



**DELEGATION PERMANENTE DU LIBAN
AUPRES DE L'UNESCO
1, RUE MIOLLIS - 75015 PARIS**

N° 18/2019

Paris, le 17 janvier 2019

Madame la Directrice,

Suite aux décisions 41 COM 7B.82 et 41 COM 7B.83 adoptées par le Comité du patrimoine mondial à Cracovie concernant l'état de conservation des sites de Tyr et de la Vallée de la Qadisha et la forêt des cèdres de Dieu, j'ai l'honneur de vous faire parvenir ci-joint la lettre ainsi que les rapports qui vous sont transmis par le Directeur général des Antiquités explicitant les actions entreprises sur ces sites au regard des décisions du Comité.

En vous en souhaitant bonne réception, je vous prie d'agréer, Madame la Directrice, l'assurance de ma considération distinguée.

Sahar Baassiri

Ambassadeur, Délégué Permanent du Liban
Auprès de l'UNESCO

Madame Mechtild Rössler
Directrice du Centre du patrimoine mondial

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Dir. V. 113
17/01/19

Direction Générale des Antiquités

Le Directeur Général

Dr. Mechtild Rössler

Directrice

Centre du Patrimoine Mondial

Réf : n° 6760
Beyrouth, le 29-11-2018

Objet : Rapports sur l'état de conservation de la Vallée de la Qadisha et de Tyr

Madame la Directrice,

Conformément aux décisions de la 41^{ème} session du comité du Patrimoine Mondial tenue à Cracovie, concernant la vallée de la Qadisha et le site de Tyr, et en se référant aux recommandations des sessions successives du comité, la Direction Générale des Antiquités vous soumet les rapports sur l'état de conservation des deux sites ainsi que le rapport UDAS.

En vous remerciant de votre soutien, veuillez, Chère Madame, recevoir mes salutations distinguées.

Sarkis El.Khoury

Directeur Général



FORMAT POUR LA SOUMISSION DES RAPPORTS SUR L'ETAT DE CONSERVATION PAR LES ETATS PARTIES

Nom du bien du patrimoine mondial (État(s) partie(s)) (Numéro d'identification)

Ouadi Qadisha ou Vallée Sainte et forêt des Cèdres de Dieu (Horsh Arz el-Rab) (Liban) (C 850)

1-Résumé analytique du rapport

Ce rapport répond aux questions soulevées par le comité lors de la 41ème mission, il détaille les sujets qui concernent les projets prévus pour la vallée de la Qadisha et l'état général de conservation du site.

Après révision de son statut, le "Comité de gestion de la vallée de Qadisha" est légalement l'organisme de gestion de la Vallée Sainte. Il est toujours présidé par le patriarcat maronite et composé des représentants des deux ordres religieux maronites libanais et Mariamite, et des deux présidents des fédérations des municipalités de Bcharré et de Zgharta. Un directeur exécutif a été assigné, toutes les actions au sein de la Vallée sont coordonnées avec La Direction Générale des Antiquités.

Les actions prévues dans le cadre du Projet de Réhabilitation et de valorisation de la Vallée débiteront en 2019, ainsi que les travaux de la chaussée de la vallée.

Les modifications des limites du site ainsi que de sa zone tampon sont en cours de révision.

2. Réponse de l'État partie à la décision du Comité du patrimoine mondial

Demande à l'État partie de transmettre au Centre du patrimoine mondial plus d'informations sur les projets de développement socio-économique proposé aux communautés locales et de s'assurer que ces projets ne présentent pas d'impact négatif sur l'intégrité du bien :

Actuellement les seuls projets qui sont prévus pour la vallée de la Qadisha sont ceux proposés dans le cadre du projet de » réhabilitation et valorisation de la vallée de la Qadisha » financé par l'Agence de Coopération Italienne. Le Bureau de L'Unesco de Beyrouth a établi les termes de référence pour le Consultant en collaboration avec la DGA et lancera les appels d'offre début 2019. Les travaux de réhabilitation de trois sentiers et de restauration et valorisation de deux monuments devraient se réaliser en 24 mois.

Les limites du site et de sa zone tampon ont été définies dans la cadre du Plan Directeur d'Urbanisme de la Vallée. Une révision de ces limites est en cours avec les instances et les autorités locales. Les documents finaux seront soumis au centre après définis par l'Etat Libanais

Rappelle à l'État partie d'informer le Centre du patrimoine mondial, en temps utile, de tout projet de développement majeur qui pourrait nuire à la valeur universelle exceptionnelle d'un bien, avant que toute décision irréversible ne soit prise, conformément au Paragraphe 172 des Orientations:

Le projet de la Chaussée de Qadisha a été préparé et validé par les autorités libanaises, actuellement l'entrepreneur a été sélectionné. Les travaux d'exécution débuteront en 2019 ils seront supervisés par le consultant et contrôlés par la DGA afin de s'assurer qu'il n'y a aucun impact sur la Valeur Universelle Exceptionnelle.

Un accord a été signé entre le Patriarcat Maronite et la Fao(The Food and Agriculture Organization of the UN) pour la mise en place d'un projet de restauration de quelques terrasses traditionnelles pour l'amélioration du paysage culturel et rural afin d'assurer une durabilité des espèces locaux. (annexe 1)

3. Autres problèmes de conservation actuels identifiés par le ou les État(s) partie(s) comme pouvant avoir un impact sur la valeur universelle exceptionnelle (VUE) du bien

Aucun projet de grande envergure et ayant un impact sur la VUE n'est prévu.

4. Conformément au paragraphe 172 des Orientations, décrire toute restauration potentielle importante, altération potentielle et/ou toute nouvelle(s) construction(s) potentielle(s) qui pourrai(en)t être entreprise(s) à l'intérieur du bien, de ou des zones tampon, des corridors ou de toute autre localisation où un tel développement pourrait avoir un impact sur la valeur universelle exceptionnelle (VUE) du bien, y compris sur son authenticité et son intégrité

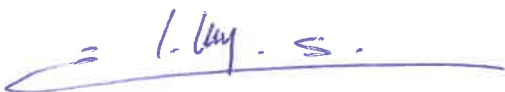
Tous les projets de restauration et de consolidation ou de présentation qui sont exécutés dans la Vallée Sainte au cours de ces deux dernières années, n'ont pas eu d'impact sur le site. D'ailleurs aucun projet de grande envergure n'a été mis en place.

5. Accès public au rapport sur l'état de conservation

6. Signature de l'Autorité :

Sarkis El.Khoury

Directeur Général



ANNEXE I

منظمة
الأمم المتحدة
للزراعة

联合国
粮食及
农业组织

Food and Agriculture
Organization of the
United Nations



Organisation des
Nations Unies pour
l'alimentation et
l'agriculture

Продовольственная и
сельскохозяйственная
организация
Объединенных Наций

Organización de las
Naciones Unidas para la
Alimentación y la
Agricultura

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FAO Budget Code: GCP/IGLO/579/ROK

Your Ref: LoA 75/17

GRMS Supplier Number

PO Number (if available)

LETTER OF AGREEMENT

Between

the Food and Agriculture Organization of the United Nations ("FAO")
and

Patriarcat Maronite Al Dimane

For provision of

Restoration of traditional agriculture stone terraces for improvement of the cultural landscape values and rural livelihoods through sustainable value chains of local plant species

1. Introduction

The Food and Agriculture Organization of the United Nations (hereinafter referred to as "FAO") and *The Maronite Patriarchy - El Dimane* (hereinafter referred to as the "Service Provider") (together hereinafter referred to as the "Parties") have agreed that the Service Provider will provide certain services defined in detail in the attached Annex I (the "Services") which forms an integral part of this Letter of Agreement (hereinafter the "Agreement") in support of the Restoration of traditional agriculture stone terraces for improvement of the cultural landscape values and rural livelihoods through sustainable value chains of local plant species within the Forest and Landscape Restoration Mechanism that is implemented in collaboration with the Ministry of Agriculture. To enable the Service Provider to provide the Services, FAO will pay the Service Provider a total amount not exceeding *thirty thousand US dollars, (USD 30,000)*, which represents FAO's maximum financial liability, into the Service Provider's account specified in paragraph 2 below.

2. Detailed Banking Instructions

Bank name: Bank of Beirut

Bank country and city: Lebanon Jounieh - Ghadir

Bank branch address: Jounieh - Ghadir city Center BLDG new Avenue STR

SWIFT code: BABELBBE

Account number: 1140172809600

Exact bank account holder's name: PATRIARCAT MARONITE AL DIMANE

Account currency: USDollars

Bank branch code or sort code:

IBAN number: LB63007500000001140172809600

3. Designation of the FAO Responsible Officer.

Dr. Maurice Saadé, FAO Representative in Lebanon is designated the officer responsible for the management of this Agreement ("Responsible Officer") on behalf of FAO.

4. Entry into force and period of validity.

The Agreement will enter into force upon the date of signature by the Service Provider, by FAO or on 10/09 2017 whichever of the three dates is the latest and will terminate on 20/12/2017.

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5. Purpose

- a) The purpose for which the funds provided by FAO under this Agreement shall be used are the following:

Objective.

The Services will contribute to the following Organizational objective SO2: the implementation of restoration initiatives and programs by promoting an integrated approach of landscape management with the idea to restore a well-balanced package of goods and services provided by the landscapes to increase the forests areas and reduce degradation, in addition to building multiple economic opportunities in order to create jobs, reduce the rural exodus and keep a good standard of living based on a sustainable use of all the good and services provided by Lebanese landscapes, through association with the local stakeholders

- (i) **Outputs.** The Service Provider will produce, achieve or deliver the following outputs:

Three pre-selected sites of stones terraces in Kadisha valley region Restored as "Forest and Landscape Restoration pilot actions in Lebanon" focusing on the implementation of methodological models to be potentially replicable in other Lebanese regions.

Dissemination of results to local stakeholders and beneficiaries lessons learnt and success stories presentation. Awareness raising session in Kadisha valley region

- (ii) **Activities.** The Service Provider will undertake the following activities

Pilot Restoration of traditional agriculture stone terraces for improvement of the cultural landscape values and rural livelihoods through sustainable value chains of local plant species. This will be based on the results of the baseline assessment on stone terraces and the assessment of the socio-economic value of the goods supplied by stone terrace in the Kadisha valley region. It is considered as a complementary activity to the restoration works that the Maronite Patriarchy in El Dimane and the Qannoubin League at Kadisha valley have started to implement as pilots supportive projects in different villages in the Kadisha valley and promote with the beneficiaries farmers and land owners.

1. Implementation of restoration works for the three pre-selected sites at Kadisha valley
2. Dissemination of results to local stakeholders and beneficiaries lessons learnt and success stories presentation. Awareness raising session in Kadisha valley region

- b) A detailed description of the Services including technical and operational requirements, budget, workplan and timeframe, performance indicators and means of verification, as well as inputs to be provided free-of-charge by the Service Provider and FAO, if any, are set out in detail in the Annex.

6. General Conditions

- a) Funds provided by FAO under this Agreement are to be used by the Service Provider exclusively for the provision of the Services in accordance with the budget set out in the Annex. Neither the

Service Provider nor its personnel nor any other persons providing the Services on its behalf, will incur any additional commitment or expense on behalf of FAO.

- b) The Service Provider will be responsible for all activities related to the provision of the Services and the acts or omissions of all employees, agents or other representatives, and authorized subcontractors providing the Services on its behalf. FAO will not be held responsible for any accident, illness, loss or damage which may occur during the provision of the Services or any claims, demands, suits, judgements, arising there from, including for any injury to the Service Provider's employees, or to third parties, or any loss of, damage to, or destruction of property of third parties, arising out of or connected to the Service Provider's work or performance under this Agreement.
- c) The Service Provider shall not utilize funds received under this Agreement to subcontract services or procure items except as specifically provided for in the Annex or as specifically approved in writing by FAO. Any subcontracting arrangement shall in no way relieve the Service Provider of the responsibility for the provision/delivery of the Services required under this Agreement. Subcontracts or procurement of the items set forth in the Annex shall be procured in conformity with the Service Provider's own procurement rules and procedures. The Service Provider confirms that its procurement rules and procedures, and their implementation, ensure that the procurement process is transparent and consistent with generally-accepted principles governing public sector procurement to obtain best value for money. The Service Provider will ensure that its agreements with any subcontractor include the obligation to maintain appropriate records for a period of five years and FAO's right to review, audit and have access to all documentation and sites related to the activities carried out in connection with this Agreement.
- d) The Service Provider shall make and thereafter maintain, in compliance with national legislation, provision for adequate insurance to cover such risks as damage to property and injuries to persons, as well as third party liability claims.
- e) The personnel assigned by the Service Provider to provide the Services are not considered in any respect as being employees or agents of FAO. Nothing in this Agreement or in any document or arrangement relating thereto shall be construed as conferring any privileges or immunities of FAO on the Service Provider, its personnel or any other persons providing the Services on its behalf.
- f) Nothing in this Agreement or in any document relating thereto, shall be construed as constituting a waiver of privileges or immunities of FAO, or as its acceptance of the jurisdiction of the courts of any country over disputes arising out of this Agreement.
- g) The present Agreement shall be governed by general principles of law, to the exclusion of any single national system of law. General principles of law shall be deemed to include the UNIDROIT Principles of International Commercial Contracts of 2010.
- h) In providing the Services, the Service Provider shall conform to all national laws applicable to its activities and its relations to third parties, including employees. The Service Provider shall promptly correct any violations thereof and shall keep FAO informed of any conflict or problem arising in relation to national authorities.
- i) The Service Provider shall observe the highest standard of ethics in providing the Services and agrees to adhere to the UN Supplier Code of Conduct, which can be viewed at http://www.un.org/depts/ptd/pdf/conduct_english.pdf.

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m) In order to enter into an agreement with FAO, the Service Provider, and any of its agents or authorized subcontractors, should not be suspended, debarred or otherwise identified as ineligible by any Intergovernmental or UN Organization, including any organization within the World Bank Group or any multi-lateral development bank, or by the institutions and bodies of economic integration organizations (e.g., the European Union). The Service Provider is required to disclose

l) The Service Provider shall take all reasonable precautions to avoid any conflict of interest in the implementation of the Services and shall inform FAO without delay of any situation constituting or likely to entail a conflict of interest including any FAO personnel having an interest of any kind in the Service Provider's activities.

- (vi) "Obstructive practice" is an act or omission by the Service Provider or its affiliates, successors or assigns that may prevent or hinder the work of the Investigation Unit of the FAO (Office of the Inspector General).
- (v) "Supplier Code of Conduct" and provisions or other published requirements of doing business with FAO, including the (<http://www.fao.org/procurement/codeofconduct/>), as well as any and hospitality post-employment FAO policy
- (iv) "Unethical practice" is an act or omission contrary to the conflict of interest, gifts indirectly, of anything of value whether tangible or intangible to improperly influence the actions of another party.
- (iii) "Corrupt practice" is the offering, giving, receiving or soliciting, directly or indirectly, for the purpose of influencing the actions of another party, including to influence improperly the actions of another party.
- (ii) "Collusive practice" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party.
- (i) "Coercive practice" is intimidating or harming, or threatening to harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party.
- (i) "Fraudulent practice" is any act or omission, including misrepresentation that knowingly or recklessly misleads, or attempts to mislead, a party to obtain, financial and/or other benefit and/or to avoid an obligation.

k) For the purpose of this Agreement, the following terms shall have the following meanings:

The Service Provider confirms that it has not engaged in, nor will engage in, any corrupt, fraudulent, collusive, coercive, unethical or obstructive practices in entering into or implementing this Agreement. If FAO determines that the Service Provider has engaged in such practices, it may impose sanctions, including termination of the Agreement, as provided by FAO's Sanctions Procedures (http://www.fao.org/illegal/in/user_upload/procurement/docs/FAO_Vendors_Sanctions_Policy_Procedures.pdf). In addition, information on sanctioned Service Providers and other third parties may be shared with other Intergovernmental or UN Organizations. This provision must be included in all subcontracts, sub-agreements or assignments entered into by the Service Provider under this Agreement.

to FAO whether it, or any of its agents or authorized subcontractors, is subject to any sanction or temporary suspension imposed by any such organization or National Authority at any time during the three years prior to this Agreement or at any time throughout the execution of this Agreement. The Service Provider recognizes that a breach of this provision will entitle FAO to terminate its Agreement with the Service Provider immediately upon notice to the Service Provider, without any liability for termination charges or any other liability of any kind of FAO.

- n) Unless authorized in writing by FAO, the Service Provider shall not advertise or otherwise make public that it has a contractual relationship with FAO, nor shall the Service Provider, in any manner whatsoever use the name or emblem of FAO, or any abbreviation of the name of FAO.
- o) All intellectual property rights, including copyright, in the outputs produced under this Agreement are vested in FAO, including, without any limitations, the right to use, publish, translate, sell or distribute, privately or publicly, any item or part thereof. Neither the Service Provider nor its personnel will communicate to any other person or entity any confidential information made known to it by FAO nor will they use this information for private or corporate advantage. This provision will survive the expiration or termination of this Agreement.
- p) To comply with disclosure requirements and enhance transparency, FAO may release and/or publish the following information about this Agreement: (i) the name and nationality of the Service Provider; (ii) a brief description and location of the Services provided; and (iii) the amount of this Agreement. The Service Provider specifically consents to the release and/or publication of such information. FAO will not release or publish information that could reasonably be considered confidential or proprietary.
- q) The Service Provider shall return to FAO any unexpended funds budgeted and paid by FAO under this Agreement.
- r) This Agreement is not subject to payment by FAO of any levies, taxes, registration duties or any other duties or charges whatsoever. The Service Provider shall duly pay taxes, duties and other charges in accordance with prevailing laws and regulations applicable to the Service Provider.
- s) The Service Provider agrees to undertake all reasonable efforts to ensure that none of the funds received from FAO under this Agreement are used to provide support to individuals or entities i) associated with terrorism, as included in the list maintained by the Security Council Committee established pursuant to its Resolutions 1267 (1999) and 1989 (2011) or ii) that are the subject of sanctions or other enforcement measures promulgated by the United Nations Security Council. This provision must be included in all subcontracts, sub-agreements or assignments entered into under this Agreement. The Service Provider acknowledges and agrees that this provision constitutes an essential term of this Agreement and any breach of these obligations and warranties shall entitle FAO to terminate this Agreement immediately upon notice to the Service Provider, without any liability for termination charges or any other liability of any kind of FAO.
- t) The Service Provider shall take all appropriate measures to prevent sexual exploitation or abuse of any beneficiary of the services provided under this Agreement, or to any persons related to such beneficiaries, by its employees or any other persons engaged and controlled by the Service Provider to perform any services under this Agreement. For these purposes, sexual activity with any person less than eighteen years of age shall constitute the sexual exploitation and abuse of such person. In addition, the Service Provider shall refrain from, and shall take all reasonable and appropriate measures to prohibit its employees or other persons engaged and controlled by it from

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exchanging any money, goods, services, or other things of value, for sexual favours or activities, or from engaging in any sexual activities that are exploitive or degrading to any beneficiary of the services provided under this Agreement or to any persons related to such beneficiaries. The Service Provider acknowledges and agrees that the provisions hereof constitute an essential term of this Agreement and that any breach of these provisions shall entitle the Organization to terminate this Agreement immediately upon notice to the Service Provider, without any liability for termination charges or any other liability of any kind.

7. Reporting and Record Maintenance Requirements

- a) The Service Provider shall submit to the Responsible Officer named in paragraph 3, the Reports include a final report consisting of a narrative report and financial report ("Final Report") within 30 days following the completion of the Services. The Final Report must be sufficiently detailed to allow certification of deliverables and of expenditures. The financial report shall be signed and certified as to its correctness by a duly designated representative of the Service Provider (e.g. executive officer, chief financial officer, chief accountant or similar).
- b) The Service Provider shall keep accurate financial records and maintain supporting documentation showing the utilization of inputs and funds under this Agreement and any other documentation related to the Services for a period of five years following termination or expiry of the Agreement, during which period FAO, or a person designated by FAO, or the relevant auditing authority (e.g. national audit office) shall have the right, at any time, to conduct reviews and/or audits relating to any aspect of this Agreement. The Service Provider shall provide its full and timely cooperation with any such review or audit. Full and timely cooperation shall include, but not be limited to, making available employees or agents and granting to FAO or other designated person or relevant authority, access at reasonable times and conditions to the Service Provider's premises or other sites where documentation related to this Agreement is kept or activities related to this Agreement are carried out.

8. Delays and Termination

- a) The Agreement shall enter into force upon signature by both Parties and shall remain in force until the Services have been satisfactorily provided or until otherwise terminated in accordance with the provisions herein.
- b) The Service Provider will carry out the Services in accordance with the workplan and within the timeframe set forth in the Annex and shall notify FAO of any delays that will prevent delivery of the Services in accordance with the workplan and within the timeframe set forth in the Annex.
- c) FAO may suspend or cancel all or part of this Agreement, obtain the Services elsewhere and make corresponding adjustments to any payments that may be due to the Service Provider, if the Service Provider fails to make delivery, or perform to a standard considered acceptable to FAO. Subject to consultation with the Service Provider, the determination of FAO, relating to this provision, shall be binding.
- d) If at any time during the course of this Agreement it becomes impossible for the parties to perform any of their obligations for reasons of Force Majeure, that party shall promptly notify the other in writing of the existence of such Force Majeure. The party giving notice is thereby relieved from such

obligations as long as Force Majeure persists. For the purpose of this Agreement, the term "Force Majeure" shall mean any unforeseeable exceptional situation or event beyond the Parties' control which prevents either of them from fulfilling any of their obligations under this Agreement, was not attributable to error or negligence on their part (or of their personnel, agents, or other representatives, or authorized subcontractors), and proves insurmountable in spite of all due diligence.

- e) FAO shall have the right to terminate this Agreement, by written notice to this effect, if it considers that continued implementation of the Agreement is impossible or impractical:
 - (i) For unforeseen causes beyond the control of FAO;
 - (ii) in the event of a default or delay on the part of the Service Provider after written notice by FAO which provides a reasonable period to remedy the default or delay.
- f) In the event of termination as per 8e) above, the following shall apply:
 - (i) Termination for unforeseen causes beyond its control, FAO shall complete all payments for expenses which have been incurred by the Service Provider up to the effective date of termination.
 - (ii) Termination due to the Service Provider's default or delay, the Service Provider shall refund to FAO any payment already received in respect of Services that have not been performed to a standard considered acceptable to FAO.
- g) FAO shall have the right to terminate this Agreement, by written notice to this effect, if FAO establishes in accordance with its administrative procedures:
 - (i) Irregularities, including any corrupt, fraudulent, collusive, coercive, unethical or obstructive practices in paragraphs 6i)-p) on the part of the Service Provider in relation to this Agreement; or
 - (ii) A breach of the reporting requirements in paragraph 7 above.
- h) In the event of termination as per g) above, the Service Provider shall refund to FAO all payments that were made on the basis of the irregularity or corrupt, fraudulent, collusive, coercive, unethical or obstructive practices, or as otherwise determined by FAO to be equitable and take other action as deemed appropriate by FAO.

9. Terms of Payment

- a) The payments will be made after certification by the Responsible Officer of the request(s) for payment as follows:

- (i) 1st payment not to exceed 20% of the contract USD 6,000 -upon signature of the present Agreement;
 - (ii) 2nd payment not to exceed 60% of the contract USD 18,000 - upon sites restoration works accomplished with compliance of the proposed methodology and acceptance by FAO of the first draft report including description of the restoration works in the selected sites and monitoring maps as prepared in collaboration with the GIS FAO consultant as indicated in the Work plan/Timeframe in the Annex II and in the table I.
 - (iii) 3rd payment not to exceed 20% of the contract USD 6,000- upon acceptance by FAO of the report including description of the restoration works in the selected sites and detailed planting activities with monitoring maps and pictures as indicated in the Work plan/Timeframe in the Annex II ;
- b) The payments will be made in the currency stated in paragraph 1, in accordance with the detailed banking instructions provided by the Service Provider and defined in paragraph 2.
- c) The Service Provider shall submit each request for payment to the address indicated below:
- Mr Maurice Saade
FAO Representative in Lebanon
FAO Representation Office in Lebanon
Antoine Rayess Street, RayessBldg, Baabda
(P.O. box 40,010, Baabda, Lebanon)
Tel. 00-961-5924005, Fax: 00-961-5922128
E-mail: Maurice.Saade@fao.org*
- d) FAO enjoys certain privileges and immunities which include exemption from payment of Value Added Tax ("VAT" or "IVA"), customs duties and importation restrictions.
- e) If the Service Provider fails to submit the Final Report mentioned in 7a) above no later than 30 days following completion, expiry or termination of this Agreement, FAO may, after provision of due notice of the default, terminate this Agreement without making the final payment.

10. Settlement of Disputes

- a) Any dispute between the parties arising out of the interpretation or execution of this Agreement, if not settled by negotiation between the parties or by another agreed mode of settlement, shall be submitted at the request of either party, to one conciliator. Should the parties fail to reach agreement on the name of a sole conciliator, each party shall appoint one conciliator. The conciliation shall be carried out in accordance with the Conciliation Rules of the United Nations Commission on International Trade Law, as at present in force.
- b) Any dispute not resolved by conciliation shall, at the request of either party, be settled by arbitration in accordance with the Arbitration Rules of the United Nations Commission on International Trade Law, as at present in force. The arbitral tribunal shall have no authority to award punitive damages. FAO and the Service Provider agree to be bound by any arbitration award rendered in accordance with this article, as the final adjudication of any such dispute.

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- c) The parties may request conciliation during the execution of this Agreement and in the period not to exceed twelve months after the completion, expiry or termination of this Agreement. The parties may request arbitration not later than ninety days after the termination of the conciliation proceedings. All dispute resolution proceedings shall be conducted in the language in which the agreement is drafted provided that it is one of the six official languages of FAO (Arabic, Chinese, English, French, Russian and Spanish). In cases where the language of the agreement is not an official language of FAO, the conciliation or the arbitration proceedings shall be conducted in English.

II. Amendments.

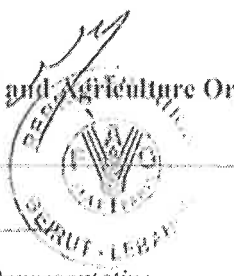
Any changes or amendments to this Agreement shall be made in writing and on the basis of mutual consent of the signatories to this Agreement.

Signed on behalf of the Food and Agriculture Organization of the United Nations:

Signature: _____

Date: 02 OCT 2017

Maurice Saade, FAO Representative

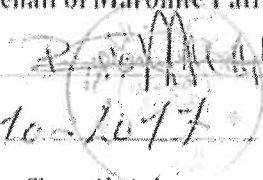


Signed on behalf of Maronite Patriarchy -- El Dimane

Signature: _____

Date: 6-10-2017

Father Tony Al-Agha



Signature: _____

Date: 6-10-2017

Tony Barakat, field coordinator



The Service Provider will sign two copies of this Agreement and return one to the Responsible Officer.

ANNOTATED OUTLINE FOR PREPARATION OF STANDARD ANNEX I OF
THE LETTER OF AGREEMENT
ANNEX I
TERMS OF AGREEMENT

1. Background

The restoration of abandoned agricultural terraces in the Shouf Biosphere Reserve (SBR) and Qadisha Valley in Lebanon demonstrates the best practices in terms of restoring the ecological functionality of the terrace systems to avoid environmental risks, regain biodiversity values and enhance their integration in the eco-cultural landscape; and supporting green economic opportunities to enhance people's livelihoods, generate jobs and create market links between producers and consumers through the production and marketing of aromatic/medicinal/edible plants, thus positively impacting the region's socio-economy.

A study on the existing stones terraces in the SBR and Qadisha Valley was launched by FAO and conducted by the ACS during 2016 aiming to create a detailed inventory and baseline analysis of terraces in both regions, demonstrate best practices on the restoration of agriculture terraces in well-represented pilot sites; and develop restoration guidelines that serve farmers. Further support to farmers included identifying the best crops for planting in restored terraces in the study areas, and performing a market analysis and estimating the cost-benefit ratio of restoring the terraces. The terraces provide a wide range of ecosystem services as they sustain fertile soil, and slow down water runoff and loss of soil; increase soil moisture content through improved infiltration; facilitate runoff water harvesting to irrigate the crops and fill local reservoirs for irrigation during dry season, capture the sun's heat in the rock walls, thus absorbing heat during the daytime and releasing it at night that help create a slightly warmer internal micro-climate which can protect crops from frosts, prolong the growing season and allow for crop diversification (supporting the traditional use of the very rich Mediterranean agro-biodiversity), play a major role in the provision of goods, including the production of diversified annual and perennial crops and livestock, wild fruits, honey, pollination, and biomass from fruit tree orchards and the natural vegetation linked to the terrace system; their stone walls play an important role in terms of biodiversity conservation (micro-habitats for numerous plants, insects, reptiles, amphibian, birds and mammals).

The Qadisha Valley is located north of Mount Lebanon, at the foothills of Mount al-Makmel and West of the Forest of the Cedars of God. It lies within the Becharre and Zgharta districts of the North Governorate of Lebanon. It covers an area of 136 square kilometers (km²).

The Qadisha Valley is divided geographically into two areas: The Qannoubine Area and Hadshit Area.

The valley stretches over several villages like Dimane, Bane, Hasroun, Hadchit and others. The two sides of the valley are formed by calcareous cliffs and steep slopes, including patches with agriculture terraces, most of which are abandoned.

The calcareous steep slopes of the valley are characterized by an ancient system of stone wall terraces that were intensively cultivated with vineyards, olives, figs, apple, mulberry, citrus and apricot trees, among others. Christian monastic communities, specifically Maronites, who had built and caved monasteries into valley slopes and cliffs, with some dating back to early

Christianity, were an important force cultivating the land and building and maintaining the terraced landscape. However, the different economical and socio-political crisis that occurred in the region has forced people to abandon their villages, negatively affecting the agriculture terrace production and maintenance.

Terraces in Qadisha are mainly located at altitudes ranging between 850 and 1150 m. Nowadays a large part of these terraces are abandoned with substantial amounts of collapsed stone walls, and are colonized by natural vegetation forming different successional stages – from small scrub to very dense secondary forest stands. Forestland in between agriculture terraces and colonizing abandoned terraces is composed of various tree stands, including cypress (*Cupressus sempervirens*), Brutia pine (*Pinus brutia*), oak (*Quercus calliprinos* and *Q. infectoria*), laurel (*Laurus nobilis*), wild apple (*Malus trilobata*), and wild pear (*Pyrus syriaca*); and numerous shrub and herbaceous species, such as oregano (*Origanum syriacum*) and sage (*Salvia trilobata*).

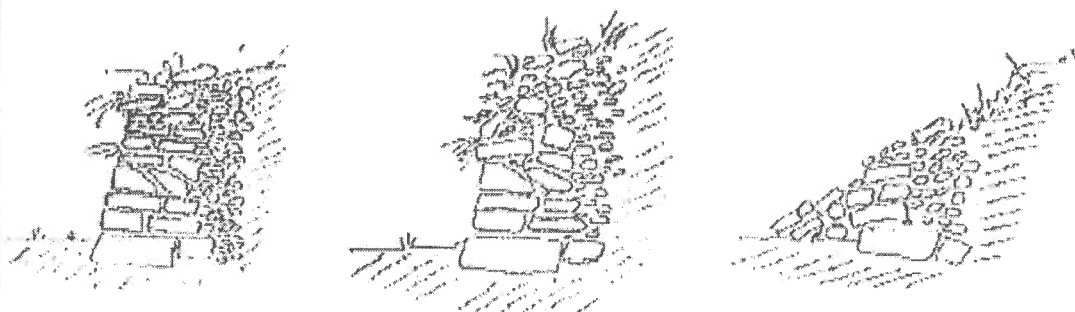
The expansion of natural forests has a positive environmental impact, preventing erosion problems in abandoned terraces and increasing the biodiversity values of the Qadisha deep gorge where built and cave sanctuaries are spread. However, uncontrolled urban construction in wooded areas and the accumulation of dry biomass in too dense secondary vegetation in some abandoned terraces have significantly increased the risk of forest fires in the valley, which implies the need to manage the forest biomass and apply adequate urban planning.

Description of Terrace Collapse

Abandonment generates several environmental issues, the most important of which is renewed erosion. The following types of collapse can be identified:

- collapse of the wall summit elements;
- partial collapse of the wall;
- translation of the wall base;
- total collapse of the wall.

It is worth noting that simultaneous multiple causes lead to more complex collapse forms. The collapse of the wall summit elements can be due to surface water runoff (when the wall head is made up of small sized elements) but it can be accelerated by excess of vegetation growing between the cracks of the wall itself. Collapses can be preceded by localized or widespread degradation of the top (Left and Central figures below), an appropriate time to interfere and stop the degradation phenomenon, before a collapse occurs (Right figure). The collapse of summit elements due to water runoff begins with excess water – above over saturated ground, leaping from terrace bed to terrace bed and causing the fall of small lithic elements from the top of terrace walls.

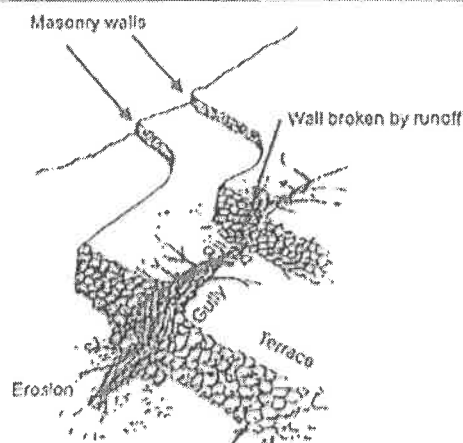


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Left: localized degradation of wall top; Central: widespread degradation; Right: wall portions collapse.

The depression left by the fall of one or more lithic elements can become a runoff concentration point, accelerating soil and stone elements removal. The water collection funnel can grow until it involves downstream terraces in the degradation process, and it can become a gully, with a considerable size and impossible to recover. The partial collapse of the wall for stability loss is due to the deformations a wall can suffer as a result of ground thrust. Because of this thrust, part of the structure deforms with respect to its original geometry, following a development process that leads to a progressive deformation.



2. Terms of Reference

2.1 Definition of Output(s) and/or Outcome(s)

Within the framework of the work plan 2016-2018 of the Forest and Landscape Restoration Mechanism, the outcome 3 consists of the following:

"FOREST AND LANDSCAPE RESTORATION PILOT ACTIONS IN LEBANON". Pilot actions will be focused on the implementation of methodological models / business models potentially replicable in other Lebanese regions. Those pilot actions are co-financed by partners and are well integrated in FLR initiatives/FLR planning at landscape level

The actions to be implemented within the present LoA, are based on the traditional stones terraces assesment implemented by the Shouf Cedars Associations in both regions Shouf Biosphere and Kadisha valley during 2016. The assesment enabled the FLR team to identify potential pilot sites for restoration supporting the main aim of restoration of traditional agriculture stone terraces for improvement of the cultural landscape values and rural livelihoods through sustainable value chains of local plant species. The present actions are divided as follows:

1. Pilot Restoration of traditional agriculture stone terraces in the area of the Kadisha valley region. This outcome will: (i) improve the livelihoods of low-income members of local communities through the support to sustainable and climate-resilient value chains revolving around the cultivation and commercialization of aromatic, medicinal, or culinary herbs and shrubs as well as other valuable trees species, (ii) support the restoration of traditional stone terrace - iconic human-made landscapes that are traditional to the area and can add value to the Kadisha valley region in terms of cultural heritage conservation and responsible tourism interest, (iii) promote economic activities that are relevant and suited to climate change adaptation by supporting low-maintenance agriculture requiring a low irrigation input, which contributes to the conservation of soils and helps limit soil erosion and (iv) contribute to the conservation of the currently dwindling ecological niche of the numerous species of flora and fauna that colonize the stones and the soil of terraces. Target crops will include *Origanum syriacum*, *Rhus coriaria*, *Zizyplus jujuba*, *Rosa canina* and

Questionnaires were developed to collect general information about the regions and more detailed information about the abandoned terraces and interested farmers. After the field survey, a desk work was performed which developed a list of criteria to guide the process of selecting the locations to be restored according to priority. Such criteria involved the proximity to the reserve, accessibility, climate suitability, study of the stone wall condition, soil condition, water availability, land ownership, absence of conflicts between land users and uses, level of local awareness, and co-funding.

It is very important that the service provider respects the following while implementing the sites restoration:

- no new access roads will be needed to reach the 3 selected sites in order to perform the required restoration activities
- walls restoration will be done to reach the same level of surrounding remaining walls. No major changes in the terraces general context will be noticed. It is recommended that terraces walls will be restored using same collapsed stone materials or equally approved.
- project works will be done under the MoA and FAO supervision and monitoring in close collaboration with Wadi Kadisha Management Committee in order to obey by the protection regulations of the cultural sites as Wadi Kadisha is being classified by UNESCO and the Ministry of Culture.

2.3 Workplan and Timeframe (Duration)

Action PLAN		September – December 2017			
Task	Deliverables	September	October	November	December
Signature of the contract	Signed contract				
Implementation of site pilot restoration in SBR	-Restoration works of selected pilot sites -Plantation of aromatic/medicinal selected plants				
-Dissemination: Awareness raising session in Kadisha valley region	- sessions with farmers and cooperatives				

2.4 Monitoring Mechanisms and Reporting Requirements

The technical field activities will be monitored by the Maronite Patriarchy El Dimane focal point and the Qanoubin League nominated field supervisor during the stages of restoration works and planting, and for a period of one year after. Monitoring and Reporting will be jointly the responsibility of the FAO, ACS and the Ministry of agriculture FLR team. The GIS FAO

68 T.A

consultant shall support the reporting and mapping of field results. All reporting and maps delivery shall be in compliance with the section 2.3. Workplan and Timeframe.

Two reports are required:

- 1st report due in November 2017: draft description of the restoration works in selected sites and monitoring maps
- 2nd report due in December 2017: (narrative & financial) final description of the restoration works in selected sites and monitoring maps - Financial report as well supportive documents showing the utilization of inputs and funds under this Agreement


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منظمة
 الأغذية والزراعة
 للأمم المتحدة



Food and Agriculture
 Organisation of the
 United Nations



Organisation des
 Nations Unies pour
 l'alimentation et
 l'agriculture

Продовольственная и
 сельскохозяйственная
 организации
 Объединенных Наций

Organización de las
 Naciones Unidas para la
 Alimentación y la
 Agricultura

Table 1: Restoration works detailed activities and cost:

PROJECT DETAILS		DETAILED COST USD			CONTRIBUTION USD	
TASK 1: Implementation of site pilot restoration in Kadisha Valley region	UNIT	Number of unit	UNIT COST USD	TOTAL COST USD	Maronite Patriarchy / Beneficiaries	FAO
Pre-preparation of the land for restoration activities						
Strip digging and cleaning the land (Tree thinning and shredding)	m	1450	5.00	7250.00	0.00	7250.00
Olive trees	tree	200	5.00	1000.00	0.00	1000.00
Oregano seedlings	seedling	4300	1.00	4300.00	0.00	4300.00
Purchasing and planting trees and seedlings						
Vines	tree	100	4.00	400.00	0.00	400.00
Lavender	seedling	100	1.00	100.00	0.00	100.00
Pomegranate trees	tree	500	5.00	2500.00	0.00	2500.00
Stone wall rehabilitation	m square	1050	14.00	14700.00	3450.00	11250.00
Water installation from the source to the land				4500.00	4500.00	0.00
Total restoration cost:				34750.00	7950.00	26800.00

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3. Detailed budget (if appropriate)

Provide detailed budget, specifying items, unit costs and quantities, and showing the total amount which FAO agrees to finance (strictly on an actual cost basis).

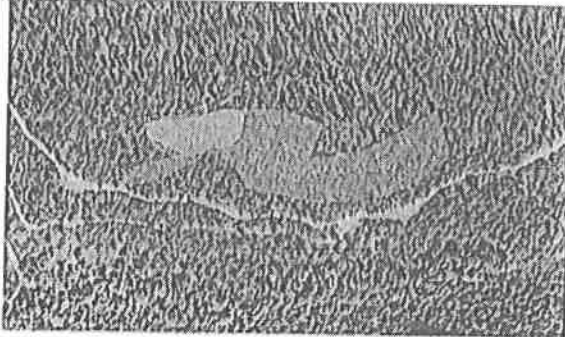
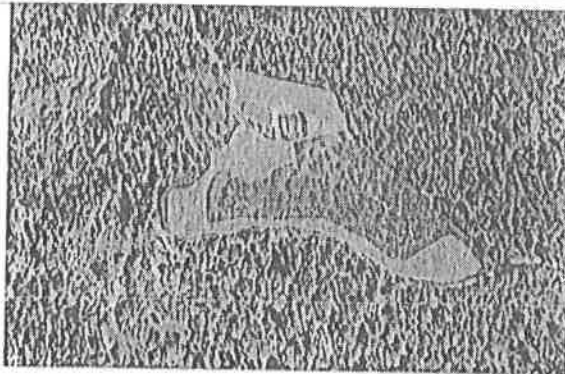
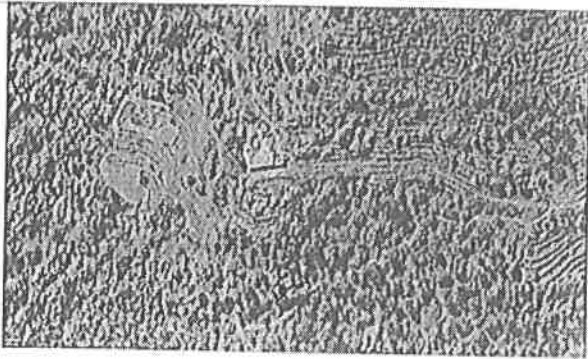
PROJECT DETAILS		DETAILED COST USD			CONTRIBUTION USD	
ACTIVITY	UNIT	Number of unit	UNIT COST USD	TOTAL COST USD	Maronite Patriarchy / Beneficiaries	FAO
Total restoration works				34750.00	7950.00	26800.00
Field coordination	month	4	600.00	2400.00	00.00	2400.00
Transportation	month	4	200.00	800.00	00.00	800.00
Total:				37950.00	7950.00	30000.00

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Annex II

Selected Sites To The Proposed Project:

Village	Owner	Surface	Map
Hadsheet (Qadisha Valley)	Wakaf land (private)	1.3 Ha	
Qannoubin	Patriarchat e land (private)	1.5 Ha	
Qanoubin	Elias Kady (private)	0.2 Ha	

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Proposed interventions:

Wakef land:

Location: Hadsheet

Description of the land: it has very old terraces which have old olive trees and apple trees and grape trees.

Proposed trees:

New olive trees

Oregano

Grape trees

Wakef Land

Item	Unit cost	Number of units in square meter	Total
Strip Digging and cleaning the land(m)	\$5	600	\$3000
Purchasing and planting Olive trees	\$5	200	\$1000
Purchasing and planting Oregano seedlings	\$1	2000	\$2000
Purchasing and planting grape trees	\$4	100	\$400
Stone wall rehabilitation	14\$/m2	600m2	\$8400
Water installation from the source to the land			\$2000
Total			\$16800

Patriarchate land

Location: Qanoubin

Description of the land: it has very old terraces which has old trees pomegranate.

Patriarchate land

Item	Unit cost	Number of units	Total
Strip Digging and cleaning the land(m)	\$5	650	\$3250
Purchasing and planting pomegranate trees	\$5	500	\$2500
Purchasing and planting Oregano seedlings	\$1	2000	\$2000
Stone wall rehabilitation	14\$/m2	400 m2	\$5600
Water installation from the source to the land			2000\$
Total			\$15350

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Elias Kady

Location: Qanoubin

Description of the land: it has very old terraces.

Elias Kady

Item	Unit cost	Number of units	Total
Strip Digging and cleaning the land(m)	\$5.00	200	\$1000
Purchasing and planting Oregano seedlings	\$1.00	300	\$300
Purchasing and planting Lavender	\$1.00	100	\$100
Water installation from the source to the land			500\$
Stone wall rehabilitation	14\$/m2	50 m2	\$700
		Total	\$2600

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**DELEGATION PERMANENTE DU LIBAN
AUPRES DE L'UNESCO
1, RUE MIOLLIS - 75015 PARIS**

N° 22/2019

Paris, le 23 janvier 2019

Madame la Directrice,

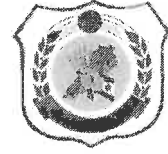
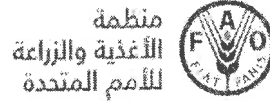
Suite à ma lettre n°18/2018 du 17 janvier 2019 par laquelle je vous transmettais le rapport sur le suivi de l'état de conservation de la *Vallée de la Qadisha et la forêt des cèdres de Dieu*, dont l'accord figurant à l'Annexe 1 nous a été transmis par inadvertance sans les signatures de toutes les parties, j'ai l'honneur de vous faire parvenir ci-joint la version définitive et complète du rapport avec l'accord dûment signé, en remplacement de celui non signé par toutes les parties.

En vous en souhaitant bonne réception, je vous prie d'agréer, Madame la Directrice, l'assurance de ma considération distinguée.

Sahar Baassiri

Ambassadeur, Délégué Permanent du Liban
Auprès de l'UNESCO

Madame Mechtild Rössler
Directrice du Centre du patrimoine mondial



Forest and Landscape Restoration Mechanism

**Restoration of traditional agriculture stone
terraces for improvement of the cultural
landscape values and rural livelihoods
through sustainable value chains of local
plant species
in
Kadisha Valley
Lebanon**

**Final Report
May 2018**

Contents

I.	Introduction	3
II.	Background.....	3
III.	Site description	4
IV.	Description of selected pilot sites and proposed intervention	4
V.	Methodologies for terrace restoration.....	8
VI.	Restoration activities implemented.....	9
VII.	Challenges faced during implementation	13
VIII.	Potential replication in the region	13
IX.	Conclusion	13
	Annex I.....	15
	Annex II.....	16

I. Introduction

FAO's "Forest and Landscape Restoration Mechanism" (FLRM) was implemented in collaboration with the Ministry of Agriculture, in 3 pilot sites in Kadisha Valley in North Lebanon. This project complements the restoration works that the Maronite Patriarchate in El Dimane and the Quannoubine League at Kadisha Valley started to implement as support pilot projects in different villages of the Kadisha Valley.

Stone terraces play an important role in providing goods and services that benefit the local communities and encourage them to stay in their villages.

The restoration of terraces in Kadisha was based on the results of the "Baseline assessment on stone terraces and the assessment of the socio-economic value of the goods supplied by stone terraces in Kadisha and Shouf Biosphere Reserve (SBR)" that was implemented by the SBR.

These restoration activities were meant to deliver a well-balanced package of landscape derived goods and services that reduce degradation and enhance the socio-economic situation of local stakeholders.

The FLRM project selected three sites of stones terraces in Kadisha valley region as "Forest and Landscape Restoration pilot actions in Lebanon" to implement restoration models that can be replicated in other Lebanese regions.

Finally, the project will disseminate the results and lessons learnt to local stakeholders and beneficiaries to encourage local landowners to restore their lands.

II. Background

The restoration of abandoned agricultural terraces within this project should be based on the best practices in terms of restoring the ecological functionality of the terrace systems to avoid environmental risks, regain biodiversity values and enhance their integration in the eco-cultural landscape. In addition, these activities enhance people's livelihoods, generate jobs and create market links between producers and consumers through the production and marketing of aromatic/medicinal/edible plants, thus positively impacting the region's socio-economy.

A study on the existing stones terraces in the Shouf Biosphere Reserve (SBR) and Kadisha Valley was conducted by the SBR during the year 2016 aiming to create a detailed inventory and baseline analysis of terraces in both regions. This study proposed the appropriate restoration modalities of the agriculture terraces in representative pilot sites. Furthermore, the study suggested the best crops suitable for planting and with sufficient economic returns and analysed the cost-benefit ratio of restoring the terraces. The restoration works were implemented based on the result of this study.

III. Site description

The Kadisha Valley is located within the Becharre and Zgharta districts in the North of Lebanon, at the foothills of Mount al-Makmel and west of the Forest of the Cedars of God.

The sides of the valley are formed by calcareous cliffs and steep slopes, including patches with agriculture terraces.

The agricultural terraces are located at altitudes ranging between 850 and 1150 m and are characterized by a system of stone wall terraces that were intensively cultivated with vineyards, olives, figs, apples, citrus, apricot trees and mulberry. However, the different economical and socio-political crisis that occurred in the region, in addition to the difficult accessibility, increase cost of production, and lack of marketing opportunities forced people to abandon their villages, negatively affecting the agriculture terrace production and maintenance. This abandonment has led to substantial amounts of collapsed stone walls and colonization by natural vegetation. The expansion of natural forests has a positive environmental impact, preventing erosion problems in abandoned terraces and increasing the biodiversity values of the Kadisha valley. However, the accumulation of dry biomass in too dense secondary vegetation in some abandoned terraces has significantly increased the risk of forest fires in the valley, which implies the need to manage the forest biomass.

The valley covers a total area of 136 square kilometers (km²), and is divided geographically into two areas: The Quannoubine area and Hadshit area.

The study conducted by the SBR in the first phase of the project, presented the situation in both Quanoubine and Hadshit areas.

Quanoubine area is mainly owned by the Maronite patriarchate, and the total area of abandoned land surveyed is 19.2 ha, on an average altitude of 800 meter. The terraced area is 88000 m² with varying conditions: 32600 m² have totally damaged terraces, 36800 m² need partial restoration, and the rest seems to be in good condition. In addition, 28% of the surveyed terraces have been newly rehabilitated, since terrace building stones are available in all sites.

The ownership of the terraces in Hadshit is private, and they are located on an altitude between 900 and 1200m. The abandoned terraces cover an area of 6650 m², and are only accessible by agricultural roads. 55% of the terraced walls need full restoration and the stones are locally available.

IV. Description of selected pilot sites and proposed intervention

The “Baseline assessment on stone terraces and the assessment of the socio-economic value of the goods supplied by stone terraces in Kadisha and Shouf Biosphere Reserve (SBR)” that was conducted in the first phase of the project resulted in the selection of 3 potential restoration sites in Kadisha (table 1) with proposed interventions in each site.

Table 1 – Potential restoration sites in Kadisha.

Geographical region	Owner	Surface (ha)
Hadshit	Wakef land (private)	1.3 Ha
Qanoubine	Patriarchate land(private)	1.5 Ha
Qanoubine	Elias Kady (private)	0.2 Ha

The selected potential sites are described below, in addition to the proposed intervention and cost in each site.

a) Wakef Land

This land is geographically located in Hadshit. It is a private land, with very old terraces, planted with olive trees, apple trees and grape trees.

This site was selected for its high visibility since it is close to the road. The activities could be easily replicated, thus the selection of this site will have a high positive impact on the community and biodiversity.

The proposed interventions in that land are listed in table 2.

Table 2- Proposed interventions in Wakef land – Hadshit.

Wakef Land			
Item	Unit cost	Number of units in square meter	Total
Strip Digging and cleaning of the land	\$5	600	\$3000
Purchasing and planting Olive trees	\$5	200	\$1000
Purchasing and planting Oregano seedlings	\$1	2000	\$2000
Purchasing and planting grape trees	\$4	100	\$400
Stone wall rehabilitation	14\$/m ²	600m ²	\$8400
Water installation from the source to the land			\$2000
Total			\$16800

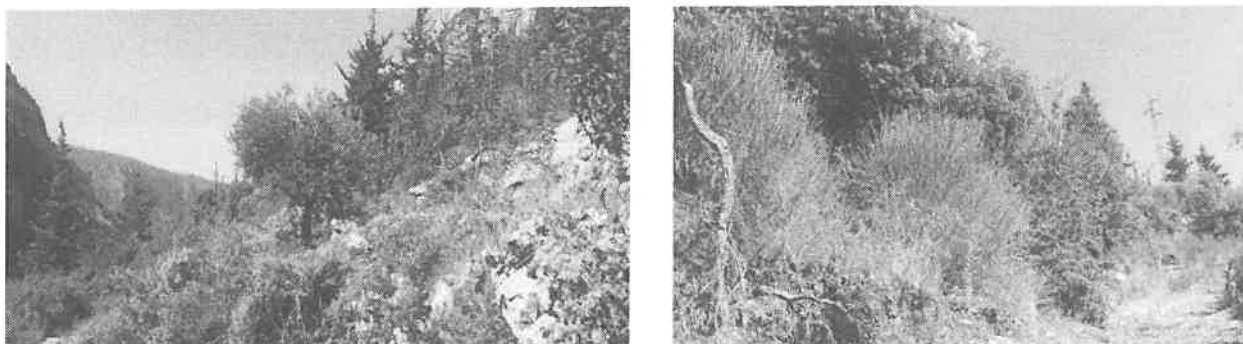


Figure 1: Wakef land – Hadshit before the restoration work

b) Patriarchate land

The Patriarchate land is located in Quannoubine. It is owned by the Maronite patriarchate, and has very old terraces with old pomegranate trees.

This site was selected for its high visibility, since it is close to the road and frequently visited by the priests and the patriarch. It is also close to the cemeteries of the patriarchs. This site resembles a lot to other sites in Quannoubine, thus it is easy to be replicate the implemented activities in similar sites and have a high positive impact on the community.

The proposed interventions in that land are listed in table 3.

Table 3- Proposed interventions in Patriarchate land – Quannoubine.

Patriarchate land			
Item	Unit cost	Number of units	Total
Strip Digging and cleaning the land(m)	\$5	650	\$3250
Purchasing and planting pomegranate trees	\$5	500	\$2500
Purchasing and planting Oregano seedlings	\$1	2000	\$2000
Stone wall rehabilitation	14\$/m ²	400 m ²	\$5600
Water installation from the source to the land			\$2000
Total			\$15350



Figure 2: Patriarchate land – Quannoubine before the restoration work

c) Elias Kady land

This land is also located in Quannoubine and is owned by the Maronite Patriarchate. However, it is managed by a family who lives there. It has very old terraces that are abandoned because of its difficult access. This is one of the reasons for its selection. In fact, it is not accessible by cars and needs to be reached on foot. For that reason, it is considered very challenging. However, it is very visible from the other side of the valley. Consequently, this land was selected for its high visibility, its challenging location and its high positive impact on the community.

The proposed interventions in that land are listed in table 4.

Table 4- Proposed interventions in Elias Kady land – Quannoubine.

Elias Kady			
Item	Unit cost	Number of units	Total
Strip Digging and cleaning the land(m)	\$5.00	200	\$1000
Purchasing and planting Oregano seedlings	\$1.00	300	\$300
Purchasing and planting Lavender	\$1.00	100	\$100
Water installation from the source to the land			500\$
Stone wall rehabilitation	14\$/m ²	50 m ²	\$700
		Total	\$2600



Figure 3: Elias Kady land – Quannoubine before the restoration work

V. Methodologies for terrace restoration

The main activities implemented in the selected sites were divided into six steps:

1. Cleaning of the land:

In order to do the restoration, the first step was to clean the site from the unwanted vegetation. The cleaning was done without using any machinery, but by uprooting the plants.

2. Stone wall rehabilitation:

The stones used for the rehabilitation of the walls were sourced on site. As the terraces fell into disuse their stones fell over time, but remained on site. The first step was to find these stones, and then pile them without using concrete. Only small stones were used with soil to compact them.

3. Plowing of the land:

It is not easy to use any machinery in Kadisha due to its protected status; therefore, the land was plowed using animals and tools. This system was used in the Patriarchate land and in Elias Kady land, where the soil is sandy and easy to work in. However, in the wakef land, the soil is rocky and an excavator was a must.

4. Planting:

The proposed planting design in the restored terraces included the planting of suitable native trees, shrubs and herbal species with economic interest. In each site, the selected species to be planted were proposed in the first part of the project.

Traditional tools were used to create 60 * 60 * 50 cm (length * width * depth) holes for planting the trees, and 20 cm deep lines for planting the herbs.

5. Irrigation:

The planted lands were equipped with a drip system.

6. Fencing:

In order to protect from wild boar attacks, and to prevent the destruction and need for replicating the work, concertina galvanized fencing was placed around some terraces.

It is important to mention that the labor was from Hadshit region, since the policy of the Patriarchate encourages local employment.

The technical field activities were monitored by the focal point of the Maronite Patriarchate in El Dimane focal point and the field supervisor nominated by the Quannoubine League.

VI. Restoration activities implemented

The proposed interventions, mentioned previously, had to be adjusted once the work started to meet the actual site needs.

a) Wakf land

This land needed cleaning from unwanted vegetation to have a clear view of the existing olive trees and planting new ones and other seedlings.

After cleaning the land, it was found that there is no possibility to plant new trees due to lack of space.

Consequently, this merging issue highlighted the importance of restoring the landscape by limited intervention of cleaning and planting in a traditional sustainable way.

Table 5 compares between planned and implemented activities.

Table 5- Comparison between the requested activities and the implemented ones in Wakf land.

Item	Requested activities	Implemented activities	Remarks
Strip Digging and cleaning of the land	600 m ²	200 m ²	It was agreed to decrease the area, in order to allocate the remaining budget to Elias Kady land, given the challenge it represents.
Purchasing and planting Olive trees	200 trees	0	There was not enough space for trees.
Purchasing and planting Oregano seedlings	2000 seedling	2500 seedling	There was enough space between trees.
Purchasing and planting grapevines	100 trees	0	There was not enough space for trees.
Stone wall rehabilitation	600 m ²	No	It was agreed to restore 200 out of 600 m ² , and yet give a positive and visible impact and allocate the remaining budget to Elias Kady land, because that site needed more allocation in order to give a higher impact, given the challenge it represent.
Water installation from the source to the land	Yes	Yes	Implemented by the Patriarchate.
Purchasing and planting lavender seedlings	0	150 seedling	There was enough space between trees, and it was important for diversification.

Picture 4- Wakf land – Hadshit after the restoration work



Figure 4: Wakf land – Hadshit after the restoration work

b) Patriarchate land

This land needed cleaning from unwanted vegetation, planting new trees and seedlings, stone wall restoration and installation of an irrigation system.

After implementing the activities, wild boars showed in the area, and destructed the new seedlings. Therefore, there was a need to put fencing around the terraces.

Table 6 compares between planned and implemented activities.

Table 6- Comparison between the requested activities and the implemented ones in the Patriarchate land.

Item	Requested activities	Implemented activities	Remarks
Strip Digging and cleaning the land	650 m ²	650 m ²	
Purchasing and planting pomegranate trees	500 trees	350 trees	After cleaning, some already existing pomegranate trees were detected on site.
Purchasing and planting Oregano seedlings	2000 seedlings	2000 seedlings	
Stone wall rehabilitation	400 m ²	375 m ²	After cleaning, the area of walls to be restored showed to be less than expected.
Water installation from the source to the land	Yes	Yes	Implemented by the Patriarchate.
Fencing	No	Yes	Implemented by the Patriarchate.



Figure 5: Patriarchate land – Quannoubine after the restoration work

c) Elias Kady land

This land needed cleaning from unwanted vegetation, planting new trees and seedlings, stone wall restoration and irrigation installation.

Also in this area wild boars showed and destructed the new seedlings. Therefore, there was also a need to put fencing around the terraces.

Table 7 compares between planned and implemented activities.

Table 7- Comparison between the requested activities and the implemented ones in Elias Kady land.

Item	Requested activities	Implemented activities	Remarks
Strip Digging and cleaning the land(m)	200 m ²	600 m ²	The area was increased because the owner showed an interest and helped in the implementation of the works.
Purchasing and planting Oregano seedlings	300 seedlings	2500 seedlings	
Purchasing and planting Lavender	100 seedlings	0	It was replaced by planting additional plants of pomegranate and seedlings of oregano.
Water installation from the source to the land	Yes	Yes	Implemented by the Patriarchate.
Stone wall rehabilitation	50 m ²	300 m ²	The area of stone wall rehabilitation increased because the initial area increased.
Purchasing and planting pomegranate trees	0	250 trees	
Fencing	No	Yes	Implemented by the Patriarchate.



Figure 6: Elias Kady land – Quannoubine after the restoration work

In addition to the hard work implemented in Kadisha valley, an awareness raising session for the local stakeholders and beneficiaries is scheduled for June 2018. The aim of this workshop is to disseminate the obtained results, show the lessons learnt and success stories.

VII. Challenges faced during implementation

During the implementation of the activities, two main challenges showed up.

The most important challenge is that the valley is listed as a World Heritage. This caused many challenges during the implementation of the work. In fact, it is forbidden to use modern machinery, it is also forbidden to make agricultural roads to facilitate the access to many lands. These prohibitions made the work more difficult and costlier. Indeed, the selection of Elias Kady land was done in order to explore this challenge.

In addition, banning the use of modern machinery spiked the cost as all the activities were done manually, which took more time and effort.

The second challenge was the attacks from the wild boars that destroyed the newly planted seedlings. This has led to doubling the cost of the seedlings in the Patriarchate land, because the wild boar problem was not taken in consideration from the beginning.

As it was already stated, Kadisha Valley is listed as World Heritage. This fact imposes the reliance on the regulations and laws set for a World Heritage site. Thus, special procedures with UNESCO, need to be met, in order to undertake any activity in the valley.

VIII. Potential replication in the region

An important number of local people showed an interest in restoring their lands. Farmers are ready to provide financial and labour assistance, and expect in return contribution equipment and technical guidance. The number of interested people is around 12, with lands ranging from 1000 to 5000 m². The replication of the restoration activities in other lands is easy since there are many opportunities like the existence of pilot sites, the existence of the stones in the field, and the existence of the knowledge. However, the most important challenge is the listing of the valley as a World Heritage because it increases the costs of the restoration.

IX. Conclusion

Kadisha valley should not only be considered as a touristic and ecological zone. It is the home of many local people who had to leave their lands because of the war and poor economic opportunities.

The outcomes from the restoration of traditional agriculture stone terraces in the area of the Kadisha valley region are: (i) improve the livelihoods of low-income members of local communities through the cultivation of aromatic, medicinal, or culinary herbs and shrubs as well as other valuable trees species, (ii) support the restoration of traditional stone terrace that can add a value to the Kadisha valley region in terms of cultural heritage conservation and responsible tourism interest, (iii) promote economic activities that are relevant to climate change adaptation by supporting low-maintenance agriculture requiring little irrigation, which contributes to the conservation of soils and helps limit soil erosion and (iv) contribute to the conservation of the numerous species of flora and fauna that colonize the stones and the soil of terraces.



The implemented activities can be easily replicated in other sites and many owners have already showed an interest in restoring their lands.

Annex I

Criteria set in the SBR report that were used for the selection of potential restoration sites in both Shouf and Kadisha sites

Accessibility: proximity to roads with access to the terrace site.
Climate suitability: sites located at a bio-climatic level that supports growth of the selected plants.
Stone wall conditions: priority to terraces with well-preserved or recently rehabilitated stone walls, followed by terraces with small areas requiring wall restoration (to maximize benefits under limited budgets).
Soil conditions: (i) soil types that supports the growth of selected species (clay is the least desirable type); (ii) soil conservation status is acceptable for agriculture purposes (no erosion, compaction, salinity, or nutrient wash up signals; no record of high intensity fire in the past 10 years, as occurrence of fire signifies low humidity available in the top soil).
Water availability: existence of drip irrigation system is priority. Onsite rechargeable tank is least preferred (Specific for Shouf Biosphere Reserve).
Clear land ownership: demonstrated ownership through necessary documents.
Absence of conflicts between land uses and users: sites where conflicting uses occur such as grazing, mining, etc, will not be considered.
Level of local awareness and buy-in: priority to farmers showing high level of interest and commitment (full time farmers are preferred).
Co-funding: farmer's willingness and capacity to provide matching funds or in-kind contribution to the project (case specific; could range from work force for building of walls to resources for installing drip irrigation).

Annex II
Selected Sites to the Proposed Project

Village	Owner	Surface	Map of the selected site
Hadsheet (Qadisha Valley)	Wakef land (private)	1.3 Ha	
Qannoubin	Patriarchate land (private)	1.5 Ha	
Qanoubin	Elias Kady (private)	0.2 Ha	