WATER & LAND FOR LIFE & EQUALITY: THE URBAN-RURAL CONTINUUM IN METROPOLITAN LIMA

Integrated Strategies for Equitable Distribution of Resources and Benefits considering Land, Water, Open Spaces & People's knowledge

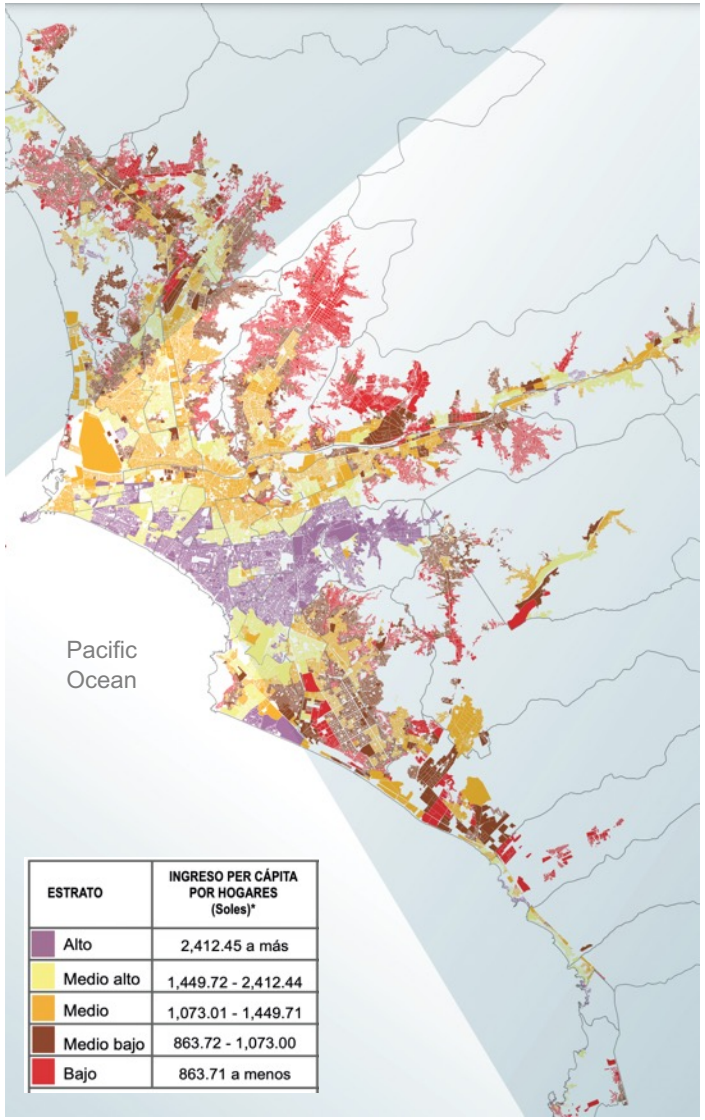
Arq. Rossana Poblet Alegre

MSc.| Phd candidate University of Stuttgart

DETERIORATED SOCIO-ECONOMIC CONDITIONS AT NATIONAL LEVEL & SPECIALLY IN METROPOLITAN LIMA

According to the National Institute of Statistics and Informatics (INEI).

- Between 2016 and 2023, the **population living in poverty** in Metropolitan Lima went from **11% to 28,7%** (3 times more).
- The number of **poor** nuclear households **headed by women** increased by 3% compared to 2022, **reaching 57,2% in 2023**.
- Monetary poverty affected **29%** of the total population and **increased 1,5%** with respect to **2022 (27.5%)**.
- In **urban areas** it reached **26,4% increasing by 2,3% compared to 2022**, while in **rural areas decreased 1,3% (39.8%)**.







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PERMANENT QUESTIONS ALONG THE URBAN-RURAL CONTINUUM

In areas along urban rivers, characterized by high levels of inequality, exclusion and vulnerability,

- how to recover degraded ecosystems and, at the same time, reverse deteriorated living conditions and public health, including bad nutrition?
- is mutual sharing and equitable distribution of resources, along the urban-rural continuum and urban rivers, possible?
- how to redesign the urban-rural continuum in areas historically understood as "peri-urban" in "transition to become urban" and affected by urban speculation?
- What strategies are needed to integrate water management and territorial planning to achieve resilience and more socially and environmentally just cities?



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EXISTING ANCESTRAL KNOWLEDGE: MUTUAL SHARING, RECYPROCITY & REDISTRIBUTION

- How to recover degraded ecosystems and, at the same time, reverse the poor living conditions of residents?













EXISTING ANCESTRAL KNOWLEDGE: AS PART OF SOCIAL AND WORKING SYSTEMS

- is mutual sharing and equitable distribution of resources, along the urban-rural continuum and urban rivers, still possible?

1. AYNI



Work and reciprocity within an Ayllu



CONSTRUCCIÓN o TECHADO DE CASAS



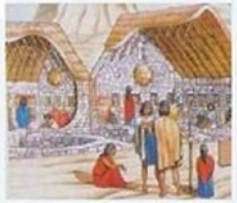
AGRICULTURA Y CUIDADO DE REBAÑOS

2. MINCA



Communal work with other Ayllus





3. MITA



All Ayllus work together



LABORES DE CONSTRUCCIÓN



ALMACENAR BIENES EN COLCAS



LABORES AGRÍCOLAS Y GANADERAS

1+2+3 SUPPORTED MUTUAL SHARING & REDISTRIBUTION SYTEM



Storage of goods in Colcas



Goods redistribution

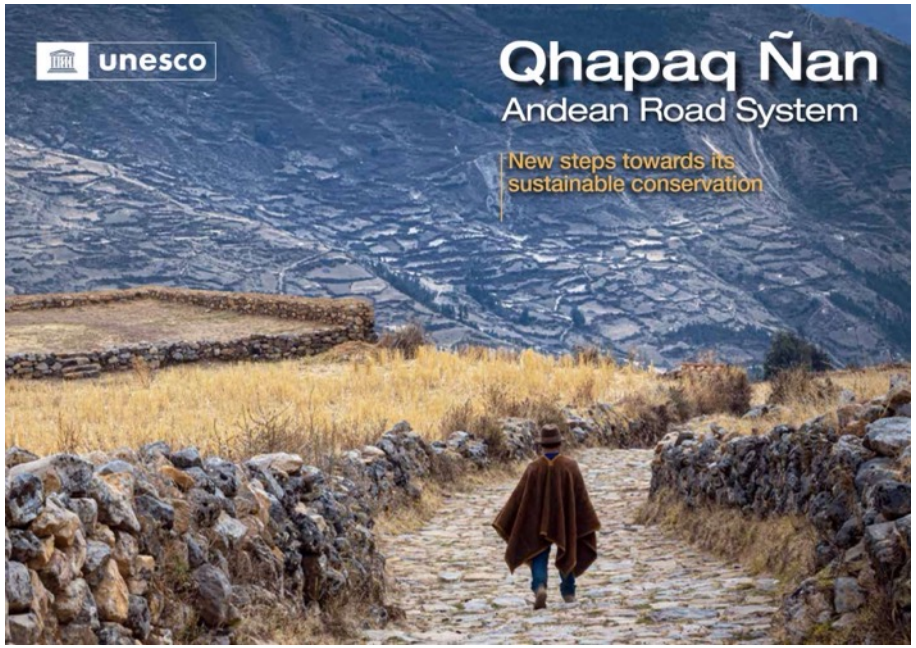


Maintained chierarchies

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THAT'S HOW THE ANDEAN ROAD SYSTEM ACROSS 6 SA COUNTRIES WAS BUILT: THE QHAPAQ ÑAN







Exceptional and unique testimony to the Inca civilization based on the values and principles of **reciprocity, redistribution and duality** constructed in a singular system of organization called Tawantinsuyu. It illustrates thousands of years of **cultural evolution throughout the Andes** and the impact in the communities along the Qhapaq Ñan until today, in particular with relation to the **social fabric of local communities and the cultural philosophies** that give meaning to relationships **among people and between people, land and ecosystems.**

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THAT'S HOW THE LAST INCA'S SUSPENSION BRIDGE IS REBUILT EVERY YEAR: Q'ESWACHAKA









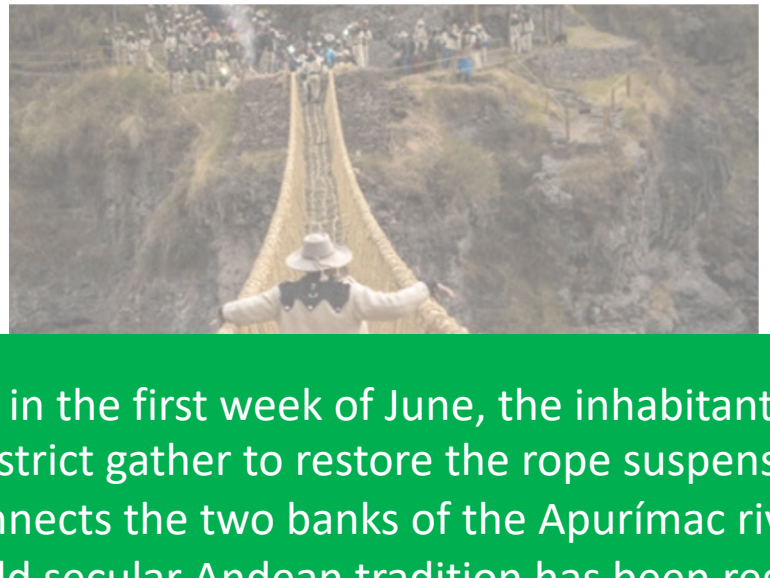




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THAT'S HOW THE LAST INCA'S SUSPENSION BRIDGE IS REBUILT EVERY YEAR: Q'ESWACHAKA







Every year in the first week of June, the inhabitants of Peru's Quehue district gather to restore the rope suspension bridge that connects the two banks of the Apurímac river. This centuries-old secular Andean tradition has been register in the List of Intangible Cultural Heritage of Humanity since 2013.







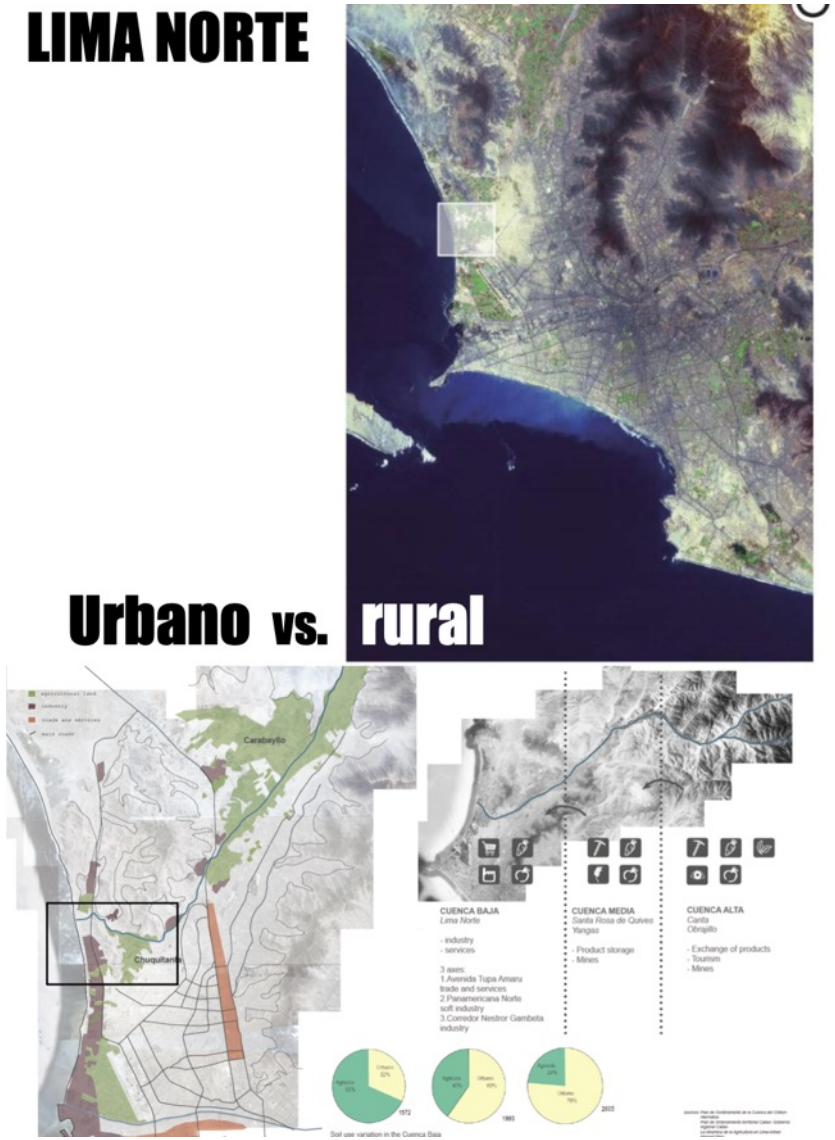
URBAN-RURAL CONTINUUM IN THE METROPOLITAN LIMA: URBAN vs. RURAL vs. PERIURBAN

- how to redesign the urban-rural continuum in areas understood as "peri-urban" in "transition to become urban"?



Chuquitanta, Lower Chillon River, Lima North, Peru

URBAN-RURAL CONTINUUM IN THE METROPOLITAN LIMA: URBAN vs. RURAL vs. PERIURBAN





10+ years of studying the natural & man-made processes along the seasonal Chillon river

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URBAN-RURAL CONTINUUM IN THE METROPOLITAN LIMA: CULTURAL HERITAGE







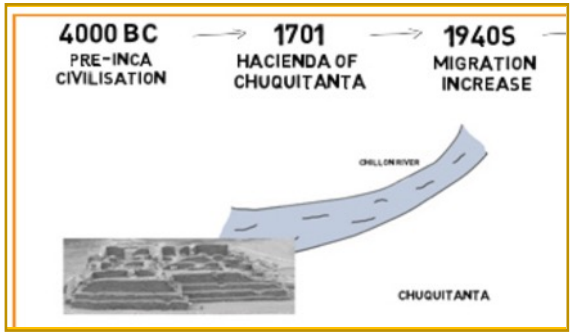


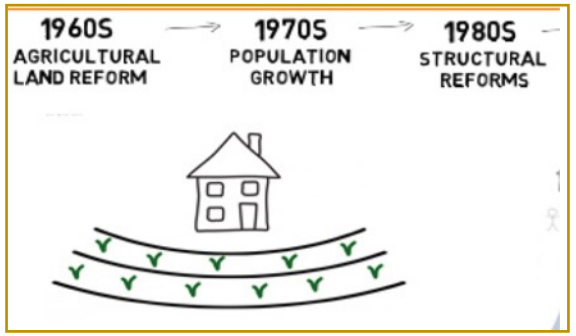


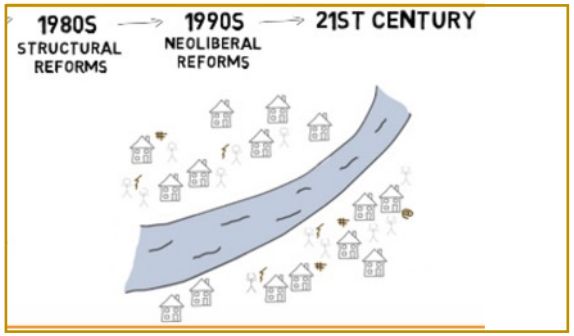


URBAN-RURAL CONTINUUM IN THE METROPOLITAN LIMA: CULTURAL LANDSCAPES









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PROMOTING THE PROTECTION OF CULTURAL HERITAGE ALONG THE URBAN RURAL CONTINUUM



LOWER CHILLON PRESERVING INTANGIBLE HERITAGE, LOCAL KNOWLEDGE AND ANDEAN TRADITIONS

→ PERFILES - LIMEÑOS DE TODAS LAS CEPAS

Guardiana de un paraíso olvidado y milenario

MARÍA ROSALES (49), o hermana Killa, tiene la misión de proteger la huaca Paraíso, la más antigua de Lima con más de 4.000 años, y sostiene que el mensaje de la madre tierra está ahí para todos

— JAVIER LIZARZABURU

FOTOS: RICHARD HERING

María Rosales tenía 8 años cuando su abuela la llevó a Chavín de Huántar y le dijo 'yaves, Killa, los auquilitos son los que te van a enseñar cómo curar tus heridas y las heridas de los otros'. En ese momento solo atinó a pensar que su abuela era una supersticiosa.

Aunque le gustaba levantarse con ella antes de las cinco de la mañana para recoger plantas, no se le cruzaba por la mente que un día se convertiría en una mujer que sana. Después entendió que esas plantas curaban determinadas enfermedades y que había que recogerlas de madrugada para que no perdieran potencia.

Su entrenamiento en la sabiduría de las plantas y de la madre tierra se produjo así, casi de casualidad, acompañando a su abuela por los campos y los cerros que rodeaban Trigopampa, el pueblo donde se crio en la sierra de Áncash. Los auquilitos eran las huacas, la casa de los antiguos, y aprendió muy temprano que ahí se entra con respeto, llevándoles "superfume, su coquita, su cigarrito".

La tercera de 13 hermanos, María se crió con sus abuelos, quienes desde el primer día la llamaron Killa. En quechua Killa quiere decir luna, que es como la mayoría la conoce en estos días. "Pero mi abuelita me puso Killa no por la luna sino porque en Áncash Killa quiere decir 'cicatriz'. Ella decía que yo era la persona que iba a curar muchas heridas".

UNA DECISIÓN DE VIDA

A los 28 años "supe que no correspondía ser como mis abuelos", y volvió a Chavín de Huántar. Aquí pasó días meditando y pidiendo a los apus que la ayudasen en su decisión, "y cuando vine a Lima lo hice en una peregrinación, visitando cada una de las huacas entre Chavín y Paraíso".

El día que fuimos a la celebración del ritual de la Chakana, o la Cruz del Sur, que se celebra la primera semana de mayo, el camino tenía todas las características de una herida. Urbana, pero herida al fin y al cabo, con capas de basura acumulada que acompañan el curso del río. Llegar hasta aquí, tomando la trocha que sale del camino a Ventanilla, por la margen derecha del río Chillón, toma diez o quince minutos.

La hermana Killa está a car-



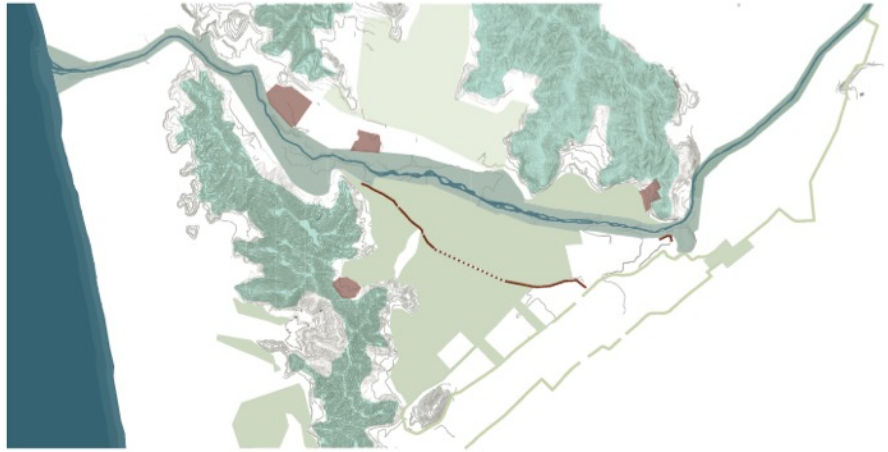
TESORO LIMEÑO. El complejo arqueológico Chuquitantá incluye ocho estructuras distribuidas sobre un área de 50 hectáreas. La huaca fue investigada y restaurada por Frederic Engel en los años 60.





URBAN-RURAL CONTINUUM IN THE METROPOLITAN LIMA: INTEGRATIVE PLANNING

❖ What strategies are needed to integrate water management, landscape planning and territorial planning with people's knowledge?







Natural Landscape

Cultural Landscape

Cultural Heritage

People's knowledge

MULTIFUNCTIONAL LIVING OPEN SPACE SYSTEMS ALONG THE URBAN-RURAL CONTINUUM

- Multifunction services provision: Recreation, Well-being, Food Production, Cultural heritage protection, Cultural Landscape recovery, Intangible Heritage protection (traditions and ancentral knowledge)
- Everyday risk and disaster risk reduction
- Environmental recovery and boost ecosystem services
- Natural and seminatural ecosystems protection
- Climate change adaptation and mitigation
- Agricultural activities inserted in urban settings
- Physical and social integration
- Promote circular economy
- New business models development

LOWER CHILLON LANDSCAPE DIALOGUES: FOR MUTUAL SHARING AND FAIR DISTRIBUTION





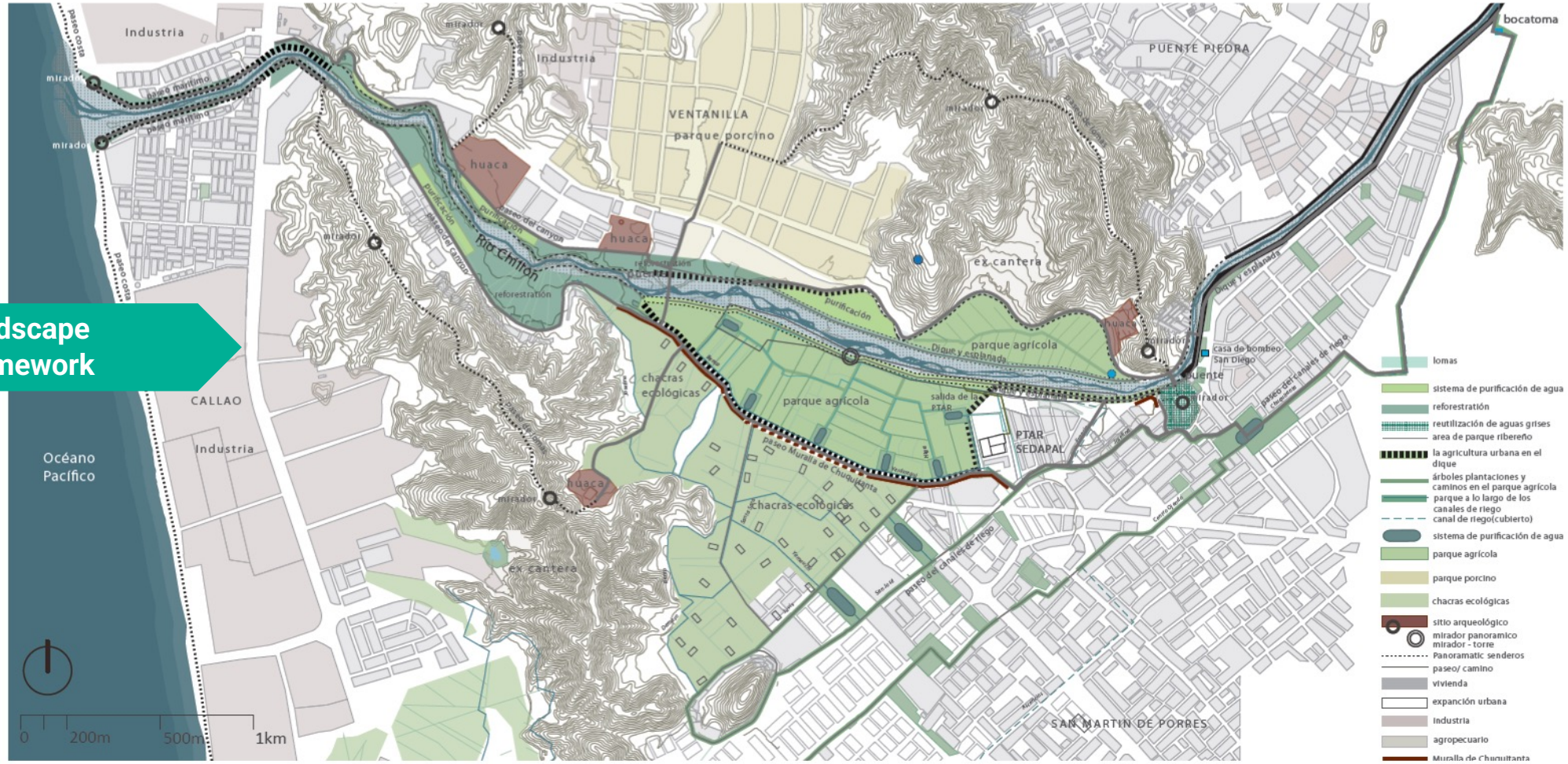


"…we have to stop the sale of agricultural land and take care and recover the archeological sites along the river, proposing new activities for the area, such as recreation, culture, eco-production, etc, that can create a buffer zone during rainy season.

Sra. Albina (farmers representative) and Sra. Milagros (La Florida II settlement representative:

LOWER CHILLON ECOLOGICAL INFRASTRUCTURE LANDSCAPE FRAMEWORK: AGRICULTURAL PARK

Landscape Framework

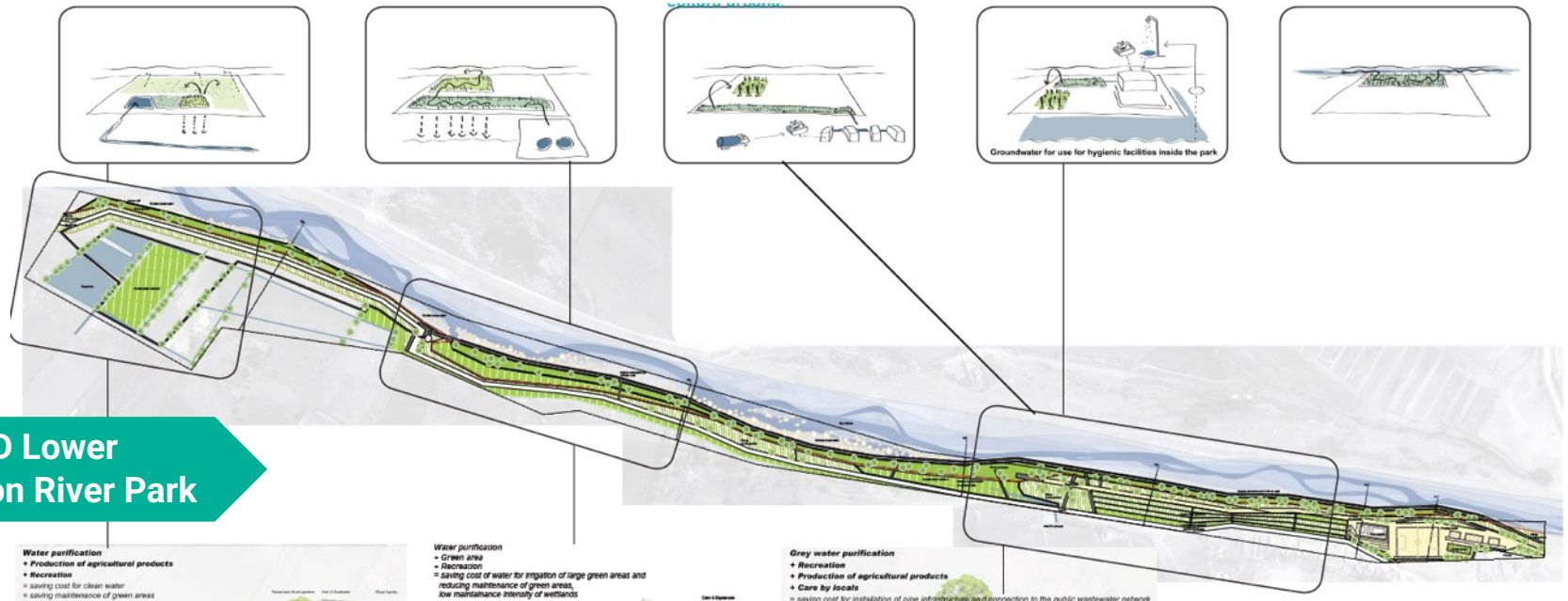


Main Strategies

- Protect agricultural land
- Integrating territorial planning and Water management
- Protecting Water sources quality and quantity
- Protecting water canals and reduce desertification
- Integrate people's knowledge.
- Integrate archeological sites and cultural landscapes
- Integrate fragile desert ecosystems.
- Create Multifunctional open space system.

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LOWER CHILLON RIVER PARK PROJECT TO INCREASE RESILIENCE: CHUQUITANTA ECOLOGICAL RIVER PARK



WSUD Lower Chillon River Park



PARQUE ALREDEDOR DE LOS RESERVORIOS



PARQUE HUMEDALES



AGRICULTURA URBANA CON TRATAMIENTO DE HUMEDALES

ILPÖ | Jan Dieterle | University of Stuttgart, LiWa Project



Shanghai Houtan Park Turenscape, 2010



Ing. Luis Alvarado, 2012

Restore the River Ecosystem & Co-design the River Park

"We want the river park, agricultural land and archaeological areas to be restored so that they recover their functions and generate a positive impact on the population, improving the quality of life of the residents of 5 districts."

LOWER CHILLON WATER SENSITIVE URBAN DESIGN: ECOLOGICAL INFRASTRUCTURES & NATURE BASED SOLUTIONS

WSUD Summer Schools









2011-2012 Diseño de parques sensibles al agua en Chuquitanta, cuenca baja del río Chillón

LOWER CHILLON WATER SENSITIVE URBAN DESIGN: ECOLOGICAL INFRASTRUCTURES & NATURE BASED SOLUTIONS

WSUD Summer Schools



2013 Diseño de parques productivos con aguas residuales tratadas -Colegio RFA, Chuquitanta

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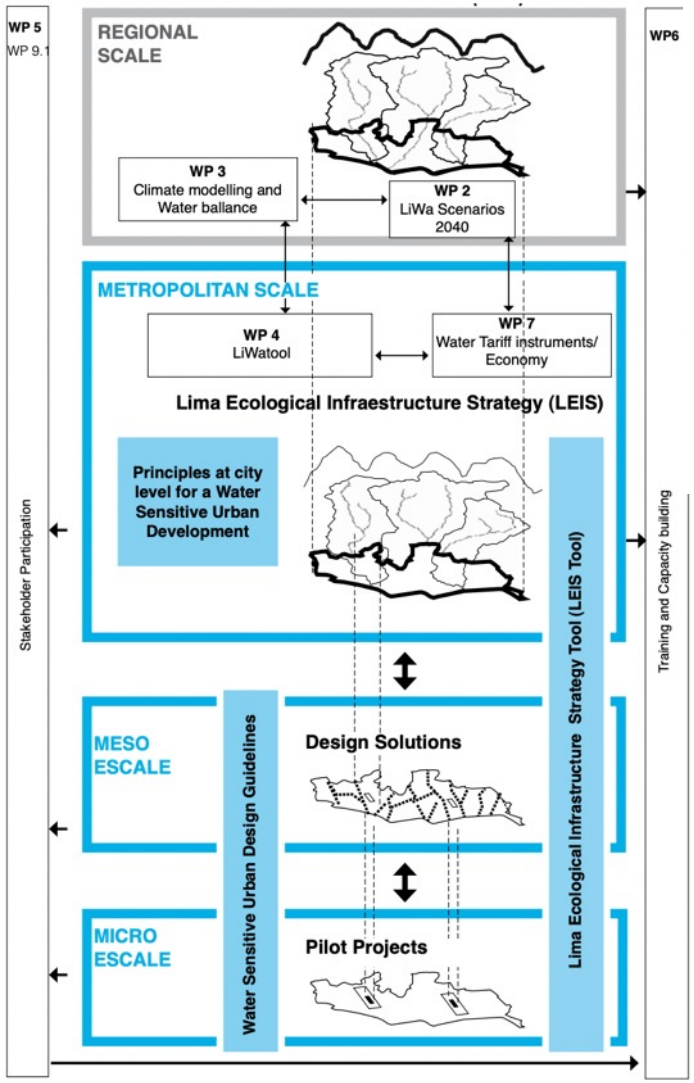
LOWER CHILLON WATER SENSITIVE URBAN DESIGN: WASTEWATER TREATMENT PARK “CHILDREN’S PARK”

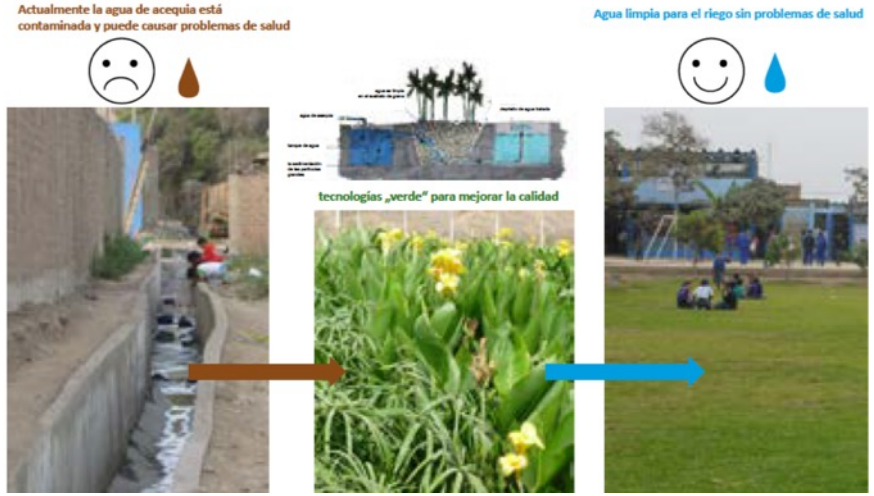
WWTP Children‘s Park, 2014





LOWER CHILLON WATER SENSITIVE URBAN DESIGN: WASTEWATER TREATMENT PARK “CHILDREN’S PARK”











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AT NATIONAL LEVEL: EL NIÑO COSTERO, EL NIÑO, LA NIÑA, AND OTHER MAN-MADE DISASTER EVENTS

RECONSTRUCCIÓN CON CAMBIOS

WITH(OUT)



RECONSTRUCTION WITH CHANGES: PERU & UK G2G - CONTRACT

- A major milestone under this collaboration framework was reached in October with the delivery of the Master Plan for the Piura River. This is the first comprehensive plan that proposes interventions to protect the current population from flooding that may occur due to the El Niño phenomenon.
- The UK Delivery Team (UKDT) made up of experts from Arup, Mace and Gleeds has been working with the Authority for Reconstruction with Changes to apply international best practice to the delivery of vital infrastructure and facilities that will protect and benefit millions of people along the coastal regions of Peru.
- The Government-to-Government (G2G) partnership is supporting the reconstruction of 74 schools and 18 new or completely rebuilt hospitals and health facilities.
- To protect communities against future extreme weather events, the UKDT is accelerating the implementation of sustainable flood prevention by improving 17 river basins, 5 gullies and 7 urban drainage systems across seven regions.
- A national Early Warning System is also being implemented to help the public prepare and reduce the impact of natural disasters in high-risk areas.



MISSING OPPORTUNITIES FOR REAL “RECONSTRUCTION WITH CHANGES”: PERU & UK CONTRACT



URBAN-RURAL LINKAGES: INTEGRATED STRATEGUES WITH KEY ACTORS

2014 — 2016 — 2023 — 2030 — 2035 — 2040+





Creating an enabling environment for strengthened urban-rural linkages:

A Governance, legislation and capacity development
B Integrated planning across the urban-rural continuum
C Investment and finance for inclusive urban-rural development
D Empower people and communities
E Knowledge and data management for dynamic spatial flows of people, products, services, resources and information

Sectorial and thematic entry points to promote integrated territorial development:

F Territorial economic development and employment
G Coherent approaches to social service provision
H Infrastructure, technology and communication systems
I Integrated approaches for food security, nutrition, and public health

J Environmental impact and natural resource and land management

K The urban-rural continuum, to face risk and disaster events, like El Niño (ENSO)

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URBAN-RURAL LINKAGES: CO-DESIGN INTEGRATED STRATEGUES WITH KEY ACTORS

2014 — 2016 — 2023 — 2030 — 2035 — 2040+











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Integrated Strategies for Equitable Distribution of Resources and Benefits considering Land, Water, Open Spaces & People's knowledge

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Thank You