

Independent Review of the “Strengthening Disaster Risk Management in Papua New Guinea” Project

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Acronyms and Abbreviations

APEC	Asia Pacific Economic Cooperation
ARoB	Autonomous Region of Bougainville
CBDRM	Community-Based Disaster Risk Management
CHARM	Comprehensive Hazard Assessment for Risk Management
DFAT	Department of Foreign Affairs and Trade (Australia)
DMT	Disaster Management Team
DNPM	Department of National Planning and Monitoring
DRMP	Disaster Risk Management Project (PNG)
DRR	Disaster Risk Reduction
DRM	Disaster Risk Management
GoPNG	Government of Papua New Guinea
HPA	Humanitarian Partnership Agreement
IOM	International Office for Migration (UN)
K	PNG Kina
LLG	Local Level Government
MHRA	Multi-hazard Risk Assessment
MTDPIII	Medium Term Development Plan III, 2018-2022
mVAM	mobile Vulnerability and Mapping (World Food Program)
NBC	PNG National Broadcasting Corporation
NDC	National Disaster Centre (PNG Government)
NEC	National Executive Council
NDRRF	National Disaster Risk Reduction Framework, 2017-2030
NGO	Non-government organisation
NWS	National weather Service
OCHA	Office for the Coordination of Humanitarian Affairs (UN)
PDC	Provincial Disaster Coordinator
PDCom	Provincial Disaster Committee
PNG	Papua New Guinea
PNGRC	Papua New Guinea Red Cross Society
RIMES	Regional Integrated Multi-Hazard Early Warning System
SOP	Standard Operating Procedures
UN	United Nations
UNICEF	United Nations Children’s Fund

UNISDR United Nations Office for Disaster Risk Reduction
UNDP United Nations Development Programme
UNRC United Nations Resident Coordinator
USAID United States Agency for International Development

Executive Summary

“Strengthening Disaster Risk Management in PNG” was initiated in 2015 as a three-year project with a budget of USD\$3,450,000. It was designed to be implemented by UNDP (United Nations Development Programme) in collaboration with the National Disaster Centre (NDC) and provincial government structures. A no-cost extension was granted until December 2018. Five provinces were selected for pilot projects in disaster risk management (DRM) capacity building at a provincial level: the Autonomous Region of Bougainville (ARoB), Central Province, Madang, Simbu and Western Highlands.

The outcome of the project is defined as: *Government and civil society at national and provincial level contribute to the reduce (sic) vulnerability of women, girls, men and boys to disaster risk.* Four outputs contribute to this which can be summarized as (a) DRM capacity development (b) DRM mainstreaming (c) support for early recovery and (d) humanitarian coordination.

This review was commissioned towards the end of the first phase of project implementation to inform its future direction. The findings are based on a review of project documentation, discussions with key stakeholders in Port Moresby and field work in four provinces.

The following findings were made in relation to the main activities:

- **Support for the development of the National Disaster Risk Reduction Framework, (NDRRF) 2017-30.** This is a positive example of an effective process resulting in a potentially valuable document. The principal challenge will be to ensure the development of an implementation plan, accompanied by appropriate funding, monitoring and evaluation measures.
- **Development of NDC capacity.** UNDP and NDC have cooperated on many areas of the project, but progress in some areas has been slow. Poor levels of staffing, resourcing and general support for role of the NDC by the Government of PNG must be addressed, commensurate with NDC’s demonstrated leadership capacity.
- **Provincial Disaster Risk Management Capacity Assessments** in five pilot provinces. These show that the institutional arrangements and resources provided for DRM vary between provinces, but human and resource capacity is generally low. The capacity assessments provide a valuable baseline and make a compelling case for a stronger provincial focus for the project.
- **Disaster Loss Database.** Information from national, provincial and sub-provincial government records have been captured using a standardised form designed by the project and transferred to a consolidated database. This activity is potentially useful but its longer-term sustainability must be addressed
- **Early Warning Systems.** Support has been provided to the National Multi-hazard Early Warning Centre – but the procedures for creating and disseminating warnings requires significant attention.
- **DRM Mainstreaming.** Progress has been relatively slow but the project is now well placed to address this in the next phase of the project. The project’s role in the integration of DRR into the Medium Term Development Plan III, 2018-2022 and the District Development Plan for Rigo District (2018-2022) in Central Province are significant successes and present opportunities which can be built on in the next phase of the project.

- **Multi-Hazard Risk Assessment** in five provinces. The project has worked closely with government agencies to produce detailed assessments of a kind hitherto unavailable in PNG. Whilst this activity is useful the project must be careful to emphasise the limitations of the assessments due to the weakness of current data sources in PNG. However, as data sources improve, this should become a very valuable tool.
- **Disaster Recovery.** The project has struggled to make progress due to a level of disinterest on the part of the authorities who have preferred to focus on disaster response. A national Disaster Recovery Framework has been created but not signed off. Further engagement by the project is necessary.
- **Provision of a Humanitarian Coordination Specialist 2016-18.** This role has provided critical support to the UN Resident Coordinator in the role of co-chair of the Disaster Management Team (DMT) following the El Niño drought (2015-16) and Highlands earthquake (2018) and assisted with the coordination of other minor responses. Improvements in coordination mechanisms (such as clusters) have been noted. However, the disruptive effect of these disaster responses on other aspects of the project should not be forgotten and steps should be taken to manage this more effectively in future.

Other significant findings

Whilst the project has some important achievements, it has not yet met its aspirations at a sub-national level. The main provincial level activities – the capacity assessment, the disaster database and the multi hazard risk assessment establish a baseline but have not yet enhanced capacity. Action plans have been developed but there is currently no clear path to implementation. The review proposes a different way of working based on maintaining a presence in the pilot provinces and providing a small projects fund to stimulate activities which form part of the action plans which have been developed. The aim should be to create a network of contributing DRM actors with PDCs at its centre. Expansion to other provinces should only be considered when an effective model of provincial operation has been demonstrated.

The review finds that there has been ad hoc and poorly documented engagement between the key partners – UNDP, DFAT and NDC – resulting in a lack of information flow and consequent misunderstandings. A change in governance structure and processes is therefore a key recommendation of the review. More frequent and more focused meetings and better documentation of progress, expenditure and decisions is necessary to strengthen mutual confidence between partners.

The project should strengthen its focus on coordination, both internally and within the DRM sector. There are opportunities for synergies between project activities and between the project and other UN initiatives. Many organisations including churches, NGOs, CBOs, the private sector and Red Cross branches are active in DRM but the links between them appear weak. The possible advantages of mutual learning, resource sharing and improving consistency are considerable.

A challenge for the sustainability of the project is the generally weak level of commitment to DRM by the Government of PNG (GoPNG). Some PDCs are scarcely resourced at all and most are heavily indebted. Through this project UNDP and DFAT have a key role in

promoting the proper resourcing of DRM – but it is also proposed that engagement in a given province should be conditional on achieving benchmarks which indicate a basic level of reciprocal commitment to the objectives of the project.

Major contributions by resource companies to the 2018 Highlands earthquake response have increased interest in private sector collaboration. Support by communications and media organisations to the development of early warning systems is identified as a particular need which the project could address.

Available statistics suggest that levels of gender inequality in PNG are very high and that gender-based violence exists on an alarming scale. Recent studies also show that the vulnerability of PNG’s women reaches even higher levels when disasters occur. Gender protection should be a much stronger focus of the next phase of the project from the design process onwards.

Limitations in project design and reporting requirements have hampered effective monitoring and evaluation, which must be addressed.

The next phase of the project must realise the value of the frameworks, plans, assessments and standard operating procedures which have been developed and ensure that they are widely understood, adopted and implemented. The production of these documents must be seen as the beginning – not the end – of a process.

1 Introduction

The “Strengthening Disaster Risk Management in PNG” Project (DRMP) was conceived as a three-year project to be implemented by the United Nations Development Programme (UNDP), working in close collaboration with Government of PNG (GoPNG) partners, particularly the National Disaster Centre (NDC) and a number of Provincial government structures. The project was scheduled to begin in 2015. However, challenges in recruiting staff and the onset of the El Nino drought in the latter part of 2015 meant that it did not effectively start until 2016. It was therefore granted a no-cost extension until December 2018. The total budget for the program was USD\$3,450,000 of which DFAT provided USD\$2,672,756.84.¹

In the course of the review, UNDP further advised they made an additional call on DFAT funds available in the One UN Trust Fund account, in the order of USD\$700,000. This was not reflected in the financial information earlier provided to the review team and remains the subject of ongoing discussion between DFAT and UNDP separate to this report.

The project is described in the project document as “...*the essential interface between the UN System, members of the Disaster Management Team and government disaster management authorities.*” Its outcome is described as: *Government and civil society at national and provincial level contribute to the reduce (sic) vulnerability of women, girls, men and boys to disaster risk.*”

The project document identifies four project outputs. Some of the activities initiated under each output are listed below:²

Output 1: Disaster preparedness and response mechanisms enhanced and disaster early warning procedures strengthened (budget USD950,000)

- *Development of a national DRM Framework*
- *Development of NDC capacity*
- *Provincial Disaster Risk Management Capacity Assessments in five target provinces*
- *Disaster Loss database in five target provinces*
- *Comprehensive Hazard and Risk Management (CHARM) training course*
- *Standard Operating Procedures (SOPs) for key disaster types*
- *Provision of office/communications equipment for NDC and five target provinces*
- *Early warning procedures*

Output 2: Disaster risk management integrated into development plans and budget (budget USD1,500,000)

- *Multi-Hazard Risk Assessment in five target provinces*
- *Inclusion of DRR in national Medium Term Development Plan 2018-2022 (MTDP III)*
- *Inclusion of DRR in Rigo District Development Plan 2018-2022*

Output 3: Preparedness and planning mechanisms and tools to manage disaster recovery processes at national and sub-national levels strengthened (budget USD500,000)

¹ The project document does not specify where the remaining funds would come from.

² These are *actual* activities and do not necessarily reflect those in the project document. For an explanation of changes in project plans, see Section 2.

- Support to 2015/16 Drought early recovery
- Development of national Disaster Recovery Framework
- Support to 2018 Highlands earthquake early recovery
- Support to two provincial Early Recovery Frameworks

Output 4: Readiness of the Disaster Management Team members and the National Disaster Centre to prepare and respond to disasters enhanced: (budget USD500,000)

- Support for coordination of two major disaster responses (El Nino drought, 2015-16, Highlands earthquake 2018) and several smaller scale responses
- Improvements to humanitarian response architecture (DMT, clusters)
- Preparedness measures e.g. El Nino action planning 2017, development of standardized rapid needs assessment tools

A summary of achievements in relation to each of these outputs has been provided by the project (see annex 5).

The project has a partnership strategy, as described in the project document: *“The project will be implemented in partnership with a range of stakeholders including the government, civil society organization (sic) and other agencies to develop institutional capacities at the national and sub-national level with the NDC playing an effective coordination role.”*

The sub-national component of the project was defined in the early stages of implementation. Five ‘pilot provinces’³ were identified as the focus of the project. These were chosen on the basis of the limited data available on vulnerability to disaster risk, but happen to include provinces from the four regions of PNG. The provinces are: Bougainville, Central, Madang, Simbu and Western Highlands.

The project document includes a provision for an end of project evaluation.

This report is structured according to the guiding questions provided in Terms of Reference (see Annex 1). Detailed descriptions and analysis of each project activity is provided, grouped according to design outcomes, in Section 3. The remaining guiding questions are addressed in Section 4. Numbered recommendations are provided as they arise throughout the text. They are consolidated and grouped into categories (operational, strategic, thematic, governance and management) for ease of reference at the end of the report.

2 Methodology

In reviewing the project it is useful to keep in mind a definition of disaster risk management which is: *“the application of disaster risk reduction policies and strategies to prevent new disaster risk, reduce existing disaster risk and manage residual risk, contributing to the strengthening of resilience and reduction of disaster losses.”* (UNISDR)

The review has been conducted using contributions from a large team⁴ of project stakeholders⁵ including multiple participants from UNDP, NDC and DFAT. In the spirit of an

³ Bougainville is strictly defined as an *autonomous region* but is commonly referred to as a province.

⁴ The full team is listed in Annex 2

⁵ The Review Overview document (9/9/18) identifies three external and 10 internal participants. Several members of the Multi Hazard Risk Assessment team also accompanied the review during its field work.

independent review, the analysis, conclusions and recommendations have been developed by a core team of three members external to the project.⁶

The review conducted analysis of project data provided by DFAT and UNDP prior to and during the field deployment. On arrival in Port Moresby the core team received extensive briefings from DFAT, NDC and UNDP which included presentations on the main project activities.

The team visited three of the five provinces covered by the project. Most team members visited Madang before splitting into separate teams that visited Western Highlands and Bougainville. The Highlands team also visited Southern Highlands which has been heavily impacted by the 2018 Highlands earthquake. Teams met senior members of provincial governments and members of Provincial Disaster Committees (PDComs) as well as representatives of NGOs, churches and the Red Cross Movement. They also witnessed project activities such as preparations for a tsunami simulation (Bougainville) and Risk Assessment and Capacity Assessment presentations (Western Highlands).

The itinerary was designed to provide an honest view of the challenges faced in the districts. For example, the team spent a day travelling to Bogia District in Madang Province, affected by an eruption of a volcano on Manam Island less than three weeks earlier. This exposed them to the immediate political, administrative and logistical challenges involved in a disaster response related particularly to population displacement.

The core team periodically reviewed their findings during the fieldwork before making presentations to UNDP, DFAT and NDC at the conclusion of their visit.

2.1 Limitations

There are two particular methodological challenges which must be understood in relation to the project review. Firstly, the project document appears to have been prepared hurriedly, perhaps in response to the withdrawal of OCHA from PNG in June 2015. As such it has some significant shortcomings:

- Its exact sign off and start date are not provided
- Two of the three outcome indicators in the Results and Resources Framework are the same
- It is not internally consistent. For example, under Output 2 (Section 2.2 Programming Approach) states that “*Under the proposed program support will be provided to planners and decision makers at provincial, district and LLG levels to integrate risk management into the development planning and budgeting process, thus ensuring availability of resources for disaster risk management at different levels.*” Design document, p10. However this is not mentioned in the Results and Resources Framework⁷.
- Output targets are not specific e.g. “DRM awareness enhanced.” Indicators are vague and not enumerated. For example, “number of DRM plans developed” (How many? By whom? For what purpose?)

⁶ Peter Chamberlain (Team Leader external consultant); Amanda Farry, (Policy Officer, Disaster Resilience and Recovery Section Humanitarian, NGOs and Partnerships Division, DFAT, Canberra); Ken Westgate, external consultant.

⁷ The interpretation of this is contested by the project, which states that this paragraph is only meant to identify an opportunity.

- Reference to “*address the concerns of Timorese women (sic)*” (p30) in the document, which indicates that the text has been drawn from a separate project design.

During the design of a potential second phase of the project, it is essential that DFAT and UNDP ensure there is sufficient senior management engagement and staff resourcing to result in a strong project framework, and avoid such design flaws. See recommendation 20(a) below.

The second challenge is that the project was intended by the major donor and implementers to be flexible. In the complex and uncertain environment of PNG, it was recognised that changes would be necessary. Two major disasters, a general election in 2017 and the extensive preparations for the APEC summit in 2018 during the course of the three-year period required a major reordering of priorities and activities. Project staff therefore regard the annual work plans approved by the project steering committee as the definitive planning documents, and these differ in some respects from the project document. The project can therefore not be simply reviewed against the project document. This also raises the importance of a robust and transparent steering committee mechanism in this context (see section 4.1.1 below)

The Review can provide only limited conclusions in relation to value for money as required by the TOR due to misunderstandings regarding the provision of financial information to the team. (See section 4.2 below). Some broad conclusions are drawn on the basis of a summary of annual budgets and expenditure, although it should be noted that this *does not* form part of the project’s formal financial reporting process.

Other project documentation was provided immediately prior to the team being mobilised and could not therefore inform the evaluation plan. However, the project subsequently provided very extensive data and briefing to assist the team.

It should also be noted that in order to focus on field work, insufficient time was available to contact all of the national level stakeholders – particularly in relation to humanitarian coordination.

3 Findings—effectiveness

The project can celebrate a number of notable achievements; informants are generally positive about its impact and supportive of its continuation.

Specific comments are provided for each of the main outputs listed in Section 1.

3.1 DRM Capacity Development

Output 1: Disaster preparedness and response mechanisms enhanced and disaster early warning procedures strengthened

3.1.1 Development of a National DRM Framework

The development of the National Disaster Risk Reduction Framework is one of the key achievements of the project. It has resulted in a key national document – and critically one which has been endorsed by the National Executive Council. It is also a good model of UNDP-NDC collaboration and was produced with the engagement of other stakeholders in the sector.

The document uses and contextualises the Guiding Principles and Priorities for Action from the Sendai Framework for Disaster Risk Reduction 2015-30 and includes many of the supporting activities. This is a potential strength in that if implemented it will meet PNG's commitments as a signatory to the Sendai Framework and will be easily understood by those familiar with the global framework.

The sign off of the document will not in itself change DRM in PNG: the commitments contained within it must be resourced and implemented. This will present several challenges. The scope of the commitments is considerable: there are no less than 57 activities included under the Priorities for Action. If not supported and resourced there is a danger that the document will lose relevance. It should be remembered that PNG's endorsement of Sendai's predecessor, the Hyogo Framework for Disaster Risk Reduction (2005-2015) did not result in lasting change and only two attempts were made to report against it.

A particular challenge will be the monitoring and reporting against the framework. Seven targets and forty indicators are provided in the document but it is unclear where the data will come from to measure progress. For example, Target 2 aims to reduce the number of people affected by disasters in 2020-2030 to be less than those affected from 2005-2015. It does not state what the figure is for 2005-2015.

The project sees the Disaster Loss Database (see section 3.1.3 below) as a key means of addressing this problem. It is believed that it will provide data relevant to four of the seven targets. This is contingent on the completion and maintenance of the database and the acceptance of its data as the definitive information source for this purpose. The project plans to involve UNISDR and the Asia Disaster Preparedness Centre to provide technical support.

It will be necessary to decide on a method to collect this data, including detailed figures for injuries, damaged dwellings, livelihoods and nutritional status which are included in the indicators.

Another challenge will be to socialise the document. Although many stakeholders have been consulted, including Provincial Disaster Coordinators, there is no sense that this complex document is widely understood particularly outside of the national capital.

Whilst the implementation of the NDRRF ultimately needs to be driven and resourced by GoPNG the project can continue its support in a number of ways:

Recommendation 1: *The value of National Disaster Risk Reduction Framework will only be realised through practical implementation. The project should support the development of an action plan to prioritise and implement the commitments made in the framework.*

Recommendation 2: *The project should assist NDC to prepare a monitoring and reporting plan for the framework.*

Recommendation 3: *Socialising and promoting the NDRRF at the sub-national level, should be a priority for the project. It should also support implementation in provinces in which it is active.*

3.1.2 Development of NDC capacity

The development of NDC capacity has been made particularly challenging by the low level of resourcing and support provided by GoPNG. Throughout the project period it has had a number of key positions vacant and it appears to have very little direct funding. This has had a damaging effect on its profile and ability to fulfil its mandated role. To offset staff shortages and develop the skills of young graduates the project has appointed five interns, recruited from the CHARM program to support NDC staff which appears to have been a positive development although it is not a permanent solution.

Shortage of funds was graphically illustrated during the review’s fieldwork. On two occasions NDC staff felt unable to accompany the review team due to debts to local businesses or inability to provide support to disaster victims. During 2018 NDC has at times been locked out of its offices and had power cut off for non-payment of bills. Many of its records are stored in containers and inaccessible until new premises are found.

GoPNG’s decision to bypass NDC in the management of the 2018 Highland earthquake response reflects its perception of its leadership role and capacity. A Controller was appointed to the response and this position will transfer responsibilities to a Restoration Authority, with no clear role for NDC.

The project is constrained in terms of its scope to directly address this situation. Despite this the review team believes it should continue to support NDC and, where feasible, increase engagement, while DFAT and the UN should explore other means to influence GoPNG decisions regarding personnel allocation. Successes such as the NDRRF indicate how a successful partnership can work. The project cannot – and should not – simply resource the NDC, but it can support NDC to build a network of activities which provide it with profile and relevance.

A closer working relationship is needed so that UNDP and NDC can communicate frankly and resolve issues between them. The following examples indicate that this is not always the case.

One activity agreed in the project document is a capacity assessment of NDC and PDCs in order to plan capacity development effectively. This exercise has been completed in the provinces where workshops were completed in 2017 but has not occurred at an NDC level. It is clear that there are different views on the necessity of conducting the capacity assessment, but this issue should be resolved.

One NDC staff member was sent to Thailand to participate in the Multi-Hazard Risk Assessment training. On his return he did not participate in any of the five provincial Risk assessment exercises, which was integral to the purpose of the training.

A proposal has been made to relocate the project team to the NDC offices to strengthen working relationships but no conclusion has been reached. The review proposes to strengthen the relationship between UNDP and NDC with the following measures:

Recommendation 4: Project staff should be co-located within the NDC offices, subject to issues with access, power supply etc. being resolved⁸

Recommendation 5: The project should advocate more strongly for adequate resourcing for NDC, particularly for a full staffing complement

3.1.3 Provincial Disaster Risk Management Capacity Assessments

The Provincial Disaster Risk Management Capacity Assessments were conducted in the five target provinces during the latter part of 2017 and consolidated into reports presented at a workshop in Port Moresby in August 2018. These studies are an important first step in the capacity building process, providing a baseline for the project.

The capacity assessments attempted to build on assessments conducted by UNOCHA in 2010, but this was found to be problematic with issues around interpreting the data and gaps within it. The methodology involved two-day workshops in each province with groups of between 6-20 DRM stakeholders.⁹ Questionnaires were applied, supplemented with interviews, focus groups and research to establish a picture of human, institutional and resource capacity.

It is important to note the acknowledged limitations of the exercise. Firstly, these were self-assessments and therefore subjective. For example, most provinces felt that they were doing well in incorporating gender into DRM which is not consistent with the views of other observers. Secondly, they represent a snapshot and capacity may have already changed. For example, Western Highlands had only one DRM staff member, the Provincial Disaster Coordinator, when the survey was conducted and the ratings probably reflect the presence of this capable individual. This person has now left to pursue overseas study. No replacement has been appointed and his duties have now been transferred to an already busy official.

The data available to the assessment may also be unreliable¹⁰. The Simbu workshop report notes the existence of a “*disaster management strategy which is out of date but still useful*” whilst a footnote points out that other sources variously suggest that “*the disaster management plan may not exist*” or alternatively that “*IOM has almost completed work on a new plan*”.¹¹

These workshops also included the development of provincial DRM Action Plans. Unfortunately, provincial stakeholders have many commitments and lack resources, so these do not appear to have been implemented to any significant degree.

Nevertheless, these capacity assessments provide some key information which will be important in the next stages of the project. This includes:

- No two provinces have the same DRM structures and processes. DRM staffing levels vary from one to eight individuals
- Generally, scores for human capacity were very low and suggest the need for further training which is needed in almost all areas of disaster management.

⁸ In the process of reviewing the review NDC has endorsed this recommendation.

⁹ It should be noted that the Central Province workshop was only a half day duration

¹⁰ The project confirms that the IOM plan does exist and is nearing completion

¹¹ Preliminary Simbu Province Disaster Management Capacity Assessment Report, October 2017 p5

- Physical resources were also lacking – and heavily reliant on the use of personal phones, internet connections, etc.
- Debt and resourcing is a critical issue. All provincial DRM structures are in debt to an alarming degree. This affects their credibility and their ability to engage with the private sector. Typically, these debts arise when provinces are encouraged to spend money on a response with the promise of provincial or national funding which is never actually provided. The collective debts of the five target provinces at the time of the capacity assessment were likely to be in excess of 8m Kina (around AUD3.5m)
- Senior provincial officials are often disengaged from the work of the project.
- Although each province reports some progress towards a disaster management plan, the review believes that none have been completed and approved at this point.

These capacity assessments are an important first step in provincial capacity building, notwithstanding their limitations. The Capacity Development Plan which accompanies them provides a comprehensive list of training needs and also maps out training which is currently available in PNG which will be useful resources in the next stage of the project.

Learnings from the capacity assessment process feed into the review’s conclusions and recommendations on provincial programming in Section 3.5, below.

3.1.4 Disaster loss database

The Disaster Loss Database is an attempt to initiate formal data gathering about disasters at a national and provincial level. This is an important first step in understanding the incidence of disasters, particularly small-scale disasters which are dealt with at the sub-national level. Information about these disasters is often recorded on paper at the provincial and district level but it has not been collated in a way which makes it accessible and usable as the basis for DRM planning. The database will enable the stakeholders to track the incidence of disasters geographically and over time. It should be noted that it will be very difficult to monitor the targets included in the National Disaster Risk Reduction Framework without data of this sort.

The project has engaged a data specialist from the University of PNG, who works with interns recruited from the Comprehensive Hazard and Risk Management (CHARM) program to gather and record the data. The project began in mid-2017 and has designed a disaster data card which allows the data to be recorded in a consistent way. Provincial disaster records are transferred onto these cards and provinces are encouraged to use them for future disasters. So far 1125 cards have been completed which include all of the records available in the project’s five pilot provinces.

The project has acknowledged limitations. Disaster records may not have been written or retained in each province. The engagement of provincial and national DRM stakeholders has been variable. Casualty and damage figures also vary considerably: for example, estimates of those killed in the 2018 Highlands earthquake range from around 30 to more than 100.

The results show the prevalent risks in each province including floods (most common in Central Province and Western Highlands), volcanoes (most common in Madang and

Bougainville) and landslides (Simbu). The data allows mapping of disaster data not only at a provincial level but at district and LLG levels.

Whilst the value of the database to the five target provinces is significant, the logic of this project is that it should be rolled out to all provinces to provide national data. A methodology has been developed and volunteers trained in data collection, so this should be possible at a relatively low cost. The project will need to consider how the database will be maintained and updated after the initial data collection exercise is complete.

A significant challenge for the project is to ensure the sustainability of the database. It is currently dependent on a single academic and a small group of volunteers. Without continuous updating it would quickly become obsolete. NDC and UPNG are both interested in cementing an agreement for the maintenance and resourcing of the database and it is important that this is finalised. PDC level training and support is also required to ensure that provinces continue to maintain these records.

Recommendation 6: *Subject to the development of a strategy to maintain it, the Disaster Loss Database should be established in all provinces so that consolidated national level data can be produced. Potential linkages with other data sources such as the World Food Program’s mobile Vulnerability and Mapping (mVAM) should be explored.*

3.1.5 Comprehensive Hazard and Risk Management (CHARM) training course

The CHARM training course is an initiative to support DRM training through the University of PNG. The project document frames it in ambitious terms as “a two-year diploma course” (p10) but in fact it is a more limited training – not a stand-alone course but rather a component of other degrees and diplomas. A project review of the training in 2017 found that although the course is spread over 17 weeks it could be compressed into a one-week intensive course if necessary. It found that the course was not really comprehensive: rather it focused on risk assessment and described it as “*necessary but not sufficient.*” It recommended the use of the training to upgrade the skills of provincial staff and to be linked to provincial planning. A number of staff from Provincial Disaster Offices and Provincial Administrations from five pilot provinces have attended this training.

The review did not talk to trainers or trainees of this course so it is not possible to make recommendations concerning future support. It should be noted that the course has provided motivated and capable interns for NDC and the Disaster Loss Database. It also notes that there are other more comprehensive training curricula available, such as the CARE four-part Community Disaster Risk Management training course which has been used successfully with provincial, district and LLG officials.

3.1.6 Standard Operating Procedures (SOPs) for key disaster types

In 2018 Standard Operating Procedures have been developed for the following:

- How to establish SOPs
- Flood reporting
- Fire protection options
- Landslide reporting
- Report of missing small craft and air and small craft search initiation
- Tsunami alert

- Volcano event report
- Dealing with a volcano alert from the Rabaul Volcanic Observatory

These are brief, practical documents which are virtually complete but are awaiting final technical input before release. They were developed with input gathered at the Capacity Assessment workshops and consultations with other stakeholders and they could clearly be useful to other provinces. At this point it is hard to assess their effectiveness. It is important that once completed they are made available at provincial and sub-provincial level and that training is provided in their use.

3.1.7 Provision of office/communications equipment

The project has purchased a range of office equipment for Provincial Disaster Coordinators to address their serious lack of resources – something which was underlined by the Capacity Assessment. The project is currently waiting for sign off for the distribution by NDC. The following equipment will be provided: desktop computer, printer/scanner, camera, document binder, external hard drive, data projector and a document shredder. Following the Highlands earthquake, the project agreed to supply this equipment to two of the most affected provinces (Hela and Southern Highlands) as well as the five pilot provinces. It will be important that the use of this equipment is monitored to avoid misappropriation.

Recipients will hopefully be encouraged to use these facilities in support of project activities. For example it should help with the maintenance and coordination of information for the disaster loss database and stakeholder mapping.

3.1.8 Early warning procedures

PNG has established a new Multi-Hazard Early Warning Centre, a joint initiative of the Department of Mineral Policy and Geohazards Management, the National Weather Service and Regional Integrated Multi-Hazard Early Warning System (RIMES). This is not formally part of the project but it has been closely involved due to its ongoing relations with all three partners, particularly through the Multi-Hazard Risk Assessment. Review team members toured the facility which is well equipped to gather and analyse meteorological and geohazards information.

The project has directly supported the centre by leveraging funding which it has used to install two weather stations (one in Simbu and one in Port Moresby), which are now linked to the centre.

However, the system needs to be developed in three critical ways. First, the system collects complex technical data but it does not yet have the means to translate this into clear and simple warnings and advisories. One informant said: *“Scientific/Technical information is vague; for example ‘volcano on stage 2 or 3 alert’ means nothing to the NBC let alone a villager.”* Automated warning systems may be a part of the solution.

Second the protocols for how warnings are created and authorised are unclear. A National Broadcasting Corporation (NBC) official commented:

“We have multiple layers of disaster response agencies: - who says what and who has overall authority to issue directions/warnings? (It could be) NEC, the Minister or Secretary of the Department of Provincial Affairs, NDC, PDCs, the Police, the PNG Defence Force, the Geophysical Observatory, the National Weather Service, the PNG Fire Service...”

Thirdly, the transmission of warnings is a real problem. The review found that at a local level people know nothing of the early warning centre and it has no means of reaching them in real time. The National Broadcasting Corporation has emergency broadcasting policy in place but its coverage is far from universal

The review was informed of UHF networks such as those operated by the Missionary Aviation Fellowship and other church organisations which should also be part of the solution.

Mobile phone networks are increasingly used as a key element in disaster warning systems and mobile usage and coverage is extensive in PNG. However Digicel, the largest phone company in PNG, has so far declined to transmit warning messages without payment.

The issue of getting warnings to those who need them, particularly in covering ‘the last mile’ to those in danger, is critical.

Recommendation 7: *The project should work with the Multi-Hazard Early Warning Centre and to develop an effective early warning system. To do this it must create standard operating procedures for alerting authorities and broadcasters, find methods to formulate simple warnings and advisories*

Part of this process should be the strengthening of NDC/RIMES relations, with NDC currently feeling that RIMES is not very responsive to their requests for information.

The review also suggests that increased engagement with communications stakeholders to support the early warning system should be a key direction for the project (see recommendation 18 below).

3.2 Disaster Risk Management Mainstreaming

Output 2: Disaster risk management integrated into development plans and budget

DRM integration was prioritised in the project design document and almost half of the budget was allocated to it. Some successes have been achieved – most notably the project’s role in the development of the Medium Term Development Plan III, 2018-2022. This is a key government planning tool, which includes climate change and disaster risk reduction. This national planning document provides guidance to provinces and districts for development of their own provincial and district development plans. It is discussed below in section 3.2.2

Maintaining the relationship with the Department of National Planning and Monitoring (DNPM) developed during this process should be a priority for NDC and the project.

The project has also supported the development of the District Development Plan for Rigo District (2018-2022) in Central Province, which is the first and only district level development plan finalized and launched in PNG. The plan is notable for the inclusion of climate change and disaster risk reduction elements and will hopefully provide a model for other districts. The plan was formally launched in 2018 by Prime Minister and five other ministers (including Minister for Planning), and was referred to as an exemplary plan for other districts to follow.

However other activities listed in the project document – such as “*training of key departments in DRM integrated planning and budgeting*” and “*DRM integrated in the training curriculum of Civil Servants*” have not progressed. Just over USD\$1m of the \$1.5m initially allocated have been spent and progress at the provincial/sub provincial level has been limited.

The project has produced a report (2016) on mainstreaming at the national and provincial levels.¹² This provides analysis of DRM governance, processes and budgeting and provides some suggestions for future activities, but it has not yet been built upon. The project decided that the Multi-hazard risk Assessment and capacity assessment were necessary precursors for further mainstreaming activities, which raises issues of sequencing. There is a risk that the Mainstreaming DRM report may be outdated when the time comes to implement its suggestions.

The CHARM course (see 3.1.5 above) has also provided training to some officials but on a relatively limited scale.

It is clear to the review team that the project cannot effectively achieve its outcomes solely by working through stand-alone DRM structures that have limited authority and almost no budget. Effective mainstreaming requires that DRM is included in all relevant government plans and reports. It also necessitates training of line ministry and provincial staff so that it is well understood. The project should focus to a greater extent on these activities in the next phase of the project

There are no easy solutions to this problem and further initiatives will require consultation and planning. UNDP has its own mainstreaming methodology which should be consulted and DFAT is actively involved in civil service training in PNG which might also be a source of insight.

Recommendation 8: *The project should review its approach to DRM mainstreaming at national and provincial levels. It must develop more effective strategies in the next phase of the project based not only on DRM integration into plans and budgets, but on the provision of training to those who must implement them. It must continue to support the implementation of DRM within MTDP III and build on the success of the Rigo district planning process.*

3.2.1 Multi-Hazard Risk Assessment

The Multi-Hazard Risk Assessment (MHRA) is classified as a DRM integration initiative in the project document. The project contracted RIMES to lead this process but it has been developed in close collaboration with PNG stakeholders including three branches of the Department of Mineral Policy and Geo-hazards (the Port Moresby Geophysical Observatory, the Engineering Geology branch and the Rabaul Volcanological Observatory), NDC, the National Weather Service and the Conservation and Environmental Protection Authority. The risk assessment process was launched in January 2017 and started with the development and validation of the appropriate methodology. Selected staff from the main participating agencies then went to Bangkok for three weeks of specialised training on multi-hazard risk assessment. Initial assessments were based on existing data and these were presented for validation at workshops in the provinces later that year. Findings were presented on the first day, and on the second day provincial DRR plans were formulated.

The assessments provide data on a range of hazards including earthquakes, tsunamis, landslides, volcanoes and a range of hydro-meteorological hazards. These are linked to a social vulnerability assessment. The review received some negative feedback about the scientific basis and reliability of the assessments which reflects a failure to explain the

¹² Mainstreaming Disaster Risk Management, 2016

purpose and the limitations of this exercise. Currently there is *no* systematic hazard or risk assessment covering the country or the provinces. This makes investment in DRM based on disaster risk a difficult proposition. This is exemplified by the complex and recondite methodology used to select the five pilot provinces for the project. Selection of priorities within provinces is also problematic without some form of risk assessment.

To create a truly reliable risk assessment it would be necessary to generate primary data on a large scale which would be slow, difficult and very expensive. Such methods would not be practicable for this project due to constraints of time and funding. For example, the MHRA has relied on population data contained in the 2011 census. NGOs working at a community level regard this as unreliable and out of date.¹³ However it remains the best available data available and the MHRA has little alternative but to use it.

What the MHRA should do, however, is to be clearer about its data sources and reference them throughout its reports. It should also attempt to improve the reliability of its data sources wherever possible. Reports should contain caveats and be honest about their limitations: they are *not* definitive and totally reliable documents but are based on the data currently available. MHRA reports should be peer reviewed before they are shared with DRM practitioners.

MHRA provincial workshops have developed Disaster Risk Reduction Action Plans to be taken forward by the participants. These are potentially useful but may be confusing. They contain lengthy lists of actions – often twenty or more – involving multiple organisations. These provincial stakeholders have MHRA action plans *and* DRM action plans developed by the capacity assessment workshops and they have very few resources with which to implement them. There appears to have been limited progress with the implementation of these plans. This issue is discussed further in Section 4.2.

Nonetheless, the MHRA has produced useful assessments in the five ‘pilot’ provinces and it has worked in a participatory way with a number of government authorities. A cohesive assessment team has been created and members accompanied the review team showing enthusiasm and commitment. This team is well placed to roll out the MHRA to other provinces in PNG and it seems logical to do so.

Recommendation 9 (a): *The MHRA already developed for existing provinces must be updated to address the concerns outlined. This includes better citation of data sources, acknowledging the limitations of the data available and used in the assessments and seeking peer review.*

Recommendation 9 (b): *On the basis of recommendation 9 (a), the MHRA should be extended to all provinces in PNG to create a national risk assessment data base.*

3.2.2 DRR in the national Medium-Term Development Plan 2018-22 (MTDP3)

One significant achievement has been the inclusion of DRR in MTDP3 which was launched in October 2018. It is an example of good timing and using the comparative advantages of NDC and UNDP. NDC were consulted as part of the planning process and this access, combined with the fact that UNDP were assisting with the development of the plan, made

¹³ See for example Evaluation of CARE International and Oxfam PNG El Nino HPA Drought Response Project, 2016 p8

DRM mainstreaming possible. The timing of the exercise, in the aftermath of the Highlands earthquake, probably also strengthened the case.

This is success ‘on paper.’ The challenge for the project will be to support capacity building which will help transform this document into tangible changes in practice. Continuing to build the key relationship with (see recommendation 8 above)

3.3 Disaster Recovery

Output 3: Preparedness and planning mechanisms and tools to manage disaster recovery processes at national and sub-national levels strengthened

The project has invested considerable time and effort in promoting the case for recovery planning but has had limited success. The occurrence of two major disasters in the timespan of the project might have provided opportunities to make the case for recovery planning at an early stage, but in fact they have resulted in a focus on the immediate humanitarian response alone.

3.3.1 Development of National Disaster Recovery Framework

The project recruited a recovery specialist in 2016 and it was proposed that the specialist engage in recovery planning following the El Niño drought – but it proved to be too late. Almost all response projects had spent their funds and were already returning to their pre-drought programming. The project turned its attention to the production of a generic National Recovery Framework with the hope of guiding future responses. Provincial recovery frameworks for Bougainville and Western Highlands were also created as part of the exercise. Unfortunately, the framework was never formally endorsed by the National Executive Council and its status remains unclear.

3.3.2 Support to 2018 Highlands earthquake early recovery

Following the earthquake in February 2018 the government chose to put the response under the authority of a Controller. The project seconded its recovery specialist to the controller’s office for forty days over a six-month period. However, the imperatives of the response left little consideration for recovery. At the end of 2018 the Controller will be superseded by a Restoration Authority, but formal consideration of a recovery process will come far too late to be effective.

The project has attempted to promote and implement recovery planning without much success due to circumstances beyond its control. The project should however continue to make the case and push for consideration of the recovery framework it has created. Early recovery is an important part of UNDP’s institutional focus and something which it is well equipped to support.

Recommendation 10: *The project should promote disaster recovery more actively to ensure that it is better integrated into relevant Government and DMT processes. This should include advocating for the approval of the frameworks it has produced and the provision of appropriate training and support at national and provincial levels.*

3.4 Humanitarian Coordination

Output 4: Readiness of the Disaster Management Team members and the National Disaster Centre to prepare and respond to disasters enhanced:

First it should be noted that informants have made criticisms of the major humanitarian responses conducted during the project period; both the El Niño drought response and the Highlands earthquake response were regarded as too slow and technically deficient in a number of respects. However, the role played by the project in coordinating these responses and strengthening coordination methods has been generally praised.

The coordination work done during the drought and earthquake response has been a notable success of the program. In June 2015 UNOCHA - which would usually play a key role in humanitarian coordination - closed its office in PNG. In the following months it became evident that a serious drought was occurring, a situation complicated by GoPNG's refusal to declare a disaster. The project prioritised its response coordination role and a Humanitarian Coordination Specialist was appointed. Throughout the response it provided vital support to the UN Resident Coordinator in his role as co-chair of the DMT. It also strengthened the humanitarian response architecture in PNG. For example, a food security cluster was established in 2016 and steps were taken to strengthen the protection cluster. The current Resident Coordinator said: *“The cluster system is anchored on this project.”*

The project has continued to play a key role in coordination. A joint interagency needs assessment team was established and when a further El Niño drought was forecast in 2017, the project played a key role in action planning for further drought. It also used the drought as an opportunity to host a visit by the Special Envoy of the UN Secretary General for El Niño and Climate in 2016, drawing international attention to the situation in PNG.

More recently project funds have also been used to support the deployment of the UNOCHA Field Coordinator for the Southern Highlands and Hela provinces, following the February 2018 earthquake.

The project's coordination role has also involved a substantial input into a number of smaller disasters including seasonal floods (Jiwaka, 2015, 2018, East Sepik 2017, Central Province, 2018), volcanic eruptions (Madang province, Manam, 2015, 2018 Kadovar, 2018) and earthquakes (Bougainville, 2017).

However, it should be noted that there has been a considerable 'opportunity cost' to the project from its focus on disaster response. One UNDP official suggested that the coordination role it has sought to play would usually be assigned to a four-person UNOCHA team. In performing this role it has had to neglect work on the achievement of other important planned outputs. Most tangibly the El Niño drought was the main reason that a no-cost extension was sought for the project. In the words of one team member: *“Most of 2016 was spent on the El Niño response.”*

Practically it would have been difficult for the project to do otherwise: government agencies, including NDC were largely preoccupied with the response.

The impacts of the 2018 earthquake have been similar:

“I would have loved to have done more work on preparedness, but we kept getting interrupted by disasters!”

Playing a key role in national level response coordination has come at a cost to some of the project’s other priorities, particularly at the provincial level. For example, the project document makes a clear case for prioritising provincial DRM:

“There is a greater probability of small disaster events happening frequently in different parts of the country... In this context the project will focus to enhance DRM capacities at the sub-national level.” (P9)

As the project nears the completion of its first three year phase, work at a provincial level has only really begun in the last 12-18 months – and it is still at an early stage.

Large scale disasters will always have a disruptive impact on longer term DRM but this impact could be managed more effectively in the next phase of the project. The design for the next phase needs to consider ways of reducing the impact of disasters on other project outputs, perhaps by providing for separate surge capacity, additional funding or by initiating more activities at the provincial level where they are less likely to be disrupted by disasters that do not directly affect them.

Informants suggest that the next few years provide a real opportunity to focus on the full range of DRM activities envisaged by the project:

- The National DRM Framework 2017-30 is now approved
- The Medium-Term Development Plan 2018-22 enshrines DRR mainstreaming
- The 2017 national elections should mean a period of relative stability over the next four years

A key question for the project team relates to the management arrangements for the Humanitarian Coordination Specialist during the next phase of the project. Hitherto the position report to the DRM Project’s Technical Advisor and works closely with the UN Resident Coordinator (UNRC) who until now has also been the UNDP Resident Representative. Starting from 01 January 2019 the UN RC will be independent of a specific UN technical agency, and UNDP will have a separate Resident Representative. The Humanitarian Coordination Specialist will still be expected to provide humanitarian coordination support to the UNRC.

Due to time constraints the review has not had the opportunity to consult with all affected parties in relation to this issue. However, the role has worked well under its current management arrangements and administratively it is likely to be simpler to keep it within the existing project. The role also ensures the visibility of the project and provides it with a useful link between humanitarian and DRM programming notwithstanding the negative consequences noted above. On balance, the review believes that the position should remain as part of an ongoing DRM project.

Recommendation 11 (a): *The Humanitarian Coordination Specialist position should remain as part of an ongoing DRM project.*

Recommendation 11 (b): *The design for the next phase of the project should identify and incorporate measures to reduce the impact of disaster responses on other key aspects of*

the project. It should be a disaster risk management project – not a humanitarian coordination project.

3.5 Effectiveness at the national and sub-national levels

In reviewing the effectiveness of the activities of the project it is an inescapable conclusion that it has been most effective at the national level and that its initiatives to strengthen provincial capacity are at an early stage. The provincial capacity assessments carried out by the project make it clear that human and material capacity is at a low level and that we are only now getting a clear understanding of province-level DRM structures and how they work in each province.

This problem must be addressed. In the words of an NDC official: *“If the project is extended it should focus on the provincial level.”* This sentiment was echoed by several other informants.

These informants are under no illusions about how challenging this will be. The review’s visit to Madang province and to Bogia District, the site of the recent Manam volcanic eruption, illustrated this. Divisions were evident within the provincial authorities; resources were inadequate and there were also differences between political and administrative leadership. The resettlement of the population displaced by an eruption 14 years ago had not yet been resolved. For various reasons it was not possible to meet some key officials and humanitarian actors involved in DRM.

The project must work to support provincial disaster management structures, but it is clear that they lack the authority, resources and training to drive DRM themselves. The project should strive to engage other actors such as NGOs, churches, Red Cross branches and local businesses. The project should place PDCs at the centre of a network of actors, each bringing their own resources and competencies to disaster management.

The project will need to change the way it works in the provinces. To date it has employed a ‘fly in, fly out’ approach where staff or consultants go to the province to conduct the planned activity and leave. The quality of the work done on these missions is good but the action plans created by the Capacity Assessments and Risk Assessments do not appear to have moved forward significantly due to lack of focus and resources. It is probable that it is also an expensive mode of operation.

A project presence in each province would be advantageous. This would provide a continuity of support and would provide the project with better access to stakeholders and better information on local developments. It would enable stakeholder mapping and provide support for the maintenance of initiatives such as the disaster loss database and the socialisation of the NDRRF and MTDPIII. The project’s success with interns through the CHARM program might provide a means of identifying suitable candidates.

The project cannot and should not provide large scale funds to provincial authorities, but it may be that a small projects fund which can be accessed by stakeholders within the province to address key items on their action plans may help to generate momentum and confidence.

Finally, it should be stated that the review *does not* support the project becoming involved in grass roots activities such as Community-Based Disaster Risk Management. NGO, churches

and Red Cross Branches are already engaged in these activities and they are likely to have a comparative advantage in doing so. The project can help PDCs coordinate and learn from such activities but it should not be an implementer.

Recommendation 12: *The next phase of the project should focus on provincial capacity development. It should consider the deployment of local staff to each target province and initiate a small projects fund to enable local DRM stakeholders to address their key priorities.*

4 Findings—other criteria

4.1 Relevance

The review concludes that the project’s original scope is largely relevant. It has contributed significantly to PNG’s DRM framework through its contributions to the NDRRF, MTDPIII and other initiatives. It is also consistent with the UN Development Assistance Framework and Country Programme Document for PNG, 2018-22 and DFAT’s Humanitarian Strategy (2016).

Perhaps the best example of this alignment is the development of the National Disaster Risk Reduction Framework 2017-30 (NDRRF). The project document identified the opportunity to contribute to this key document which enshrines PNG’s commitment to the Sendai Framework for Disaster Risk Reduction 2015-30, the outcome document of the Third UN World Conference on Disaster Risk Reduction held in Japan in 2015. The development of the DRM framework is also an exemplar of how the project was envisaged: working closely with its national partner, the NDC, and encouraging participation from a range of stakeholders to produce a potentially important document with wide ownership. A team member commented:

“NDC were in the driving seat...every single word went through six months of review with line ministries and NGOs.”

The project approach can be described as a flexible one: it has been willing to seize opportunities and address important issues when they arise, even when that means deviating from planned activities. This approach has been broadly accepted by the main project stakeholders, UNDP, NDC and DFAT. This has enhanced the project’s relevance.

The response to the El Niño drought in 2015-16 is a good example of this flexibility. The project document notes the withdrawal of UNOCHA from PNG and the need for the project to support humanitarian coordination but it could not have foreseen that a major disaster would occur in the early months of the project. Resources were diverted into supporting the response and the project performed an invaluable role in supporting the coordination the response, strengthening humanitarian architecture and leading on future El Niño preparedness. A senior official commented;

“If we had not had this project we would have been in a much worse place.”

However, this flexible approach has had some negative consequences in achieving the full range of project objectives. It has contributed to the comparatively slow pace of provincial programming. (See section 3.5 above)

4.1.1 Governance

The governance structure of the project is problematic for a project of this type. If changes in project objectives and activities are to occur, it is vital that the key project partners are engaged.

Section 4 of the project document outlines the project’s management and governance arrangements, mandating the creation of a project board and indicating the management structure. These arrangements were elaborated at the first meeting of the Board (renamed the Steering Committee) in May 2016. This meeting approved TORs and membership of the group.

In practice the Steering Committee has met infrequently, about once a year. The membership is as follows;

- National Disaster Centre (NDC)
- Department of Mineral Policy & Geohazards Management
- National Weather Service (NWS)
- Climate Change Development Authority (CCDA)
- PNG Red Cross Society (PNGRC)
- Department of Foreign Affairs & Trade (DFAT)
- United Nations Development Program

There are often multiple participants from each agency and there is some variation of participants between meetings. In 2018 it was agreed to add an NGO representative.

The inclusion of several partners who are not central to the decision making suggests confusion between the functions of a management/governance group and those of a broader reference group.

The key partners are the executing agency (UNDP), the key implementing partner (NDC) and the donor (DFAT) and there should be strong and active collaboration between them based on more frequent meetings a better information flow and clarity on decision making processes.

Whilst relations between these agencies are generally cordial important misunderstandings and tensions do occur. One NDC member said that the project was managed by UNDP and that NDC was “*not much involved.*” UNDP and DFAT have different views on whether expansion of the project into Highland provinces has been agreed, as well as on the use of earmarked funds for the continuation of the project. DFAT has very little documentation about the project on file. A breakdown in communications has also occurred in relation to the Multi-Hazard Risk Assessment. Critical feedback from Geoscience Australia and the Bureau of Meteorology has been provided via DFAT but the project has not yet had the opportunity to address these concerns.

Currently meetings are mainly used to provide a yearly update on progress in relation to the four outputs of the project and a presentation of the annual plan which effectively supersedes the project document adjusting activities in response to the changing realities of the PNG environment. If these meetings are to provide approval for such changes it is

important that relevant documents are provided well in advance of the meeting and that discussions and decisions are carefully recorded. Where annual plans deviate from the project document it is important that changes are appended to the project document.

It is also worth noting that intended board functions do not feature in the minutes. These include reporting against the risk matrix included in the project document, and a substantial allocation for project audits (USD100,000) which have not been discussed. Financial information is not presented or discussed.

The project partners need to develop a steering committee and reporting mechanisms that meet their needs: in the course of the review NDC have suggested brief written monthly reports to help them engage with the project more effectively.

Recommendation 13: *The steering committee should be reconstituted to include only the three key project partners: UNDP, NDC and DFAT. Meetings should be held on a quarterly basis and include discussions of progress and decision making on the basis of up-to-date narrative and financial information. A wider reference group which includes other current members of the steering committee should be formed if there is sufficient interest among these stakeholders.*

4.2 Efficiency

The review did not access financial and budgetary information while in country and there have been questions about the clarity of the information subsequently provided. During the drafting of the report a concise summary of expenditure by output was provided to the review by the project. This related to funds provided for the first phase of the project as described in the project document.

However In the course of the review, UNDP informed DFAT that an additional USD700, 000 has been drawn from funds in the One UN Trust Fund Account to support activities in the Highlands following the earthquake. The May 2018 Project Steering Committee meeting discussed the post-earthquake situation, but the minutes do not appear to anticipate or approve expenditure of this sort. Following protracted discussions, DFAT has advised UNDP that an audit will be commissioned by a reputable international firm in 2019 to focus on improving accountability and transparency.

This significant confusion underscores the critical importance of improving both governance arrangements (see section 4.1.1 above) and a more rigorous design process (see sections 2.1 and 4.5). Transparent and up-to-date financial information must be available to the project partners in order to make informed decisions about the future direction and activities of the project.

In relation to the allocations indicated in the project document, more has been spent on output 4 (response coordination) and less than budgeted on outputs 1, 2 and 3. The largest underspend relates to DRM mainstreaming. This is consistent with the analysis provided in this report i.e. the project has been disrupted by the occurrence of two major disasters and that mainstreaming has been one output most seriously affected by this disruption.

Following the review the project has produced a document which illustrates graphically how disasters and opportunities for the project unforeseen in the original project document have

led to adaption and enhancement of activities in 2018.¹⁴ The responses to the Highlands Earthquake and lesser disasters such as the Kadovar and Manam volcanic eruptions and Central Province Flooding have increased the response coordination workload. The project has also used opportunities provided by the preparations for the APEC summit (November 2018) to promote disaster management. Specific local opportunities have been taken such as support for the Rigo District Development Plan so that DRR and climate change are properly included, and tsunami planning and evacuation drills in parts of AROB.

Delays to a number of activities are attributed to the impact of disasters and these have been rescheduled for 2019. These activities are in many instances referred to elsewhere in the report and include the development of an action plan for the NDRRF and the distribution of office and communications equipment to NDC and the five pilot provinces.

In terms of efficiency this document shows that unanticipated activities - and achievements need to be considered when assessing the outcomes of the project. The operating environment in PNG is demonstrably unpredictable and it requires an adaptable approach to project implementation.

One area where greater efficiency could be achieved is through stronger coordination. The project has clearly played a pivotal role in the coordination of humanitarian response, but sectoral coordination seems to be much weaker in other aspects of DRM. This presents an opportunity for the next phase of the project. Three areas of coordination should be considered:

4.2.1 Internal/UN Coordination

Within the project different activities tend to operate relatively independently and while they have usually been implemented effectively, some synergies may have been missed. One example is the parallel processes used by the Capacity Assessment and Risk Assessment processes. Both were centred on provincial level workshops which gathered information and formulated action plans in the second half of 2017 – often within a few weeks of one another. Whilst the content and process of each exercise were different there may well have been ways in which they could have worked more closely together. For example, the Capacity Assessment team travelled to Madang to conduct its workshop in August 2017 involving around 20 participants for a two-day workshop resulting in a 12 point Disaster Action Plan. In September 2017 a Risk Assessment project two-day workshop was held at the same venue, again with around 20 participants, resulting in a 36 point Disaster Risk Reduction Plan. Staff members were aware that this was not ideal and say that they tried to link them, but that staff/consultant schedules made this difficult. Closer collaboration might have saved money – but more importantly it must be asked whether impact could have been improved. In provinces where DRM is struggling for resources and focus, the stakeholders now have two disaster-related action plans with almost 50 action points to consider and no permanent project presence to assist them.

This is contrary to the advice given to the review by officials in the Western Highlands: *“Don’t try to do too many things...If we try and do a number of things it will confuse them (senior officials).”*

¹⁴ K Sharifov, Impact of 2018 Disasters to DRM Project, December 2018.

The UNOCHA Field Coordinator for Hela and Southern Highlands¹⁵ also felt that she should have been more involved in the DRM project’s meetings and communications. In two respects there was a convergence of interests. Although there has been some consultation on recovery strategy more could have been done. UNDP, including this project, also have an interest in expanding to the Highlands but no one had engaged with her to learn from her experience of working in the region since the earthquake. She felt that the position had been “an underutilized resource”.

Coordination across the UN program in PNG could also be improved. IOM has received USAID funding for DRM projects in 13 Provinces¹⁶. This project will run until March 2020. There are three provinces where both IOM and the DRMP are working¹⁷ – but coordination between them seems limited. There is clearly some overlap. For example, the DRMP project document planned to lead development of Provincial DRM plans. In fact IOM has done so and UNDP staff expressed concerns about their structure and length. Although no plans have been signed off, it may be too late to provide input. Better collaboration would improve the quality of the plans and ensure consistency between provinces in which IOM is operating and those where it is not present.

There are other examples. A leader of the Multi-Hazard Risk Assessment learned that UNDP’s Climate Adaption Fund had supported flood assessments in a number of provinces which had not been shared. UNICEF are implementing DRR in schools which might be useful to link to this project.

Recommendation 14: *Project management should focus on more integrated project planning and better coordination with relevant UN activities during the next phase of the project.*

4.2.2 Donor Coordination

The review team believes that donor coordination could be strengthened. It learned of USAID support for IOM. It was told that the European Union has been funding similar activities which reportedly include support to Rabaul Volcanological Observatory, CHARM and PNGRC. New Zealand has supported response activities and might be open to DRM initiatives.

4.2.3 DRM Sector Coordination

There are a lot of DRM/DRR activities in PNG but there does not seem to be strong coordination between them. DFAT itself funds NGOs through the Australian Humanitarian Partnership, the PNGRC, faith-based groups through the Church Partnership Program. All involve DRM/DRR programming. DFAT also funds Geoscience Australia for work which includes the Rabaul Volcano Observatory. All of these agencies are broadly aware of one another but they do not work closely together at the national or provincial level.

For example, CARE has produced DRM training course on disaster management, reviewed and endorsed by NDC. This is aimed at communities but has also been used with local authorities. It is available in English and Tok Pisin and is a potential resource for the DRMP and others in the sector.. CARE has also produced gender impact studies for the El Niño

¹⁵ Some support costs (although not deployment costs) for this position are covered by the project.

¹⁶ The review understands that it now has funding to expand to 16 provinces

¹⁷ Simbu, Madang and ARoB

drought and the Highlands earthquake which may be a resource in addressing gender mainstreaming in the project. Conversely, some of the resources developed by DRMP are potentially very useful to other stakeholders: the SOPs, the Multi-Hazard Risk Assessment, the Capacity Assessments and the Recovery Framework.

Consistency could also be improved. There is a risk that the IOM Provincial DRM plans will differ from those to be developed by DRMP and from the Contingency Plan already developed by ChildFund with Central Province Authorities. The project is developing a template which will hopefully address this concern.

The lack of coordination in relation to DRR/DRM activities is a contrast to humanitarian response coordination which has been a stronger focus for the agencies involved.

These coordination weaknesses are something which the next phase of the DRMP project is well placed to address.

Recommendation 15: *In collaboration with NDC, the project should strengthen interagency DRM coordination in its next phase and consider the establishment of a coordination platform for agencies engaged in DRM. National and provincial mapping should be included in the design phase as well as a ‘dashboard’ which makes DRM resources (SOPs, training materials, planning formats, lessons learned) available. The project should consider the appointment of a specific position to support this work.*

4.3 Sustainability

Sustainability remains a significant challenge to the project. GoPNG funding and support for the structures to which it mandates responsibility for DRM remains inadequate. As has been noted, the NDC cannot recruit some of the positions which it needs to fulfil its role and has been locked out of its offices for non-payment of rent at the time of a major disaster response. The decision to install a Controller for the Highland earthquake response suggests a lack of commitment or confidence in the NDC. The Controller’s report and recommendations to Parliament at the end of his assignment, due in late 2018, may be an important indicator of future policies.

At a provincial level the capacity assessment suggests that annual budgets for DRM vary between zero and K400,000 in the five pilot provinces, which is a fraction of the debts they owe. It is safe to assume that there is virtually no funding is currently allocated to district and LLG level DRM. Senior provincial officials seem disengaged. It is significant that the leader of the Capacity Assessment project succeeded in meeting senior officials in only one of the five provinces.

However, a strategy which aims to transform the government structures alone is unlikely to produce sustainable results. The project must continue to support these structures but also recognize that it is more likely to succeed if there is a network of DRM stakeholders working together at the national and subnational level with NDC and PDCs providing leadership and support. Stimulating better coordination is one means to achieve this.

The project’s support should not be unconditional; it must demand more from national and local government in return for its support. The NDC must be fully staffed (see Recommendation 6). At a provincial level there must be some benchmarks to indicate the

engagement and support of provincial authorities: nothing can be achieved when there is little or no provision of funds or staff for DRM.

Recommendation 16: *The next phase of the project should make clear its expectations of government at a national and provincial level, with the active support of its key stakeholders. The project should establish benchmarks for provincial support for DRM. Where this commitment is lacking it should consider withdrawing from the province.*

A number of project stakeholders believe that the project should expand to include more provinces, particularly Highland provinces affected by the February 2018 earthquake. The impending provision of office and communications equipment to Hela and Southern Highlands may be seen as a step in this direction.

The review believes that the project should focus on provincial development (see Recommendation 12) but the findings of the capacity assessments and observations at field level suggest that the existing provincial program is still in its early stages. The demands of capacity development in these five provinces will be considerable. The logic of the ‘pilot provinces’ suggests that an effective operational model should be established, lessons learned – and only then should it be replicated on a wider scale. The review believes that this point has not yet been reached. Benchmarks will need to be established to indicate when sustainable results have been achieved (e.g. Provincial DRM plan in place, a provincial DRM coordination body which meets regularly, progress in implementing action plans etc.)

Recommendation 17: *The project should not consider expansion to other provinces at this stage. Benchmarks for a successful provincial DRM model should be established and expansion considered when these have been attained in one or more provinces.*

4.3.1 Private sector engagement

The private sector has played an increasing part in humanitarian response in PNG. During the El Niño drought phone company Digicel donated K500,000 and Ok Tedi Mining provided food. Coca Cola offered the use of their supply chain to move relief goods to affected areas.

Following the 2018 Highlands earthquake, resource companies Exxon Mobil and Oil Search provided large scale relief in the early phases of the response. Their logistics capacity was invaluable in reaching inaccessible areas which had a very limited NGO/ UN presence. In Bogia district the local MP praised Madang’s Chinese business community who had provided K30,000 to the Manam relief effort at time when other funds were not getting through.

Some informants were critical of the response of the mining companies, saying that it focused only on the area where their projects work. A Southern Highlands official said: *“Mining companies provide aid to their own areas – in Kutubu District. We never saw any of it or had any role in it.”*

They also have a short-term perspective, generally focused on one-off distributions: *“they just dumped stuff in villages,”* said another observer. Such interventions are difficult to coordinate; longer term responses do not interest them; *“they couldn’t see the point of clusters.”*

A particular challenge with engaging with the private sector is the indebtedness of PDCs and NDC: *“Debt has spoiled our integrity with the private sector”* said an official in the Western Highlands. Effectively this means that the project will need to lead initiatives to work with the private sector – not its government partners.

The review did identify areas where private sector engagement could be important and relevant to DRM. On the issue of early warning systems, it is disappointing that Digicel have so far refused to use their phone network to transmit early warning messages unless they are paid commercial rates for this. In many countries this is considered a necessary public service and done free of charge. Persuading Digicel – or their main commercial rival, BMobile – to cooperate would make a major difference to the dissemination of early warnings.

The project should also engage with public and private broadcasting networks to see how warnings and advisories can best be transmitted.

The MHRA also noted that mining companies maintain geological records and plantations maintain meteorological records which could strengthen risk assessment if access could be granted.

The project already has plans to engage with the Connecting Businesses Initiative, a UNOCHA and UNDP initiative dedicated to supporting disaster management which should also be valuable. Connections with local and national Chambers of Commerce should be encouraged.

Recommendation 18: *The project should strengthen its engagement with the private sector. Support from telecommunications and media companies in the transmission of disaster warnings is the most important need – but provision of geological and meteorological data and building relations with Chambers of Commerce should also be considered.*

4.4 Gender and Inclusive Development

Gender should be a particular priority for any project operating in PNG. It was rated 143 out of 188 countries on the Gender Related Development Index¹⁸ and a recent study says that *“gender based violence has reached pandemic levels”*.¹⁹

The project has tried to ensure that women are included in its workshops and training activities and in its staffing. Parity has not been achieved but this has been challenging simply because of the realities of PNG in which the bureaucracy is male dominated. Gender and inclusive development feature in some of its project activities. For example the capacity assessment looks at levels of engagement on gender and disability. In calculating social vulnerability the MHRA has included the incidence of female headed households. However more could be done to address these issues

The project risk matrix acknowledges a key risk: *“The project fails to build consensus and consider and address gender issues”*. It does not appear to have reported against this risk.

¹⁸ UNDP Country Programme document 2018-22 p2

¹⁹ Rapid gender Analysis, Papua New Guinea Highlands Earthquake, CARE, p4

The project document has an annex on gender mainstreaming which commits the project to “address the concerns of Timorese women (sic),” which suggests that it was not a central concern. The project has tried to ensure that gender disaggregated data is kept and that women are included in workshops and other project activities but its work on gender is limited. A gender and protection specialist was invited to participate in a project workshop - a positive initiative by the project. However she commented that:

“When I attended the UNDP’s project stakeholders’ review meeting...I was concerned to learn that there has been very little attention paid to the issues of gender and protection by participating provinces.”

Addressing this gap should be a high priority in the next phase of the project. The project does not specifically address the needs of people with disability – and organisations representing them clearly do exist. CARE for example is working with Papua New Guinea Assembly for Disabled People to strengthen its programming. As with gender, specialist expertise should be engaged concerning inclusion.

Recommendation 19: *Gender equity should be a strong focus of the project. A gender specialist should contribute to the design of the next phase of the project and gender training should be provided to staff and partners. If a reference group is set up (see Recommendation 1) UN Women should be invited to participate. More active support for people with disability should also be prioritised.*

4.5 Monitoring and Evaluation

Monitoring and evaluation was expressed as a particular concern by some informants. DFAT noted that it had very little information about the project on file and would struggle to explain and justify it, if asked. It is fair to say that DFAT staff turnover may be a factor in this but it is not a total explanation. The problem would partly be addressed by a stronger governance system (see Recommendation 1) and better information management would also help to resolve the problem. Formally the project is required to provide relatively little project-specific information to the donor under the “One UN” system but it is clearly in the interests of all stakeholders for DFAT to get all the information it needs to explain and promote its support for the project. This would also enable DFAT to identify synergies between this project and others that it supports. Files provided to the review show that a great deal of information is available but little of this – even key products of the project – are currently passed on to DFAT. The revised steering committee (see Recommendation 13) is probably the place for the information needs of the stakeholders to be agreed.

As noted in Section 2.1 the project document is sometimes inconsistent and vague which makes it problematic as the basis of M&E. A more rigorous design and a protocol for formal revisions when they prove necessary should be key aspects of the next phase of the project.

In discussing the project with team members it is clear that much has been learned about working in a challenging sector and in a rapidly changing environment. The review suggests that these should be documented and shared. Current staff mentioned that the 2010 UNOCHA capacity assessment was ‘*unintelligible*’ to newcomers, meaning that the process had to be repeated. It is important that the project captures and share the lessons from the processes and activities that it has undertaken.

Recommendation 20 (a): *The next phase of the project requires a more rigorous design process and document to guide the project and to which it can be held accountable. A theory of change/change model will support better understanding of the project. The process will require support and resourcing from UNDP and DFAT.*

Recommendation 20 (b): *A Monitoring and Evaluation specialist should be assigned to the project to support the design process, to document project progress and capture and share lessons learned.*

5 Conclusions

The Strengthening Disaster Risk Management in PNG Project has produced some creditable results in its first phase from 2015 to 18. It has made an important contribution to the coordination of the two biggest disasters to affect PNG in recent years and it has produced and supported a number of key documents which could underpin DRM in the coming years. The list of outputs is impressive:

- National Disaster Risk Reduction Framework 2018-2030
- The inclusion of DRR in the Medium Term Development Plan III (2018-2022)
- DRM Capacity Assessments for five provinces
- Multi-Hazard Risk Assessment for five provinces
- Disaster database for five provinces
- Standard Operating Procedures for a range of disaster types
- Disaster Recovery Framework
- Standardized needs assessment tool

However, the value of these documents is largely dependent on what happens next. If they are shared, socialized, monitored – and where necessary improved – their potential is considerable. If not they could quickly be forgotten.

The project will need to work with government and non-government DRM stakeholders at the national and provincial levels to ensure that their value is realized. A more coordinated approach to DRM is vital. This must include *internal* coordination to ensure that activities are properly linked and synergies with other UN initiatives are realized, and *external* coordination to ensure that these initiatives are taken forward with the engagement of government and non-government bodies. It is critical that these resources – and those developed by other agencies are accessible to those working at a grass roots level – for example in Community Based Disaster Risk Management (CBDRM)

The project must also focus its efforts at the subnational level. Most disasters are managed locally and their victims can expect limited support from the national level. The review talked to local leaders in communities affected by the Manam volcano, far from their provincial capital. To them the mention of the existing disaster management structures provokes frustration and anger because they cannot yet provide practical assistance. The project must become a more active presence at the provincial level, helping to support a network of local government actors, NGOs, churches, Red Cross volunteers and business leaders. The capacity assessments, the disaster database and the risk assessments are the first steps in understanding the considerable challenge which the current situation presents. This should also be supported by mapping of provincial stakeholders and their available resources.

Finally, the project needs a stronger gender and social inclusion focus. UNDP’s country strategy highlights the high levels of inequity and the appalling rates of gender based violence in PNG.²⁰ Gender impact studies have demonstrated that disasters impact women disproportionately, further marginalizing them and putting them at greater risk of violence and exploitation. This is a challenge that the project cannot ignore if it is to make progress towards its goal of “reducing vulnerability of women, girls, men and boys to disaster risk.”

5.1 Summary of recommendations

Operational:

Recommendation 1: *The value of National Disaster Risk Reduction Framework will only be realised through practical implementation. The project should support the development of an action plan to prioritise and implement the commitments made in the framework.*

Recommendation 2: *The project should assist NDC to prepare a monitoring and reporting plan for the framework.*

Recommendation 3: *Socialising and promoting the NDRRF at the sub-national level, should be a priority for the project. It should also support implementation in provinces in which it is active.*

Recommendation 4: *Project staff should be co-located within the NDC offices, subject to issues with access, power supply etc. being resolved.*

Recommendation 12: *The next phase of the project should focus on provincial capacity development. It should consider the deployment of local staff to each target province and initiate a small projects fund to enable local DRM stakeholders to address their key priorities*

Recommendation 16: *The next phase of the project should make clear its expectations of government at a national and provincial level, with the active support of its key stakeholders. The project should establish benchmarks for provincial support for DRM. Where this commitment is lacking it should consider withdrawing from the province.*

Strategic:

Recommendation 5: *The project should advocate more strongly for adequate resourcing for NDC, particularly for a full staffing complement*

Recommendation 8: *The project should review its approach to DRM mainstreaming at national and provincial levels. It must develop more effective strategies in the next phase of the project based not only on its integration into plans and budgets, but on the provision of training to those who must implement them. It must continue to support the implementation of DRM within MTDP III and build on the success of the Rigo district planning process.*

Recommendation 10: *The project should promote disaster recovery more actively to ensure that it is better integrated into relevant government and DMT processes. This should include advocating for the approval of the frameworks it has produced and the provision of appropriate training and support at national and provincial levels.*

Recommendation 15: *In collaboration with NDC, the project should strengthen interagency DRM coordination in its next phase and consider the establishment of a coordination platform for agencies engaged in DRM. National and provincial mapping should be included in the design phase as well as a ‘dashboard’ which makes DRM resources (SOPs, training materials, planning formats, lessons learned) available. The project should consider the*

²⁰ UNDP Country Programme document 2018-22 p2-3

appointment of a specific position to support this work.

Recommendation 17: The project should not consider expansion to other provinces at this stage. Benchmarks for a successful provincial DRM model should be established and expansion considered when these have been attained in one or more provinces.

Recommendation 18: The project should strengthen its engagement with the private sector. Support from telecommunications and media companies in the transmission of disaster warnings is the most important need – but provision of geological and meteorological data and building relations with Chambers of Commerce should also be considered.

Thematic:

Recommendation 6: Subject to the development of a strategy to maintain it, the Disaster Loss Database should be established in all provinces so that consolidated national level data can be produced. Potential linkages with other data sources such as the World Food Program’s mobile Vulnerability and Mapping (mVAM) should be explored.

Recommendation 7: The project should work with the Multi Hazard Early Warning Centre to develop an effective early warning system. To do this it must create standard operating procedures for alerting authorities and broadcasters, find methods to formulate simple warnings and advisories and improve their transmission to all parts of the country.

Recommendation 9 (a): The MHRA already developed for existing provinces must be updated to address the concerns outlined. This includes better citation of data sources, acknowledging the limitations of the data available and used in the assessments and seeking peer review.

Recommendation 9 (b): On the basis of recommendation 9 (a), the MHRA should be extended to all provinces in PNG to create a national risk assessment data base.

Recommendation 11 (a): The Humanitarian Coordination Specialist position should remain as part of an ongoing DRM project

Recommendation 11 (b): The design for the next phase of the project should identify and incorporate measures to reduce the impact of disaster responses on other key aspects of the project. It should be a disaster risk management project – not a humanitarian coordination project.

Recommendation 19: Gender equity should be a strong focus of the project. A gender specialist should contribute to the design of the next phase of the project and gender training should be provided to staff and partners. If a reference group is set up (see Recommendation 1) UN Women should be invited to participate. More active support for people with disability should also be prioritised.

Governance and Management:

Recommendation 13: The steering committee should be reconstituted to include only the three key project partners: UNDP, NDC and DFAT. Meetings should be held on a quarterly basis and include discussions of progress and decision making on the basis of up-to-date narrative and financial information. A wider reference group which includes other current members of the steering committee should be formed if there is sufficient interest among these stakeholders.

Recommendation 14: Project management should focus on more integrated project planning and better coordination with relevant UN activities during the next phase of the

project.

Recommendation 20 (a): *The next phase of the project requires a more rigorous design process and document to guide the project and to which it can be held accountable. A theory of change/change model will support better understanding of the project. The process will require support and resourcing from UNDP and DFAT.*

Recommendation 20 (b): *A Monitoring and Evaluation specialist should be assigned to the project to support the design process, to document project progress and capture and share lessons learned.*

Annex 1: Terms of Reference

Independent review of the “Strengthening Disaster Risk Management in PNG” Project

August 2018

A. Introduction

This Terms of Reference (TORs) is for an independent review of the Department of Foreign Affairs and Trade (DFAT) funded project, “*Strengthening Disaster Risk Management in Papua New Guinea*” (\$3m, 2014-2018), implemented by the United Nations Development Programme (UNDP).

B. Background

The Indo-Pacific region is the world’s most disaster prone region, with natural hazards affecting 70 million people. In this context, humanitarian emergencies are a growing reality for Australia’s development agenda. Papua New Guinea ranked 11th on the World Risk Index (WRI) in 2017. The 2016 WRI Report states PNG is “very strongly exposed to natural hazards and, owing to poor economic and social situations, particularly vulnerable”.

Papua New Guinea (PNG) is vulnerable to a range of natural hazards, including drought, floods and earthquakes, as well as long-term challenges associated with climate change. The United Nations Office for Disaster Risk Reduction (UNISDR) identifies earthquakes as the leading causes of mortality from disasters in PNG’s Disaster and Risk Profile, followed by tsunami, landslides and drought between 1990-2014. Therefore, it is imperative that communities in PNG are aware of the possible hazards and risk, and in a position to make evidence-based decisions that can reduce the impact of natural hazards.

Despite policy commitments of the Government of PNG (GoPNG) to strengthen institutional mechanisms for a wider role in response, recovery and risk reduction, the Disaster Risk Management (DRM) system in PNG is largely relief and response orientated. A comprehensive agenda targeting disaster preparedness, response and mitigation is still lacking; and sectoral agencies lack general understanding about their roles in disaster prevention, mitigation, preparedness and recovery despite the adaptation of a National Disaster Risk Management Plan.

Australia’s support to the GoPNG in the DRM space is aligned to the Australian Government’s Humanitarian Strategy (2016) and the *Sendai Framework for Disaster Risk Reduction 2015-2030* (Sendai Framework). Australia provides support to key institutions of the Government of PNG to strengthen its overall disaster risk management capabilities, preparedness and response capacity. Australia works through key partners including UNDP in the DRM space to ensure agreed objectives are achieved.

The “Strengthening Disaster Risk Management in Papua New Guinea” project is a four (4) year (2015-2018), AUD3m project that is geared towards providing strategic support to GoPNG in reducing vulnerability and increasing resilience to disasters. The DRM project aims to strengthen Papua New Guinea’s disaster risk management capacities at the national and sub-national levels. The programme includes working closely with National Disaster

Centre (NDC) and five Provincial level Disaster Committees (PDC) (Western Highlands, Simbu, Madang and Bougainville) to develop Disaster Risk Management plans and damage assessment and reporting, establish coordination mechanisms and building capacities for early warning, develop Standard Operating Procedures (SOP’s) and provide essential training support and equipment. Key outputs under the project include:

1. Disaster Preparedness and response mechanisms enhanced and disaster early warning procedures strengthened
2. Integration of disaster risk management into development plans and budgets
3. Preparedness and planning mechanisms and tools to manage recovery processes at national and sub-national levels strengthened
4. Readiness of Disaster Management team members and the National Disaster Centre to prepare and respond to disasters enhanced
5. Gender Mainstreaming across all outputs

The project is implemented in partnership with a range of stakeholders, including the national and provincial governments, civil society organisations and other agencies. The NDC plays a key coordination role and ensures that social inclusion and equality, gender empowerment and dissemination of knowledge and skills are strengthened through the project.

C. Objective of Review

The purpose of the review is two-fold:

- to evaluate the effectiveness of the project as implemented and as agreed to by DFAT, GoPNG and UNDP; and
- to use the findings of the evaluation to inform DFAT’s support to further initiatives to strengthen DRM in Papua New Guinea, in particular to determine whether the project, as currently designed and being implemented, remains fit-for-purpose.

D. Rationale

The review is timely given that phase one of the project is set to conclude at the end of 2018, and seed funding has already been earmarked for a second phase of support from January 2019.

The review will further determine and identify whether current project objectives and outcomes remain relevant given PNG’s unique geo-climatic conditions and experiences in various natural hazards including earthquakes, volcanic eruptions, tsunamis, cyclones, river and coastal flooding, landslides and droughts.

Australia has also been invited to support a systemic review of PNG’s disaster risk management system and, given the central role of this project in the sector, the findings and recommendations from this review will have direct relevance to broader structural changes in the sector.

More broadly, the project will ensure close ongoing alignment with Australia’s Humanitarian Strategy (2016) by supporting countries to reduce and promote effective disaster risk reduction in the region, and the Sendai framework.

The review will be conducted through close cooperation with UNDP and the GoPNG through the NDC. This is to ensure that the review fully utilises UNDP and NDC’s current extensive local knowledge and networks.

E. Scope of Work

This independent review will assess and provide recommendations on overall project performance based on the following five key areas:

1. **Relevance:** is the project’s scope, governance, planning and implementation arrangements consistent with national policy and context – is this still the right thing to do?
2. **Effectiveness:** to what extent has PNG’s disaster preparedness and response mechanisms and early warning procedures been enhanced and strengthened through the project?
3. **Efficiency:** are risks identified and managed appropriately, including risks to the sustainability of the project?
4. **Sustainability and gender equality:** is this investment making a difference and considerate of disability and empowering women and girls as humanitarian leaders?
5. **M&E:** does the project provide good evidence on outputs and overall progress toward intermediate and longer-term outcomes? Does the current system/mechanism facilitate lesson-learning and continuous improvement of project activities?

Further reference can be made to DFAT’s key evaluation criteria and guiding questions at the [Annex](#).

F. Methodology

The review should meet the standards set out in DFAT’s *Monitoring and Evaluation Standards* (<http://dfat.gov.au/about-us/publications/Documents/monitoring-evaluation-standards.pdf>).

The review will utilise a combination of document and data review and in depth interviews with key stakeholders in targeted project priority provinces including Madang and Western Highlands Provinces, the Autonomous Region of Bougainville and Port Moresby (Central Province may be covered due to their proximity to the capital and depending on available time.)

The review will be conducted over approximately two months with fieldwork between 10-21 September. The team will consult with relevant stakeholders, including but not limited to

various levels of Government, civil society, faith based organizations and other development partners.

G. Evaluation Process and Approach

The following outlines the key milestones in the review process:

- Provision of relevant documentation to the team leader by DFAT and UNDP.
- Initial evaluation briefing with DFAT Desk and Post (Teleconference).
- Desk evaluation of reports and literature.
- Development and submission of a draft review plan to DFAT
- Finalisation of the evaluation plan
- Field work in country
- Initial feedback aide memoir (may include discussion or presentation)
- Information analysis and report write up
- Submission of draft report to DFAT Desk, Post, UNDP and NDC
- Comments and feedback
- Participation in peer review of draft report
- Final write up, report submission.

H. Key Deliverables and Reporting Requirements

The following outputs are required as outlined:

- A draft review plan – one week after commencement of assignment
- Final review plan – one week after the receipt of feedback from DFAT
- Written Aide Memoire – at completion of fieldwork
Final report of a maximum of 25 pages including recommendations

Review Plan

The review plan will include the following:

- a methodology to be used for assessing outcomes of the program
- process for information collection and analysis, including tools such as questionnaires or questions to be asked during discussions
- identification of key stakeholders and project champions within government (local and national)
- identification of any challenges anticipated in achieving the evaluation objectives;
- allocation of tasks for evaluation team
- key timelines, a consultation schedule identifying key stakeholders to be consulted and the purpose of consultations and other activities/research to be undertaken.

The plan should be no more than five pages and submitted electronically to DFAT no less than five days prior to the initial meeting with DFAT in Port Moresby.

Aide Memoire

On the final day of the in-country mission, the team leader will submit and present an Aide Memoire of up to five pages with key findings. The Aide Memoire will be prepared in dot-

points based on DFAT Aid program Aide Memoire for review guidelines. The team leader will have approximately two days to work on the Aide Memoire prior to presentation to DFAT Team.

Final Report

At the conclusion of the review, the Team Leader will produce the following:

- a) First draft of the review report to be submitted to the First Secretary Program Strategy and Gender – PNG Post for comments. The evaluation report should be a brief (up to 25 pages, including executive summary), clear and cogent summary of review outcomes focusing on a balanced analysis of relevant issues and recommendations for improvement. Relevant Annexes should be included.
- b) The final review report should be submitted to DFAT within seven days of receiving final comments from DFAT.

I. Review Team

The review Team will comprise expertise provided by or through the Government of Australia, the Government of Papua New Guinea and the UNDP. The team will consist of:

- Team Leader nominated by DFAT
- DFAT Canberra Desk Humanitarian Officer
- Officer from DFAT/AHC
- UNDP Advisor (currently not involved in management of the Project)
- GoPNG Representative

Roles and Responsibilities of the Team Leader

The team leader will have overall responsibility for the delivery of a quality review report and should effectively utilise expertise of the team in meeting the terms of reference and contractual obligations.

The team leader will be responsible for the following outputs:

- Development of overall approach and methodology for the review in consultation with DFAT.
- Be responsible for managing and directing the review’s activities, representing the review team and leading consultations with relevant stakeholders including provincial and national government officials and donor agencies.
- Manage, compile and edit inputs from team members, and ensure high quality of all reporting outputs.
- Lead the development and presentation of the Aide Memoire; seek input from relevant team members.
- Represent the team in peer reviews if required.
- Develop and submit draft independent review report.
- Produce final independent evaluation report.

Team Members will:

- Work under the overall direction of the Team Leader.
- Provide advice, relevant documentation from development partners and DFAT and have an understanding of GoPNG and development partners processes and
- Contribute to required dialogue, analysis and writing of the report, as directed by the team leader
- DFAT officers from Desk or post will serve only as observers in this review and are not expected to provide any written contributions to any draft or final reports.

J. Timeframe

The review will take place between September – November 2018. The in-country fieldwork will take place between 10-21 September 2018. The timing and duration for the scope of services is **up to 25 input days** as per the table below. Final dates will be negotiated and stated in the relevant contract.

Task/Output	Description	Max Input Days	Indicative Timing
Desk and literature review	Documentation to be provided by DFAT and UNDP	3	Late August
Development of review methodology plan	Development of review methodology plan	1	Early September
Preliminary briefing	Team Leader may be required to attend a briefing (via telecom) with DFAT to discuss objective, plans and expectations.	1	Early September
In country mission, including travel days (2)	Consultations and stakeholder meetings, including provincial travel (Bougainville, WHP and Madang) and aide memoire preparation and presentation	13	10-21 September
Additional analysis and drafting of review report	Preparation and submission of a draft independent review report in electronic format within 2 weeks of Aide Memoire	5	Early October
Peer review	Receive feedback and comments on draft	1	Late October
Preparation and submission of final report	Revised final review report to be submitted	1	Early November

K. Key Documents

- United Nations Development Programme Country: Papua New Guinea Project Document. *Strengthening Disaster Risk Management in Papua New Guinea*.
- UNDP-Annual Progress Reports and Project Progress Reports
- HACT Spot Checks and Project Monitoring Reports

- Framework for Resilient Development in the Pacific (FRDP, 2017-2030)
- PNG Disaster Management Act
- Framework for Resilient Development in the Pacific (FRDP, 2017-2030)
- PNG National Disaster Management Plan
- PNG National Framework for Action 2005-2015
- PNG’s new National Disaster Risk Reduction Framework (NDRRF, 2017-2030)
- Relevant project documents and reports
- GoPNG’s National Strategy for Responsible Sustainable Development for Papua New Guinea (StaRS)
- GoPNG’s Vision 2050
- PNG’s Mid-Term Development Plan 3 (forthcoming)
- DFAT Humanitarian Action Policy
- DFAT Monitoring and Evaluation Standards
- Aide Memoire Development Guide
- DFAT Humanitarian Strategy 2016
- Independent evaluations from past phases of Australian DRM support in PNG
- Aid quality reports from past phases of Australian DRM support in PNG
- Hyogo Framework for Action 2005-2015
- Sendai Framework for Disaster Risk Reduction 2015-2030

Annex: Guiding Questions

1. Relevance

- Assess whether the project’s original scope is consistent with national policy and context – is this still the right thing to do?
- Assess the suitability of current governance and project planning arrangements in achieving results.
- Assess whether the modalities employed by the project have assisted in the delivery of results. If not, where these could be improved in the next phase of delivery.

2. Effectiveness

- Assess the extent to which PNG’s disaster risk reduction, preparedness and response mechanisms and early warning procedures been enhanced and strengthened through the project.
- Assess the effectiveness and impact of the project at the national and provincial levels, and identify whether balance of support between the two levels has been appropriate.
- Identify how efforts to reprogram project activities to reduce risk of, prepare for and respond to disasters, as directed by the steering committee, have affected project outcomes and provide recommendations for improvement.
- Assess the effectiveness of current governance and project planning arrangements to achieve results.
- How did program outcomes prior to the Highlands earthquake reduce its impact?

3. Efficiency

- Assess whether the project is achieving value for money
- Identify opportunities for other donor support and coordination to support the project (i.e. New Zealand, EU, USAID, UNISDR, World Bank/GFDRR) and linkages to other DRM programs in PNG.
- Assess the suitability of current governance arrangements to ensure project integrity and accountability
- Determine if project? Risks are identified and managed appropriately.

4. Sustainability

- Provide an assessment on whether the Government of Papua New Guinea has maintained the required investment to support the project’s successful delivery, and identify whether this support is likely to be maintained in the next 5 years.
- Assess whether the project promotes engagement with other areas of national and provincial government, and provides necessary support to ensure future project activities engage more with other areas of national and provincial Government activity, e.g. other Government Departments or authorities.

- Review the potential for the project to scale up to other provinces.
- Review whether there’s scope for greater private sector engagement in DRM, drawing on recent experiences in PNG’s Earthquake response.

5. Gender Equality & Social

- Does the project build consensus and address gender issues?
- Is this investment making a difference to gender equality and empowering women and girls as humanitarian leaders?
- Is this investment making a difference to people with disabilities and are they being engaged in helping determine how to reduce their disaster risk?

6. Monitoring and Evaluation

- Is the project’s M&E and reporting system generating credible information that can be used for management decision making, learning and accountability purposes?
- Does the project provide good evidence on outputs and overall progress toward intermediate and longer-term outcomes? Does the current system/mechanism facilitate lesson-learning and continuous improvement of project activities?
- To what extent is the existing monitoring and evaluation mechanism relevant to this project providing timely, reliable and valid insights into project progress and achievement of key outcomes and objectives?

7. Additional Areas

- Does the project encourage and promote engagement and coordination with other donors and agencies working in disaster risk reduction? What opportunities exist for any future engagement and/or interaction? For example, UNSIDR may be able to provide support for PNG in Sendai Framework monitoring – as a key regional/global partner, are there ways we can leverage UNSIDR or other donor engagement?
- Does the project encourage and promote civil-military coordination and dialogue in disaster response and relief activities? What opportunities exist for any future engagement and/or interaction?
- The review report should communicate any unanticipated but important issues that emerge during consultations with stakeholders.
- The review should provide recommendations to DFAT Management for the next planned phase of support to the project, including whether support should continue.

Annex 2: Evaluation Overview

DRM Project Review/Evaluation

OVERVIEW

Dates: 10-21 September 2018

Review Objectives: Refer to ToRs

Review Team members:

Name	Function	Notes
<i>External Evaluation Team members</i>		
Peter Chamberlain	Team Leader/DFAT	External consultant. Appointed by DFAT
Ken Westgate	Team member/UNDP	External consultant. Appointed by UNDP
Amanda Farry	Team member/DFAT	DFAT Canberra
<i>In-country DFAT/NDC/UNDP Team members</i>		
Darian Clark	Team member/DFAT	DFAT PNG
Steven Mel	Team member/DFAT	DFAT PNG
Martin Mose	Acting Director/NDC	NDC
Andrew Oaego	Assistant Director/NDC	NDC/Community & Govt Liaison
Kaigabu Kamnanaya	Assistant Director/NDC	NDC/Risk Management
Khusrav Sharifov	Team member/UNDP	UNDP PNG
Michael Sembenombo	Team member/UNDP	UNDP PNG
Gerard Ng	Team member/UNDP	UNDP PNG - Contributing to discussions
Philomena Emilio	Team member/UNDP	UNDP PNG - Contributing to discussions
Charles Kelly	UNDP Consultant	Contributing to discussions

Locations to be visited: POM, Madang, AROB, Western & Southern Highlands Provinces

Dates	Location	Notes
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10-12 Sep	POM	Briefings and consultations
13-15 Sep	Madang	Possible visit to Manam (through Bogia)
17-20 Sep	ARoB	Team 1 (incl. visit to Sohano Island)
17-20 Sep	Highlands (WHP & SHP)	Team 2 (incl. visit to Mt. Hagen & Mendi)
20-21 Sep	POM	De-brief and mission findings

Key organizations to be met:

Organization	Notes
DFAT/AHC	Andrew Eagan, Climate Change Team, GSA
MFAT	Being organized by DFAT
NDC	Management & other key staff
UN/UNDP	UN RC, UNDP Senior Management, IOM
Govt agencies	Various technical agencies
Provincial Administrations	Madang, ARoB, Western Highlands, Southern Highlands
RIMES	Carlyne Yu – Contributing to Risk Assessment discussions
AHP/Civil Society/DMT	Australian Humanitarian Partnership members/DMT

Annex 3: List of Key Informants

Walimu Apaka, Hydrological Data Management, Conservation and Environmental Protection Authority

Percy Arec, Operations Coordinator, International Organisation of Migration, Madang

Anggia Burchill, Gender and Protection Specialist, UNWOMEN

Darian Clark, First Secretary, Australian High Commission

Hagar Dagen, Deputy Chair, PNGRC, Madang

Andrew Egan, Minister Counsellor, Australian High Commission,

Joy Elijah, PNGRC, Western Highlands Deputy Chair

Sarah Elliot, Field Coordinator, Southern Highlands and Hela, UNOCHA

Anton Goiye, LLG Advisor, ARoB

Jimmy Gomoga, Assistant Director, Forecasting and Warning, National Weather Service

Martyn Hazelwood, Geoscience Australia

Ezekiel Hecko, Assistant, Disaster Loss Database

Ken Henry, PNGRC, National Disaster Response Team

John Hosea, Baptist Union, Western Highlands

Sally Jerome, Disaster Ready Project Manager/AHP Coordinator, CARE

Brendan Jinks, ex- CARE and Church Partnership Programme,

Kaigabo Kamnanaya, Assistant Director, Risk Management, National Disaster Centre

Charles Kelly, Consultant Disaster Recovery

Lazarus Kenni, Consultant, HAG private sector consultant

Puringi Kapiolu, Southern Highlands Provincial Administration

Regina Kiele, UPNG, Lead Consultant, Disaster Loss Database

Jabinson Laka, Western Highlands Provincial Authority

Deslone Lanbong Port Moresby Geophysical Observatory

Jess Lees, Leader (Highlands earthquake private sector research project) Humanitarian Advisory Group

Grace Leiseta, Senior Project Officer, ChildFund

Ian Mannix, Forewarned, Emergency Broadcasting Consultant

Steven Mel, Program Manager, Program Strategy & Gender, Australian High Commission

Matthew Moihoi, Port Moresby Geophysical Observatory

Martin Moise, Acting Director National Disasters Centre

Steven Moka, Executive Officer, Executive Officer, Western Highlands Administration

Robert Naguri, Member of Parliament, Bogia District, Madang

S. Nash, Deputy Director, Policy and Planning, ARoB

Thomas Ninkama, Research and Risk Assessment Officer, NDC

Julius Nohu, Disaster Hub Manager, CARITAS

Gerard Ng, Humanitarian Coordination Specialist, UNDP

Andrew Oaegu, Assistant Director, Community & Government Liaison, National Disaster Centre

Donna Pearson, Assistant Secretary, DCG, ARoB

Gianluca Rampolla Del Tindaro, Resident Coordinator, UNDP

Renagi Ravu, Seismologist, Port Moresby Geophysical Observatory

Michael Samuga, National Broadcasting Corporation

Joshua Sasahombi, Assistant, Disaster Loss Database

Michael Sembenombo, Project Manager, UNDP

Khusrav Sharifov, Technical Specialist DRM, UNDP

Fiebig Kilip Simon, Deputy Provincial Administrator –SHP, Economic and Social Services, Southern Highlands Provincial Administration

Thomas Sonsa, Disaster Office Manager, ARoB

Betty Tambili, Manager, Planning/ICT, Western Highlands Provincial Administration

Justin Taper, Baptist Union of PNG, Western Highlands

Barclay Tenza, Southern Highlands, Provincial Disaster staff, Southern Highlands

Dr Simon Tembo, Executive Officer, Southern Highlands Administration

Joseph Timothy, District CEO, Southern Highlands

Dianne Unagi, Country Representative, CARITAS

Davene Vroon, Counsellor, New Zealand High Commission

Kame Wanga, Southern Highlands Administration

Ruben Wanumi, National Weather Service

Peter Wari, Southern Highlands Provincial Administration

Zilpah Yahamani, Assistant Disaster Loss Database

Tohien Yangen, Southern Highlands Provincial Administration

Carlyne Yu, Climate Risk Specialist, RIMES

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Strengthening Disaster Risk Management in Papua New Guinea, (2015)

Annex 5: Overview of DRM Project Achievements 2016 – 2018 (November)

Output 1: Disaster Preparedness & Response Mechanisms enhanced, and disaster early warning procedures strengthened:

- Review of existing national, regional and global DRR Frameworks;
- Technical support to development of the National DRR Framework (2017-2030) – endorsed by Govt of PNG in 2018;
- Support to provinces in developing provincial DRM plans;
- Support to NDC and provinces with development of SOPs (for multiple hazards);
- Capacity needs assessments in the five pilot provinces;
- Capacity Development Plans for NDC and 5 pilot provinces;
- Review of DRM arrangements in five provinces leading to development of DRM Action Plans (to address major DRM-related issues in the five pilot provinces);
- Trainings and other support to PDCs/provinces;
- Disaster Loss Database established at NDC (data collection and data entry ongoing);
- Technical study visit for information sharing and establishing cooperation between AROB Disaster office and the ENB Provincial Administration and RVO (to enhance monitoring of volcanoes in AROB);
- Tsunami Evacuation and Response Plan for Buka/AROB;
- Public Education Materials on Tsunami preparedness adapted for schools in PNG;
- Tsunami Evacuation Drills conducted for Sohano Island, AROB;
- Equipment support to PDC offices;
- Tsunami Evacuation Drills conducted for the Schools in ENB & Milne Bay (non-DFAT funding);
- Procurement and installation of Automated Weather Station (AWS) unit in Simbu & Port Moresby (non-DFAT funding);

Output 2: Disaster Risk Management Integrated into development plans and budgets:

- Review of DRM mainstreaming opportunities, with focus at sub-national levels;
- Integration of Climate Change and DRM in MTDP III (2018-2022);
- Technical support for mainstreaming Climate Change and DRM in Rigo District Development Plan (2018-2022) – in Central province;
- Development and endorsement of Multi-Hazard Risk Assessment methodology;
- Establishment & Training of PNG Technical Team on Risk Assessment;

- Training to Technical Departments on Flood and Tsunami planning;
- Multi-hazard risk assessment for five pilot provinces;
- Provincial DRR Plans and Risk Baselines for five pilot provinces;
- Agreement with UPNG on CHARM Course & CHARM Centre;
- CHARM Training for Provincial Administration staff and PDCs from 8 provinces;
- Comprehensive review of CHARM Training Course;

Output 3: Preparedness and planning mechanisms and tools to manage disaster recovery processes at national and sub-national levels strengthened:

- Early Recovery coordination support to El-Nino/drought (2015-2016);
- Early Recovery coordination support to Highlands Earthquake (2018);
- Review of existing Early Recovery-related policies and documents;
- Facilitation of Interagency Dialogue on disaster recovery needs assessment, analysis and reporting;
- Technical support to Government and DMT for development of the National Early Recovery Framework (awaiting Govt approval);
- Development of two Regional/Provincial Recovery Frameworks (AROB & WHP);

Output 4: Readiness of the Disaster Management Team and the NDC to prepare and respond to disaster enhanced:

- El Nino/Drought response (completed in June 2016);
- Comprehensive post-drought assessment;
- Organization of the visit of UN Special Envoy to PNG;
- Coordination and field support to Highlands Earthquake (national and field coordination);
- Development of EQ Disaster Impact Model;
- NDC’s Highlands EQ Response Strategy;
- DMT Highlands EQ Response Plan;
- Humanitarian Financing (CERF \$9.2m for Highlands EQ Response);
- Response to Kadovar Eruption & Central Province Floods;
- Finalisation of standardised multi-sectoral assessment tool (ACAPS);
- Establishment of Inter-Agency Disaster Assessment Team;
- Maintaining Who What Where database;
- Support to PNG’s Hosting of two APEC EPWG meetings in POM;

- Policy and Technical Support to CCDA in preparation and organisation of Senior Disaster Management Officials Forum (SDMOF);
- Support to DMT and UNCT in monitoring of humanitarian situation in the country;
- Coordination and support activities to DMT;

Other key achievements for the successful implementation of the Project:

- Establishment of multi-stakeholder Project Steering Committee (PSC);
- Selection of 5 Pilot Provinces (based on comprehensive selection criteria);
- Project Inception Workshops in 5 Provinces;