





# **TIMOR-LESTE PLASTICS UPCYCLING ALLIANCE**

# Quarterly Report (Q1) Year 3

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### **Acronyms**

EU The European Union

GoTL Government of the Democratic Republic of Timor-Leste

ILO International Labour Organization

**KOICA** The Korea International Cooperation Agency

**MEYS** Ministry of Education Youth and Sports

MOU Memorandum of Understanding

MPW Ministry of Public Works

MTCI Ministry of Tourism Commerce and Industry

N/A Not Applicable

PET Polyethylene terephthalate **PSA** Plastics Solutions Alliance

**PUA** Plastic Upcycling Alliance

R4D Roads for Development

R&D Research and Development

SSE Secretary of State for the Environment

Terms of Reference **TORs** 

UNTL National University of Timor-Leste

**USAID** The United States Agency for International Development





### **Executive Summary**

The Plastics Upcycling Alliance (PUA) is a 3-year, \$2.25 million activity to sustainably address plastic waste management in Timor-Leste. PUA works to address both the challenge of excessive plastic waste and the potential to develop a competitive 'plastics circular economy' in Timor-Leste. Mercy Corps, in partnership with USAID, is implementing the activity with leveraged engagement from private sector partners Heineken and Caltech. The PUA is funded through a \$900,000 investment from USAID, with an additional \$1.35 million from private-sector investment.

The PUA seeks to catalyze the growth of a plastics recycling industry, creating and expanding valuable employment and entrepreneurship opportunities with the potential to improve the natural beauty of Timor-Leste and protect the health and safety of its people. The goal is to advance Timor-Leste towards a 'plastic neutral' status whereby unnecessary plastic use is curtailed and replaced, and up to 20% of Dili's plastic waste is collected and recycled into locally sought-after products within three years. Under this goal are three activity objectives (AOs):

- (1) Reduce Plastic Use;
- (2) Increase Plastic Recycling; and
- (3) Improve Plastics Management.

The technical approach is built on the premise of multi-tiered stakeholder participation in the plastics recycling industry, whereby plastic by-products are collected from businesses and industry actors; waste contractors collect and sell plastic waste from community recycling bins; and waste pickers collect plastic waste directly from households, as well as discarded plastic waste in the community. Once collected, the plastic waste will be sold to aggregators and micro-processers, who aggregate, clean, sort, and/or shred plastics, creating a value-added product for sale onwards to upcyclers and asphalt producers. Pavers, tiles, and blocks produced by upcyclers will then be sold to retailers as well as directly to construction contractors.

Key to the initiative's long-term success is the enabling environment for plastic waste and the vision of collaboration, learning, and adaptation. The program will work closely with the Government of Timor-Leste and local stakeholders to support a policy environment that fosters the plastics waste industry while also establishing a model of plastics management for dissemination beyond Dili. Initially, the activity will target Dili, the capital city of Timor-Leste, and the largest population and plastic waste concentration center. However, opportunities to expand plastic waste supply chains, as well as product distribution networks, will be considered at a later stage if feasible and relevant to PUA's core objectives.

#### **Key Achievements of Quarter 1, Year 3**

Strengthening cooperation with government to inspire policy reform. PUA continued to expand engagement and coordination with government stakeholders to promote an enabling environment for improved plastic management. These efforts to encourage policy reform prompted the signing of a joint Memorandum of Understanding (MOU) between Mercy Corps and the Ministry of Tourism, Commerce, and Industry (MTCI) dedicated to supporting local businesses through circular models.





- Building partnerships for the piloting of plastic asphalt technologies. PUA deepened its action to develop the first demonstration project for plastic asphalt in Timor-Leste. Building upon its growing collaboration with the National University of Timor-Leste (UNTL), PUA contributed to the execution of a Terms of Reference (TORs) between Mercy Corps and UNTL's Road Technology Laboratory towards the piloting of asphalt technologies using plastic waste on UNTL's Faculty of Engineering, Science and Technology's campus in Hera.
- Exploring new collaboration opportunities under the Plastics Solutions Alliance. The members of the Plastics Solutions Alliance (PSA) intensified their networking to examine new cooperation opportunities, including their shared interest in assessing solutions to power plastic recycling from renewable energy; and in researching a new line of recycled pavers made from a unique blend of plastic and food waste, using a by-product of PSA partner Heineken's brewing operations.
- Testing of product lines to assess the potential for international exports. In addition to stimulating demand on the domestic market for recycled goods, PUA and PSA partner Caltech is working to assess the feasibility and potential profitability of international sales. To that end, three pallets of recycled pavers made from local plastic waste have been exported to Australia, and one additional pallet to Canada. To improve product attractiveness and facilitate marketing among potential buyers in more mature markets, PUA appointed ALS Global, a certified material testing laboratory, to evaluate the performance of the pavers according to international standards.





## **Program Summary**

Timor-Leste became the newest country in Southeast Asia in 2002. Decades of conflict left it severely depleted of public infrastructure, human capital, and institutional frameworks. Following independence, extreme poverty and hunger were widespread, with conflict and violence as ongoing threats. Today, Timor-Leste is a more peaceful, democratic nation. While poverty levels remain very high, significant progress has been made. The proportion of Timorese living in poverty declined from 50% in 2007 to an estimated 42% in 2014. Economic growth has centered on Timor-Leste's natural resources, with oil accounting for over 90% of government revenues. This growth has resulted in a rise in waste production, including plastic waste. Dili, Timor-Leste's capital, faces the urgent challenge of addressing excessive amounts of plastic waste while lacking a feasible recycling solution. Currently, mismanaged plastic is burned in rubbish piles throughout the city, clogs critical drainage infrastructure, and is washed up on the country's once pristine beaches. This creates risks to human health and safety and jeopardizes the growth potential of its nascent but promising tourism industry.

To address both the challenge of excessive plastic waste and the potential to develop a competitive 'plastics circular economy' in Timor-Leste, Mercy Corps, in partnership with the United States Agency for International Development (USAID) and private sector partners Heineken Timor S.A. and Caltech Ltd. (a civil engineering company), is implementing the 3-year, \$2.25 million Timor-Leste Plastic Upcycling Alliance (PUA) initiative. PUA is funded through a \$900,000 investment from USAID, with an additional \$1.35 million leveraged from private-sector investment.

PUA catalyzes the growth of a plastics recycling industry, creating and expanding valuable employment and entrepreneurship opportunities with the potential to improve the natural beauty of Timor-Leste and protect the health and safety of its people. PUA's goal is to assist Timor-Leste to achieve 'plastic neutral' status whereby unnecessary plastic use is curtailed and replaced, and up to 20% of Dili's plastic waste is collected and recycled into locally sought-after products within three years. Under this goal are three Activity Objectives (AOs): (1) Reduce Plastic Use, (2) Increase Plastic Recycling, and (3) Improve Plastics Management.

The technical approach is built on the premise of multi-tiered stakeholder participation in the plastics recycling industry, whereby plastic by-products are collected from businesses and industry actors, waste contractors collect and sell plastic waste from community recycling bins, and waste pickers collect plastic waste directly from households, as well as discarded plastic waste in the community. Once collected, the plastic waste will be sold to aggregators and micro-processers, who aggregate, clean, sort, and/or shred plastics, creating a value-added product for sale onwards to upcyclers and asphalt producers. Pavers, tiles, and blocks produced by upcyclers will then be sold to retailers as well as directly to construction contractors.

Initially, the activity will target Dili, the capital city of Timor-Leste, and the largest population and plastic waste concentration center. However, opportunities to expand plastic waste supply chains, as well as product distribution networks, will be considered at a later stage if feasible and relevant to PUA's core objectives.





## **Summary of Achievements**

Progress on indicators is noted below.

Strategic Objectives/ Intermediate Goal	Indicator	Reach to Date	Cumulative Target	Reporting Frequency	Comments/ Clarification
Aim: Circular economy for plastic waste created and expands employment and entrepreneurship opportunities while protecting the natural beauty of Timor-Leste and health and safety for its people	Number of income- generating opportunities supported in Plastics Circular Economy as a result of the activity's assistance	35	15	Annual	New: Conservation of Environment Timor- Leste (2), Hadadin Group (2), Mr. Creative (2), Sentru Estudu Resiklajen (1)
Goal: Timor-Leste achieves 'plastic neutral' status whereby plastic use is limited and plastic waste is collected and recycled into locally sought-after products	Quantity (weight) of plastic recycled/upcycled into locally sought-after products as a result of the activity's assistance	21.296 tons	100 tons / 100,000 kg	Annual	Expected to scale up with the introduction of commercial-scale machinery in 2022
INCREASE PLASTIC RECYCLI	NG				
IR 2.2: Competitive recycled plastics product line developed (R&D)	Number of product lines researched	15	12	Quarterly	New: food waste/plastic paver (Caltech), jewelry from ironed plastic bags (Tiwomen Ecojewelry), paver and tile (Mesak Training Center)
IR 2.2: Competitive recycled plastics product line developed (R&D)	Number of product lines developed	11	6	Quarterly	New: 1 by Tiwomen Ecojewelry; 1 by Mesak Training Center
IR 2.2: Competitive recycled plastics product line developed (R&D)	Number of MSMEs supported Disaggregated by size of the enterprise	Micro: 8 Small: 4 Medium: 0	7	Quarterly	New: Tiwomen Ecojewelry, Klibur Badaen Tradisional Ale- Ale Timor, Conservation of Environment Timor- Leste, Hadadin Group, Mr. Creative, Sentru Estudu Resiklajen
IR 2.3: Demand for recycled plastic product lines increased	Number of communication platforms used to market upcycled and/or plastic alternative products	10	8	Quarterly	
IR 2.4: Distribution channels and installation services for recycled plastic product lines developed	Number of demonstrations promoted	16	8	Quarterly	





IMPROVE PLASTICS MANAGEMENT						
IR 3.1: Policy enabling environment for plastics reduction and recycling improved	Number of dialogues between government and sector stakeholders regarding plastics reduction and improved recycling	9	20	Quarterly	New: MOU signing event with Ministry of Tourism, Commerce and Industry	
IR 3.1: Policy enabling environment for plastics reduction and recycling improved	Number of strategies for a policy enabling environment regarding polymer-enhanced road construction created and disseminated	0	1	Quarterly		
IR 3.2: Evidence of impact produced  IR3.3: Model of plastics management in small to medium-sized cities produced	Number of collaboration, learning, and adaptation documents created	3	6	Quarterly		
IR 3.4: Evidence and lessons disseminated	Number of collaboration, learning, and adaptation documents disseminated	1	6	Quarterly		
IR 3.4: Evidence and lessons disseminated	Number of participants attending collaboration, learning, and adaptation events where information disseminated	8 (5M, 3F)	70	Quarterly		

Note: IR 1.1 to IR 2.1 fall under KOICA activities – in line with the MEL Plan, indicators focus only on PUA activities.





## **Highlighted Activities**

# **Expanding public-private cooperation to promote upcycling and inspire policy reform**

Mercy Corps worked throughout 2021 to successfully develop and sign an MOU with the Ministry of Tourism, Commerce, and Industry (MTCI), aiming to support local businesses engaged in developing inclusive circular models and to stimulate market demand for upcycled and recycled products. Establishing a sector-specific MOU that connects PUA's actions to national socioeconomic goals with the leading government entity for tourism and industry is expected to create linkages that will facilitate official endorsement by government actors and help maximize the visibility and impact of PUA's efforts in Year 3. This new strategic collaboration will focus on addressing the problem of mismanaged plastic waste harming the country's environment as a means to create economic opportunities and promote Timor-Leste's vision of becoming a competitive tourism destination while protecting its natural beauty and cultural heritage. The establishment of this MOU is intended to strengthen and supplement PUA's ongoing efforts to convene a coalition that engages businesses, encourages action, and inspires political will and policy reform. Under this MOU, Mercy Corps will continue to champion the implementation of practical actions that contribute to the realization of several of PUA's outcomes by:

- Increasing awareness of plastic waste danger and 3R strategies.
- Stimulating demand for upcycled plastic product lines.
- Advancing a policy enabling environment for plastics reduction and recycling.
- Disseminating PUA's findings and lessons learned.

For example, Mercy Corps has already approached MTCI to discuss several collaboration ideas on behalf of PUA, including:

- The promotion of upcycled and plastic alternative products, thanks to the creation of attractive displays at highly visible/visited locations such as constructing a gazebo using recycled plastic bricks, pavers, and other materials produced by local businesses.
- The production of a video to increase recycling awareness and promote recycling behaviors.
- The endorsement of a catalog presenting locally made upcycled and recycled products with photos, key specifications, and contact information of producers, distributors, and installers.
- Once a critical mass of products is available, the organization of a marketing and promotional event that will showcase upcycled products in an exposition-like space.
- The development of a plan to assist Timor-Leste's decision-makers in identifying potential policy reform and delivering effective plastic pollution mitigation strategies within the country's available resources.

To amplify the momentum created by the signing of the MOU, the ceremony included a micro fair that served as a networking platform to showcase the products of two local recycling and upcycling groups and to promote dialogue between government, civil society, businesses, and development partners committed to tackling the plastic challenge. The products presented included eco-jewelry and eco-construction materials made from recycled plastic.









Micro fair featuring Tiwomen Ecojewelry (left) and Caltech (right) at the MOU signing ceremony (Source: Mercy Corps)

#### Building support for the execution of Timor-Leste's first plastic asphalt demonstration project

In light of their constructive collaboration to drive R&D in the field of sustainable civil engineering and innovative construction materials, PUA and the Faculty of Engineering, Science and Technology of the National University of Timor-Leste (UNTL) have been exploring the possibility of developing the country's first demonstration project using plastic asphalt on UNTL's engineering campus. United around the common goal of supporting Timor-Leste on its journey to plastic neutrality, PUA and UNTL worked closely to develop specific Terms of Reference (TORs) that established the governing principles of their partnership to move this project forward. The TORs were signed in December 2021 by Mercy Corps and UNTL's Road Technology Laboratory with the intention to:

- Increase awareness of plastic pollution and knowledge of plastic waste management to ensure the younger generation can develop skills and strategies that will help protect the natural beauty of Timor-Leste and the health and safety of its people.
- Demonstrate the use of plastic waste in innovative construction materials and asphalt mixes for road paving by executing a pilot project that will inform policymakers while providing unique applied research opportunities to the UNTL community.
- Support GoTL's efforts towards developing national infrastructure and the realization of the country's "Zero Plastic" Policy.









TORs signing and mechanical workshop visit with UNTL's Road Technology Laboratory (Source: Mercy Corps)

In parallel with the TORs, PUA and UNTL analyzed the feasibility and the practicality of the proposed project while creating practical learning opportunities for UNTL's students. Under the faculty's supervision, a group of engineering students completed a detailed topographic survey and produced a contour map of the project site. An administrative and regulatory review also confirmed that the project would be fully covered by UNTL's existing permits, licenses, and authorizations. Since a network of paved internal roads was already planned as part of the campus' development and construction, UNTL determined that such a demonstration project would not require any new permits, nor any standalone environmental and social impact assessments. Finally, PUA conducted a series of meetings with the Roads for Development (R4D) program to learn more about current best practices in the planning, budgeting, and procurement of road construction projects in Timor-Leste. Funded by Australian Aid and implemented by the International Labor Organization (ILO), R4D is working with the Ministry of Public Works (MPW)'s Directorate of Roads, Bridges, and Flood Control to improve road access and management in Timor-Leste. Although R4D's experience applies to projects that differ in scale and nature from the demonstration scope envisaged by PUA, the sectoral expertise, knowledge, and templates acquired in these consultations will facilitate the preparation of PUA's own tender in the first quarter of 2022.



Site visit and contour map of the proposed project area (Source: Mercy Corps)





#### **Deepening collaboration under the Plastics Solutions Alliance**

Private sector engagement is a critical component of PUA. Throughout 2021, the Plastic Solutions Alliance (PSA) served as an overarching networking structure to ensure continued alignment of goals and objectives, avoid duplication, optimize resources, and share notes on strategic risks, opportunities, and potential synergies between its members in a changing environment. United around the shared vision of a "plastic neutral" Timor-Leste, the coalition currently leverages more than US\$3.5 million in private and development funding that is directed to communities with too much plastic and too few opportunities. In the last quarter of 2021, PSA members continued to examine the potential for further cooperation and co-investment around:

- The possibility to power Caltech's soon-to-be commissioned and PSA-supported recycling plant with renewable energy.
- The production of a new line of recycled pavers made from plastic and food waste, whereby Caltech would use a by-product of Heineken's brewing operations as a new ingredient for its pavers.

In December 2021, these discussions resulted in the successful prototyping of a new paver made from a mix of 84% used plastics and 16% diatomaceous earth, a silica by-product of brewing used as the dry aggregate in lieu of sand or crushed glass.

With the emergence of new COVID-19 variants globally, this quarter also encouraged the PSA to fund and procure maintenance services for the handwashing stations collectively installed by the alliance during the first wave of the pandemic in March 2020. The 36 handwashing stations had not been serviced since their installation to address the chronic lack of handwashing facilities at high traffic locations around Dili (clinics, churches, food markets, essential government buildings, and more). Considering the progress of the pandemic globally, the PSA concluded that these stations were still and would remain relevant assets to support the national response to COVID-19 in the foreseeable future. Designed by Caltech and made with recycled plastic pavers using 900-1,400 PET bottles per station, their deployment enabled the adoption of key prevention measures reducing the risk of disease transmission while providing highly visible demonstration sites for the marketing of recycled products throughout the city. The maintenance services began in December 2021 with an initial assessment and immediate repairs to restore all the stations to a fully working state. Throughout 2022, monthly visual inspections will be conducted to assess the condition of the stations, and preventive maintenance will be performed to keep them running and avoid unplanned downtime from equipment failure. Corrective maintenance will also be undertaken on an ad hoc basis to identify, isolate and repair faults, run simple troubleshooting, replace equipment after it fails, or carry out improvements to avoid repeated failures. The maintenance operations will also include replacing all PSA-branded visibility materials displayed on the stations. To that end, a new visual identity was created in November 2021, and new banners will be installed on the stations in January 2022 to reinforce their eco-construction branding. The new design combines key COVID-19 prevention messages with enhanced communication about the work and members of the PSA.







New banner design for the handwashing stations (Source: Mercy Corps)

#### Testing the properties of recycled pavers to facilitate exports

Risk mitigation is at the core of PUA's approach to empower private sector actors investing in innovative upcycling and recycling solutions for plastic. As part of this vision, PUA completed the procurement of material testing services from ALS Global, an accredited laboratory, to help PSA member Caltech assess the quality and safety of its recycled pavers. PUA consulted industry experts and worked in close coordination with Caltech to ensure the tests would provide maximum added value based on Caltech's development strategy. Standards from Australia and New Zealand were selected for the Asia Pacific region, while standards from the United States were identified as the most commercially relevant and technically recognized for global markets. The Australian division of international group ALS Global was subsequently appointed to conduct the following series of physical and environmental tests:

- Australia/New Zealand:
  - AS/NZS 4456 for compression, water absorption, moisture, unit mass and density (no freeze/thaw code in AS/NZS series).
- United States:
  - ASTM C140 for compression, water absorption, unit mass, density, moisture and freeze/thaw properties (ASTM C67).
  - LEAF Method 1315 (USEPA 1315/1310) for polychlorinated biphenyls and volatile and semivolatile organic compounds (including polycyclic aromatic hydrocarbons).

The series involving the shortest testing protocols were completed in December 2021 while the longer ones are still ongoing and will run through the first quarter of 2022. The corresponding AS/NZS, ASTM, and LEAF testing reports will be delivered once all measurements are completed.





#### Advertising upcycled products to stimulate market demand

To realize its ambition to establish a market for upcycled products, PUA has been pursuing multiple ways to stimulate domestic demand from individual consumers and organizations. PUA constantly works to generate opportunities for businesses and entrepreneurs involved in the plastic waste cycle to market their products such as the creation of attractive displays at highly visited locations, the production and dissemination of contents to encourage recycling behaviors, or the organization of promotional actions to present locally made upcycled/recycled goods at government-endorsed events or in exposition-like spaces. While some of these activities have been experiencing delays due to the COVID-19 pandemic and the slowdown of the national economy, PUA keeps exploring every option to improve the visibility of upcycled products in Year 3. In this respect, PUA initiated the design of an original catalog listing the upcycled products currently made in Timor-Leste. Designed to increase product desirability, the catalog will include high-definition photos, key specifications, and contact information of designers, manufacturers, or distributors to facilitate sales and purchase inquiries. At least nine companies have already expressed interest in the concept and will be featured in the first issue of the catalog. Dedicated interviews and specific photoshoots have been completed during the last quarter of 2021 with all participating businesses, and PUA is currently finalizing the publication's design. In parallel, PUA has initiated discussions with MTCI to secure official endorsement for the catalog and to maximize exposure for all public and private partners. If compatible with the organizers' agenda, PUA is exploring the possibility of scheduling a launch event during the National Climate Change Conference coordinated by the Secretary of State for the Environment (SSE) in the first quarter of 2022.

## **Challenges and Lessons Learned**

- Local stakeholder engagement for consultancies. Because of COVID-19, the State of Emergency has been nearly continuously in effect in Timor-Leste since the launch of PUA. Throughout 2021, airports, ports, and land borders have remained closed to international travelers. As a result, the external consultants hired to drive some of PUA's key research and learning activities could not send any visiting personnel to do fieldwork and directly assess the local context for their assignments. PUA thus had to mobilize substantial resources to drive targeted local stakeholder engagement and facilitate in-country research on behalf of its consultants. Data collection activities that would typically be supervised by expert consultants and researchers instead had to be managed by less experienced PUA staff, which proved to be extremely time-consuming. Furthermore, data collection methodologies typically include a combination of interrelated focus group discussions, surveys, and key informant interviews that corroborate perspectives and can be run in parallel. However, the enforcement of distancing and sanitary measures throughout 2021 meant that all non-essential activities involving direct community engagement were suspended. PUA had to pivot to virtual interviews, which remain largely unpopular among local stakeholders. This can be explained by the generally poor quality of local telecommunications and limited levels of technology fluency among senior officials. Although such additional reluctance rarely jeopardized the entire exercise itself, PUA's requests inevitably faced lower response rates and slower response times. Inquiries required extensive follow-up, and PUA had to continuously adapt its consultant-led studies' workflow to cater to the cumulative delays stemming from all these factors.
- Cost-sharing for demonstration projects. As the effects of the economic downturn and deteriorating socioeconomic context of the past two years have increasingly been weighing on local economic actors,





priorities shifted from expansion to subsistence. Individuals and institutions switched to more conservative strategies across the private sector and civil society. In these conditions, it has been very challenging for PUA to find stakeholders willing to consider cost-sharing and co-investment approaches for the execution of construction projects demonstrating the use of innovative (but often more expensive) recycled materials. Despite PUA's aggressive outreach efforts and flexibility to cover a significant portion of the cost, the execution of such projects is anticipated to remain challenging in Year 3.

Capturing lessons learned for urban plastic waste management. Since March 2021, PUA has actively contributed to the piloting of a plastic waste collection service aiming to test the logistical feasibility and economic viability of differentiated waste collection in Dili. With support from the PSA, this pilot was designed as a private sector driven initiative based on the principle of waste separation at source. Mercy Corps is currently finalizing a report presenting the data and information collected throughout this pilot phase to document PUA's model, lessons, and recommendations for plastics management. The report is currently under final verification and will be released in the first quarter of 2022 to form part of PUA's collaboration, learning, and adaptation resources.





#### **Q2 Plans**

#### PUA's plans and activities for the next quarter:

- PSA coordination and Steering Committee meeting.
- Handwashing stations maintenance and visibility enhancements.
- Commissioning of Caltech's new processing equipment toward realizing commercial-scale operations.
- Completion of material testing and review of the reports assessing the performance of the pavers.
- Publication of Timor-Leste's first recycled products catalog.
- Tender preparation activities and launch of a competitive procurement process for PUA's first plastic asphalt demonstration project.
- Conclusion of the market and economic analysis.
- Finalization of the waste collection pilot lessons learned.
- Participation in the National Climate Change Conference.





#### Stories from the Field

For the second consecutive year, PUA partnered with Alola Foundation to offer training and marketing opportunities to local entrepreneurs.

In December 2021, PUA teamed up with local civil society organization Alola Foundation to support another edition of Alola's annual Christmas fair for the second consecutive year. To promote improved plastic management during the event, PUA directly facilitated the presence of seven local upcycling and recycling businesses that create products from plastic waste and alternatives to single-use plastic. In the days leading to the fair, participating businesses were invited to attend a preparatory workshop initially designed as an introductory session presenting different marketing strategies. Thanks to PUA's support, two additional trainings facilitated by two innovative enterprises supported through Mercy Corps' circular economy programming were added to the workshop. In these extra sessions, eight facilitators from these two groups presented their plastic recycling techniques to 13 participants. While the workshop was initially scheduled to end at noon, the participants showed such enthusiasm that the facilitators graciously agreed to repeatedly extend the workshop's duration until 5:00 pm. The collective commitment from all the instructors and participants effectively turned a short marketing seminar into a full-day technical training during which participants learned to fabricate unique handcrafted earrings and flowers from used plastic bags. During the fair, the businesses and the innovators supported by Mercy Corps had the opportunity to showcase their skills, market their products, and sell them directly to the public. Participating upcycling businesses included: Mr. Creative, Klibur Bada'en Tradisional Homan Ale-Ale Timor, Conservation of Environment Timor-Leste, Sentru Estudu Resiklajen, Asosiasaun Halibur Defisiente Matan Timor-Leste, Hadadin Group, and Tiwomen Ecojewelry. With cumulative sales exceeding US\$650, most of these businesses were successful in increasing their sales and expressed appreciation for the opportunity to effectively engage with new customers.









Upcycling entrepreneurs attending the Alola fair and workshop (Source: Mercy Corps)





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#### **About Mercy Corps**

Mercy Corps is a leading global organization powered by the belief that a better world is possible. In disaster, in hardship, in more than 40 countries around the world, we partner to put bold solutions into action — helping people triumph over adversity and build stronger communities from within. Now, and for the future.



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