



THE LOCALIZATION OF EMERGENCY RELIEF GOODS:

REUSABLE SANITARY PADS AND SOAP IN VANUATU

A feasibility study
Port Vila, August 2020



FIELD READY



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2. ABBREVIATIONS

| | |
|--------|--|
| ADRA | Adventist Development and Relief Agency |
| ASRC | Australian Red Cross Society |
| CARE | CARE International in Vanuatu |
| CERF | (United Nations) Central Emergency Relief Fund |
| DFAT | (Australian) Department of Foreign Affairs and Trade |
| G&P | Gender and Protection Cluster |
| IFRC | International Federation of Red Cross and Red Crescent Societies |
| INGO | International Non Government Organisation |
| MHM | Menstrual Hygiene Management |
| MFAT | (New Zealand) Ministry of Foreign Affairs and Trade |
| MLV | Mama's Laef Vanuatu |
| NDMO | National Disaster Management Office |
| NFI | Non-Food Item |
| UN | United Nations |
| UNICEF | United Nations Children's Fund |
| UNFPA | United Nations Population Fund |
| VRC | Vanuatu Red Cross |
| VSPD | Vanuatu Society for People with a Disability |
| VBRC | Vanuatu Business Resilience Council |
| WASH | Water Sanitation and Hygiene |
| WV | World Vision Vanuatu |

3. EXECUTIVE SUMMARY

3.1 About the report

Learnings from TC Harold presented new-thinking to traditional sourcing of emergency relief goods in a disaster context and identified opportunities to increase the quality of the response through local procurement. The advantages of sourcing goods in Vanuatu include flow-on effects to businesses, their staff and the local suppliers of their materials and can play a critical role in strengthening the formal and informal economy. Equally, with reduced dependence on international stocks, Vanuatu can build its internal capacity and strengthen its overall resilience and ability to respond to natural disasters into the future.

On 6 April 2020, just over five years after Cyclone Pam devastated the south of Vanuatu, category 5 Tropical Cyclone (TC) Harold severely impacted the northern provinces. The context into which Harold landed was significantly different from previous disasters, as the emergency response was required to adapt to a simultaneous global pandemic. Where the traditional response to a natural disaster would see the immediate sourcing of propositioned emergency relief supplies from global warehouses, restricted international freight and tight quarantine protocols due to COVID-19 required alternative procurement strategies, seeing international non-government organizations (INGOs) and donor agencies turn to domestic markets to procure relief items. This 'forced localization' presented an opportunity to maximize the benefits of the traditional distribution of Non-Food-Items (NFIs), by also elevating local businesses and social enterprise that are often forgotten or even undermined by conventional international procurement. There was demonstrated capacity within the local market to supply several items that are typically brought in from overseas and clear evidence of economic benefits going back to domestic businesses, their staff and communities. The findings highlighted the need for further analysis into the inclusion of locally sourced relief items for future emergency procurement in Vanuatu.

In recent evaluations and learnings from TC Harold, both the WASH and Gender and Protection (G&P) cluster highlighted the need to develop formalised guidelines on hygiene and dignity kits. Further, the WASH Lessons Learnt Report highlighted the viability of domestic procurement and recommended further exploration of the purchase and packing of kits locally. This provides a timely opportunity to review the possible items to be included in these kits and further explore openings for localised procurement. Field Ready has identified bathing soap and reusable sanitary pads as two key products in each of these kits that have an existing local production capacity in Vanuatu. This report aims to investigate the current and potential capacity of these two local industries and provide a comprehensive overview of the required considerations for integrating these products into emergency relief procurement frameworks.

3.2 Key Findings

It is time to redefine traditional emergency procurement.

With an increasing frequency of disasters and reduced certainty in access to global markets, the Government of Vanuatu and various donor agencies are looking to increase stockpiles of emergency relief goods in Vanuatu. There is an opportunity to build on this momentum and design strategies to better integrate localized procurement into a traditional emergency response.

Localized procurement can maximize the benefits of emergency relief.

The localized procurement of reusable sanitary pads and soap can boost local industry and increase economic opportunities for small and medium-sized enterprises. It can enable increased employment for predominately female industries and would facilitate a new market outlet that will help stabilize production and foster new revenue avenues.

Locally produced reusable sanitary pads are a valuable addition into hygiene and dignity kits.

Reusable sanitary pads are a contextually appropriate, sustainable, economical and environmentally-friendly alternative to the traditional distribution of disposable sanitary pads. To ensure that the product is best-utilised, there is a need to include supporting materials into distributed kits and design complementary distribution procedures that provide relevant information and training.

With a little guidance, the Vanuatu soap industry could produce a viable alternative to imported products.

The production of soap in Vanuatu is a growing industry that can provide increased economic opportunities to producers and their local suppliers. National specifications for soap still need to be formalized before there can be a clear validation of its appropriateness. Shared learning, research or training may assist producers to design a product that will meet national and donor expectations.

Local substitutions will not be price competitive with international alternatives.

While there are some opportunities to reduce production costs for both MHM products and soap in Vanuatu, it is unlikely that the locally produced goods will be economically competitive with those available through global procurement catalogues. The substitution of a local alternative will require donors to access their value for money not just through a direct price comparison of products, but through a social and environmental lens that accounts for the complimentary positive impacts for the community and local economy.

Locally made reusable sanitary pads and soap will need to be prepositioned.

With limited access to bulk materials and a lengthy production time, local businesses will not have the capacity to produce the high volume of goods on-demand within the expected timeframe for emergency distribution. The inclusion of locally made sanitary pads and soap into emergency distribution kits will require allocated funds to prepare prepositioned stockpiles of goods.

Locally produced kits will not always be able to fill the demand.

Given the high volumes of kits typically required in an emergency, it is unlikely that localized procurement will be able to fill the total demand. Strategies should instead focus on key kits or items and aim to cover a percentage of total NFI requirements with locally procured goods.

Increased localization of NFIs builds the local economy and Vanuatu's resilience to disasters. Defining the required items and their specifications in national guidelines will enable local businesses to source and supply required products and overtime could see growth in the range of products that can be sourced locally. The increased capacity to produce, procure, prepare and store emergency relief items in-country can ensure that kits are relevant and appropriate for the context and provides a safety net should international stocks be inaccessible.

3.3 Recommendations

The localization of relief goods will require support at an industry level, cooperation and collaboration between clusters, donors and INGOs and the integration of localization strategies into the traditional procurement framework. Key recommendations have been summarized as:

1. Advocate for collaborative working groups to formalize cluster guidelines on NFIs.

Promote the establishment of a collaborative working group to define the contents of hygiene and dignity kits and formalize standards in national cluster guidelines. Review the possibility of a new MHM specific kit and identify which cluster this would fall under.

2. Formalise a 'Local Procurement Platform' that links relevant businesses with donor agencies and facilitates the sharing of procurement requirements.

Engage the Vanuatu Business Resilience Network (VBRN) to build on the existing framework that outlines localized sources for emergency items and facilitate a two-way dialogue between business houses and donor agencies.

3. Share learnings with the NDMO and relevant clusters to facilitate the design of a national localization procurement policy.

Support the design of a formalized tender process and comprehensive localization strategy for the procurement of emergency relief goods. Develop a long-term plan and aligning targets for the percentage of coverage of locally procured goods in an emergency response.

4. Work with donor agencies to conduct a pre-assessment of locally procured items to confirm quality and suitability.

Bring together core donor agencies and INGOs to design a preassessment process that would validate the inclusion of locally made goods into existing kits or procurement

strategies. Assess the quality of goods in-line with donor and cluster guidelines and where required conduct additional analysis or research into the suitability of the product.

5. Identify opportunities to fund a pilot project to preposition locally made NFIs.

Collaborate with traditional donors of prepositioned emergency relief stock, such as CERF, DFAT and MFAT, to design a pilot project that would trial the local production of complete or partial hygiene, dignity and MHM kits.

6. Promote the design and distribution of an MHM kit that is sourced primarily in Vanuatu.

Develop a comprehensive MHM kit that will meet the requirements of girls and women in an emergency context in Vanuatu. Work with relevant clusters, government departments, INGOs and donor agencies to confirm contents and aim where possible to source goods from local suppliers.

7. Identify technologies, ingredients or knowledge sharing that could support Vanuatu soap producers to meet Cluster and donor standards.

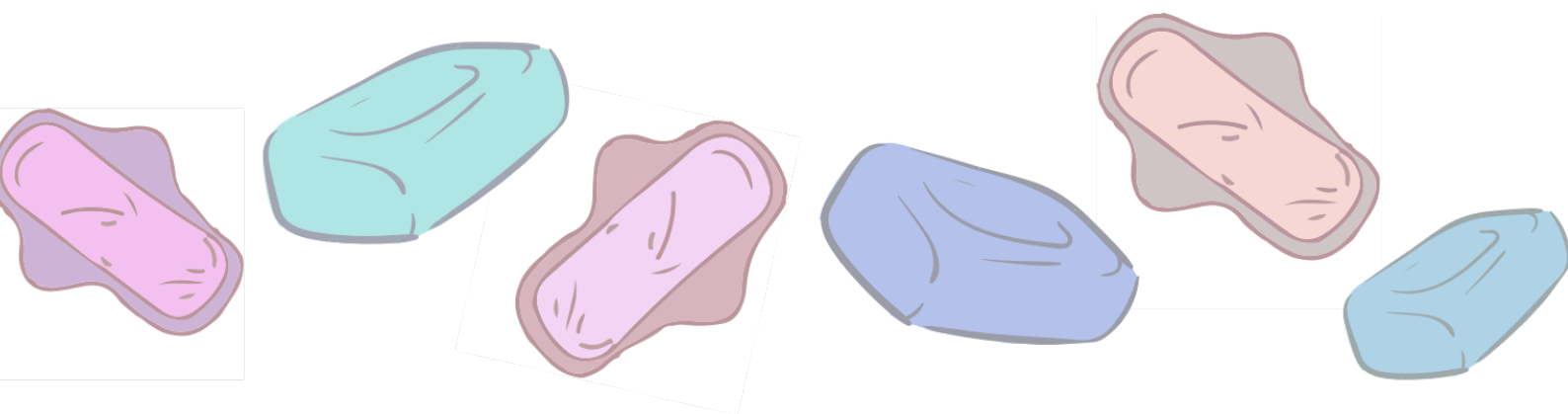
Identify research and knowledge sharing opportunities that could support soap producers to align products with industry/ national/ donor standards. Host a workshop with both formal and informal soap producers to share learnings, increase production capacity and establish linkages with potential markets.

8. Investigate opportunities to reduce production costs for local producers

Explore opportunities or linkages with Pacific RISE for the mobilization of stock for reusable sanitary pads at Pacific hubs. Investigate a model for the consolidation of procurement of local materials to reduce production costs for soap producers.

9. Define and promote best-practice for distribution of MHM products

Work with relevant clusters and distribution agencies to define and promote the best practice for the distribution of MHM materials during an emergency. This should include the provision of awareness and product demonstrations by female staff during distributions.



4. INTRODUCTION

4.1 Overview: Vanuatu and Disaster Procurement

Vanuatu, located on the earthquake-prone 'ring of fire' and situated at the centre of the Pacific cyclone belt experiences a high frequency of volcanic eruptions, cyclones, earthquakes, tsunamis, storm surges, coastal flooding and landslides¹. In the 2018 World Risk Report, Vanuatu continued to rate as the country with the world's highest disaster risk index. On 6 April 2020, just over five years Cyclone Pam devastated the islands of southern Vanuatu, category 5 Tropical Cyclone (TC) Harold severely impacted the northern provinces. The context into which Harold landed was significantly different from previous disasters, as the emergency response was required to adapt to a simultaneous global pandemic. Where the traditional response to a natural disaster would see the immediate sourcing of propositioned emergency relief supplies from international warehouses, restricted international freight and tight quarantine protocols due to COVID-19 required alternative procurement strategies, seeing international Non-Government Organizations (INGOs) and donor agencies turn to domestic markets to procure relief items². This 'forced localization' presented an opportunity to maximize the benefits of the traditional distribution of Non-Food-Items (NFIs), by also elevating local businesses and social enterprise that are often forgotten or even undermined by conventional international procurement. There was demonstrated capacity within the local market to supply several items that are typically brought in from overseas and clear evidence of economic benefits going back to domestic businesses and their staff. The findings highlight the need for further analysis into the inclusion of locally sourced relief items into future emergency procurement in Vanuatu.

Traditional emergency response to a cyclone, volcanic eruption or similar emergency would see the distribution of shelter, hygiene, household and dignity kits to provide temporary relief for households and vulnerable individuals. The response to TC Harold demonstrated that the majority of these kits can be procured and packed in Vanuatu, albeit in smaller volumes than required to enable a comprehensive distribution to all affected households. Business houses were typically restricted by the amount of stock on hand and struggled to access information regarding the specifications and requirements for items. The Vanuatu Business Resilience Council (VBRC) identified this gap and designed a support service that linked the public/ donor and private sectors and shared information regarding availability and demand. The initiative provides the framework for a formalised platform that could foster interlinkages between the local market and procurement agencies for future disasters.

A formal definition of kit contents and their specifications will enable local businesses to align with procurement requirements. While the Vanuatu Shelter Cluster had defined the contents and specifications for emergency shelter kits (set after TC Pam), similar guidelines for hygiene kits and dignity kits had not yet been formalised. During TC Harold, this lack of clarity presented challenges in the timely design of localised kits, but also opened

¹ (Global Facility for Disaster Reduction and Recovery, 2020)

² (Kenni & Wijewickrama, 2020)

opportunities for localised substitution. CARE in Vanuatu, for example was able to adapt their typical international hygiene kit and substitute in reusable sanitary pads sourced from a Ni-Vanuatu owned social enterprise, in place of standard disposable sanitary pads. The inclusion provided a critical boost to the business and its predominately female workforce and offered a contextually relevant, sustainable product that was well received by recipients. These trials have been able to validate the inclusion of certain products and can form the basis for defining contextually appropriate emergency relief kits for Vanuatu.

In recent evaluations and learnings from TC Harold, both the WASH and Gender and Protection (G&P) cluster highlighted the need to develop formalised guidelines on hygiene and dignity kits. Further, the WASH Lessons Learnt Report highlighted the viability of domestic procurement and recommended further exploration of the purchase and packing of kits locally³. This provides a timely opportunity to review the possible items to be included in these kits and further explore openings for localised procurement. Field Ready has identified bathing soap and reusable sanitary pads as two key products in each of these kits that have an existing local production capacity in Vanuatu. This report aims to investigate the current and potential capability of these two local industries and provide a comprehensive overview of the required considerations for integrating these products into emergency relief procurement frameworks.

5. METHODOLOGY

This study has undertaken a literature review of recent and relevant reports, journals and project activities to form the basis of its findings. These have been supplemented with primary data collected via 10 key-informant interviews (KIs) conducted face to face, via zoom or email.

Findings are supported by additional KIs and Focus Group Discussions (FGDs) that were conducted by the author in correlation with CARE International in Vanuatu's (CARE) post distribution monitoring assessment (PDM), completed in Ward 13 and 14 in South Pentecost. A total of 5 KIs and 3 FGDs were conducted with women selected via a snowballing strategy. Participants were aged between 18 – 70 years old and had received locally made reusable sanitary pads in hygiene kits that were distributed after TC Harold.

6. LITERATURE REVIEW

6.1 Menstrual Health Management (MHM) in an emergency context

Menstrual Health Management (MHM)

Access to safe and dignified menstruation health management (MHM) is a fundamental need for women and girls. Growing evidence across the Pacific shows that many girls and women still do not have access to the resources and information they require to manage menstruation with ease and dignity, especially those with dispersed populations across large

³ (Vanuatu WASH Cluster, 2020)

or remote geographic locations⁴. These barriers are often compounded during an emergency. A study by the Australian Red Cross Society (ARCS) found that a lack of access to sanitary materials in a disaster context was a major concern for women and girls in Vanuatu⁵. Disasters such as a cyclone can displace girls and women from their homes and limit access to privacy and resources. They may be living in crowded, unsafe environments that lack private access to water and toilet facilities (especially at night) and may lack mechanisms for privately disposing of used materials, or for discreetly washing and drying reusable sanitary pads. Equally, they may have lost access to their usual possessions and the income and markets through which they could replace them.

Despite these heightened challenges, in many cases, MHM is still largely overlooked in a disaster response context⁶, with Vanuatu no exception. A situation report for TC Harold circulated by the WASH Cluster highlighted the critical gap in MHM during the response⁷. The current National WASH Cluster Minimum Standards has no reference to MHM requirements or standards in emergency response, with the exception of “acceptable material for menstrual hygiene” included in the recommendations for hygiene kit composition⁸. A holistic MHM response in an emergency setting needs to consider three essential components: access to appropriate MHM products and additional supportive material for storage, washing, and drying; adequate infrastructure for water, sanitation, changing areas and waste disposal; and menstrual health education and promotion⁹. This study focuses specifically on the first component; the procurement and distribution of MHM products and relevant supporting materials.

MHM Products

There are many different menstrual hygiene products available, with no one product that is suitable for all women or girls in one particular setting. Menstrual product preferences are largely influenced by culture, acceptability, cost-effectiveness, access to water, privacy and environmental impact¹⁰. Girls and women with different types of disabilities may also have specific preferences depending on their situation¹¹. In an emergency, there is a heightened need to consider the life cycle of usage when selecting menstrual products for distribution. The emergency type (acute/chronic), climate (dry/rainy) and setting (evacuation centre/damaged home) should also be taken into account. For an effective emergency response, there is a critical need to understand the existing preferences and practices of girls and women. Consultations with women and girls in different settings should inform emergency response planning and guide the selection of appropriate products for distribution¹².

Reusable pads are an alternative to the single-use disposable sanitary pads or plain cloth that women in low-economic countries typically use to manage their menstruation. Reusable

⁴ (IWDA, Institute, & WaterAid, 2017)

⁵ (Australian Red Cross Society, Vanuatu Red Cross Society and James Cook University, 2020)

⁶ (UNHCR, 2018) (Columbia University and International Research Committee, 2017)

⁷ (Australian Red Cross Society, Vanuatu Red Cross Society and James Cook University, 2020)

⁸ (Vanuatu National WASH Cluster, Unknown)

⁹ (Sommer, et al., 2016)

¹⁰ (Columbia University and International Research Committee, 2017)

¹¹ (Australian Red Cross Society, Vanuatu Red Cross Society and James Cook University, 2020)

¹² (UNICEF, 2019)

pads are worn externally to the body in the underwear and held in place usually by snaps. They are made from a variety of natural or synthetic absorbent and waterproof materials that aim to reduce leakage and maintain good sanitation. After use, they are washed, dried and reused for one year or more. Reusable pads have rapidly gained interest from development and humanitarian partners as a more sustainable, cost-effective and environmentally friendly solution to disposable pads in emergency distributions. Various United Nations (UN) agencies and INGOS now recognize reusable pads as a core relief item in a disaster context and already include reusable pads into some of their emergency relief kits¹³.

MHM in Vanuatu

Women across the Pacific have limited exposure to MHM and the various products now available on the global market¹⁴. A study by the Australian Red Cross Society (ARCS) suggested that disposable pads are the most common form of MHM management for girls and women in Vanuatu (specific to Efate and Santo), but that reusable pads or similar homemade products are also utilized especially in rural areas and amongst older populations. After conducting a series of trials, participants overwhelmingly provided positive feedback on reusable pads with the vast majority indicating that they would recommend the product¹⁵.

Local industry is responding to this demand for sustainable MHM alternatives with a range of businesses and social enterprises setting up across the Pacific. Businesses are typically female-owned and driven and provide an innovative new way to increase economic independence while addressing a critical need for their female populations. While there has been extensive progress made in the sector, with several businesses now producing quality reusable sanitary pads and other MHM products, ability to scale up and increase both market coverage and access of products is still limited. One of the key limitations faced by Pacific businesses is access to affordable raw materials¹⁶. Pacific RISE, an initiative by the Australian Government's Department of Foreign Affairs and Trade (DFAT), has designed a trade finance vehicle that aims to address this challenge, aiming to consolidate the supply chain and build the bargaining power of enterprises as a collective. While systems are still in the design phase, it is hoped that bulk materials will be ordered at the end of 2020 and transported to a centralized sourcing hub, potentially in New Zealand. Investors have already been identified to provide the upfront capital, with the expectation that local businesses will be able to order materials as required, helping to reduce costs, increase access to raw materials and stabilize supply¹⁷. Addressing these types of barriers will enable businesses to increase production and provide increased opportunities for women and girls in the Pacific to utilize locally made sustainable and cost-effective MHM products.

While there is some research on women's preferences for MHM products in Vanuatu and the Pacific, there is very little analysis into their changing preferences in an emergency context¹⁸.

¹³ (UNHCR, 2018)

¹⁴ (IWDA, Institute, & WaterAid, 2017)

¹⁵ (Australian Red Cross Society, Vanuatu Red Cross Society and James Cook University, 2020)

¹⁶ (Criterion Institute and Pacific RISE, 2018)

¹⁷ KII 11 – Pacific RISE

¹⁸ (Australian Red Cross Society, Vanuatu Red Cross Society and James Cook University, 2020) (IWDA, Institute, & WaterAid, 2017)

As the literature suggests, women in an emergency may face additional challenges that will impact on their ability to manage menstruation¹⁹. In Vanuatu, a cyclone, volcanic eruption, flood or tsunami may impact on privacy when staying at an evacuation centre or with a relative. Girls and women may have limited access to space for changing, washing or drying reusable sanitary pads, may have restricted access to water. There may also be cultural taboos to washing or drying MHM items in public. It is critical to consider these challenges when designing a comprehensive MHM response to a disaster or emergency. For Vanuatu's context, it may require the inclusion of additional items such as rope, pegs and a piece of material to cover drying pads, while a protective, leakproof bag could be required ensure that used pads can be stored before washing, and clean pads are protected from mildew or insect infestation while not in use²⁰. The type of pads (light, regular or heavy flow), colour, and the number of pads included in each kit should also be considered within the given context. While some donor agencies have adopted guidelines for the design and requirements of reusable sanitary pads (See Annex 4), there are no universal guiding principles on the composition of MHM kits.

6.2 Hygiene and soap in an emergency context

The provision of water, sanitation and hygiene (WASH) is a critical component of an emergency response²¹. People affected by disasters are more susceptible to illness and death from disease, particularly diarrhoeal and infectious diseases. The distribution of soap is a standard inclusion to hygiene and dignity kits to reduce public health risks and provide dignity and security to people affected by a natural disaster or emergency.

Industry standards

United Nations of Refugee Agency (UNHCR) guidelines require 70% of a disaster-affected population to have access to soap. In Vanuatu, the cluster guidelines suggest two blocks of bathing soap per person per month, with an estimate of five persons per household. There are no specific guidelines for soap quality or characteristics in the national cluster guidelines, however, it is expected that soap should foam and should not irritate the skin²². During TC Harold and in the context of COVID-19, there was an emphasis on sourcing soap that was 'antibacterial', however, data from the United States Food and Drug Association (USFDA) suggest that there is no scientific evidence to prove that antibacterial soap is more effective than standard soap²³. For agencies with formalised international procurement systems, there is typically a list of quality specifications (see Annex 4). Neither UNICEF nor IFRC identify the need for 'antibacterial' soap in their procurement guidelines.

Soap in Vanuatu

The production of soap in Vanuatu is a growing industry that can provide significant value-addition to readily accessible local materials. With several formalised businesses and a

¹⁹ (Columbia University and International Research Committee, 2017) (UNICEF, 2019) (UNHCR, 2018)

²⁰ (Schmitt, Clatworthy, Gruer, & Sommer, 2020)

²¹ (Sphere Association, 2018)

²² KII 6- WASH Cluster

²³ (USFDA, 2020)

growing number of informal producers, the industry provides economic opportunities, typically for women, to access a consistent income. While there is little research specific to Vanuatu, globally there are growing examples of the immense positive economic impacts of small-scale soap production in low and middle-income communities as an accessible process that requires little start-up capital and few resources²⁴. The benefits of soap production in Vanuatu extend past the producer, with flow-on effects to the suppliers of natural materials such as coconut oil, tamanu oil and volcanic ash. These suppliers are typically small-scale producers based in rural or remote areas and the supply of materials to soap producers can offer a stable supplementary income. While there are many formal and informal soap producers in Vanuatu, there is little evidence of locally made goods being utilised in development projects or emergency response. While some government and INGO projects have included soap procured domestically for projects or activities, this is typically an imported product sourced from supermarkets, with minimal economic benefits to local producers. In some cases, these distributions could potentially even have an adverse effect on the local soap industry, as imported stock donated to communities reduces market demand.

7. SUPPLIER ANALYSIS

7.1 Reusable Sanitary Pads

Local production capacity overview

Mama's Laef Vanuatu (MLV) is a Ni-Vanuatu owned and operated social enterprise that produces a range of reusable sanitary and incontinence pads. MLV sells packs and individual reusable pads through informal markets and is increasingly contracted by INGOs or donors to produce high volumes of kits that are distributed to women and girls through various projects and initiatives. They are the only producer of MHM products in Vanuatu and aim to provide an economic, environmentally friendly alternative to the low-quality disposable pads that currently dominate the market.

The grassroots organisation has strengthened its capacity over the last few years and now leads the way for MHM enterprises in the Pacific. Mama's Laef employs six full-time employees and four casual staff, with 90% staff female. The team on the ground is supported by an Australian-based volunteer who continues to build the capacity of local staff and identify new opportunities for growth and improvement. The organisation has a workshop in Pango, Port Vila with a production line of 10 sewing machines and new electric fabric cutters. Their current maximum capacity allows up to 1000 pads a week to be constructed, although the team continue to improve efficiencies and production volumes.

²⁴ (Sani & Dawanka, 20120)

Quality

Mama's Laef produces a high-quality product that utilises much of the technology and innovation available in the field and aligns closely with international alternatives. The production team designed the original pattern from industry templates and has since refined this to produce a premium, context-appropriate product. The business offers a range of three menstrual hygiene pads (light flow, medium flow and heavy flow/ overnight) as well as incontinence pads and reusable children's nappies. Kits of menstrual pads are sold or distributed with plastic reusable bags which women and girls can use to safely store wet or soiled pads, however, the team is aiming to develop a new 'wet bag' in the future that will be more durable.

Supply Chain

Mama's Laef, like most other Pacific MHM enterprises, depends on the importation of key materials to construct their product. To produce an absorbent, light and quick-drying product that prevents leaks and maintains a high level of sanitation, the social enterprise imports a specific absorbent fabric, polyurethane laminate (waterproof liner) and snapping buttons that fix the product to the underwear. These materials are consistent across the board for other producers of reusable sanitary pads in the Pacific²⁵. With no alternatives in the local market, MLV imports these materials, filling a partial container (LCL), directly from wholesalers in China. This has proven to be the most cost-effective supply chain, with Australia and Zealand on-selling similar products at retail prices and limited success in sourcing goods through the United States. Supplies from India via Fiji could also be an economical option that is currently being explored. Lead time for delivery is typically three to four months, however, distributions caused by COVID-19 at the start of the year resulted in extensive delays. With factories in China now open again, deliveries of goods are more consistent, but there are still clear limitations should MLV be required to produce a high volume of products with a short order time.

A lack of capital places additional constraints on the start-up, restricting the volume of materials that are ordered each time. At present, orders of new materials range between US\$5,000-10,000 and are dependent on the sales of previous stock. This often results in an inefficient procurement strategy, where small, frequent orders are shipped internationally. Larger orders, possibly full container loads (FCL), sent intermittently could reduce freight costs and likely open windows for volume discounts, further reducing the unit cost for materials. It would also allow the team to focus on production and reduce the likelihood of material shortages. Opportunities to link in with the Pacific RISE trade finance vehicle that aims to consolidate orders from suppliers across the Pacific and store goods at a 'Pacific hub' could also help to address this challenge.

Production Costs

The cost of production after materials have been procured is relatively low. The co-owners of MLV own the warehouse they operate in and only need to cover the basic electricity costs

²⁵ (Criterion Institute and Pacific RISE, 2018)

each month. As with many other Pacific Countries, the cost of labour is also relatively low and casual staff can be employed based on production demand.

Item pricing & cost comparisons

Mama's Laef is a not for profit organisation and aims to produce and sell products at the lowest possible price. However, the cost of production is high and products are considerably more expensive than low quality, disposable sanitary pads that currently dominate the Vanuatu market. While reusable pads tend to be more economical over time, community members are often hesitant or lack the finances to cover the higher upfront cost.

There are three different MHM products offered by MLV, which can be combined to make comprehensive kits. The most basic kit includes four 'light flow' pads, for a cost of 1,600 VT per pack. This pack closely aligns with the quality and volume of the UNICEF MHM Pack distributed with comparative a unit cost of 490VT (international freight not included).

It is asserted, however, that this pack is unlikely to meet the needs of most girls and women, and that a pack of 2 light flow, 2 regular flow and 2 heavy flow/ overnight pads would be a more suitable pack for distribution. This would cost 3,100VT per pack.

Current outlets and partnerships

Mama's Laef currently sells products to individual customers through informal markets as well as selling higher volumes of packs to organisations NGOs, who will typically distribute the packs to girls and women for free via various community development projects. Marketing and sales are still a barrier to expansion as the business has found it difficult to identify sustainable and practical sales outlets. Producing bulk orders for an emergency response would enable the start-up to hire additional staff, strengthen their business capacity, increase their overall product reach and build brand/ product awareness.

At this stage, MVL does not have any formal associations or partnerships with government departments, although this is flagged as a key goal going forward.

Capacity for scale-up/ supplying for a disaster

In early 2020, MLV produced a range of goods for TC Harold emergency relief packs. CARE repurposed 1,000 packs of reusable sanitary pads that had been prepared for a schools project to instead include in locally procured hygiene kits, while another 350 packs of pads were made by MVL within a week. World Vision in partnership with the Vanuatu Society of People with a Disability (VSPD) also purchased 100 adult incontinence pads for distribution to households with a person living with a disability. CARE and several other INGOs were eager to source more reusable pads, however, MVL was unable to fulfil these requests due to a shortage of materials caused by COVID-19 related warehouse closures in China. When materials did become available two months later, distributions had already been completed and the opportunity to further supply emergency relief packs was missed.

Mama's Laef has indicated that they would like to scale up and cover the needs of government, donors and distribution agencies in future disasters with comprehensive MHM

packs. However, producing significantly higher volumes within a limited time frame will require either a considerable scale-up or the prepositioning of stocks in advance. The current factory is at capacity with 10 staff and equipment. With limited space to expand their current site, scale-up would require an additional venue, or possibly the establishment of subbranches. Additional human resources do not appear to be a limitation, as casual labour can easily be recruited to help meet production demand.

The key challenge presented for MLV in the supply of reusable sanitary pads is access to stock or materials within a very limited frame. Without capital or a confirmed buyer, procuring internally propositioned stock is not economically viable. Specific external funding would be required to fund orders that can be prepared in advance for an emergency. The volume of prepositioned stock required is difficult to predict and it impossible to accurately forecast when goods would be required. Prepositioned stock will need to be stored safely with sufficient ventilation to prevent deterioration of the product. The current MVL premises does not have space to store a high volume of stock or materials.

7.2 Soap

Local production capacity overview

There are several small-medium sized producers of soap in Vanuatu, with the majority utilizing natural materials and coconut oil as the predominate base for their product. One of the major benefits of Vanuatu's soap industry is that ingredients are predominantly sourced from local agricultural procurers, enabling a flow-on economic effect to agricultural producers in rural or remote communities.

Volcanic Earth is one of the more formalised soap producers in Vanuatu with a range of high-quality products that utilise mostly locally sourced ingredients. The established business typically has 10 female permanent staff and can hire additional casual labour given increased production requirements. Volcanic earth offers a range of soaps made from various local ingredients and has the capacity to make approximately 270 bars of soap per day. The business has an internationally recognised certificate in Good Management Practises (GMP) and has developed a range of products that are sold commercially across the world.

Tanna Farms is an agri-business that produces cold-pressed, organically certified coconut oil and coconut soap for domestic sale and export. The small Tanna-based business employs 20 staff (60% female) in the peak of production and sources key materials from 10 local farmers in the region.

There are several additional informal or semi-formal small businesses that produce soap utilising locally made ingredients. These enterprises are typically owned by or employ women and sell their product through local markets and handicraft stores.

Supply Chain

Soap bars produced by Volcanic Earth utilise a range of locally sourced products including coconut oil, volcanic ash and native essential oils. The only imported products are dyes to colour soap, which is a non-essential addition. There are no current challenges or shortages in sourcing local raw materials.

The current operation is set up with space to mix and mould the soap, as well as a drying room. Soap takes a minimum of 3 weeks to cure and are then wrapped in a biodegradable plastic that prevents the product from sweating. Wrapped soap can last 5 years or more, with the quality of the soap typically improving over time.

Tanna Farms has a slightly different product which also utilises all-natural materials. The soap typically takes six weeks to cure and is wrapped in paper.

Item pricing and cost comparisons

The cost of local soap is considerably higher than imported alternatives. Wholesale prices for a block of 100g soap is 140VT (Ex VAT) whereas a similar-sized block sourced from the supermarket costs an average of 70VT. The is higher again compared to stock sourced in bulk for global agencies such as UNICEF, where the quoted price for one bar of 100g is just US\$0.15, or 17VT (international freight not included). Domestic sources of materials are unlikely to provide flexibility in pricing models unless volumes are drastically increased.

Quality

The quality of soap produced in Vanuatu varies between producers. More formalised businesses such as Volcanic Earth and Tanna Farms have designed a quality product that is validated by success in the international market. However, further analysis into the specific characteristics of Vanuatu-made soap is still required to ensure it meets the standards required by the WASH cluster and donor agencies. Soap typically sourced by international agencies is made with an animal or vegetable oil base, whereas Vanuatu made soap utilises coconut oil as the primary product. This can mean that the soap may have a higher moisture content than is typically desired, reducing the wear and durability of the soap once in use. There are opportunities to alter the composition of soap and producers at Volcanic Earth feel confident they can adapt their recipe to produce a suitable product, with options to use different bases including copra or sunflower oil that could potentially result in a 'hard' soap that would offer longer durability.

Current outlets and partnerships

Volcanic Earth products are traditionally marketed to domestic tourists and overseas buyers. Restrictions on tourism due to COVID-19 has drastically reduced sales and operations, with export now accounting for 85% sales. Volcanic Earth products have never been utilised in structured activities or projects by NGOs, government or donor agencies. The current production capacity of Tanna Farms is limited, with COVID-19 restrictions obstructing the traditional tourism outlet for their products.

Capacity for scale-up/ supplying for a disaster

Volcanic Earth would only require additional soap moulds to enable a scale-up of production, which can be constructed in Vanuatu or sourced internationally. Additional casual staff would be readily available to facilitate uptake in production.

However, due to the extended nature of production, with a minimum of 3 weeks to cure, it would be impractical to expect soap to be made to order in an emergency context. The prepositioning of stock would be required to ensure sufficient product is readily available for immediate distribution. Preposition of stock would require an economic commitment from INGOs or donor agencies, as neither formal nor informal businesses have the financial capacity to prepare a high volume of products without a confirmed consignee.

8. PRODUCT PERCEPTIONS AND DEMAND

Global emergency response strategies emphasise the need for adequate consultations and assessments with target populations before the distribution of emergency relief items, to ensure that the products are appropriate and relevant to the recipients in their given context²⁶. Lessons learned from TC Pam highlighted the need for culturally appropriate kits and stressed that standardised international kits were not always appropriate in the Vanuatu context²⁷. Additional analysis of community perceptions and feedback on reusable sanitary pads has therefore been conducted to validate their potential inclusion into distribution packages.

Findings from CARE's Post Distribution Survey August 2020, South Pentecost

Qualitative data collected from community members that received reusable sanitary pads in TC Harold suggested that the products were well received by recipients. Of those who received the reusable pads, 50% indicated that they had used them already (after 1-2 months from receiving them). Of those that had not used them, some indicated that they were not clear on how to use them or they did not know what they were, despite the instructions included in each pack. A small number of participants were not confident to discuss why they had not yet used them. It could also be possible that women received the item in their households kit, but that woman had not menstruated since the distribution of goods or that the MHM products were shared with other family members (each household received only hygiene kit with just one MHM kit, irrelevant to how many women of menstruating age were in the house).

The majority of women (89%) who had used the reusable pads found them easy and effective. Many women suggested that reusable pads were beneficial due to their extended lifespan, which negated the need to spend money on disposables. One individual noted that the money she saved on disposable pads was used to buy food for her children. Only one

²⁶ (UNICEF, 2018) (International Federation of Red Cross and Red Cross Societies, 2020)

²⁷ (SPC, 2015)

participant suggested that the reusable sanitary pads did not meet her needs as it did provide sufficient absorbency.

A third (33%) of those interviewed had reduced or limited access to water after the cyclone and suggested that this was a limitation in using and washing reusable pads. Many women and girls indicated that they were required to stay at a house other than their own, or share their house with additional family members after the cyclone. Young women were more likely to highlight concern over finding a private place to dry their reusable pads, with some suggesting they would hide them under a piece of material, or choose to dry them inside, even though it was less effective. Some suggested that washing lines had been lost during the cyclone and that a string to hang the pads on would be helpful. Older women typically did not express embarrassment in hanging out the products with their washing.

It was commonly found that hanging or laying reusable pads in the sun was an effective way to dry reusable pads when it was sunny, but if it was overcast or raining that it could more than one day for pads to dry. While most felt that the pack of four was adequate, some indicated that poor drying conditions and the correlating increased dry time of the pads would sometimes mean that they did not have sufficient products to manage their menstruation.

Findings from the Australian Red Cross Society, May 2020

In early 2020 the Australian Red Cross Society conducted a report on the menstrual hygiene needs of women in Vanuatu in a disaster context. The study compared two types of disposable pads with two types of reusable pads; those from Mama's Laef and product made by an African enterprise, Afripads. The study concluded that both disposable and reusable sanitary pads were required in a disaster MHM kit, given the varying access to water.

After trialling two styles of reusable pads, the vast majority of participants provided positive feedback on the products (97% satisfaction for Afripads, 86% for Mama's Laef). Women that expressed dissatisfaction with Mama's Laef products highlighted issues with absorbency. This could be attributed to the kit composition, as Mama's Laef packs included four light pads, whereas Afripads included a mix of regular and heavy flow pads. It could, therefore, be hypothesized that participants would record greater satisfaction with a mixed pack of light, regular and heavy flow pads from Mama's Laef.

Overall the findings suggested that of the two reusable options, Afripads were preferred for future VRC procurement due to this slightly higher feedback response from participants and their lower unit cost. It should be noted however that that price comparison did not consider freight costs, or the time required to source pads internationally and failed to consider the complementary economic benefits of local procurement.

9. SUPPLY CHAIN CONSIDERATIONS

9.1 Capacity and demand

While the specific national requirements surrounding the distribution of NFIs in an emergency are not clearly defined, it is generally agreed that in an emergency context hygiene kits should be distributed to every affected household, while dignity kits should be distributed to individuals that meet fall within general vulnerability criteria. While this criteria varies between the G&P Cluster and distribution partners, consensus during TV Harold was to target vulnerable persons which included pregnant and lactating women, single-headed households, and people with a disability. Distributions by CARE found that this resulted in a ratio of generally 1 out of every 3 households.

In 2015, approximately 13,000 hygiene kits were distributed after TC Pam²⁸, with distribution targeted at one kit per household and an average of 5 persons per household. Kits were supplied by a large number of INGOs and donor agencies and all sourced from international stockpiles that were primarily flown in on defence force flights out of Australia, New Zealand and Fiji. The only record of the distribution of dignity kits was via UNFPA, who shared 400 prepositioned kits to women who met vulnerability criteria²⁹.

After the eruption of the volcano in Ambae in 2018, just over 4,100 hygiene kits were distributed to the affected households. Kits were all procured from international stockpiles from the New Zealand Ministry of Foreign Affairs (MFAT), the Adventist Development and Relief Agency (ADRA), UNICEF and the VRC³⁰.

The most recent TC Harold situation report available at the time of writing indicated that 5000+ hygiene kits had been distributed, although it is expected that the final figure is much higher than this³¹. These were a mix of locally sourced and internationally procured kits. A total of 2,000 dignity kits were sourced from prepositioned stock in Australia by UNFPA, with no additional dignity kits made in-country. World Vision partnered with the Vanuatu Society for People with a Disability (VSPD) to distribute 100 MHM and disability-specific kits (reusable incontinence pants), but there was no other evidence of similar kits being distributed by other agencies.

9.2 Procurement strategy

The substitution or inclusion of locally made products into emergency relief kits must consider traditional procurement processes in a disaster context. Kits or specific items are generally sourced through formal procurement processes where MOUs and commercial contracts are established between global or regional head offices and private suppliers. Suppliers tender for high volumes of product, enabling heavily-reduced production costs and final pricing of kits.

²⁸ (OCHA, 2015)

²⁹ (United Nations Population Fund (UNFPA), 2015)

³⁰ (Vanuatu WASH Cluster, 2018)

³¹ (Vanuatu WASH Cluster, 2020)

INGOs and UN agencies stockpile standardised kits in warehouses at key distribution points across the world, ready to be deployed immediately in times of an emergency. For Vanuatu, these stockpiles are typically located in Brisbane, Auckland and Suva and transport permitting, can generally be deployed within days. TC Harold provided a new opportunity to source kit items from businesses in Vanuatu, however, despite some key benefits for the local economy, the process of procuring and preparing kits domestically was slow and the overall costs of materials and complete kits considerably higher³². It could, therefore, be hypothesised that without intervention, it is likely that most INGOs and donor agencies will fall back into traditional procurement processes of sourcing low-budget goods from international stockpiles.

Global agencies, especially those that fall under the United Nations, typically have a defined procurement procedure that identifies preference to source items within the domestic context where possible, given the local alternative is not too financially burdensome or untimely. UNICEF's globally mandated procurement procedure states that "the country office should always assess local or regional markets to identify the best sourcing options" and stipulates that "economic, social, and environmental aspects of supply planning should be considered. This means striving for the best value for money considering whole lifecycle costs, reducing environmental impact and promoting local markets and human rights."³³

World Vision Vanuatu has a short policy on purchasing locally produced items for small ad-hoc purchases such as gifts, however, emergency response procurement falls under the broader World Vision International (WVI) Global Emergency Procurement Guidelines, which does not specifically cover localized purchasing of NFIs³⁴.

9.3 Kit Composition

Kit composition varies between INGOs and donor agencies. Some have developed a combined hygiene and dignity kit (ie. UNICEF, World Vision) while other organisations opted for two separate, simplified kits (ie. CARE, UNFPA). No agencies have distributed specific MHM kits during TC Harold, although some do have access to these in their supply catalogues (ie. IFRC). Donors and UN agencies typically require a product pre-assessment to confirm quality and suitability before their inclusion into standardised kits³⁵.

There are three identified strategies to include locally procured goods into existing distribution frameworks. These include; the addition of extra products into international kits, the comprehensive localised procurement of hygiene and dignity kits and the development of an MHM specific kit.

Each of these strategies will require consensus from distribution agencies and formalisation in WASH, G&P and Health cluster guidelines.

³² Internal reports from CARE International in Vanuatu

³³ (UNICEF, 2018)

³⁴ KII 9 – World Vision Australia

³⁵ KII 7 – UNFPA

Addition

There are opportunities to include additional products into internationally sourced kits. In procuring hygiene kits for TC Harold, CARE opted to include locally procured underwear into international hygiene kits, to ensure that girls and women were able to utilise the included sanitary pads.

The design of future kits could, therefore, utilise international prepositioned kits and simply include additional locally procured goods to compliment the kit. The addition of these items into pre-existing kits will increase the overall cost and will require the WASH cluster to support or even mandate their inclusion.

Partial or complete kit procurement in Vanuatu

There may be space to redesign the overall procurement strategy specifically for hygiene and/or dignity kits in Vanuatu. Should Vanuatu suppliers be able to offer a complete locally sourced kit to the required specifications, INGOs and donor agencies will be better placed to substitute these in place international stock.

In TC Harold, CARE was able to make 1350 hygiene kits with goods entirely procured in the domestic market. Each kit aligned with the contents of CARE's international hygiene kit, with the substitution of reusable sanitary pads for disposables, and extra inclusion of underwear. Each kit also contained two buckets, 15 bars of antibacterial soap, seven bars of laundry soap and a sarong. The only significant gap in the domestic market was high-quality buckets or jerry cans to the required specification, a finding that was corroborated by the national WASH cluster³⁶. This could gap could be potentially be filled by the procurement of individual buckets or jerry cans through international supply catalogues, or possibly through an initiative by Field Ready that now produces buckets to emergency specifications in Fiji. While there is no formalised list of contents for a dignity kit, a rapid analysis of the UNFPA dignity kit contents would suggest that the majority of these items would also be available domestically.

New MHM kit

There could be value in separating MHM goods from the traditional hygiene kit and/ or making an additional kit. This would enable appropriate additional information sharing and training at the time of distribution, given women have indicated that it was difficult to access this information when packs were shared to households in an open community context. It could be possible to source all the required MHM materials domestically, depending on the final list of required items.

The inclusion of an MHM would require consensus between WASH, Health and G&P Clusters and would require overall consensus that MHM is a critical component to disaster response. A possible MHM kit could include:

- 4-6 x reusable sanitary pads, (mix of light, regular and heavy flow)

³⁶ KII 6 – WASH cluster

- 1 x simplified instructions with pictures
- 1 x waterproof bag for storage
- 1 x 10L bucket
- 1 x soap
- 1 x small rope or string to use as a clothesline.
- 1x sarong or light piece of thin material that can be used to cover drying pads
- 3 x underwear (mixed size)
- 1x pack of pegs
- 1 x pack of disposable pads
- 1 x pack paper bags for discreet disposal or disposable pads

9.4 Incorporating into Cluster Guidelines

Cluster Guidelines provide INGOs and donor agencies with the national requirements of kit contents that ensure they are contextually appropriate and aligned between agencies. A formalized list of items, defined by the relevant cluster, will greatly increase the uptake of products such as reusable sanitary pads. During TC Harold, there was no set list of items for either kit, resulting in delays in procurement and conflict during community distribution, due to the vast disparity between kit contents. Evaluation workshops of the national response identified the standardization of kit contents as a key priority for both the WASH and G&P Cluster. There was also a recognised need for consensus and collaboration between the two clusters, as well as the Health Cluster to better define responsibilities between each going forward.

The inclusion of locally procured soap and reusable sanitary pads into NFIs could be significantly strengthened given their inclusion into cluster guidelines. While it may not be appropriate or feasible to mandate these items into kits, clusters could identify them as a preferred item, to be included where possible.

9.5 Prepositioned stock

A natural disaster or emergency typically requires immediate access to emergency goods. It is evident that local businesses do not have the capacity to prepare goods on demand (ie. Shortly after the disaster) and will require prepositioned stock.

This would suggest that businesses do not necessarily need support to increase their current capacity, but instead that strategies are required to enable the prepositioning stock that can be produced over a wider time frame within the current capacity of the organisation. It should also be highlighted that increasing the production capacity of the business may not be beneficial overall for a business. Given the infrequent nature of emergencies, high demands for stock will only exist for short periods of time. Increases in machinery, staff or operational space may be unsustainable for business during standard production periods.

Some INGOs and donor agencies currently have a permanent warehouses of prepositioned stock in Vanuatu, including IFRC/ VRC, Save the Children, World Vision and UNICEF. Other bodies, including CARE, Oxfam and UNFPA typically source goods from warehouses in Brisbane or Suva and do not keep stock on hand in Vanuatu. The National Disaster

Management Office (NDMO) has flagged intentions to build a warehouse facility that would stock pre-positioned stock in-country. UNFPA is also looking at options to have goods on the ground in Port Vila, given the increased frequency of disasters in Vanuatu and the reduced guarantee of access to international stocks.

Donor agencies such as DFAT, MFAT and the Central Emergency Response Fund (CERF) are typically responsible for the funding of prepositioned stock and would be central in approving the substitution of domestically procured NFIs.

9.6 Distribution considerations

Should reusable sanitary pads be included in emergency kits, there will need to be additional considerations for their distribution. Research by the VRC highlights the need for staff and volunteers to share key information on how to use and care for reusable pads, with findings suggesting that some women did not use the products when appropriate information was not provided³⁷. These findings were validated by additional research conducted for this study through CARE's post-distribution monitoring, which found that many women did not utilise the reusable sanitary pads as they were not clear on what they were or how to use them or what, despite the inclusion of instructions and pictures in Bislama. Best practise would see the distribution of kits with MHM products by female staff in a safe and discreet location that women and girls could access³⁸. Demonstration and basic information on MHM should be shared with the recipients to ensure they are confident in how to use the product. The specific needs of people with a disability should also be taken into consideration when conducting demonstrations and information sessions in the community. Without this consideration, there is a high risk that distributed goods will not be utilised to their potential.

10. CONCLUSIONS

With an increasing frequency of disasters and reduced certainty in access to global markets, the Government of Vanuatu and various donor agencies are looking to increase stockpiles of emergency relief goods in Vanuatu. National clusters, UN agencies and INGOs are reflecting on the alternative strategies utilised during TC Harold and are now redefining procurement policies in preparation for re-stocking of goods. There is an opportunity to build this momentum and design strategies to better integrate localized procurement into a traditional emergency response.

The localized procurement of reusable sanitary pads and soap would boost local industry and increase economic opportunities for small and medium-sized enterprises. It would enable increased employment for a predominately female workforce in each industry and would facilitate a new market outlet that will help stabilize production and foster new revenue avenues. For Mama's Laef, bulk orders could increase access to capital that can

³⁷ (Australian Red Cross Society, Vanuatu Red Cross Society and James Cook University, 2020)

³⁸ (Columbia University and International Research Committee, 2017)

facilitate additional expansion and market reach. For the soap industry, a new outlet for production could help mitigate the impacts felt due to the collapse of the tourism industry and increase economic outcomes for suppliers along the value chain.

Research demonstrates that reusable sanitary pads are appropriate in Vanuatu and are a sustainable, economical and environmentally-friendly alternative to the traditional distribution of disposable sanitary pads. To ensure that the product is best-utilised, there is a need to include supporting materials into distributed kits and design complementary distribution procedures that provide relevant information and training. For local soap, national specifications still need to be formalized before there can be a clear validation of its appropriateness. Research and industry support for producers may be required to design a product that will meet national and donor expectations. The design of a soap that meets regulations would enable the distribution of a local alternative in emergencies, but also other opportunities to include these into ongoing WASH/ hygiene activities and initiatives.

While there are some opportunities to reduce production costs for both MHM products and soap in Vanuatu, it is unlikely that the locally produced products will be economically competitive with those available through global procurement catalogues. The substitution of the local alternative will require donors to access their value for money not just through a direct price comparison of products, but through a social and environmental lens that accounts for the complimentary positive impacts for the community and local economy. Additional subsidies and national localization policies or guidelines may also encourage the substitution.

With limited access to materials and a lengthy production time, it is evident that local businesses will not have the capacity to produce the high volume of goods on-demand within the expected timeframe for emergency distribution. The inclusion of locally constructed sanitary pads and soap into emergency distribution kits will require allocated funds to prepare prepositioned stockpiles of goods. Businesses will need a committed buyer before production can commence and once goods have been produced, the responsibility of storage will transfer onto the consignee.

Given the high volumes of kits typically required in an emergency, it is unlikely that localized procurement will be able to fill the total demand. Strategies should instead focus on key kits or items and aim to cover a percentage of total NFI requirements with locally procured goods. Opportunities exist to develop comprehensive hygiene, dignity and MHM kits with materials sourced entirely within Vanuatu. There are also options to identify key items for local production that can be included or substituted into existing internationally procured kits. Defining the required items and their specifications in national guidelines will enable local businesses to source and supply required products and overtime could see growth in the range of products that can be sourced locally. The increased capacity to produce, procure, prepare and store emergency relief items in-country can ensure that kits are relevant and appropriate for the context and provides a safety net should access to international stocks be unattainable. Overall, increased localization of relief goods can strengthen Vanuatu's capacity to respond to a natural disaster and increase national resilience to future emergencies.

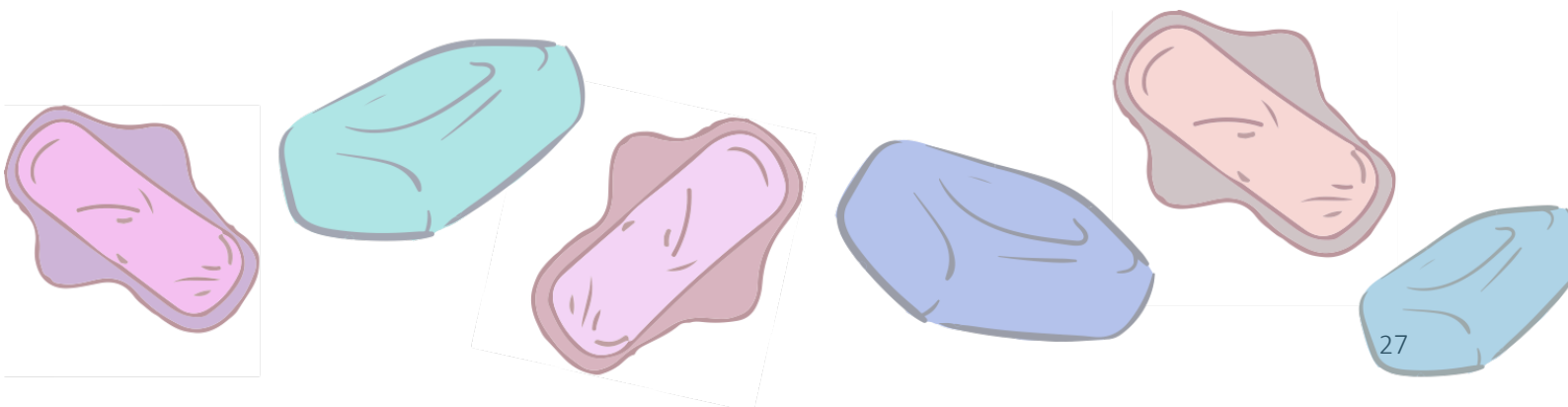
11. RECOMMENDATIONS

The localization of relief goods will require support at an industry level, cooperation and collaboration between clusters, donors and INGOs and the integration of localization strategies into traditional procurement framework. The following recommendations have been designed to enable a comprehensive approach to localized procurement in a disaster context.

1. Advocate for collaborative working groups to develop national cluster guidelines on NFIs.
 - b. Promote the establishment of a working group with representatives from the WASH, G&P and Health Cluster, leading agencies including UNICEF, UNFPA, VRC, CARE and World Vision and industry representatives to define the contents of hygiene and dignity kits and formalize standards in National Cluster guidelines. Review the possibility of a new MHM specific kit and identify which cluster this would fall under.
 - c. Develop a working group with representatives of the WASH Cluster, leading WASH agencies such as UNICEF, VRC and ADRA and representatives of the soap production industry, including the Department of Industry, Volcanic Earth, Tanna Farms and small-scale producers to define national specifications for bathing soap in terms of quality and materials.
2. Formalise a 'Local Procurement Platform' that links relevant businesses with donor agencies and facilitates the sharing of procurement requirements.
 - a. Engage the Vanuatu Business Resilience Network (VBRN) to build on the existing frameworks that outlines localized sources for emergency items.
 - b. Facilitate a two way dialogue between business houses and donor agencies that can strengthen the capacity of local businesses to align with donor requirements.
3. Share learnings with the NDMO and relevant clusters to facilitate the design of a national localization procurement policy.
 - a. Present a 'Local Procurement Platform' to NDMO to inform a national localized emergency procurement policy.
 - b. Review regional and national procurement policies and supplier agreement protocols to support the design of a formalized tender process and comprehensive localization strategy for the procurement of emergency relief goods.
 - c. Develop a long-term plan and aligning targets for the percentage of coverage of locally procured goods in future emergency response.
4. Work with donor agencies to conduct a pre-assessment of locally procured items to confirm quality and suitability.
 - a. Bring together core donor agencies and INGOs to design a preassessment process that would validate the inclusion of locally made goods into existing kits or procurement strategies. Assess the quality of goods in line with donor and cluster

guidelines and where required, conduct additional analysis or research into the suitability of the product.

5. Identify opportunities to fund a pilot project to preposition locally made NFIs.
 - a. Collaborate with traditional donors of prepositioned emergency relief stock, such as CERF, DFAT and MFAT, to design a pilot project that would trial the local production of complete or partial hygiene, dignity and/or MHM kits.
6. Promote the design and distribution of an MHM kit that is sourced primarily in Vanuatu.
 - a. Develop a comprehensive MHM kit that will meet the requirements of girls and women in an emergency context in Vanuatu. Work with relevant clusters, government departments, INGOs and donor agencies to confirm contents and aim where possible to source goods from local suppliers.
7. Identify technologies, ingredients or knowledge sharing that could support Vanuatu soap producers to meet cluster and donor standards.
 - a. Identify research and knowledge sharing opportunities that could support soap producers to align products with industry/ national/ donor standards.
 - b. Host a workshop with both formal and informal soap producers to share learnings, increase production capacity and establish linkages with potential markets.
8. Investigate opportunities to reduce production costs for local producers
 - a. Explore opportunities or linkages with Pacific RISE for the mobilization of stock for reusable sanitary pads at Pacific hubs.
 - b. Investigate a model for the consolidation of procurement of local materials to reduce production costs for soap producers.
9. Define and promote best-practice for distribution of MHM products
 - a. Work with relevant clusters and distribution agencies to define and promote the best practice for the distribution of MHM materials during an emergency.
 - b. Support Mama's Laef to develop improved pictorial instructions for MHM packs. Include a sticker on the outside of MHM packs that identifies the intended target for the product.



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13. ANNEX

13.1 Annex 1. Key Informant Interviews

| KII | Name | Role | Organisation | Date |
|-----|-----------------------|---------------------------------|---|-------------------------|
| 1 | Belinda Roselli | Founder | Mama's Laef | 29.07.2020 & 09.08.2020 |
| 2 | Mary and Jack Kalsrap | Owners | Mama's Laef | 4.08.2020 |
| 3 | Linda Trekner | CEO | Volcanic Earth | 5.08.2020 |
| 4 | Jono Bushell | Owner | Tanna Farms | 09.08.20 |
| 5 | Rothina Noka | Director | Department of Womens Affairs (G&P Cluster Lead) | 4.08.2020 |
| 6 | Sandrine Benjimen | WASH co-lead & WASH coordinator | Department of Water and Sanitation | 07.08.2020 |
| 7 | Emily Deed | Vanuatu Office Lead | United Nations Population Fund (UNFPA) | 05.08.2020 |
| 8 | Jake Ward | WASH Manager | UNICEF | 10.08.20 |
| 9 | Janet Collins | Procurement Manager | World Vision (Brisbane) | 11.08.20 |
| 10 | Lucy Wells | Facility Services Manager | Pacific RISE | 12.08.20 |

13.2 Annex 2. Industry Standards

| Donor | Vanuatu WASH Cluster Guidelines ³⁹ | IFRC * | UNICEF ⁴⁰ | CARE (domestic for TC Harold) | World Vision | UNFPA |
|---------------------------|--|----------------------------------|--|--|--|--------------------------------|
| Kit name | Hygiene Kit | Hygiene kit | WASH & Dignity kit | Hygiene Kit | Hygiene kit | Dignity Kit |
| Budgeted price (US\$/VUV) | - | US\$12.90 VUV | US\$41.83 | Varied pricing | Unknown | Unknown |
| Expected coverage | 1 family of 5 1 month | 1 family of 5 1 month | Unknown | 1 family of 5 1 month | 1 family 5 | 1 person |
| Water containers 10L | 1 x 10 litre capacity water container for transportation | { __L Jerry provided separately} | 2 x Water container 10L | 1 x 10L Bucket with lid or 20L Jerry Can | 1 x Bucket handle & lid with plug -14L | - |
| Water containers 20L | 1 x 20 litre capacity water container for storage | - | 1 x Bucket, with lid, 14L | 1 x 10L bucket no lid | - | - |
| Soap | 2 x 250g bathing soap, per person per month | 5 x Soap, body soap, 100g | 12 x Soap, toilet, bar, approx.110g, wrapped | 15 x Soap, antibacterial 90gm bar | 13 x Body Soap 100g | 1 x bath soap 1 x soap case |
| Laundry Soap | 2 x 200g laundry soap per person per month | 3 x Washing powder, 1kg bag | 1 x Laundry detergent, 1.5kg | 7 x Laundry bar 250g | 8 x Laundry Soap 135g | 2 x soap bar |

³⁹ (WASH Cluster , 2019)

⁴⁰ (UNICEF, 2020)

| | | | | | | |
|-------------------------|---|--|---|--|--|---|
| MHM | 2 x Acceptable material for menstrual hygiene, eg. Washable cotton cloth per person | 8 x sanitary pad, normal, box of 10 | 2 x Reusable menstrual Pads, kit 2 x Sanitary pads, female, w/wings, disposables | 1 x Reusable Sanitary Pads pack 4 | 30 x Sanitary Napkins 30 x A5 Brown Paper Bags (for sanitary napkin disposal) | 1 x pack reusable sanitary pads 1 x pack 10 disposable sanitary pads |
| Toilet Paper | - | 12 x toilet paper, twin ply, roll | - | - | 4 x Rolls of toilet Paper | - |
| Toothpaste & Toothbrush | - | 5 x tooth paste, 75ml/100g, tube, 5 x toothbrush | - | - | 5 x Toothpaste 100gms (herbal) | 1 x toothbrush 1 x toothpaste |
| Shampoo | - | 2 x shampoo, adult, normal hair, 250ml | - | - | - | - |
| Razor blades | - | 5 x razor, disposable | - | - | 5 x Disposable Razors | - |
| Underwear | - | - | 9 x Underwear, female panties, qty 3x3 (S, M, L) | 5 x underwear- 1x S,L girls, 1 x S,M, L Womens | 3 x Women's Underpants (1 x large + 2 x medium) | 2 x underwear |
| Torch | - | - | 1 x Torch, handheld, self-powered | - | 1 x Small Torch (hand wound) | 1 x flashlight |
| Potty | - | - | 1 x Child potty | - | - | - |
| Cloth/ sarong/ towel | - | - | 2 x Multipurpose Cloth, cotton, 1x1.5m | 1 x sarong | - | 1 x sarong 1 x towel |
| Whistle | - | - | 1 x Whistle, for safety use, metal | - | - | 1 x whistle |
| Comb | - | - | - | - | 1 x Standard Comb | 1 x comb |

| | | | | | | |
|----------------|---|---|---|---|---|-----------------------|
| Diapers | | - | - | - | 1 x Small Nylon bag containing: 6 x Washable Baby Diapers 12 x Diaper pins 2 x Plastic diaper covers (1 x 0-3mths + 1 x 3-6mths) | - |
| Bra | - | - | - | - | - | 1 x bra |
| Blanket | - | - | - | - | - | 1 x blanket |
| T-shirt | - | - | - | - | - | 1 x t-shirt |
| Ziplock bags | - | - | - | - | - | 1 x pack ziplock bags |
| Mosquito coils | - | - | - | - | - | 1 x mosquito |
| Sandals | - | - | - | - | - | 1 x Sandals |

13.3 Annex 3. Item composition and pricing Comparisons

Reusable Sanitary Pads

| | IFRC – Disposables | IFRC – Reusables | UNICEF | Mama's Laef Basic Kit | Mama's Laef Proposed kit |
|---------------------------|---------------------------------------|--|--|--------------------------|---|
| Budgeted price (US\$/VUV) | Unknown | Unknown | US \$4.28 = 490VT (excluding shipping) | 1,600 VT (VAT inclusive) | 3,100VT (VAT inclusive) |
| Contents | 60 x disposable pads 3 x underwear | MHM Kit: 6 x Reusable pads 3 x underwear | Reusable Menstrual Set: 2 x Holders made of cotton 3 x Winged Pads 2 x Straight pads 1 x pouch for storage | 4 x light reusable pad | 2 x light reusable pad 2 x regular reusable pad 2 x heavy/ night reusable pad |

Soap

| | IFRC | UNICEF | CARE | Volcanic Earth | Tanna Farms |
|---------------------------|---------|-------------------------------|------|----------------|-------------|
| Budgeted price (US\$/VUV) | Unknown | 17VT US \$0.15 (100g unit) | 70VT | 140VT | 140VT |

13.4 Annex 4. Technical Specifications

Reusable Sanitary Pads

| | IFRC | UNICEF ⁴¹ |
|-----------------|--|---|
| General quality | Soft fabric, no bad smell, no skin irritation Appropriate for use with underwear (fold under the crotch of the underwear and closure with plastic button) | |
| Material | Top: <ul style="list-style-type: none"> Absorbent layer of Micro fleece 100% Polyester or 100% cotton (towel type) Inside absorbent part: <ul style="list-style-type: none"> At least 2 absorbent layers of Micro fleece of 80% polyester and 20% polyamide, or at least 2 additional layers of 100% cotton (towel type) Bottom: <ul style="list-style-type: none"> Waterproof layer of Polyurethane Laminate (PUL) | Pads are made of cotton, preferably flannel, for high absorbance on one side, and synthetic material on the flip side for protection against leakage. |
| Shape | Winged | |
| Washing | Quality sufficient to withstand a minimum of 10 washes at washing temperatures of 40 degrees minimum | Workmanship and quality to withstand multiple washes for at least one year. |
| Stitching | Firmly stitched with overlock, using soft non-irritating thread Absorbent part centered on the pad to be firmly stitched using soft non-irritating thread | The holders have ribbon bands with edges well stitched by overlocking or other adequate fixation to secure the pads in position. |

⁴¹ (UNICEF, 2020)

| | | |
|----------------------|--|------------------------------|
| Colour | <p>Plain homogeneous fabric colour: dark blue, black, purple or brown</p> <p>Colour to be well fixed: the pad being immersed in clear water, the water should not become coloured in the colour of the pad</p> | Colors: grey or light brown. |
| Absorption | <p>The pad must have an absorption capacity of at least 40ml (absorbent pad - maxi) OR 60ml (super absorbent pad – super maxi)</p> <p>To test the absorption capacity immerse the pad in water for 5 minutes. Remove the pad. When the trickle of water that flows from the pad becomes drops, measure the amount of water absorbed by weight difference</p> | |
| Length | <p>Absorbent pad: 28 cm</p> <p>Super absorbent pad: 35 cm, Tolerance: +/- 5%</p> | |
| Width | <p>Absorbent pad: 20 cm including wings, 9 cm wings excluded</p> <p>Super absorbent pad: 21 cm including wings, 10 cm wings excluded</p> <p>Tolerance: +/- 5%</p> | |
| Thickness | Minimum 4.5 mm at the middle of the pad, Tolerance: +/- 5% | |
| Button | <p>Plastic snap button</p> <p>Diameter 12 mm minimum</p> <p>Metal snap buttons not accepted</p> | |
| BAG for sanitary pad | <p>Soft plastic, waterpoof</p> <p>No holes, no tears</p> <p>Envelope-style storage bag</p> <p>Minimum 150 mm, maximum 170 mm Minimum 120 mm, maximum 140 mm</p> | |

Soap

| IFRC ⁴² : | UNICEF ⁴³ |
|---|--|
| <ul style="list-style-type: none"> • The fatty acid content indicates the cleaning efficiency - the higher it is, better the soap. It should not be lower than 55%. • The Sodium Hydroxide (NaOH) content indicates the level of purity of the soap; it is not harmful up to 0.3%. • The moisture content should not be higher than 25%. The higher the moisture content, the faster the wear. | <p>Technical Specifications:</p> <ul style="list-style-type: none"> • Hand soap for personal hygiene, • Suitable for both baby and adult, • Non-perfumed, for normal skin, • Not less than 100 g (100-110g), • Long durability. • Individually wrapped bar. • The soap bar shall not be marked with any brand name or manufacturer's logo. (Information is to be placed on the wrapping) <p>Composed of:</p> <ul style="list-style-type: none"> • TFM (total fatty matter) content: Minimum 70 %. • Glycerin approx. 1 % • Others: approx. 29% • pH Value (conc. 1% at 40°C) : 9-11. • Does not contain fat from pig |

⁴² (IFRC, 2020)

⁴³ (UNICEF, 2020)

13.5 Annex 4. Images

Mama's Laef



Light flow Pad – 400VT



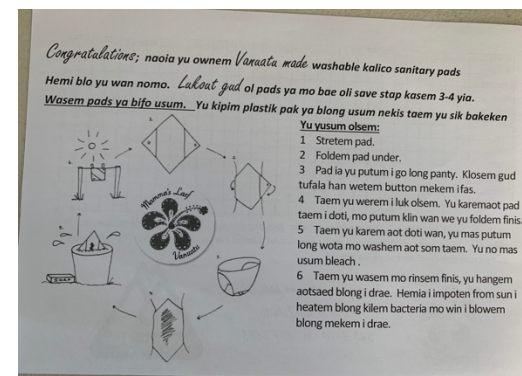
Regular flow pad – 500VT



Heavy flow/ overnight pad 650VT



One 20ft container for storage and another for production.



Instructions included with Mama's Laef packs

Soap – Volcanic Earth & Tanna Farms



Stock on hand and production set up at Volcanic Earth