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# **5. PITCAIRN**



# SYNTHÈSE DE L'AVANCEMENT DU PROJET À PITCAIRN

		RÉAL.	<b>BUDGETS ET DÉPENSES</b>			
SITES / CODE T6	ACTIVITÉS	TECH.BUDGETS ( $\epsilon$ )DÉPENSES ( $\epsilon$ ) $(\%)$ DE CONSO $(112\%)$ $(112$		DÉPENSES (€) (% DE CONSO)		
C2P1	Integrated waste management plan (gestion des déchets)	$\odot$	86 192 €			
C2P2	Erosion control (Prévenir l'érosion des sols)	$\odot$	113 130 €			
C2P3	Sustainable management of resources (Gestion durable des ressources)	÷	87 813 €			
C2 TRANSVERSAL ACTIVITIES	Other transversal activites and regional expertise Autres activités transversales et expertise régionale	Ċ	81 405 €	55 057 € (68%)		
	Réserve (reste à budgéter)	$\odot$	3 060 €	0 €		
		TOTAL	371 600 €	217 007 € (58%)		
🕐 activitá finalicáa 🕐	activité pas tout à fait finalisée 🤃 activité romise en sause					

😊 activité finalisée - 😑 activité pas tout à fait finalisée 🛛 😁 activité remise en cause

Les fiches sont en anglais, dans leur version originale.





# **PN-C2P1 : INTEGRATED WASTE MANAGEMENT PLAN**

OBJECTIVES AND MEANS	STATUS						
IMPROVE PITCAIRN'S WASTE MANAGEMENT BY DEVELOPING, ADOPTING AND IMPLEMENTING AN INTEGRATED WASTE MANAGEMENT PLAN	TECHNIC	<b>AL</b>	$\odot$				
Formulate satisfactory and cost-effective protocols for integrated waste manage- ment, including the management of domestic waste, used oils, batteries and chemicals (including pharmaceuticals); and create the enabling conditions for implementing the	<b>FINANCI</b>	AL .	112 %				
adopted action plan. 2 actions: 1 Write and adopt and integrated management plan	BUDGET	EXPENSE	S BALANCE				
<ul> <li>Implement the decided protocols</li> <li>Wood Chiper</li> </ul>	€86192	€ 96 269	9 €-10077				

### **OPERATORS**

**1 2 3** ENVIRONMENT, CONSERVATION AND NATURAL RESOURCE DIVISION (NRD)

### **OBJECTIVES**

The expected outcomes and planned activities was to construct a recycling centre on Pitcairn, to purchase recycling bins for domestic and commercial use and to purchase glass imploding machine

### **PROGRESS AND RESULTS**

Despite a postponed start due to the limited work force work, they have been renewed commitment to have the activities completed within the project period. But the workforce on Pitcairn can finally be applied to the waste management project.

A SPREP consultant visited Pitcairn Island in June 2016 to assess the Island's waste management needs and to produce a Waste Management Plan. The consultant noted that Pitcairn's population of approximately 50 people produces around 10 to 15 bags of rubbish a week. Recommendations were made to improve the management of the landfill which has been put in place. These included no longer burning waste but instead the use of a swallower pit and compacting the rubbish using bulldozer or similar. Recyclable rubbish is now separated by the households and collected and stored for recycling. Rubbish and recycling bins have been provided to households as part of the project. The glass crusher, plastic shredder and recycling facility are now in place.

The Operations Division Manager carefully planned the new waste management facility, recycling and green waste area and rubbish dump using a program called Autocad. The site is designed to be user friendly creating a safe environment for both GPI employees and community. The location for the waste management site has been cleared and is ready for construction. The location will have two areas one for recycling and the other for green waste, storage of mulch and soil for community use.

The wood Chippers have been procured and procurement procedures followed for the recycle centre. Three wood chippers have been procured, capable of handling small and large tree trunks, for wood chipping, and the other for chipping plastics/polystyrene. The ECNR and Operations Divisions will conduct a workshop with the community explaining the new waste management facility, importance of recycling, and the use of mulch. The new waste facility also brings a renewed commitment to recycling plastics and glass products. Used glass bottles and jars will be utilised by the Pitcairn Glass Artisans made possible through the INTEGRE Project Turning Glass Waste into Souvenirs. Plastics will be chipped and reused as aggregate in concrete roads.





# **PN-C2P1 : INTEGRATED WASTE MANAGEMENT PLAN**

### AGENDA 123

		20	14		2015				2016				2017				2018
	I	П	III	IV	I	П	III	IV	I	Π	III	IV	I	II	III	IV	jan.
Initial																	
Revised																	

### **COMMENTS AND ANALYSIS**

The completion of the Alternative Harbour required almost the full commitment of the Island's workforce and heavy equipment. This caused the INTEGRE project to be delayed.

A new Waste Management building has been erected and the glass crusher, plastic shredder and recycling facility are now in place.

But the visit by Alice Leney was then extremely valuable it gave him the chance to actually see Pitcairn general rubbish, recyclables, hazardous waste and bulk waste such as 200 litre drums etc. General waste surveys that are developed for other islands are not always applicable to another and therefore it is most beneficial for field visits as a starting point. Alice managed to capture Pitcairn requirements within his waste management plan and it was an easy read for all to understand leaving out the technical jargon.

Lessons learned: the project needed a dedicated manager to ensure momentum was maintained. Too many distractions caused the work to falter on a number of occasions and resulted in increased pressure



towards to end of the project to get purchasing completed before the deadline.

It was identified that Pitcairn needs to reduce the number of initiatives it undertakes within the regional projects. It does not have sufficient managers to oversee a large number of undertakings.

While recyclable items are being collected no arrangement exists at present for removing it from the Island.

The budget for the waste management activities was exceeded by €10,000 larger due to the higher than expected cost of the required shredders.

Regarding the follow up, waste collection and disposal is a critical part of remote Island life and is vital for a successful community. The new facilities will improve the process and a new role within the Public Works Division has been established to ensure oversee the ongoing operation.





# **PN-C2P2 : EROSION CONTROL**

OD JECTIVES AND MEANS		STATUS	
<b>OBJECTIVES AND MEANS</b> ENSURE SECURITY AGAINST LANDSLIDES AND MAINTAIN THE QUALITY OF THE SOIL ON THE ISLAND	TECHNIC		<b>37</b> %
<ol> <li>Mat and replant priority areas subject to erosion</li> <li>Install culverts to divert storm water and prevent erosion</li> </ol>	BUDGET	EXPENSES	BALANCE
	€113130	41 330 €	71 800 €

### **OPERATORS**

**12** ENVIRONMENT, CONSERVATION AND NATURAL RESOURCE DIVISION (ENCR), OPERATIONS DIVISION

### **OBJECTIVES**

The objectives of this activity were to ensure security against landslides and maintain the quality of the soil.

### **PROGRESS AND RESULTS**

Soil erosion was the first component of the project to be completed. This Activity area was relatively straight forward and focused on repairing existing areas of erosion and installing culverts to help divert storm water away from areas where it could do damage.

This component of the project included a pilot employment programme employing three external workers from French Polynesia to help with capacity issues on island.

Soil erosion mats (Enka and Coconut) were installed in various areas on the south and eastern sides of the island where the soil erosion was extreme and much of the top soil blown away.

Over 1000 plant cuttings, a variety of native and exotic plants, were propagated at the local nursery to plant out in the areas. The mats are holding the soil in place and some plants have taken root.

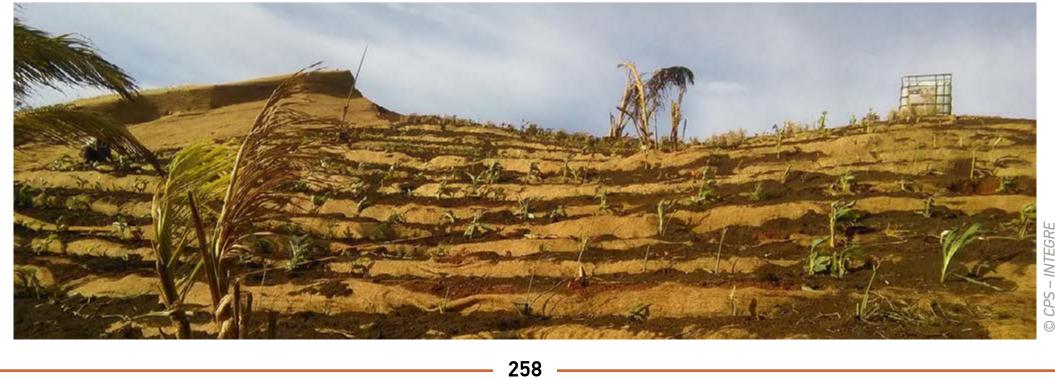
Work on replanting continues and Island is already showing visible signs of significant re-growth. The replanting program has been adopted by the ECNR Department and has become part of their regular work schedule. Pitcairn is fortunate in that it is a very small Island covering only 5 km<sup>2</sup> so the work while important was achievable with the assistance of the external workforce.

Work on culverts recommenced in June 2017 and culverts are being installed in various areas. The culvert installation has been delayed due to the necessary machinery being utilised at the Alternative Harbour project and a small workforce.

The problems encountered are that the availability of heavy machinery due to the Alternate Harbour Project taking priority, prevented the installation of the culverts. Work was halted on the installation of the culverts, as the heavy equipment could not be easily relocated between the sites.

The installation of culverts will commence in conjunction with the territorial EDF 10 project, concreting of the roads activity.

Both the ECNR and Operations Division Managers participated in the projects activities by providing instruction to the workforce. The PIO prepares the Cashbooks and liaises with the ECNR Division Manager.

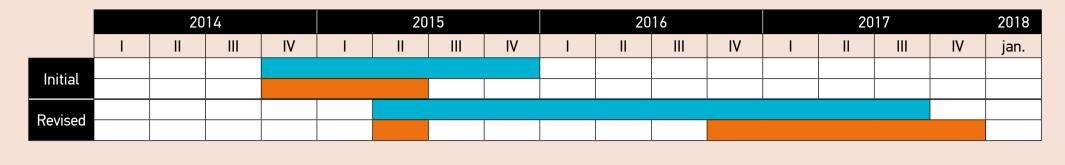


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# **PN-C2P2 : EROSION CONTROL**

### AGENDA 12



### **COMMENTS AND ANALYSIS**

Progress of this activity has been slow due to a number of contributing factors such as harsh weather conditions at both sites, dry weather conditions and water conservation, available machinery and man power. Throughout this project, Pitcairn have gained a wealth of knowledge and have identified its strengths, weaknesses and project planning when there are multiple projects on the go.

The need for not so many projects being undertaken at one time has been clearly identified. The INTEGRE Project contained far too many initiatives to be adequately managed by the work force Time pressure on installing the culverts came mainly from the Island's heavy equipment being not available was also a hindrance to progress.

Better planning was needed and this has resulted in the need to establish

clearer and more regular communication between all parties as well as the need for a dedicated project manager in future projects.

The use of off island labour was largely a success but it needed to be far better managed. Contracts and expectations were not clearly set out prior to the work forces arrival on Island. There were also language differences, which made communication and dispute resolutions difficult. In future the GPI will be more actively involved in the recruitment process with more focus put on clearer contracts and emphasis put on some degree of speaking English.

There were also issues around the setting of budgets. The amount of matting and culverts was over estimated and was largely responsible for an under spend in this area of around €72,000.





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# **PN-C2P3 : SUSTAINABLE MANAGEMENT OF RESOURCES**

OBJECTIVES AND MEANS	STATUS						
SUPPORT LOCAL INITIATIVES TO PROMOTE PITCAIRN HERITAGE AND DEVELOP SMALL- SCALE BUSINESSES	TECHNIC	AL	$\odot$				
	FINANCI	AL	28 %				
<ol> <li>Promote Pitcairn's culture through participation to international events </li> <li>Set up the first botanical garden of Pitcairn </li> </ol>	BUDGET	EXPENSES	BALANCE				
3 Commence a glass blowing souvenir industry using local glass waste 😑	€ 87 813	€ 24 530	€ 63 283				

### **OPERATORS**

#### **2** CAROL WARREN

**3 JACQUI CHRISTIAN** / UNDER COORDINATION OF ENVIRONMENT, CONSERVATION AND NATURAL RESOURCE DIVISION

### **OBJECTIVES**

The objective of this activity was to support local initiatives to promote Pitcairn heritage and develop small-scale businesses.

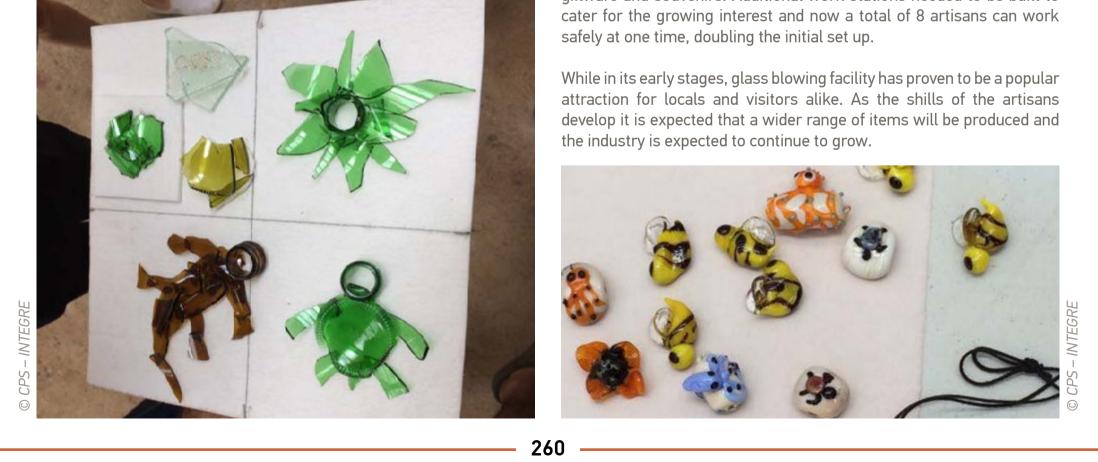
### **PROGRESS AND RESULTS**

#### 1 C2P31 - International events

It is difficult to identify suitable international events that match the Claymore II rotations.

#### 🙎 C2P32 – Botanical garden

A new nursery incorporating a botanical garden was constructed in 2016 and has been very successful in helping propagate plants to be used in the replanting of the areas affected by erosion. Plants are now being propagated and ready for planting out. A plant layout plan has been drawn and land has been cleared ready for further development and planting. Site has also proved to be of interest to visitors to the Island helping to develop understanding and appreciation for the Island and its natural resources.



#### C2P33 – Glass waste to souvenirs

This activity started quite late in the project. In 2017, suitable equipment was sourced and shipped to Pitcairn to setup the glass studio. A glass artist expert was sourced and arrangements made for her and her team to travel to Pitcairn in August 2017 to establish the facility and provide initial training.

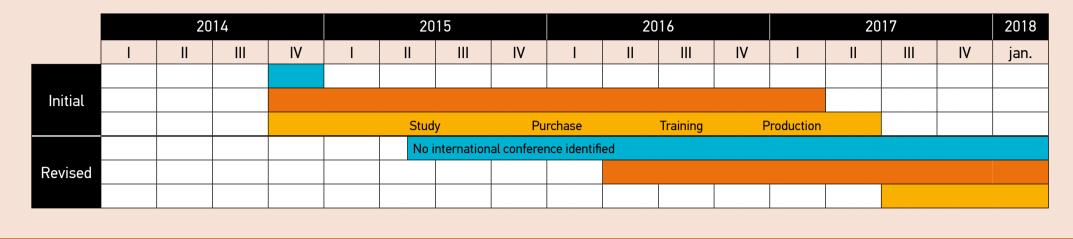
The ECNR in consultation with the Island Council secured the use of Government land for the establishment of the Glass Centre. A temporary glass blowing facility was established in the town centre while a new building was sourced from New Zealand. Training was made available to all those in the community who were interested and over 50% of the adult resident population attended the training.

The facility opens to the community for those who wish to produce giftware and souvenirs. Additional work stations needed to be built to



## **PN-C2P3 : SUSTAINABLE MANAGEMENT OF RESOURCES**

### AGENDA 123



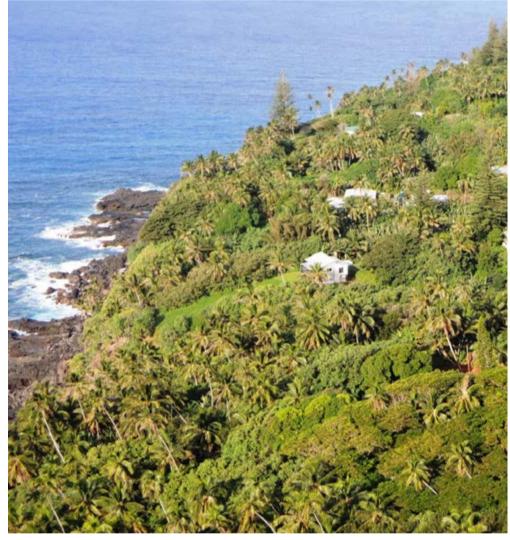
### **COMMENTS AND ANALYSIS**

Both initiatives were successful but the glass blowing facility struggled to get started due to the lead person having left the Island. It is now realised that the project should have been formally handed over to another Pitcairn resident, rather than it being managed remotely as the momentum was lost. This was a bigger project than expected and the funds allocated to it were not properly used to outsource some of the more technical work. There was a significant under spend of the budget of more than €56,500 largely due to an over estimation in the costs of training and building the workshop.

Regarding the follow up, both initiatives have proven to be of value to the community which is the best way to ensure their continued success. The botanical garden has been put under the care of the Natural Resources Division which provides it with the financial and staff resources it needs.

The Glass blowing facility is about to move into its new permanent building with increased work space and storage for individual artisans. Interest remains high and visitors are responding well to the jewellery and gifts being produced.

Unfortunately, a number of purchases were made without respect of the EU/SPC procedures and there are some ineligibles expenses that SPC had to withdraw from the expenses because they did not respect for example the rule of mandatory 3 quotes.







resources of timber and tock accounted for the perhistoric habitation of the island.

It is also thought that the polynesians introduced a lot of plants to the island such as <u>Banana</u> (Musa x paradisica). <u>Coconut</u> (Coco nucifera). <u>Taro</u> (Corlocasie escutenta), <u>Swamp Taro</u> (Cyrtosperma merkusii) and probably even the famous breadfruit (Actocarpus atilis). All these plants are found at this stop.

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have been thrilled to discover some of their familiar food plants growing on Pitcairn left behind by their ancestors

Since then new plant uses have been developed using both Polynesian and English ingenuity. The people of Pitcaim today have many uses for the islands plants.

The pretty hand made carvings are made from the timber of <u>Miro</u> (Thespesia populnea) and <u>Tay</u> (Cordia subcordata). Some fine old Miro trees are found at this stop. – INTEGRE

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# **PN-C2PPLN : OTHER TRANSVERSAL ACTIVITIES** AND REGIONAL EXPERTISE

OBJECTIVES AND MEANS	STATUS						
IMPROVE PITCAIRN'S INTEGRATION IN THE PACIFIC NETWORKS, SHARE THE INTEGRE EXPERTISE AND INVOLVE THE POPULATION IN THE ENVIRONMENTAL MANAGEMENT	TECHNIC	AL					
OF THE ISLAND	FINANCI	<b>AL</b>		68 %			
Note that all the former activities contribute to this one.	BUDGET	EXPE	NSES	BALANCE			
	€ 81 405	405 € 55 0		€ 26 348			

### **OPERATORS**

**ENVIRONMENT, CONSERVATION AND NATURAL RESOURCE DIVISION (NRD)** 

### **PROGRESS AND RESULTS**

No resources were able to be allocated to these activities. During the 2017 year Pitcairn's available workforce was committed to the other activities within the IN-TEGRE Project or the EDF9 Alternate Harbour.

Agriculture training - Consultant visited Pitcairn and conducted field workshops for the community. Fisheries - Consultant visited Pitcairn and conducted workshops with local fisheries and a report was provided and used in developing a draft Fisheries Management Plan.

Those field visits of the consultants provided by the projects in fisheries, organic farming and waste management were very useful. The Division Manager and the Darwin Project team continue to liaise with Hugh Govan for assistance in reviewing the draft





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Fisheries Management Plan for Pitcairn Islands.

The Division Manager has continued to liaise with Alice Leney on recyclable products and equipment. There is also a link with the CANC in New Caledonia for the organic farming.



# PN-C2PPLN : OTHER TRANSVERSAL ACTIVITIES AND REGIONAL EXPERTISE

### AGENDA

	2014				2015			2016				2017				2018	
	Ι	Π	III	IV		I		IV		Ι	III	IV	1	II	III	IV	jan.
Initial																	
Revised																	

### **COMMENTS AND ANALYSIS**

None of the activities were achieved. Of the €81,405 allocated to these activities only €37,615 was used to fund the shipping to Pitcairn of the materials needed for other INTEGRE initiatives.

Field visits are extremely important as it provides valuable training, information and interaction to the local community. Since the 2016 visit locals are more conscious about recycling, gardening has taken a new leap with locals implementing their own garden beds for vegetables, the use of mulch and soil nutrients, etc.

Regarding the problems encountered and the impact on planned actions, there was a focus by the community to complete the Alternative Harbour which still required some construction work.

This became the priority so that EDF 9 could be completed and thus absorbed the main work force on Pitcairn for around nine months. The result was that all other project work was delayed.



In terms of lessons learned, it is clear that Pitcairn tried to take on too much under this Project. It has been clear that the Island only has the resources to manage one or two larger projects rather than a large number of smaller ones. Each project needs a dedicated manager and there are not enough people with that skill set available.

Some costs incurred on the Island could have been applied to the INTEGRE project but the internal processes and controls were not sufficiently in place to meet EU criteria and compliance.

This was also a consistent issue with the other Activities undertaken in INTEGRE.

In terms of follow up, there is still interest in organic farming on Pitcairn and this will be pursued as time and funding allows maybe in the regional EDF 11 but this will now need to be financed through UK budgetary aid which has restrictions.



