

Circular Economy in the Humanitarian Sector in Jordan

15th December 2021

Amman

12/2021

Agenda

14:00 – 14:15: UNEP and IMPACT
welcoming remarks

14:15 – 14:30: Introduction and
presentation of the study

14:30 – 15:45: Key findings of the study

15:45 – 16:15: Recommendations

16:15 – 16:30: Additional interactions
and Q&A



Why?

General objective

To **catalyse discussion** in the humanitarian response in Jordan around Circular Economy (CE) and **trigger action** toward the integration of circularity in humanitarian activities through:

- Providing a snapshot of past and ongoing projects under the Jordan Response Plan (JRP) that include elements of circularity by sectors that have potential for circularity
- Identify opportunities for circularity under the JRP
- Develop guidelines in the form of a Toolkit to support partners interested to integrate circularity into their programming

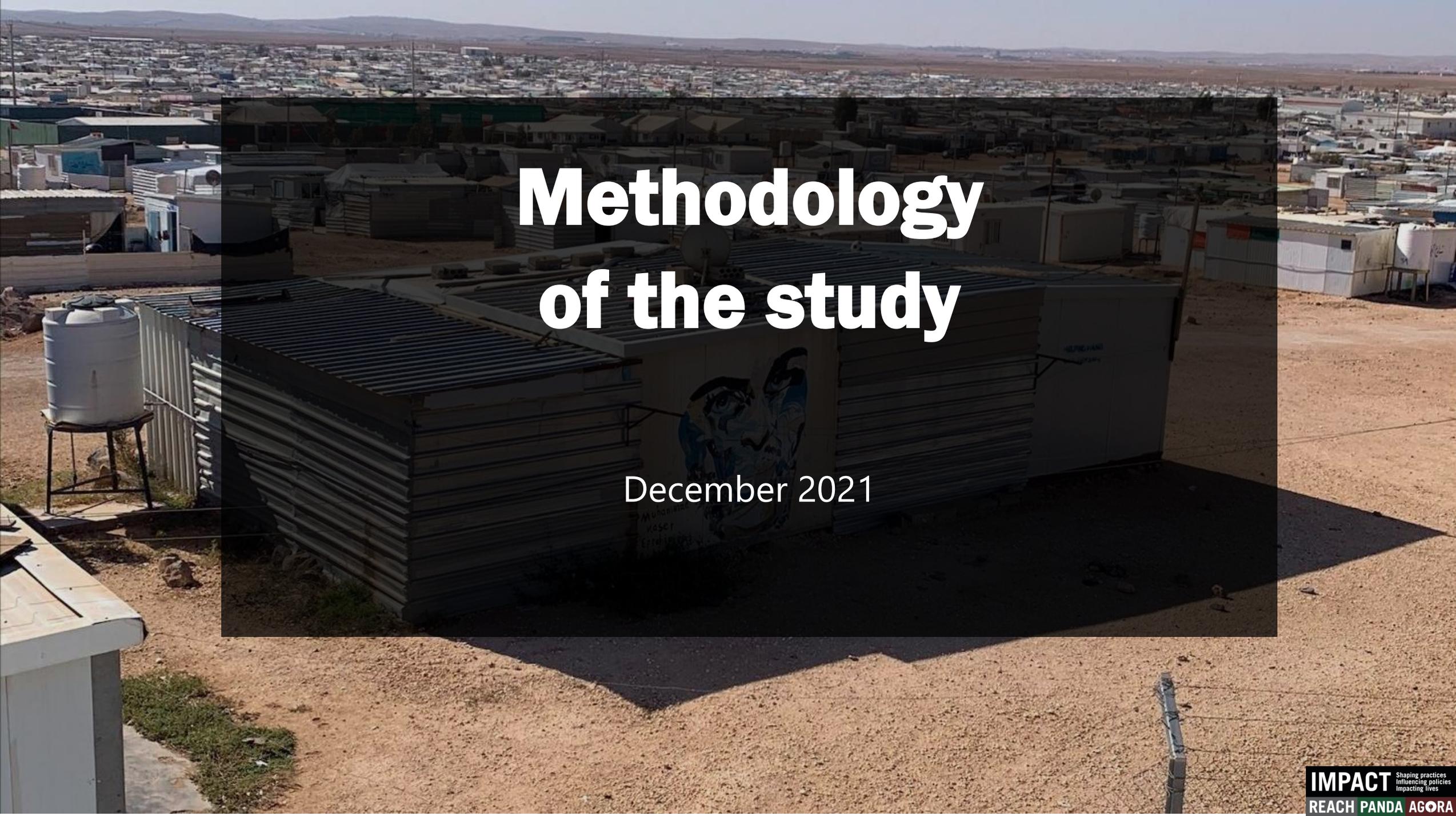


What?

Goals of the assessment

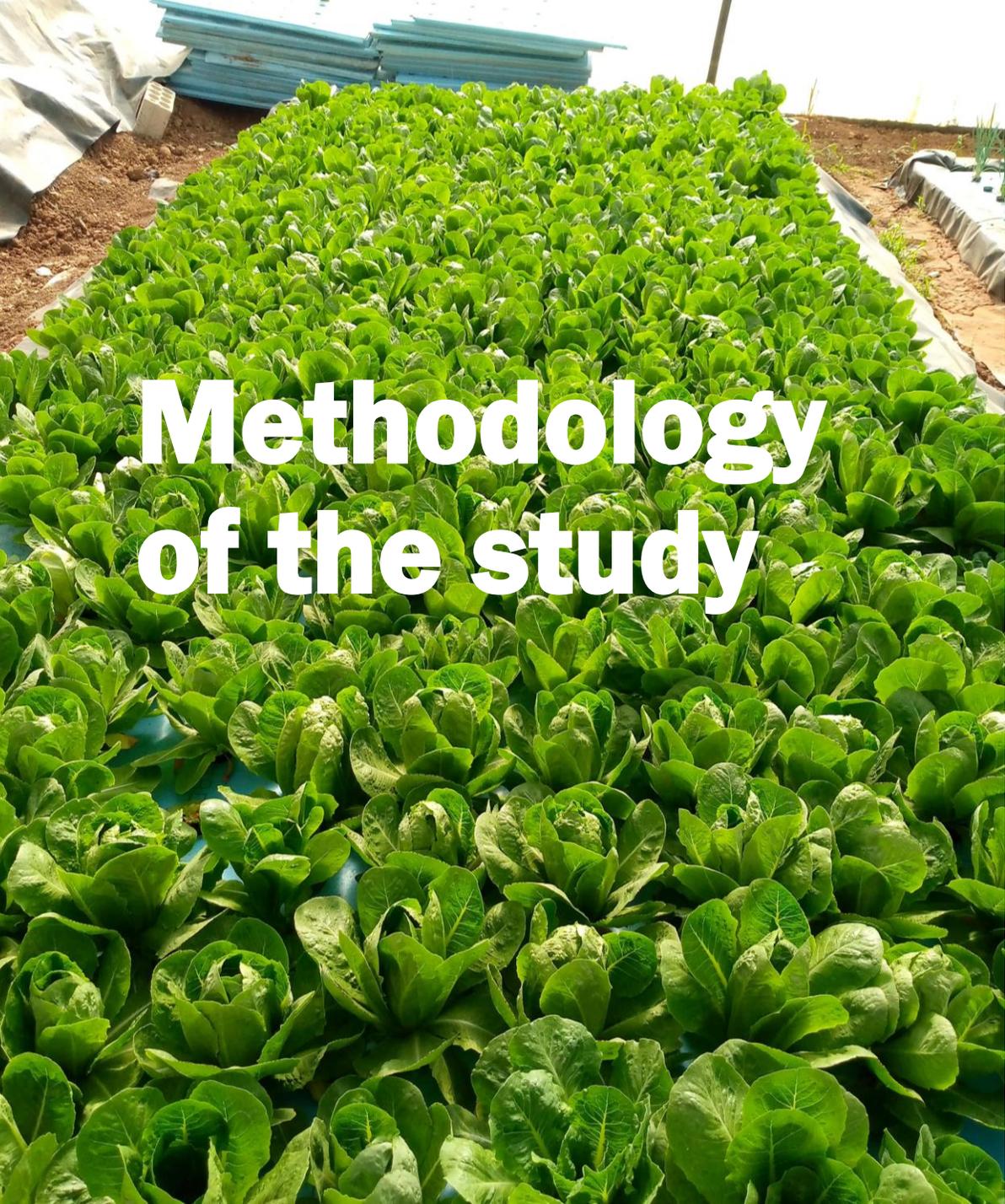
This assessment aimed to investigate:

- Which are the programmes implemented under the JRP which include one or more elements of circularity?
- Which is the impact of COVID-19 on projects including one or more elements of circularity?
- Which are the challenges faced by humanitarian actors in Jordan whose programming include one or more elements of circularity?
- Which are the opportunities for the humanitarian actors in Jordan to implement circularity in their programming?



Methodology of the study

December 2021

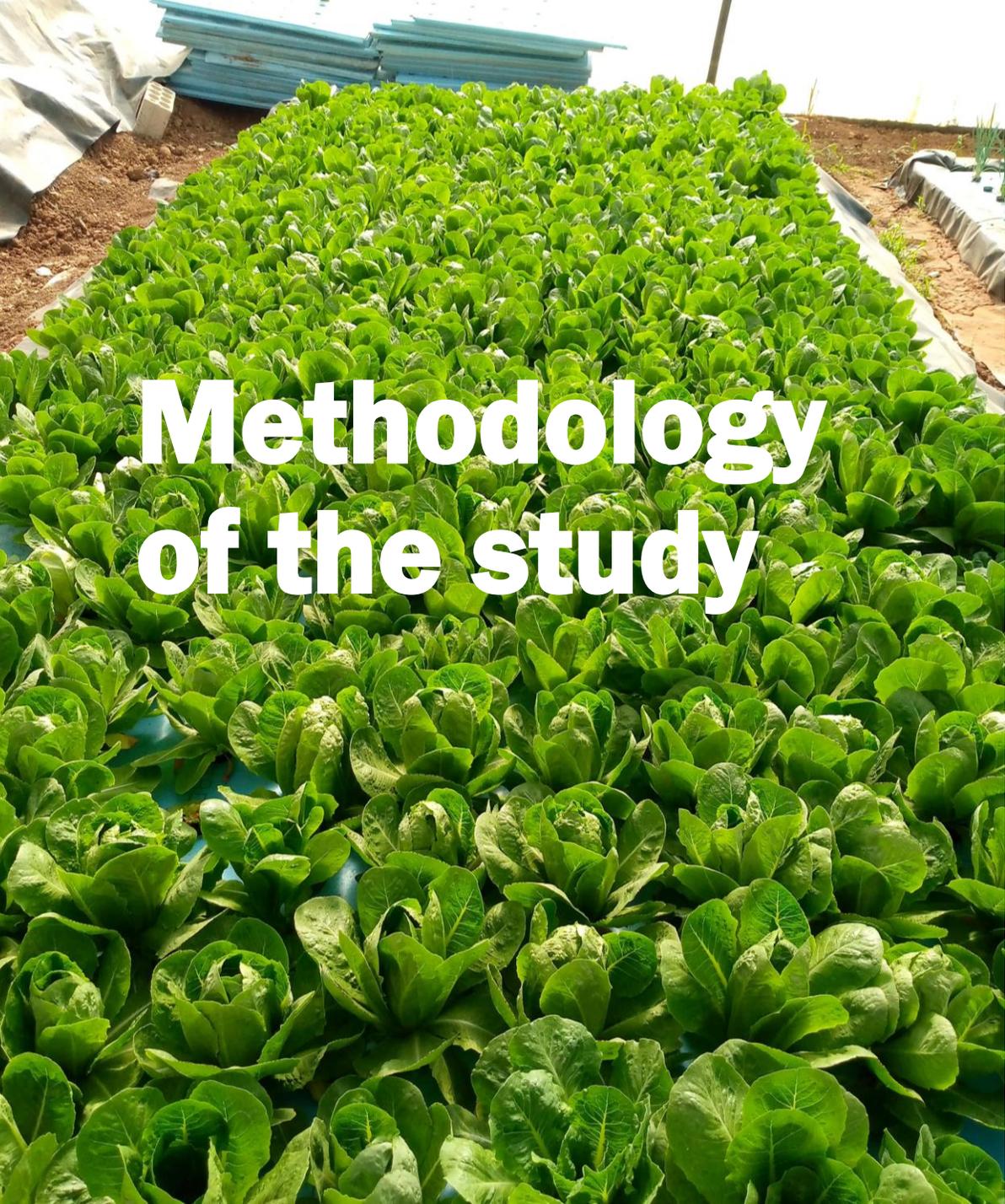


Methodology of the study

Data collection method

Semi-structured interviews conducted in October and November 2021 with key stakeholders from the following groups:

- National stakeholders (involved in the guidance of programming implemented under the JRP)
- Implementing partners (UN Agencies, National and International NGOs)
- Donor government representatives.



Methodology of the study

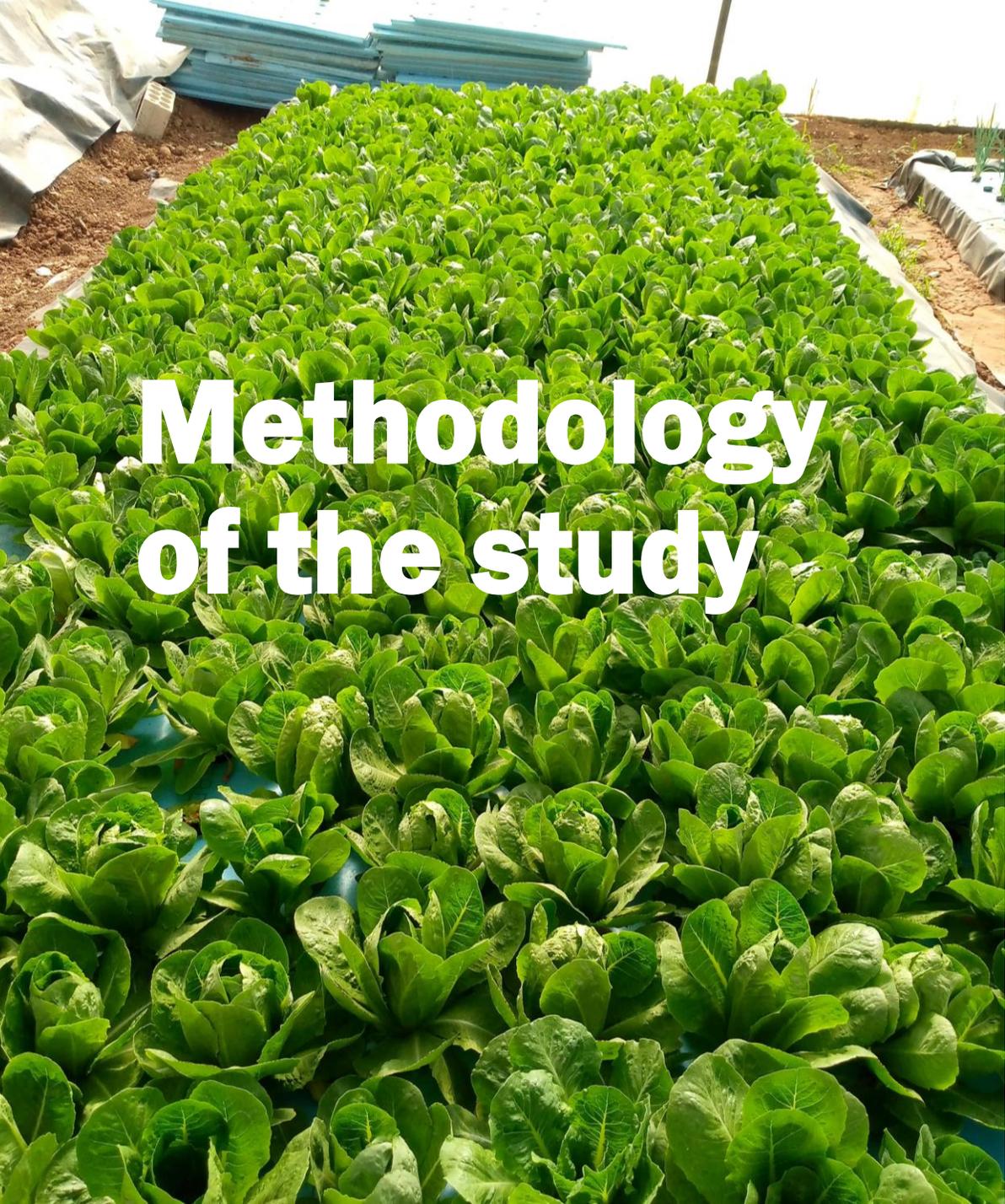
Sample

A purposive sampling method was used before conducting Key Informants Interviews (KIIs) with

- 15 implementing partners KIIs.
- 5 donor representatives KIIs.
- 4 national stakeholders KIIs involved in guidance of programming implemented under the JRP.

Planned outputs

- **Joint validation workshop**
- A comprehensive report map
- A circular economy toolkit
- An executive summary on the status of the circular economy in the humanitarian sector in Jordan



Methodology of the study

Limitations of the research

- The relative novelty of the topic influencing different level of knowledge about CE could have influenced the selection of main topics of conversation.
- The records of the KIs used for qualitative analysis were summaries of the discussions and did not include full transcripts. As a result, the reported findings should not be considered as direct quotes from the participants to the interviews.
- Due to nonresponse attrition, the assessment was not able to reach the initially planned target number of KIs. In order to provide an accurate picture, key-informant interviews were conducted until data saturation was reached.



Circular economy

Definitions

Humanitarian Sector in Jordan: programs, projects or actors registered with the Ministry of Planning and International Cooperation (MOPIC) who support the implementation of the JRP.

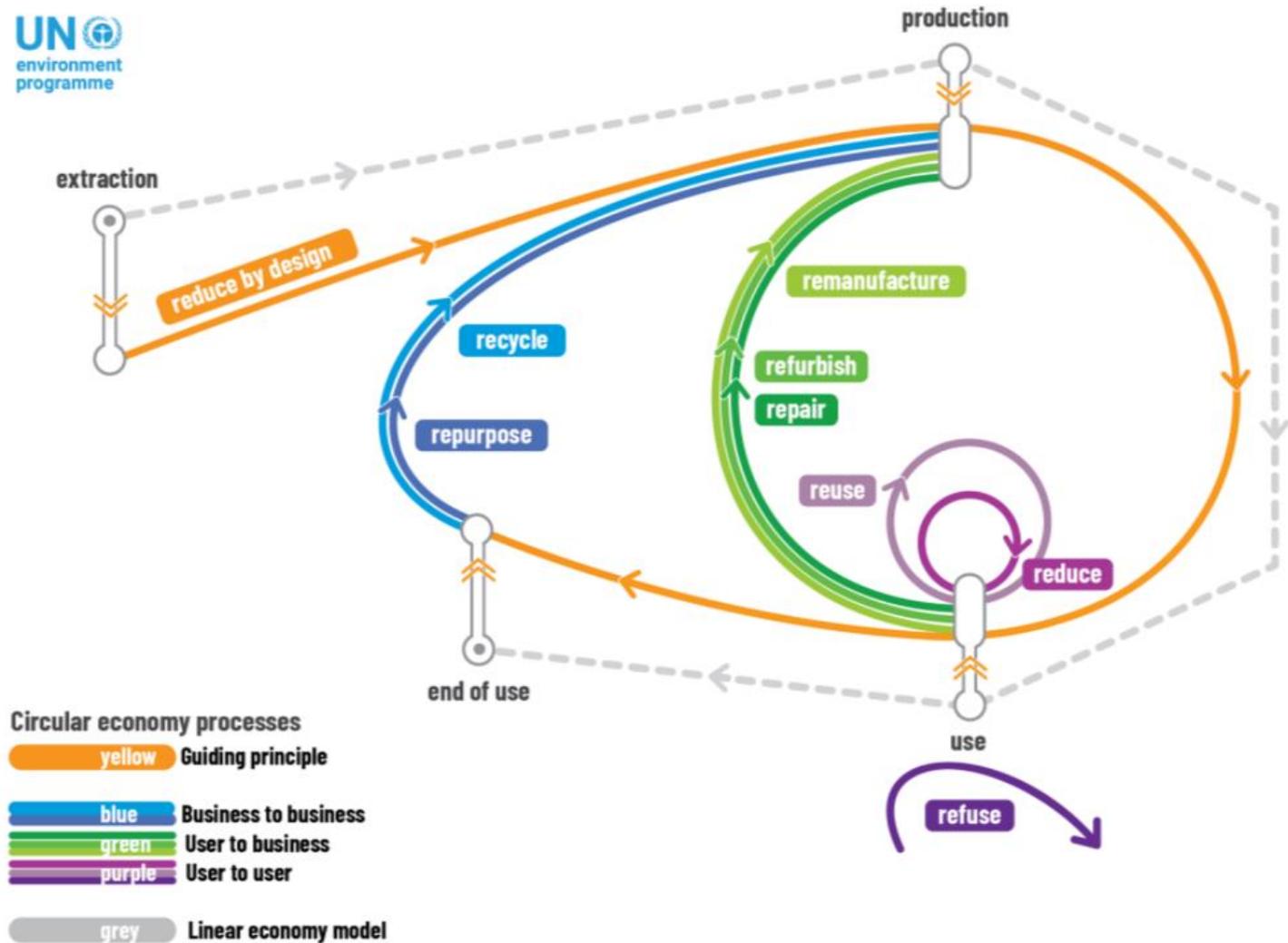
Programmes focused on Circular Economy: those programs implemented in support of the JRP by humanitarian actors: design out waste and pollution **and/or** keep products **and/or** materials in use or regenerate natural systems.

Circularity: process that aims to extract the largest utility use of products, components and materials. Ultimately, it aims to decouple the global economic development from finite resource consumption through engaging in a continuous positive development cycle that preserves and enhances natural capital, optimises resource yields, and minimises system risks by managing finite stocks and renewable flows.



Circular economy

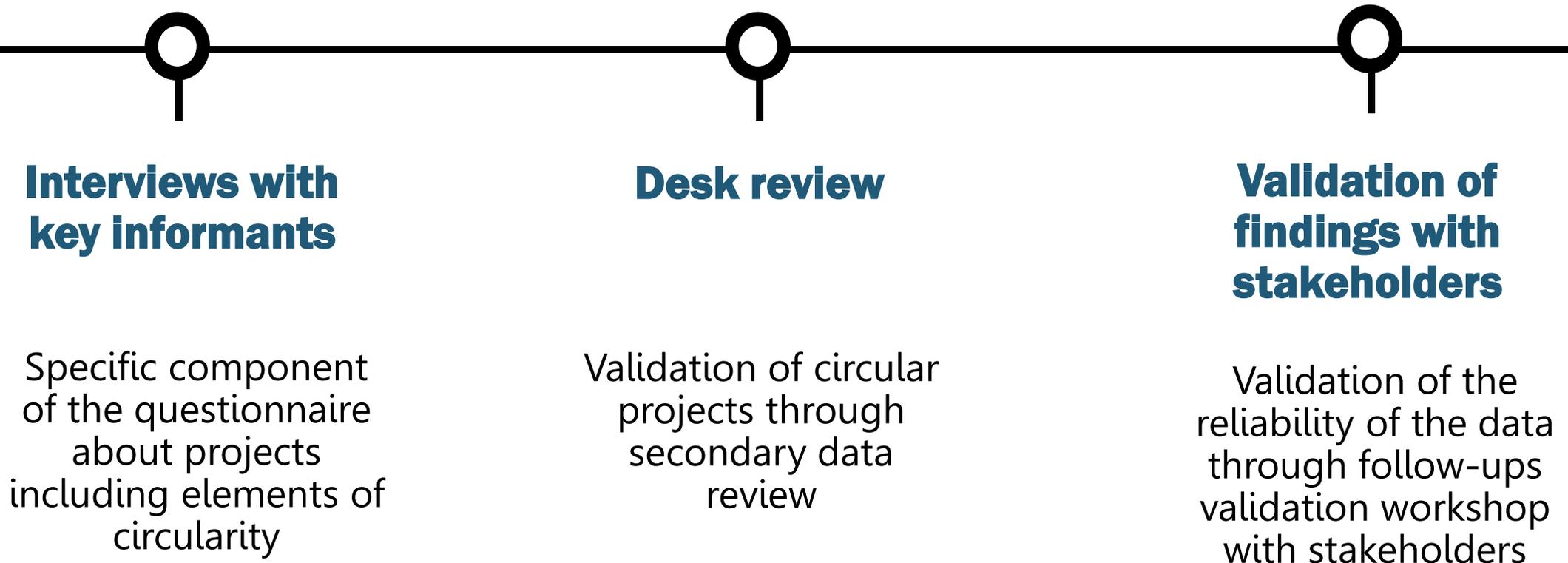
The Circular Economy process

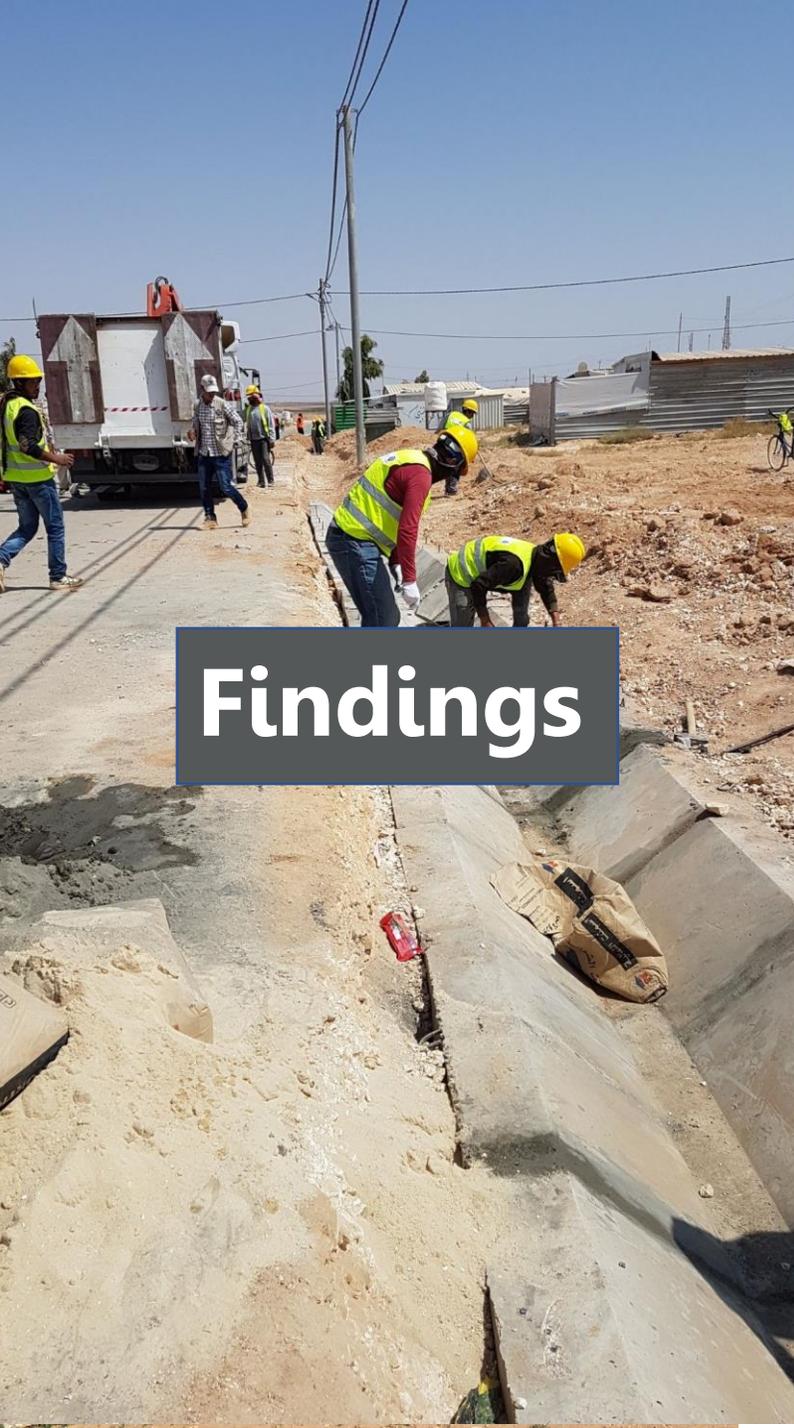




Findings

Programming mapping



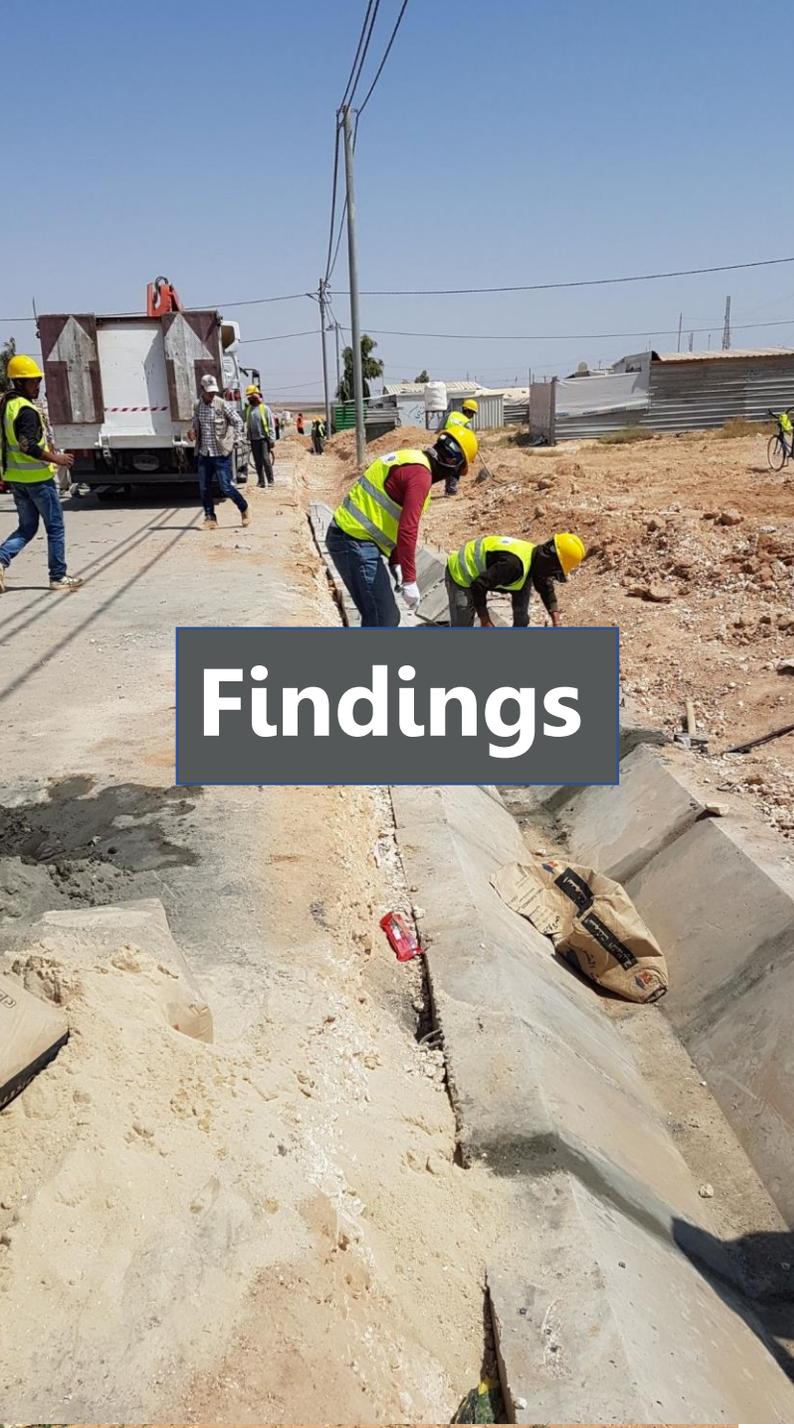


Findings

Programming mapping

Results

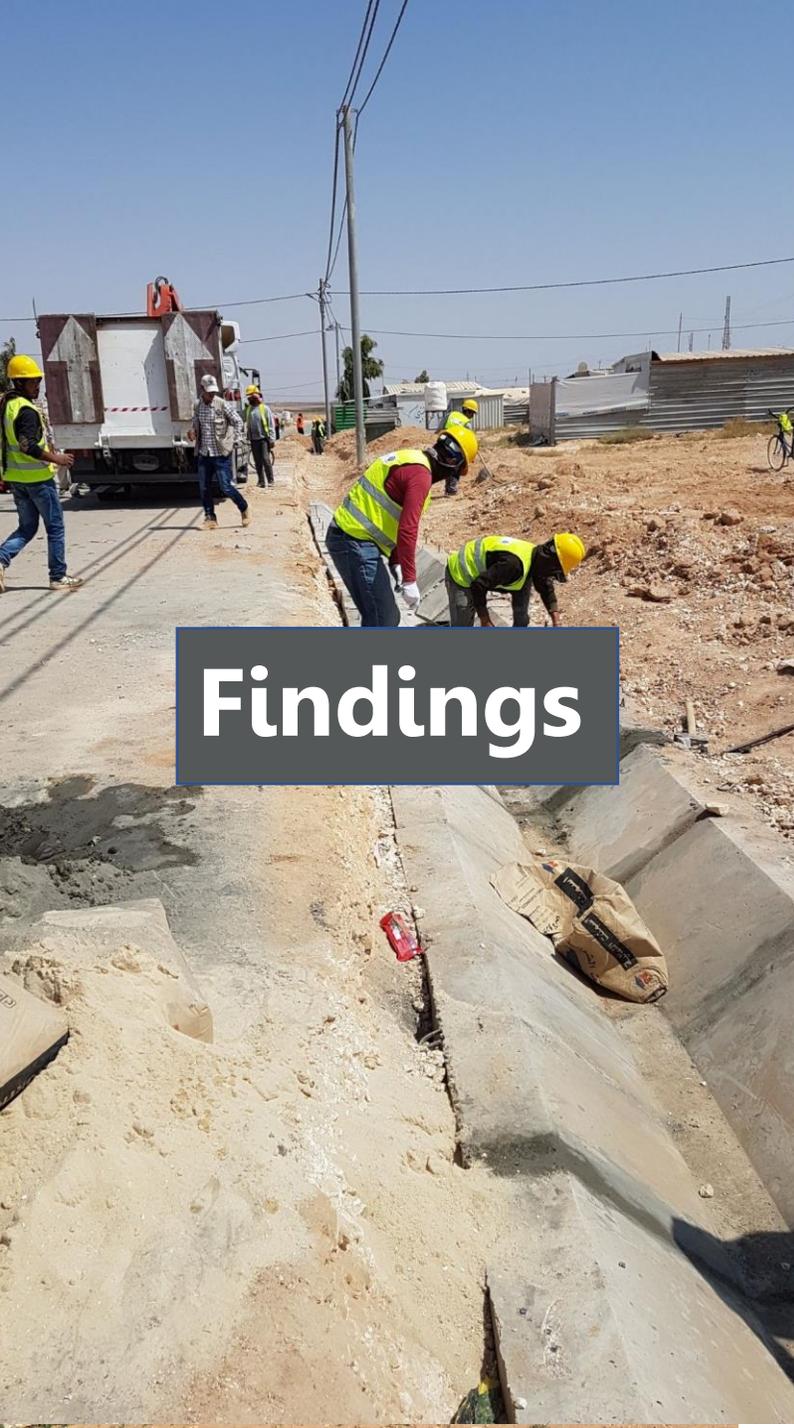
- **At least 41 humanitarian programs** which include one or more intentional elements that could be considered as circular.
- **Roughly equal share of projects implemented by a consortium** (41%, 17 out of 41), compared to projects implemented by a single organisation (59%, 24/41)
- Various success stories in the area of **creating community awareness** at household level about the benefits of environmental protection



Programming mapping (KIs and desk research)

Results

Elements of circularity	# of entries
Minimise waste and keep materials in use	25
Minimise waste	7
Keep materials in use	2
Regenerate natural systems	2
Regenerate natural systems and keep materials in use	2
Minimise waste and keep materials in use and regenerate natural systems	1
Keep materials in use and regenerate natural systems	1
Not assigned	1
Grand Total	41

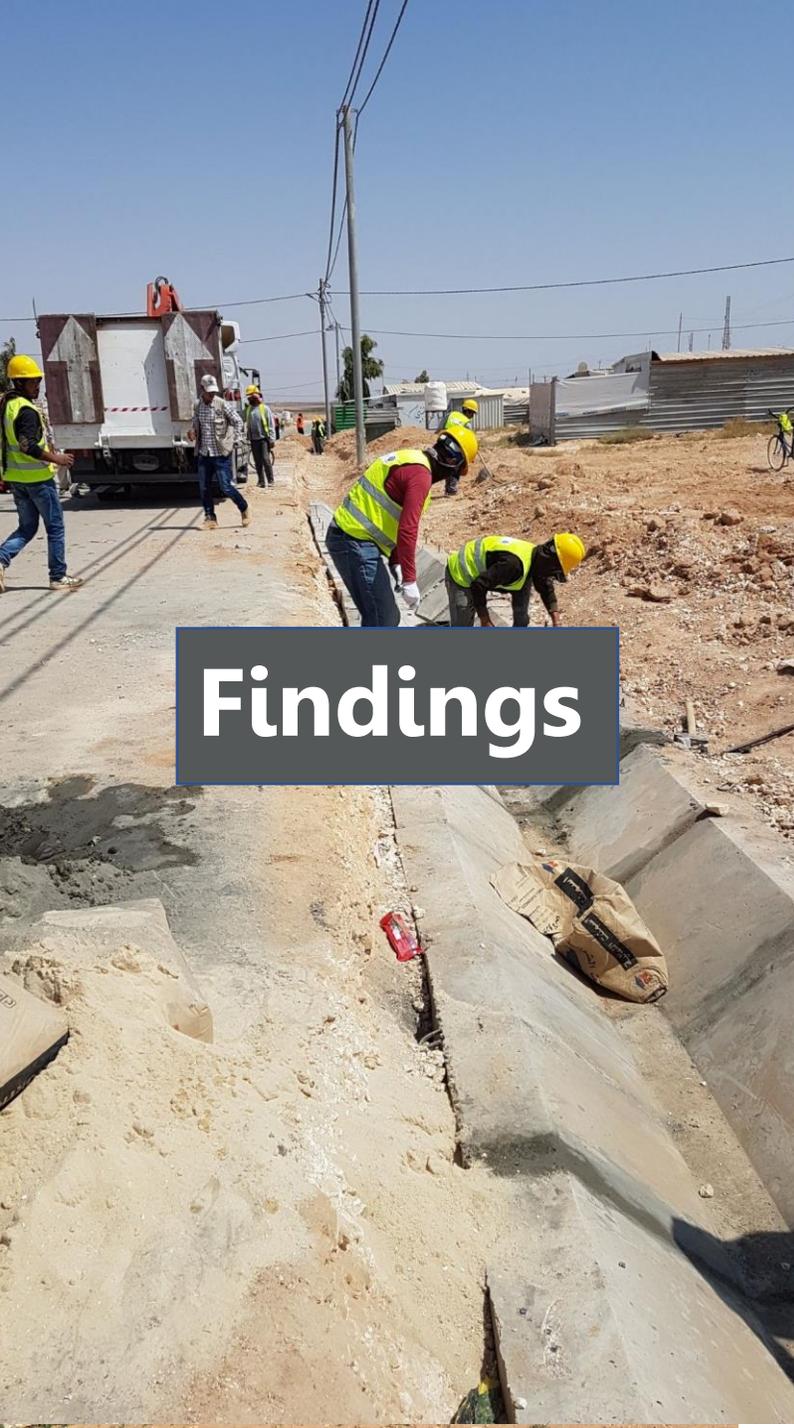


Findings

Impact of COVID-19

Results

- Movement restrictions and temporary suspension of several activities due to measures restricting spreading COVID-19 were the impact reported by the largest number of KIs (9 KIs).
- COVID-19 crisis had an impact over program implementation (5 KIs) or led to increases in project costs (4 KIs).
- The crisis increased the vulnerability of refugees and Jordanians. Consequently, funding towards income-earning activities were prioritised over environmental protection intervention (1KI).
- COVID-19 also increased the consumption of hygiene materials, which led to an increase in the production of waste (1 KI).
- Notably, more people started collecting trash to cope with limited access to usual livelihoods activities (1 KI).



Impact of COVID-19

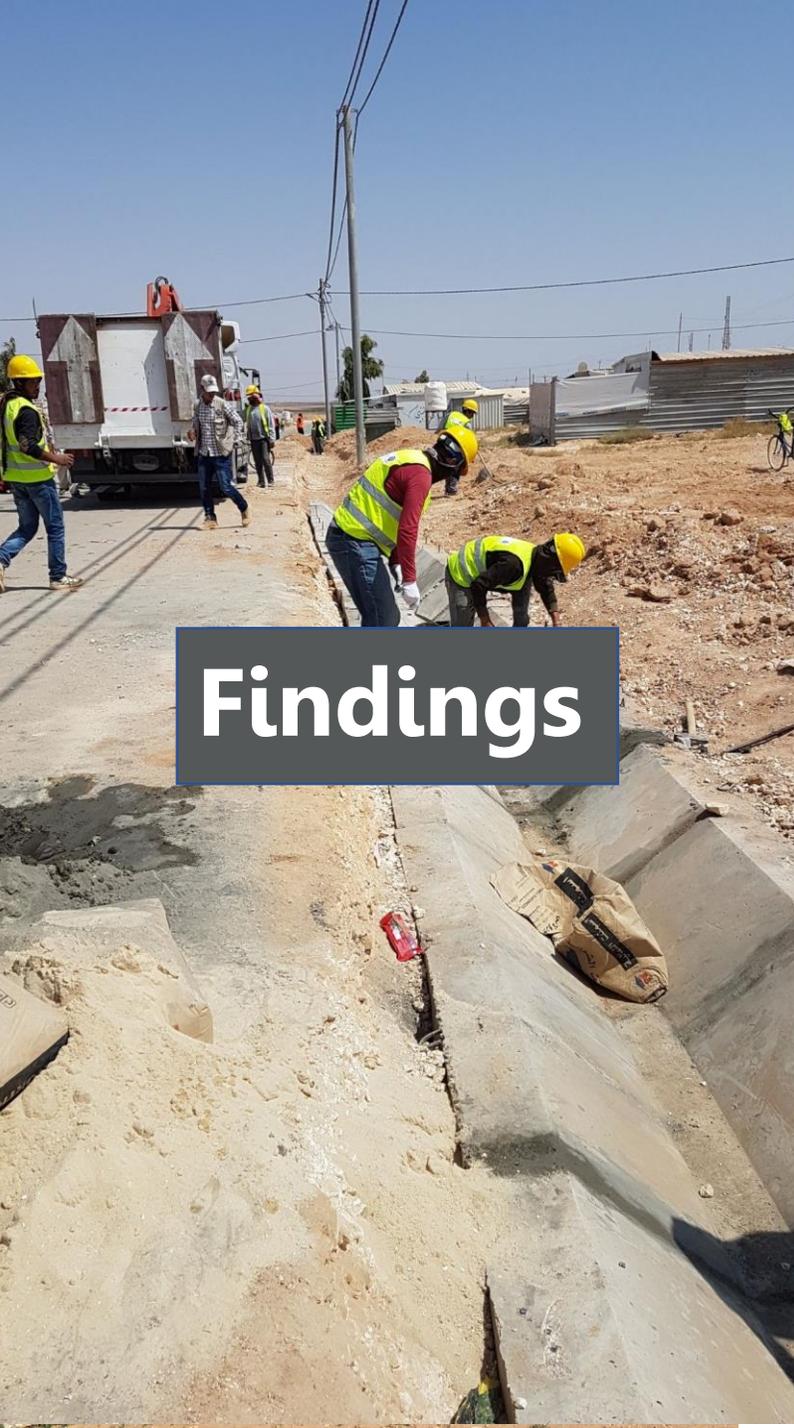
Results

Number of KIs reporting on the impact of COVID-19 on activities containing elements of circularity (five most reported barriers)

Reported impact of COVID-19	# of KII mentioning the topic
Decrease of activities due to movement restrictions	9
Changes in operations	5
Increase in project costs	4
Cessation of activities due to government restrictions	3
Increase in beneficiaries' vulnerability	3
Increased generation of waste	3
More concern about the environmental issues	3
Financial difficulties of the project	2
Less concern about environmental issues from beneficiaries	2

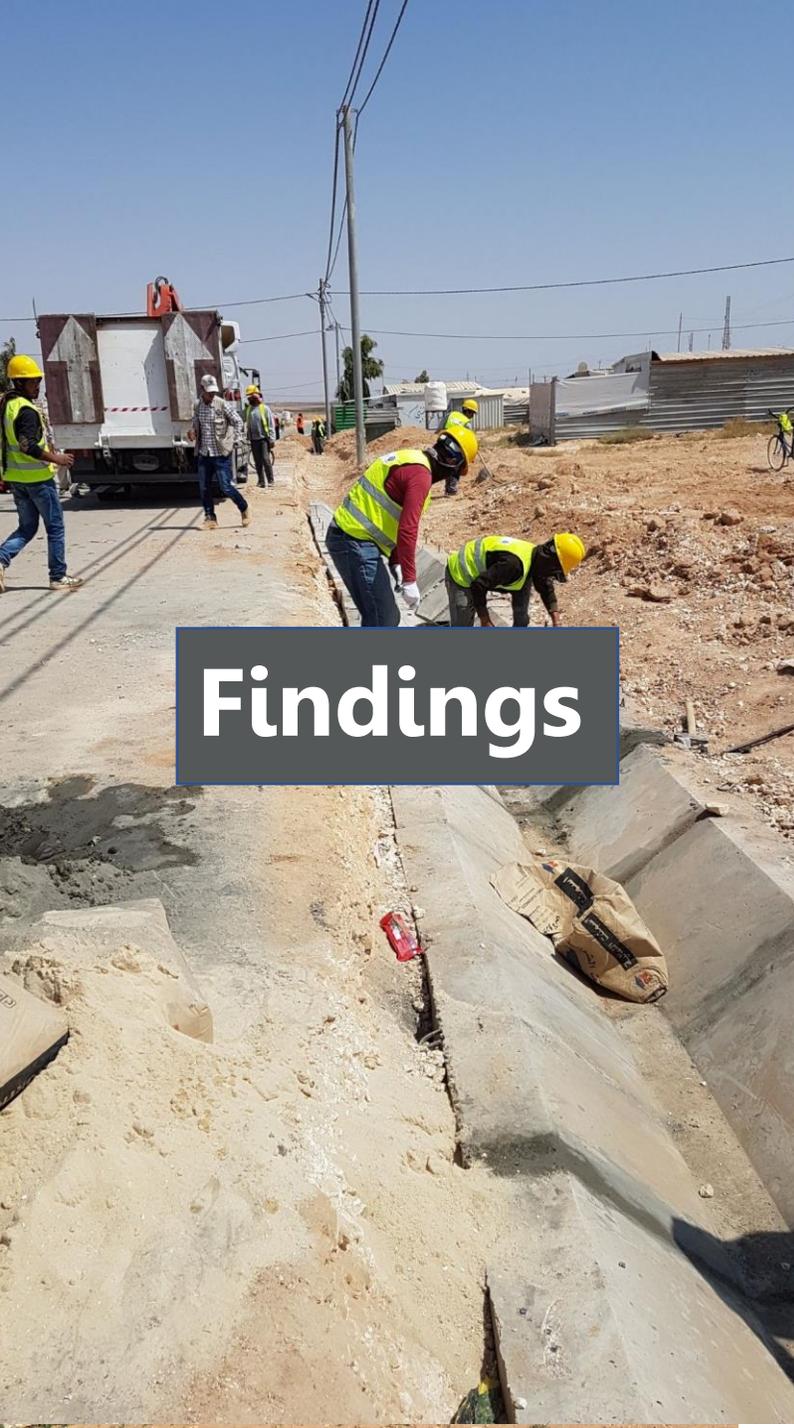
Circular economy in the humanitarian sector in Jordan

Overview



Findings

1. Interviews with key informants and desk review revealed that circular economy benefits the most when there is a high level of collaboration among stakeholders.
2. Not only for interventions involving beneficiaries, community support is key for circularity to grow.
3. Circular economy has a long-term return, therefore taking advantage of technology and people's skills at early stages could be beneficial.
4. Public policies that promote circular economy could help circularity take off at the initial stages of programming.
5. Initial stages of programming that involve circular economy could benefit from funding, whereas taking advantage of the local context could offset the need for large initial investments.

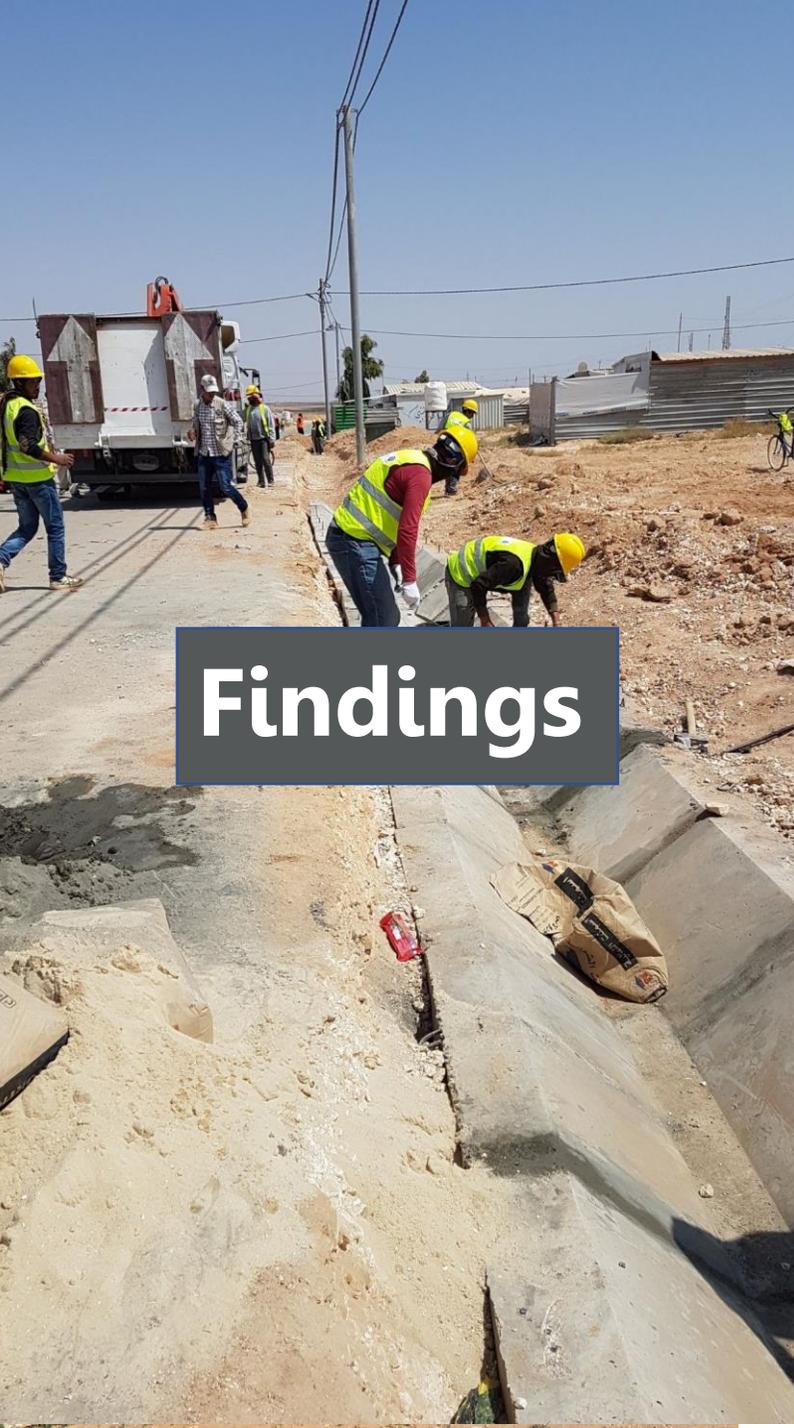


Findings

Challenges and opportunities in circular economy in Jordan

1. Circularity can benefit from higher level of collaboration between actors

- Circular economy requires a systemic approach and opportunity exists from **increasing community support** (5 KIs) and **higher coordination between humanitarian stakeholders** (4 KIs) in order for circular economy to grow
- Government's role is essential in **overseeing the policy implementation** (4KIs), while **donors can provide strategic guidance and funding for circular economy projects** (3 KIs)
- Success stories from projects containing circular elements were built on **community involvement**.

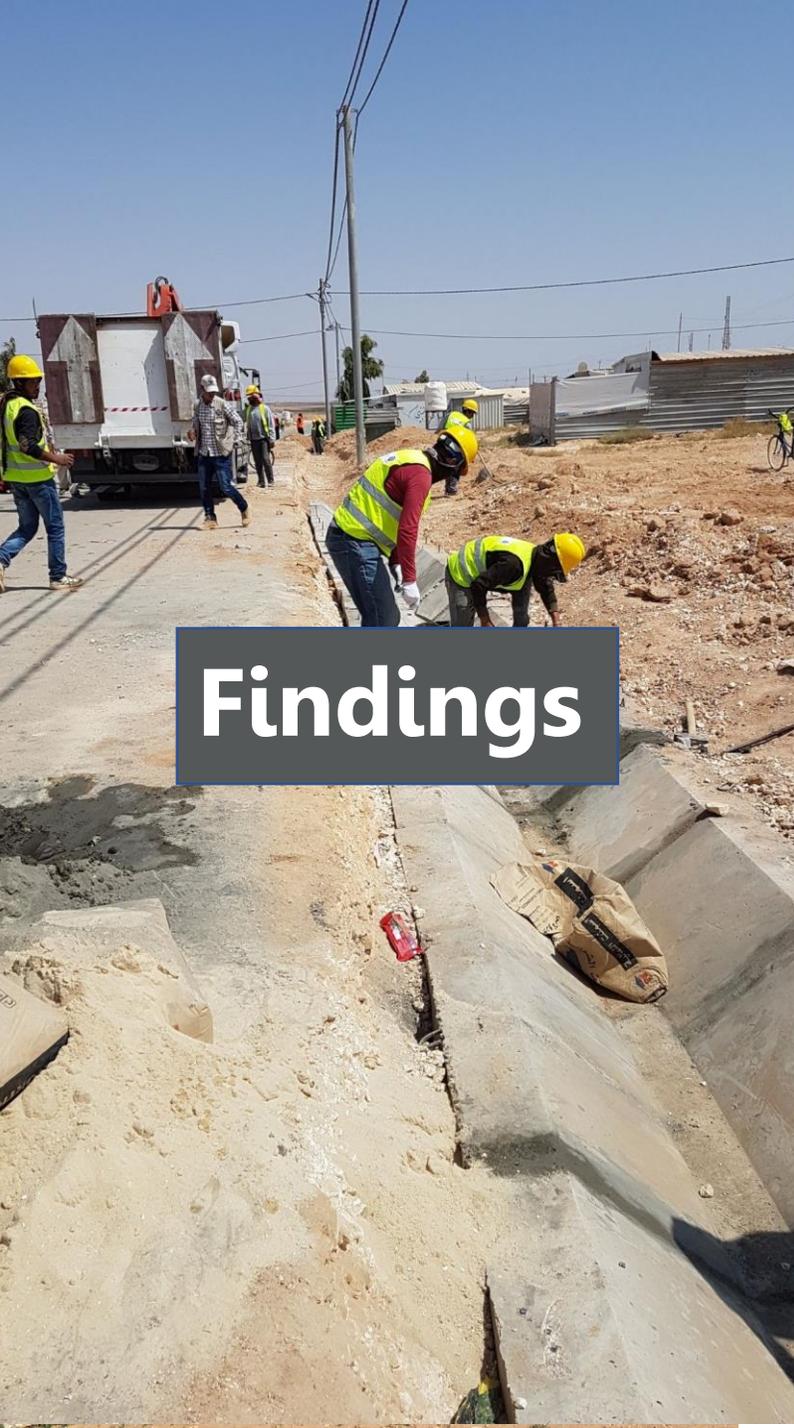


Findings

Challenges and opportunities in circular economy in Jordan

2. Ensuring community support

- Interviews with key-informants revealed that one of the success factors of the projects including circular elements was **the support from the community** (12 KIs).
- Circular projects in the area of valuation of solid-waste were reported to also benefit from support of donors (6KIs) and public actors (5 KIs) .
- Gaining community support often involves changing traditional practices. For instance, **using recycled waste-water in agriculture may be met with some level of reluctance, but once benefits are obvious, technology is embraced** (1KI) .

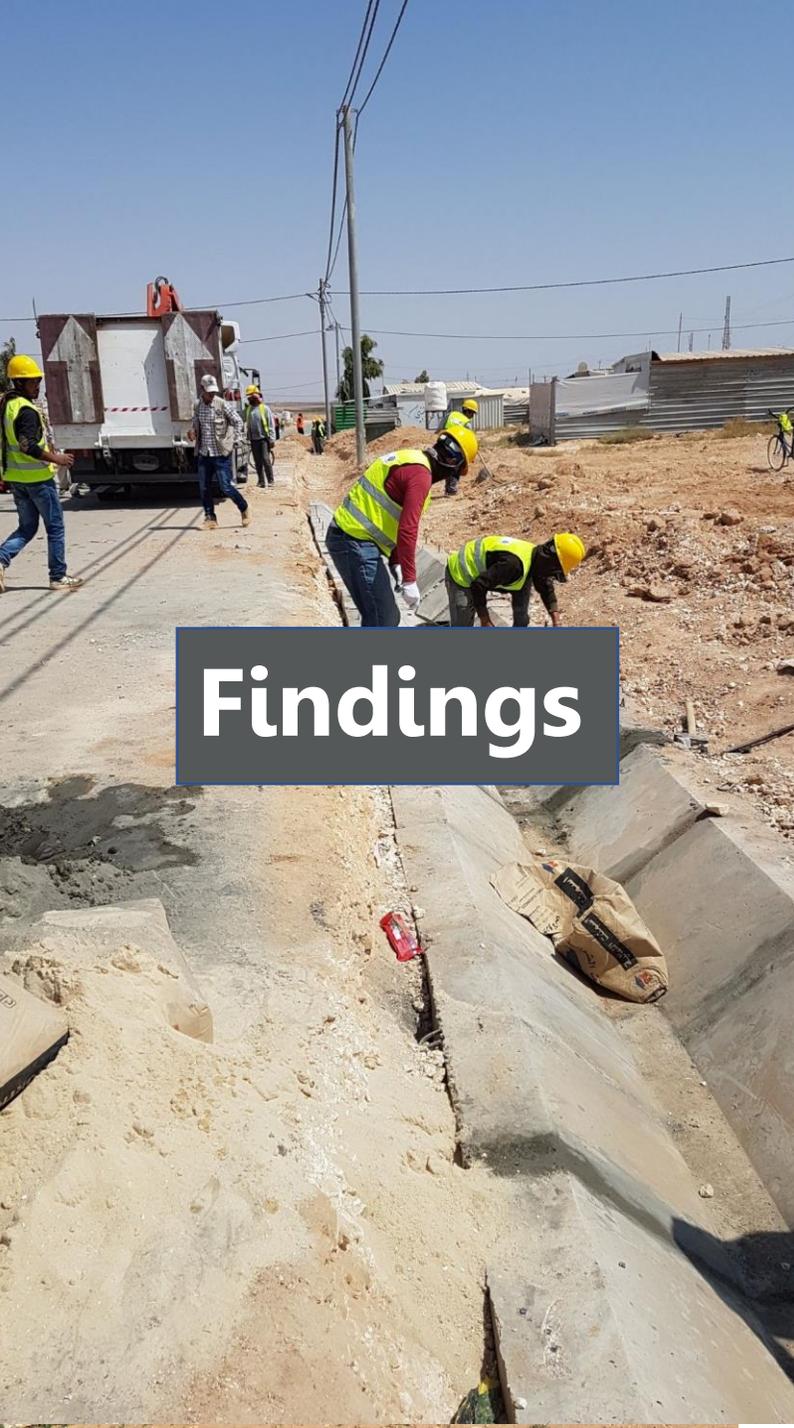


Findings

Challenges and opportunities in circular economy in Jordan

3. Growing capacity building and resilience

- **Endorsing new technologies (6 KIs)** to promote circularity was seen as an important area of improvement. The boost received from adopting circular economy is necessary to be sustained with investments in technology and infrastructure.
- **Findings revealed that there was a large need to take advantage of the local conditions and contextual learning (1KI).**
- **Long term resilience is achieved through investing in human resource and expertise in the area.** Key informants agreed on the importance of training, but training-only is not enough to build a resilient system (4 KIs).
- **Educational and research centers are key to developing circularity in Jordan (1 KI).**

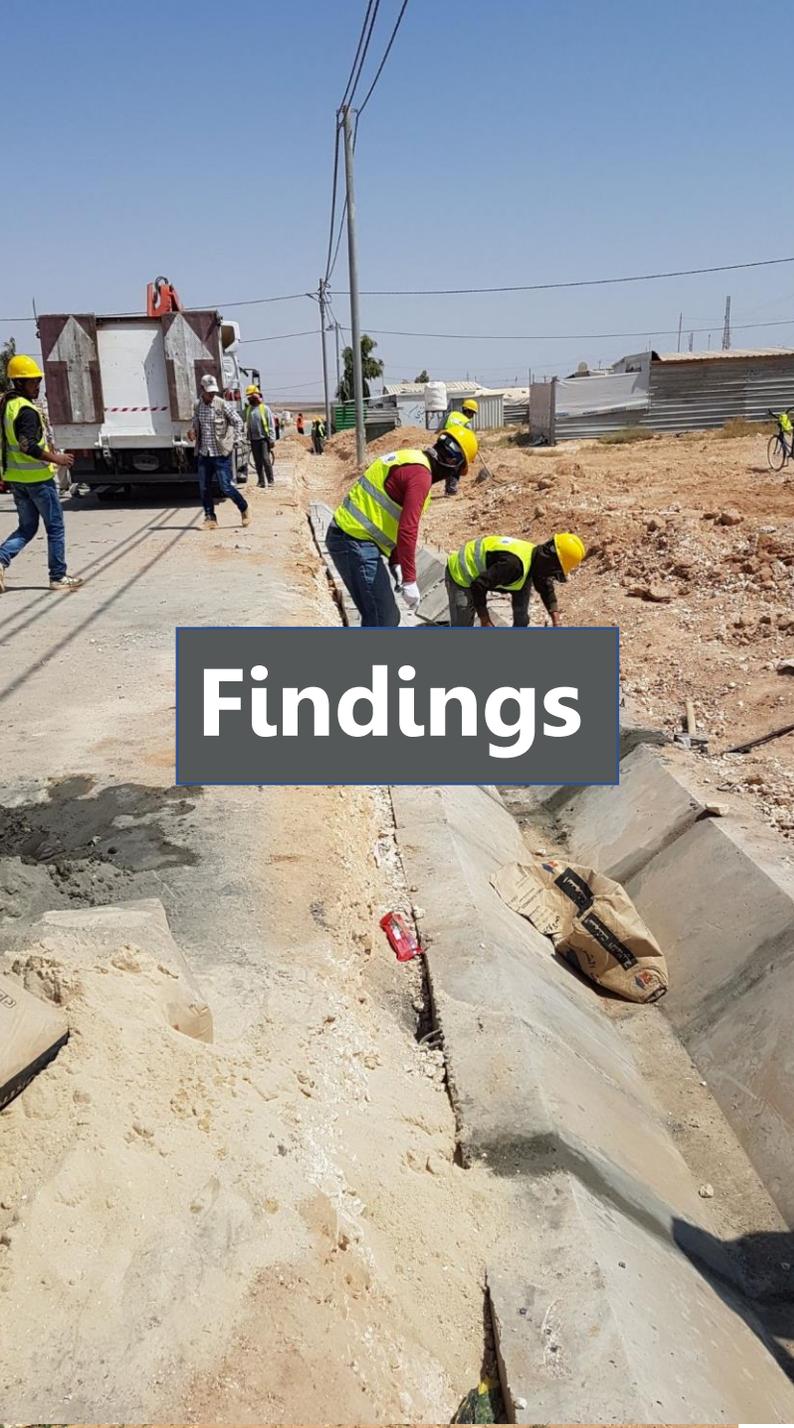


Findings

Challenges and opportunities in circular economy in Jordan

4. Supporting a thriving legal and administrative environment

- Key informants mentioned **the essential role the government** has in terms of sustaining programming that could include circular economy (5 KIs).
- **Improving horizontal coordination and avoiding duplication of responsibilities** were mentioned by 1 KI as key aspects in terms of overcoming the potential barriers in implementing circular economy at policy level.
- As mentioned during the interviews by some KIs, **donors also have a key role, ensuring strong handover planning of the existing key flagship projects to the local authorities.**
- There is a need of updating the current regulatory standards and guidelines for water reuse, beneficial use of biosolids and energy generation (1 KI).



Findings

Challenges and opportunities in circular economy in Jordan

5. Ensuring the financial sustainability of projects

- It was found that there was a **technology selection criteria** biased toward expensive technologies without considering all potential possibilities that better suit the local conditions.
- One KI mentioned that **there are major opportunities in terms of learning from success stories in the region in the area of SWM and not only.**
- Despite a relatively high cost of initial investment, **over time, the returns from including circularity in projects are high as it was mentioned by one KI.**
- While circularity is just one of the many approaches in the implementation of humanitarian projects, **donors could encourage circularity by providing opportunities for implementing organizations to include such elements in their programming (3KIs).**

An aerial photograph of a densely packed informal settlement, likely a township. The houses are built with corrugated metal sheets, some with satellite dishes on their roofs. The ground is dry and dusty. In the background, a vast, flat landscape extends to the horizon under a clear sky. A large, semi-transparent black rectangle is overlaid on the center of the image, containing the text 'Sector recommendations' in white, bold, sans-serif font.

Sector recommendations



Sector Selection

Recommendations

Perceptions or opinions of key informants interviewed for the assessment



Humanitarian Program Planning				
Public services		WASH	Economic empowerment	
Solid waste management	Energy	Water	Food security	Livelihoods
Donors				
National stakeholders				
Implementing partners				



Sector Selection

Sector suggestions

Humanitarian program planning

Overall

- **Consider material inputs and outputs**, as well as **how a program can contribute to keeping materials in use, designing out waste, and/or regenerating natural systems.**
- **Consider the long-term benefits** of further integrating sustainability in the humanitarian



Sector suggestions

Humanitarian program planning

Implementing partners

- **Continue integrating elements of circularity** within programmatic strategies through:
 - **mainstreaming circularity** in programmatic and/or organizational strategy
 - **the consideration of circularity** at the design and implementation phases.
- **Continue designing and implementing circular activities** in sectors relevant to the response through:
 - specific circular piloting
 - dedicated circular projects
- **Sign and commit to *the Climate and Environment Charter for Humanitarian Organizations*.**
- **Create further synergies and partnerships** with relevant stakeholders.



Humanitarian Programming

Sector suggestions

Humanitarian program planning

Donors

- **Continue integrating and promoting elements of circularity**
 - **Increasing the overall consideration of circularity** in internal and external strategy documents
 - **Tracking specific indicators related to circularity** at the program and organizational levels
 - **Considering cost/benefit ratios of implementing partners'** in relation to the medium- and longer-term expected gains in terms of circularity, including sustainability aspect
 - **Considering further funding scale-up circular projects** based on demonstrated results of successful pilots.



Humanitarian Programming

Sector suggestions

Humanitarian program planning

Donors

(cont.)

- Continue **encouraging multi-actor approaches** in the response
- Continue **acting as facilitators** and **key stakeholders** in a community of practices around the circular economy.
- Work with counterpart national stakeholders
- **Sign and commit** to *the Climate and Environment Charter for Humanitarian Organizations*.



Sector suggestions

Humanitarian program planning

National stakeholders

- **Further promote the integration of the circular economy approach, in connection to the Green Growth National Action Plan 2021-2025.**
- **Continue to act as key stakeholders in a community of practices around the circular economy in Jordan.**

**Humanitarian
Programming**



Sector suggestions

Introduction

The second section of the recommendations is articulated around the main JRP sectors where **existing circular initiatives and opportunities for circularity in Jordan have been identified.**

It should be noted that in a circular approach, **these can and should be read in an interconnected manner** (e.g., presence of economic opportunities through green jobs in the waste management sector; potential to reuse wastewater and / or biowaste in the agricultural sector through circular or regenerative approaches which would also contribute to increased economic empowerment and food security of beneficiary populations etc...).



Economic Empowerment

Sector suggestions

Economic Empowerment: Food Security/ Livelihoods

In a protracted crisis like the Syrian crisis in Jordan, it is necessary to consider how integrating elements of CE can increase the long-term sustainability of humanitarian projects.

To increase food security for vulnerable populations in a non-emergency while addressing the needs for economic opportunities and sustainable livelihoods for both Syrians and vulnerable Jordanians, **consider further investing in regenerative agriculture, agricultural livelihoods and green jobs.** This will help the direct objective of increasing food security, while also supporting livelihoods' creation and enhancement in the local market, in both rural and urban environment, in addition to contributing to the three aspects of circularity (regenerating natural systems, minimizing/ designing out waste and keeping products and materials in use).

Opportunities for circularity have been highlighted in the agricultural sector in Jordan which can be further deepened and expanded as it follows:



Sector suggestions

Economic Empowerment: Food Security/ Livelihoods

Implementing partners

- **Continue promoting successful circular and/or climate-smart practices in the agricultural sector).**

Such practices include notably:

- hydroponic farming, permaculture, azolla farming, beekeeping...
- proper recovery of yard and pruning waste produced in farms for compost and as mulch
- recovery and valorization of wastewater for agriculture (see WASH sector)
- **Continue supporting improved market access for farmers** implementing circular agricultural practices.
- **Continue providing seed grants** on integrated farm management practices.
- **Continue raising awareness** amongst farmers on the benefits of quality compost



Economic Empowerment

Sector suggestions

Economic Empowerment: Food Security/ Livelihoods

Donors

- Provide support in **scaling up successful pilot circular and regenerative agricultural activities** (such as described above).
- **Continue supporting circular and regenerative agricultural activities** which have proven relevant in the context of Jordan.
- **Consider investing in agricultural projects** which main objectives are **focused around circularity**.
- Continue funding **business development** and **marketing support**.



Economic Empowerment

Sector suggestions

Economic Empowerment: Food Security/ Livelihoods

National Stakeholders

- Encourage farmers to rely less on water intensive crops by **providing market incentives for regenerative agriculture.**
- Ensure the effective **implementation of Ministry of Agriculture regulations on harmful agricultural practices.**
- **Consider incentivising long-term leases** and other land-use policy adjustments.



Sector suggestions

WASH

Integrating elements of CE in the WASH sector can help beneficiaries meet their WASH needs while increasing the resource-efficiency by designing out waste and keeping materials in use from the project planning phase. This can be integrated at the HH level, as well as on a larger scale in camps or municipalities for example. Additionally, proper treatment of wastewater can regenerate natural systems by decreasing contamination of natural systems.



Sector suggestions

WASH

Implementing partners

- **Support greywater treatment and reuse systems for fodder and fruit crops.**
- **Continue promoting the installation and use of water saving devices** at household level.
- **Continue sensitising beneficiaries on good water conservation practices** at the HH level as well as farmers on water management, harvesting and reuse practices for cultivation, including innovative circular practices (see previous sector).



Sector suggestions

WASH

Donors

- **Consider further supporting greywater recycling and reuse systems** at the household, camp, and municipality levels (pilots and beyond).
- **Continue investing in biogas plants to transform bio-sludge waste into renewable energy and compost for agriculture** (pilots and beyond).



WASH

Sector suggestions

WASH

National stakeholders

- **Adjust government regulations and set up strong safety audit mechanisms** to encourage the safe use of treated wastewater for irrigation in agriculture beyond existing crops.
- **Adjust government regulations and set up a strong safety audit** to allow for treated sludge to be used as a fertilizer (compost).
- **Consider further supporting research and innovation for energy recovery from water and sludge**, considering the large amounts of energy consumed by wastewater treatment plants (WWTP).
- Investments in wastewater treatment should also consider the **opportunity to create green jobs** in both water treatment and water reuse post-treatment.



Public Services

Sector suggestions

Public services (Waste minimization and Energy)

Increasing CE initiatives in public services can **elevate the standard of living for refugees, contribute to the overall wellbeing** of the host community and **safeguard the environment**, all while creating new green jobs.



Public Services

Sector suggestions

Public services (Minimisation of waste and Energy)

Implementing partners

- Consider all relevant possibilities to further minimise and design out project-level waste at the project planning phase.
- If some waste is unavoidable (e.g., Food packaging in food assistance projects), **ensure a plan is in place to manage and recover it as much as possible**, including looking at circularity opportunities.
- **Partner with other local stakeholders who are able to either keep materials in use or repurpose it.**
- Help **connect upcycling initiatives to designers and buyers** in order to boost the marketability of upcycled products.



Public Services

Sector suggestions

Public services (Minimisation of waste and Energy)

Implementing partners

(cont.)

- Continue **promoting improved household and business-level waste minimization** and **segregation** through sensitization and capacity building.
- **Continue providing beneficiaries with skills** allowing them to access green jobs relevant to Jordan
- **Continue investigating opportunities** to generate renewable energy from waste.



Public Services

Sector suggestions

Public services (Minimisation of waste and Energy)

Donors

- **Support implementing actors in designing out waste in the humanitarian response** from the program planning phase and throughout all following project cycle phases.
- In a transition towards more green jobs, **consider further supporting income generating green jobs** dealing with valuable waste outputs such as in the following fields: composting, upcycling, renewable energy from biogas plants.
- **Consider supporting the installation of small scale biodigesters** in farms or cooperatives as relevant and/or supporting linkages between farmers and existing composting stations.
- **Continue investing in schemes and plants transforming waste into compost and/or energy**, which will contribute to decreasing what winds up in the landfill and transform waste into a valuable material.



Public Services

Sector suggestions

Public services (Minimisation of waste and Energy)

Donors

(cont.)

- **Support international experience sharing** by facilitating government study visits to other countries within the region and vice-versa.
- **Invest in waste banks or storage spaces** to help scaling up small and medium-sized recovery initiatives.
- **Continue supporting government initiatives to setup sorting centers closer to municipal areas or transfer stations** that are more easily accessible which will optimize transportation costs, minimize pollution and support the efforts of diverting recoverable waste away from landfills



Public Services

Sector suggestions

Public services (Minimisation of waste and Energy)

National stakeholders

- **Encourage partnerships between private waste recovery actors and municipalities.**
- **Continue to optimize transportation costs** by diverting recoverable waste away from landfills through the setup of sorting centers closer to municipal areas or transfer stations.
- **Continue to conduct waste audits in Jordanian municipalities and institutionalize these audits.**



Public Services

Sector suggestions

Public services (Minimisation of waste and Energy)

National stakeholders

(cont.)

- **Continue the process of establishing a dedicated SWM unit within municipalities, to improve budgeting and more efficient allocation of resources for MSWM.**
- **Continue following up on the implementation of the Jordan National Energy Strategy including employment outcomes and development of the grid, to symbiotically increase its capacity to capitalize on inputs from green energy while supporting producers (such as biogas plants) to use treated sludge for renewable energy.**



Q&A

Discussion under *Chatham House Rule*: anyone who comes to a meeting is free to use information from the discussion but is not allowed to reveal who made any particular comment.



Thank you for your attention!



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