







Tagabe River 2nd Clean-Up Campaign Mini Report





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Preface

Vanuatu GEF, SPC IW R2R Project is a GEF Fully Funded project implemented by the division of Biodiversity and Conservation under the Department of Environmental Protection and Conservation as the hosting agency within the Ministry of Climate Change, Meteorology, Natural Disaster, Environment and Energy. The Tagabe River Catchment Area (TRCA) is known as the national IW R2R project demonstration site. The project works in close collaboration with Department of Water Resources as the agency responsible for the management of TRCA and utilises the Tagabe River Management Committee (TRMC) as the body responsible for coordination and responding to any situation or activities that happens within the national demonstration site. Being the authority (TRMC) responsible for overseeing issues occurring in the area, it is also regarded as the project's supporting committee as well as playing the role for the national steering committee. The committee is engaged with the project through its planning, implementation and thus the overall coordination of the project. The national PM is provides the secretarial services to the committee since his recruitment until present. The project activities are aligned with the TRMC activities.

The project itself has not implemented much in the past two years. However as per national log frame and in accordance to the MYCWP, the NPM has planned this year, 2019 to implement most of project related activities. It has become so, that one of the activities that has been recently implemented is the conducting of the Quarterly Clean-Up Campaign along the Tagabe River. Such activities is subject to the overall national component three (3), specified under outcome 3, 'Community local government partnerships for sustainable land and surface water use preserving livelihoods'. Therefore, this quarterly clean-up campaign has been carried out for at least two times, the first one was on the last quarter of 2018 and the second which is conducted in this quarter 1 of 2019. This related activity was formulated in order to contribute with other related project activities to achieve the overall output which states, **Best Practice for community and local government partnership for sustainable land and surface water use reported and replicated through National STAR Project.**

Towards accomplishing both outputs and outcomes of the project, it necessarily important to planned, coordinate and implement this ongoing activity to aggregate the most desirable results. A bottom-up approach was a strategy integrated into this activity engaging both communities and natural government and non-government institutions.

We are pleased and overwhelmed by the success of this event so far with related contribution of our implementing partners and have adapt from the lessoned learned from each implementation to suit the context and current situation of the Tagabe River. Thus to further the progress achieving desirable output, this activity has pave the forward for the mass awareness which is to be conducted in the next quarter as per component 2 of the national log frame.

Donna Kalfatak IW R2R Vanuatu Supervisor Department of Environmental Protection and Conservation









Acronyms

DEPC- Department of Environmental Protection and Conservation

DoWR- Department of Water Resource

GEF- Global Environment Facility

GEM- Geoscience, Energy and Maritime (Division)

IMM-Ifira Marine Management

IW R2R- International Waters Ridge-to-Reef

IWRM- Integrated Water Resource Management

MWPZ- Matnakara Water Protection Zone

NMP- National Project Manager

SPC- Secretariat for Pacific Community

TRCA- Tagabe River Catchment Area

TRMC- Tagabe River Management Committee

UNDP- United Nations Development Program

VESS- Vanuatu Environmental Science Society

WWD- World Water Day









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Basic Data

Project Title	Vanuatu International Waters Ridge to Reef Project		
Project Site/ Location	Tagabe River Catchment Area, Port Vila, Vanuatu		
Activity related output and outcome	Output	Best Practice for community and local government partnership for sustainable land and surface water use reported and replicated through National STAR Project	
	Outcome	Community local government partnerships for sustainable land and surface water use preserving livelihood	
Acitivity Contribution to National Policies			

	Contact number	(678)5372122
	Activity Status	Ongoing (Quarterly)
Activity Implementation	Implementing and Coordinating partners	IW R2R Vanuatu, TRMC and
		IMM
	Stakeholders engagement	Dept. of Lands, Dept. of
		Environment, Dept. of Water
		Resources, Dept. of Forestry,
		Dept. of Agriculture, Minsitry
		of Lands, Ministry of Health,
		VESS, IMM and TRMC
		members (stakeholders)
	Funds allocated for this activity	USD 7,545 VUV 841,724
	Funds utilised	USD 2,147 VUV 239,485
	Availability of fund allocation	USD 5,398 VUV 602,239
	% Funds utilised	28.5%









Executive Summary

The International Waters Ridge-to-Reef (IW R2R) Project Vanuatu is a 3 year initiated GEF Project that has UNDP is its international implementing agency with the Secretariat of the Pacific Secretariat (SPC) as its regional implementing agency, hosted nationally by the Department of Environmental Protection and Conservation. IW R2R Vanuatu has TRMC as its national steering committee established under the DoWR as set forth by the Water Resources Management Act. As such this committee has existed since 2003, however activities implemented within the TRCA dated back to 1993. TRMC has developed and launched the Tagabe R2R Management Plan (2017-2030) from which much of activities with the IW R2R Vanuatu Log Frame coincide with each other supporting and contributing to national policies, resource management plans and overally the national sustainable development plan. The project itself has three major components:

- 1. Strengthening the coordination in support of the development and implementation of the Tagabe Catchment R2R Management Plan
- 2. Strengthening the capacity for participatory monitoring and evaluation of the Tagabe Catchment R2R Management Plan to strengthen the enabling environment for coastal area management.
- 3. Establish partnership for sustainable coastal area development.

The project's components have within them activities and time frames to achieve over the three years' project lifecycle. Such components also have links with Tagabe River Catchment Management Plan 2017-2030 and thus a MYCWP developed for the project details to incorporate the management plan in order to fulfil the component 1 for the national log frame.

Simply for the purpose of this ongoing activity, IW R2R Vanuatu takes lead in terms of funding and coordination in representation of TRMC and IMM as it implementing partners. As mentioned, this particular campaign is ongoing as of Q4 of 2018. This however represents major kick off for IW R2R Vanuatu project implementation. According to the national log frame, this activity lies within the component 3 and outputs/outcomes No. 2. So far the project has utilised 28.5% of the overall fund allocation for Quarterly Clean-Up campaign along Tagabe River. There were lesson learned and adjustment to adopt various methods and strategies in order to achieve the overall output/outcome set forth to accomplished.









Acknowledgement

The Tagabe River Management Committee (TRMC) and the IW R2R Project Vanuatu would like to convey their sincere acknowledgement to all those whom have participated in this major event highlighted at Tagabe River on the 20^{th} - 22^{nd} of March, this year 2019. As part of the organising committee for this Tagabe River Clean-up Campaign, the TRMC and IW R2R with great gratitude share its word of acknowledgement firstly to every island communities residing along Taagabe River whom actively engaged in this event to commemorate the World Water Day; to the pikini's, olgeta yongfala, mamas and papas and olgetal ol olfala. Your commitment and engagement reflects your concerns in related sense of waste management and sustainable river.

Secondly, the IW R2R acknowledges TRMC and its related government institutional stakeholders towards commemorating World Water Day at a community level. Thus, special acknowledgement to the; Department of Lands, Department of Water Resources, Department of Environmental Protection and Conservation, Department of Forestry, Department of Agriculture and Rural Developments, Ministry of Lands and the Ministry of Health. Your participation emphasis government's commitment towards safeguarding Tagabe River for sustainable livelihoods as well as over ally the protecting and conserving TRCA.

With these, further words of gratitude and appreciation to the heads of each government institution; Ministers, Directors, Prinicipal Officers for your consent and approval of staffs to be part of this significant event highlighting this year, 2019 World Water Day.

GEF/UNDP/SPC IW R2R Vanuatu and TRMC preferably acknowledge the IMM for its continuous assistant in mobilising, facilitating and organising communities along Tagabe River for this campaign. To be more specific, Nelson Bakokoto for your personal commitment and time ensuring a successful participation of communities.

We also take this opportunity to acknowledge Vanuatu Environmental Science Society for their in-kind participation in data collection of littering waste products/item disposed in the river. This was the second time we have engaged VESS in such clean-up in Tagabe and we acknowledge your contribution in data management.

Lastly, acknowledging the presence of Rohnda Robinson, the head of SPC Head of Disaster Community and Resilience Programme and the Deputy Director for SPC GEM Division. Vinaka for you time and dedication in this particular event as an abossador for Pacific R2R Program and SPC.









Current Overview of the Waste Management in Tagabe River

The Tagabe River Situates as the lower portion of the Tagabe Watershed Catchment Area. In the past and currently, this river has been beneficially used at daily basis by the residing island their livelihoods. The communities themselves lack educative knowledge and understanding on waste management, purposely littering and thus placing dump site along the river which is within 30m buffer zone. Communities are not accountable of such an appropriate actions, otherwise should be the result of the lack of awareness or whether they has been educative awareness but are not effective nor influencial to communities themselves in order to see actions of changes. In addition, the unaffordable access of waste collector by local authorities has always seen to contribute to the current status of Tagabe River in the perspective of waste management.

Majority of the communities have settlement that is directly within 30m buffer areas while only minority from observation have household settings indirectly within the buffer areas. Rubbish damping sites for most of the communities' household are placed within a distance of 5m-10m from the river consisting of organic and inorganic products. As in the event of natural phenomena's (heavy rain, banks flooding and wind) these can redistributed into the river.

The river itself consist of littering items such as plastic bags, plastic bottles, tins and canes and other littering and non-degradable products. All these can be found accumulated on the bottom of the river or floating on top. Littering products often found on the rivers' surface often are clustered in groups held back by parches of water lilies that stretches across the river. As results they can be found in large heaps floating on top of the river.



Figure 1 Community rubbish damp site located within buffer zones of Tagabe River









Additionally littering that are capable to stay afloat on the water from up stream can be found collated in parches or individually downstream. Communities residing downstream often complain about such matter from which they are not responsible. It is then a great concern, to ensure and maintain a sustainable river that should be seen beneficial for the entire Tagabe River communities.

In the past there has been clean-up campaign conducted along the Tagabe River. The approach usually involves civil servants and often with the absent community's participations. Again, clean-up occasionally was conducted then at only certain areas of the river. However, the significance of this campaign and the previous one emphasises the need of enhancing community's mindsets by engaging all residing communities along the river with civil servants carrying out this activity. This is regarded as a more strategic respond put forward to engage the both participation of civil servant and communities for the entire catchment.

Residing island group communities are essential to be engaged, but the real significance lies within their understanding on the purpose of their engagement. At a higher natural resource sectors and intuitional platform, we do understand the causes of littering and its impact to the environment, and thus by all means of the time, financial and human resources are dedicated to promote as well as to advocate sustainable resources management to mitigate the impact of waste. It is then very crucial to take and feed this at a community level whom as seen majorly as offenders of such actions whom in reality are not. The practical application of their engagement is considered as one of the many integrative approach on how educative waste management information can be taken considerably at community level and be a factor of change in their actions.









Purpose

The current status of the Tagabe River in terms of waste management and pollution such as waste disposal and littering has been always a major concerns for residing communities and natural resources authorities from both government institutions and NGOs for the overall management of Tagabe River. With the absent of strategic planning, response and integrated management, issue dealing with waste disposal and littering is seen to continue and rapidly increase. Thus posing an immediate threat to communities who themselves are actors of the scenario but also beneficiaries of the river for sustaining day-day livelihood. Additionally, with expanding concerns to the biodiversity of the river system, the flora, fauna and microorganisms those are inclusive towards the overall functioning of the river ecosystem as well as coastal/marine environment. Keeping this concept in mind we decide to conduct this cleaning campaign for such purpose:

1. *Minimize the accumulation of inorganic product found in and along Tagabe River*. Even though the absent of strategic waste management/approach in placed, we look towards reducing the accumulation of solid waste (Inorganic and Organic) in the river and avoid its further accumulation as well its point source pollutant.

2. Enhancing the mindset of river communities.

As a starting base and moving forward for at least a better management of the river. It is important to engage the participation of communities as they are daily resource users. Community engagement such as this will retain their sense of ownership of the river and understand our intentions to engage them in resource management through this particular activity. Again, this should reinstate their responsibilities by adopting protective measures as key managers for Tagabe Rivers from further future initiatives from TRMC and R2R.

3. Engagement and Participation of Communities and Civil Servants

The IW R2R project Vanuatu we consider communities as the main players of the project implementation as well as achieving a desirable output. It has been notice that such activities implemented at community level in the past have never capture the full participation of communities. Therefore, this clean-up campaign considers and ensures full engagement of communities since they are the daily beneficiaries ant the river itself is used for provisional and recreational purposes but over ally sustain livelihoods. With the dedicated participants from civil servants on the 22nd March highlights the significance of resource management, waste management and sustainable development which is again something that we at institutional (Government, NGO's and Private Sectors) level are introducing, promoting and advocating to general public. As represented by the participation of civil servants in this community level programs shows our practical commitment, reinstates idea of









efficiency of cooperation but greater links to point No. 4, a reference to the awareness.

4. Basis and Reference for the mass awareness.

This mass clean-up campaign and the previous one are the basis in which the awareness is being run with the communities. The mass awareness should basically educate communities on integrated resource and waste management for a sustainable river, yet practically the need to engage them, which has been portrayed in purpose 3, in order to illustrate what we are trying to promote. This two clean-up campaign can be the basis of evidence for the communities to understand why we have been engaging them and how passionate we are in more practical activities to come. So it is more a strategic directives we are taking in order to capture their mindset i.e. attention firstly and then enhance their mindset. This again will remain a contribution to sustainability in all project activities at ground level.

5. World Water Day 22nd March, 2019

Over ally all the purpose stated above is to commemorate the World Water Day 22nd March of 2019 with our national theme" Klin mo Inaf Wota blo Everione". These purposes highlight the significance of Water and that it's being celebrated with the communities. This event yet marks and paves the way forward for IW R2R Project and TRMC effective roll outs of project related works as well as committing ourselves to the overall sustainability of the all related activities as we incorporate and integrate project management with the idea of community to cabinet approach. Only then there will be cross sectoral stakeholders engagement, there will be a sense of Ownership, Enhancement of Mindset and lastly sustainability.









Tagabe Clean-Up Campaign

Coordination

This quarter, the clean-up campaign was conducted with residing island community groups along Tagabe River from the exactly Tagabe Bridge to Blacksand bridge and right down to the last communities at Blacksand coastal area. The campaign begins from the $20^{th} - 22^{nd}$ March with the communities which was facilitated by the IMM. About 300 cabbage bags were distributed to these communities on the 19^{th} March including hand gloves. The distribution of these rubbish collection utilities were in accordance to size of communities and also the dense of littering product needed to remove.

The civil servants, NGO and private sectors further this initiated activity which is coordinated by the IW R2R NPM on the 22nd March. Each government department are stationed in pick up point along the river from Tagabe main bridge right to the pump station i.e. MWPZ 1. Communities from this portion of river are also engaged with the civil servant in rubbish collection.

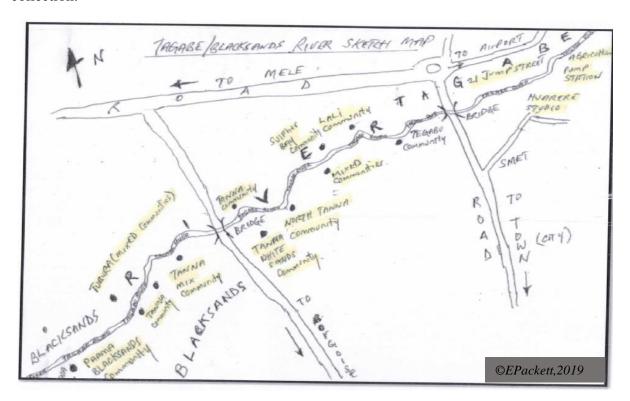


Figure 2 Overall sketch map of the Tagabe River showing the distribution of the residing island community groups









From figure 1, the communities highlighted in yellow are the communities that were engaged in this major clean-up along the Tagabe River. The civil servants are included in this event and were stationed at each check point from the Tagabe main bridge towards the pump station. This includes the Dept. of Environment, Dept. of Water Resources, Dept. of Forestry, Dept. of Agriculture, Dept. of Lands, Ministry of Lands and Natural Resources and Ministry of Health as well as VESS and IMM.

Implementation

It was clear enough that community members are concerned about their river and this can be shown by the effective participation. Majority of which are women, young girls, children, men and elderly people. Each islander chiefs where responsible to coordinate his community to participate in this mass clean up. However, during the preparation of this cleaning campaign, chiefs were notified and in advance with notices posted in every community notice boards and public places. Therefore the communities were well aware of this activity. The overall communities turn out portrays gender equality in their participation during this 3 days of Tagabe Cleaning up Campaign.



Figure 3 Children from various communities were part of this cleaning-up campaign to commemorate WWD, 2019









Date	Activities
16/03/2019	Distribute notices to communities at Blacksand area regarding
	WWD clean-up campaign and also gave some information and
	awareness about the important of keeping that river clean.
18/03/2019	Continue distributing notices to communities regarding WWD
	upstream Tagabe communities with partly conducting mini-
	awareness.
19/03/2019	Distribute plastic bags and hand gloves to all the communities in
	the surrounding area from Blacksand to Tagabe Main Bridge. The
	DEPC vehicle was used for the distribution of plastic bag on that
	day.
20/03/2019	Follow up with communities and inspecting of site along the river.
	More plastic bags were distributed.
21/03/2019	Follow up with communities, distributing more plastic bags and
	awareness done.

Table 1 illustrates community's engagement in WWD Clean-Up Campaign which was facilitated by Nelson Bakokoto from (IMM)

The IMM was entirely responsible to facilitate from the dates outline above in Table 1 WWD clean-up campaign. The preparation of such event with the communities begins from 16th-19th March. Communities resume with the campaign from 20th-21st March as well as 22nd March. These are island communities residing from Blacksand to Tagabe main bridge.





Figure 4 A mother and a teenage girl from Mix Island communities at Blacksand participating in rubbish collection found in the river

The turning out of activities results in at least six (5) trips made by private waste collector for disposal at Etas. Most of the communities respond to have more cabbage bags and hand gloves. Again stressing communities' commitment towards related issues addressing waste management. The cleaning campaign proceeds on for at least four days engaging predominantly communities.

As part of the coordination team for this cleaning campaign together with TRMC, we took this opportunities to provide light refreshment for all community members' and civil servants









whom participated in this cleaning up campaigns on the exact date for WWD, 22nd March. Inclusion of refreshment mainly sandwiches and Juice. This is to acknowledge their time and commitment to step outdoor from their offices to show their commitment for this event, for the communities and the overall users of TRCA.



Figure 5 Ministry of Lands, Dept. of Lands and DEPC staffs engaged in litter collection along Tagabe River from Huarere Studio Area



Figure 6 IMM, DEPC and VESS staffs engaged in collection of littering item as well as data collection at Tagabe Bridge









Highlight

- 1. Entire Tagabe River from furthest communities upstream to the last community downstream in Blacksand engage in littering collection and other inorganic products.
- 2. Communities take responsibilities and dedication towards cleaning up their respective riparian areas of Tagabe River
- 3. Six (5) trips of cabbage collection to Etas (Municipal Rubbish Dumping site). A total of 300 cabbage bags collected.



Figure 7 Cabbage Bag Filled and gathered in each pick up point by communities and civil servants during this clean-up campaign from 20^{nd} - 23^{th} March.

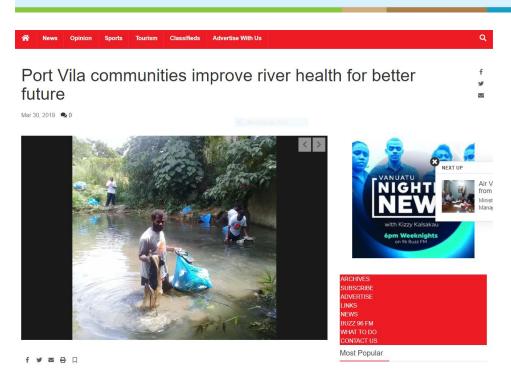
- 4. Gender inclusive/equality in community member's participation in this massive river clean up.
- 5. Chiefly system took governance towards coordinating their communities in this activities, again dedicating their commitment and concern for their river but also paving a way towards any future engagement of communities as part of IWRM for Tagabe River.
- 6. As part of awareness, communication and knowledge management at least 1 press release on Daily Post Vanuatu.











Link: http://dailypost.vu/news/port-vila-communities-improve-river-health-for-better-future/article_e8e77b5b-892b-581f-bf38-242f41246582.html

Figure 8 A press release that was published out by the Daily Post Vanuatu

- 7. Pre mini awareness with the communities. Its purpose to provide justification to communities in safeguarding their river for to health benefits through improved waste management practices and neighbouring communities. Capturing and changing communities' mindset to be proper managers of their river.
- 8. Data collection by VESS officer for the purpose of data monitoring and management of littering products in Tagabe River.











Figure 9 Highlight No. 8 Litter Data collection by DEPC staff on 22nd March, WWD



Figure 10 Highlight No. 8 Litter Data Collection by DEPC staffs on 22nd March, WWD with the assistant of SPC GEM Deputy Director and Head of Disaster and Resilience Programme, Rhonda Robinson.









9. SPC GEM Deputy Director and Head of Disaster Community Resilience Programme Rhonda Robinson personally was part of this mass clean-up campaign.





Figure 11 SPC GEM Division, Deputy Director General and Head of Disaster and Resilience Program, Rohnda Robinson part of this event as an ambassador for IW R2R representing SPC and RPCU.









Data Analysis and Discussion

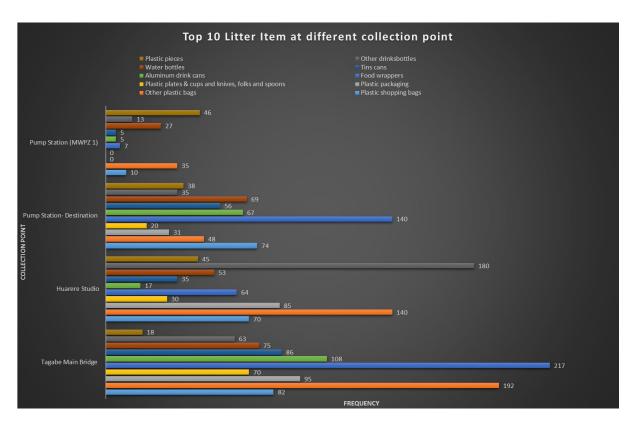


Figure 12 Shows top ten (10) litter items collected in three (3) different segments of the upper portion of Tagabe River

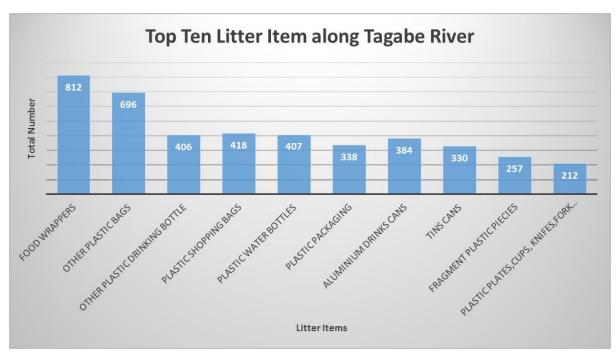


Figure 13 Summarises top ten (10) litter items in accurate figures collected from upper portion of Tagabe River (Tagabe Main Bridge-Pump Station)









The littering data recorded for all items littered in the river. However, only top 10 of these littering product that are frequently found along and within the river are displayed in this graph (fig 12). Differences in each littering product item along segments of the upper portion of river is influenced by various factors. Major contributing factors would be residential settlements and public access to certain part of the river. For example, Tagabe Bridge is publicly accessible and a passage, thus from fig 12, plastic wrappers, other plastic bags and Aluminium drink canes are greater than other segments of the river. Huarere Studio accommodates a very high density of residential developments i.e. homes in both side of the river wherefore Fig 12 illustrates the greatest number of other drinking bottles in this area compared to all others segments with other plastic bags second inline. Similar case for areas along Pump stations top Destination with food wrappers topping all 10 littering item. Thus, as mentioned there are various social factors that contribute to the trench fluctuations individual top littering product.

According to Fig 13, it has summarise out of the ten (10) litter products found from the entire upper portion of Tagabe River. From the summary, **Food Wrappers** are of greater number/frequency collected, seconding by **other plastic bags**. The list number of plastic bags found and collected are **fragmented plastic pieces** and **plastic plate, cups, knives, fork** etc. To reinstate, these was the actual collection of litter that has been collected and graphed (fig13). However, there are more of such littering item still floating, accumulating that needed to be collected and recorded.

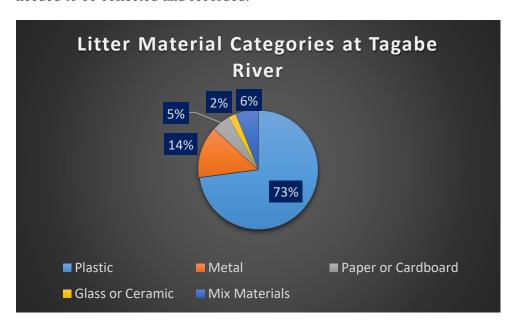


Figure 14 Pie Chart classifying litter material into percentage categories for the upper portion of Tagabe River.









From the data collection, it has been identified (fig 14) that plastics have the greatest percentage (73%) during this clean-up campaign. 14% was **metals** with **mix materials** and **paper or cardboard** relatively similar and the least category is **glass/ceramic** with a percentage of 2.

Observation/Challenges

While on ground coordination and implementation there were several observation and issue/concerns raised by communities along Tagabe River. Some of which are of great importance to be addressed if strategic management is taken.

- 1. Communities along Tagabe River do show their concerns towards the rubbish that are found in the river. Simply for the reason of which they are the daily users of the river for various purpose. Even before this current massive clean-up, communities who really have this overall idea have been recently cleaning their part of the river. Thus it was greatly portrayed by the commitment and time. For communities not serious about their river do still remain faithful during this clean-up campaign participating equally as to those communities having clear concern of their environment. It may be the result of pre awareness to either communities or chief towards the consent of their environment and for the own benefits and the entire Tagabe water catchment.
- 2. Secondly the communities who have overwhelming concern of their river in practice do complain about what is distributed up stream. Communities downstream continuously affect and at some point affects their willingness to consistently clean their part of the river. If such is ongoing we will be expecting Tagabe River to be heavily contaminated by accumulation of rubbish.
- 3. In terms of the marine ecosystem. If such rubbish or littering flows to the coastal areas and even to the adjacent reeferal areas. Such will not only have negative impact on marine creatures but the entire reef ecosystem. Thus relates to Ifira Community Conservation (ICCA) that specifically falls under the Ifira Marine Management (IMM) to conserve and protect our marine resources. Such practices and measures to reduce disposal of litter waste into the reef will have direct consequences that will either be positive or negative to community and coastal conservation that has been in place. Therefore promoting and enforcing the traditional conservation of our marine resources of which are being highly threatened by human induced action inland.
- 4. Communities also raised concern and complains against the Tusker factory and MCI whom deliberately flood their effluent into the river. Thus affecting the quality of river and its daily users but also the aquatic life forms existing in the river.
- 5. Needs more awareness in community's related institutions, such as, Schools and Churches.









- 6. Difficult to educate people/since most of the young youths, children are have low literacy level or uneducated especially in this rural parts of the community.
- 7. This area is in an urban and peri urban area. Thus, the need for proper planning and from Municipal and Shefa Provincial Government regarding waste management. Specifically waste collection as seen to lacking in these area that contributes to inappropriate waste/littering disposal practices.
- 8. More through clean-up campaign. Even though, the campaign was successful they is need for a through collection that considers greater duration in timing and involvement of everyone (communities in specific).

Recommendation

Regarding the observation/issues and concerns from this massive cleaning up campaigns there should be a more strategic respond and integrative management of surface water, land and riparian areas (land) engaging communities and to cabinet level to collaborate and effectively with greater assistance from government and non-government organisation. Therefore recommendations are as follows:

- 1. Setting up WASH committee for every communities along Tagabe River. Or alternatively strengthen the existing provincial government structure to have focal points, i.e. groups within the communities to implement natural resources management and preserving ecosystem goods and services towards sustaining all of Tagabe River Communities. But also allows knowledge sharing and issues addressing Tagabe River can be taken accountable by all relevant key players.
- 2. The need of more advocacy, educative awareness and knowledge sharing to the communities on best land and surface water practices. To capture the mindset of communities and enhance they management practices towards a more sustainable river.
- 3. It is highly recommended that strategic plans and integrative management of Tagabe River considered soon as possible. Issues apart from waste, sanitation is also becoming increase concerns for the communities and wherefore all responsible organisations. The need of lower catchment be better coordinated by TRMC to develop and implement management plan.
- 4. Establishing recycle cage, as seen from the data collected. Plastic bottles trends will likely to be increase. However with the latest band of plastic bags will largely enhance its trench. Plastic bottles will increase since we have more distributors. However with World Vision and other commercial organisation taking the lead in the recycling. This should be a profound way to remove and reduce those numbers in the river.









- 5. The need to develop a national Waster Water Standard, so that legal authorities can penalise offenders against such standards. For example the Tusker Factory and MCI releasing waste water into Tagabe River.
- 6. To ensure such effective awareness and knowledge sharing for the cleanliness of Tagabe River to the Chief of Ifira and to the chief's council. As such, an opportunity to tapped into our existing traditional frameworks, representation of native land owners in for their indigenous integration of community mindset as environmental managers of Tagabe river prolonging its services to the island communities but also to maintain this historical site to the people of Ifira.
- 7. Monitoring of littering data in Tagabe River. In such events, IW R2R has been using VESS littering data sheets to collect data. Yet data collection and monitoring can be only done by those with firsthand knowledge or rather certain literacy level. In this very important to collect litter data that are representable through a robust design methodology. Since the river stretches quite lengthy proximity far inland to the coastal areas, there is requirement to select from individual communities and train them on such methodology. Thus monitoring of littering product can be projected as a trench over time and be used as reference to the effectiveness of quarterly clean-up and the awareness carried with the communities.
- 8. Training be conducted with collaboration of VESS and DEPC with communities especially on data collection and monitoring.

Finance

Item	Expenditure	Funders
Food allowance	36,000 Vatu	IW R2R Vanuatu
Transport (fuel)	7,500 Vatu	IW R2R Vanuatu
Local Community Assistant	13,000 Vatu	IW R2R Vanuatu
Communication (credit card)	1,500 Vatu	IW R2R Vanuatu
Cabbage Bag and Hand Gloves	18,180 Vatu	IW R2R Vanuatu
Cabbage Collection by Private	15,000 Vatu	IW R2R Vanuatu
Waste Collector		
	26,400 Vatu	IW R2R Vanuatu
World Water Day T-shirt		
Total	117,580 Vatu	

Table 2 Financial expenditure and breakdowns for this quarterly campaign









Conclusion

To conclude, the overall Tagabe Clean-up campaign is a kick-start off to get communities up and running. Engaging Tagabe communities to take responsible as manager of the river from which their benefits from but also for the entire population of Port Vila being part of the Tagabe Catchment. This should pave the way forward towards achieving a more strategic and integrated management to land, water and forest given the close interconnectedness to maintain and enhance ecosystem services in sustaining livelihoods of Tagabe Island communities.