

## Proposed Project Concept Entitled “Rain Water Harvesting Systems for Domestic and Agricultural Uses”

<b>Project Title</b>	<b>Rain Water Harvesting Systems for Domestic and Agricultural Uses</b>																																																																												
<b>Project Duration</b>	36 months																																																																												
<b>Estimated Budget</b>	The total estimated project budget is US \$3,784,375.  25% of the cisterns construction’s cost will be as beneficiaries' contribution.																																																																												
<b>Stakeholders</b>	The project stakeholders will be the Ministry of Agriculture (MoA), the Ministry of Local Government (MoLG), UNDP, and local and international Agricultural Associations and NGOs.																																																																												
<b>Targeted Areas</b>	<p>The project will target several localities in three Agro-Eco zones clusters of the Bethlehem Governorate, as the following:</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th colspan="2" style="background-color: #f1c40f;">Eastern Cluster</th> <th colspan="2" style="background-color: #f1c40f;">Western Cluster</th> <th colspan="2" style="background-color: #f1c40f;">Southern Cluster</th> </tr> <tr> <th style="background-color: #f1c40f;">Locality</th> <th style="background-color: #f1c40f;">No. of cisterns</th> <th style="background-color: #f1c40f;">Locality</th> <th style="background-color: #f1c40f;">No. of cisterns</th> <th style="background-color: #f1c40f;">Locality</th> <th style="background-color: #f1c40f;">No. of cisterns</th> </tr> </thead> <tbody> <tr> <td>Hindaza</td> <td>50</td> <td>Nahhalin</td> <td>55</td> <td>Marah Ma’alla</td> <td>15</td> </tr> <tr> <td>Al ‘Ubeidiya</td> <td>100</td> <td>Al Jab’a</td> <td>10</td> <td>Marah Rabah</td> <td>30</td> </tr> <tr> <td>Za’tara</td> <td>75</td> <td>Al Walaja</td> <td>50</td> <td>Wadi an Nis</td> <td>15</td> </tr> <tr> <td>Jannatah</td> <td>50</td> <td>Wadi Fukin</td> <td>20</td> <td>Artas</td> <td>20</td> </tr> <tr> <td>Al Maniya</td> <td>20</td> <td>Al Khader</td> <td>10</td> <td>Beit Fajjar</td> <td>40</td> </tr> <tr> <td>Ash Shawawra</td> <td>50</td> <td>Husan</td> <td>50</td> <td>Al Manshiya</td> <td>6</td> </tr> <tr> <td>Tuqu’</td> <td>150</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Dar Salah</td> <td>60</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td><b>Total</b></td> <td><b>555</b></td> <td></td> <td><b>195</b></td> <td></td> <td><b>125</b></td> </tr> <tr> <td><b>Grand Total</b></td> <td colspan="4"></td> <td><b>875</b></td> </tr> </tbody> </table> <p>The project will target the southern, eastern and western parts of the Bethlehem Governorate, which include <i>Marah Ma’alla, Wadi an Nis, Marah Rabah, Beit Fajjar, Artas and Al Manshiya</i>, in the southern part; <i>Al ‘Ubeidiya, Hindaza, Tuqu’, Ash Shawawra, Al Maniya, Dar Salah, Za’tara and Jannatah</i> in the eastern part; and <i>Nahhalin, Al Jab’a, Al Walaja, Wadi Fukin, Al Khader and Husan</i> in the western part.</p>					Eastern Cluster		Western Cluster		Southern Cluster		Locality	No. of cisterns	Locality	No. of cisterns	Locality	No. of cisterns	Hindaza	50	Nahhalin	55	Marah Ma’alla	15	Al ‘Ubeidiya	100	Al Jab’a	10	Marah Rabah	30	Za’tara	75	Al Walaja	50	Wadi an Nis	15	Jannatah	50	Wadi Fukin	20	Artas	20	Al Maniya	20	Al Khader	10	Beit Fajjar	40	Ash Shawawra	50	Husan	50	Al Manshiya	6	Tuqu’	150					Dar Salah	60					<b>Total</b>	<b>555</b>		<b>195</b>		<b>125</b>	<b>Grand Total</b>					<b>875</b>
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<p><b>Map of Targeted Areas</b></p>	
<p><b>Beneficiaries</b></p>	<p>The project will target 875 families (approximately 5,680 individuals).</p>
<p><b>Project Description</b></p>	<p>The annual rate of rainfall in these areas ranges between 250 and 550mm. Water in the targeted areas is the most important factor for agriculture.</p> <p>This project will help in improving the rainwater harvesting systems in the targeted areas through the construction of 875 cisterns.</p> <p>This proposed project will complement the strategic plan of the MoA through increasing the productivity of the agricultural unit and improving access to water resources. The cisterns will act as a supplementary resource of water for the irrigation of plants and livestock consumption. This will assist in reducing the effects of drought and improve the livelihood of the targeted households.</p>
<p><b>Project Objectives</b></p>	<ul style="list-style-type: none"> <li>• To harvest and store rainwater for summer use (for irrigation and livestock consumption).</li> <li>• To increase the productivity in warm and dry seasons.</li> <li>• To increase the total agricultural area in the Bethlehem Governorate.</li> <li>• To reduce the effects of drought.</li> <li>• To combat drought prevalence in the area.</li> <li>• To assist in reducing the water scarcity problems, especially during the summer season.</li> </ul>

	<ul style="list-style-type: none"> <li>• To improve the livelihood of the targeted families.</li> </ul>
<p><b><i>Project Activities</i></b></p>	<ul style="list-style-type: none"> <li>• Launching the project in partnership with the community committees and announcing application opportunities publicly.</li> <li>• The completed applications will be analyzed and investigated through conducting field visits and determining the beneficiaries according to the project selection criteria (<i>the beneficiary should have agricultural land and/or livestock</i>).</li> <li>• Provide the beneficiaries with an implementation manuals.</li> <li>• Constructing the 875 cisterns and providing the beneficiaries with the necessary technical support and agricultural extensions.</li> <li>• Supervising, monitoring and evaluating the implementation process.</li> <li>• Preparing the final reports (technical and financial) and disseminating the results.</li> </ul>
<p><b><i>Expected Results</i></b></p>	<ul style="list-style-type: none"> <li>• 875 cisterns for collecting and storing rainwater constructed in the targeted areas.</li> <li>• The rainwater harvesting and storing capacity increased by 61,250 cubic meters annually which equivalent to US\$ 64,000 / year.</li> <li>• The productivity of 610 dunums of cultivated land increased by utilizing supplementary irrigation.</li> </ul>