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SHERPA TOOL BETA

SUSTAINABLE HOUSING EVALUATION
& RATING PARTICIPATIVE APPROACH

SUSTAINABLE HABITAT

SHERPA  **TOOL**
BETA

SUSTAINABLE HOUSING EVALUATION
& RATING PARTICIPATIVE APPROACH

AKNOWLEDGEMENT

PROJECT LEADER

UN-Habitat (Christophe LALANDE, Emma-Liisa HANNULA)
LABEX AE&CC, ENSAG

DESIGNED AND REALISED BY

Philippe GARNIER (CRATerre), Scientific direction.
Lalaina RAKOTOMALALA (CRATerre-ENSAG, AE&CC research unit), Coordination.
Grégoire PACCOUD & Arnaud MISSE (AE&CC research unit),
Carmen ANTUNA ROZADO & Aapo HUOVILA (VTT)

WITH THE CONTRIBUTION OF

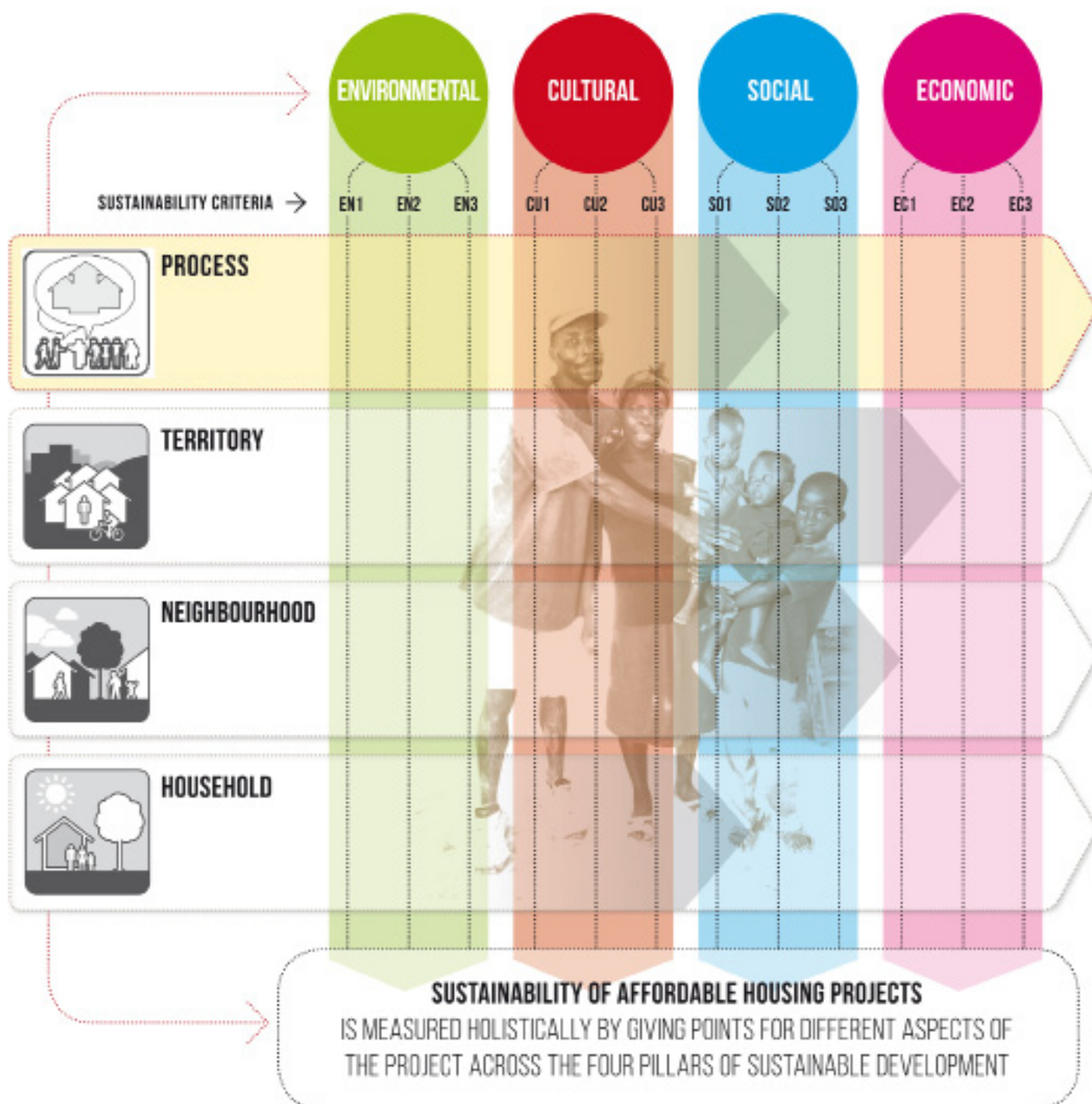
Robert CELAIRE (ENSAM), Stéphane CARTIER (PACTE), Nuria SANCHEZ MUNOZ (DSA Terre), Léa GENIS & Christian BELINGA NKO'O & Olivier MOLES & Laëtitia ARANTES (AE&CC research unit), Enrique SEVILLANO (DSA Terre), Alexandre DOULINE (Misereor), Luc FLOISSAC & Aurore LOPEZ (Eco-Etudes), Elsa CAUDERAY & Julien HOSTA (CArPE), Alejandro MUCHADA (), Pekka Huovila (VTT), Mauricio GANDUGLIA (), Mauricio CORBA BARRETO (DSA Terre), Sergio SABBADINI (), Matthieu GENIN (), Béatrice BOYER (URD group), Estelle DELAHAYE (DSA Terre), Marc (AE&CC research unit), Juliette (AE&CC research unit), Sébastien MORISSET & Thierry JOFFROY & Hubert GUILLAUD (AE&CC research unit), Wilfredo CARAZAS AEDO (), Eric RUIZ (), Gilles DEBIZET (PACTE), Thiago Lopez Ferreira (), Anaïs GUEGEN (), Mu JUN (), Léo TOMASI (), Vivien AUMELAS, Stéphane SADOUX (), Magali AUPICON (Université de Grenoble).

Note: [This is the first beta version of the SHERPA tool \(June 2014\). The rating tool development is a continuous process, so now we count on your kind feedback!](#)

Lalaina RAKOTOMALALA: lalaina.rakotomalala.38@gmail.com

Philippe GARNIER: craterre.pgarnier@club-internet.fr

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PARAGRAPH IN PROGRESS (DO NOT READ IT NOW)

A series of questions is asked. Four options are suggested, from the most negative to the most positive one and each answer is associated with a score from 0 to 3. These scores are used to calculate the various sustainability criteria and pillars

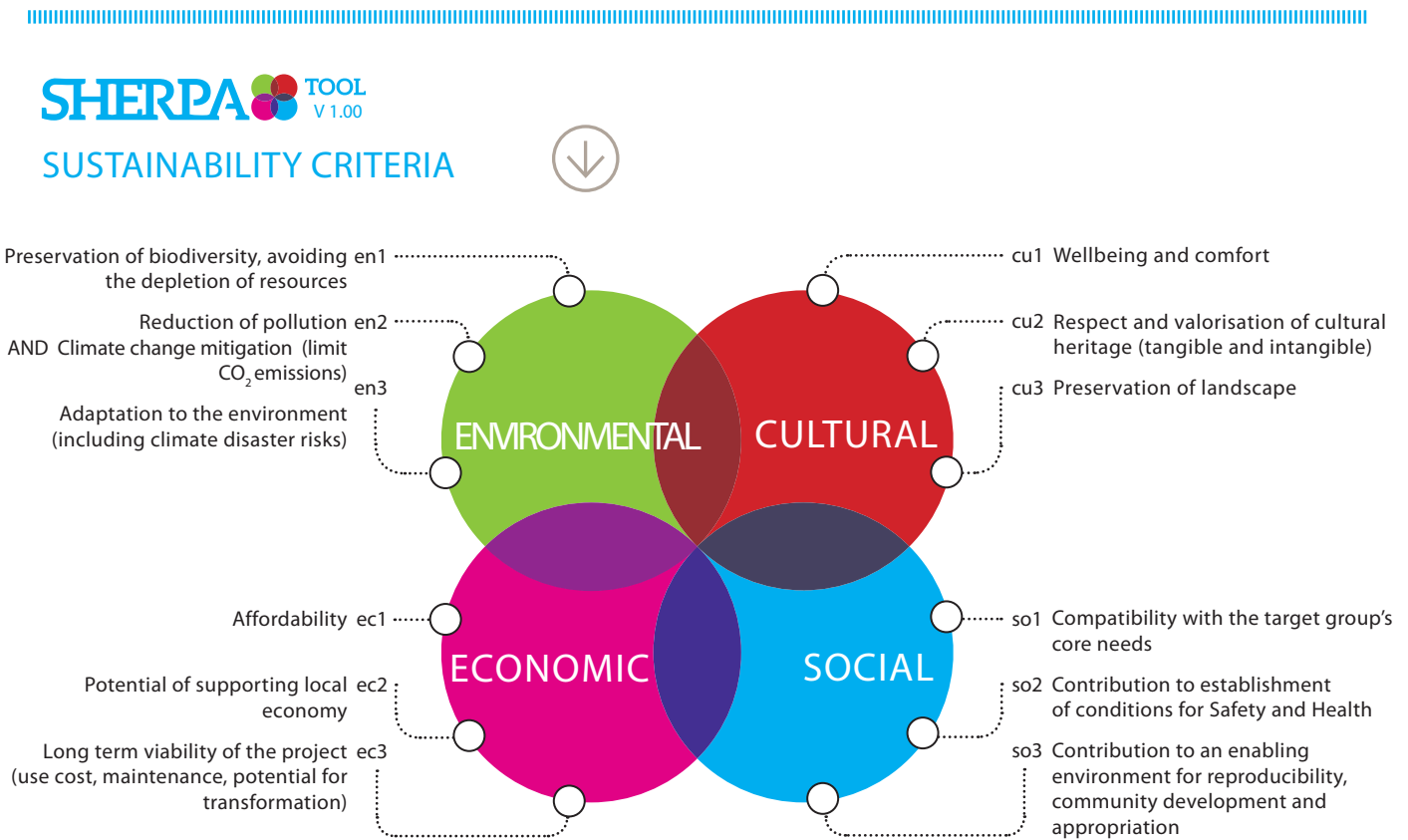
Assessment	description	Points
a	poor	0
b	unsufficient	1
c	good	2
d	excellent	3

C'est un outil d'évaluation ex ante pour l'aide à la conception et à la décision, pour les projets d'habitats (échelle : îlots d'habitats) qui consiste en une liste d'indicateurs et critères pouvant être appliqués au développement d'un projet en vue de renforcer son caractère durable (économiquement, socialement, culturellement et en matière d'environnement). Basé sur l'expérience d'acteurs de terrain et des indicateurs internationaux de développement durable, il propose une liste d'actions ou de situations, échelonnées comme plus ou moins durables, à travers une liste d'indicateurs.

The objective of the , by scoring each pillar of sustainable development, encompassing 12 sustainability criteria. Sustainability corresponds with an overall balance of all four pillars, by scoring at least a minimum threshold value, defined by a minimum acceptable level for each addressed issue.

This tool was designed with the contribution of participants coming from a large variety of fields such as architecture, computing, sociology, urban planning, NGOs management or anthropology. It also results from different seminars, other participation tools and had some ups and downs during its designing procedure. It has been tested and therefore modified to propose sharper questions and a more user-friendly tool.

Therefore this tool has actually followed the same logic as it is recommending for housing projects processes. To keep this coherence on, this tool should be periodically revised in order to correct any problem it might cause, to enrich questions seen under a different light, and in one word, to improve it with every review.



INDEX OF INDICATORS PER CATEGORIES

A. PROCESSES PART

22 INDICATORS

1. Inception phase:

- 1.1. Who initiated the request?
- 1.2. Who assessed the initial request?

2. Diagnostic:

- 2.1. Identification of the key stakeholders and of their roles
- 2.2. Environmental context analysis
- 2.3. Cultural context analysis
- 2.4. Economic context analysis
- 2.5. Social context analysis
- 2.6. Governance and institutional analysis
- 2.7. How are needs and priorities identified?
- 2.8. How are the resulting objectives defined and prioritized?
- 2.9. Feasibility study

3. Project planning phase:

- 3.1. Project convention
- 3.2. Strategy and programming

4. Project architectural and financial design phase

- 4.1. Who does participate in the architectural design?
- 4.2. How do the stakeholders take part in the architectural design?
- 4.3. Project financial design

5. Implementation and building construction phase

- 5.1. Who does participate in the building construction phase?
- 5.2. Training and capacity building
- 5.3. Capacity building of project management

6. Evaluation and maintenance phase

- 6.1. Who will monitor the project
- 6.2. Evaluation and update of the diagnosis
- 6.3. Who will ensure the continuity of the project?

You will have to list who are the stakeholders of your project.

Processus transparent et démocratique.

B. TERRITORY PART

28 INDICATORS

1. Water

- 1.1. Water availability
- 1.2. Water quality
- 1.3. Affordability
- 1.4. Management
- 1.5. Water supply
- 1.6. Diversity of sources of water supply

2. Food and agriculture

- 2.1. Food availability
- 2.2. Affordability
- 2.3. manque indicateur sur mitage/consommation du foncier

3. Income generation and employment opportunities

- 3.1. Accessibility
- 3.2. Job creation (à améliorer)

4. Social and community cohesion

- 4.1. Public open spaces
- 4.2. Stability between different groups
- 4.3. Access to local educational facilities
- 4.4. Access to health care facilities
- 4.5. Public rescue and security services
- 4.6. Cultural activities and events

5. Movement networks

- 5.1. Practicability and safety
- 5.2. Access to key functions
- 5.3. Cultural adequacy and possibility of different transport options
- 5.4. Transportation affordability

6. Solid Waste

- 6.1. Collection and treatment
- 6.2. Affordability of techniques

7. Sanitation

- 7.1. Toilet facilities
- 7.2. Collection and treatment
- 7.3. Sanitary maintenance
- 7.4. Water protection
- 7.5. Stormwater drainage.

C. NEIGHBORHOOD PART

21 INDICATORS

1. **Planning suitable to the environmental characteristics: climate suitability and disaster risks reduction**
 - 1.1. Climate specific planning
 - 1.2. Traditional landplanning
 - 1.3. Settlement pattern
 - 1.4. Sheltered location
 - 1.5. Soil type
 - 1.6. Air quality
 - 1.7. Noise
 - 1.8. Prevention measures
2. **Planning and cultural suitability**
 - 2.1. Cultural practices and needs
3. **Planning and social and community cohesion**
 - 3.1. Social links
 - 3.2. Social inclusion
 - 3.3. Peace and conflicts transformation
 - 3.4. Evolutivity
 - 3.5. Extension
 - 3.6. Green spaces
4. **Movement networks**
 - 4.1. Access to key functions
 - 4.2. Cultural adequacy and different transport options
 - 4.3. Emergency exits
5. **Land tenure**
 - 5.1. Security
 - 5.2. Affordability of land use
 - 5.3. Land tenure management

D. HOUSEHOLD PART

38 INDICATORS

1. **Housing layout and orientation**
 - 1.1. Thermal comfort
 - 1.2. Natural lighting
 - 1.3. Customs and use of space
 - 1.4. Privacy
 - 1.5. Flexibility
 - 1.6. Risks
 - 1.7. Safety measures
 - 1.8. Manque taille de l'habitat/ des pièces/ design compact...
2. **Building elements**
 - 2.1. Origin
 - 2.2. Natural resources
 - 2.3. Embodied energy
 - 2.4. Building envelope and hygrothermal comfort
 - 2.5. Openings and thermal comfort
 - 2.6. Recycling or reuse property.
 - 2.7. Waste generation
 - 2.8. Structural safety and climate suitability
 - 2.9. Healthy materials
 - 2.10. Long-lasting of materials
 - 2.11. Affordability
 - 2.12. Social and cultural acceptance
 - 2.13. Landscape preservation
3. **Appliances and equipments**
 - 3.1. Thermal comfort
 - 3.2. Cooking
 - 3.3. Affordability
 - 3.4. Maintenance
 - 3.5. Transfer of cultural heritage
4. **Architectural and building techniques**
 - 4.1. Local skills adequacy and availability
 - 4.2. Transfer of building cultures
 - 4.3. The talent demonstration of local craftsmens
 - 4.4. Risks mitigation measures
 - 4.5. Protection
 - 4.6. Materials and equipment required for the construction
 - 4.7. Construction efforts
 - 4.8. Waste generation
 - 4.9. Reuse of materials in the project
 - 4.10. Retrofitting
 - 4.11. Landscape and heritage preservation
 - 4.12. Building cultures adequacy





PROCESSES



A. PROCESSES PART

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Processus transparent et démocratique.



INCEPTION PHASE

i this part is about the starting point of the project

-  A. PROCESSES
-  B. TERRITORY
-  C. NEIGHBORHOOD
-  D. HOUSEHOLD

➔ Who initiated the request?

1.1

? How many stakeholders are involved in the initial request?

a	Only one of the stakeholders		i Please specify	0
b	Some of the stakeholders			1
c	A majority of the stakeholders including the concerned "community"	i The concerned community means the likely beneficiaries of the project		2
d	All the stakeholders are involved			3

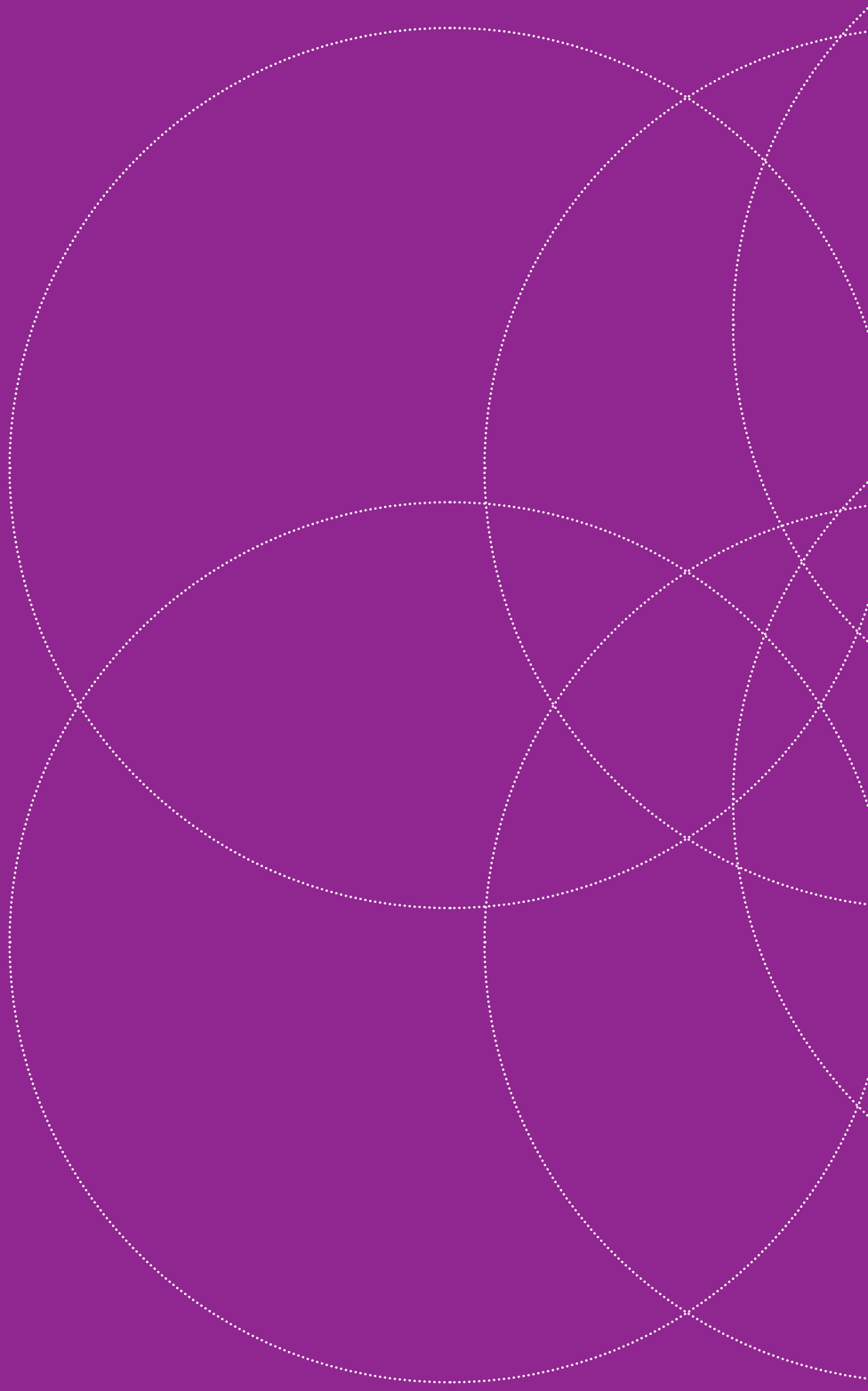
➔ Who assessed the initial request?

2.2

? How many stakeholders validated the relevance and the priority of the initial request?

a	Only one of the stakeholders		i Please specify	0
b	Some of the stakeholders			1
c	Most of the stakeholders including the communities	i The concerned community means the likely beneficiaries of the project		2
d	All the stakeholders are involved			3







B

TERRITORY



B. TERRITORY PART

28 INDICATORS

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PARAGRAPH IN PROGRESS (DO NOT READ IT NOW)

Liveable location:

"Housing is more than just houses. It is connected to a larger network of urban design, settlement patterns, ecological structures as well as infrastructure and services of a city, region and country".

"Housing design that does not into account these networks cannot be sustainable in the longterm as urban patterns and access to services and infrastrucutre affect the productivity, security, quality of life and development of communities".

UNHabitat,

Going green (p.28)

"Adequate housing must be in a place that enables access to employment, primary healthcare, education and other social services and civic amenities.

Rural and urban, housing must be in a location that is safe, particularly from environmental hazards and pollutants".

<http://www.hlrn.org/toolkit/English/explore/index.htm>

N.B.: all the services (water, food, waste, sanitation,...) which are not managed at the regional or city wide scale (public services), can be considered at the neighborhood scale (community level) or household scale (private).



WATER

- i** Water accessibility is about:
- its local availability
 - sufficient quantity for all
 - its affordability for the target groups


Other tools or references to go further: SPHERE standards and quantitative indicators on water access, quantity, quality and facilities. Website: <http://www.spherehandbook.org/en/watersupplystandard1accessandwaterquantity/>
http://www.who.int/topics/drinking_water/en/

-  A. PROCESSES
-  B. TERRITORY
-  C. NEIGHBORHOOD
-  D. HOUSEHOLD

➔ Water availability

1.1


? The project must ensure there is always enough water for everybody for drinking, cooking and hygienic issues. Water availability is about quantity and distance. Please refer to SPHERE's standards to quantify the indicators.

a	No water available for all the target groups and no measures are taken		 Please specify	0
b	Water available for all the target groups but far away and no measures are taken.			1
c	The project ensures that water is available for all the target groups, but sometimes it is required to go fetch it far away			2
d	The project ensures that water is available for all the target groups close to the housing blocks			3

➔ Water quality

1.2

? Is water for drinking and cooking analyzed and treated to ensure that it is safe enough for health? Please refer to SPHERE's standards to define water quality requirements for safety.

a	No treatment strategy to ensure quality		 Please specify	0
b	Treatment based on local traditional knowledge and practices			1
c	The project ensures that water is analyzed and appropriate treatments are considered			2
d	The project ensures that the analysis and the treatment of water are based on local tested practices			3

➔ Affordability

1.3

? Affordability means that everybody can afford it (water consumption shouldn't account for a great proportion of incomes) all costs included (conveyance, treatment, supply, storage).

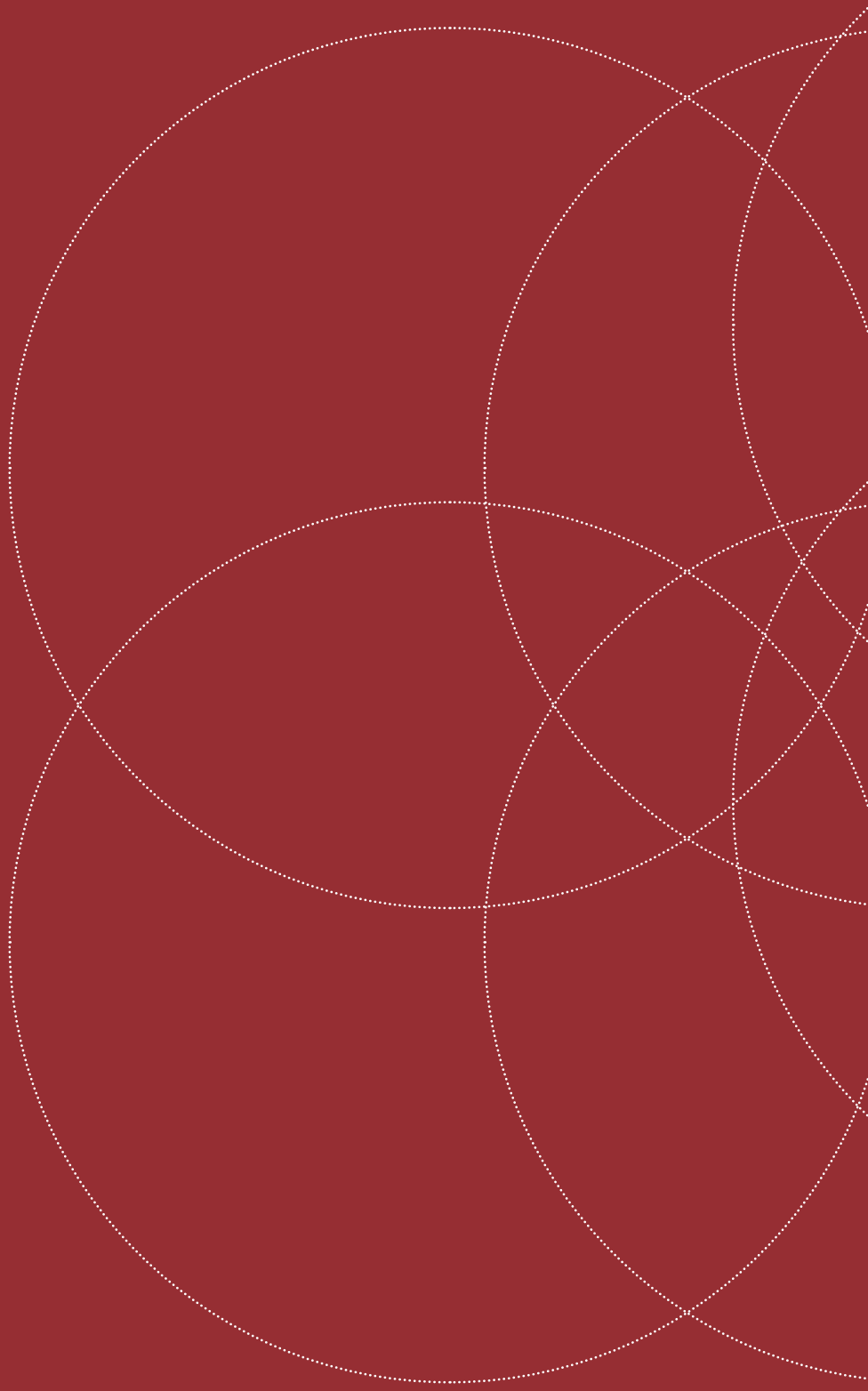
a	Drinking water consumption not affordable and no measure is taken	i For instance some people cannot afford it.	✔ Please specify	0
b	Drinking water consumption rather expensive and no measure is taken		..... .....	1
c	The project ensures drinking water consumption to be fairly affordable	i Everybody can afford it and water cost accounts for an acceptable proportion of their income.	..... .....	2
d	The project ensures drinking water consumption to be affordable	i Everybody can afford it: water cost accounts for a very low proportion of their income.	..... .....	3

➔ Management

1.4

? Water management must ensure that water use is sustainable in the long run: identify and find solutions to conflicts, maintain affordability of the resource, avoid depletion (overexploitation) and to ensure constant supply. Is the management collective, public?

a	No management strategy of water		✔ Please specify	0
b	Poor management strategy of water	i A monitoring committee is formed but it does not represent all the groups (like women,...).	..... .....	1
c	Good management strategy is considered in the project	i A monitoring committee with representation of most of the stakeholders (different groups of inhabitants) is formed.	..... .....	2
d	Excellent management strategy	i A monitoring committee with representation of most of the stakeholders (different groups of inhabitants) is formed and supported by the State.	3





NEIGHBORHOOD



C. NEIGHBORHOOD PART

21 INDICATORS

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APPROPRIATE SETTLEMENTS PLANNING FOR CLIMATIC HAZARDS AND DISASTER RISKS REDUCTION

-  A. PROCESSES
-  B. TERRITORY
-  C. NEIGHBORHOOD
-  D. HOUSEHOLD

→ Climate specific planning

1.1

? Does the planning contribute to protect the inhabitants from the adverse elements of climate (excessive heat by increasing shading, protection from sandstorms,...) and to benefit from the favorable ones to increase their comfort or safety?

a	No water available for all the target groups and no measures are taken		 Please specify	0
b	Water available for all the target groups but far away and no measures are taken.			1
c	The project ensures that water is available for all the target groups, but sometimes it is required to go fetch it far away			2
d	The project ensures that water is available for all the target groups close to the housing blocks			3

