

The logo features a central white circle containing the text 'IN-HABIT' in a bold, white, sans-serif font. The 'IN' is positioned inside the circle, while '-HABIT' extends to the right. Four white lines radiate from the central circle to four smaller white circles, one in each quadrant (top-left, top-right, bottom-left, bottom-right), creating a network-like structure.

IN-HABIT



IN-HABIT

WP 7 Assessing the impact of visionary and integrated solutions on IHW

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Partners: UCO, CORD, AVUE, BSC, RPR, KQ, UNIPI, LUCCA, SUA, NITRA, HIDE, UREAD, TSR, DFC, BOT, LABORELEC , WTG



Work Progress Task 7.1

- A set of 138 Indicators (among Impact and Context Indicators) covering 4 dimensions and 18 sub-dimensions of H&W was co-designed by complementing already validated indicators (OECD, Eurostat, WHO, ILO, Eurofound) with new indicators defined with a context-based and a GDEI perspective
- Two rounds of consultations of local stakeholders and various meetings among project partners were organized for the design, adaptation and validation of IHW indicators. 58 local inhabitants were involved in 4 co-design workshops and 36 NGOs representing GDEI groups were surveyed.
- 3 methods workshop with the research partners, 2 training sessions with the LCAs and one simulation workshop for the co-design, validation and first application of the assessment framework and tools
- An Impact Assessment Plan (D7.1) was produced defining the evaluation methods, indicators, data collection tools and actions to be used for the ex-ante, ongoing and ex-post evaluation.

Results of T7.1: Designed and tested a participative Theory-based assessment framework linking solutions and well-being

4 City specific value chains were co-designed involving local partners and inhabitants

City specific In-HABIT solutions



Expected changes on 4 Dimensions and 18 subdimensions of Health and well-being (partners + inhabitants' view)



Key Impact Indicators Including

Examples from Lucca pilot

- Renovation of under-used green areas
- green playgrounds, green corridors and therapy gardens
- sports and leisure facilities for both people and animals
- animal assisted interventions in the public space



Figure 10. Sub-dimensions of SWB.



Figure 11. Sub-dimensions of HL.



Figure 12. Sub-dimensions of EWB.

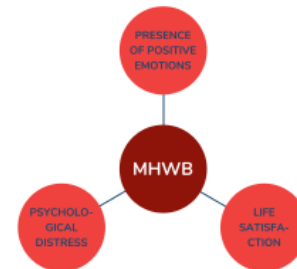


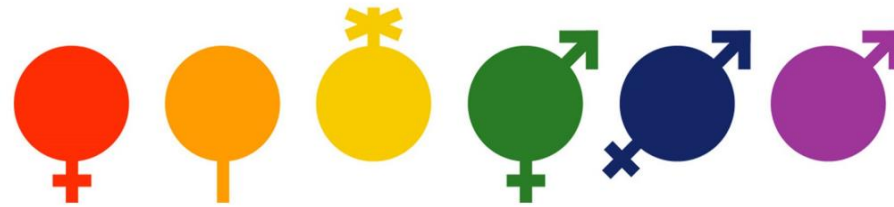
Figure 13. Sub-dimensions of MHWB.

- city specific and common indicators
- GDEI indicators sensitive to personal characteristics like age, gender, sexual orientation and gender identity, disability, ethnicity, religion
- covering both the partners and the local inhabitants perspective

Example of a value chain from the Cordoba pilot



Results of T7.1



The **GDEI perspective** was embedded within the impact assessment framework:

- **GDEI personal characteristics** which may affect the project's impact on health and well-being are included in the research framework and quantitative data are disaggregated by gender, age, sexual orientation, ethnicity, disability, religion and belief.
- Expected results which may be influenced by GDEI characteristics were empirically defined as **GDEI indicators**, which were selected with the involvement of the representatives of the groups at risk of discrimination and exclusion (local NGOs in the 4 cities).

Results of T7.1: identification of GDEI sensitive well-being subdimensions and indicators

IHW sub-dimensions that are GDEI sensitive have then been identified for each of the main personal characteristics.

IHW sub-dimensions sensitive to age	IHW sub-dimensions sensitive to sexual orientation	IHW sub-dimensions sensitive to gender	IHW sub-dimensions sensitive to disability	IHW sub-dimensions sensitive to ethnicity and religion
<ul style="list-style-type: none"> - Spatial well-being - Safety - Social inclusion - Social cohesion - Housing - Financial situation 	<ul style="list-style-type: none"> - Discrimination - Security and violence - Social cohesion - Employment - Cultural participation - Leisure and free time - Housing - Financial situation 	<ul style="list-style-type: none"> - Security and violence - Discrimination - Employment - Spatial well-being - Leisure and free time - Job and skill satisfaction - Financial situation - Housing 	<ul style="list-style-type: none"> - Social inclusion - Social cohesion - Spatial well-being - Employment - Financial situation 	<ul style="list-style-type: none"> - Social inclusion - Social cohesion - Discrimination - Equality - Cultural participation - Leisure and free time

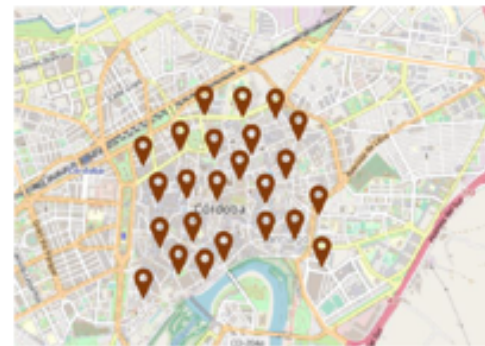
Work Progress and results of T7.2 IN-HABIT Data Platform

- The sensor network has been designed by WTG in collaboration with city partners considering: the data to be collected from each city, the technical feasibility (in terms of physics, installation points and sensor power points) and the most efficient communication technologies

Example: sensors network of Cordoba

Scope

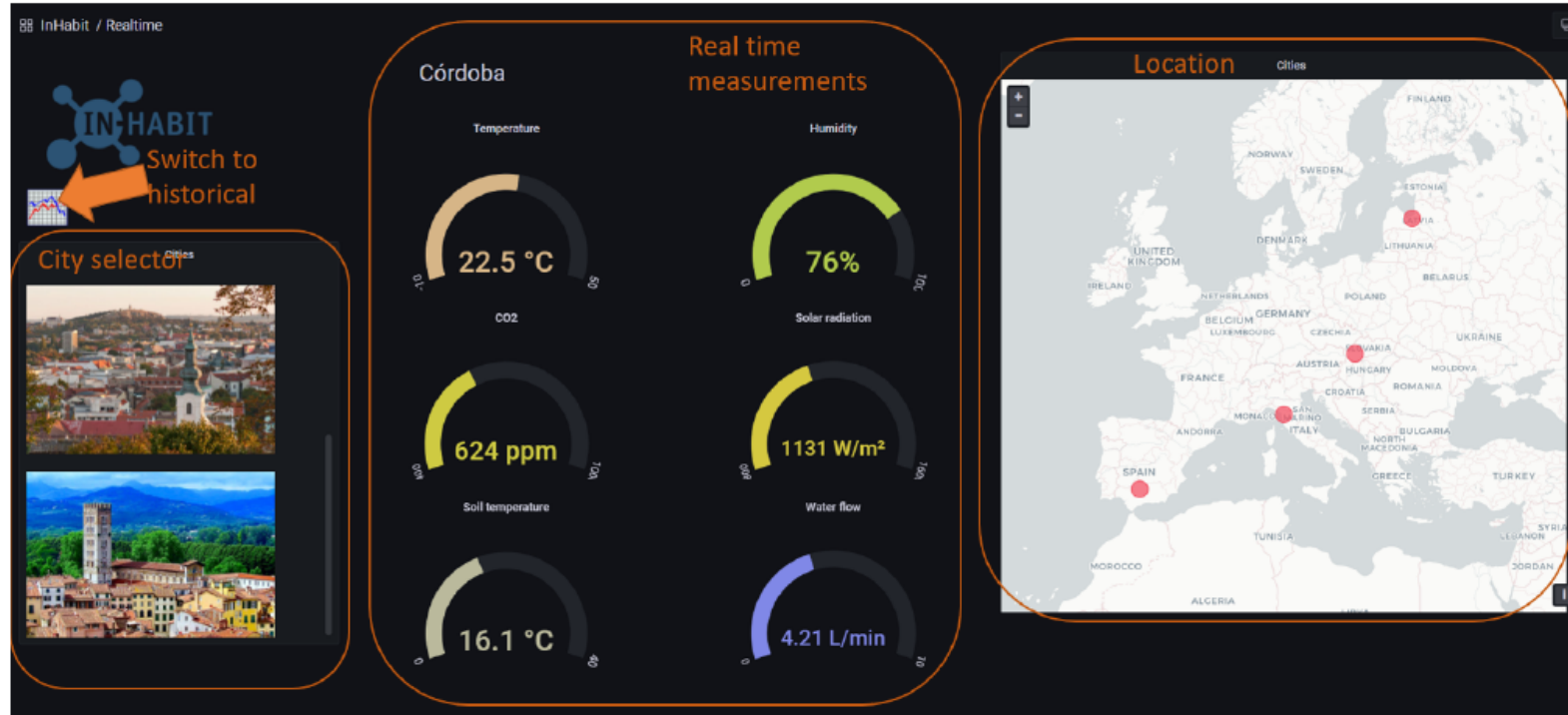
To check how the quality of life improves in the patios and to find out which type of patio is the best among all of them.



Type of measurement point: Patio
24 Measurement points

Patio		
Sensors	Power	Unit
Temperature (TOP)	Battery	°C
Temperature (MIDDLE)	Battery	°C
Temperature (SOIL)	Battery	°C
Humidity (TOP)	Battery	%
Humidity (MIDDLE)	Battery	%
PAR Radiation	Battery	W/m ²
CO2	Battery	ppm
Flowmeter	Battery	m ³ /seg

- The architecture of the Platform was designed **(D7.2)** and the beta version of both the Platform and the Dashboard has been developed **(Milestone 6)**
- The persistence layer, the communications layer and the big data structure for obtaining and managing data from an influxDB database have been developed. The database is currently filled in by a simulator. The operational version will integrate data from the sensors, the IN-HABITAPP, historical data and data from city surveys.
- The Dashboard has been built based on the data model of the city of Cordoba for all cities and the main functions of real-time visualization, historical visualization and data export have been added.



Work Progress Task 7.3 Baseline study

- A quali-quantitative baseline study on social well-being, mental health and well-being, healthy lifestyles and economic well-being was carried (T7.3) in the 4 pilot cities from January 2021- to February 2022. Data collected in each city by LCAs following guidelines and training provided by ISIM. Data analysis carried by ISIM and UREAD.

BASELINE ASSESSMENT TOOLS

- - Open statistics and administrative data
 - 4 city surveys
 - 5 focus groups
 - 20 storytelling sessions (audio)
- D7.3 Baseline Study on IHW Report was drafted by ISIM and UREAD and delivered, including also former D7.6.

Results of T7.3 Baseline study

- The **knowledge base on IHW** in small and medium sized European cities **after Covid 19** was enhanced thanks to the wide scope of the baseline study: 18 sub-dimensions of HW covered, around 120 indicators involved including context indicators on the effects of Covid 19 over healthy habits
- 1240 valid answers to the survey + 53 participants to the qualitative study in the 4 cities

66% women

47% young

7% LGBTQI+ persons

6% persons with a disability

6% ethnic minorities

14% religious minorities

Examples

Knowledge confirmed on the intervention groups (examples)

Cordoba

- the majority of people (61%) cannot satisfy their basic needs

Riga

- the majority (87%) consider easy to find healthy food in the neighbourhood

Lucca

- the majority (60%) meets frequently with friends and relatives in public spaces

Nitra

- 20% perceive themselves to be a member of a discriminated group (compared to 10% of the control group)

New/unexpected aspects emerged from the baselines study

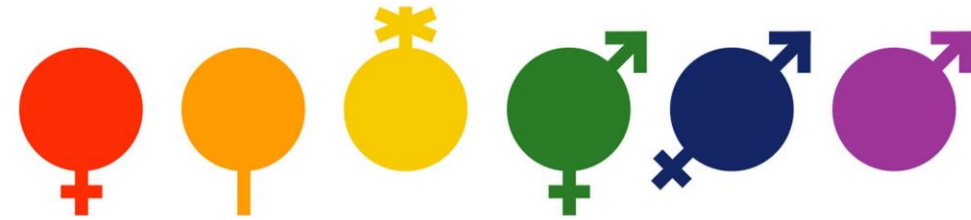
- experience higher levels of social and civil engagement compared to the rest of the city

- a minority (18%) uses the public green areas to do sports.

- the majority (58%) reports difficulties in accessing the local cultural and leisure opportunities

- the majority (60%) experience a high sense of community

Results of T7.3



- **People at risk of discrimination and exclusion** have been involved in the data collection actions (surveys, focus groups and storytelling).
- Practical and organizational measures to ensure an **equitable participation** of persons at risk of discrimination and exclusion in the research activities were tested:
 - ✓ use of LCAs and local observers as **linguistic/cultural mediators** during the administration of the survey;
 - ✓ adaptation of the **data collection modality** to the needs of the vulnerable groups: the in person mode was preferred to the digital one, the venue of the interviews was a neutral or familiar place (public square, community center, house, bar) and the time was arranged according to the availability of the participants.

Results of T7.3



- The 4 levels **Citizens Science Inclusion Mechanism** was tested by involving local inhabitants at different level in the recruitment of participants belonging to specific target groups (snowball sampling), in the communication of the baseline study and in distribution of the survey
- A set of **incentives** were tested to support citizens' involvement in the research:
 - the personal relationship (bond of trust) between the LCAs, local stakeholders and neighbors (all cities)
 - bus tickets (Cordoba)
 - training and university credits for students (Riga and Nitra)
 - role recognition and space for participation by the local municipality (Lucca)

Challenges

- To maintain and strengthen the current level of engagement of the members of the IN-HUBs, using adequate incentives at project level
- To further involve hidden groups and people at risk of discrimination in the research (discomfort and refuse to provide personal and sensitive data)
- To re-adapt the city expected changes and indicators to the co-deployment of the solutions
- Regarding the Data Platform: to adapt the sensors to the characteristics of the installation points

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