

AMENDMENT TO THE AGREEMENT OF COOPERATION



BETWEEN

THE UNITED NATIONS HUMAN SETTLEMENTS PROGRAMME

AND

THE INTERNATIONAL CENTRE FOR EARTH CONSTRUCTION

The Agreement of Cooperation (hereinafter referred to as the "Agreement") between the United Nations Human Settlements Programme (hereinafter referred to as the "UN-Habitat") and International Centre for Earth Construction, (hereinafter referred to as "CRAterre"), and collectively referred to as the "Parties" and individually as the "Party", that entered into force on 12 March 2013: for the Parties to collaborate to implement the sustainable housing rating tool (the "Project"), within the Programme Global Network for Sustainable Housing; with UN-Habitat providing funds to CRAterre up to a maximum amount of US\$40,000 (United States Dollars Forty Thousand) and with a completion date of 12 March 2014, is hereby amended as follows:

The scope of the Project has being widened to include additional activities by CRAterre which shall demonstrate the importance of affordable sustainable housing in the context of the Project. Therefore, in order to undertake the additional activities under the Project, additional funds amounting to US\$11,500 (United States Dollars Eleven Thousand, Five Hundred) is required. As a result, the total maximum amount of UN-Habitat's contribution under the Agreement is hereby increased from US\$40,000 (United States Dollars Forty Thousand) to US\$51,500 (United States Dollars Fifty One Thousand, Five Hundred). (*Letter of Justification from Christophe Lalonde, Leader, Housing Unit, UN-Habitat's Housing and Slum Upgrading Branch to Saidou N'dow, Legal Officer, UN-Habitat, dated 24 January 2014, is herein attached for reference.*)

The changes are reflected in the amended articles below:

Article II – Objective and Scope

Instead of:

"1. Subject to their respective regulations, rules, policies, practice, procedures and availability of funds, the Parties shall collaborate to implementing the sustainable housing rating tool (the "Project"), within the Programme Global Network for Sustainable Housing."

"4. The Project, which is described in a more detailed manner in Annex B hereto, aims at:
(1) Producing a Life Cycle Analysis and Sustainable Housing rating tool dedicated to local informal settlements and pro-poor housing development that better take into account building materials and cultures to monitor and assess the impact of sustainable housing, to support the mainstreaming of sustainable and green housing practices, and eventually the change in building codes and housing standards.

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(2) Developing an analytical framework and a tool which will offer the opportunity to promote sustainable housing practices in developing countries, against the resistance to change in applying green housing practice and vernacular architecture, in particular in the contexts of slum upgrading, large scale social housing programmes, and post-crisis reconstruction.”

Reads:

1. Subject to their respective regulations, rules, policies, practice, procedures and availability of funds, the Parties shall collaborate to implementing the sustainable housing rating tool, the practical construction training demonstrating different earthen construction technologies in the Democratic Republic of Congo (“DRC”), developing a prototype house in earth in the DRC and a publication related to the prototype house (hereinafter referred to as the “Project”), within the Programme Global Network for Sustainable Housing.

2. The Project, which is described in a more detailed manner in Annex B hereto, aims at:

(1) Producing a Life Cycle Analysis and Sustainable Housing rating tool dedicated to local informal settlements and pro-poor housing development that better take into account building materials and cultures to monitor and assess the impact of sustainable housing, to support the mainstreaming of sustainable and green housing practices, and eventually the change in building codes and housing standards;

(2) Developing an analytical framework and a tool which will offer the opportunity to promote sustainable housing practices in developing countries, against the resistance to change in applying green housing practice and vernacular architecture, in particular in the contexts of slum upgrading, large scale social housing programmes, and post-crisis reconstruction;

(3) Preparing and planning for a prototype house by developing technical drawings for implementation of the initial design of the Project House in Goma in DRC; and

(4) Promoting the wider use of earthen construction technologies in DRC through developing technical drawings of the developed prototype house and illustrative diagrams using alternative (earth-based) building technologies to the building technologies used in the prototype house design, with cost estimations and through preparing and implementing a 4-days community training in different earthen construction technologies and documenting the training for possible later wider implication.

Article IV – UN-Habitat’s Responsibilities

Instead of:

“(a) Providing funds to CRAterre up to a maximum amount of **US\$ 40,000 (United States Dollars Forty Thousand)** in accordance with the procedures set forth under Article VI herein below;

Reads:

“(a) Providing funds to CRAterre up to a maximum amount of **US\$ 51,500 (United States Dollars Fifty One Thousand, Five Hundred)** in accordance with the procedures set forth under Article VI herein below and Annex C (“the Payment Schedule”);

Additional Clause under Article IV:

(e) Producing the initial design of the prototype house in DRC from which CRAterre can develop the technical drawings for the implementation of the Project.

Article V – CRAterre Responsibilities

Additional Clause under Article V:

(d) Preparing and planning for a prototype house by developing technical drawings for implementation of the initial design of the Project House in Goma in DRC;

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- (e) Promoting the wider use of earthen construction technologies in DRC through developing technical drawings of the developed prototype house using alternative (earth-based) building technologies to the building technologies used in the prototype house design, with cost estimations and through preparing diagrams of the use of alternative earthen construction technologies; and
- (f) Implementing a 4-days' community construction training in different earthen construction technologies in DRC and documenting the training.

Article VI – Financial Arrangements

Instead of:

"1. As part of the UN-Habitat cooperation under this Agreement, and in accordance with Annexes B and C, UN-Habitat shall provide CRAterre with funds up to a maximum amount of US\$40,000 (United States Dollars Forty Thousand) in accordance with the following schedule:

- (b) A second installment of US\$16,000 (United States Dollars Sixteen Thousand), equivalent to 40% of the maximum amount set out in this Article, shall be made available, provided that UN-Habitat is satisfied that CRAterre is in compliance with this Agreement (*outputs indicated in the Payment Schedule have been provided*), a submission of a financial statement showing the use of funds so far provided, as certified by the competent financial authority of CRAterre, and a payment request;
- (c) A third installment of US\$20,000 (United States Dollars Twenty Thousand), equivalent to 50% of the maximum amount set out in this Article, shall be made available upon satisfactory provision of the final outputs (*outputs indicated in the Payment Schedule have been provided*), financial statements of the Project audited by an independent audit firm showing the use of funds so far provided by CRAterre and a payment request."

Reads:

1. As part of the UN-Habitat cooperation under this Agreement, and in accordance with Annexes B and C, UN-Habitat shall provide CRAterre with funds up to a maximum amount of US\$51,500 (United States Dollars forty thousands) in accordance with the following schedule:

- (b) A second installment of US\$16,000 (United States Dollars Sixteen Thousand), equivalent to 31% of the maximum amount set out in this Article, shall be made available, provided that UN-Habitat is satisfied that CRAterre is in compliance with this Agreement (*outputs indicated in Annex C of the Payment Schedule have been provided*), a submission of a financial statement showing the use of funds so far provided, as certified by the competent financial authority of CRAterre, and a payment request;
- (c) A third installment of US\$20,000 (United States Dollars Twenty Thousand), equivalent to 39% of the maximum amount set out in this Article, shall be made available upon satisfactory provision of the final outputs (*outputs indicated in Annex C of the Payment Schedule have been provided*), a submission of a financial statement showing the use of funds so far provided, as certified by the competent financial authority of CRAterre, and a payment request;

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- (d) A fourth installment of US\$5,000 (United States Dollars Five Thousand), equivalent to 10 %, shall be made available, provided that UN-Habitat is satisfied that CRAterre is in compliance with this Agreement (*outputs indicated in Annex C of the Payment Schedule have been provided*), a submission of a financial statement showing the use of funds so far provided, as certified by the competent financial authority of CRAterre, and a payment request; and
- (e) The fifth and final installment of US\$ 6,500 (United States Dollars Six Thousand Five Hundred), equivalent to 13%, shall be made available, provided that UN-Habitat is satisfied that CRAterre is in compliance with this Agreement (*outputs indicated in Annex C of the Payment Schedule have been provided*), a submission of a financial statement showing the use of funds so far provided, as certified by the competent financial authority of CRAterre, and a payment request.

Article VII – Reporting Requirements, Maintenance of Records and Audit

Instead of:

“1. CRAterre shall prepare and submit to UN-Habitat, progress narrative and financial report at the end of each project phases: inception (after 2 months from the start of the project), draft (after 6 months from the start of the project), and final (after 9 months) as stated in Annex C.”

Reads:

1. CRAterre shall prepare and submit to UN-Habitat, progress narrative and financial report at the end of each project phases: inception (after 2 months from the start of the project), draft (after 6 months from the start of the project), and (after 9 months, submission of technical drawings of the prototype house (by the end of January 2014), submission of alternative technical drawings and diagrams (by the end of February 2014), and implementation of a 4-days' community construction training (from 4th to 7th March 2014)) as stated in Annex C.

Annex B – The Project Document/Project Work Plan

The Project Document/Project Work Plan is hereby amended as per the attached revised Annex B to reflect the additional activities under the Agreement.

Annex C – The Budget and Payment Schedule

The Budget and Payment Schedule are hereby amended as per the attached revised Annex C to reflect the additional funds amounting to US\$11,500 (United States Dollars Eleven Thousand, Five Hundred) is required thereby increasing the original maximum amount from US\$40,000 (United States Dollars Forty Thousand) to US\$51,500 (United States Dollars Fifty One Thousand, Five Hundred) and the disbursement thereof at later date(s).

This Amendment shall become effective as of the date of countersignature. All other terms and conditions of the Agreement remain valid and enforceable.

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The undersigned duly authorized representatives of UN-Habitat and CRAterre have signed this Amendment in two (2) originals on the date(s) and at the place(s) below written.

FOR UN-Habitat:

Signature: Mohamed El-Sioufi

Mohamed El-Sioufi
Branch Coordinator, Housing and Slum Upgrading
Branch

Place: Nairobi, Kenya

Date: 27/01/2014

For CRAterre

Signature: Thierry Joffroy

Thierry Joffroy
Chairman

Place: Villefontaine

Date: 30/01/2014





Revised Annex B

THE PROJECT DOCUMENT AND IMPLEMENTATION SCHEDULE/WORK PLAN

Purpose:

The purpose of this agreement is to produce a LCA and Sustainable Housing rating tool dedicated to local informal settlements and pro-poor housing development that better take into account building materials, technologies and building cultures and to implement a practical construction training in different earthen construction technologies in the Democratic Republic of Congo; and work together in developing a prototype house in earth in the DRC and a publication related to the prototype house.

The Rating tool will also help partners and government authorities to monitor and assess the impact of sustainable housing, to support the mainstreaming of sustainable/ green housing practices, and eventually the change in building codes and housing standards.

Under this agreement, an analytical framework and a tool will be produced. They will offer the opportunity to promote sustainable housing practices in developing countries, against the resistance to change in applying green housing practice and vernacular architecture, in particular in the contexts of slum upgrading, large scale social housing programmes, and post-crisis reconstruction.

The earthen prototype house and the construction training in different earthen construction technologies in the Democratic Republic of Congo will support the scaling up process of sustainable, affordable building practices in wider reconstruction programmes of permanent housing in the DRC and bridge the gap between the humanitarian shelters and sustainable permanent housing development in the Eastern DRC.

Background and justification:

The convergence of climate change, increasing global population, rapid urbanisation and the need for poverty alleviation in developing countries sets the stage for a global partnership on sustainable housing, the *Global Network for Sustainable Housing (GNSH)*.

In the context of climate change mitigation, no sector is more able to produce cost effective reductions in energy consumption and greenhouse gas emissions than the building sector. In the realm of population and urbanisation, housing remains a key facet of sustainability, human development and poverty alleviation.

Only with effective, evidenced-based housing policies and programmes can sustainable housing be developed that can synergistically address issues of poverty, environmental sustainability, and climate change mitigation and adaptation.

The overall aim of GNSH is to contribute to the development of pro-poor sustainable and affordable housing in developing countries, with a specific focus on improving the social, cultural, economic and environmental sustainability of slum upgrading and prevention programmes.

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Considering the rapid urbanisation occurring in many developing countries which is placing enormous pressure on urban land and housing, the production of thoughtfully designed, affordable sustainable housing and settlements through improved knowledge, cooperation, and policies and programmes presents the world with a timely opportunity to ensure housing is environmentally, socially, culturally and economically rewarding for all.

In order to promote effective building techniques and the promotion of policies and building codes in host countries it is important to utilise a comprehensive set of design and construction guidelines which are made appropriate to the specific characteristics of affordable and sustainable housing in developing regions, and which can be evaluated and monitored according to their performance and sustainability against one globally recognised, standardised and adapted rating tool.

The rating tool will address the following gaps:

1. To help building professionals, their clients, donors and decision makers to make an informed choice during the design phase of the project;
2. To foresee the environmental, social, economic and cultural impacts of development projects, particularly in the context of slum upgrading and post-crisis reconstruction in developing countries
3. To analyse completed housing projects, and therefore to test the relevance of the tool during its design phase.

The prototype house and construction training in the DRC will address the following gaps:

1. To show a sustainable affordable model for permanent reconstruction of affordable housing in the context of the DRC for wider scale implementation.
2. To bridge the gap between the humanitarian shelters and permanent housing development in the Eastern DRC.

Outputs and deliverables:

The following outputs will be delivered under this agreement:

1. An analytical tool based on a set of criteria (e.g. 10 to 15 items) taking into account the 4 pillars of sustainable development (environment, culture, social and economy);
2. This tool will be based on an analytical matrix to help field staff, project managers or technicians, with a qualitative evaluation system built around a simple multi-criteria questions and answers that is calibrated to the study context (e.g. slum upgrading and post-crisis reconstruction);
3. Performance indicators obtained will allow evaluating projects along their design phase as well as once finished;
4. The matrix will be delivered with a methodological guide to fulfill and answer the questionnaire as well as to interpret the results. There will be a testing phase on existing project to fine tune and validate the tool.
5. Support UN-Habitat Housing Unit to prepare and plan for a prototype house in Goma in the DRC.
6. Development of technical drawings and diagrams using alternative (earth-based) building technologies to the building technologies used in the prototype house design, with cost estimations.
7. To prepare for and implement a community training in earthen construction technologies in Goma in the DRC.

8. To document the community training in earthen construction technologies in Goma in the DRC.

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Revised Annex C

THE BUDGET INCLUDING THE PAYMENT SCHEDULE

IMPLEMENTATION SCHEDULE AND WORK PLAN

Outputs/Deliverable	Result	Duration 2013-2014 (14 Months)													
		Fe	Mr	A	M	Jn	Ju	Au	Se	Oc	No	De	Ja	Fe	M
Inception Report	Produce a technical proposal and agree on the terms of reference and detailed work plan to deliver the outputs under the Project.														
Draft Report	Including all draft outputs and deliverables submitted for review by CRAterre to UN-Habitat														
Final Report	Delivered by CRAterre to UN-Habitat, including all described outputs and deliverables and upon satisfaction, accepted by UN-Habitat														

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<p>Technical drawings and diagrams</p>	<p>Delivered by CRAterre to UN-Habitat, including technical drawings of developed prototype house and technical drawings and diagrams using alternative (earth-based) building technologies to the building technologies used in the prototype house design, and their cost estimations.</p>															
<p>Implementation of a 4-days community construction training</p>	<p>Delivered by CRAterre to UN-Habitat, including implementation of a 4-days community training in different earthen construction technologies and documenting the training</p>															

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TABLE 1: PROJECT BUDGET

Activity/Particulars	Cost and Budget (USD)
Inception report: <ul style="list-style-type: none"> Produce a technical proposal and agree on the terms of reference and detailed work plan to deliver the outputs under the Project, including research design and template for the rating tool and the analytical framework. 	USD 4,000 PAID OUT
Draft report: <ul style="list-style-type: none"> Draft report including all draft outputs and deliverables, including first draft rating tool and analytical framework tool, submitted for review by <i>CRATERre</i> to UN-Habitat 	USD 16,000 PAID OUT
Final report: <ul style="list-style-type: none"> Delivered by <i>CRATERre</i> to UN-Habitat, including all described outputs and deliverables, final draft rating tool and analytical framework, and upon satisfaction, accepted by UN-Habitat 	USD 20,000
Technical drawings: <ul style="list-style-type: none"> Submission of the technical drawings of developed prototype house and the technical drawings and diagrams using alternative (earth-based) building technologies to the building technologies used in the prototype house design, with cost estimations 	USD 5000
4-days community construction training: <ul style="list-style-type: none"> Implementation of a 4-days community training in different earthen construction technologies and documenting the training for possible later wider implication (includes all building material and travel costs) 	USD 6500
TOTAL	USD 51,500

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TABLE 2: PAYMENT SCHEDULE

Payment schedule	Amount (USD)	Percent (%)	Activities/outputs & Progress Report	Completion Date	Anticipated Payment Date
1st installment	4,000	7	Produce a technical proposal and agree on the terms of reference and detailed work plan to deliver the outputs under the Project.	31 March 2013	15 April 2013 PAID OUT
2nd installment	16,000	31	Draft report including all draft outputs and deliverables submitted for review by <i>CRAterre</i> to UN-Habitat	31 July 2013	15 August 2013 PAID OUT
3rd Installment	20,000	39	Final draft delivered by <i>CRAterre</i> to UN-Habitat, including all described outputs and deliverables and upon satisfaction, accepted by UN-Habitat	31 October 2013	15 November 2013
4th Installment	5,000	10	Submission of the technical drawings of developed prototype house and the technical drawings using alternative (earth-based) building technologies to the building technologies used in the prototype house design, with cost estimations	31 January 2014	15 February 2014
5th Installment	6,500	13	Implementation of a 4-days community training in different earthen construction technologies and documenting the training for possible later wider implication	8 March 2014	23 April 2014
TOTAL	51,500	100	End of Agreement of Cooperation March 2014		

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Addendum to the Amendment 1

Further specifications of the deliverables

(See e-mail of Emma-Liisa Hannula of 29 January 2014) :

- Update of the drawings sent by Emma-Liisa : CRAterre will update the drawings according to the technical options proposed for the test building, including addition of technical issues (walls and roofing details) to the same scale as already available and with similar graphics. Drawings will be provided in dwg and pdf.
- Details for the technical options available (basement, floor, walls, roofing, openings) will be provided as 3D (sketchup file and 2D pdf). Other specific details discussed with AMICOR and during the mission will be provided as sketches and/or picture.
- Training material as cards/handout : 1 per technical option including description, diagram(s) from data produced by CRAterre and graphics (3D and picture/sketch) will be made available for the training. A set of coherent architectural options will also be summarized as handout. These architectural options will be defined during the mission in Kibati and their summary be provided only in the final report. Furthermore the technical options' handouts will be updated for the final report with data collected during the mission (pictures, sketches).



