

**Malaysia Activity Proposal 3
for WCP GWP-SEA Work Plan 2014**

No	Item	Description
1	Country	Malaysia
2	Strategic Goal	SG3 : Strengthen Partnerships
3	Goal/Component	WCP Component 2: Innovative Green Solutions
4	Work Package	Work Package 5 - Demonstration Projects
5	Outcome Challenge	WCP-OC5: Stakeholders develop and implement innovative pro-poor and gender sensitive “green” solutions for addressing critical water security challenges such as water, food and energy, to enhance climate resilience of countries and communities.
6	Title of Activity	Community rainwater-harvesting for enhancing flood and drought resilience
7	Activity Proponent	
	• Submission by	Malaysia Country Water Partnership (MyCWP)
	• Contact person	Lead – Mr Amlir Ayat, MyWP Dato’ Ir. Hj. Hanapi Mohamad Noor (hanapi@water.gov.my/ athirahlim@gmail.com) Zelina Z. Ibrahim (zelinazi@gmail.com) for WCP
	• Contact Address	
8	Background and Needs Statement	<ul style="list-style-type: none"> • Background <p>Malaysia is blessed with high rainfall amounts, but about 40 percent of this is lost through evapotranspiration and much of the rest goes to overland flow into rivers and waterways. Rains are mostly monsoonal although convectional rainfall is normal in many parts of the country resulting in generally wet conditions throughout the year. Rainfall is also spatially inhomogeneous and not necessarily over the areas where water supply facilities are located. Climate change effects are expected to change this scenario, with the possibility of extended dry periods (of more than 3 weeks) and higher intensity rainfalls of longer duration. These conditions increase the risks of drought and floods. The effects of such a situation would have effects throughout the country but would be difficult to predict with any great certainty at the local level. This proposal is focused in developing an innovative approach for enhancing flood and drought resilience at the local community level through inculcating</p>

		<p>simple pro-active measures. The idea is to raise awareness in the community of self-help techniques which could be easily implemented for common facilities and even on individual properties. The basic premise is that traditional practices of water management, such as rainwater harvesting, and water saving measures could form a part of everyday living, and provide the buffer for reducing stormwater runoff and provide an alternative water source to ameliorate water scarcity at times of drought.</p> <p>The National Water Resources Policy (NWRP) 2012 of Malaysia has identified in Thrust 3, 'Use of Alternative Water Resources and Sources', is an important direction for Water Resources Security (Core Area 1). One of the strategies under this thrust is Strategy 11, which is to 'Explore different options for alternative uses of different types of water resources'. The identified Strategic Action Plan, number 25, is to 'Identify alternative or conjunctive water resources options and suitability of use'.</p> <p>The NWRP also identifies that 'Capacity Building and Awareness' is a Core Area (Core Area 4) for sustainable water resources management. One of the targets, under 'Capacity Building and Awareness' Thrust 9, is to 'Improve Understanding and Awareness of the Importance of Water Resources Security and Sustainability' (Target 18). This leads to one of the Strategic Action Plans under Strategy 28 'Strengthen existing awareness programmes and campaigns to suit goals for water resources security and sustainability' which is to 'Formulate programmes or activities to suit particular target groups or situations or needs' (Strategic Action Plan 68).</p> <p>These actions are consistent with the National Policy on Climate Change (NPCC) 2009, where Principle 4 on 'Effective Participation' has the objective of to 'Improve participation of stakeholders and major groups for effective implementation of climate change responses'. The Strategic Thrust 9 is to 'Increase awareness and community participation to promote behavioural responses to climate change' through Key Actions. One of the Key Actions identified is Key Action 36 which is to 'Promote community-based climate change responses and programmes'.</p> <p>Malaysia's Second Communication (NC2) on addressing climate change (Chapter 8) also identified under section 8.4 'Water Resources' that 'Further research in innovative rainwater management is needed to explore new ways of reducing flood, drought and other climate risks in cities, towns and communities. An emerging strategy for climate</p>
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		<p>change adaptation involves the change of the rainwater management paradigm, which is to collect rainwater instead of draining it away.'</p> <p>Thus the proposed project is very much aligned with the national needs identified at the policy level. Implementation of the policy directions in rainwater management need to go down to the lowest practicable level, that is at the household or community level. This project proposes to start with a pilot implementation which may be easier to manage and to disseminate the lessons and successes learnt from the project to other communities for future replication.</p> <ul style="list-style-type: none"> • Relevance to WP5 Guiding Principles <p>The focus of this project is in accordance with item v. 'Focus should be on dealing with climate hazards like droughts or floods which have a huge impact on livelihoods'. The project is expected to encourage communities at the local level to implement innovative solutions for reducing the potential impacts of droughts and floods through storage of rainwater and the use of water saving devices at the household level. This is expected to increase the resilience and adaptive capacity of the communities while providing slow-release pseudo-storage for the disturbed local hydrological cycle.</p> <p>The project is expected to also address the principle in item x. 'The projects should have a potential for up scaling and to be replicated. Building in <i>learning by doing</i> approach will allow teams to capture experiences and lessons learnt for wider dissemination'. MyCWP Partners working together with the community could strengthen the partnership itself and develop new linkages with community associations.</p> <p>It is likely that the awareness raising and close interaction with community representatives could encourage the outcome expected in item xi. 'Projects can range from soft interventions to hard technical solutions that make a real impact on livelihoods ensuring building local adaptive capacity and improving climate resilience.'</p> <p>In the future phases of this project, we hope that it could form a success story that would illustrate the principle in item xii. 'Implementation of innovative green projects should lead to a portfolio of no/low regrets projects that can be taken forward to project preparation and funding.'</p> <ul style="list-style-type: none"> • Activities <p>The project activities focus on community analysis and</p>
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		<p>engagement prior to awareness raising. The community shall need to be convinced that the implementation of the project could lead to benefits for them. In order to ensure that they are involved in the project frequent meetings and discussion may be held to build trust and confidence.</p> <p>Technical and on-the-ground implementation experts would be identified to form the project team. It is very important to identify the project champions both from the project team side as well as from the community. good relationship building is essential for this project.</p> <p>Once the community has expressed willingness to participate, the financial and investment aspects would need to be addressed. This should be down together with the community. They must be encouraged to identify sources and methods for obtaining financing, otherwise it shall only maintain dependence on government sponsorship and not result in community empowerment. However the project team shall have to work together with them, and in this case the network of private sector Partners is important in sourcing for opportunities under the Corporate Social Responsibility banner.</p> <p>The final stage is the implementation of the project in selected common facilities and also in any individual households. There would have to be a process of monitoring and reporting introduced so that the results of the implementation could be evaluated. This would lead to future case studies, hopefully, of success which could prompt other community facilities and the Local Authority to want to replicate the designs and measures taken elsewhere.</p>
9	Activity components	<ol style="list-style-type: none"> 1. Community analysis and Engagement <ol style="list-style-type: none"> a. Form a project team comprising project champions and technical experts among MyCWP Partners. b. Identify criteria for community selection for participation in the rainwater harvesting project. c. Develop programme of engagement and implementation. d. Community engagement through meetings and socialization with representatives. 2. Awareness raising <ol style="list-style-type: none"> a. Conduct awareness raising session with community on water resources and climate change connection to food and energy issues. b. Presentation of rainwater harvesting benefits, guides, and case studies on financial savings.

		<ul style="list-style-type: none"> c. Discussion on potential and predicted climate change impact on rainfall patterns and implications for drought and flood hazards. d. Discussion on selection of demonstration sites at community facilities and individual homes. <p>3. Investment strategy</p> <ul style="list-style-type: none"> a. Brainstorming for innovative and cost-saving design for rainwater harvesting and water saving devices, including academic and private sector MyCWP Partners with expertise in this area. b. Evaluation of costing based on design requirements for implementation sites. c. Discussion on financial investment strategies, options and project sources with the community. d. Solicitation of funding and sponsorship for project together with community, including private sector MyCWP Partners as part of Corporate Social Responsibility contribution. <p>4. Innovation implementation</p> <ul style="list-style-type: none"> a. Implement project construction and operation at project sites. b. Prepare report document of project designs, successful investment strategies and implementation process. c. Submit report to the local district Engineering Unit with recommendations on appropriate designs for community facilities and individual houses.
10	When will be implemented	<p>Target times for the Phase 1 activities in 2014, are:</p> <ul style="list-style-type: none"> • Q1 - Community Analysis and Engagement • Q2 - Awareness Raising • Q3 - Investment Strategy • Q4 - Innovation implementation
11	Project Phasing	<p>The whole project cycle is expected to last three (3) years:</p> <ul style="list-style-type: none"> • Phase 1, in the first year, is for presentation and community discussion on innovative solutions for flood and drought resilience through implantation of rainwater harvesting and water saving features. • Phase 2, in the second year, is for evaluating the success and financial benefits of the implementation. There would

		<p>be Monitoring and Evaluation of the implementation at common facilities and individual houses. In addition there should be an opportunity to 'Create recognition programmes for individuals and entities that help promote water resources security and sustainability' as advocated in Strategic Action Plan 69 of the NWRP. The success stories can be publicized to other communities to encourage replication.</p> <ul style="list-style-type: none"> Phase 3, in the third year, is for discussion and evaluation through a Review of the actions taken, again through discussions with community representatives, Local Authorities and Water Suppliers. The project could be identified as a successful platform for effective engagement of the media and stakeholders as outlined in Strategic Action Plan 67 of the NWRP. It is anticipated that the success of implementation would result in adoption of design features in all common community features and encouraged in individual houses.
12	Boundary Actors	<ul style="list-style-type: none"> Drainage and Irrigation Department Malaysia, Environmental Management and Climate Change Division of the Ministry of Natural Resources and Environment, Engineering, Planning and Environmental Consultancies, Local Authorities, Malaysian Meteorological Service Ministry of Energy, Green Technology and Water National Research Institutes, NGOs, Town and Country Planning Departments, Universities, Water Supply Operators
13	Implementation arrangement	<ul style="list-style-type: none"> MyCWP shall work with its government, private and NGO partners to organise the project. A project team shall be formed. The project champions shall be identified together with technical experts. The community associations are expected to be the key players MyCWP Secretariat together with project team members shall provide project management and logistical support for the implementation of the project. Presentations shall be invited from technical experts and the Local Authority. Facilitators, Technical report consultants shall be appointed to support the activity.
14	Progress Markers	<ul style="list-style-type: none"> The community will understand the benefits of rainwater harvesting and water management and share their

		<p>knowledge on flood and drought management.</p> <ul style="list-style-type: none"> • Other communities will want to be part of this programme. 						
15	Budget estimation and plan (in Euro)							
			GWP FUND				Other Source	Total Cost
No.	Category	Total GWP fund	Q4 2013	2014	2015	2016		
1	Travel Staff							
2	Travel Consultants							
3	Meeting							
4	Consultant Fee							
5	Communication							
6	Other costs							
TOTAL								
Please attach detailed calculation if necessary								
Please see excel spreadsheet on Attachment 3 - Malaysia 3 Budget 10314.xlsx								

Table 1: Overview of types of activities and tasks under Work Package 5 - Demonstration Projects

Activities	Proposed activities/tasks	Sub-Outputs Deliverables /	Proposed Methods for delivery
1. Community analysis	<ul style="list-style-type: none"> a. Form a project team comprising project champions and technical experts among MyCWP Partners. b. Identify criteria for community selection for participation in the rainwater harvesting project. c. Develop programme of engagement and implementation. d. Community engagement through meetings and socialization with representatives. 	<ul style="list-style-type: none"> • Meetings with community representatives 	<p>Identified Consultant Project Team contacts community for discussion on project.</p>
2. Awareness raising	<ul style="list-style-type: none"> a. Conduct awareness raising session with community on water resources and climate change connection to food and energy issues. b. Presentation of rainwater harvesting benefits, guides, and case studies on financial savings. c. Discussion on potential and predicted climate change impact on rainfall patterns and implications for drought and flood hazards. d. Discussion on selection of demonstration sites at community facilities and individual homes. 	<ul style="list-style-type: none"> • Community awareness raising session conducted • Discussed demonstration sites for implementation 	<p>Consultant Project Team work with Community representatives to organize activity and project implementation.</p>
3. Investment strategy	<ul style="list-style-type: none"> a. Brainstorming for innovative and cost-saving design for rainwater harvesting and water saving devices, including academic and private sector MyCWP Partners with expertise in this area. b. Evaluation of costing based on design requirements for implementation sites. c. Discussion on financial investment strategies, options and project sources with the community. d. Solicitation of funding and sponsorship for project together with community, including private sector MyCWP Partners as part of Corporate Social Responsibility contribution. 	<ul style="list-style-type: none"> • Innovative designs developed • Identified financial investment strategies, options and project sources with the community 	<p>Consultant Project Team work with Community representatives on viable investment strategies.</p>

4. Innovation implementation	<ul style="list-style-type: none"> a. Implement project construction and operation at project sites. b. Prepare report document of project designs, successful investment strategies and implementation process. c. Submit report to the local district Engineering Unit with recommendations on appropriate designs for community facilities and individual houses. 	<ul style="list-style-type: none"> • Implement rainwater harvesting and water saving device installation 	Consultant Project Team work with Community representatives on installation of devices.
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Table 2: Budget Required Based Tasks under Work Package 5 - Demonstration Projects

Activities Proposed activities/tasks	Sub-Outputs / Deliverables	Proposed Methods for delivery	Category of Cost	Cost (Euro)
Please see excel spreadsheet on Attachment 3 - Malaysia 3 Budget 10314.xlsx				