Making the Local Business Case for Adopting Circular Economy Approaches
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MARKET AND CIRCULAR BASED APPROACHES TO ACHIEVING ENVIRONMENTALLY SUSTAINABLE PROGRAMS

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Joint Initiative for Sustainable Humanitarian Packaging Waste Management
The Joint Initiative (JI)

20+ humanitarian actors working together to make packaging in humanitarian assistance more environmentally and socially responsible.

- Reducing the volume of humanitarian packaging waste
- Informing and encouraging the use of sustainable alternatives (recycled materials; avoiding conventional plastics)
- Improving recycling and repurposing in humanitarian contexts
The Joint Initiative: Aim & Approach

Minimizing the environmental impact of packaging, and turning it into opportunities

➔ Circular economy thinking
➔ Improving coordination
➔ Changing the narrative to opportunities
➔ Being good environmental stewards
➔ Both ‘bottom up’ and ‘top-down’
➔ Raising awareness

Charting our path collaboratively
Multi-Donor Policy Landscape Analysis and Coordination

Aim: To understand how humanitarian donors currently address issues of environmental mainstreaming in humanitarian action and support harmonization of green and sustainable supply chain initiatives.

Key Takeaways –

- Balance generic approaches and provide specific, prescriptive guidance
- Capitalize on significant interest in greening and harmonizing approaches
- Consider how to address additional costs and human resources required for greening operations

Policy and Advocacy Progress –
JI Activities

Policy and advocacy
- Supply chain policy landscape analyzed & standardized & advocacy conducted
- Led by USAID & UNEP/OCHA JEU

Data and evidence
- Increased evidence base of packaging to inform the full lifecycle
- Led by WFP & USAID

Procurement
- Improve & standardize procurement specifications through guidance/tools
- Led by DRC, USAID, IOM

Design, production, distribution
- Improvements to minimize plastic and reduce environmental impact
- Led by USAID, Academic Partners

End of life
- Strengthened locally sustainable EOL waste mgmt through partnerships and better access to tools & data
- Led by WFP, UNEP/OCHA JEU, USAID
Looking Upstream AND Downstream!

Credit: Environmental Management Centre (EMC) Pvt. Ltd.
Packaging & Procurement
Packaging derived from sustainable materials (i.e., bio-based, recycled content) - such as:

- cardboard boxes: recyclable, unbleached, not laminated
- plastic shrink wrap and strapping: clear bio-based or compostable stretch-wrap and bio-based banding straps
- ink: solvent-based indelible

So long as the integrity of the commodity is guaranteed, other criteria include:

- No single use plastic wrapping around individual NFIs unless essential for quality/sterility
- Reduce and optimize secondary and tertiary packaging of NFIs
- Optimize packaging, palletizing and loadability of transport units
- Use of natural colors (no dyes)
- Packaging with a second-life purpose
Optimizing and Reducing Packaging

*Example*: Reconfigured pallets of Plastic Sheeting
Assessing Possibilities for Eco-Friendly Packaging

**Nutrition Product Sachets**
- Industry has tested biodegradable and bio-compostable options
  - Incompatible with FSQ needs and $$
- Producers exploring alternative solutions and options to boost recyclability

**Shrink Wrap**
- Have tested biodegradable SW option at BHA Miami Warehouse
- Market continues work to develop stronger, more durable material
- Keeping tabs on private sector R&D progress
End of Packaging Life Management, Reuse, & Recycling
End of Packaging Life
Upcycling
Recycling

Mapping recycling capabilities and private sector footprint across key geographies –

- Completed: Antigua, Bangladesh, Ethiopia, Haiti, Kenya, Madagascar, Niger, Senegal
- Ongoing/planned: Afghanistan, Burkina Faso, Cameroon, Liberia, Syria, Ukraine, and Yemen

Need for more robust stocktaking of informal sector and entrepreneurial efforts to recycle/repurpose

Important to periodically update as landscape changes
Private Sector Landscape Assessment in Ethiopia and Kenya

- Geographic scope:
  - Ethiopia - for highly active informal economy
  - Kenya - for burgeoning ecosystem of recycling/WM enterprises

- Considered range of PS actors:
  - For Profit - Unassisted (majority)
  - For Profit - Assisted
  - Public-Private Partnership
  - Non-Profit Driven
  - Other Government-Funded Entities

- Examined contextual challenges and associated opportunities to connect private sector with humanitarian operations

- Provided recommendations for BHA and HAOs
Core Private Sector Research Questions

In regards to humanitarian packaging waste management –

• What is the market demand?
• What opportunities to manage and reuse these materials exist?
• What companies are already working on waste management & where?
• What gaps or challenges exist for the private sector?
• What lessons learned or best practices currently exist?
• What are opportunities for greater collaboration across the sector?
Overarching Challenges for Private Sector

- Markets
- Taxation and Regulation
- Labor
- Supply and Collection
- Transportation
- Red Tape

Ethiopia waste material exchange network

“Min Alesh Tera” recyclable waste collection center

Credit: UNDP/Ethiopia Accelerator Lab

Credit: Resonance/Fasil Reta
Opportunities for PS to Engage in Humanitarian WM

➔ Transport waste for end-of-life management
➔ Store materials for reuse and recycling
➔ Invest in local infrastructure
➔ Connect actors, including informal workers, to market access
➔ Engage in advocacy around sound waste management practices

Short-Term Recommendations for BHA & HAOs

❏ Institute internal waste management procedures for better sorting and tracking
❏ Investigate options for aggregating waste, utilizing reverse logistics, and introducing technologies that create logistics efficiencies
❏ Increase private sector participation, collaboration, and input into policies and end-of-life solutions
BHA & MIT Lincoln Laboratory Recycling Concept

BHA/MIT LL
Solar Powered Recycling Concepts for Pilot Operations

- Containerized Recycling Facility
  - Limited site preparation
  - Employs community
  - Powers community assets

- Mobile Recycling Truck
  - Travels to communities
  - Densification operation
  - Transports recycled product

- Small Recycling Facility
  - Scalable operations
  - Employs community
  - Powers community assets

Solar Powered Baler Prototype

- Flexible solar panels
- Baler for waste densification
- Power conditioning eq.
- 100 bags
- 300 bag bale
- Batteries charged by Solar Power

Credit: MIT Lincoln Lab/John Aldridge
CRS Recycling Program in Madagascar

• CRS Development Food Security Program
  – Connected with 3 youth groups that expressed desire to conduct WM and WASH activities

• Private sector assessment completed
  – Identified mix of industrial recycling companies and upcycling start-ups

• Community “competition” to collect discarded waste and aggregate recyclable materials
  – Approx. 6 tons collected since October
  – Received training on sorting techniques

• BHA/MIT LL to deploy baler unit to Beloha in early 2023
THANK YOU(!)
for your interest, attention, and insight.

Questions, feedback, other points for discussion?

Contact Us!

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Making the local business case for adopting circular economy approaches

Recycling in Jordan
Recycling in Jordan Activity
Towards a more competitive recycling sector in Amman
Recycling in Jordan

Current Situation

- **3200 TONS**
  Waste received daily in the landfill

- **5% ANNUALLY**
  Waste generation rate in Amman is climbing

- **7% RECYCLING**
  Current estimated recycling rate in Amman
Recycling in Jordan
Commercial Recycling in Amman

- 99K establishments
  Commercial waste generators in Amman
- 682 tons
  Waste production per day
- 89 tons
  Recycled waste per day
Recycling in Jordan Activity

Major objective
Increased Commercial Sector Utilization of Recycling Services in Amman
Recycling in Jordan
Five-year Selected Project Results

116 TONS/DAY
Waste diverted from the landfill by the private sector

2500 ESTABLISHMENTS
Commercial waste generators using recycling services

250 PRIVATE SECTOR
Improved practices or technologies
Recycling in Jordan

Five-year Selected Project Results

800 JOBS
Number of full-time equivalent jobs created

1800 WASTE PICKERS
Informal pickers with increased access to resources

5M USD
Private sector leveraged investment
Market Systems Development

SUPPORTING FUNCTIONS
- Infrastructure
- Information
- Skills & technology
- Related services

RULES
- Standards
- Regulations
- Informal rules & norms
- Laws

Core

Demand

Supply

Private Sector
Membership org.
Informal network
Government
Non-governmental org.
Overall Implementation Approach

Market Systems Development

Partnership with Private Sector, NGOs and CSOs

Recycling in Jordan Activity

Partnership with Ministry of Environment and Greater Amman Municipality

Behavior Change Communications

Gender and Social Inclusion
Market System Analysis (prioritization)

- Prioritized Sectors
  - Hotels
  - Restaurants & Cafes
  - Shopping Malls
  - Hypermarkets

- Prioritized Waste Streams
  - Paper & Cardboards
  - Plastics
  - Metals
  - Organics
Market System Analysis (value chain)

Producers

- Waste Generation
- Awareness
- Lack of Linkages

Collection

- Business Model
- Technical Knowledge
- Integration / Formalization

Sorting

- Solid Waste Management Planning
- Business Skills and Planning

Aggregation

- Law Implementation
- Export Rules
- Export Taxes

Processing

- Access to recyclables

Manufacture

- Export

Export

- Export Rules
- Export Taxes

Law Implementation

- Technical Knowledge
- Business Skills and Planning

Solid Waste Management Planning

Integration / Formalization

Access to recyclables

Business Model

Business Skills and Planning

Supply Side

Demand Side

Informal Network

Enabling Environment

Lack of Linkages

Producers

Law Implementation

Export Rules

Export Taxes

Solid Waste Management Planning

Integration / Formalization

Access to recyclables

Business Model

Business Skills and Planning

Supply Side

Demand Side

Informal Network

Enabling Environment

Lack of Linkages

Producers
Project Objectives

- Increase commercial sector utilization of recycling services

1. Improve and Expand Private Sector Recycling Market
2. Increase Demand and Utilization of Recycling Services with Amman's Commercial Sector
3. Transform Informal Waste Workers and Integrate them within Waste Management
4. Improve Business Enabling Environment for Recycling Services & Material Markets
Recycling in Jordan Activity

Supply side: Partnerships with service providers to improve profitability and expand waste management and recycling services
Small & Growing Businesses Training Program

- Limited capacities and lack of business skills
- SGB program aimed to:
  - improve market understanding
  - enhance the value proposition
  - develop effective service promotion
  - increase the performance and profitability
- Training curricula with GESI integration
- Partnerships with local host organizations in the implementation for sustainability
- 48 participants (service providers across the value chain)
- Developed growth plans witnessed improvements in knowledge and skills
Firm-level Support

• Technical assistance focused on the business areas/domains that are prohibiting business growth
  – improving the supply chain, linkages, & relationships
  – expand services and capacity to handle more clients

• A result-based incentive scheme was developed to encourage recyclers increasing volumes and types of recovered recyclables and expanding their clientele base.

• A special activity fund (SAF) mechanics was put in place to catalyze finance for infrastructure and support offsetting some risks associated with recycling business/service expansion
Creating Value Chain Linkages

• The First Recycling Services Directory was developed and disseminated as a tool to create and foster business linkages and the availability/access to market information.

• Digital and printed-copies (Nos. 1500) [including more than 100 market actors from marginalized groups, youth and women] were produced and disseminated to relevant stakeholders in the sector.
Recycling in Jordan Activity

Demand side: Engaging the commercial sector to adapt the 3Rs practices
Market System for Waste Management Plans

- WMPs are mandated under the Waste Management Framework Law
- Policy tool (instructions) along with guidelines and templates for WMPs’ preparations in collaboration with MOENV
- Awareness raising session on the new Law & promoting the 3Rs practices
- Guidebook and interactive training program for waste generators in partnership with business associations
- Training to increase private sector capacity and readiness to deliver WMPs development services
Recycling Value Propositions

- Piloting recycling interventions to demonstrate the viability of new recycling business models

- Showcasing recycling pilot results to service providers and waste generators to endorse the benefits from adopting recycling practices

- Improving the value propositions of the SPs by offering new integrated solutions and bundling sets of services such as waste collection, separation at source, recyclables collection, SWM plans, waste composition analysis, periodical reporting, and/or training
Awareness & Behavior Change

- Stakeholder engagement to identify levels of recycling knowledge, misconceptions and information gaps through:
  - Conducting sector-based awareness raising sessions
  - Developing and testing change management interventions to validate the recycling business case such as separation at source practices
  - Working with leader business associations and private sector entities to disseminate gender sensitive Information, Education and Communication (IEC) materials, as well as recycling templates, tools and recycling models with proven success
  - Increasing demand for private recycling services by educating and raising awareness among commercial waste generators and addressing information gaps

### WHY YOU SHOULD RECYLE ŠOCIAL MÉDIA CAMPAIGN

#### INSIGHTS OF SOCIAL MEDIA POSTS

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#### INSIGHTS OF #HASHTAG AND QR CODE

- 5.6 million reach
- 504 interactions
- 458 likes
- 233 mentions (including social and web)
- 40 unique shares
- 4620 QR Code scans (2614 unique scans)
Recycling in Jordan Activity

Informal sector transformation
Informal Sector Transformation

Building Capacity of Informal Sector

- Social sigma & accessibility to recyclable material
- GESI considerations
- Waste pickers’ training and certification program (8 modules)
- Partnerships with local NGOs
- 400 trainees including 45 females
- Survey on WPs’ livelihoods

Recognition/Integration-Model

- Formalization & legal recognition
- Municipal recognition through GAM’s temporary work permits (new regulations)
- Waste pickers engagement in the Recycling Banks concept
- Waste Pickers contribution to the Extended Producer Responsibility (EPR) principle
Recycling in Jordan Activity

Enabling Environment
Enabling Environment

Legislative frameworks

- Strengthen national regulatory policy and enforcement for SWM
- Improve GAM engagement with private sector recyclers and waste generators
- Continuous coordination with other Ministries and Development Agencies on Circular Economy

Policy advocacy

- Promoting domestic recycling sector through tax and trade incentives
- Facilitate the dialogue between the private sector and official authorities
- Organize roundtable discussions to address recycling market challenges
Recycling Banks Concept

• A new and innovative solution for the municipal waste management system
• The concept promotes waste separation-at-the-source activities and offers market-based incentives for clean recyclables
• Recycling banks would be a tool to integrate trained and certified informal actors into formal activities that are recognized by the municipality
• Private sector will be engaged in the operations of the recycling banks
• Joint cooperation with GAM to pilot the concept at two locations within Amman
Reflections

• Partnerships with business associations are fundamental to establish reach and impact.
• SP’s provide different services/products across the value chains with different business models (one size does not fit all).
• Municipal recognition schemes are more acceptable by certified and trained waste pickers than formalized (registered) systems.
• Legislative process takes time and involve multiple stakeholders; affecting practical implementation.
• Lack of law enforcement has not encouraged private sector engagement in waste management planning.
Thank You
Links

- USAID Climate Strategy (Apr 2022)
- USAID Local Capacity Strengthening Policy (Oct 2022)
- BHA Circular Economy Private Sector Landscape Assessment (Dec. 2022)
- Logs Cluster: Green Procurement in Humanitarian Logistics Workshop
- Logs Cluster: Waste Management and Reverse Logistics in the Humanitarian Context
- Joint Initiative newsletter archive, Joint Initiative LinkedIn, Joint Initiative website

- Recycling in Jordan Activity Market Systems Analysis
- Recycling in Jordan Activity Gender Analysis
- Barrier Analysis
- Behavior Change Communications Strategy
- Recycling Directory
THANK YOU FOR ATTENDING TODAY!

For more information, please contact info@marketlinks.org