



Karak Composting Facility

The Facility Manager

Eng. Mohammad Ma'aitah

Coordinate • Collaborate • Co-create



Supported by



Co-Funded by the European Union



Implemented by



Historical Background

The German-Jordanian Cooperation



- The rationale behind establishment of the facility is to implement the cash-for-work mechanism to support the WtpE project target beneficiaries; the Syrian refugees and the Jordanian vulnerable in hosting community, while enhancing waste management in partners municipalities.
- The facility serves as a tool to demonstrate an economically and environmentally sound management of organic waste in Jordan.
- Precious organic waste materials are collected, sorted, and processed into marketable high-quality compost. In so doing, this opens avenue for jobs opportunities and reduces mounting pressure on landfill

An Overview of Karak Composting Facility



- Established on a total area of 20 dunums.
- The current design capacity of approximately 5 metric ton a day and still expandable to process 30 metric ton a day
- Equipped well with necessary basic infrastructure and machinery
- Operated in September 2019
- Right now, only one-third of this capacity is fulfilled (1.7 metric ton a day)

Feedstock (Botanical Waste & Animal Manure)



1. Locally generated botanical waste



Feedstock (Botanical Waste & Animal Manure)



2. Animal manure





Infrastructure

1. Hangars and offices





Infrastructure

2. Composting operation platform

The expansion plan is underway





Key Composting Machines

Shredding Machine





Key Composting Machines

Wheel Loader





Key Composting Machines

Turning Machine





Key Composting Machines

Screening Machine





Final Product (Compost)





Quality of Compost

Higher than the required Jordanian Standard



المركز الوطني للبحوث الزراعية
مديرية المختبرات - مختبر الأحياء الدقيقة

صاحب العينات: مشروع الكوميوست / د. نبيل بني هاني	نوع العينات: كميوست
تاريخ استلام العينات: 2/2/2020	القائم بالتحليل: سمير قديمي، ميساء درويش
Batch No. M/20/15	

Lab No.	Fecal coliform/g	E.coli/g	Salmonella/g
34	Zero	Zero	Negative

النتيجة لا تمثل إلا العينة المستلمة

مدير مديرية المختبرات

رئيس قسم الأحياء الدقيقة

د. نبيل بني هاني

سمير قديمي

مدير مديرية المختبرات
Director of Laboratories
Directorate



المركز الوطني للبحوث الزراعية
مديرية المختبرات
مختبر تحليل الأسمدة
شهادة تحليل

C.O.A No.: F20/02/19

Date of certificate: 16/02/2020

تاريخ الاستدعاء: 2020/2/2	صاحب العينات: WTPE project / GIZ
تاريخ البدء بتحليل العينات: 2020/2/9	عدد العينات: عينة كميوست
القائم بالتحليل: الهام ابورمان / م. هبة الشويكي	

الرقم المخبري: 2020/097	رقم التشغيل: F/20/ 044	اسم العينة:
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No.	Test Name	Result	Unit	Test Method No.
1.	pH	7.8		AOAC 973.04,DM
2.	EC	2.8	dS/m	AOAC 973.04,DM
3.	Ash	49.5	wt/wt %	AOAC 967.04,DM
4.	Moisture	17.7	wt/wt %	AOAC 967.03,FM
5.	Organic Matter	50.5	wt/wt %	AOAC 967.05,DM
6.	N	1.8	wt/wt %	AOAC 955.04,970.02,978.02,DM
7.	P ₂ O ₅	0.8	wt/wt %	AOAC 957.02,958.01,977.01,DM
8.	K ₂ O	1.9	wt/wt %	AOAC 983.02,DM
9.	Ni	15.3	ppm	AOAC 965.09,DM
10.	As	<0.15	ppm	AOAC 965.09,DM
11.	Se	<0.06	ppm	AOAC 965.09,DM
12.	Cd	<0.0012	ppm	AOAC 965.09,DM
13.	Pb	5.4	ppm	AOAC 965.09,DM
14.	C/N	16:1		
15.	Foreign particles (glass,plastic...) after sieving with 10 mm mesh	0.8	wt/wt %	Gravimetric , Fresh weight

ملاحظة: النتيجة لا تمثل إلا العينة المستلمة

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Director of Laboratories
Directorate

Feedback of End-User on Karak Compost



Satisfaction is leading to increased sales





Vision of Karak Municipality

1. Moving forward with the facility from pilot level to commercial level especially that the compost produced has been tested and tried through NARC.
2. Partnership with Private Sector for sustainable operation of the composting facility.



Contact Details

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Municipality of Karak

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