

United Nations Development Programme

برنامج الأمم المتحدة الإنمائي

**(Annex 1) - TERMS OF REFERENCE****FOR**

**NATIONAL CONSULTANT:
COMPOSTING AND MSW SORTING CENTER MACHINERY DESIGN SPECILAIST**

I. Position Information	
Project:	Enhancing Women Participation in the Solid Waste Management Sector in Jordan
Location:	UNDP Offices in Amman and in Irbid Governorate, Jordan
Type of Contract:	National – Locally Recruited (IC Contract)
Post Level:	National Consultant
Languages Required:	English and Arabic
Duration of Initial Contract:	18 working days within 300 calendar days
Start Date:	Immediately

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II. Background and Organizational Context

The proposed project will contribute to improving women's quality of life in North of Jordan through enhancing their livelihoods and wellbeing. The entry point of this project is women economic empowerment and equality as means to addressing barriers that are hindering women from active participation in their communities as workers, entrepreneurs and change makers, with the understanding that real women's economic empowerment exists when women and girls have the similar opportunities to men and boys in terms of knowledge, economic opportunities, gender-sensitive policies and decision-making power and access to and control over assets and resources.

The Project focuses on empowering women through improving effectiveness of women organizations to actively represent and support women voices in decision-making processes, increasing participation by women in the local economy, enhancing gender informed and responsive policy making at community and national levels, with particular focus on the Solid Waste Management Sector (SWM).

The project targets women in three Municipalities which comprise Northern Shouneh District plus an additional municipality (within Kourah District) all in Irbid Governorate. This project is designed to use the SWM sector to provide interventions aiming at empowering women economically, strengthening their voice and representation at the local level, and enhancing the institutional capacities to accompany this process. The design of the project is therefore built around three tracks that aim to improve the economic well-being and social stability of rural women in Northern Jordan, especially in the SWM sector

UNDP is planning to establish a composting plant in Kura and continue to support the sorting center in Northern Shouneh, and UNDP will supply machinery and equipment for the composting plant and the sorting center. UNDP therefore requires the services of a **Design Specialist** to assist the Project Management Unit (PMU) through the design of these components. A compost plant is to be established with a daily production capacity of 60 ton/day, using raw material of manure and agricultural waste, where the raw material of agricultural waste will be shredded and added to the mixture, and the final product will be also shredded to be of fine composition (grinding) suitable for compost uses.

The Design Specialist is to serve:

- Under the overall supervision of UNDP's Environment Team Leader;
- Under the direct supervision of UNDP Construction Manager and Environment SWM Project Manager.
- In coordination with technical supervision of the Project Management Unit of the Ministry of Local Administration (MoLA).

III. Key Results and Impact

Particularly, the **Design Specialist** will be technically responsible for the design of machinery required for the compost plant in Kura.

The complex nature of the project needs a skilled engineer in managing technical issues related to design of mechanical and electrical design works and machinery selection. The specified services are required to ensure successful design and technical inputs of the project. The **Design**

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Specialist will have a direct impact on the positive outcome, successful management, effective closure, and sustainability of the other components within the program.

IV. Duties and Responsibilities

General:

The **Design Specialist** – will be directly responsible for successfully completing the below set of tasks within allotted, agreed-upon time frames:

The **Design Specialist** – is responsible to ensure tasks are carried out in accordance with the UNDP project documents, Conditions of Contracts, technical specifications, applicable international standards, and standard project management procedures.

Upon completion of the respective tasks, he / she will be required to report the final outcomes, issues and any necessary follow-up action for the approval of UNDP project management.

All deliverables shall be shared for UNDP/MoLA review, drafts shall cover completed scope of deliverable and of high quality and within the assigned timeframe in the deliverables table.

Scope of Work:

The **Design Specialist** shall carry out tasks in relation to the composting plant up to UNDP's approval within the assigned working days (no cost addition for extra working days for below tasks), including activities, but not limited to:

1. Provide an assessment of the machinery needed for the composting plant, taking into consideration the previously procured machinery in the country for similar projects.
2. Provide full detailed design (plans, sections, elevations, 3D; CAD & pdf), implementation and operation guidelines, Bill of Quantities (BoQ) and specifications, for the composting plant machinery (showing also their capacity and advantages) including those already identified by UNDP:
 - a. Compost windrow turning machine (revise the available specifications used previously by UNDP).
 - b. Compost grinder and agriculture waste shredder (separate machines or multifunction as per UNDP preference for the waste shredder and compost grinder).
3. Provide cost estimate for the designed machinery under this contract.
4. Support and participate in tendering process through ToR drafting for machinery supplier/contractor and minimum qualification for contractor and technical evaluation criteria in line with UNDP's rules and regulations.
5. Support during bid period through answering bidders' queries, and joining pre-bid meeting/s, site visit/s and Evaluation of bids, as requested and in a timely manner in accordance to the machinery bid invitation document.
6. Support in Machinery inspection upon supply, installation and testing by the machinery suppliers.
7. Support in supervising the machinery suppliers' training program on operating, maintaining the machinery designed under this contract and troubleshooting to beneficiaries in the targeted municipalities.

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V. Qualifications and Experience	
Education and professional qualifications:	<ul style="list-style-type: none"> Bachelor's degree in mechanical or mechatronics engineering or other relevant study.
Experience required	<ul style="list-style-type: none"> Over 10 years of experience in engineering designs/operations/projects and with experience in SWM related projects. Experience in implementation of MSW composting plants and recycling projects is essential. Previous experience with Government, UNDP, or other UN organizations or INGO's would be an added advantage.
Competencies required	<ul style="list-style-type: none"> Experience in implementation of similar projects in Jordan, in particular public sector related MSW projects is preferred. Knowledge of project management framework and procedures would be a strong advantage. Competency in the use of standard Microsoft computer packages is essential. Competency in AutoCAD and other computer-aided drawing and design programs is essential. Membership in Jordan Engineers Associations is essential.
Language Requirements	<ul style="list-style-type: none"> The candidate shall be fluent in the English and Arabic languages with excellent writing and presentation skills.
Nationality	Jordanian

VI. Deliverables & Outputs Time Frame			
Output Description		Deadline from Contract Signature (calendar days)	Payment authorized (percentage of total price)
1	Needs assessment report and preliminary design as elaborated in the scope of work. (Article 1+2)	5 days (final draft submission should be after 3 days of contract for UNDP/MoLA revision)	5%
2	Full detailed design approved by UNDP as elaborated in the scope of work (Article 1+2+3)	14 days (final draft submission should be after 10 days of contract for UNDP/MoLA revision)	30%
3	ToR Draft and technical bid documents as elaborated in the scope of work (Article 4)	25 days (final draft submission should be after 20 days of contract for UNDP/MoLA revision)	25%
4	Bid support services and bid evaluation as elaborated in the scope of work (Article 5)	100 days (final draft submission should be after 80 days of contract for UNDP/MoLA revision)	15%
5	Certificate of completion for	300 days	25%

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	machinery installation and operation in accordance to the required specifications (only for substantial completion, including O&M training and technical support), as elaborated in the scope of work (Article 6 and 7).	(final draft submission should be after 270 days of contract for UNDP/MoLA revision)	
Total		300 Days from start order	100%

VII. Documents required

Required Documents for offers evaluation to be submitted by hand to UNDP offices before announced deadline:

1. Curriculum Vitae (shall at least include information about university degree, trainings and professional certificates, experience, age, professional references, skills and competencies, contact information).
2. Signed Technical Offer relevant to the scope of works in accordance to relevant design codes and standards.
3. Signed Separate financial offer of the five deliverables shown in table VI, which will be inclusive of all costs related to completion of this contract.

VIII. Approvals:

Project Manager	Ghadir Al Majali	<i>ghadir almajali</i>
Team Leader	Silke Handley	<i>Silke Handley</i>
Resident Representative	Sara Ferrer Olivella	<i>[Signature]</i>