

# THE HOUSING BAROMETER

A TOOL TO SUPPORT A RAPID HOUSING  
SECTOR REVIEW



**UN**  **HABITAT**  
FOR A BETTER URBAN FUTURE

The Housing Barometer: a tool to support a housing sector review  
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The Housing Barometer draws on the Practical Guide for Conducting Housing Profiles. It has both a pedagogic and an action research purpose. The tool was created with the dual goal to support the realization of the housing profiles and to support housing sector analysis, stimulating holistic and integrated thinking, and strengthening the users' understanding about the complexity of the housing sector and the interlinkages between the various attributes and sub-sectors of housing.

The tool was tested for the first time at a Housing Practitioners Lab organized within the framework of the training course "Innovative Approaches to Deliver Affordable Housing Options in Asia" which took place from 19-29 November 2018, organized by UN-Habitat in partnership with the International Urban Training Centre (IUTC) in Korea. Nearly 30 participants attended the training, including mayors, deputy mayors and senior officials from Asian national bodies and cities.

The Housing Barometer was tested in countries like Bangladesh, Bhutan, India, Indonesia, Mongolia, Philippines and Vietnam. It was further tested in January 2019 by the participants of the Housing Specialization of the Master Programme in Urban Management and Development organized by the Institute for Housing and Urban Development Studies-IHS, Erasmus University of Rotterdam. They used the Housing Barometer to support the analysis of their country's housing sector and held thereafter presentations to debate the results and outcomes as well as the policy implications and the design of housing strategies to address the shortcomings identified by the Housing Barometer. The assessment of the Housing Barometer as a tool to support the analysis of the housing sector was very positive.

The final draft was shared with experts from UN-Habitat and partners and was peer-reviewed by Anaclaudia Marinheiro Centeno Rossbach, Coordinator Latin America and the Caribbean, Cities Alliance; Inês da Silva Magalhães, former National State Secretary of Housing of the Ministry of Cities of Brazil;; Luis Bonilla Ortiz-Arrieta, Operational Director TECHO, Santiago, Chile; Marielos Arlen Marin, lecturer at the Central American University 'José Simeón Cañas- UCA, El Salvador, doctoral candidate at the University of Massachusetts Amherst, USA; Matthew French, Housing and Urban Development Expert, Program Manager, Revitalising Informal Settlements and their Environments (RISE), Monash Sustainable Development Institute, Australia; Kecia Rust, Housing Finance Specialist and Head of the Centre for Affordable Housing Finance in Africa, Johannesburg, South Africa; Dr Wolfgang Amann, head of the IIBW – Institute for Real Estate, Construction and Housing Ltd. (Institut für Immobilien, Bauen und Wohnen GmbH), Vienna, Austria; Monica Ramirez, Director Housing and Human Settlements, Latin America and the Caribbean, Habitat for Humanity International, Costa Rica; Mariana Barrera, Economist, National Director of Innovation and Sustainable Development of the Secretariat of Urban Infrastructure of the Ministry of Interior, Public Works and Housing of Argentina; Ester van Steekelenburg, Housing and Urban Management Expert, Head of Urban Discovery, Hong Kong; Viviana Fernandez, architect, lecturer at the Faculty of Architecture and Urbanism of the University of Chile, former staff of the Ministry of Housing and Urbanism; Doris Andoni, Housing Expert and former Executive Director of the Albanian National Housing Agency, currently Head of the Housing Unit of the Ministry of Finance and Economy of Albania; David Sims, senior economist, consultant to UN-Habitat, principal author of the Housing Profile of Vietnam and Tunisia;; and Fernando Duarte Callizo, director of TECHO. The peer-review process provided excellent and insightful expert knowledge which improved the final product that is presented herein. Their inputs and commitment to improving the tool is greatly appreciated.

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## 1. PREAMBLE:

The Housing Barometer is a tool to support a rapid analysis of the housing sector. It provides a quick overview of the housing sector that feeds directly into the housing policy formulation process. The Housing Barometer relies on qualitative assessments rather than data and empirical evidences. It expresses the perceptions of policy makers, decision makers and housing practitioners about the performance of the various subsectors of the housing sector. The result of housing sector analysis through the Housing Barometer gives an immediate visualization of the performance of the housing sector by means of the scoring given to each dimension and sub-sector of the Housing Sector in the context that it is being utilized.

The Housing Barometer is a practical tool that draws on the housing sector analysis methodology as outlined in the Practical Guide for Conducting Housing Profiles<sup>1</sup>.

The Housing Barometer enables an easy diagrammatic visualization of the weaknesses and strengthens of the housing sector in a given city/country which triggers policy discussions. It is illustrated as a housing sector diamond (the geometric figure) that unveils areas for further analysis and possible policy response. The Housing Barometer is therefore a problem-solving tool helping in the identification of the problem areas or policy shortcomings that need attention.

The housing sector diamond or radar chart – the visualization and geometric figure – expresses the results of the scoring system tagged to values given to a series of questions made about land supply, infrastructure provision, the construction industry, the house finance industry, urban planning, supply of labour, rules and regulations and so on. Low scores will indicate areas that need policy interventions and indicate where additional data, research and evidences will need to be collected in order to support the design of the evidence-based housing strategy. High scores mean that policies are in place and resulting into positive outcomes. It goes without saying that the normative view of the housing sector – as defined in the Practical Guide for Conducting Housing Profiles – is the foundation of the Housing Barometer.

From the outset, it is important to highlight that the performance of a nation's housing sector is a complex issue. The analysis requires grounded research on the housing, land and real estate markets, the institutions, public policies, outcomes and social-economic processes that have a direct impact on cities and towns and on the quality of life of the inhabitants. Thus, the Housing Barometer is a supporting tool and does not replace the comprehensive analysis of the housing sector which is outlined in the 'Practical Guide for Conducting Housing Profiles' from which the standardisation of indicators and questionnaires are derived.

The outcome of the analysis provided by the Housing Barometer is to a certain degree an interpretation of the Housing Sector performance. By no means it replaces the need for empirical evidences, market surveys and policy research that must be carried out for an in-depth analysis of the housing sector in a given country and the formulation of a housing policy response. Finally, the Housing Barometer was designed with a dual goal of serving on the one hand the broad housing industry community in their quest to analyse and understand the structure and functioning of the housing sector, and on the other hand to serve as pedagogic tool to support Housing Practitioners Labs which are part and parcel of capacity building carried out by UN-Habitat in the housing field.

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<sup>1</sup> UN-Habitat (2011). Practical Guide for Conducting Housing Profiles. Nairobi: UN-Habitat.



## PART I

### Background, Context and Relevance of a Housing Barometer

## 2. THE MEANING AND DEFINITION OF HOUSING

Housing is an integral element of a nation's economy<sup>2</sup>. It's backward and forward linkages with other parts of the economy strictly bond people's needs, demands and social processes with the supply of land, infrastructure, building materials, technology, labour, and housing finance. These linkages allow housing to act as an essential engine for sustainable development and poverty reduction in both society and the economy<sup>3</sup>. Operating within an overarching governance of the housing sector, a framework defined by institutional and regulatory systems that enable society to build homes and neighbourhoods, housing has an inescapable physical manifestation through the building of houses, dwellings, shelter, accommodation, site & services and/or residential units. Without a functioning housing sector, urban centres cannot be established or developed. A functioning housing sector offers appropriate, affordable housing and sustainable patterns of urbanisation – which are critical for the future of our ever-urbanising planet<sup>4</sup>.

The success of a well-functioning housing sector involves various elements and components applicable to every housing stakeholder measured by the ability of the sector to deliver affordable housing options in scale and diversity in size, location, standard, price and typology. A housing policy, therefore, is built on and integrates a systematic analysis of the supply and demand side of the sector, the responsibilities and relationship between the various stakeholders and institutions operating within the governance framework<sup>5</sup>. The Housing Barometer serves the purpose of rapidly analysing the housing sector prior to the realization of the Housing Profile and the in-depth market and sector analysis that precedes the design of well-intended policies.

## 3. WHAT IS THE HOUSING BAROMETER?

The experience with undertaking the Housing Profile in various countries demonstrates the need to quickly unveil problem areas of the housing sector prior to initiating the comprehensive analysis of data, information, and participant's observations that sustain the housing sector analysis employed by the Housing Profile Methodology. The Housing Barometer is a tool to help achieving this. In addition to this, it helps to initiate the dialogue with local stakeholders to validate preliminary assessments provided by the tool.

For those undertaking the Housing Profile, the Housing Barometer becomes a supporting tool to set some parameters. It can also be used to assess the perception and views of the various housing stakeholders about the housing sector in a given location by allowing them to use the tool so that a compilation of responses could give as a broader picture of stakeholders' perceptions. It must be clear from the outset

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<sup>2</sup> Kissick et al., (2006). Housing for All: Essential to Economic, Social, and Civic Development. PADCO in collaboration with The International Housing Coalition.

[http://www.habitat.org/lc/housing\\_finance/pdf/housing\\_for\\_all.pdf](http://www.habitat.org/lc/housing_finance/pdf/housing_for_all.pdf)

<sup>3</sup> Urban Economics (Second Edition). By Arthur O'Sullivan, Department of Economics, Oregon State University, USA. Undated.

<sup>4</sup> UN-Habitat (2011). Practical guide for conducting Housing Profiles. Nairobi: UN-Habitat.

<sup>5</sup> Lund, Brian (2006), "Understanding Housing Policy", United Kingdom: The Policy Press, University of Bristol.

that the Housing Barometer is a tool draws on qualitative information and individual's assessment. The more informed and the more data and information is available at hand, the more accurate the Housing Barometer expresses visually the real situation of the Housing Sector. Thus, the Housing Barometer helps policymakers and housing practitioners in the identification of the weaknesses and strengthens of the housing sector unveiling problem areas that need policy attention.

The Housing Barometer is the outcome of the scoring and values given to a set of questions to assess each sub-dimension of the housing sector, as illustrated in the Practical Guide for Conducting Housing Profiles (Figure 1):

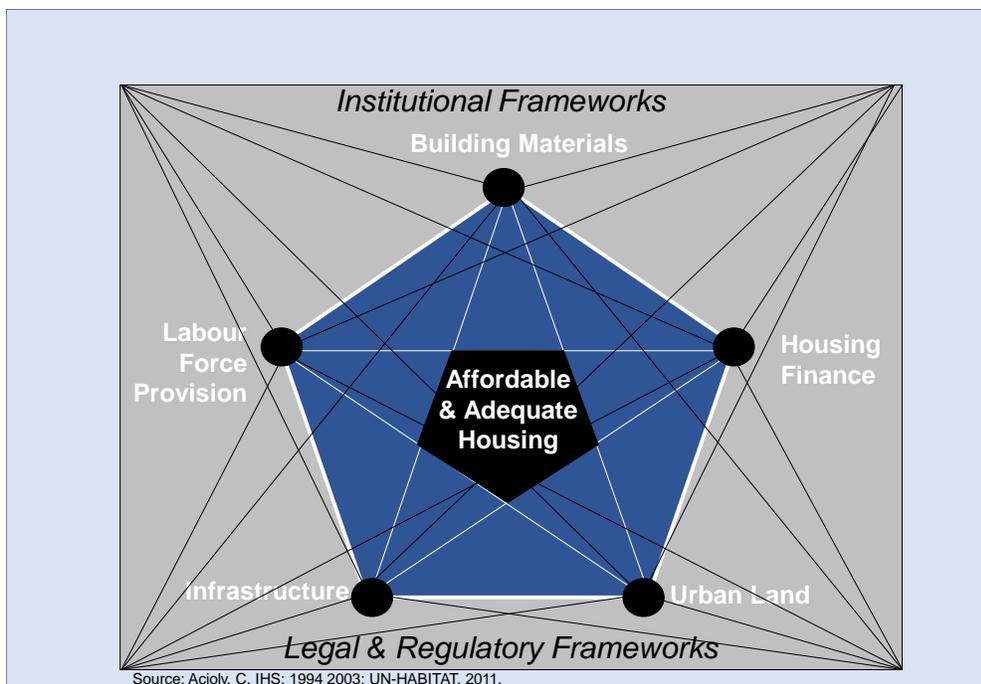


Figure 1; Understanding the Structure of the Housing Sector

## 4. THE STRUCTURE, OPERATION & ROLE OF THE HOUSING BAROMETER

As mentioned above, the barometer is comprised of a set of 6 questionnaires for each sub-division that defines and structures the housing sector, with standardised indicators giving a value scoring to each sub-dimension of the housing sector that is visualized in a radar chart, also called the housing diamond. The selected questions were drawn from the Practical Guide for Conducting Housing Profiles which ensures consistency and coherence with the enquiries made when undertaking an in-depth analysis of the housing sector as advocated by the Housing Profile Methodology.

### 4.1 INDICATORS

The values of the scoring given to each question varies in range between zero and five, with zero as the lowest rating and five as the highest meaning non-existence in one extreme and fully implemented on the other. Figure 3 shows the indicators utilised for each mark. Different definitions were given to each ranking due to the variety of questions presented. Therefore, their applicability might vary according to the context in which it is being applied.

## 4.2 SUMMARY AND FINAL SCORES

Each questionnaire has 15 to 21 questions. Thus, the maximum score ranges from 75 to 105, representing a scoring of 100%. To be able to obtain the final percentage for each element showing on the chart, a rule of three is used. An example of a component with 15 questions is presenting in Figure 2.

Final Score: 63  
 75 points = 100%  
 63 points =?  
 $(63 \cdot 100) / 75 \rightarrow 84\%$

Figure 2: Scoring System of the Housing Barometer

Scoring	Indicators				
0	<i>Not yet in place</i>	<i>Does not exist but it is urgent to implement it</i>	<i>No evidence</i>	<i>Extremely unclear</i>	<i>No, never</i>
1	<i>It is in process</i>	<i>Does not exist but it needs to be implemented</i>	<i>There is evidence but it is not reliable</i>	<i>Unclear</i>	<i>No, but it's in process</i>
2	<i>It exists, but it is not regulated yet</i>	<i>Does not exist, but it would be useful to consider implementing it</i>	<i>Little Evidence</i>	<i>Somehow unclear</i>	<i>Yes, but rarely</i>
3	<i>It exists, it is regulated, but it is not implemented yet</i>	<i>Does not exist, but there are plans to implement it</i>	<i>Some evidence</i>	<i>Somehow clear</i>	<i>Yes, sometimes</i>
4	<i>It exists, it is regulated, it is implemented, but it does not function properly</i>	<i>Does not exist and the lack thereof does not have a negative impact</i>	<i>Moderate evidence</i>	<i>Clear</i>	<i>Yes, often</i>
5	<i>It exists, it is regulated, it is implemented, and it functions properly</i>	<i>Does not exist and does not apply in my country</i>	<i>Strong evidence</i>	<i>Extremely clear</i>	<i>Yes, always</i>

Figure 3: Scoring and Values of the Housing Barometer

The next section demonstrates the different variables that the Housing Barometer can generate to explain the key problem areas that need improvements and where policymakers and housing practitioners should give policy attention, undertake in-depth analysis and assess the existing conditions affecting the performance of the housing sector.

## 5. RESULTS AND MEASURES BY THE HOUSING BAROMETER

### 5.1 HOUSING BAROMETER 100%

Figure 4 visualizes the results of the Housing Barometer showing a well-functioning housing sector where the six sub-sector components score the highest scoring with a total of 75 points (100%). A housing sector that achieves this mark most likely reveals a housing sector where there is a balance between supply and demand and that all of its subsectors seem to function adequately; planned land is adequately available and serviced-land are supplied at a scale compatible with the demand for housing, and the building industry is functioning well and supplying building materials in diversity and scale. All in all, a high score in the Housing Barometer reveals a dynamic and well-functioning housing sector<sup>6</sup>. Further research will help to reveal eventual distortions and anomalies in the sector. One could predict that housing policy is doing its work and government and the private sector are most likely to fulfil its role in housing developments. A high score in the Housing Barometer may also reveal that housing is playing its role in macro-economic development, employment generation and poverty reduction.



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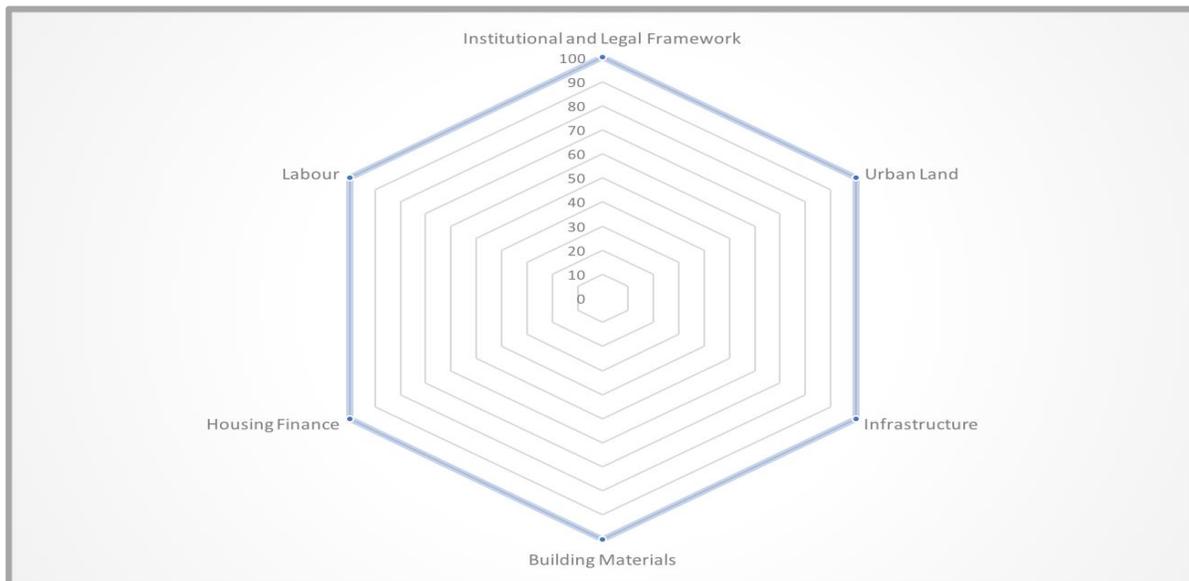


Figure 4: Housing Barometer Scoring 100%

<sup>6</sup> Drawn from Housing Enabling Markets to Work. World Bank Policy paper. 1993.

## 5.2 HOUSING BAROMETER 70 - 80%



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When the Housing Barometer reveals a scoring in the range between 70 to 80%, as revealed in Figure 5, it means that although there is a certain cohesion in the functioning and structure of the sector and the performance of its sub-sector and components, the housing sector may be facing some difficulties and bottlenecks. Some restrictions are hindering land supply for housing, housing finance might not reach all housing consumers, and it may be the case that there is insufficient investment in infrastructure and thus limiting supply of serviced land a scale. It might as well be the

construction industry and building materials supply that are falling short in meeting the demand for new housing construction. One must bear in mind that the Housing Barometer is an indicative, qualitative-based tool, that informs the perception of its users such as housing practitioners and policy makers.

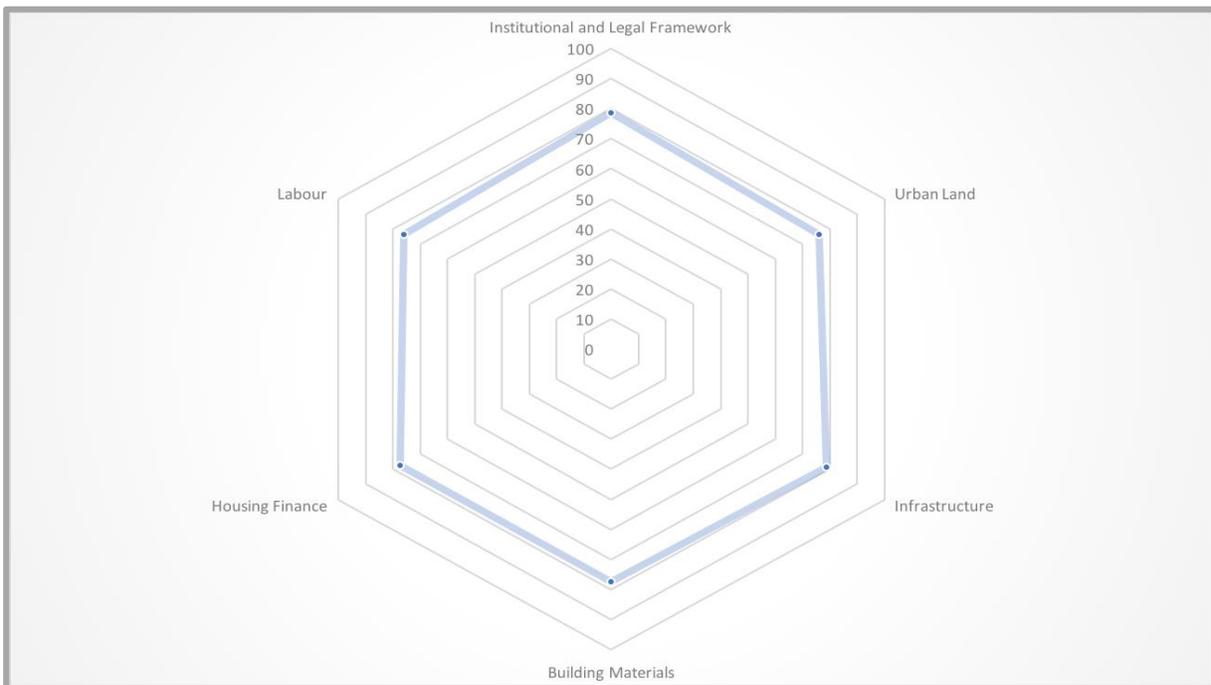


Figure 5: Housing Barometer Scoring 70-80%

### 5.3 HOUSING BAROMETER 50 – 60 % (OR LESS)



When the diagnosis of the Housing Barometer yields a result where the sub-sectors and components are scoring lower than 60, as in Figure 6 it is indicating the likelihood that the housing sector faces a considerable bottleneck that is affecting its ability to provide adequate housing that is affordable and meets the demand of the population. It certainly indicates the likelihood of problem areas and policy shortcomings in the supply but also in the demand side of the market. In this case, the Housing Barometer helps to obtain a quick visualization of a housing sector that is not well-functioning, most likely presenting bottlenecks in the supply of land, infrastructure, building materials as well as in housing finance and the institutional and financial frameworks. It might be that the institutional and regulatory framework is also not functioning well. By responding to the questionnaires one will have a first insight of the housing sector. It goes without saying that one needs to make an in-depth analysis and undertake research to find out more of the identified problem areas in a way that the policy response is evidence-based and well-informed.



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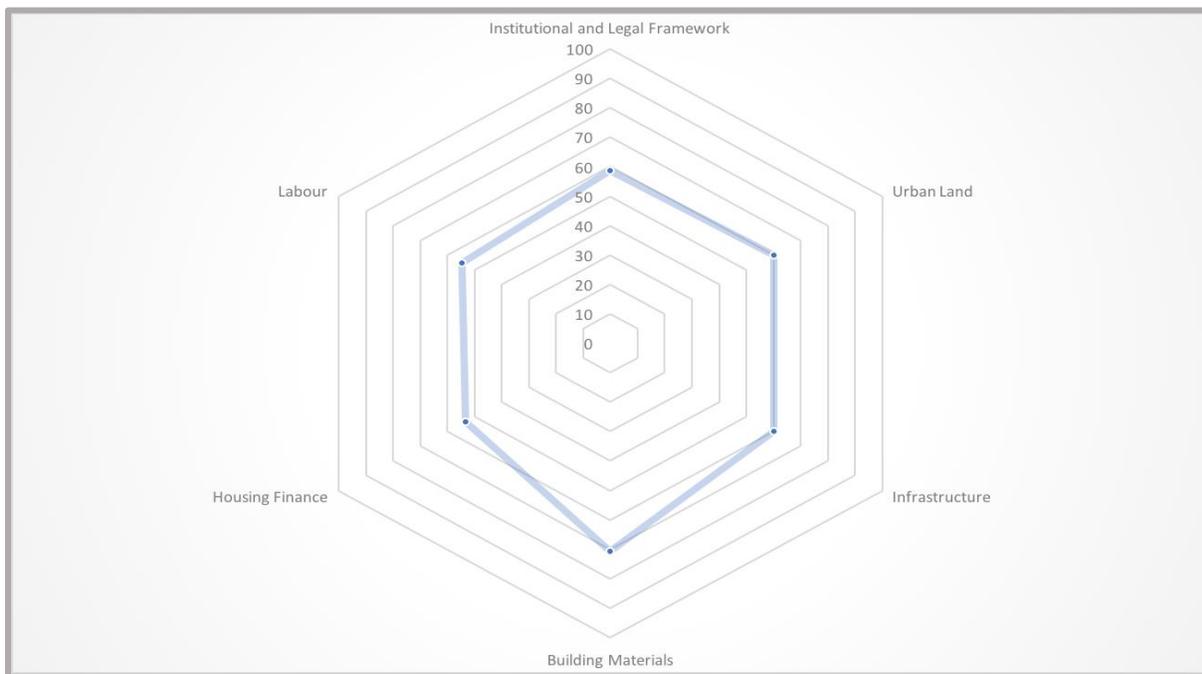


Figure 6: Housing Barometer 50 – 60 % (OR LESS)

## 5.4 HOUSING BAROMETER REVEALING WEAK LABOUR FORCE PROVISION



When the Housing Barometer reveals a deficiency in the supply of labour (*Figure 7*), it may indicate that the housing sector has difficulties to produce skilled labour for the construction industry which affects the supply side. It might indicate the lack of vocational training, insufficient volume of construction to meet the demand and a building industry not well developed and capable to generate scaled up and diversified employment opportunities. This may require in-depth analysis on the availability of vocational training, on the job training and knowledge available for those involved in the building materials and construction industry. It might reveal inadequate infrastructure for quality control, testing and assurance protocols for safety and durability of construction materials and technology.

It might indicate the absence of federations, associations or unions that ensure the safety and interests of workers, both with employers and with the government. Another factor to consider is the percentage of self-construction existent in the urbanized agglomerations in the country.

Therefore, the low results of the Housing Barometer, in this respect, triggers the design of measures and policies to improve the labour sector associated with the building materials and construction industry which altogether has impacts on housing prices and accessibility to adequate housing by all segments of society. It indicates problems in the employability in the sector which research needs to unveil.

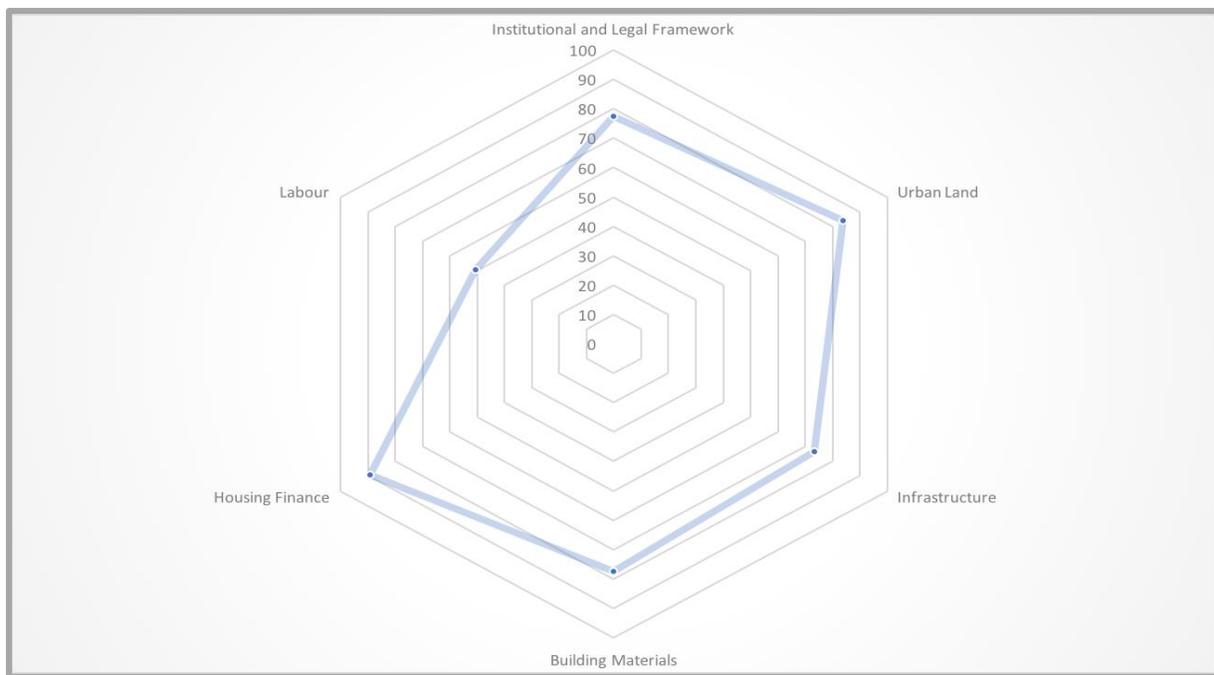


Figure 7: Housing Barometer revealing weak labour force provision

## 5.5 THE HOUSING BAROMETER REVEALING WEAK INFRASTRUCTURE



Figure 8 shows the results of the housing barometer when there is shortage or inadequate provision of infrastructure in the housing sector. This result indicates that there are bottlenecks hindering infrastructure provision which has a direct impact on the supply of housing opportunities. Investments in infrastructure are lagging behind which is severely curtailing the supply of serviced land for housing development. This might indicate distortions in price as well as the overall availability of housing. This will lead policy makers and decision makers to look at the overall performance of the utility sector and analyse the causes behind the shortcomings in the provision of potable water, sewerage, electricity, drainage, solid waste, transport, roads and other utilities needed for the full development and consolidation of residential areas in cities. In this case, the Housing Barometer gives an indicator that accessibility, distribution, universality and even affordability to basic infrastructure may be at stake for one reason or another. This is likely to stimulate further investigation in the institutional and regulatory frameworks and the financial and economic aspects of infrastructure provision, as well as the ability to pay of the consumers.

The Housing Barometer, in this case, helps to unfold the close association between scarcity of basic infrastructure, housing affordability and informal housing developments. The low scoring in infrastructure provision is likely to reveal the likelihood of informal urbanization and multiplication of slums.

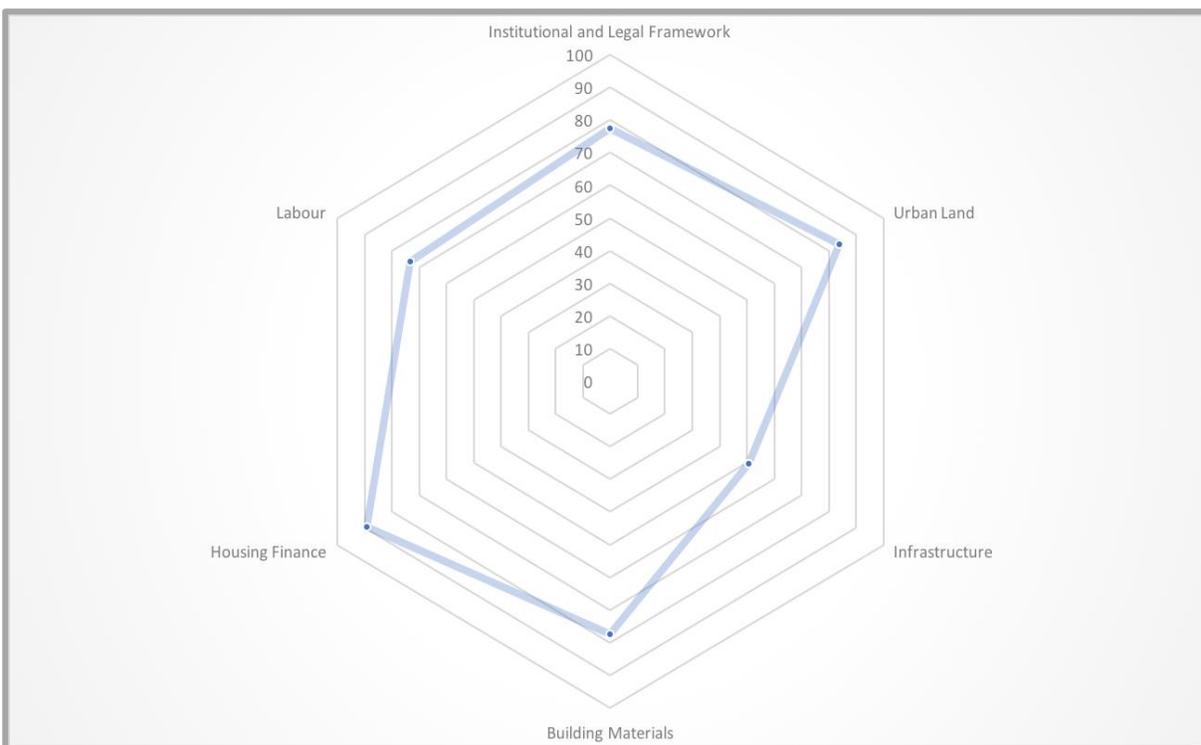
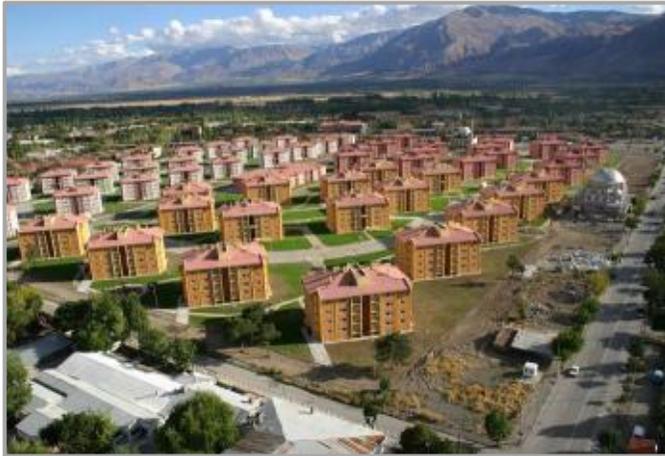


Figure 8: Housing revealing weak infrastructure

## 5.6 HOUSING BAROMETER UNVEILING WEAK INSTITUTIONAL AND LEGAL FRAMEWORK



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The institutional, legal and regulatory frameworks are the conduits through which land supply connects with infrastructure provision, housing finance and the building construction industry determining a lot of the housing sector. In this case, the Housing Barometer helps to assess the existing norms, institutions, regulations, institutions that regulate the housing sector, whether these exist and are being enforced. A low scoring institutional and regulatory framework is likely to reveal a housing sector that is confronted with a sizeable informal

housing market and distortions in the other sub-sectors. The low scoring of the institutional and regulatory frameworks requires further studies to unveil the eventual distortions in other sub-sectors such as informality in land tenure, the housing provision in an unregulated manner, inadequate regulations and enforcement capacity to guide housing and urban development. Figure 9 reveals the results of the Housing Barometer.

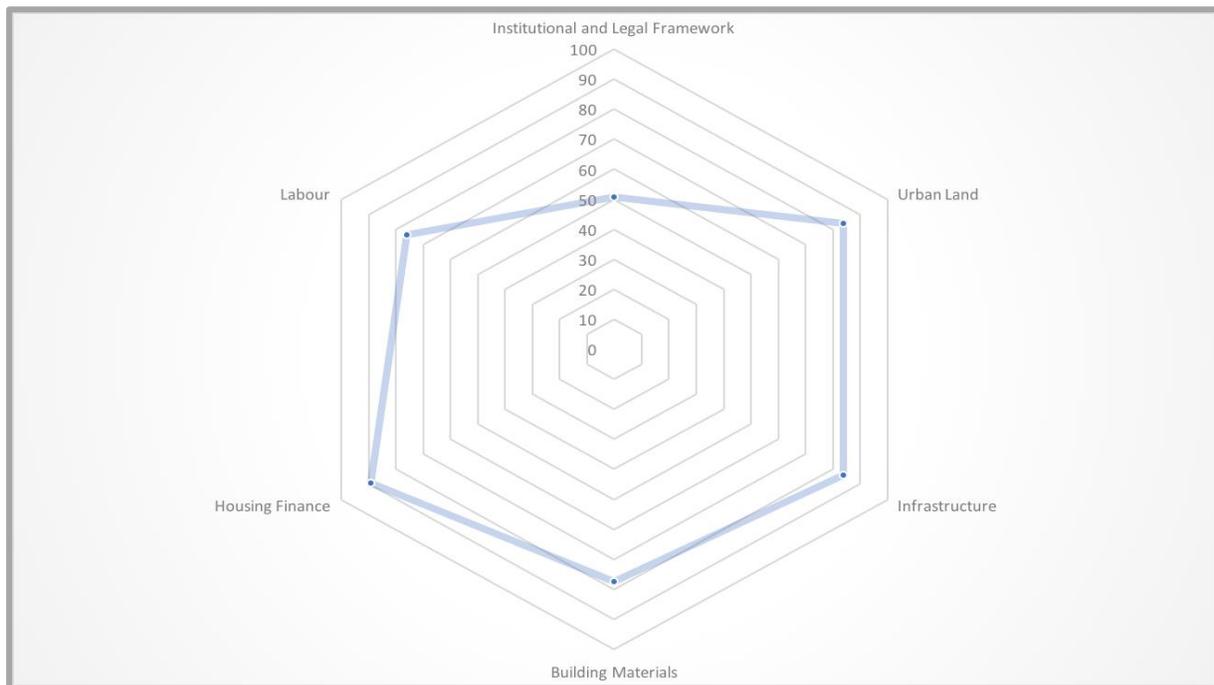


Figure 9: Housing Barometer unveiling weak Institutional and Legal framework

## 5.7 HOUSING BAROMETER REVEALING A WEAK HOUSING FINANCE



The ease with which one can acquire a loan, credit or financing to enable the purchase of a housing unit (a house, apartment or a residential plot) and the loan term or amortization period – the duration in months or years that it takes to pay back the loan/credit) – are essential elements of housing finance which increases the ability of the population to pay for and access housing. The willingness and ability to pay are fundamental factors of housing finance and part and parcel of a well-functioning housing sector. Thus, the existence of financial institutions, collateral and foreclosure laws to protect lenders and borrowers, and the diversity of the housing finance industry should be looked at in depth. The Housing Barometer helps to quickly unveil whether housing finance exists and is accessible to the population by going through fundamental questions which provides a rapid overview of the housing finance industry. This is an important dimension of housing because it directly connects with the national economy. If underdeveloped it might distort financial markets and the overall performance of the housing sector, making housing unaffordable and propelling informal land and housing development processes. Figure 10 illustrates this.



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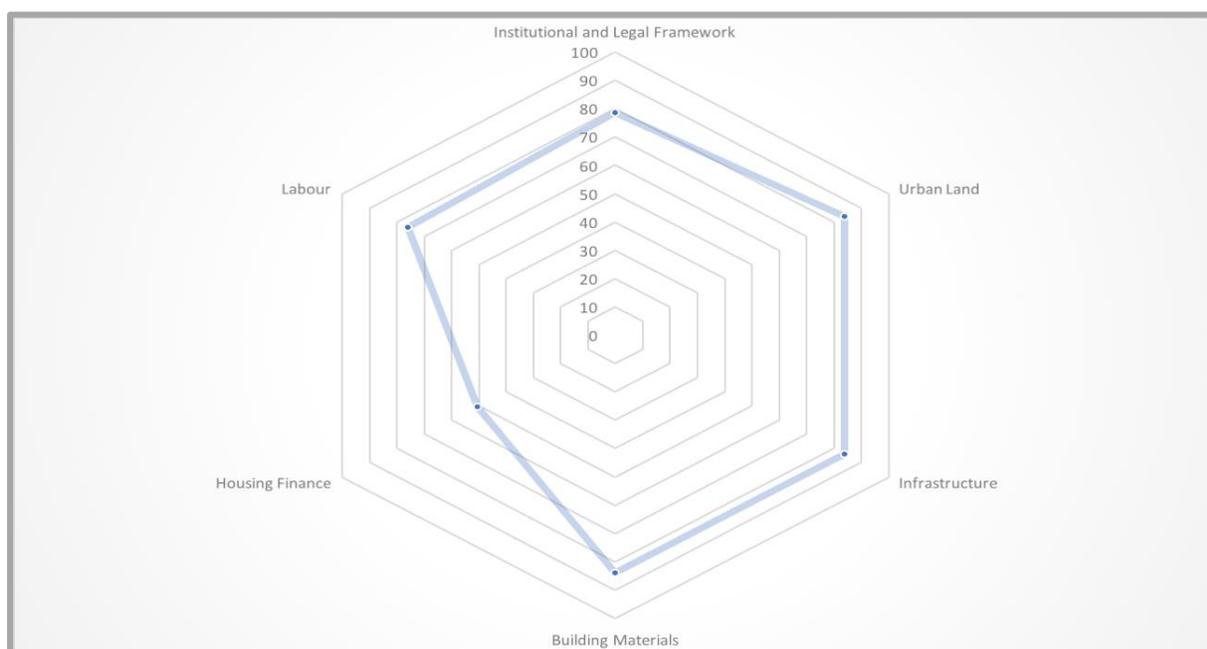


Figure 10: Housing Barometer revealing a weak Housing Finance

## 5.8 HOUSING BAROMETER UNVEILING SHORTAGE OF URBAN LAND



As mentioned in the Practical Guide for Conducting Housing Profiles, without land one cannot build houses nor develop neighbourhoods and cities<sup>7</sup>.



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When the Housing Barometer reveals a low scoring for the supply of land for housing, as in Figure 11, it indicates that there is scarcity of land for housing and consequently it is most likely that in this city housing prices are speculative, informal settlements are likely to multiply and peripheral urban expansion may become the norm. The attributes associated to land are therefore affected such as the legal security of tenure and land ownership, price and land valuation, and the size of land for housing development. In this case the Housing Barometer immediately informs that

distortions in the availability of land, expressed in the low scoring of the housing diamond, will likely generate scarcity of land and high price of housing. Thus, there is a high probability that low scoring for land supply in the Housing Barometer is closely associated to an unaffordable housing in this city.

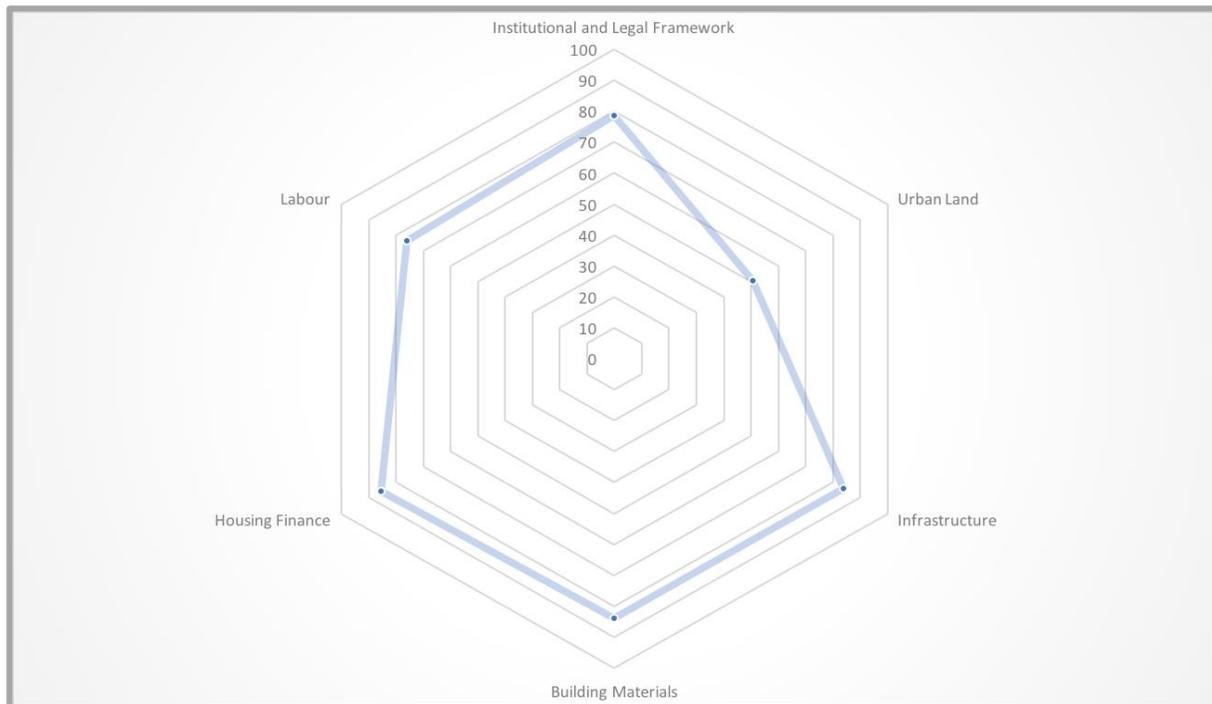


Figure11: Housing Barometer unveiling shortage of Urban Land

<sup>7</sup> UN-Habitat (2011). Practical guide for conducting Housing Profiles. Nairobi: UN-Habitat. Pg.51

## PART II

### 6. GUIDELINES FOR THE USE OF THE HOUSING BAROMETER

The visualization of the results of the Housing Barometer is generated from the answers (scoring) given to a set of questions referred to each of the 6 elements that defines housing, according to UN-Habitat's Housing Profile Methodology. These questions are organized in an excel workbook whose responses range from low to high scores. This supports the use of the Housing Barometer and it is an integral part of the tool.

The tool was tested with some examples of the Housing Profile, in order to assess the validity of the tool, the level of precision of the visual outcome of the Housing Barometer and its pedagogic value to support capacity building and training in the housing field. It goes without saying that this was not done by local experts and drawn on their experience but rather based on the information available in the analysis mentioned above. In normal conditions, as a tool to support a rapid housing sector review, the Housing Barometer should be used at the beginning of the housing sector analysis prior to the production of the Housing Profile of the country/city, with the available knowledge that practitioners and policymakers have at hand. The outcome will determine the areas that need further analysis, rigorous data collection and possibly surveys to generate empirical evidence.



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## 6.1 LABOUR PROVISION

Question		Scoring
1	Building codes, norms and technical standards regulate the building construction activities in the country.	
2	Builders receive different kinds of incentives for building affordable housing.	
3	Self-built housing is measured, and there is data about it in the country.	
4	There is enough information about the labour force in the country.	
5	There are federations, associations or unions to organise the labour force and defend the interests of its members.	
6	The proportion of labour costs in relation to the total cost of building a housing unit is reasonable.	
7	The building industry and the construction sector shows regular innovations in building techniques and building knowledge that is absorbed by the labour force.	
8	Building and builders are evaluated on their activities and skills in relation to issues of climate change mitigation and resilience.	
9	There are specialised centres and higher education institutions that provide training and education for builders and construction workers to develop and apply technologies, materials and efficiency measures in building/housing construction and use of materials.	
10	The construction and building materials industry has established procedures for certification and protection of specializations/know-how of workers and builders.	
11	The size of the building and construction industry provides employment for a sizeable population and contributes significantly to the GDP of the country.	
12	The marketplace has available information about the quantity and quality of the labour force engaged in the building industry and construction sector.	
13	The labour force in the building materials and construction industry is formalized, and the employment, contracts and salaries are protected under laws that are enforced by government regulators.	
14	There is adequate information in the market for self-builders about the building materials and construction sector as well as about the use of building materials on the percentage of labour related to the use of technology at the time of construction.	
15	The level of unemployment in the building materials sector and the construction industry is low.	
<b>TOTAL (75 POINTS MAX.)</b>		0
<b>PERCENTAGE SCORE (100%)</b>		0.00

## 6.2 INFRASTRUCTURE

	Question	Scoring
1	There are utility companies, institutions and organisations responsible for the provision of basic infrastructure with their roles well-defined by government bylaws and the governance systems governing the sector.	
2	The amount of housing units connected to the various infrastructure networks (powerlines, potable water supply, sewerage, drainage, roads, fibre optic, etc.) is recorded and consumption is measured and charged.	
3	The cost of and the tariff for potable water consumption is well-established through meters and counters at every plot/housing and tariff collection is well-established.	
4	The total bill for recurrent household expenditures on basic infrastructure remains within affordable values for most households.	
5	The percentage of people or households who have access to water, electricity and any other basic infrastructure such as sewerage, solid waste collection and gas/heating service in informal and/or formal settlements is monitored and reported.	
6	The government has investment programmes to expand the provision of basic infrastructure networks to all residents (universal coverage).	
7	The cost of infrastructure provision is regularly published in specialized housing, real estate, construction magazines.	
8	There is a specific development fund, revolving fund or trust fund that provides regular and predictable funding to expand and improve the provision of basic urban infrastructure to all urban residents on a continuous/regular basis.	
9	There are regular inspection procedures to detect illegal connections to the various infrastructure networks, and when discovered, disconnected and/or fined according to local practices of utility companies.	
10	There are ongoing privatization and different forms of incentives for private sector participation in basic infrastructure provision, including PPP, BOT, etc.	
11	There is evidence published in academic reports and in the press/newspapers that suggest a large percentage of urban households and firms disconnected from piped water, sewerage systems and power lines.	
12	There are ongoing infrastructure development programmes with investments that impact housing markets and housing supply.	
13	There is data available that demonstrate the deficit in infrastructure provision and household connections in the country (disaggregated or not).	
14	Existing tariffs, fees and user's charges can finance the maintenance of the networks and keep up with the expansion of the provision of basic infrastructure.	
	The government keeps the tariffs and servicing prices regulated and monitors price increases according to the economy of the country.	
15	Policies on urban mobility are in place and closely connected with housing provision, making public transport accessible to existing and new housing and residential areas.	
	<b>TOTAL (75 POINTS MAX.)</b>	0
	<b>PERCENTAGE SCORE (100%)</b>	0.00

### 6.3 INSTITUTIONAL AND LEGAL FRAMEWORK

Question		Scoring
1	There is an official housing policy document that outlines government policies, responsibilities and institutions, programs, finance as well as the overall governance of the housing sector in the country.	
2	The government housing policy was publicly debated with civil society by large as well as in parliament before its approval by government and the respective legislative institution (parliament, congress, senate, the house of representatives, national assembly).	
3	The housing sector has a dedicated institution to lead the housing policy formulation and implementation in the country.	
4	The housing policy receives a budgetary allocation to secure its implementation.	
5	There are different housing programmes designed and/or under-implementation which address different target groups and/or housing problems.	
6	There is an established government policy towards the existing informal housing stock (slums, informal settlements, illegal buildings, etc.).	
7	The government's housing policy includes a strategy towards homeownership as well as rental housing.	
8	There are mechanisms to prevent displacement.	
9	There is a regulation on displacement compensation.	
10	The government's housing policy recognises, protects and adopts measures for the realization of the right to adequate housing as formulated in the Habitat Agenda (1996) and the New Urban Agenda (2016).	
11	There is a building code that spells out standards, norms and regulations for housing and residential buildings which are adopted, enacted, regulated and inspected by a government institution.	
12	The Civil Code outlines property rights and legal provisions protecting the purchase, sale and disposal of immovable properties, housing, including land.	
13	There is legislation that provides for expropriation and/or eminent domain type of bylaws that gives power to governments to expropriate land and private properties for the public good.	
14	There are specific institutional and regulatory provisions that regulate the practice of urban planning and land-use ordinances, including the obligation for cities to have a master plan/urban plan/urban development plan.	
15	There are statutory urban planning regulations defining urban planning norms and standards to be adopted by cities, which may restrict or facilitate the allocation of land for housing.	
16	Is there a legal obligation for homeowners to be a member, contribute and participate in housing maintenance and management?	
17	Is there property management companies in operation in the housing market to ensure professional housing maintenance and management in multifamily housing stock?	
18	There is a policy and legislation that makes compulsory the establishment of homeowners association for the management, maintenance and renovation of multifamily housing.	
19	Is there an enforced foreclosure law that supervises and controls the overtaken of properties when a lender attempts to recover the balance of a loan from a borrower who has stopped making payments?	
20	There are non-profit housing providers such as housing association and/or cooperatives that mobilise finance and potential housing residents to make housing affordable.	
21	There are public and/or private financial institutions that provide and promote housing and shelter assistance subsidies for homeless people.	
<b>TOTAL (105 POINTS MAX.)</b>		0
<b>PERCENTAGE SCORE (100%)</b>		0.00

#### 6.4 BUILDING MATERIALS AND CONSTRUCTION INDUSTRY

Question		Scoring
1	There exist key institutions and organisations that are responsible for the organisation, production and supply of building materials for the construction industry and housing production in the country.	
2	The government regulates the building materials industry and the construction sector with specific norms, standards, fees, taxes tariffs that go into the final building material products and components that are sold in the market.	
3	There are government programmes that stimulate and promote the utilization of alternative or traditional building materials which may include specific waivers, fiscal incentives, subsidies, tax relief, etc.	
4	There are research and development practices in the private and/or public sectors as well as institutions that have the mandate to develop, test, regulate, standardize and disseminate the use of industrialized as well as alternative/traditional building materials in the country.	
5	There are national/local institutions that test quality, durability and resistance of building materials and set national norms and regulations and these are enforced by existing practices and inspections of quality control to protect consumers and ensure the safety of buildings.	
6	Raw materials are available in the country which allows domestic transformation and production of building materials to feed the national construction industry and prevents the local/national market from being depend on imported building materials.	
7	There is a regulated market that sets price references for key building materials components such as cement, bricks and building components such as iron beams, etc. and there are law enforcement institutions.	
8	The cost of building materials in relation to the final cost of the housing is within an acceptable and affordable range in relation to the cost of infrastructure, land and labour.	
9	The market and price quotations and commercialization of the building materials components needed for housing construction is monitored and overseen by public or private institution.	
10	There is a well-established industry of pre-fabricated building components that stimulates pre-fab housing buildings at affordable prices.	
11	Local/national housing development markets majorly use national material and components rather than international/imported materials.	
12	The supply of building materials in the country meets the demand and prices are not speculative.	
13	There are specific government policies to boost innovation in technology, durability, safety, affordability and cultural adequacy of building materials.	
14	There are measures adopted by governments showing serious concerns for climate change mitigation and resilience in the production and use of building materials, and the market is responsive to that.	
15	There is an emerging green housing building activity setting up new standards for clean production sustainability and affordability for both producers and consumers in housing.	
16	The construction sector and the building materials industry is responsible for a significant portion of the GDP of the country, producing jobs, wealth and a value chain for the national economy.	
<b>TOTAL (80 POINTS MAX.)</b>		0
<b>PERCENTAGE SCORE (100%)</b>		0.00

## 6.5 HOUSING FINANCE

Question		Scoring
1	There are several housing finance institutions in the country that provide mortgage loans, housing credit and other forms of financial services which offer different options and services for the population and result in positive competition in the housing sector.	
2	There is a low percentage of undocumented and insecure land holdings, undocumented income, unregulated building construction which lower the risks attached loans and thus stimulates housing finance institutions to engage in housing finance services in the country.	
3	The existence and availability of subsidies meet the demand for impoverished people with low incomes, enabling them to have access to adequate housing	
4	There are foreclosure laws and regulations that are enforced by justice, and banks and financial institutions can repossess mortgaged properties in case of default within a reasonable amount of time.	
5	The central bank and or similar national finance institution regulates and enforces regulations on the market, supervising housing finance institutions, including the determination of interest rates applied to housing loans.	
6	The average loan amount in relation to income that people can borrow from financial institutions is well defined and regulated.	
7	There are different types of house mortgage with different maturity periods of the loans that are provided by housing financial institutions.	
8	There are micro-credit services for housing and it is accessible by a large percentage of the population in the country.	
9	There is data and information available about the size of the market for micro-loans and the number of micro-financing institutions (MFIs) active in the country.	
10	There is a secondary mortgage market in the country and investors and financial institutions are actively involved in this.	
11	The basic legislation in place and the law enforcement capacity stimulate banks and individuals and firms to engage in mortgage and loan agreements.	
12	Banks and housing financial institutions have standard procedures to determine affordability and/or ability to pay for housing finance.	
13	There is sufficient knowledge in the marketplace about housing prices, household and individual incomes as well as the ability to pay for housing.	
14	The size of the informal market of loans and credits is negligible and people are encouraged to formally apply for loans in financial institutions.	
15	There is legislation and institutions actively involved in secondary markets, securitisation link to the national and international capital market.	
16	There are initiatives or adopted measures to regulate the rental supply of Airbnb or any other form of rental practices.	
17	The size of the housing finance industry is relevant and plays an important role in macroeconomic development and the overall economy.	
<b>TOTAL (85 POINTS MAX.)</b>		0
<b>PERCENTAGE SCORE (100%)</b>		0.00

## 6.6 URBAN LAND SUPPLY

Question		Scoring
1	Customary land ownership, tribal and traditional landholdings are recognised with attached property rights in land disputes and practices within the land and real estate markets in the country.	
2	There are multiple institutes of land property rights employed by the government such as individual and title deeds, land lease, land-use rights, community land trust and usufruct allocations when developing and/or allocating land for housing and other building purposes.	
3	The legislation that regulates land subdivision, parcelling and urbanisation patterns adopts a legally defined minimal plot size for residential/housing and parameters.	
4	There is a supply of land for urbanization which accommodates the population growth and demand for land and infrastructure in the urbanized areas of the country.	
5	Governments are unaware of informal land supply systems and/or unplanned development schemes.	
6	Governmental institutional mechanisms and regulatory frameworks used to acquire land supply are easy to access and function well preventing Informal land market handling of land.	
7	The land stock and the availability of land for urban development is well-organised, recorded and administered in the form of land information system cadastre or property registry.	
8	Land prices are within the margins of affordability vis-à-vis household incomes and their ability and willingness to pay.	
9	There is land rent, land property tax, land lease fees or any kind of property tax enforced on occupants/owners of the urban land and/or housing property.	
10	Government evictions and court cases are rarely used as interventions in Informal settlements and land stock which are informally and illegally occupied.	
11	Land-use rights are well-protected, documented and recognized by the market and there are institutions and legal instruments to enable housing finance institutions to safely engage in loan agreements, mortgage finance involving building on loan.	
12	There is legal control of the amount of land that one individual can hold as his/her own property within the legal boundary of cities.	
13	The government counts on a variety of instruments to manage and allocate land and employ land-based finance such as laws and policies to implement land readjustment, land value capture, betterment charges, property tax, etc.	
14	There are institutions that undertake regular market surveys and publicise land values, land markets outcomes, land price gradients that inform housing costumers about choices, locations, the price of a parcel of land in a determined location, making the market transparent and without asymmetry of information.	
15	The real estate market is well established and regulated with multiple institutions such as developers, real estate agents, associations of real estate markets players that offer wide opportunities in the real estate market.	
<b>TOTAL (75 POINTS MAX.)</b>		0
<b>PERCENTAGE SCORE (100%)</b>		0.00

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