



**Cyclone Pat**  
**Recovery and Reconstruction Plan**  
**2010-2011**



**Aitutaki**  
**Cook Islands**

February 2010

## Acknowledgements

C YCLONE R ECOVERY C OMMITTEE  
Cyclone Recovery and Reconstruction Plan 2010 - 2011  
FEBRUARY 2010

### Authority

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## Executive Summary

Tropical Cyclone Pat passed through the Southern Cook Islands in the early hours of 10 February 2010 (Cook Islands time), and Aitutaki island was seriously affected. At its height Tropical Cyclone Pat was classified as a category 3 cyclone bringing destructive wind gusts of over 100 knots. On 10 February the Prime Minister of the Cook Islands declared a 'State of Disaster' for Aitutaki. There were no deaths reported and limited casualties occurred. However, the entire Aitutaki population was either directly or indirectly affected with damages occurring in all 8 villages. The most significant impact was on housing with approximately 78% of all homes being affected. Damage to livelihoods varies by sector although it is recognized that the local agriculture sector was completely destroyed. There was severe damage and destruction of the local food supply and food security will be affected for the next 3 to 36 months.

In response to these severe impacts and following relatively successful relief efforts, the Government of Cook Islands moved to a 'recovery' phase with an emphasis on restoring the community of Aitutaki to a state of normality. The 'Recovery Coordinator', nominated as the Minister for Finance, established a 'Recovery Committee' to develop a recovery and reconstruction plan consisting of representatives from the Minister of Finance's Office, Office of the Prime Minister (OPM), Emergency Management Cook Islands (EMCI), Ministry of Finance and Economic Management (MFEM), Aid Management Division (AMD), Ministry for Internal Affairs (INTAFF), Ministry of Infrastructure and Planning (MOIP), United Nations Development Programme (UNDP) and Aitutaki Island Administration. The Recovery Committee worked with line Ministries and partner agencies in developing the plan. The strategies are based on a recovery assessment conducted by the Government with support from UNDP that collected inputs through extensive consultation with the local community in Aitutaki. The plan is a 'living' document and will be reviewed and updated by the recovery committee as further analysis becomes available.

The purpose of the Aitutaki Recovery and Reconstruction Plan is not only to restore the community of Aitutaki to a state of normality but also to build back better by minimizing the impact of future disasters. As such the plan is designed to address the issues of 1) **Housing and Infrastructure**; 2) **Social Services**; 3) **Local Economic Recovery**; and 4) **Disaster Risk Management** as well as the cross cutting-issues of gender and the environment. These areas of intervention are designed to be mutually reinforcing. The Plan will place particular emphasis on addressing the needs and basic human rights of women, young people, the elderly, the disabled and children in its approach to recovery amongst the affected populations. Under this pretext, the need to provide people with proper housing and with adequate opportunities to provide for their families cannot be understated – particularly given the potential out-migration that may occur if housing and income generating options are not provided immediately.

In terms of reconstruction, **housing and infrastructure** are the dominant concern for the recovery and reconstruction phase. The implementation of recovery and reconstruction activities relating to housing is based on the following: phased implementation, starting with partially damaged homes; application of the building standards especially those pertaining to cyclone proofing; the use of local construction industry stakeholders; targeted assistance for those most vulnerable and least resilient; and speedy

policy formulation, decision making and confirmation of financing. These more physical infrastructure related projects will be complemented by strategies aimed at **social recovery** ensuring the social fabric of the community is not weakened through a multi-disciplinary approach.

The **Local Economic Recovery** component of the plan aims to restore original sources of livelihood with the long-term intention of expanding traditional income generating activities and the possibility of introducing new alternative livelihoods options. This strategy hinges on: Immediately injecting capital into the local economy through an exchange for labor in the housing sector and cash transfers to most vulnerable; assisting small businesses in recovering and growing further; assisting local farmers in maximizing crop production, ensuring livestock populations are maintained; and expanding alternative land and marine-based tourism options and develop local partnerships with Rarotonga-based tourism operators.

A final aspect of the plan is to reduce risk to further disasters. The **Disaster Risk Management** component of the plan aims to reduce risk to disasters by instilling risk reduction principles throughout all aspects of the recovery process. These strategies will focus on awareness and lesson learning activities with communities and key stakeholders in Aitutaki whilst disaster issues are fresh on peoples' minds. There is also the opportunity to enhance preparedness systems (and infrastructure) as well as the need to repair early warning systems. Furthermore, the recovery programme provides an ideal opportunity to strengthen institutional arrangement for DRM in Aitutaki, and is firmly based within the National Action Plan for Disaster Risk Management (2009-2015).

The total estimated cost of implementing these strategies is **NZ \$9,466,902** as summarized in *Table 1* below. The overall responsibility for the implementation of the recovery plan rests with the Government of Cook Islands, through a designated 'Recovery Coordinator' as required under Sec 13.2 of the DRM Act 2007. The Minister for Finance has been nominated as the RC for the Aitutaki recovery program. Oversight and technical support for the implementation of the plan will be provided through the 'Recovery Committee' chaired by the Office of the Prime Minister, whilst on the ground activities relating to housing reconstruction will be managed by a dedicated Project Manager in Aitutaki.

**Table 1:** Summary of Costs

<b>Recovery Component</b>	<b>Cost (NZD)</b>	<b>Committed (NZD)</b>	<b>Funding Gap (NZD)</b>
Housing and Infrastructure	\$7,359,822	\$1,024,000	\$6,335,822
Social Recovery	\$220,000	\$0	\$220,000
Local Economic Recovery	\$1,356,670	\$305,670	\$1,051,000
Disaster Risk Management	\$530,410	\$4,000	\$526,410
<b>TOTAL (NZD)</b>	<b>\$9,466,902</b>	<b>\$1,333,670</b>	<b>\$8,133,232</b>

**Table of Contents**

Acknowledgements..... 2

Executive Summary..... 3

I. INTRODUCTION..... 6

    Damage Assessment and Priorities for Recovery and Reconstruction ..... 6

    Recovery Planning Process..... 8

    Guiding Principles..... 8

II. RECOVERY AND RECONSTRUCTION PRIORITIES ..... 11

    HOUSING & INFRASTRUCTURE..... 11

    SOCIAL RECOVERY ..... 14

    LOCAL ECONOMIC RECOVERY ..... 16

    DISASTER RISK MANAGEMENT..... 19

III. IMPLEMENTATION STRATEGY..... 21

    Institutional Structure ..... 21

    Communications Strategy ..... 23

    Financing Management and Strategy ..... 23

    Monitoring and Evaluation Framework..... 23

Annex 1: AITUTAKI DOMESTIC HOUSING POLICY ..... 25

Annex 2: ACTIVITY MATRIX & COSTINGS ..... 32

Annex 3: RECOVERY NEEDS ASSESSMENT ..... 36

# I. INTRODUCTION

## Damage Assessment and Priorities for Recovery and Reconstruction

Tropical Cyclone Pat passed through the Southern Cook Islands in the early hours of 10 February 2010 (Cook Islands time), and Aitutaki island was seriously affected (see map below highlighting all affected areas). At its height Tropical Cyclone Pat was classified as a category 3 cyclone bringing destructive wind gusts of over 100 knots. On 10 February the Prime Minister of the Cook Islands declared a 'State of Disaster' for Aitutaki. Given the scale of the resulting damage it was somewhat miraculous that there were limited casualties and no deaths reported, although the entire Aitutaki population was either directly or indirectly affected across all 8 villages. The most significant impact was on housing with approximately **78% of all homes** being affected. Damage to livelihoods varies by sector although it is recognized that the local agriculture sector was completely destroyed. There was severe damage and destruction of the local food supply and food security will be affected for the next 3 to 36 months.

Map of Aitutaki and indication of impacted areas (EMCI)



The relief response to immediate humanitarian needs was carried out successfully with almost all key relief needs being taken in to account within a two week period. UNDAC deployed to the Cook Islands at the request of EMCI advised by their initial assessments of the damage caused by Tropical Cyclone Pat and emerging humanitarian needs. A series of rapid assessments were undertaken by the Red Cross,

the Ministry of Infrastructure and Planning (MOIP), Ministries for Health, Education and Agriculture. These assessments were facilitated by Emergency Management Cook Islands (EMCI). Initial relief activities were designed to meet the needs in the priority areas of Water (WASH), Shelter and Food with related needs in Protection, Education, restoration of essential services and immediate support to agricultural activities. Four key protection areas which were identified during the relief phase included (1) psycho-social support (2) displacement including the situation of evacuation centres (3) access to information by the affected population and (4) identification of vulnerable groups and meeting their specific needs. Psycho social support needs were clearly identified and although the Ministry of Education and the Red Cross sent a number of counsellors sufficient numbers of trained counsellors were not available to meet the needs. Access to information was facilitated by regular media releases as well as community awareness activities. The Red Cross and the Ministry of Internal Affairs identified vulnerable groups and are currently working together to serve their specific needs which should advise recovery planning.

The New Zealand government made a contribution of \$NZ 350,000 to support emergency relief and recovery efforts on Aitutaki. \$NZ 100,000 of this funding was channelled through the Cook Islands Red Cross to provide emergency supplies for distribution in Aitutaki. The remainder was used to purchase building materials to repair the schools and provide relief supplies and equipment. On Saturday 13 February New Zealand received a formal request for assistance from Cook Islands Government. On Sunday 14 February a C-130 Hercules, fully stocked with relief supplies such as family tents, generators, chainsaws and water purification tablets and with a team of New Zealand Defence Force field personnel on board (including electricians, builders, engineers and a plumber) arrived in Rarotonga. On the following day, the Hercules arrived on Aitutaki and the relief operation began. Tents, tarpaulins and emergency kits (supplied by Cook Islands Red Cross and the NZAID programme) were distributed to provide shelter and water. The Hercules made four trips to Aitutaki transporting several tonnes of relief supplies, telecommunications and electrical equipment. The NZDF field engineers assisted with the construction of shelters, training and handing over the task to local volunteers and Red Cross personnel. Although their focus was on repairing the schools and hospital their contributions included restoring electricity, clearing debris, constructing a stand for the water tank and operating machinery.

**Priority Recovery and Reconstruction Needs:** The Government of Cook Islands with support from UNDP deployed a team to Aitutaki from 24-25 Feb 2010 to conduct a recovery needs assessment in relation to the impacts of Cyclone Pat on the island of Aitutaki. The assessment was conducted using participatory techniques and was designed to identify the key priorities for rebuilding people's lives after cyclone Pat. The questions were focused around sustainable livelihoods and how these have been affected by the cyclone, including the identification of possible solutions for sustainable recovery efforts. The main aim of the recovery needs assessment was to form the basis of a Recovery Plan and in particular to: identify priority needs for Early Recovery, based on impacts of the disaster; assess capacities and resources for early recovery efforts; and identify specific actions that can be taken to address the priority needs for early recovery. A summary of priority needs to be addressed included (ordered by urgency): 1) housing and infrastructure; 2) social recovery; 3) local economic recovery; and 4) disaster risk reduction. It was

also widely recognized that there be a clear message of hope given to the Aitutaki community in order to deter the threat of outward migration.

In terms of reconstruction, housing is the dominant concern for the recovery and reconstruction phase. However, due to financial and budgetary constraints, it is unlikely that the Government will be able to fully cover all repair and reconstruction costs. The implementation of recovery and reconstruction activities relating to housing is based on the following:

- Phased implementation, starting with partially damaged homes
- Application of the building standards especially those pertaining to cyclone proofing
- Encouragement of full participation of affected population in housing reconstruction and repair
- The use of local construction industry stakeholders
- Targeted assistance for those most vulnerable and least resilient
- Speedy policy formulation, decision making and confirmation of financing.

### **Recovery Planning Process**

The process for developing the plan was coordinated through a 'Recovery Committee' consisting of representatives from the Minister of Finance's Office, Office of the Prime Minister (OPM), Emergency Management Cook Islands (EMCI), Ministry of Finance and Economic Management (MFEM), Aid Management Division (AMD), Ministry for Internal Affairs (INTAFF), Ministry of Infrastructure and Planning (MOIP), the Red Cross CI, UNDP and representatives of the Aitutaki Island Administration. The Recovery Committee reports to the designated 'Recovery Coordinator' and designed and conducted a recovery needs assessment in Aitutaki. The main purpose of this assessment was to identify the key priority areas for recovery and reconstruction in Aitutaki, and would build on existing damage and humanitarian assessments. The Recovery Team worked with key line Ministries and partner agencies in developing strategies and specific activities for each of the priority areas identified in the assessment. As such the development of the plan is based on a multi-dimensional and multi-stakeholder process both at the Island (Aitutaki) and national levels. The plan is a 'living' document and will be reviewed and updated by the recovery committee as further analysis is incorporated in to the plan.

### **Guiding Principles**

Designed to address the issues surrounding the housing sector, livelihoods and disaster risk reduction as well as the cross cutting-issues of gender and the environment, the purpose of the Aitutaki Recovery and Reconstruction Plan is to assist in bridging the transition period from the relief phase to the recovery phase and minimize the impact of future disasters. The need to provide people with proper housing and with adequate opportunities to provide for their families cannot be understated – particularly given the potential out-migration that may occur if proper housing and income generating options are not provided immediately. Secondly, it is imperative that the Aitutaki community is not merely restored, but built back better.



The Aitutaki Recovery and Reconstruction Plan encompasses a detailed assessment of a range of sectors and activities that take into account the capacity, strengths and resilience of the local Aitutaki community. The key areas of strategic intervention covered are 1) Housing; 2) Local Economic Recovery; and 3) Disaster Risk Reduction with the environment and gender representing the key cross cutting issues. The identified strategic interventions are designed and will be implementing in a way in which each component will mutually reinforce the other. The Aitutaki Recovery and Reconstruction Plan will place particular emphasis on addressing the needs of women, young people, the elderly, the disabled and children in its approach to recovery amongst the affected populations under the principle of building back better while ensuring that basic human rights are upheld.

**Key Principles:** The Government's policy options, interventions and overall strategy presented within the Aitutaki Recovery and Reconstruction Plan, whilst recognizing the resiliency of the Aitutaki community, primarily focuses on providing a minimum level of assistance based on the following guiding principles:

- **Freedom of Choice:** The Government recognizes that some of the affected population will consider migrating, and that people have complete freedom to choose the best possible option for their family. To the extent possible, information should be made available on the situation with regard to shelter/housing options, community facilities, water and sanitation services, availability of food, livelihood opportunities and disaster risks; and support that will be available for the different options (from the Government, UN, NGOs, etc).
- **Adequate Housing:** Under the framework of the Recovery and Reconstruction Plan that follow the Building Controls & Standards Regulations 1991 and the Environment Act 2001, the government will provide approved basic safe shelter for the occupants of damaged domestic homes affected by Tropical Cyclone Pat. Under this pretext, decisions on the repairs and provision of dwelling houses shall be based upon sound survey and damage assessments for normally occupied homes.
- **Access to Finance:** The Government will provide special assistance to the affected population in the form of increased support to self financing, bank loans, aid and development assistance, and community support through fund raising and volunteer assistance.
- **Community-centred & Inclusive:** An emphasis on systematic consultation with the affected communities as well as close collaboration between Government and non-Governmental agencies will be applied at every phase of the recovery and re-construction process.
- **Human Rights Based & Protection Approach:** Efforts must be responsive to the diverse needs of communities and individuals in a way that recognizes and appreciates their integrity, dignity and basic and alienable rights.
- **Disaster Risk Reduction:** Disaster risk reduction/management needs to be considered as a key cross-cutting issue throughout the recovery process. In particular, enhancing safety standards and avoiding the rebuilding of previous vulnerabilities and the creation of new risks must be factored in the rehabilitation and reconstruction of houses, infrastructures and livelihoods.
- **Gender Sensitive & Equitable Distribution of Resources:** The recovery and re-construction should be fully cognizant of the increased burden on women in the post-disaster period particularly those whose homes were completely destroyed. Recovery and re-construction processes will promote gender equality within communities, more evenly distribute ownership of assets, and improve the condition and position of women and other vulnerable groups.

- **Environment:** Due to the intricate relationship between the environment and population in Aitutaki, the environment is a key cross cutting issue and is an integral part of the recovery and re-construction process.

*Note: Protection is a cross-cutting issue that needs to be considered across sectors in all aspects of early recovery plans, policies and activities. In particular, ensuring that the affected population, in particular those who are most vulnerable, will meaningfully participate in all aspects of recovery activities, be fully informed of Government plans and policies, NGO, UN and donor responses, and able to make informed decisions on their own durable solutions related to place of residence, housing, livelihoods and access to basic services.*

## II. RECOVERY AND RECONSTRUCTION PRIORITIES

### HOUSING & INFRASTRUCTURE

**NEEDS:** It is estimated that almost three hundred occupied domestic homes were damaged at varying levels. The government's initial assessment on the full cost of repair and reconstruction of all domestic homes damaged by Tropical Cyclone Pat is estimated at \$15 million (excluding labour costs) and up to \$21 million (if labour costs are taken in to account). The comprehensive assessment undertaken by the Ministry of Infrastructure and Planning identifies 110 homes with small scale damage (Category 1 and 2), 95 homes with significant damage (Category 3) and 72 that have been completely demolished or are condemned (Category 4). There was also damage to other related infrastructure, such as power, water and public buildings. The most urgent need is to provide basic shelter to those people in domestic dwellings that were damaged as a result of Tropical Cyclone Pat. The views collected from the needs assessment identified differences in opinion on which homes should be repaired first: those totally destroyed and/or those partially. Generally it appears that all the homes need to be repaired and restored if they can, but the issue of protecting home assets and appliances suggests emphasis on repairing and restoring partially affected homes and dealing with the completely destroyed homes (that are occupied) in a coordinated manner.

**Table 2: Damaged Domestic Buildings**

Extent of Damage	Number	Max. Grant
Category 1: minor damage (0-25%)	59	\$7,500
Category 2: moderate damage (26-50%)	51	\$7,500
Category 3: major damage (51-75%)	95	\$15,000
Category 4: completely demolished (76-100%)	72	\$35,000
<b>TOTAL</b>	<b>277</b>	

**STRATEGIES:** Due to budgetary constraints, the government will not be able to fully cover all repair and reconstruction costs. However, to address the shelter needs the following strategies are proposed:

1. Partial funding assistance to occupants of damaged homes based on grants up to a certain level depending on category of damage.
2. Phased implementation so that the government can respond immediately to the short-term domestic housing needs (Phase 1) of Category 1 and 2 domestic buildings and demonstrate commitment to meeting the longer-term and more complex needs as more detailed and necessary information becomes available (Phase 2) for Category 3 and 4 domestic buildings.

<sup>1</sup> Source: Ministry of Infrastructure and Planning (MOIP) Detailed Damage Assessment, Feb 2010

3. Place priority on those with greatest vulnerability such as the elderly or disabled with least ability to rebuild.
4. Repair of basic infrastructure in Aitutaki including power, water and public buildings (schools and the hospital).

**ACTIVITIES:** The following activities have been identified and are included in more detail in the Housing Policy attached. These were developed jointly by all members of the Recovery Committee, with detailed analytical and technical inputs from MOIP.

<p><i>Comprehensive assessment:</i></p> <ul style="list-style-type: none"> <li>• Ministry of Infrastructure and Planning to identify and classify all occupied domestic homes affected by the cyclone (immediate)</li> </ul>
<p><i>Establish Project Management Team:</i></p> <ul style="list-style-type: none"> <li>• Team to manage the supply of basic shelters and supervision of the contract under Phase 1 and Phase 2.</li> <li>• Review the material cost estimates for the repair works required.</li> <li>• Refine total costs of the project and fit within the recovery fiscal framework.</li> <li>• Supervise the work on repairs and construction.</li> <li>• Project financial management.</li> </ul>
<p><i>Phase 1 implementation (1 – 2 months)</i></p> <ul style="list-style-type: none"> <li>• Provide grants to repair all houses with Category 1 and 2 damages (immediate)</li> <li>• Secure funding arrangements for Phase 2 (Category 3 and 4) and establish partnerships with donors, banks, local trades people, volunteers, local businesses.</li> <li>• Design basic shelter for houses with Category 4 damage, in consultation with stakeholders, within the required budgetary and building code requirements.</li> </ul>
<p><i>Phase 2 implementation (up to 12 months)</i></p> <ul style="list-style-type: none"> <li>• Procurement and contract for the supply of repairs to houses with Category 3 damage and construction of new houses for houses with Category 4 damage.</li> <li>• Provide grants to repair and construct houses with Category 3 and 4 damages.</li> <li>• Distinguish between households that will accept the basic shelter offered by the Government and households that will seek enhancement of government assistance through self financing, bank loans, aid and development assistance, and community support through fund raising and volunteers seek</li> </ul>
<p><i>Repair of basic services infrastructure in Aitutaki</i></p> <ul style="list-style-type: none"> <li>• Underground cabling for island power supply. Given the scale of this operation a phased approach is recommended for installation of an underground cabling network</li> <li>• Water Pumps and associated parts, water tanks ( to be made in Aitutaki) and the redevelopment of Vaimaru and Pukoe galleries and the construction of Vainamu gallery</li> </ul>

- Repair and reconstruction of damaged schools (Araura primary school, Araura College, Vaitau School).
- Repair and restoration of Aitutaki Hospital

Activities	Cost (NZD)
1. Comprehensive assessment	(completed)
2. Project Management Team for Phases 1 and 2	\$332,500
3. Phase 1 implementation (Category 1 and 2)	\$825,000
4. Phase 2 implementation (Categories 3 and 4)	\$3,945,000
5. Repair of basic services infrastructure	\$2,357,322
<b>TOTAL</b>	<b>\$7,359,822</b>

## SOCIAL RECOVERY

**NEEDS:** While a lot of focus has been placed on the physical reconstruction and establishing systems to return people to normalcy, there is a need to monitor and assess that the people affected by the disaster are also recovering. The needs assessment and focus group discussions identified that those affected by the cyclone were primarily concerned about their immediate needs rather than long term needs with some recommending that discussions on their future needs occur at a later stage. Some counseling services have been offered to those traumatized by the event, however, follow up may be necessary, particularly for those people and families living in houses with category 3 and 4 damage to ensure that they have not suffered any long term effects from the cyclone. Systems needs to be put in place to ensure that: those typically employed are able to retain employment and continue to be productive in the workplace (particularly essential services); maintains the family unit (including extended family) ensure that it is not weakened; school age children continue to attend school regularly and not be kept at home to assist with the repairs and recovery at home; prevent opportunities for gender-based violence due to depression or frustration caused by the loss and damage of the cyclone; the vulnerable members in society, such as the elderly and disabled, are not marginalized in the recovery efforts. There is a real risk that families will choose to leave Aitutaki rather than remain.

**STRATEGIES:** Ensuring the social fabric of the community is not weakened requires a multi-disciplinary approach and includes a number of strategies already identified under the other key priority areas such as housing, economic livelihoods. In addition to those strategies, the following have been identified to provide support to families and communities:

1. Case management of the most vulnerable households.
2. Counselling services for those traumatised by the cyclone.
3. Continued communication with the community on recovery progress.

**ACTIVITIES:** The following activities were developed by INTAFF in consultation with the Ministries of Education and Health and the Red Cross.

*Case Management of most vulnerable households:*

- The Ministry of Internal Affairs, in consultation with the Aitutaki Island Council, the Red Cross and other relevant ministries, identify the most at-risk individuals and families for priority case management (immediate)
- These individuals or families are those that were living in homes that suffered from Categories 3 and 4 damage, are least likely to return to normalcy without assistance and the most likely to emigrate. Normalcy includes ability to return to work and retain employment, normal functioning within the home including ensuring basic shelter and food security is provided, regular school attendance by the children etc.
- Case management will involve providing a high level of assistance to these families to help them access the right services such as counseling and other specific recovery activities (such as

<p>housing, the cash for workscheme etc).</p> <ul style="list-style-type: none"> <li>• There will be regular monitoring and updates on these individuals and families for the first three months and then a follow up review in six months time.</li> </ul>
<p><i>Counseling services for those traumatized by the Cyclone:</i></p> <ul style="list-style-type: none"> <li>• While some counseling has already been provided, over the next three months, counseling services should be made available to the general public on an opt-in basis in Aitutaki to help those affected overcome any trauma.</li> <li>• While counseling services will be open to any member of the public in Aitutaki, there should be specific targeting to those in employment who may be traumatized to the extent that it may affect that employment.</li> </ul>
<p><i>Continued Communication with the Community</i></p> <ul style="list-style-type: none"> <li>• The Aitutaki Islands Council should continue to inform the public on the progress of the recovery including all assistance available to help with recovery through local radio and TV broadcasts. This may also involve holding community consultations on a monthly basis for the first three months to encourage a participatory approach by the people affected (immediate).</li> <li>• Follow up focus group discussions with key stakeholders (community groups; women's groups; businesses etc) should also be undertaken as requested by those consulted in the initial needs assessment, given the reaction by the community was focused on immediate needs rather than long term needs.</li> </ul>

Social Recovery Activities	Cost (NZD)
1. Case management	\$100,000
2. Counseling services	\$100,000
3. Continued communication	\$20,000
<b>TOTAL</b>	<b>\$220,000</b>

## LOCAL ECONOMIC RECOVERY

**NEEDS:** The total population of Aitutaki was directly or indirectly affected by Cyclone Pat. Damage to the local agriculture and livestock sector is extensive. The value in crop loss from Cyclone Pat is estimated at **US \$1.5 million**. There was severe damage and destruction of the local food supply and food security will be affected for the next 3 to 36 months. The impact and strength of the cyclone caused 100% destruction of some of the food crops cultivated on the island, in particular, papaya and bananas. Most fruit and nut crops including coconuts, mango, chestnuts, and breadfruit will take many months to recover. Significant support will be needed to help agricultural livelihoods and ensure a reliable food supply to the local tourism industry. There are also reports of dead livestock, and there is a need for livestock feed, feed storage and foraging to assist small scale farming and livestock enterprise.

Cash assistance is desperately needed to procure housing materials, to purchase food in the market and for other essentials – particularly for the most vulnerable (e.g. women and elderly-led households). The expansion of social safety nets through the immediate injection of capital, taking into account gender disparity, to support livelihoods and to prevent a potentially large out-migration is a key strategy for early recovery. The importance of restoring small businesses, including shops, in order to stabilize the local economy is also widely recognized. Additionally, sustainable livelihood options that incorporate alternative income generating options linked to the tourism industry that take into account the respective skills sets of both men and women should be introduced. A strong element of sound planning with an emphasis on reducing the risks of future disasters is also recommended.

**STRATEGY:** The Local Economic Recovery strategy aims to restore original sources of livelihood with the long-term intention of expanding traditional income generating activities and the possibility of introducing new alternative livelihoods options. This strategy hinges on:

1. Immediately injecting capital into the local economy through an exchange for labor in the housing sector and cash transfers to most vulnerable,
2. Assisting small businesses in recovering and growing further,
3. Assisting local farmers in maximizing crop production, ensuring livestock populations are maintained, and
4. Expanding alternative land and marine-based tourism options and develop local partnerships with Rarotonga-based tourism operators.

These strategic interventions are designed to mutually reinforce each other with the aim to stimulate the local economy, provide alternative income generating options for both men and women, ensure long-term food security and fortify sustainable partnerships between the local population and the tourism operators. In transitioning recovery activities into long-term sustainable development and in order to facilitate local ownership, it is recommended that an island planning process be conducted and an island plan be produced - whereby all inputs can be strategically coordinated to achieve priority areas



identified by the Aitutaki community. Opportunities to recover and improve livelihood are explored through the following key initiatives:

- **Local capital Injection:** The purpose of this initiative is to **immediately** inject capital into the local economy, which is critical to procure much needed housing materials, to purchase food in the market and for other essentials and also to retain the population most likely to migrate – namely the youth. The most vulnerable of the affected population have been identified (approx. 28 elderly/women-led households), which require immediate cash grant assistance. The cash for Work initiative, using a proven international model, will offer short-term employment (4 weeks) that provides labor (approx. 100 youth) for the housing sector, supports skills transfer and facilitates with the disposing of potentially dangerous debris. Cash for Work will promote local labor and provide employment opportunities for the unemployed, give the target group an opportunity to gain skills in carpentry and assist Habitat for Humanity – who will provide technical support and guidance, but not a sufficient labor force for the task. This initiative will be administered by Internal Affairs or by the Red Cross depending on forthcoming agreements.
- **Agriculture/Livestock** Providing critical agricultural and livestock inputs for families and local farmers are by far the most important activities in restoring original livelihoods. These activities can commence **immediately**. There are also opportunities to enhance agricultural yields in order to secure a more reliable local agricultural supply to the local tourism market – thereby increasing the income generating opportunities and securing long-term food security. Although the livestock sector was not directly affected, traditional livestock feed inputs, namely coconuts, are in short supply. Therefore, it is critical that livestock feed be considered as a top priority for maintaining current livestock populations over the medium to long-term.
- **Small business support:** Unfortunately, there was no small business sector damage assessment conducted immediately after the cyclone; however, it is recognized that the small businesses in Aitutaki are the lifeblood of the local economy. It is, therefore, important to explore possibilities with the Bank of the Cook Islands to offer assistance to small business in the form of existing fixed loan relief and grant options designed to support small business owners in recovering. It is also recommended that concessionary loans are provided to assist small business recover and develop (e.g. Jump-start the Aitutaki Women's group handicraft production/expand their market).
- **Local Tourism:** The tourism sector was immediately affected in Aitutaki with the local labor force being directly affected and some infrastructural damages. The large scale tourism operators have recovered quickly; however, recovering from the cyclone offers important opportunities to introduce alternative land and marine based tourism options and create partnerships with Rarotonga-based local tourism operators whereby the local population can more directly benefit from the reliable tourist stock in Aitutaki.

**ACTIVITIES:** The following list of activities for local economic recovery work was developed by a working group led by the Office of the Prime Minister (OPM) with contributions from the Cook Islands Red Cross,

Business, Trade and Investment Board (BTIB), Cook Islands Tourism Cooperation (CKITC) and members of the Aitutaki administration.

<p><i>Local Capital Injection</i></p> <ul style="list-style-type: none"> <li>• Cash for work initiative designed to provide labor for the housing sector and support the immediate clean up of dangerous debris (<b>target group:</b> 100 youth).</li> <li>• Immediate cash grants offered to the identified most vulnerable (<b>target group:</b> 28 women and elderly-led households)</li> </ul>
<p><i>Agriculture/Livestock</i></p> <ul style="list-style-type: none"> <li>• Tractor services provided to clear arable land</li> <li>• Seeds and seedlings immediately provided to jump-start agricultural production</li> <li>• Fertilizer, pesticides and tools provided to restore and re-plant crops and trees</li> <li>• Damaged nursery's repaired and irrigation tanks provided</li> <li>• Livestock feed and related inputs provided</li> <li>• Livestock drugs provided to reduce risk of disease and sickness among livestock</li> </ul>
<p><i>Small Business Support</i></p> <ul style="list-style-type: none"> <li>• Small business damage assessment conducted</li> <li>• Exploring possibilities with the Bank of the Cook Islands to offer existing fixed loan relief and grant options designed to support small business owners in recovering</li> <li>• Topping up of the Business Support Loan (BSL) and targeting potential small business, the Aitutaki women's group and possible local land/marine based tourism start up operators</li> </ul>
<p><i>Local Tourism</i></p> <ul style="list-style-type: none"> <li>• Support given to the local bone fishing industry to expand local bone fishing market</li> <li>• Restore cultural/historical sites damaged by cyclone and establish guided tours of sites and provide training of guides</li> <li>• Ensure local dive operators are operational and have access to fuel supply as well as put in place cadetship programmes to train locals to become dive masters</li> <li>• Conduct assessment of local flora and fauna for nature guided tours</li> <li>• Develop tours for tourists interested in local remedies and massage techniques</li> <li>• Training in first aid for tourist fishing vessels and boat masters</li> <li>• Develop programme to grow partnerships with Rarotonga-based tourism operators to mentor Aitutakians interested in developing local tourism ventures</li> <li>• Walkways and cycle ways developed for beautification</li> </ul>
<p><i>Island Planning for Sustainable Development</i></p> <ul style="list-style-type: none"> <li>• Village planning process undertaken whereby Aitutaki island sustainable development plan is produced</li> </ul>

**Table: Summary of Costs for Proposed Local Economic Recovery Interventions**

Local Economic Recovery Activities	NZ\$
1. Local Capital Injection	\$100,000
2. Agriculture/Livestock	\$194,870
3. Small Business Support	\$1,000,000
4. Local Tourism	\$55,000
5. Island planning for sustainable development	\$7,000
<b>TOTAL</b>	<b>\$1,356,870</b>

## DISASTER RISK MANAGEMENT

**NEEDS:** The scale of the impact of Cyclone Pat highlighted a number of areas for improvement in terms of the management of disaster risk on Aitutaki. The recovery needs assessment also demonstrated that there was a strong willingness by communities and other stakeholders to address their exposure to disaster risk. These revolved mainly around clean-up activities, early warning systems (such as the meteorological site), key infrastructure (housing and other public structures), and water and electricity. The cyclone impacts also highlighted the need for improvements in existing preparedness procedures and evacuation shelters. Following the cyclone there is a degree of secondary risk associated with future extreme events due to the remaining debris (particularly roofing iron) which needs to be addressed in the immediate term, as well as a fire risk given that it occurred following a dry period.

**STRATEGIES:** In order to achieve reduce risk to disasters, risk reduction principles need to be instilled throughout all aspects of the recovery process. With the impacts of Cyclone Pat as well as the almost immediate threat of Cyclone Sarah and the potential Tsunami (relating to the earthquake in Chile), disasters are very much on peoples' minds. This provides an opportunity to further consolidate awareness and lessons learned activities with communities and key stakeholders in Aitutaki whilst disaster issues are fresh on peoples' minds. There is also the opportunity to enhance preparedness systems (and infrastructure) as well as the need to repair early warning systems. Furthermore, the recovery programme provides an ideal opportunity to strengthen institutional arrangement for DRM in Aitutaki, and is firmly based within the National Action Plan for Disaster Risk Management (2009-2015). The strategies for risk reduction and disaster management are based around the following key areas:

1. Clean-up activities to reduce secondary risk
2. Raising awareness and enhancing capacity at community level on DRM issues.
3. Disaster Preparedness and Early Warning
4. Improve disaster resilience of designated evacuation shelters
5. Institutional strengthening for DRM in Aitutaki
6. Initial waste management and biodiversity work

**ACTIVITIES:** The following list of activities for DRM based recovery work was developed by a working group led by Emergency Management Cook Islands (EMCI) with contributions from the Met Office, the Police Commission, MFEM and members of the Aitutaki administration.

*Clean-up activities to reduce secondary risk:*

- Collection of debris in all affected areas (immediate)
- Disposal of roofing iron and purchase of compacting machine (immediate)

<p><i>Awareness Raising and Training on DRM:</i></p> <ul style="list-style-type: none"> <li>• Awareness raising and lessons learned workshop for the people of Aitutaki (immediate)</li> <li>• Provisions for training on disaster resilient building techniques for local carpenters (immediate)</li> <li>• Activities to raise awareness of the children and teachers about disaster risks and disaster preparedness.</li> </ul>
<p><i>Early Warning Systems and Preparedness</i></p> <ul style="list-style-type: none"> <li>• Replace damaged meteorological station (immediate)</li> <li>• End-to-end review of EWS to develop optimal system</li> <li>• Conduct regular table top and operational exercises (drills) to test the early warning systems</li> <li>• Update Aitutaki Disaster Response Plan.</li> </ul>
<p><i>Improve disaster resilience of evacuation shelters</i></p> <ul style="list-style-type: none"> <li>• Review of the safety shelters evacuation system (immediate)</li> <li>• Install adequate water storage systems for designated evacuation shelters</li> <li>• Provide back-up generators for designated evacuation shelters</li> <li>• Carry out structural repairs to designated evacuation shelters</li> </ul>
<p><i>Institutional strengthening for DRM:</i></p> <ul style="list-style-type: none"> <li>• Comprehensive assessment of all hazard risks (immediate);</li> <li>• Review national building codes and application for Aitutaki recovery programme</li> <li>• Review and update Aitutaki Disaster Management Plan</li> <li>• Re-establish Aitutaki Disaster Risk Management Council (in accordance with the Aitutaki Disaster Management Plan)</li> </ul>

<b>DRM Activities</b>	<b>Cost (NZD)</b>
1. Clean-up activities	\$86,410
2. Awareness raising and training on DRM	\$5,000
3. Early Warning Systems and preparedness plans	\$24,000
4. Improve disaster resilience of key infrastructure	\$200,000
5. Institutional strengthening for DRM	\$15,000
6. Waste management and biodiversity work	\$200,000
<b>TOTAL</b>	<b>\$530,410</b>

### III. IMPLEMENTATION STRATEGY

#### **Institutional Structure**

The successful implementation of the recovery plan for Aitutaki is dependent on the institutional arrangements for implementing, monitoring and evaluating the plan. Where possible these arrangements will build on existing structures. The overall responsibility for the implementation of the recovery plan rests with the Government of Cook Islands, through a designated '**Disaster Recovery Coordinator**' as required under Sec 13.2 of the DRM Act 2007. The Minister for Finance has been nominated as the RC for the Aitutaki recovery program.

#### The Recovery Committee

Following the cyclone the Government set up a Cyclone '**Recovery Committee**' to facilitate and coordinate cyclone recovery and reconstruction planning processes. This committee was responsible for conducting a recovery needs assessment and developing a recovery plan. The committee is made up of representatives from the Office of the Prime Minister, the Office of the Minister of Finance, the Ministry for Internal Affairs, and Ministry of Finance and Economic Management. The team was also supported by an Early Recovery Adviser and Programme Specialist from UNDP. The Recovery Committee will also have the duty of ensuring the implementation, monitoring and evaluation of the recovery plan and report directly to the Recovery Coordinator. Chairing the Recovery Committee will be the representative of the Recovery Coordinator, while the Central Policy and Planning Office of the Office of the Prime Minister (OPM) will take overall coordinating responsibility for ensuring that members of the committee and other line Ministries deliver on the following key responsibilities of the committee:

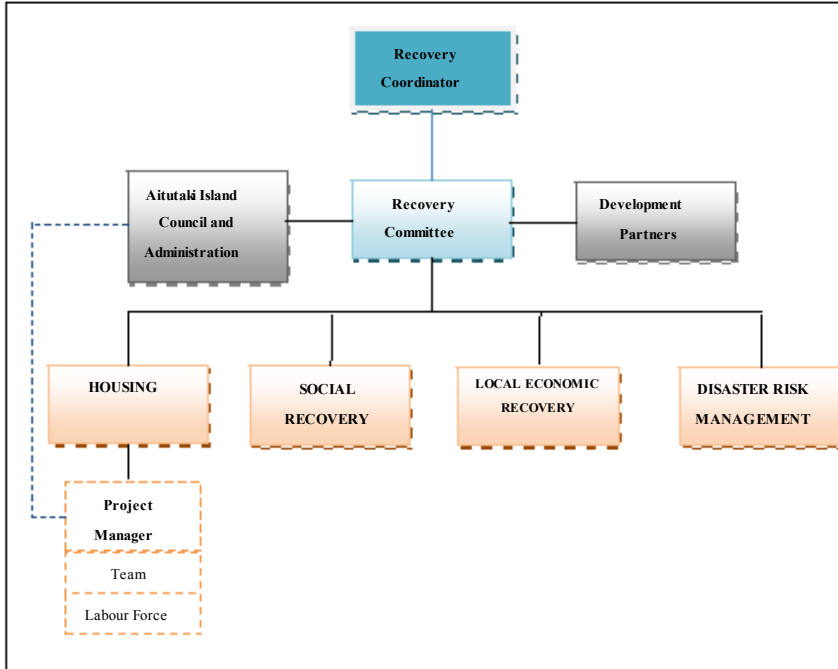
- Provide oversight on implementation of the plan, by assigning responsibilities to key technical line agencies;
- Manage funding mechanisms assigned for the recovery process, including resource mobilization efforts where necessary;
- Conduct systematic monitoring of progress in relation to the implementation of all components of the recovery plan; and
- Provide technical support to a Project Manager in Aitutaki on all aspects relating to housing recovery, by drawing on technical expertise from within the committee, the line Ministries and agencies, and elsewhere as and when necessary.

Actual implementation of recovery activities will be undertaken by the respective lead and support agencies as identified in the activity and costing matrix in *Annex 2*: with overall management oversight provided through the Recovery Committee (as per *Figure 1* below). These agencies are responsible for providing feedback to the Recovery Committee for monitoring and evaluation purposes. Where development partner assistance is provided, the Recovery Committee will present to partners regular progress reports on implementation of activities supported.

Project Manager (in Aitutaki)

In relation to the repair and reconstruction of housing, this will be managed full-time by a dedicated **Project Manager (PM)** on the ground in Aitutaki contracted to the Ministry of Infrastructure and Planning. The PM will report directly to the Ministry of Infrastructure and Planning, the Recovery Committee and the Mayor, Island Council and the Aitutaki Island Administration. Additionally, the PM will provide regular updates to communities and stakeholders in Aitutaki. The PM will also be responsible for supporting monitoring and evaluation activities driven by the Recovery Committee in Rarotonga. Where development partner assistance has been received for housing recovery, the Recovery Committee will report regularly to partners.

Figure 1: Institutional Arrangements



### **Communications Strategy**

The main purpose of a communications strategy is to provide timely communication of information on the recovery plan to the community as well as to other key stakeholders such as the recovery committee, implementing agencies, community groups, donors and NGOs, as well as Cook islanders living overseas that have links with Aitutaki. In particular the communications strategy will be used to:

- Create awareness and inform stakeholders on the recovery process;
- Build capacity of the target beneficiaries; and
- Serve as a mechanism to facilitate feedback for the purposes of monitoring and evaluation.

The development of a communications strategy will be led by the Recovery Committee through respective technical agencies such as INTAFF and EMCI that are already engaged with the affected communities. Key communications aimed at the target communities in Aitutaki will be delivered through the Island Administration and the PM.

### **Financing Management and Strategy**

Financial resources dedicated to recovery activities will be monitored, recorded, analyzed and reported through transparent financial systems. Approved budgets and expenditures will be publicly available through the monitoring process. In the interest of minimising administrative burden and financial management efficiencies, all finance, both aid and local budget shall be administered through the MFEM. All financial information relating to development assistance will be captured by the Aid Management Division and coordinated and managed in accordance with the Recovery Plan and as directed by the Recovery Coordinator and Committee.

### **Monitoring and Evaluation Framework**

The recovery committee will be responsible for producing regular progress reports (suggested every 6 months) on implementation progress of the recovery plan. Monitoring activities should include on-site assessments, regular reporting, and financial expenditure tracking. These reports should include:

- Results achieved on each of the activity areas of the recovery plan;
- Actions taken to improve performance and address issues/risks arising from implementation;
- Forecast programme for the next 6 months; and
- Lessons learned for future recovery activities.





## Annex 1: AITUTAKI DOMESTIC HOUSING POLICY

February 2010

### 1. Introduction

It is estimated that over three hundred occupied domestic homes were damaged on 10 February 2010 by Tropical Cyclone Pat with varying levels of damage. Once the comprehensive assessments are completed by the Ministry of Infrastructure and Planning (MOIP) estimates will be provided.

### 2. Objectives and Intended Outcomes

The primary objective of this policy is to repair and replace domestic houses damaged as a result of Tropical Cyclone Pat that prior to the event were in regular use as dwellings. The main intended outcomes of the Housing Policy are:

- Basic domestic cyclone proof shelter for those householders who lost their dwellings during Tropical Cyclone Pat.
- Safe and secure shelter as a result of repairs to damaged dwelling houses.
- Increased economic activity in the local construction industry as a result of the design, construction and provision of basic shelter.
- Enabling household access to private bank packages to assist with recovery efforts where basic shelters are expanded on.

### 3. Policy Proposal

Due to financial and budgetary constraints, it is unlikely that the government will be able to fully cover all repair and reconstruction costs. The policy proposal would provide partial funding assistance to homes that were damaged as a result of Cyclone Pat at a cost of **\$7,209,822**.

Table 1 below provides more detail of the funding proposal for affected households.

Implementation of this option is based on the following:

- Phased implementation, starting with partially damaged homes
- Application of the building standards especially those pertaining to cyclone proofing
- Encouragement of full participation of affected population in housing reconstruction and repair
- The use of local construction industry stakeholders
- Targeted assistance for those most vulnerable and least resilient
- Speedy policy formulation, decision making and confirmation of financing.

#### 4. Guiding Principles

The government's policy proposal primarily focuses on providing a minimum level of assistance for basic shelter based on the following guiding principles.

- The government recognizes the resilience of the Aitutaki Community, both resident and overseas, in adjusting to disaster recovery.
- The government recognizes the real threat that affected people will consider immigration to New Zealand and Australia depleting the local population and adversely impacting on the social and economic recovery of Aitutaki.
- While domestic housing is not generally the responsibility of the government, under the present circumstances, the government will provide basic safe shelter for the occupants of damaged domestic homes affected by Tropical Cyclone Pat.
- While covering basic needs, the housing policy allows for the enhancement of government assistance through self financing, bank loans, aid and development assistance, and community support through fund raising and volunteers.
- Domestic housing rehabilitation under the Recovery and Reconstruction Plan will follow the *Building Controls & Standards Regulations 1991* and the *Environment Act 2001*.
- Decisions on the repairs and provision of dwelling houses shall be based upon sound survey and damage assessments for normally occupied homes.
- Decisions shall be made that take into account urgency, equality, especially for the vulnerable, and impacts shall be long lasting.
- Dwelling house repairs and the provision of basic, safe and secure shelter shall offer protection from future cyclonic events.
- Decisions on repairs and reconstruction of domestic housing shall be fiscally responsible.
- All endeavors will be made to use local resources including labor and material retailed by local businesses as a means of supporting local industry. However, where it is considered that prices being charged are fiscally irresponsible, unfair and taking advantage of disaster circumstance, or otherwise, government may chose to consider alternative options that meet the test of fiscal responsibility, such as bulk procurement through government systems.

**Table 1: Initial Damage Assessment and Funding Proposal**

Damage Category	Number of houses	Assistance Package	Cost (\$'000)
CAT 1 Minor damage	59	Grant – not exceeding \$7,500 per occupied house affected.	442.5
CAT 2 Moderate damage	51	Grant – not exceeding \$7,500 per occupied house affected.	382.5
CAT 3 Major damage	95	Grant – not exceeding \$15,000 per occupied house affected.	1,425
CAT 4 Completely destroyed	72	Temporary (immediate needs to 3 months) - shelter including alternative accommodation or tents  Long term (3 – 12 months) Grant – not exceeding \$35,000 per occupied house affected.	2,520
Total Residential Dwelling	277	Cat 1,2,3 and 4	5,102.5

Notes:

- **Category 1:** Houses with minor damage to roof and walls (0-25%).
- **Category 2:** Houses with extensive damages to roof and wall structure (26-50%).
- **Category 3:** Houses with major damage (51-75%).
- **Category 4:** Houses that have been completely destroyed (76-100%).
- The number of houses in each of the categories is based on the revised assessment undertaken by the Ministry of Infrastructure and Planning.
- The level of financial assistance nominated for each category was arbitrarily determined to provide partial support to assist with housing.

Based on the comprehensive assessment undertaken by MOIP, the level of grants for each category is, on average, adequate to cover the costs of the required repairs. In the case of homes built with limestone with Category 2 damage, the average costs are significantly higher than the proposed grant. There are x houses in Category 2 built with limestone.

### Implementation Strategy

#### Phased Approach

A phased approach will be adopted to ensure the government can respond quickly to the short-term domestic housing needs of Aitutaki, where possible, and demonstrate commitment to meeting the longer-term and more complex needs as more detailed and necessary information becomes available.

- **Phase 1:** Repair of occupied domestic housing with Category 1 and 2 damages (1 to 2 months)
- **Phase 2:** Repair of occupied domestic housing with Categories 3 and 4 damage (up to 12 months)

A project management team will be appointed, managed through the Implementation Agency in consultation with the Aitutaki Island Council. Administration of the government assistance will be provided through the project management team based in Aitutaki. The project team will consist of up to four team members each with relevant skills to undertake the project and will, to the extent possible, employ local based staff. As the government assistance in all phases will be capped grants per damaged house, for administrative simplicity, the assistance shall be provided based on payment of invoices.

In order to move quickly into Phase 1, it is recommended that the existing Disaster Risk Management Committee in Aitutaki that has been responsible for the on the ground emergency response be appointed as the project management team to oversee implementation of the housing policy. Recruitment of a Project Manager will still be necessary.

#### Priority Criteria:

Depending on availability of funds, the Government will endeavour to assist in all cases, however, priority shall be placed on households least able to reconstruct or repair their homes, including:

- Very elderly, either living on their own or with children, with minimal or no household income;
- Destitute people, either living on their own or with children, with minimal or no household income;
- Infirm people living on their own or requiring fulltime care with minimal or no household income.

Special consideration may be given to households with special needs to improve accessibility to toilet and shower facilities such as ramps for the elderly and disabled into the plans of the domestic houses, especially where these vulnerable people are living alone.

#### Financing Strategy:

It is imperative that work commences on Phase 1 to:

- ensure safe domestic shelters for the rest of the cyclone season
- send a message to affected people that government is acting
- maintain community morale
- take advantage of volunteers before 'volunteer fatigue' sets in,
- take advantage of the excellent community mobilization taking place now under the Aitutaki Disaster Risk Management Committee.

Funds from the local budget should be utilized first as funds approval, confirmation and access will be easier and quicker to obtain in comparison with donor funds. Donors will be solicited to meet any gaps in funding. Community fundraising groups will be offered the opportunity to build onto the provision of basic shelter provided by the government and may consider funding water tanks, septic systems, or house contents for the vulnerable.

**Project Management Arrangements:**

The Aitutaki Domestic Housing Policy shall be delivered through the 'Aitutaki Domestic Housing Cyclone Recovery Project' and managed by a skilled project manager (PM) – see Programme document below.

The PM will be responsible for:

- Managing the supply of basic shelters and supervision of the contract with labor to come from local Aitutaki population to the extent possible (including voluntary labour). A simple design will be provided by MOIP. This will save time and money in the contracting process.
- Consult the design with local community.
- Review the material costs estimates for the repair works required.
- Determine total approximate costs for the total project.
- Refine total costs of the project and fit within the recovery fiscal framework
- Support Project implementation agency in assigning the package of assistance.
- Supervise the work on repairs and construction.
- Project financial management.

**Table 2: Cost Estimates**

Costs include the administration of the housing reconstruction and repairs.

<b>COST ESTIMATES</b>	
<b>Phase 1 (1 – 2 months)</b>	<b>\$907,500</b>
Project Administration	\$82,500
<ul style="list-style-type: none"> <li>• Project Management team (four person team)</li> <li>• Procurement and contracting</li> <li>• Inspections and review</li> <li>• Contingency</li> </ul>	
Repair and reconstruction of homes	\$825,000
<ul style="list-style-type: none"> <li>• Category 1 Grant for minor repairs (\$7,500 max.)</li> <li>• Category 2 Grant for major repairs (\$7,500 max.)</li> </ul>	
<b>Phase 2 (up to 12 months)</b>	<b>\$4,195,000</b>
Project Administration	
<ul style="list-style-type: none"> <li>• Project Management team (four person team)</li> <li>• Procurement and contracting</li> <li>• Inspections and review</li> <li>• Contingency</li> </ul>	\$250,000
Repair and reconstruction of homes	
<ul style="list-style-type: none"> <li>• Category 3 Grant for major repairs (\$15,000 max.)</li> <li>• Category 4 Grant for basic shelter for condemned and demolished homes (\$35,000 max.)</li> </ul>	\$1,425,000 \$2,520,000
<b>TOTAL APPROXIMATE COSTS</b>	<b>\$5,102,500</b>

Costs for Phase 2 are approximate costs only.

Attachment**Programme Framework**

The Aitutaki Domestic Housing Policy shall be delivered through the 'Aitutaki Domestic Housing Cyclone Recovery Project'

**Project implementation:** Ministry of Internal Affairs  
**Project Officer:** Contracted  
**Executing Agency:** MFEM (Financing conduit-both aid and local budget)  
**Monitoring Agency:** EMCI (Ensure Disaster Risk Management procedures are put in place)

**Technical Assistance:** MOIP and Red Cross for damage assessments.

**Additional Capacity Requirements:** Project implementation agency will need a skilled project manager (PM).

**Responsibilities of the PM:**

- Manage tender for basic shelter supply and supervise contract, with labor to come from the local Aitutaki population, to the extent possible. A simple design would be provided by MOIP with the industry contracting for supply and supervision contract only. This will save time and money in the contracting process.
- Consult the design with local community.
- Review the material cost estimates for the repair works required.
- Determine total approximate costs for the total project.
- Refine total costs of the project and fit within the recovery fiscal framework
- Support project implementation agency in assigning the package of assistance.
- Supervise the work on repairs and construction.
- Project Financial management.

**Implementation Strategy:**

- Project implementation agency in consultation with Aitutaki Island Council to recruit project manager.
  - This will require putting a proposal through the Recovery Committee (RC) for funding from MFEM.
  - The PM should commence to undertake the work required above.
- Project implementation agency to include the Housing Policy and Strategy into the Recovery Plan (RP).
- The RC to allocate sufficient funds from the recovery funding envelope to finance the Domestic Housing Project.
- Work to commence as soon as there is confirmation of funding.

**Annex 2: ACTIVITY MATRIX & COSTINGS**

**HOUSING & INFRASTRUCTURE**

Activities	Time-Frame	Lead and Support Agencies	Cost (NZD)	Committed (NZD)	Funding Gap (NZD)
Comprehensive assessment	Completed	MOIP	-	-	\$0
Establish Project Management Team	1-12 months	MOIP	\$332,500	\$0	\$332,500
Phase 1 Category 1 and 2 domestic buildings	1-2 months	MOIP	\$825,000	\$825,000 (MOIP)	\$0
Phase 2 Category 3 and 4 domestic buildings	1-12 months	MOIP	\$3,945,000	\$0	\$3,945,000
Repair of basic services infrastructure in Aitutaki					
• Underground electricity supply (\$150,000 for technical assessment and project planning for underground electrical reticulation)		MOIP	\$1,353,800	\$0	\$1,353,800
• Water Pumps and associated parts (\$45,000), water tanks (\$323,000) and the redevelopment of Vaimaru and Pukoe galleries and the construction of Vainamu gallery (\$199,000)		MOIP	\$567,000	\$199,000 (MOIP)	\$368,000
• Repair and reconstruction of damaged schools (Araura primary school, Araura College, Waitau School)		CIIC	\$42,754	\$0	\$42,754
• Repair and restoration of Aitutaki Hospital		CIIC	\$293,768	\$0	\$293,768
		<b>TOTAL</b>	<b>\$7,359,822</b>	<b>\$1,024,000</b>	<b>\$6,335,822</b>
				<b>14%</b>	<b>86%</b>

<sup>2</sup> All costs relate to materials and input costs. Labour costs have not been factored in. Need to confirm if in some cases this is being provided as an in-kind contribution from the respective lead agencies.

<sup>3</sup> Part of MOIP's programmed activities in the coming year.



**LOCAL ECONOMIC DEVELOPMENT**

Activities					Time Frame	Lead and Support Agencies	Cost (NZD)	Committed (NZD)		Funding Gap (NZD)
Cash for work initiative designed to provide labor for the housing sector and support the immediate clean up of dangerous debris (target group: 100 youth x 20 days x \$36/day = 6th day)					Immediate	ADRA(TBC)/OPM/ Island Council	\$72,000	\$72,000 (ADRA - tbc)		\$
Immediate cash grants offered to the identified most vulnerable (target group: 28 women/elderly-led households x \$1,000)					Immediate	ADRA(TBC)/OPM/ Island Council	\$28,000	\$28,000 (ADRA - tbc)		\$0
Tractor services provided to clear arable land					Medium-term	MA/FAO/Island Council	\$9,200	\$9,200 (FAO) <sup>4</sup>		\$0
Seeds and seedlings immediately provided to jump-start agricultural production as well as fertilizer, pesticides and tools provided to restore and re-plant crops and trees					Immediate	MA/FAO/Island Council	\$109,000	\$109,000 (FAO)		\$0
Damaged nurseries repaired and irrigation tanks provided					Medium-term	MA/FAO/Island Council	\$40,700	\$40,700 (FAO)		\$0
Livestock feed and related inputs provided and livestock drugs provided to reduce risk of disease and sickness among livestock					Immediate	MA/FAO/Island Council	\$36,770	\$36,770 (FAO)		\$0
Small business damage assessment conducted					Immediate	BTIB	In kind	In kind		\$0
Exploring possibilities with the Bank of the Cook Islands to offer existing fixed loan relief and grant options designed to support small business owners in recovering					Medium-term	Bank of Cook Islands	\$500,000	\$0		\$500,000
Topping up of the Business Support Loan (BSL) and targeting potential small business					Medium-term to long-term	BTIB	\$500,000	\$0		\$500,000
Support given to the local bone fishing industry to expand local bone fishing market					Medium-term	CKI TC Island Council	\$10,000	\$10,000 (CKI TC)		\$0
Restore cultural/historical sites damaged by cyclone and establish guided tours of sites and provide training of guides					Medium-term	CKI TC Island Council	\$5,000	\$0		\$5,000

<sup>4</sup> All potential funding contributions from FAO need to be confirmed with Ministry of Agriculture

Activities					Time Frame	Lead and Support Agencies	Cost (NZD)	Committed (NZD)	Funding Gap (NZD)
Walkways and cycle ways developed for beautification					Medium term to long-term	CKI TC/Island Council/NZ Dept of Conservation	\$10,000	\$0	\$10,000
Conduct assessment of local flora and fauna for nature guided tours					Medium term to long-term	CKI TC/Island Council	In kind	In kind (CKI TC)	\$0
Develop programme to grow partnerships with Karotonga-based tourism operators to mentor Aitutakans interested in developing local tourism ventures (seed funding)					Medium term to long-term	CKI TC/Island Council/Raro Business community	\$10,000	\$0	\$10,000
Ensure local dive operators are operational and have access to fuel supply as well as put in place cadetship programmes to train locals to become dive masters					Medium term	CKI TC/Island Council	\$20,000	\$0	\$20,000
Training in first aid for tourist fishing vessels and boat master					Medium term	CKI TC/Island Council/Red Cross	\$5,000	\$0	\$5,000
Develop tours for tourists interested in local remedies and massage techniques (seed funding)					Medium term to long-term	CKI TC/Island Council	\$5,000	\$0	\$5,000
Village planning process undertaken whereby Aitutaki island sustainable development plan is produced					Medium term	OPM BTIB	\$7,000	\$7,000 (UNDP)	\$7,000
<b>TOTAL</b>							<b>\$1,356,670</b>	<b>\$305,670</b> 23%	<b>\$1,051,000</b> 77%

**DISASTER RISK MANAGEMENT**

<b>Activities</b>				<b>Time-Frame</b>	<b>Lead and Support Agencies</b>	<b>Cost (NZD)</b>	<b>Committed (NZD)</b>	<b>Funding Gap (NZD)</b>
Clean-up activities to reduce secondary risk (purchase/hire of metal crusher)				Immediate	MOIP	\$86,410	\$0	\$86,410
Raising awareness and enhancing capacity at community level on DRM issues.				Immediate	EMCI	\$5,000	\$0	\$5,000
Disaster Preparedness and Early Warning: \$20,000 for replacement of met station, and				Immediate - medium term	EMCI / MET Office	\$24,000	\$4,000 (SOPAC) tbc	\$20,000
Improve disaster resilience of evacuation shelters: \$25,000 per shelter for 8 villages including adequate water storage (\$2,000), back-up generator (\$6,000) and repairs (up to \$22,000)				Medium term	CIIC / EMCI	\$200,000	\$0	\$200,000
Institutional strengthening for DRM in Aitutaki				Medium term	EMCI / Aitutaki Council	\$15,000	\$0	\$15,000
Waste management and biodiversity work				Immediate to medium term	NES	\$200,000	\$0	\$200,000
					<b>TOTAL</b>	<b>\$530,410</b>	<b>\$4,000</b> <b>1%</b>	<b>\$526,410</b> <b>99%</b>

## Annex 3: RECOVERY NEEDS ASSESSMENT



### POST CYCLONE PAT RECOVERY ASSESSMENT

#### FIELD VISIT TO AITUTAKI, COOK ISLANDS

24-25 February, 2010

#### Overview

The Government of Cook Islands with support from the UNDP technical adviser on early recovery deployed a team to Aitutaki from 24-25 Feb 2010 to conduct a recovery needs assessment in relation to the impacts of Cyclone Pat on the island of Aituaki. This team consisted of representatives from the Office of the Prime Minister, the Ministry of Internal Affairs and Emergency Management Cook Islands. The main aim of the recovery needs assessment is to form the basis of a Recovery Plan and in particular to: identify priority needs for Early Recovery, based on impacts of the disaster; assess capacities and resources for early recovery efforts; and identify specific actions can be taken to address the priority needs for early recovery.

#### Key Outcomes of the Recovery Needs Assessment:

During the consultations with a wide range of stakeholders, the following key points were raised that are relevant to the Recovery Plan:

**HOUSING:** Timing is of the essence in terms of providing a package of assistance to those households that experienced damage to their homes. Therefore, a strong recommendation is to commence work with Category 1 and 2 houses as a first phase, followed by reconstruction of category 4 (and some 3) as a subsequent phase;

**BUILDING CODES:** it is imperative that housing and other structures are repaired or rebuilt in accordance. As such, the proposed design for the newly build houses needs to be confirmed as soon as possible, and additional capacity needs to be confirmed for the reconstruction effort;

**COMMUNICATION STRATEGY:** there is an increasing risk of outward migration from Aitutaki as a result of the cyclone, particularly by young employable members of the community. It is imperative

therefore, that a clear communication is made by the Government to the communities regarding the nature and sequencing of assistance that will be provided by the Government and its partners;

**FUNDING for RECONSTRUCTION:** this should not be based on a 100% cost recovery basis, but rather on a partial funding basis in order to bring some ownership of the process to the affected population and furthermore to avoid developing a dependency culture;

**POWER:** there is an opportunity to accelerate previous plans to re-install the power supply network underground. This approach will reduce the risk of further cyclones and other related extreme weather events.

**LOCAL ECONOMIC DEVELOPMENT:** there are a number of opportunities to strengthen and diversify the local economic base, through grant based schemes or concessional loans. This can provide an important complement to the housing package of assistance currently being discussed.

**DISASTER PREPAREDNESS:** a number of designated evacuation centres were not able to withstand the force of the cyclone, and therefore need strengthening.

**RISK REDUCTION:** There is also a real risk of further damage due to the remaining debris (particularly roofing iron). When considering the rebuild of new homes, we should consider the provision of new water tanks as part of the package – this will reduce vulnerability to water shortages during times of disaster.

## Approach

The survey was designed to identify the key priorities for rebuilding people's lives after cyclone Pat. The questions are focused around sustainable livelihoods and how these have been affected by the cyclone, including the identification of possible solutions for sustainable recovery efforts. NOTE: this survey will complement the range of assessments that are already being undertaken (building cost, agriculture, environment, health and education). The approach to the assessment was based on the following:

- **Guiding Questions:** were developed as the basis for semi-structured interviews and used as a guide. They were based around the following: provide an open-ended opportunity for the communities to discuss the future recovery needs; to expand on the housing issue; to identify opportunities for local economic recovery; and to reduce risk of future disaster events. We acknowledge the contributions from UNISDR and UNOCHR for the provision of guiding questions relating to risk reduction and protection respectively.
- **Focus Groups:** one of the most effective forms of qualitative participatory assessments is to use focus group discussions. Where possible separate focus group discussions should be held for: women; men; youth; and those with 'special needs. This can be complemented by interviews with key individuals that may provide perspectives beyond the scope of organized focus group discussions.
- **Accessing communities:** the team observed the protocol used for accessing communities in Aitutaki and were guided by Government representatives.
- **Roles in the team:** the team nominated for each interview / focus group discussion an interviewer; a note taker and where possible someone needs to translate to the rest of the team during the focus group discussions.
- **Stakeholders:** the assessment focused on community groups (in Tautu), women's groups (Amuri, Nikaupara, Arutanga and Vaipae), the mayor and the Council, builders already active in the recovery phase, the business community, NZ Army, school children (Araura College Form 6 students), other members of the public administration and a representative of Habitat for Humanity.

- Assessments: the assessment was carried out in conjunction with other assessments (such as the MOIP detailed review of damage cost to homes) and was based on a review of the following completed assessments: MOIP Rapid Assessment of Cyclone Pat Damages, Government of the Cook Islands, February 2010; Red Cross Assessment of Cyclone Pat Damages, February 2010; Ministry of Agriculture Assessment; Ministry of Education Assessment; Ministry of Health Assessment; UNDAC Assessment and Final Report.
- The Team responsible for conducting the field assessment in Aitutaki, included:  
*Moortaza Jivanji*, Disaster Risk Management Programme Specialist, UNDP  
*Elizabeth Koteka*, Director, Central Planning and Policy Office (CPPO), OPM  
*Mrs Nooroa Numanga*, Director, Disability Cook Islands, INTAFF  
*Ms Vaine Wichman*, Strategic Planner, CPPO, OPM

## Summary of Meetings held on the island

### 1. Women's Groups and Community Meeting (Amuri, Tautu, Nikaupara, Arutanga)

There was a general agreement that preparations to the best of their abilities and resources had been done before the onslaught of the cyclone, although there was an observation that no one had expected the level of damage experienced today.

In every women's group meeting there was a sharing of the psychological impact the storm now has on them, suggesting the rawness of the experience still in their minds.

The women were clear on their priorities towards long term recovery: roofing iron, timber and nails to repair the partly damaged houses and the houses that had lost roofing, in order to protect the home contents, and preserve the current status of the house otherwise it will deteriorate rapidly left open to the weather elements.

There was difference of views on which homes should be repaired first: those totally destroyed and/or those partially. Generally it appears that all the homes need to be repaired and restored if they can, but the issue of protecting home assets and appliances suggests emphasis on repairing and restoring partially affected homes and dealing with the completely destroyed homes (that are occupied) in a coordinated manner.

Looking forward, food security not a burdening issue, the shops are flush with food, though some of their plantations are damaged they can harvest now and cool store, the new plantings will sustain them in the upcoming months.

In terms of income earning opportunities, most are mothers and have access to the child welfare benefit, which supplements other forms of income they receive from husbands, children overseas and their own individual effort to raise funds to keep their home ticking over. The CICC women in three villages have access to a revolving fund administered by their executive which helps to improve home environment by encouraging women in groups to lend and then pay back after three months. Projects completed include tie dye, baking and sewing with the products being sold at the market to visitors and Aitutakians. The general

observation however is that women mainly work in groups to achieve an occasion and then disperse to do their own thing in the home, and so consistency in production is challenged. One group highlighted the time factor in women's lives, for instance the effort involved in income earning activities is tailored along the work of the women in the home, and the obligations of their home to community obligations.

There was feedback on distribution processes and the need for the relief supplies and equipment to be shared equally to all homes rather than to the destroyed and damaged homes, given that the people in the unaffected homes are also supporting members of the destroyed/damaged homes. Also there was strong conclusions that a particular village was being ignored in the restoration of power and amenities.

There was a general agreement that it is important that Aitutakans also take charge of the reconstruction phase, but working with the volunteers and technical support to rebuild their homes. If a basic shell could be provided to those who have lost everything then these households could work to completed the house at their pace and strength.

All women's groups want Aitutaki to return to pre-Cyclone Pat conditions, where Aitutaki was truly their island paradise.

## **2. Consultation with Students (Araura College Form 6 students)**

They felt that the warnings were not enough, and although they were all sent home to assist their families prepare, it appears as young men and women they did not know what to expect. In hindsight they did advise that this experience has made them more aware of the need to take warnings and preparations seriously (their comments on underground power, mosquitos, and helping in the immediate aftermath of the disaster).

Their prioritization of immediate needs confirms their place in their home, and also highlights their understanding of sustainability (replanting crops to eat, fixing damaged houses, and being watchful to health issues).

Whether it was because of the impact of the cyclone or the way the question was presented, their immediate concerns after 6 months related mainly to developing an early warning system with good information and communication of cyclonic weather to the population, and ensuring essential service like electricity is available during the storms (underground lines).

Generally there is an understanding that these children (those that complete school) will travel overseas in the next few years (either for education or work). However they all believe they will return to the island one day. Why they will return, for most of them it is family that will bring them back.

Their vision for Aitutaki? Top tourist destination, paradise, the way it is.

The suggestions above shows convergence and divergence of vision.

## **3. Outcomes from Business Sector meeting**

A meeting was held with representatives from the business community, mainly with those involved in high end tourism operations on Aitutaki. Key issues arising from the meeting were:

- **Employment base:** the main issue underlined by the business community was the potential impact of outward migration the island as a result of the cyclone. This would severely undermine the employment base for the tourism sector;
- **Response by the industry:** the tourism sector played a significant role in responding to the impacts of Cyclone Pat. This included the continuation of wages provided to those staff that were severely affected; the employment of local people for clean-up activities;
- **Power:** impacts on these were a major constraint to the development of the island. Given that power cables are overland, these are significantly vulnerable to disaster events;
- **Telecommunications:** although the telecommunications lines were restored rather rapidly, there is a need to install back-up power. Furthermore, the telecommunications hardware on Aitutaki is relatively old and would benefit from modernizing. A potential barrier to improvements in the telecommunications sector is the monopoly power currently being held by Telecoms;
- **Insurance:** most operators did not have adequate insurance to cover losses resulting from the cyclone. The main obstacle to access to national and international insurance markets was the high excess rates and premiums imposed by the insurance companies (due to the high risk profile of islands in the Pacific that are exposed to cyclones and other extreme events);
- **Government:** a number of concerns were raised regarding the Government's capacity to respond quickly to these recovery needs.
- **Institutional Structure:** this needs to be clear in terms of who is responsible for managing the recovery process.

The following concrete recommendations regarding recovery opportunities were made by representatives at the meeting as follows:

- **Tourism Sector Response:** the tourism operators (in general) had communicated with its key stakeholders within Cook Islands and overseas, on regular updates. As such tourism activity was not severely compromised as a result of the cyclone. This has implications for future extreme events in terms of the active involvement of the private sector in the relief phase;
- **Access to affordable finance:** this is key not only to assisting those families that were severely affected by the cyclone, but also to stimulating and maintaining local economic activity and providing opportunities to diversify the economic base of the island. This can come through relief on current interest payment obligations, access to low-interest seed funding for small businesses, and cash handouts to affected families;
- **Message of Hope:** in order to deter the threat of outward migration, the communities on Aitutaki need a message of hope from the Government, and they need it fast. This should focus on two things: HOMES and JOBS.

#### 4. Outcomes from Island Council/Mayor meeting

A meeting was held with the Mayor and representatives of the Island Council. The following issues were raised in relation to the recovery process and priority needs of the affected communities:

- **Power lines:** there is an opportunity to re-route the main power lines underground. This was already work in progress before the cyclone. This also happened in Manihiki – therefore a precedent has already been set.
- **Evacuation Centre:** the Hospital is not suitable as an evacuation centre. The schools have stronger structures to withstand cyclones and high winds. However, there still needs to be a major investment in the designated evacuation shelters i.e. building codes and back-up power supplies



- **Injuries:** clean-up activities led to a number of injuries. Therefore, greater care and the application of basic safety standards needs to be in place following a major disaster.
- **Broader health issues:** apart from injuries during the clean-up there were no other reported health issues or outbreaks resulting from the cyclone impacts. There may be an issue with stagnant water and vector borne diseases – this will need to be investigated further.
- **Access to Shipping:** this is relatively constrained and therefore impedes recovery and reconstruction efforts
- **Housing reconstruction:** should use this as an opportunity to install adequate water tanks (rain-water) in each new house that is built as part of the design