





GUIDE FOR THE

DIAGNOSIS OF LOCAL CONSTRUCTION

TIMOR-LESTE





1. OBJECTIVE OF THIS MANUAL

The purpose of this document is to explain the process and the objectives of the diagnostic study of local construction (shelter/housing and habitat) in a comprehensive manner in order to allow for the development of humanitarian projects in the Shelter/Housing sector in Timor-Leste.

It covers the whole of the different stages of diagnosis, and is intended for the use of technicians in the Shelter/Housing sector in Timor-Leste.



The diagnostic study of local construction has to be carried out by each partner in the Shelter Cluster in the early stages of any project or programme of support in the shelter/housing sector. The diagnostic process should allow partners to better approach the identification and observation of local building cultures in order to:

- Understand the value of what already exists in terms of architecture, culture and technical solutions linked to the housing;
- Understand the techniques and the evolution of local building practice;
- Understand the impact of « natural » hazards on habitat, and identify local strategies to deal with these.

This diagnostic process should then serve to inform the development of shelter projects or programs in place, taking the context into account and making the best possible use of relevant local construction practices, and potentially useful local materials.

3. EXPECTED RESULTS FROM THE DIAGNOSTIC STUDY

- 1. Improvement of the humanitarian support offered in a post-disaster situation, and also better disaster preparedness:
 - Familiarity with local house-building practices;
 - Formulation of an adequate and efficient humanitarian response;
- 2. Validation of adequate and efficient local building cultures;
- 3. In the long term, formation of a database allowing better understanding of local construction in order to support humanitarian action. For this, partners are encouraged to send their reports and summaries of research findings to the coordination of the Shelter Cluster. Any good quality studies can be published on the Shelter Cluster's site in order to allow all partners to benefit from the knowledge which has been brought together.



House on stilts in Timor-Leste AusAid – Creative Commons



Stone house in Bacau David Stanley – Creative Commons



Two typologies of housing coexisting Peter Shanks – Creative Commons



4. ELEMENTS OF THE DIAGNOSTIC STUDY

Production of habitat Architecture of the area Influence of risks in the habitat Objectives **Objectives** Objectives - To identify the processes of production of habitat (self-- To identify the different architectural typologies; - To identify the type of settlement and its general building, tradespeople, etc.); - To identify the materials used for construction; characteristics: - To understand the issues involved in habitat and in the way of - To identify the size and dimensions of homes and habitations; - To know the types of risk current in the area being researched; dwelling: - To identify the building cultures of the area being studied; severity and frequency of these; - To identify ways of living in the area (hygiene, security, access - To know the impact of the risks on the population; - To understand the issues of habitat in relation to risks: - To identify the actors in construction in the area being studied; to water, cuisine...); - To identify the potential risks; - To identify the suppliers of materials. - To identify the number of stages of construction; - To identify the vulnerability of the population; - To know the dimensions of land plots; - To identify which parts of the area being studied are most - To identify the way of building on plots (one or several houses, exposed. one or several buildings). Expected results Expected results Expected results - To have an idea of the prices and variations in price of - Identification of local building cultures; - Knowledge of the strategies put in place to deal with disaster; materials; - Draw out the best from local building knowledge and develop - Identification of means for prevention and channels for - Knowing the actors in construction; solutions which are suitable to the context and to the information; - To know what materials are available on the local market; - Identification of places of refuge; inhabitants. - Being able to support these actors. - Identification of the resilience of the population / capacity for recovery / access to shelter; - Identification of the measures put in place to reduce damage. Information gathering: Interviews with inhabitants, Information gathering: Site visit. Interviews with inhabitants. Information gathering: Interviews with inhabitants and local tradespeople, producers and suppliers. The different diagnostic The different diagnostic forms guide this process. Debrief and authorities. The different research tools support this process. tools are a support for this. summary at the end of each day. Photos.



5. ASSESSMENT ACTIVITIES

PHASE	ACTIVITIES	OBJECTIVES	PREPARATION	RESOURCES NEEDED
A STUDY OF THE AREA AND ESTABLISHING CONTACT BEFORE THE FIELD MISSION	1. SELECTION OF THE STUDY AREA	 To select a target area linked with the local authorities, ad hoc local humanitarian plans and the needs identified by the Shelter Cluster. 	• Careful consideration of the security situation before going to the field.	 Operational Plan Shelter Cluster and Government; Ad hoc local humanitarian plans and needs identified by the Shelter Cluster.
	2. STUDY OF EXISTING DOCUMENTATION	 To understand the population in the area being studied; To understand the actors already operating in the area; To understand the community dynamics (different ethnic groups, associations, women, young people, people living with disability etc.). 	• Study available documentation on the area and review of the whole body of documents to learn about the situation before going to the field.	• Existing documentation on the area.
	3. CONTACT WITH LOCAL AUTHORITIES BEFORE THE FIELD VISIT	 To clarify the reasons for the activity with those in positions of responsibility for the local population; To respect the principle of accountability to the local authorities; To facilitate the process. 	 Identification of the correct protocol (who should be contacted first, and by whom); Identification of the right period to undertake the field visit (taking note of market days, religious festivals, aid distributions, sensitising by other actors, etc) Agreeing meeting times and places with the people who will meet with you on arrival in the field, sufficiently ahead of your journey to the field; Sharing the objective of the visit and the way the research will be carried out with the different stakeholders; Logistical preparations for the field visit (local guides, meals, accommodation, - if necessary, meeting room, dealing with unexpected events, rain, etc) 	



PHASE ACTIVITIS	OBJECTIVES	IMPLEMENTATION	INTERVIEW FORM/ OTHER MATERIAL REQUIRED
B OBSERVATION AND INTERVIEWS IN THE FIELD 4. MEETING WITH THE AUTHORITIES, CHIEFS, AND COMMUNITY NOTABLES	 To explain the process to the authorities and to request permission for the visits and guides for the purpose; To identify the target groups that it is most important to meet; To request information on the history, context, etc., of the site; To study the distribution of inhabitants across the target area. 	 Duration : Between 45 and 90 minutes Meeting with local authority. The meeting should serve to prepare the following visit. The local authority should be able to facilitate local guides for the field visit, but also to inform the population about the focus groups and the need for different persons to participate in these group interviews. 	 Free note taking ; Form 01 – collective interview (general part concerning information on the area)
5. VISIT TO THE TARGET AREA	 OBJECTIVES COMMON TO ACTIVITIES 5-6-7-8-9 To identify building cultures and skills in the target areas: To identify the existing architectural typologies (past, present, and apparent tendencies in evolution) linked to the specificities of the area: natural hazards (winds, water, seismic activity, volcanos, hail, fires) and technological/ human (shifting territories, mines, conflicts, fires deliberately lit); To understand the habitat: link to the community, link to the land plot, distribution of internal spaces, roles and usage of interior and exterior spaces, access to water, to sanitation, to religious buildings / shrines); To understand the links between local cultures and ways of dwelling/inhabiting; To get to know the capacities, vulnerabilities, strengths and weaknesses of local habitat; To contribute to the reinforcing of the resilience of local settlement and of the communities more broadly; 	 Duration : Between 1 and one and a half hours Observation of the environment Access (physical and security). Access to local materials; Communications coverage, basic services; Vegetation, topography, landscape. Observation of the territory Taking photos of the built environment and the layout of the area; Observation of the logic of the layout (houses in clusters or dispersed; proximity to rivers, peaks, forests etc; proximity to fields; proximity to quarries, etc); Mapping of risks. Observation of the housing typologies Photographing the different typologies (with consent of the inhabitants); Observation of similarities and differences. Selection of houses for individual study (Activity 7) Choose two houses of each typology; Request the owner's permission for the study. Advise 	 Camera Free note taking Form 01 – collective interview



PHASE	ACTIVITIES	OBJECTIVES	IMPLEMENTATION	INTERVIEW FORM / OTHER MATERIAL REQUIRED
B OBSERVATION AND INTERVIEWS IN THE FIELD (cont)	<section-header></section-header>	 OBJECTIVES COMMON TO ACTIVITIES 5-6-7-8-9 (cont.) To understand the modes of production and maintenance of housing. To understand also the life cycle of the dwelling: To know the roles and responsibilities of the main actors involved in the different stages of the processes of production of habitat (inhabitants, tradespeople, merchants, administrative authorities, etc.); To open and explore the aspect of gender (roles of women/ girls and men/ boys in building a house; To identify and understand the modes of contracting between the different parties (hiring labour); To understand the way in which households maintain their dwelling (frequency, means, materials, actors); To understand the existing patterns of solidarity within communities (in the construction of housing and other areas); To deepen understanding of the population in the area being studied. 	 Duration : Between 45 and 90 minutes Preparation of the interview Prepare a sufficient number of interview forms for each researcher; Prepare the interview teams to ensure they fully understand the meaning and purpose of the questions; Don't hesitate to rely on local researchers (ensure there is adequate budget for this). Following up gender issues is facilitated by having gender balance in the teams deployed. Conducting the interview Two researchers run the interview. One takes notes, and the other leads the discussion (adaptation of this approach is possible according to team resources); Opening of the interview: Thanks, and explanation of the project and the goal of the interview. Make clear that no fee is paid to interviewes; Ideally, the interview is conducted according to the order of questions set out in the form, while leaving space for freeflowing conversation. Important to know how to come back to questions not yet covered, but this is not obligatory. Questions can be added. Don't hesitate to reformulate questions or to put them again; Have a timekeeper. Beware of debates that drag on. Be careful that it's not always the same people who respond; Closing the interview: Thanks, and explanation of the reason for having specific target groups for the other interviews. 	 Form 01 – collective iinterview



PHASE	ACTIVITIES	OBJECTIVES	IMPLEMENTATION	INTERVIEW FORM / OTHER MATERIAL REQUIRED
B OBSERVATION AND INTERVIEWS IN THE FIELD (cont)	<section-header></section-header>	 OBJECTIVES COMMON TO ACTIVITIES 5-6-7-8-9 (cont.) To identify the potential of existing resources in relation to the production of habitat in the area: To know the existing technical skills available (number of bricklayers, bricklayer's labourers, carpenters) and the ways in which knowledge is transmitted; To evaluate whether or not enough local labour is available to meet the needs of the project; To identify resources and competencies in terms of technical training in construction (training centres, schools, universities). 	 Duration of each interview : maximum 1 hour per household (two households for each typology) Preparation of the interview As far as is possible, home owners should be informed in advance of the site visit. Conducting the interview The interview is run in two phases: one phase of questions and one phase of drawings and taking technical notes Formation of two groups: one group for the questions to the home owner, and one for the drawings. Expected results Detailed plan of each house: layout/ cross-section / elevation / layout of the immediate environment; Photos of the houses and structures (interior and exterior) and of the plot; Knowledge of the history of the house : base, extension, repairs, current maintenance, etc; Allocation of roles in the process of production of the house. Cost. Investment by households. Strengths and weaknesses of the house; Knowledge of the construction systems used. 	 Form 02 – individual interview , household (1 per household) Form 03 – individual interview -technical section (1 per household) Camera Measuring tape (to take the measurements of houses)
	8. INTERVIEW WITH TRADESPEOPLE / SUPPLIERS FOR DIAGNOSIS OF SKILLS AND MATERIALS AVAILABLE		 Duration : Between 45 and 90 minutes Information to be collected Availability of labour, skills. Availability of materials : season of availability, dimensions, availability of materials in case of crisis, origin of the materials and method of supply; Costs of materials (not only monetary). Validation and value add of local contributions (collection, production, assembly); Identification of the suppliers of materials, of manufacturers / growers (where this is the case) and their methods of manufacture. Support to these actors through their participation in the projects. 	 Form 04 – Materials / tradespeople



PHASE	ACTIVITIES	OBJECTIVES	IMPLEMENTATION	INTERVIEW FORM/ OTHER MATERIAL REQUIRED
B OBSERVATION AND INTERVIEWS IN THE FIELD (cont)	9. ADDITIONAL INTERVIEWS WITH FOCUS GROUPS ACCORDING TO THE AREA STUDIED: WOMEN AND PEOPLE WITH DISABILITY	 OBJECTIVES COMMON TO ACTIVITIES 5-6-7-8-9 (cont) To identify the biggest issues linked to the rehabilitation, reconstruction or construction of houses : Environmental risks (e.g. deforestation due to the large volume of houses to be rebuilt/rehabilitated); Risks connected with the techniques and materials used (quarries, etc); Period for construction in relation to seasons, harvests, etc; Availability of materials and feasibility of monetary support; Access to water. 	 Duration : Between 30 and 60 minutes per focus group Importance of these interview It is important to engage and to listen to women and people living with disability, who often do not participate sufficiently in the general collective interviews (Activity 6), and for this reason, it is important to set up these specific groups. Preparation and conduct of the interview Conduct as many interviews as is necessary according to the profile and characteristics of the area : Focus group with women; Focus group with people with disability. For a detailed explanation of the preparation and conducting of group interviews see the section on implementation under Activity 6. 	 Form 05 – Women / people with disability
	10. RETURN TO THE COMMUNITY	 To respect the principle of accountability to affected populations; To involve the community in the carrying-out of the project. 	 Duration : 15 minutes Short report-back on activities carried out in the field visit and interviews with the community. Following the report-back, the protocol for departure can be followed. 	Oral reporting back



PHASE	ACTIVITIES	OBJECTIVES	IMPLEMENTATION	MATERIALS REQUIRED
C REFLECTION AFTER THE FIELD VISIT AND BEFORE THE WRITING- UP OF THE PROJECT	<section-header></section-header>	 To summarise the information gathered in the research process through the forms. These forms must be easily readable, and not contain too much text, in order to be as attractive and reader-friendly as possible. The forms will be shared with all the influential people or groups of people in the area; To communicate about the research and about the area, and allow stakeholders to have a rapid and efficient overview of the traditional building cultures in the area. 	 Expected result Summary report with text in dot points and photos which communicate significant aspects and points. Process Preparation of the summary individually or as a group; Summary of collective interviews in point format and with photos inserted; Summary of observations on the typologies of construction in the area. Addition of plans, photos and some text; Summary of individual interviews, plans, elevations, drawings and information on sanitation, etc. Indicative outline SITE: Situation of the area studied / access/ typical landscapes CONTEXT: History / population / main economic activity / socio – economic profile / governance / services / NGOs and other organisations present / local risks / women's situation / modes of communication SITUATION OF PEOPLE LIVING WITH A DISABILITY: Inclusion ACCESS TO LAND TYPOLOGIES OF DWELLING: Typology 1, 2, 3, etc. / description / elements of construction / strengths / weaknesses HABITAT: Organisation of spaces / size of houses / improvements - maintenance - extension of houses / orientation / other spaces / water / sanitation / available skills/ materials / handling of waste / community solidarity mechanisms / security / seasonality LESSONS FROM LOCAL HABITAT : Weaknesses / relevant technical details / good practices 	 Computer Format for summary report



- **12. REPORT-BACK TO** COMMUNITY FOR VALIDATION AND ACCOUNTABILITY AFTER THE SUMMARY REPORT HAS BEEN WRITTEN
- To present the summary report to the community for possible corrections, and validation;
- To inform the local authorities about the work carried out in the area:
- To promote and share the knowledge gathered on local building cultures.
- Presentations on the work conducted in the form of a lecture-debate with the local authorities and other main actors in the area (municipality, civil society, church, etc.);
- Handing over of a copy of the summary report to the community.
- Summary report
- Computer and projector (if possible)

PARTNER OR THE

CONSORTIUM ON

HUMANITARIAN

RESPONSE TO BE

USED IN THE AREA

THE

- 13. REFLECTION BY THE • To decide on the project strategy in agreement with the community and taking into account the diagnosis of local building culture which has been completed.
- Choice made in a manner consistent with the Vision and Principles of the Shelter Cluster.
- Linkage between the diagnosis and the proposed project: for example a study on solutions to reduce costs as relevant to local reality (participation by inhabitants, gathering of materials).
- Carefully considered exit strategy.

• Project documents from each participating shelter partner



6. PROCEDURE AND INDICATIVE PLANNING FOR THE SITE VISIT

PROCEDURE

in principle, the field assessment should be carried out over two days, but the time allocation can vary according to the season, the security situation, the context, or the complexity of local conditions.

Composition of work teams tasked with conducting the research:

- Mixed team: woman / man or non-binary recommended.
- Mixed team: technical background / social background recommended.
- Minimum of two persons (duration or number of researchers to be adjusted in line with researchers' experience and the complexity of sites being assessed).



Important to note that:

- The research tools act as the guiding thread and the record through the different interviews and research.
- These do not necessarily have to be followed strictly in order. It is more important to 'let the conversation run' rather than 'keep control of the discussion'. Some elements that come up out of a spontaneous discussion will contribute to the depth and richness of the assessment. The relationship established in a 'free' discussion allows the researchers and community members to create a climate conducive to sharing of experiences and information.
- It is therefore important that one of the researchers facilitates the discussion, while the other takes notes and makes additions tools when that is necessary. The latter can also return the discussion to points that have not been covered, or covered only partially.
- Whenever possible, complement the information gathered with photos and sketches.
- Don't forget to take down the telephone contacts of the local people who might be able to provide further information after the main assessment has been done.
- Once the assessment report has been written, hand it over to the community and the local authorities who gave permission for and facilitated the assessment.





INDICATIVE PLANNING OF THE SITE VISIT

The planning can vary for each different site visit, as the essential point is to carry out the whole of the activities, but not necessarily in the order that they are given here

DAY 1			
Morning / Afternoon / Evening	Indicative time	Activity	Interview form and other material required for the activity
Morning	Between 45 and 90 minutes	ACTIVITY 4 : Meeting with the local authorities, chiefs, community notables (according to local context)	Free note taking Form 01 – collective interview
	Between 60 and 90 minutes	ACTIVITY 5 : Visit to the target area	Free note taking Form 01 – collective interview Camera
	Between 45 and 90 minutes	ACTIVITY 6 : Collective interview	Form 01 – collective interview
Afternoon	Between 45 minutes and one hour per household	ACTIVITY 7 : Individual interviews with households according to architectural typologies (2 households per typology)	Form 02 – individual interview, household section (one per household)
			Form 03 – individual interview, technical section (one per household)
			Camera
			Measuring tape
Evening	Between one and two hours	 Sort out the photos taken during the day, according to the themes to be presented in the summary report. Build up the summary report with key points which have emerged from the first day of assessment. Identify what information is missing (data, photos) in order to collect this on the second day of assessment. 	Computer Template for summary report



DAY 2			
Morning / Afternoon / Evening	Indicative time	Activity	Interview form and other material needed for the activity
Morning	Between 30 and	 Brief report-back to local authorities on the previous day's activities. Validation of the team's understanding of the site. Gathering of complementary information. 	Free note-taking
	45 minutes		Form 01 – collective interview (form filled out the previous day to be supplemented)
			Form 02 – individual interview (collated set of forms from the previous day to be supplemented)
			Form 03 - individual interview (collated set of forms from the previous day to be supplemented)
	Between 45 minutes and one hour	ACTIVITY 8 : Interview with tradespeople's focus group for assessment of available materials and skills (skilled building workers)	Form 04 – materials/ tradespeople
	Between 30 minutes and one hour per group	ACTIVITY 9 : Additional focus group according to the profile of the area: women, people with disability	Form 05 – women / people living with disability
Afternoon	2 hours	- Follow-up research (individual interviews or focus groups).	Free note-taking
		ACTIVITY 10 : Overall report-back to the community of the assessment work over the previous two days.	Forms remaining to be finalised (01, 02, 03, 04, 05 or 06)
		- Leave-taking protocols and departure.	