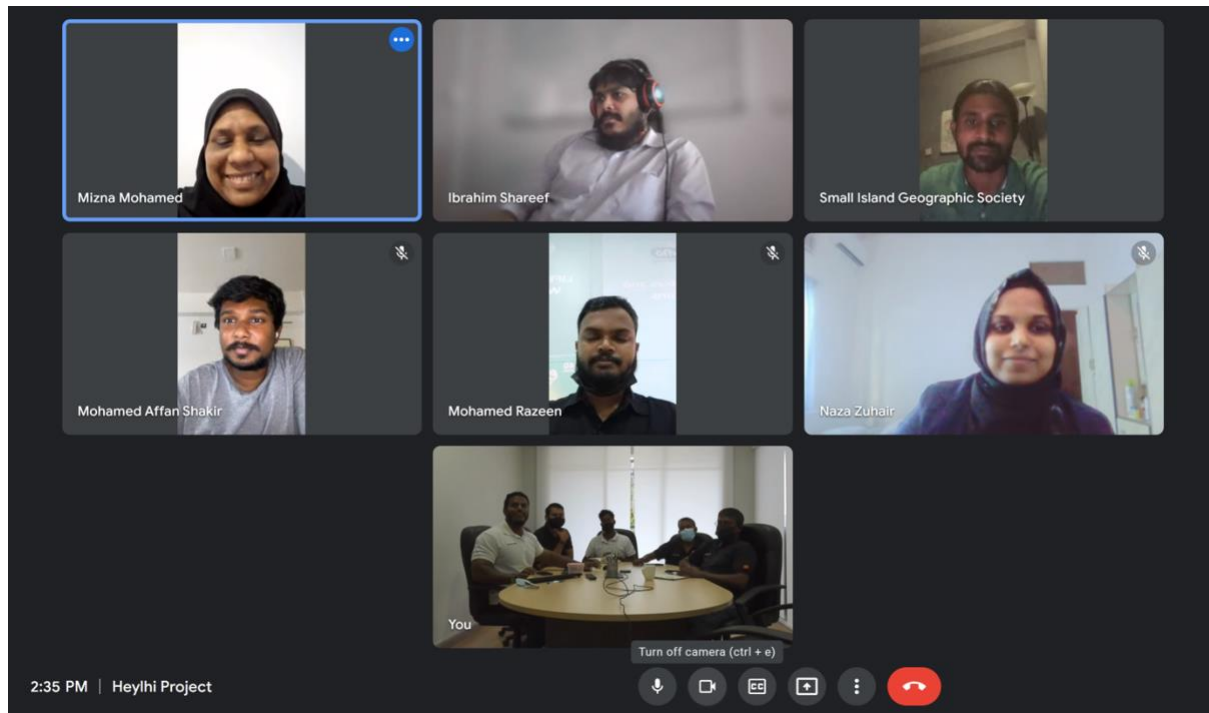


CLIMATE INNOVATION CHALLENGE

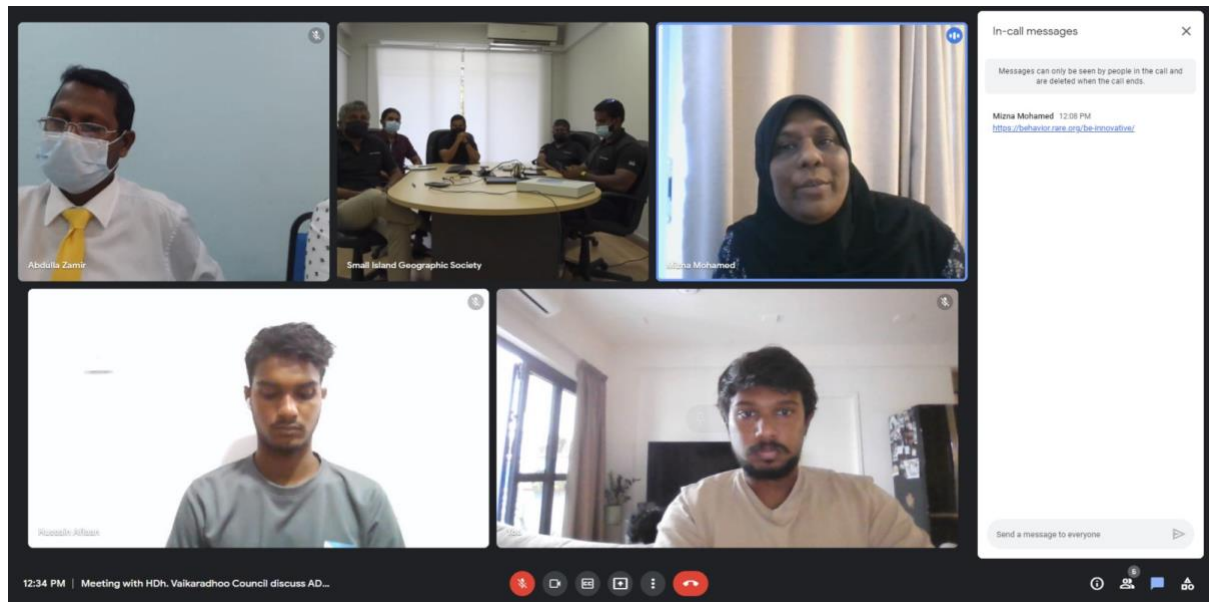
Monthly Progress Update

Reporting Period (Month)	December 2021 – January 2022
Grantee Name	Small Island Geographic Society
Project Title	“Heylhi”
<p>1. List the key activities undertaken during this month</p> <ul style="list-style-type: none"> Establishment of “Heylhi” Project Management Unit. Project “Heylhi” meeting with Developers to create the application on 23rd January, 2022. Meeting with Local Council of HDh. Vaikaradhoo on 27th January, 2022 to discuss Project “Heylhi” and the implementation steps that are to be taken. 	
<p>2. List the key beneficiaries /stakeholders consulted during this month</p> <ul style="list-style-type: none"> This month SIGS met with the Developers who will be creating the application, and the HDh. Vaikaradhoo Local Council President and team in order to discuss the project. 	
<p>3. Summarize key achievements and milestones of this month</p> <ul style="list-style-type: none"> Start of Project “Heylhi”, developers begin work of the “alpha” version of the application which will be ready by the 2nd week of February. Meeting with Local Council to discuss the project, they will be helping SIGS with the implementation of the Project, as well as with project activities, communications with locals, etc. Discussion on specification of Concrete Markers that are to be set up, along with discussions on Flooding Gauge. 	
<p>4. List key issues to be resolved</p> <ul style="list-style-type: none"> Travel for initial baseline survey of Vaikaradhoo was planned for 24th January. Due to increased Covid 19 cases, we have been unable to travel to Vaikaradhoo to do the baseline survey. As this wave starts to clear, we will be traveling to the island in order to complete the baseline survey. 	
<p>5. Any additional issues (observations/learning in terms of the applicability, scalability and sustainability)</p> <ul style="list-style-type: none"> None except for travel limitations. 	

Annex - Meeting Pictures



23/01/2021 Meeting with Developers and introduction to Project "Heylhi"



27/01/2021 Meeting with HDh. Vaikaradhoo Island Council to discuss implementation of Project "Heylhi"

CLIMATE INNOVATION CHALLENGE

Activity Reporting

Reporting Activity	1. Project Inception - Establishment PMU Report
Grantee Name	Small Island Geographic Society
Project Title	“Heylhi”
<p>Introduction</p> <p>As part of Heylhi project, this report will provide the information on the establishment Project Management Unit as part of Activity 1 – Project Inception.</p>	
<p>1. PMU Arrangements</p> <p>The project will be led by Heylhi Project PMU. The Lead Developer / Project Coordinator will be in charge of the PMU and the Development Project Manager will head the application development team. Project coordination and support will be provided by the team throughout the project with guidance from the Lead Developer / Project Coordinator. The team will commence the work as per the implementation plan.</p> <p>Table 1 provides a list of team members, roles, and responsibilities. Curriculum Vitae of the team members is attached as annex 1 – 12 in this report. Table 2 provides a cash flow plan for PMU remuneration.</p> <p>Due to the short time frame for the project, SIGS has engaged Water Solutions Pvt. Ltd. to manage the human resource aspects of the project. In order to meet the requirements of employment regulations, Heylhi project team members’ contractual and remunerations will be processed through Water Solutions Pvt. Ltd. All costs related to Heylhi project remunerations will be invoiced to SIGS on a monthly basis for the duration of the project.</p>	

Table 1: PMU Roles and Responsibilities

No.	Name	Position	Responsibilities	Input in Days
1	Mizna Mohamed	Lead Developer/ Project Coordinator	will oversee the implementation of the project; coordinate with all relevant stakeholders, manage and provide guidance to the project team.	120
2	Ahmed Zahy Zuhair	Development Project Manager	Prioritize, plan and coordinate project development activities according to project requirements. Communication between the community liaison officer, communication specialist, and development team and address additional requirements as the project develops.	120
3	Mohamed Razeen	Back End Developer	work alongside front-end developers, full stack developers, programmers or UX specialists to create comprehensive digital solutions for project needs.	80
4	Naza Zuhair	Front End Developer	Determining the structure and design of app, striking a balance between functional and aesthetic design, and ensuring app design is optimized for smartphones.	80
5	Faruhath Jameel	UI/ UX Designer	Collecting, researching, investigating and evaluating user requirements. Their responsibility is to deliver an outstanding user experience providing an exceptional and intuitive application design.	60
6	Ibrahim Shareef	Development Consultant	Supporting the Project Coordinator in any project activity and carrying out interviews; documenting findings and working closely with the Social Media Content Developer on sharing research information for the public.	60
7	Mohamed Bunyameen	Communication Specialist	Assist the project on all communication to improve the visibility and outreach	60
8	Hussain Aflaan	Community Liaison Officer	Prepare and deliver verbal communications, such as interviews, phone calls and face-to-face meetings, and written communications, including press releases, reports and social media updates, to colleagues, collaborators, the public and other stakeholders.	40

9	Mohamed Affan Shakir	Social Media Content Developer	Document project activities through photos and videos and post them to the website and other social media platforms, and develop marketing materials.	60
10	Shaadhoon Mohamed Haleem	Project Assistant	Responsible for supporting the Project Coordinator in any project activity and carrying out interviews; documenting findings and working closely with the Social Media Content Developer on sharing research information for the public.	120

Table 2: Cash Flow Plan for PMU Remuneration

	Dec, 2021	Jan, 2022	Feb, 2022	Mar, 2022	Apr, 2022	May, 2022	Jun, 2022	Jul, 2022	Total
Remuneration									
1. Project Coordinator	818.18	2,454.55	2,454.55	2,454.55	2,454.55	2,454.55	2,454.55	2,454.55	18,000.00
2. Development Project Manager	818.18	2,454.55	2,454.55	2,454.55	2,454.55	2,454.55	2,454.55	2,454.55	18,000.00
3. Back End Developer		1,333.33	1,333.33	1,333.33	1,333.33	1,333.33	1,333.33	1,333.33	8,000.00
4. Front End Developer		1,333.33	1,333.33	1,333.33	1,333.33	1,333.33	1,333.33	1,333.33	8,000.00
5. UI/ UX Designer		1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	6,000.00
6. Development Consultant		550.00	550.00	550.00	550.00	550.00	550.00	550.00	3,300.00
7. Communication Specialist	150.00	450.00	450.00	450.00	450.00	450.00	450.00	450.00	3,300.00
8. Community Liaison Officer	100.00	300.00	300.00	300.00	300.00	300.00	300.00	300.00	2,200.00
9. Social Media Content Developer		700.00	700.00	700.00	700.00	700.00	700.00	700.00	4,200.00
10 Project Assistant	300.00	900.00	900.00	900.00	900.00	900.00	900.00	900.00	6,600.00
Total	2,186.36	11,475.76	11,475.76	11,475.76	11,475.76	11,475.76	11,475.76	6,559.09	77,600.00

Annex - Proposed Team with Assigned Roles

The Project work will be led by Dr, Mizna Mohamed.

Dr. Mizna Mohamed, Project Coordinator

Dr. Mizna has over 20 years' experience working in the social and environment sector in the Maldives. She has worked in the Government as well as on the ground level with island communities and community-based organisations. Dr. Mizna has a strong research background in both quantitative and qualitative research. Her main research interests concern in particular the human-nature interactions.

Education: PhD in Environmental Science (2009 – 2012) (doctoral research constituted a broader examination of the economic, social, ecological and cultural ways in which people attach value to coral reefs), Masters in Environmental Science (2006 – 2007) (specialized on sociology) (focused on the economic valuation of coral reefs (Marine Protected Areas) and its management), University of Canterbury, New Zealand", BSc. (Hons.) Meteorology and Oceanography (Hons.) (19996 – 1999), Flinders University of South Australia. Honours Project: Analysis of sea surface temperatures in the Pacific Ocean during the El Niño Southern Oscillation"

Experience: Dr. Mizna has conducted various socio-economic assessments of island communities for various purposes including, island development plans, developing community conservation initiatives, implementation of renewable energy technologies in communities, waste management and use of single use plastics. In particular, Mizna has extensive experience in design and administration of human environment related surveys in island communities. Some relevant work includes; household survey of 321 participants were undertaken in Hulhumale to identify the knowledge, practices, and behavior of households regarding single use plastics (2021), Socio economic survey conducted in HA. Hoarafushi for the development of the Hoarafushi Land Use Plane (2019) and Hoarafushi Development Masterplan (2019), Team leader for UNDP GEF project on establishing Community Conserved Area; supported review and identification of CCA networks site and currently in the implementation phase at island level (2019-2021), Rasheed, A.A., Mohamed, M. and Inaz, N., Agents for Development: The Booming Youth Population in the Maldives, International Journal of Social Research and Innovation 3(1), 23-47. (2019), Environmental changes and everyday lives in small island communities of the Maldives (Collaborative research with University of Manchester and University of Reading, UK) (2017 – 2019), Mohamed, M. Historical changes in human-nature interactions in island communities of the Maldives, Rural South Asia Journal 1(1), 22-36 (2015)

Mr. Ahmed Zahy Zuhair, Development Project Manager

Zahy is a Technology Officer at Water Solutions who has a Bachelor's degree in Electronics and Communication, and a Masters in Software Engineering. Despite his position at the office, Zahy regularly goes out to the field, working on projects relating to road mapping and the mapping of interiors.

His expertise as the technology officer has helped water solutions acquire software and hardware that help our projects become more efficient. He designed and actively updates the website for Water Solutions and carries on improving our outreach.

Education: Master's in software engineering, Bachelor's degree in Electronics and Communication

Experience: Apart from design development and maintenance of Water Solutions website and networking infrastructure, he is also the product manager for Water solutions subsidiary, Surveying Company where in addition to website and online store operation, he is also responsible for CRM management. Recently, he, along with Ms Naza Zuhair, completed the development of the alpha version of another citizen science app aimed at divers in the Maldives.

Mr. Mohamed Razeen, Back End Developer

Razeen is a computer science student currently studying Bachelors (Hons) in Computer Science at Villa College. Proficient in Adobe Photoshop, Premier Pro, and other applications in the Adobe Suite

Education: BSc (Hons) in Computer Science from Sunway University, Malaysia and Lancaster University (Current), Canadian International Matriculation Program from Sunway College, Malaysia and Ontario University.

Experience: Worked on some University projects like, creating a library database using MySQL. Proficient in Python, PHP, JavaScript, Java, Scala, MySQL

Ms Mariyam Nazaa Zuhair, Front-End & Database Developer

Naza is a software developer and data analyst, who has been working as a freelancer in her field for the past three years. She is proficient in several high-level programming languages including Python, Java, JavaScript, C/C++. She also has experience in both sql and nosql database design and development. Her work in data analytics has involved various types of data analysis including Descriptive, Diagnostic, Exploratory, Predictive as well as Prescriptive Analysis with various supervised and unsupervised learning algorithms.

Education: BSc (Hons) in Computer Science with a Specialism in Data Analytics from Asia Pacific University, Malaysia and Staffordshire University, United Kingdom. She is experienced in Database design and development, Data Analytics using Python, R and SAS, as well as, Frontend Design & Development for mobile and web using Javascript frameworks such as React Native, React js and Vue js.

Experience: 3+ years working as a freelance data analyst and software developer. During this time, she has worked on projects with small businesses using data mining, sentiment analysis

and unsupervised learning methods in order to develop business intelligent solutions. She has also worked with Water Solutions on a previous project as a full stack developer along with Mr Ahmed Zahy Zuhair, to develop the alpha version of a mobile application aimed at divers in Maldives.

Faruhath Jameel, User Interface Developer

Faruhath Jameel has been worked in the development of User Interfaces such as websites, data collection and automation platforms. He is familiar with Adobe suit and its different software's, this includes premier pro, aftereffects, photoshop and in design. Faruhath Jameel is a registered surveyor at the Ministry of Housing and Infrastructure in the Maldives has gained vast experience in surveying of small islands properties in the Maldives. He worked in transforming the surveying industry of the Maldives introduction and use of modern surveying technology to the industry.

Education: BSc Surveying and Mapping Science from University of East London, UK / Licensed PADI Advanced Open Water Diver.

Experience: 10+ years of experience in introduction of modern technologies in surveying industry to modernize the data collection, capturing, processing and visualization of the data. Have done many work on User Interface to improve data collection and data visualization for surveying related work in the Maldives. This include as the leading GIS and Mapping expert in the development of the Maps of Maldives First Edition in 2008 and Maps of Maldives Second Edition in 2014 published by Water Solutions.

Ibrahim Shareef, Development Consultant

Ibrahim Hussain Shareef is a software developer with a background in robotics research currently working in the Maldives. He is currently the Director of Research and Engineering at Javaabu Pvt Ltd where he oversees and develops novel solutions for problems related to the company's new products or client projects. Most recently, he has worked on developing a real-time Maldivian-language text-to-speech system that works on Android devices. In the past, he has worked on dynamic video-generation and also has worked on face recognition. He has contributed to two research publications in the field of robotics and machine learning during his master's studies in Germany. He is also skilled at web-development and SQL database-design; he is proficient in Laravel, React Native, Python, and FastAPI. He is currently exploring new technologies, such as Go and Rust, in his free time.

Education: BSc in Computer Science from the University of British Columbia, Vancouver, Canada; MSc in Computer Science from the Universitaet Bonn, Germany.

Experience: During his time in Germany, he had worked as a research assistant at the Humanoid Robotics Laboratory run by Prof Maren Bennewitz; he did research in human-

pose detection from point-cloud data, and also contributed to a research publication on Human Robotic Interaction produced in co-ordination with the University of Twente in the Netherlands. His own master's research, which involved the development of a machine learning-based technique that outperformed the Social Forces Model approach to robot navigation through pedestrian crowds formed the basis of a published research paper.

Following graduation, he returned to the Maldives where he joined the Anti-Corruption Commission as a Senior Computer Programmer. While he was mainly involved with maintaining and updating existing legacy systems and databases, he gained greater fluency in technologies that were widely-used in the Maldives. After a year, he joined Javaabu in 2020 as its Director of Research and Engineering. His responsibilities at Javaabu involve software development for client projects, as well as conducting research and development for novel products. His work at Javaabu has ranged from database-design, web-development, dynamic video-generation, data-cleaning, developing text-to-speech models, and mobile-app development with React Native.

Mohamed Bunyameen, Communication Specialist

Mohamed Bunyameen is experienced in project management with work experience in both the private and public sector projects., Mohamed Bunyameen graduated with a Master of Project Management (Merit) from The Australian National University and with a Bachelor of Business (Hons) in International Business from Limkokwing University of Creative Technology, Malaysia. His main responsibility at WS includes development and implementation of project monitoring and evaluation.

Education:

Master of Project Management, (2016-2017), Australian National University, Australia, Bachelor of Business (Hons) in International Business, (2010 – 2012), Limkokwing University of Creative Technology, Malaysia, Project Management Professional (PMP), (June 2021), Project Management Institute, United States, Projects In Controlled Environments (PRINCE2) Foundation and Practitioner, (2021), AXELOS Ltd, United Kingdom

Experience:

Mohamed Bunyameen is experienced in project management with work experience in both the private and public sector projects. He extensive knowledge in contract management, donor-funded development projects, construction, and turnkey project coordination. In addition to project management is skilled in marketing, business development, and financial management.

Hussain Aflaan, Community Liaison Officer

Aflaan has training experience in liaising with the community, stakeholders and clients. He has customer service experience in the hospitality and retail trading industry. Currently he works

as a surveyor at the Water Solutions, where he has to do a considerable amount of liaising with the community and clients in the islands and resort islands in the Maldives. He has a growing interest in working in the outdoors and getting familiar with the latest survey gear while always up for new challenges. Aflan is from the island of Vaikaradhoo in Haa Dhaalu Atoll.

Education:

Certificate 3 in Faculty of Tourism and Hospitality, Villa College, Male', Maldives, General Certificate of Education (GCE) ordinary level, Cambridge University 2016, PADI Open water Rescue diver

Experience: Have more than 5 years experience in liaising with communities, stakeholders and customers. In 2017 he worked as a Customer Service Assistant at Sonee Sports liaising with customers on the products sold at the outlet. In 2018, he worked as a Guest Service Agent at Sun Island Resort and Spa where he worked with his colleagues for greeting guests upon arrival to the island, providing front desk services, communicating and serving to the guest to their needs, assigning rooms and processing guest payments. In 2019, he started working at Water Solutions where he had many surveying projects in the islands and resorts of the Maldives where he has to liaise the community on many aspects of the survey work carried out at the islands. Some of these includes drone survey of all the islands in Addu City (2021), Faarufushi island resort coastal protection survey, Hulhumale' Street View (2019) survey collecting georeferenced high resolution 360 images of the street, stitching the images and uploaded in to "google Street View", Single Beam Bathymetry Survey at Addu Atoll (2020), Harbour Survey (2020) at Dhidhoo island in Alifu Dhaalu Atoll, Shore Protection Survey at the island of Uligan (2020), Haa Alifu Atoll, Baseline survey (2019) at the island of Rasdhoo, Bodufulhadhoo, Ukulhas and Omadhoo for proposed land reclamation project, Hondaafushi setting out / as-built Survey for the development of the Land Use Plan of Horafushi (2019), survey of 13 islands in the Groundwater Resource Management and Aquifer Protection Project (2019)

Mohamed Affan Shakir, Social Media Content Developer

Mohamed Affan Shakir has been working actively in developing content for social media for many years. He is most familiar with Adobe suit and its different software's, this includes premier pro, after effects, photoshop and in design. He started learning on Mac OS hence he can also edit on iMovie and Final cut Pro. Mohamed Affan Shakir is a hydrographic surveyor by training and a registered practicing offshore surveyor at Water Solutions.

Education: BSc (first class Hons) in Ocean Exploration, Plymouth University, UK, International Hydrographic Organization (IHO) CAT A Qualified Surveyor, PADI Advance Open Water Diver. He is most familiar with Adobe suit and its different software's, this includes premier pro, after effects, photoshop and in design. Currently he is learning how to code on HTML using Mimo so he can go a step further with website design.

Experience: 5+ years of experience in developing content for social media. Managing multiple social media platforms is something he has been doing for various businesses, this includes

Instagram, twitter, YouTube, Facebook, Snapchat, Linked IN and more. Affan have designed and finished multiple websites using square space for which he has made the digital content for along with photography and videography. He has shot edited and compiled multiple videos for social media Vlogs and advertising shoots for various companies. I have 5 plus years' experience flying drones and am very familiar with Go Pro and its entire line up as I capture a lot of my footage using Go Pro cameras and their accessories. I also shoot using Nikons Mirrorless line up along with a DJI Ronin-S.

Shaadhoon Mohamed Haleem, Project Assistant

Shaadhoon has extensive experience in supporting the implementation of projects in the Maldives and Malaysia. Currently he works as Administrative Officer at Small Island Geographic Society in supporting projects and programmes implemented at the organization.

Education: Bachelor of Arts and Social Science (2012 – 2016), Monash University – Malaysia, Canadian International Matriculation Program (2010 – 2012), Sunway University – Malaysia, High School Diploma (2008 – 2010), Sunway International School – Malaysia

Experience: + 10 years of experience in supporting and assisting implementation of projects. At Muscle Load – Male', Maldives, as Front Office Help Desk, managed day-to-day activities including registering of new members, collecting fees, maintaining records, and handling the cash register at the gym. applied and developed communication skills as I had to meet with several new clients every day and maintained a positive attitude to promote the company's optimistic atmosphere. At Mavantha – Male', Worked efficiently in a team to manage and create new and innovative marketing campaigns in order to push the company further to pursue challenging ventures. As an Event Staff at Subiaco Farmers Market – Subiaco, Western Australia, work alongside a great team to assemble and dismantle equipment for the market. As Social Media Officer at Baazaar.com, worked Boost, promote, advertise the page across Facebook using eye catching and 'trendy' promotional materials targeted towards a diverse target audience. At Medianet, Operations Executive, tracked, maintained and ensured that all daily operations were going according to the schedule. Managed the online Medianet website from time to time in collaboration with the Marketing and Social Media Department

CLIMATE INNOVATION CHALLENGE

Activity Reporting

Reporting Activity	App Development Equipment Hire
Grantee Name	Small Island Geographic Society
Project Title	“Heylhi”
<p>Introduction</p> <p>As part of Heylhi project, this report will provide the information on the establishment Project Management Unit as part of Activity 1 – Project Inception.</p>	
<p>1. Work Station: Computer Systems and Software</p> <p>As part of project implementation, SIGS will contract services from Water Solution Pvt. Ltd. to provide facilities required for the project. The scope service includes providing work station for the PMU team and equipment required to carry out the project activities.</p> <p>In order to develop Helylhi App, computer systems and specific software is required to develop the app. Thus, Water Solutions Pvt Ltd. will provide the necessary software and technologies to the project which otherwise will be too costly for the project to procure as one-time purchases.</p> <p>All costs related to Heylhi project workstation, equipment, and software applications and licenses will be invoiced to SIGS as rental of equipment on a monthly basis for the duration of the project.</p> <p>Table 1 provides a list of computer systems, and software applications that will be utilized by Heylhi project.</p>	

Table 1: Computer Systems, and Software Applications

No.	Qty	Item	Description
1	4	Workstation Laptop	For development of Application
2	3	Tablet	For development and demoing Application
3			
4			
5			
6			
7			
8			
9			
10			