commission of Natural Protected Areas (CONANP), Mexico City

#### COURSES AND WORKSHOPS

03/2021

## **Planning Nature-based Solutions in Cities**

ReNature Interdisciplinary Training School, Institute of Applied Sciences, Malta College of Arts, Science & Technology

09/2019

## **Agent-Based Modeling for Geographical Applications**

University of Trento

02/09/2019 - 06/09/2019

## ThinkNature Summer School "Nature-based solutions: From theory to practice"

The Technical University of Crete. Chania, Greece

06/2019

## **AESOP PhD workshop "Planning for Transition"**

University of Ferrara, Italy

08/2018

## The environmental dimension in the design and execution of public policies

176 credit hours. National Autonomous University of Mexico (UNAM). Faculty of Science

06/2018

#### **Introduction to Theoretical Ecology**

36 credit hours. Massachusetts Institute of Technology (MIT) - National Autonomous University of Mexico (UNAM). Institute of Ecology, UNAM. Mexico City.

04/2016

#### Integrating Ecosystem Services into Development Planning.

36 credit hours. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) - Metropolitan Autonomous University, Azcapotzalco, Mexico City

#### TEACHING ACTIVITIES

## **Supporting teaching activities under European Comission Projects**

Provided assistance and training to students as part of the capacity-building activities of the **ReNature Project: Grant No. 809988**, for the following events:

ReNature Training III: Nature-based solutions in urban planning (6-7 February 2020, Trento, Italy).

- Provided frontal lessons in the scope of the training activities, including a presentation on the topic of environmental justice for Nature-based solutions planning
- Assisted students and early career researchers in the preparation of a case study on Nature-based solutions implementation in the urban core of the city of Trento (Italy)
- Provided methodological guidance on the process of mapping and assessment of urban ecosystem services
- Assisted students and provided feedback on preparing a final presentation to summarise the topics of the course.

ReNature Training School on Nature-based solutions and the science-policy interface (15-18 March 2021, virtual event)

- Provided methodological support to students for a case study preparation on stakeholder engagement and Nature-based solutions planning in the city of Valetta (Malta)
- Assisted students and provided feedback on preparing a final presentation to summarise the topics of the course.

Provided assistance and training to students as part of the capacity-building activities of the **MOVE-ON project Grant No. .07.027735/2018/776517/SUB/ENV.D2**, for the following events:

Online Training Event for La Réunion Anchor Project (20 September 2021)

• Provided methodological support to Reunion Island stakeholders and members of the MOVE-ON Consortium on two methodologies for mapping and assessing ecosystem services: participatory GIS and participatory scenario planning.