



Darwin Initiative for the Survival of Species

Annual Report

Project title	Madagascar Marine Biodiversity Training
Country(ies)	Madagascar
Contractor	The Society for Environmental Exploration
Project Reference No.	162/10/021
Grant Value	£ 40,500
Start/Finishing dates	01 October 2001 – 30 September 2002
Reporting period	01 April 2001 – 30 March 2002

Contents

	Page No.
1. Project Background	3
2. Project Objectives	3
2.1 Purpose	3
2.2 Objectives	3
2.3 Operational Plan	4
3. Project Progress	4
3.1 Project Logistics	4
3.2 Training	5
3.3 Habitat Monitoring	5
3.4 Monitoring and Evaluation	6
3.5 Selection of Trainees	6
3.6 Training Methods	6
3.7 Problems Encountered	8
3.8 Enhancement to the Project	8
4. Partnerships	9
5. Impact and Sustainability	9
6. Outputs, Outcomes and Dissemination	11
6.1 Project Outputs	11
6.2 Publications	13
6.3 Dissemination Activities	13
7. Project Expenditure	14
8. Monitoring and Evaluation	15
8.1 Monitoring	15
8.2 Progress	15
Appendix 1: Logframe	
Appendix 2: Baseline Timetable	
Appendix 3: Training Methods	
Appendix 4: Timetable Year 2	
Appendix 5: Outputs Schedule	

1.0 Project Background

The project is based in the region of Anakao in south west Madagascar. The longest uninterrupted barrier reef in Madagascar is situated off this coastline and this along with the intertidal ecosystem is the location of a major artisanal fishery targeting a wide variety of marine fauna from crustaceans and molluscs to dolphins and turtles. The area also supports about 320,000 ha of mangroves. The region is also the location of the most recent catch (March 2001) of the most sought after living fossil, the coelacanth (*Latimera chalumnae*).

Threats to the marine environment in the area include localised resource degradation in particular of coral reefs and mangroves, through destructive and inefficient practices; the ecological impacts of fisheries, sedimentation and the erosion of inland watersheds. Overfishing is becoming a serious problem in this area, influenced considerably by an increasing coastal population. The regions mangroves are intensively exploited for firewood, building materials, aquaculture and livestock grazing and tourism is increasing rapidly in the area attracted by the reef-related activities. As recently as 1999 there was only one hotel in the project area, there are now seven hotels.

Many policy reports concerning the marine environment of Madagascar have recommended that coral reef surveys should be carried out to determine their status and that the establishment of marine parks should be seriously considered. Anakao has been identified as a high priority site for biodiversity protection and the development of eco-tourism.

The local marine research institute the Institute Halieutique et des Sciences Marines (IH.SM) has identified that a major lack of time and funds have been made available for the requirements of the marine and coastal component of the National Environmental Action Plan (PNAE), to achieve anything more than rapid surveys of a limited number of coastal sites. It is also recognised that there is a lack of funding provided for Malagasy students to conduct practical field projects in marine resource monitoring and assessment. Local fisheries officers also lack the capacity to undertake monitoring and protection of these marine resources. The only currently protected area in Anakao surrounds the island of Nosy Ve. Protection is in the form of a "dina" a community management project run by a local NGO FIMIMANO, however, this is not recognised or respected by anyone other than the local communities of Anakao. FIMIMANO is comprised of representatives of the six villages with interests in Nosy Ve however, these are ordinary village members and lack the basic skills and baseline information to develop a habitat management plan for the area.

2.0 Project Objectives

2.1 Purpose

To create a core team of expertise with the necessary skills to collect marine baseline data, and to manage and monitor resources in the Anakao coastal region through implementation of a long-term monitoring plan.

2.2 Objectives

- To aid marine resource security by providing skills to monitor and manage marine biodiversity.
- To train 24 fisheries officers, community representatives and personnel/students of the Institute of Oceanography and Marine Science (IH.SM) in sustainable resource use and marine biodiversity survey/monitoring methods.
- The trainees will form core team expertise, with the necessary skills to collect marine baseline data, and manage and monitor resources in the Anakao coastal region.

- To establish four permanent monitoring sites and to develop a long-term monitoring plan for the Anakao coastal region for inclusion in the National Environmental Action Plan (PNAE).

Logframe included in Appendix 1

2.3 Operational Plan

Delays to the start date In the first instance the proposed start date of 01 July was put back to 01 October 2001, this was agreed with the Darwin Secretariat and detailed in a revised set of project schedule documents. This delay involved the setting back of the whole project timetable by three months, however, this has simply extended the completion date and has not affected any aspect of the project.

Delays and changes to the training schedule Initial preparation for the training programme including selection of trainees, took up more time than anticipated and delayed the start of the first training period. Furthermore, upon closer examination it became clear that the levels of education, interaction with the environment and roles in the management of marine and coastal resources differs significantly between the different groups of trainees and that the training needs and approach of each group would be different. Following planning meetings with the project partners and beneficiary groups, it also became apparent that there would be issues of availability particularly among fisheries officers and community representatives. As a result the training programme schedule has been adapted to accommodate participants needs and availability. It was therefore proposed to develop individual training courses for each group and to run these as separate units.

Originally, six trainees were to be trained in each eight-week period, comprising three students, and three fisheries officers and / or community representatives. Students of IH.SM will continue to be trained each quarter though in larger groups. Five community representatives were trained as a group during the period of January to March 2002, and their training will be completed in April 2002. Seven fisheries officers will also be trained separately in two groups during April and June 2002.

3.0 Progress

The project began on 1 October 2001. October was mostly spent meeting with project partners and collaborators. The final phase of planning for a comprehensive training programme was defined in collaboration with the project partner institution, IH.SM (Institut Halieutique et des Sciences Marines), and several other organisations that will benefit from the project. It was decided to begin the programme slowly and once well established, increase its speed and capacity. Therefore, the first training sessions for IH.SM students began in November and stretched over a longer period of time than initially planned, finishing in March 2002. Now that all logistical components are in place, the programme has potential to increase the number of participants trained in each quarterly phase. Project staff also attended a workshop concerning the Nosy Ve reserve and sustainable management needs for the zone. Members of FIMIMANO will comprise the community representatives to participate in the training project.

3.1 Project Logistics

Staff recruitment (with IHSM) The Project Co-ordinator and Trainer were recruited as planned and began work on the project in October 2001. Recruitment of the Malagasy Counterpart Trainer turned out to be more difficult than anticipated. An individual, also known to the Project Co-ordinator, was recommended for the post by the Director of IH.SM,

however, she was busy completing work on a community project and could not take up the post until January 2002.

Equipment Purchase All capital items have been purchased as necessary, most importantly individual snorkel sets for each of the trainees. A boat and radios were provided by the Society for Environmental Exploration for use in the training activities, as planned.

Trainee selection During October and November 2001, meetings were held with a number of representatives of local stakeholders with a view to selecting trainees to participate in the project. These included: the Director of IH.SM; the directors of the marine department and of the environmental zone management department of ONE (Office National de l'Environnement), the president and members of the NGO FIMIMANO; the regional officer responsible for Higher Education in Madagascar and with the Director of the Ministry of Fisheries in the local region. At the end of October three students from IH.SM and six community representatives, members of the NGO FIMIMANO were selected to participate in the training. Fisheries officers were finally selected in February 2002.

The training building One of the main aspects of the set up of the training program was the construction of a house to welcome the trainees on the marine research camp. It took six weeks to build the structure. The training building includes a large sleeping and living area and a science room, where books and snorkel equipment will be kept. An outside veranda provides an ideal ventilated place for lectures during the heat of the day. The final building is very satisfying and all trainees that have already used it gave very positive feedback.

3.2 Training

Training Period one The content and methodology for the training programme was compiled during October and November and was developed by project staff in collaboration with the Director of IH.SM. Following the decision to begin the training programme more slowly than originally planned the first training period lasted from the end of November 2001 to the end of March 2002. During this time 3 students from IH.SM and 5 community representatives from the local NGO FIMIMANO received training.

Training period two The planned second training period between January and March 2002 merged with the first training period due to the late start of the training programme and re-organisation of the training pattern.

Local workshops One workshop was held at the end of the training period, this was attended by: project staff and trainees, the Director of IH.SM, the Dean of the Science Faculty at IH.SM, the Dean of the Art Faculty at IH.SM, the Director of the regional Fishery Department, the Director of the National Environment Office (ONE), and professors and students of IH.SM. Following an initial presentation about the project by the Project Co-ordinator, the project trainees presented the findings of the personal projects they had undertaken as part of their training. There was a very active session of questions and answers and an address by the Director of IH.SM. Lunch was provided and informal feedback received. The workshop was also attended by representatives of local radio and regional television companies who broadcast interviews and coverage of the event.

Training Manual Preparation Work began on the preparation of the training manual through the development of the various teaching methodologies used in the first training period. These will be reviewed and amended in light of feedback from the first training period.

3.3 Habitat Monitoring

Permanent monitoring sites One permanent monitoring site was identified during this period.

3.4 Monitoring and evaluation

Monitoring / evaluation Each of the trainees completed a feedback questionnaire based on the training they had received. The workshop at the end of the training period was also used as a monitoring event to receive feedback from the trainees and also from the collaborating organisations who assisted with the selection of trainees, the development of the training methodology and attended the workshop.

3.5 Selection of trainees

IH.SM Students At the end of October three students from IH.SM were selected to undertake the first training course upon recommendation by the Director of IH.SM and agreed upon by project staff following preliminary introductions. Discussions were also held as to the possibility of students from COUT (Cellule Océanographique de l'University de Tuléar) also receiving training through the project later on.

Community Representatives Project staff met with the President and all 22 members of the NGO FIMIMANO, which represents all villages in the Nosy Ve and Anakao area. FIMIMANO are responsible for a voluntary community managed reserve based around the island and waters of Nosy Ve. The proposed habitat monitoring plan to be developed by the project will build on and expand this reserve which currently affords very little protection by non-residents of the area. Six community representatives were chosen by the President of FIMIMANO to participate in the training. The president favoured literate participants. It transpired that one of the representatives was unable to attend however, the training programme went ahead in February with the five community representatives.

Fisheries Officers In early November the Project Co-ordinator met with an officer responsible for Higher Education in Madagascar and with the Director of the Ministry of Fisheries in Tuléar (the local region), with respect to selection of fisheries officers to participate in the training project. Final selection of the fisheries officer trainees was not made until February following several meetings to discuss the issue. All proposed trainees were interested in taking part but availability will remain the difficult part. As a result, dates of training workshops had to be adapted to the participants' work schedule. Their training will then start at the end of April for some of them and the beginning of June for the others.

3.6 Training Methods

The objectives of the training programme vary slightly with the different categories of people targeted by the training programme. Indeed, the level of education and capacity for learning is different between students, community representatives and fisheries officers. Therefore, even if the aim remains the same, the approach to achieving it is different, hence the specific methods for each group have been defined as follows and separate training programmes developed to meet the objectives and needs of each category of trainee.

The program originally aimed at training 24 Malagasy people (three students, three community representatives or/and fisheries officers per phase). However, now that the programme has been developed into three categories training will be undertaken in different sized groups. Furthermore, due to the initial late start to the programme and the lower number of individuals trained in the first 6 month period (eight as opposed twelve) larger groups will be trained in subsequent phases. Due to a good logistical set-up in terms of accommodation and facilities on the project this will be possible.

IH.SM Student Training The programme methods were developed between the Project Co-ordinator, Trainer and Director of IHSM to meet the needs of the students, building on their existing knowledge. The programme can be divided into three components comprising

theoretical training including new subjects for the students such as management; a practical component including applied survey techniques and personal projects with applied fieldwork. The first training period was stretched over a six month period and was planned around the trainees availability. All of the lectures were given by the Trainer.

The personal projects undertaken by each IH.SM student went extremely well. They undertook their fieldwork in a very professional manner and obtained a considerable amount of data in only two weeks. Areas covered:

- survey and monitoring techniques
- management approaches
- project set up and running
- connections between scientific survey and management planning.

Community representatives The training programme ran for significantly less time than the student programme as it was considered that a longer training would not have been successful since trainees might lose concentration and interest in the subject. Training will therefore be provided for two weeks, this will be divided into two separate weeks. This is considered to be the maximum time trainees can make available, and also the maximum level of information they will be able to realistically handle at this point. The lectures were given in Malagasy by the Counterpart Trainer since some of the trainees did not speak French very well. The lectures were prepared by the Trainer and Counterpart Trainer. Originally, it was planned that the trainees would undertake a personal project but it was not considered suitable in this case due to an inadequate capacity to undertake such a project. Therefore, an open discussion/constructive debate about marine issues concerning Anakaio formed the pro-active part of the training workshop. The programme was successful and all trainees showed huge enthusiasm throughout the programme. Areas covered:

- provision of a simple but comprehensive knowledge of the different marine and coastal ecosystems and their interactions
- awareness of the threats to ecosystems and the socio-economic and ecological consequences of habitat degradation
- the importance of community roles in environmental protection plans.

Fisheries officers This training programme will also last for less time than the student training programme due to the full-time work commitments of the fisheries officers. Training will therefore be provided for two weeks which will be the maximum time trainees can make available, this will be divided into two separate weeks. The initial plan was to give a personal project to each trainee but considering their time availability it is not possible to take a further three weeks of their time for full time research. Open discussions and active case studies will occur instead.

The fisheries officer training programme is planned for approximately end of April or beginning May since this part of the training project includes sensitive issues and therefore needs more preparation. However, once the programme is set up and running well, it will be possible to increase the number of fisheries officers involved in the training by running further courses in later months. Areas to be covered:

- provision of additional knowledge in fish population dynamics and different management strategies
- training in survey/monitoring techniques (especially for commercial species stocks)
- the importance of collaborations with other organisations in the process of information collection
- awareness raising and training in methodologies for public education and awareness raising.

A more full breakdown of training methods is included in Appendix 3

3.7 Problems encountered

Delays to the project Several difficulties delayed the start of the project. The first one was recruitment of the counterpart trainer. The person chosen and recommended by the project partners IH.SM was not available to start work until January 2002. The solution could have been to choose another person, although this might have become an even lengthier process. Indeed, the person chosen had already worked with local communities and both project staff and IH.SM felt that she was the most suitable for the position. This delay was not as disruptive to the programme as it could have been, as the preparation work and trainee selection at the start of the project took almost until the end of November and the counterpart trainer's role would have been helpful but not essential to these activities.

Student availability The second difficulty encountered was the availability of the trainees. Indeed, although the schedule of the IH.SM students is not a full time one, the training programme had to be flexible to fit with their academic year. This was overcome by planning training activities around the students other commitments.

Fisheries officer availability The third problem, and not a minor one, was to mobilise the fisheries officers. These are people with busy full-time jobs and the actual political situation in Madagascar makes all processes slower. This problem was overcome by postponing the involvement of fisheries officers in the training programme until a more suitable time for them later in the year. The training programme aimed at the fisheries officers has been reduced to two weeks in order to accommodate their other commitments.

Community representatives Similar problems of availability were encountered with the community representatives, as each has a responsibility to support their families they are also very busy and unable to dedicate eight weeks to training. Furthermore, it was considered that the capacity of these people to learn over such an extended period did not exist. The training project aimed at the community representatives has been reduced to two weeks in order to accommodate the other commitments and learning capacities of the trainees.

3.8 Enhancements to the project

The design of the project has changed in respect to the style of the training programme. As described above account has been taken of the different needs, capabilities and capacities of the three different groups of trainees and the training programme has been amended to accommodate these issues thereby refining the training methods.

Separate training programmes have been put together for the three groups aimed at each groups particular needs, shorter training courses of total 2 weeks training for fisheries officers and community representatives have been developed. These courses will also now be taught separately, and divided into shorter blocks to accommodate issues of trainee availability. The students will receive the planned eight weeks of training spread over the year as originally planned.

In so doing this makes the course far more applicable to the different groups and will enhance the benefits to the trainees from the training.

A timetable for activities during the next year is included in Appendix 4

4.0 Partnerships

The Institute Halieutique et des Sciences Marines (IH.SM) IH.SM is the main project partner to the Society for Environmental Exploration and has been since the Society began work in Madagascar in January 2000. This relationship has gone from strength to strength and the success of the training programme so far has further cemented this relationship.

During the two year period of research undertaken to date three postgraduate students from IH.SM have visited the research project for very short periods to learn about the research programme, however funds were not available to provide them with training in the research techniques. The training programme has been extremely well received and the Directors of IH.SM have asked if it will be possible to train more of their students. In particular they are interested in training in full SCUBA techniques and in the BTEC qualification in Tropical Habitat Conservation that the Society currently awards to international trainees on 10-week field courses. The Society is very keen to pursue this and will work together with IH.SM to secure longer-term funding to expand the training course. If the project is successful in developing a habitat monitoring plan for the Anakao area the project team will also work with IH.SM to prepare a proposal to establish a nationally and internationally recognised protected area in the region, helping IH.SM to implement national policies for marine protection.

FIMIMANO The local NGO FIMIMANO who voluntarily manage a small community based marine reserve around the island of Nosy Ve have collaborated with the Society since the start of the research programme. In the first instance the research programme undertook detailed biodiversity surveys within the Nosy Ve reserve and helped to produce information about the marine resources in the reserve in the form of notice boards and posters for visitors to the island. Through the training programme this relationship has also strengthened, not only through the provision of training to representatives from FIMIMANO but the habitat monitoring plan that will be developed. Currently the dina (community management) of Nosy Ve is respected only by local communities, fisherfolk and tourists from outside of the area do not respect its status and are under no legal obligation to do so. The location of the habitat monitoring plan to be developed by the project will cover a wider area within the proximity of Nosy Ve and if fully accepted will expand and afford greater protection to this marine environment.

Collaboration and Links The success of the project has spread among other NGOs and the project team have been approached by the Wildlife Conservation Society (WCS) who have expressed an interest in organising a similar style training programme for their Malagasy employees.

Based on the success of the training project the Society has also been approached by the University of Tuléar which has recently developed a postgraduate course in Biodiversity and Environment within the natural Sciences Department of the University. The University are interested in integrating students of the course into the Society's Wilderness Research Programme, active in south west Madagascar since June 2001, to provide a course module in practical field research techniques. The Society is now working with WWF dry forest programme and the local NGO ANGAP who are responsible for National Parks in Madagascar, to develop a training programme to meet the requirements of the University course.

5.0 Impact and Sustainability

Local profile Local people are aware of some of the problems but may not know the reasons behind environmental degradation and the consequences of their living and working practices and where they are aware they do not know what potential solutions exist to improve the situation. Therefore, the training project is part of the answer to empowering key people within the local communities with the necessary knowledge so that they can play a role in biodiversity protection and in the management of the marine environment.

The Society has been working closely with the local communities already through the research programme, therefore explaining the project to them was not difficult. The approach is different as the training project involves trainees staying at the research camp and participating in the daily camp activities. All trainees received a warm welcome and when trainees return to their home villages they have acted as positive critics. Indeed, we have

heard that they relay positive accounts of their stay with the project to other villagers and share their newly acquired knowledge of the marine environment (particularly as Malagasy people tend to be great gossips).

Efforts have also been made to promote the work of the training programme in the wider region and to attract the attention of local people. At the end of the IH.SM student training period, a feedback workshop was organised at IH.SM where a wide range of key figures from IH.SM itself, the University of Tuléar, various other governmental organisations and from the Media were invited. This workshop was extremely successful and has helped significantly to promote the project.

Future possibilities As explained above since the project began the project team have been approached by several organisations interested in developing similar training programmes for both Malagasy students and employees of Malagasy organisations. The project has also been requested by the partners IH.SM to further develop the programme and if students from COUT (Cellule Océanographique de l'University de Tuléar) could also be involved in the project.

Furthermore, feedback forms completed by the trainees revealed that they were particularly interested in learning more information about various subjects, whether completely new or not. Their thirst for knowledge was definitely heightened by the training programme. This has extended to other students and many now want to sign on for the training programme in order to learn more about biodiversity management.

There is therefore a great deal of scope for further developing, expanding and replicating the project in the following ways:

- Development of the marine biodiversity training programme to include SCUBA training and Btec training for IH.SM students and to involve greater numbers of students. This would involve a bigger and longer-term project which IHSM and project staff can develop together.
- Development of a bigger programme to train trainers from farther afield in order to facilitate replication of the training programme within other educational and training establishments in the region and throughout Madagascar.
- Development of training programmes for employees of NGOs and other conservation biodiversity organisations working in the region and throughout Madagascar.

The Marine Biodiversity Training project has been developed to meet the capacity building needs of the country and most specifically the region of Anakao. Through working with local departments of national institutions such as the National Environment Office and the Fisheries Department the project is setting an example which can be replicated in other areas of Madagascar, that is, empowering local communities to monitor and manage their own natural resources

Exit Strategies In terms of the training programme an exit strategy was built into the project from the outset in the form of training the counterpart trainer. It is planned that following completion of the project she will be in a position, armed with training manuals developed during the project, to continue to provide the same training to other trainees within the region and to develop further training programmes.

In terms of sustainable management of marine resources within the project area, the establishment of permanent monitoring sites mean that the area can continue to be monitored following completion of the project. Project staff will prepare a monitoring plan to manage the use of these sites for monitoring purposes into the future. The capacity built through the training programme will provide a core of capable individuals able to undertake continued monitoring within the area and to promote protection of the area.

With the level of interest from collaborating and other organisations project staff will work with collaborating organisations to develop proposals for other long-term training programmes. Due to the apparent demand, further training of trainers and therefore further funding will be necessary. Project staff can help during the lifetime of this project by assisting in the writing of proposals to seek funding for further training programmes and in developing a training manual and training programme that will be easily replicable and adaptable to other training needs.

Perhaps the biggest element of the exit strategy of the project is the realisation by local responsible organisations and people that with training they can be capable of monitoring and managing their own natural resources. This will hopefully add momentum to local, regional and national initiatives to protect marine resources and facilitate the practical implementation of national policy objectives.

6.0 Outputs, Outcomes and Dissemination

6.1 Table 1. Project Outputs (According to Standard Output Measures)

Code No.	Quantity	Description
4 C	3	Postgraduate students complete training for 8 weeks
4 D	24 weeks	Training was provided for 3 IHSM students. Delays to the start of the training programme and changes to the implementation plan meant only three students were trained in the 6 month period. Subsequent training phases will train 4 and 5 students together.
5	1	Counterpart trainer trained The counterpart trainer joined the project in January, three months late, but has received 3 months on the job training to date.
6 A	5	Fisheries Officers / Community representatives complete training
6 B	5 weeks	Training for fisheries officers and community representatives has been reduced to 2 weeks. Due to time spent recruiting community volunteers and fisheries officers and to constraints on their availability changes to the training programme meant that 5 community representatives received half of their training in February and will receive the second half in April. Seven fisheries officers will receive training in April and June.
7		Production of Training Manuals Work began on the development of a training manual through the compilation of training materials that will be tried and tested and revised as the training programme progresses.
8	52 weeks	Time spent on the project by UK staff Two expatriate staff began work on the project in October 2001 and have completed 52 weeks on the project to date.
14 A	1	End of training workshop One feedback workshop was held in March at the end of the

		first training programme involving trainees and representatives of collaborating organisations.
15 C	3	Progress/ publicity articles produced The first end of training workshop produced one local radio interview, further local radio coverage, TV coverage on the regional news programme and one article published in local press.
16 A		6 monthly newsletter produced Work has begun on the production of a newsletter about the project, however, due to initial delays to the project and the amount of time spent setting the project up this has been delayed.
20	£1,920	Physical assets for host country 24 sets of snorkel equipment have been purchased, one each for the trainees.
22	1	Establishment of permanent monitoring sites One permanent monitoring site was established during the student training programme, three further sites will be established through the remaining training activities.
23	£ 15,440	Matched funding for the project from the Society for Environmental Exploration in the form of equipment (boat, radios) and project facilities.
	£ 57,200	In kind support: support of the Frontier-Madagascar Marine Biodiversity Research Programme.
	£ 12,450	In kind support: support from project partners IHSM through provision of office facilities, email communication facilities, rooms for workshop and administration associated with student participation.

Due to the delays to the start of training activities caused mainly by protracted discussions and negotiations regarding selection of trainees, and also the decision to devise different training components for each of the three groups of trainees, not as many trainees received training during this period as was planned. Whilst this has set the project slightly behind schedule due to the changes to the style of training this will not affect the number of trainees trained through the project. The five community representatives will complete their training in early April. Seven fisheries officers will be trained at the end of April and in June. The remaining students will be trained in two groups of 4 and 5, the first between April and June, the second between July and September. It is considered that these changes to the style of training will improve the benefits gained by the various trainees as training activities will be focused towards the different needs of the different groups.

The changes describe above also meant that only one local workshop was held to date.

Production of the first edition of a project newsletter has been delayed due to the lack of time available to project staff and also due to the fact there has been less to report in the first six months than originally anticipated due to the slower start. The newsletter will however, still be produced.

Media coverage has been greater than anticipated as has local interest in the project and in addition to the planned press releases TV and Radio coverage has been secured. Preliminary

discussions have also been held regarding the making of a documentary about the project activities, although this has not been confirmed.

Due to the changes to the training programme which mean that by the end of June all of the proposed fisheries officers and community representatives will have completed their training, there may be scope to include additional students and fisheries officers during the final training period. However, this has not yet been confirmed.

In order to accommodate the trainees and to provide facilities for learning and training a training building was constructed on the project site. This combines sleeping accommodation with science reference and equipment space and classroom facilities.

6.2 Publications

No such publications have been produced at this stage in the project.

6.3 Dissemination Activities

Prior to the first feedback workshop project staff planned the media coverage of the event and set media objectives for the length of the training project.

Press releases The Counterpart trainer distributed a press release to the local and regional radio stations and journalists concerning the first workshop.

Radio The counterpart trainer was interviewed about the project by a local radio station (Sotalily) this was broadcast twice that same day (13 March 2002) on the regional news programme. On the day of the first workshop (18 March 2002) more information was broadcast on the radio about the training project.

Television Journalists attended the workshop event with the Sotalily video cameras to film the event and to interview project staff. The event was relayed that evening on regional Television (8 O'Clock News). Further interviews were also broadcast over the following few days. Furthermore, staff from the TV company expressed an interest in the possibility of producing a documentary on the project.

With the development of the habitat monitoring plan there will be progress to report beyond the life of the project and there will also be information to report about the trainees and where their training takes them. As the training project is attached to a longer-term marine biodiversity research programme then Society staff will be able to continue to report on developments arising from this project. If as planned the counterpart trainer remains in the area to continue to provide further training to other students and trainees then it is hoped that she will also be in a position, based on skills developed through the project, to maintain a flow of progress outputs such as these.

Newsletter This has not yet been produced, however, once it is established this is something that the research programme staff can continue to produce. During the remaining 6 months of the project staff will investigate the options for developing a locally produced newsletter covering issues of local marine environment, including progress with the habitat monitoring programme and the establishment of marine protected areas within the region. A source of funding to support the newsletter will also be sought, possible sources include the national environment office itself and local businesses, in particular local hotels.

Workshops The series of workshops following each training period and a final end of project workshop are open to representatives of local organisations and media to attend, however these will not continue after the life of the project, certainly not on a regular basis. Again, with the continued presence of the research programme in the area further progress workshops

are likely to occur as developments arise, for example if a bigger training programme is developed then planning workshops and feedback workshops will continue.

Conference Project staff will attend at least one national or international conference to present details of the project. This will be a one off event associated with the project, although the training project will be promoted at all national and international events attended by any staff of the continuing research programme.

Marine Forum The newly qualified trainees will be invited to join a recently developed forum through IH.SM. It is intended that the newly trained trainees will become active members of the forum and will become involved in initiatives to develop marine conservation in the local area.

The training project is a short-term project though it's effects will be long lasting. To make substantial differences in marine habitat conservation in this area requires external support on a variety of levels, training provision is just one of these. The Madagascar Marine Research Training Programme will continue to provide capacity building support to facilitate sustainable long-term marine conservation activities including dissemination activities.

7.0 Project Expenditure

Table 3: Project expenditure during the reporting period

Item	Budget	Expenditure
Salaries (specify)		
Project Co-ordinator		
Trainer		
Malagasy Counterpart Trainer		
Rent ,rates heating lighting etc		
Office administration costs		
Capital items/equipment		
Others		
Travel and Subsistence		
Printing		
Conferences / Seminars		
Administration		
Total		

Under-expenditure has occurred in the budget due to delays and changes to the training schedule.

Salaries Expenditure was significantly less on staff salaries due to the agreed three month delay to the start of the project. Furthermore, the Malagasy counterpart trainer was not employed during the first quarter.

Travel and Subsistence costs Expenditure was significantly less in this area also due to the agreed delayed start to the project. Furthermore, slightly fewer trainees were trained during the first year than anticipated which also contributed to less costs in terms of participants travel and subsistence costs.

Administration Expenditure was less in the area also due to the agreed delayed start to the project.

8.0 Monitoring, Evaluation

8.1 Monitoring

Progress reports In terms of project implementation progress, project staff complete a quarterly progress report to the programme manager at the London headquarters of the Society detailing activities, achievements and problems encountered during the preceding three month period.

Trainee projects The main tool used to monitor the learning progress of the student trainees is the personal project that each trainee has to produce. In undertaking this independent study the trainees have the opportunity to demonstrate skills they have learnt through the project. Therefore these are a direct indicator of the success of the student training programme. These projects are written up and are evaluated both by project staff and by the Director of IH.SM. It was decided not to use this process with the community representatives and fisheries officers as it was considered beyond their capabilities and requirements.

Feedback questionnaires A second tool, used by all trainees, is the completion of a feedback questionnaire at the end of each training course. These enable trainees to identify areas that were most and least useful, easy and difficult activities and areas where they would like to have received more training. These are particularly valuable in terms of reviewing the content of the courses and developing an optimum course and handbook.

Workshops Feedback workshops at the end of each training phase are an opportunity for collaborating organisations (fisheries department, IHSM, ONE) to see and hear what the trainees have learnt and to provide third party assessment of the project progress and value.

Final Workshop A final presentation will be made upon completion of the project at a final workshop and at least one independent expert will be invited to evaluate the project.

8.2 Progress

Student training If all twelve trainees are able to undertake independent personal projects, produce reports and make presentations on what they have learnt during the course then this indicates that their capacity has been built. Feedback from the trainees also indicates if the project purpose has been achieved or not.

Feedback from the first three students reveals that all three of them were really satisfied by the training. They particularly enjoyed the practical activities and the personal project. They actually would have liked more training, especially fieldwork in the mangrove and more on the reef as well. Through observation it is possible to see that the training has helped them to gain confidence in themselves and in their knowledge. Throughout the training programme the students were particularly pro-active and, while sharing their knowledge of Madagascar's environmental situation, they repeatedly asked for additional and detailed information on a range of subjects. Their progress therefore was visible throughout the training programme. The student trainees stated that they feel more ready, after the training, to enter in the working world.

Community Representatives The Community representatives did not complete projects however, they did completed feedback forms. These show that they were satisfied with the training programme. They appeared extremely pleased to learn more about their environment and marine ecology and to build on their understanding of marine research and management concepts. Each of them had favourite subjects and expressed an interest in developing their knowledge in the future, whether it be on management strategies, turtles or sharks. Some of them would have liked the training to be longer. However, based on the previous experience

of the project staff, it was deemed that the training provided was sufficient should attendees' concentration not be lost and the main messages not be swamped with too much information. However, this is not to say that a further training session should not be organised.

Counterpart Trainer Indicators of achievement by the counterpart trainer will be evident to project staff as the project progresses. As the counterpart trainer learns more skills she will pass these on to the trainees. The project staff will monitor the teaching practices of the counterpart trainer. If she is successfully trained to provide ongoing training then an indicator of this will be if she is taken on by another organisation such as IH.SM to run further training programmes.

Habitat Monitoring Indicators of achievement along the way will be if a series of permanent monitoring plots are established as these will form the basis of a monitoring plan. The production of a monitoring plan will indicate some success but ultimate success will be evident if the national environment office act on this information and adopt the plan and develop it into some form of protected area.

If further funding proposals are produced and conservation, protection and monitoring activities undertaken in the area using the newly trained personnel or even through their involvement in the local marine forum, this will indicate the development of local capacity.

Lessons Perhaps the most important lesson learnt was the recognition that the training needs, capabilities and interests of the different groups of trainees are different. The working rhythm of students is recognisably different in Madagascar than in Europe. Too intensive training with a full schedule loses the concentration of the trainees, so training had to be more flexible and divided into shorter blocks. The availability of the trainees was an issue also overlooked in the original plan, in reality students, fisheries officers and community representatives found it difficult to be available for training for eight-week periods.

These issues were resolved by dividing the training up and compiling different training programmes to suit the different groups; reorganising the training in smaller blocks around the other commitments of the trainees, and reducing the total amount of training for the fisheries officers and community representatives, who don't have as much capacity for such intense training as the students.

Authors

Chloé Webster, Project Co-ordinator

Gwenael Hemery, Trainer

Liz Humphreys, Programme Development Manager

Completed 29 April 2002