

ICELANDIC INTERNATIONAL DEVELOPMENT AGENCY

DEVELOPING MARINE TRAINING  
IN THE FISHERIES SECTOR:

AN EVALUATION OF THE ICEIDA-SPONSORED  
PROJECT AT THE MARINE TRAINING COLLEGE,  
MONKEY BAY, MALAWI



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## EXECUTIVE SUMMARY

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An evaluation of a training project carried out at the Marine College in Monkey Bay, Malawi is reported here. Project activities and inputs have been supported by the Icelandic International Development Agency (ICEIDA) from 1999 until 2001. The immediate objectives of the project were:

- To increase the capacity of the Marine College to educate and train officers for the fishing fleet up to a standard of IMO certificates and to train other crew.
- To train Malawian lecturers.
- To provide basic training material.

The writing of syllabi and the procurement of material and equipment were envisaged as important outputs. Inputs were the placement of two Icelandic lecturers at the college for slightly more than two years. The expectation was that they would prepare syllabi for fishing courses to standards set by the International Maritime Organisation (IMO), they would train local staff and they would secure appropriate materials and equipment. The Marine College was to provide offices and housing for the lecturers and was to appoint counterparts to the two lecturers.

The evaluation was carried out at the request of ICEIDA and the Marine Department and was part of the project plan. It was sponsored by ICEIDA. The evaluation is being undertaken in order to ascertain the extent to which the goals of the project have been achieved. It was also intended that the evaluation should also provide the staff of the Marine College with information that could assist in planning and implementing activities at the college.

The evaluation team was made up of two individuals, one nominated by ICEIDA and one by the Marine Department. They were well-received by all parties in Malawi and worked closely with each other for a period of two weeks, spending considerable time on the campus of the Marine College. Interviews were taken with key informants, only some of whom had been identified at the outset, and some of whom were interviewed more than once. Some classroom observations were made. An extensive collection of documents was read. A well-attended meeting was held with the college staff on initial findings and possibilities for extension of the project before the departure of the team from Monkey Bay. A second meeting was held with ICEIDA staff in Malawi before one of the evaluators returned to Iceland.

There is no doubt that the project is relevant to the Malawi government in the context of its strategy of poverty reduction. Project activities have been effective in developing and promoting training for fishing vessel operators at a professional level. Draft syllabi and sea-training guides have been prepared and teaching facilities have improved. Efficiency of the activities has been hampered by several factors, including project planning and preparation and shortcomings in the transfer of expertise. It is too early to assess the impact of the training being offered on fishing vessel operations, but the new courses have generated a great deal of interest. Emerging needs have been

highlighted by the project activities, such as the development of a closer relationship with the public and private fishing industry. The sustainability of the training program has been hampered by a lack of commitment on behalf of the Malawi Government that has led to operational difficulties. Improved management structures are necessary.

Several scenarios for an extension of the project are presented, ranging from immediate termination of the project to long-term broad-ranging support for training at several levels.

The team recommends an extension for a period of two years, on condition that certain commitments by the Malawi Government are made during the first year.

The focus of the two-year extension should be on further development of the syllabi and sea-training materials for professional level training and the planning and implementation of a program of capacity building within the college. This program should focus on teaching methodology, including instruction and assessment. Lecturers should work towards and become skilled at encouraging the active participation of learners. In addition lecturers at the Marine College should take over a range of duties concerning the different phases of training. Certain agreements must be reached with industry and the Department of Fisheries. Some attention must be paid to gender issues and some support provided to the establishment of an independent assessment unit.

Aspects to be kept in mind during the preparation of a new project plan should include:

- The approach to be adopted to cooperation and capacity building which should provide for a range of interactions and activities among lecturers at the college,
- The inclusion of curriculum development and evaluation processes in in-house training activities which are essential to the increased capacity of staff to undertake training of this nature,
- Conditions to be met by the Malawi Government, including a firm commitment to operational costs and the development and establishment of viable management structures, and
- The development of a new project management structure, including the appointment of a project manager by the Malawian Government.

It is hoped that if these recommendations are followed that a sense of ownership of the training of fishing vessel operators will be developed among the permanent staff of the Marine College. This ownership is not visible at present. Training to IMO standards is a priority for the Marine Department; this will not be achieved without ownership of the training and commitment to all aspects, especially those concerning practical skills.

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## INTRODUCTION

### Background for the evaluation

An evaluation of a training project carried out at the Marine College in Monkey Bay, Malawi is reported here. Project activities and inputs have been supported by the Icelandic International Development Agency (ICEIDA) from 1999 until 2001. The immediate objectives of the project were:

- To increase the capacity of the Marine College to educate and train officers for the fishing fleet up to a standard of IMO certificates and to train other crew.
- To train Malawian lecturers.
- To provide basic training material.

The evaluation has been carried out at the request of ICEIDA and the Marine Department and was part of the project plan. It was sponsored by ICEIDA. The terms of reference for the evaluation were as follows:

The evaluation is being undertaken at the request of ICEIDA and the Director of Marine Services in Malawi in order to ascertain the extent to which the goals of the project have been achieved.

Should the evaluation indicate the feasibility of funding a second phase, the report will outline a proposal for its implementation, the funds envisaged and a timetable for phasing out the project.

The evaluation should also provide the staff of the MTC with information which could assist in planning and implementing activities at the college.

### Methodology

Preparations for the evaluation began in August 2001 with the preparation of the terms of reference. Documents were assembled in Malawi and Iceland, and the two evaluators selected by ICEIDA and the Marine Department met on 12<sup>th</sup> November in Lilongwe for initial discussions with the ICEIDA Country Manager and the Director of Marine Services. This was followed by a ten-day period in Monkey Bay and the Mangochi district, where considerable time was spent on campus interviewing staff and students. Visits were also made to MALDECO, the Fisheries Research Unit and Malawi Lake Services. A “snowball” approach was adopted to the selection of key informants, whereby interviews with those who had been identified early on, such as the principal of the college and the ICEIDA and other lecturers, led to information on other players or stakeholders. Classroom observations were made on the Motorman course which was being held during November. Most evaluation activities were carried out together but sometimes it was felt better to carry them out separately to make better use of the time available.

Lists of informants and documents as well as the evaluation schedule and the LFA matrix are to be found in Appendices 1 to 4. The team was met with great warmth by all parties concerned.

A valuable meeting was held with all teaching staff of the college on 20<sup>th</sup> November where initial findings were presented as well as the different options for extension. A meeting was also held with the ICEIDA Country Manager and lecturers on 24<sup>th</sup> November. A draft of the report was left with these ICEIDA staff and the principal before the departure of the Icelandic evaluator. The Malawian evaluator undertook some interviews on her own. Minor amendments and additions were made to the draft report by the principal and the two ICEIDA instructors. A short feedback meeting was held at the ICEIDA office in Iceland in early December and the major findings were presented to the Board of ICEIDA at a meeting on 10<sup>th</sup> December 2001.

Neither of the evaluators were experts in marine training, but both had extensive backgrounds in education and evaluation, and had experience of development work in Malawi. All interviews were carried out in English, which is the language used for most college activities.

## PROJECT DESCRIPTION

### Earlier projects at the Marine Training College

In-country training for the merchant marine sector in Malawi began in the early 1980s in association with Malawi Railways and underwent significant development during a major UNDP/IMO project from 1987-1994. An in-depth evaluation was carried out in 1991 (Eyre, Williams and Simbeye, 1991). The present principal was appointed to the college in 1989 as the first “National principal” and the operation of the college put on a formal basis within the Marine Department of the Ministry of Transport. New courses for the merchant sector were designed to meet IMO/STCW<sup>1</sup> standards with the assistance of expatriate staff. Classrooms and a hostel with 12 rooms were erected, materials and equipment procured and teaching staff sent for training abroad. Three groups of students each underwent three years of training to Class III Merchant during this period, with the first group beginning in 1990. The training was of the sandwich type with the first and third years on campus and the second year sea-training. Several graduates from these groups are still employed in the marine sector, including all the teaching staff employed at the college as of November 2001. Entrance qualifications for these courses were tertiary level engineering/technical training or a university degree in the physical sciences.

In the mid-1990s discussions were initiated with JICA to provide technical assistance to the college for merchant training, funds for a second hostel and the procurement of materials and equipment for the college. Some JICA volunteers had worked at the college during the UNDP/IMO project. Technical assistance has been provided since 1998 on syllabi for merchant courses and the installation and use of equipment; this assistance will end in March 2002. A hostel with 32 rooms is under construction, and highly technical equipment has been provided, including a radar simulator and a cargo oil handling simulator. Total aid has amounted to about US\$ 5 million over the period. The Malawi Government built two new classrooms and demonstration buildings during this period. Five staff members of the college and four officers working for the marine administration have received short term training in Japan during the project period.

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<sup>1</sup> STCW: Standards of Training, Certification and Watchkeeping

### Background to the present project

Discussions on the possibility of ICEIDA involvement in Marine College activities began in the mid-1990s when support to the library was provided. Following informal discussion between the Director of Marine Services and the ICEIDA Director in early 1997, the Secretary for Transport submitted a project proposal to ICEIDA in October 1997, requesting support for training of skippers, engineers and crew of fishing vessels at the college. A request was also made for support to establish a formal examination unit at the Marine Department headquarters. The unit would be responsible for assessing candidates for Certificates of Competency. An amount of US\$ 1.5 million was suggested for inputs from ICEIDA. It was noted that the Japanese government had provided aid for the construction of teaching buildings and procurement of navigation and marine engineering training equipment.

In 1998 the project write-up was discussed and reviewed. Draft budgets were drawn up and advice sought from Icelanders in Namibia and Iceland on certain aspects. The final budget was for US\$ 445,000 for a period of two years. The inputs identified in the project write-up were not significantly altered during the preparation of the project plan and will be discussed in more detail below. The project document was signed in February 1999.

The project document provided for an independent evaluation at the end of the project period. The evaluation team would make recommendations on whether the project should be extended or terminated. The present report is the outcome of the evaluation.

### Staffing and the ICEIDA-supported project

At the outset 48 months of professional support were promised from early 1999 until June 2001. The nautical lecturer arrived in March 1999 and the engineering lecturer in July 1999. The former was on sick leave for five months during 2000 and in poor health preceding his absence. In view of the circumstances it was decided in February 2001 at an ICEIDA Board meeting to add six months of support to the project with the aim of completing most aspects of the project by the end of 2001. The nautical post would be extended until December 2001. At the same time it was suggested that the engineering position be reduced to 50% from March 2001 until the end of 2002<sup>2</sup>. In practice this reduction to 50% has not yet been achieved because of staffing shortages at the college.

Staff from the ICEIDA office in Lilongwe and Iceland visited the project in February 2001 when a decision to extend assistance until the end of 2001 was made in consultation with all parties. Another request however was submitted to the ICEIDA board after the February visit for an extension until the end of 2002. This request was discussed at an ICEIDA board meeting in March 2001. It was decided not to rescind the decision made in February but at the same time to ask for a budget for the US\$ 90,000 promised for 2002. The departing director pointed that if the contract with the nautical lecturer were to be extended there would be no funds for other work. The need for an evaluation was mentioned.

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<sup>2</sup> Teaching responsibilities of the lecturer would be gradually reduced and his duties with regard to the maintenance of the *Rv. Ndunduma* increased, as well as participation in another project, a cartographic survey.

In a memo prepared for an ICEIDA meeting in May 2001 it was reiterated that officially the project would end at the end of 2001. It was noted however that provision had been made in the budget for the nautical lecturer to continue in his post until June 2002 and that for the whole of 2002 the engineering lecturer would spend at least 50% of his time on the project. The need for an evaluation was repeated. A formal request for the evaluation was received from the Director of Marine Services in June 2001.

### The Logical Framework Approach elements of the project

The project document was prepared according to the Logical Framework Approach (LFA) used by many development agencies. Development and immediate objectives were defined, as well as inputs, activities and outputs.

The development objective of the project was stated as follows:

- To provide the fisheries sector [in Malawi] with a trained and skilled workforce to meet demands of higher technology and higher standards of production.

Immediate objectives of the project were:

- To increase the capacities of human resources at the Marine College
- To increase the infrastructure capacities of the Marine College.

The full LFA matrix is shown in Appendix 3. The main inputs were to be staffing, the development of a training scheme and funding for procurement of equipment and materials. Activities would be focussed on the development of syllabi according to IMO standards, teaching, training of staff and procurement of materials and equipment.

## PROJECT RELEVANCE

### Principles and priorities of ICEIDA

The mission of ICEIDA was defined in 1998 as follows:

The development cooperation shall help people to be self-sufficient, in particular by transfer of knowledge and professional skills. The cooperation shall promote sustainable development, protection of the environment and natural resources, progress of the productive sectors, equality of individuals, democracy and human rights.

Priorities are given to development cooperation which improves the living conditions of the poorest, especially women and children, to cooperation with the least developed countries and to areas in which Icelanders have special knowledge and experience which can be transferred by teaching and training.

Strategies that ICEIDA would wish to use include in development work are:

- Concentrating on only a few projects at a time
- Seeking information from other organisations and carrying out independent research
- Defining specific and detailed goals and objectives such that results can be easily assessed

- Carrying out independent evaluations at two year intervals
- Making a distinction among selection/preparation of projects, implementation and administration, and assessment and evaluation.

*The ICEIDA-project based at the Marine College is relevant to the mission and priorities of the development agency as they appear in 1998. There has been a focus on the progress of the productive sectors and an emphasis on the transfer of expertise.*

#### Poverty reduction and food self-sufficiency in Malawi

Malawi is among the least developed countries with an average per capita income of less than US\$200. According to a headcount study on the extent of poverty in Malawi done in 1998, it was found that 65.3% of the population in Malawi live in poverty. It is felt that the poverty situation in Malawi has worsened over the years despite the introduction of a poverty alleviation programme in 1994. This is due to a number of factors both internal and external to Malawi.

The government of Malawi has therefore stepped up its efforts and reviewed its strategy on poverty. Through a comprehensive process of broad-based consultation, Poverty Reduction has been formulated as an effective approach to achieve more people-centred and sustainable development. Provision of a skilled workforce and food self-sufficiency are issues of priority concern for the Malawi Government.

The development of the fishing industry through the provision of a skilled workforce for fishing vessels on Lake Malawi is not only necessary, but also a priority in ensuring that the fishing industry has the needed capacity for efficient and sustainable fishing on Lake Malawi. This will therefore ensure adequate sources of protein for the people of Malawi and reduce the high prevalence of malnutrition in the country. The establishment of the Marine College and the desire to develop it on a continuous basis to meet modern technological challenges in the fishing industry are out of necessity and not a status symbol.

#### Need for trained personnel in the marine sector in Malawi

In 1980 the Malawi Government and the UNDP signed an agreement to establish a marine training school at Monkey Bay. This school was founded in 1981 by the Ministry of Transport in conjunction with the International Maritime Organization (IMO) through the UNDP. In 1990 the school was upgraded to college level with an emphasis on training for the merchant sector. Courses are offered for both the nautical and the engineering aspects of marine operations.

Longer courses for merchant vessels have been offered at Classes IV, III and II, with phases of sea-training between each class. Shorter courses, such as the Able seaman (AB) and the Motorman courses, have also been identified as necessary for the sector and last six weeks. The AB course is a prerequisite for the Motorman course.

Graduates of the college have been employed in the private and the public sectors. Many of the graduates from the early 1990s have moved into positions of on-shore responsibility in both the merchant marine and fisheries sectors.

Training specifically intended for officers and crew of fisheries vessels was not carried out earlier because of the lack of qualified training personnel, syllabi and basic training equipment. By the mid-1990s the need for qualified personnel on fishing vessels was felt, not only in Malawi but also elsewhere. STCW-F<sup>3</sup> guidelines for the officers and crew and fishing vessels appeared in 1995. The ICEIDA-sponsored project has focused on developing syllabi for fishing operations in accordance with these guidelines and has provided equipment and materials accordingly.

In 2000 the first group of students were admitted to the Class III course for fishing vessels (Group 1) and a second group in 2001 (Group 2). Preparations have been made for admitting a third group (Group 3) in early 2002. The course provides for six months of on-campus training and examinations followed by twelve months of sea-training on fishing vessels. In practice the process takes almost two years.

### Reaching and maintaining IMO levels of competency

Officials of the Department of Transport have a long-term objective of raising training and skills in the marine sector to satisfy criteria set by the IMO. At present Malawi is not on the so-called “white list” of countries in which competencies are in line with the IMO criteria that were developed in accordance with STCW guidelines from 1978.

During project preparations mention was made of the need to establish an assessment unit that would provide the means for an independent examination of levels of competency of cadets who have completed different stages of training. Indeed the evaluation report on the UNDP/IMO project, written in 1991, mentioned the need for an assessment mechanism. The ICEIDA project document identified an input as the setting up IMO standards but did not refer specifically to an assessment unit. The IMO standards can be used as a guideline both for teaching syllabi and for assessment.

The Marine Department provides for an independent assessment of skills, through an examinations board, for a Certificate of Competency at the end of the sea-training. These assessment procedures are in part built on the syllabi developed to IMO standards for the training offered by the Marine College. A candidate has been identified for the establishment of an “assessment unit” within the Marine Department. The ICEIDA staff has been part of the assessment team during the project period.

## **EFFECTIVENESS OF THE PROJECT**

The effectiveness of the project was assessed based on the main activities, inputs, outputs and indicators as stipulated in the project document and shown below.

### Activities, inputs and staffing

The following activities and inputs were specifically planned for the project:

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<sup>3</sup> STCW-F: Standards of Training, Certification and Watchkeeping for Fishing Vessels

Main activities planned for the project	Main inputs
Elaborate plan of training and elaborate syllabi. Set up IMO standards. Set up shorter courses and carry out training for the sector. Teach/train at the Marine College. Train Malawian lecturers. Procure material and equipment.	Two full time instructors for two years. Training scheme for the teachers of Marine College. Funding for procurement of basic equipment and teaching material.

It is virtually impossible to consider the activities and inputs of the project without due reference to the academic staff employed by the college. All training activities should be carried out by the professional staff of the college and their successful implementation depends on the commitment of the staff.

Two lecturers from Iceland have been stationed at the college since March and August 1999, though as mentioned earlier one was absent on sick leave for five months during the year 2000. The engineering lecturer sponsored by ICEIDA is an experienced engineer and has worked on several development projects outside Iceland mostly in connection with the operation of a research trawler. The nautical lecturer is an experienced fishing captain with teaching experience in secondary schools. Neither lecturer had worked in maritime education and training prior to their arrival in Malawi.

None of the lecturers at the college had expertise in fishing at the inception of the project but some had some teaching experience and were well-trained in engineering or nautical aspects of merchant shipping.

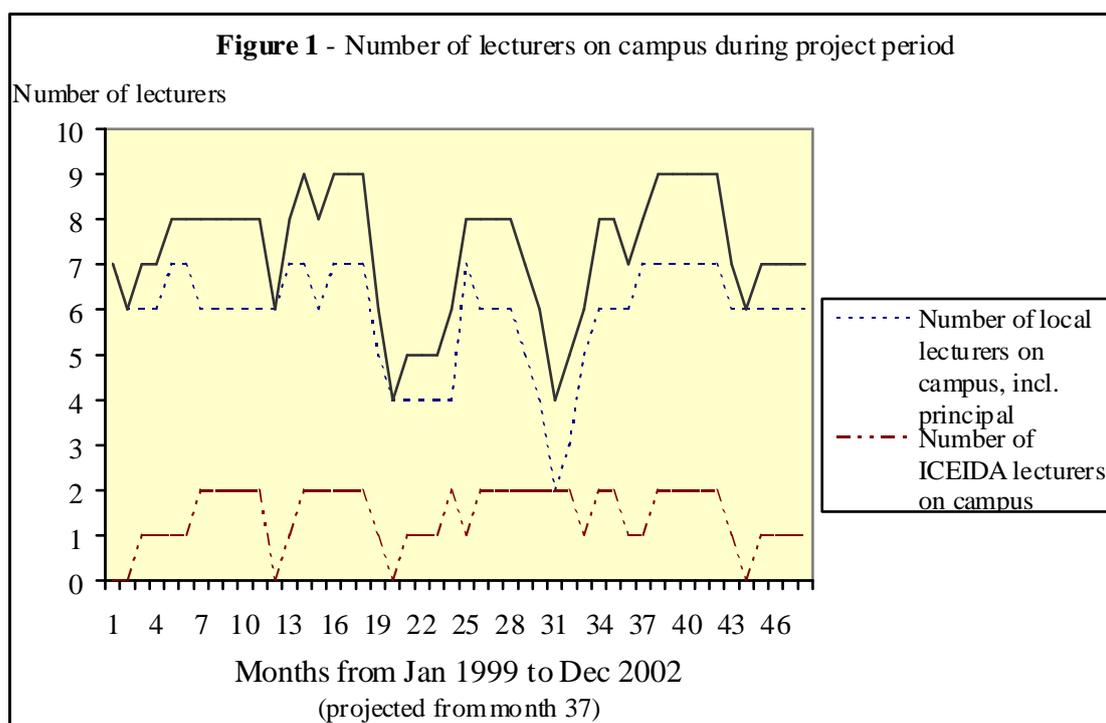
Two lecturers were identified as counterparts to the ICEIDA lecturers in 1999. The engineering counterpart was also a counterpart to a JICA technical adviser at the college and has been away on training for much of the project period (14 of 30 months from mid-1999 to the end of 2001). The nautical counterpart (and principal lecturer) worked with a JICA adviser on the preparation of a syllabus for merchant training during the project period, then spent six months in Iceland on training and left the college shortly after his return.

Other staff have left the college or passed away during the project period. Some have been away on training through the JICA project. The post of deputy principal has not been filled.

The management of training affairs within the college has often been left to the ICEIDA lecturers. During the first part of 2001 very few staff were on campus for one reason or another and the ICEIDA staff took on extra responsibilities (see Figure 1). They have prepared the timetables for the different courses. During the visit of the evaluation team there was a constant stream of visitors to the office of the ICEIDA lecturers, both to get or use basic office supplies (paper, stapler, binding machine) or to get cash for the purchase of consumables for practical lessons.

Attempts have been made to improve working conditions at the college by increasing the salary and status of staff by upgrading posts from PO to P8 level as minimum

grade for teaching staff at the college<sup>4</sup>. During the project period ICEIDA agreed to pay the salaries of some staff while awaiting government authority for their recruitment. At the beginning of 2002 there should be four to five engineering lecturers and two nautical lecturers in place in the college. Two of these have Certificates of Competency in the operation of fisheries vessels but none have extensive practical experience in fishing. Two instructors have been employed on a temporary basis during 2001, with sponsorship from ICEIDA, to assist with teaching during lessons involving practical work.



*The high turnover in staff has hampered the carrying out of project activities. The sudden departure of the nautical counterpart/principal lecturer earlier this year and delays in approving and filling the post of deputy principal, who should have responsibility for training affairs, has created a leadership gap which has not been filled. The principal of the college is not sure when the vacant positions will be filled. This is because as an institution under government the authority and process to fill them rest with the Department of Human Resource Management and Development and the Civil Service Commission over which the Principal and the Ministry of Transport have little influence. The principal appears reluctant to fill the academic leadership gap himself. A more viable management structure for academic matters however is urgently needed. To some extent the expatriate staff has filled this gap but it is essential that professional leadership comes from within the college itself.*

<sup>4</sup> PO = Professional officer and is the lowest rank of government staff who have completed three years of tertiary education at technical or university level. Higher levels are from P8 up to P1.

Activity 1: Elaborate syllabi to IMO standards

The evaluation team were provided with copies of the most recent engineering and nautical teaching syllabi for both merchant and fishing operations, as well as copies of the record books or portfolios to be used during sea-training.

In the early stages of project implementation, as can be seen from progress reports, the ICEIDA lecturers planned the development of the fishing syllabi and set deadlines for themselves. It is clear from descriptions of earlier projects that the development of syllabi has been an ongoing activity at the college since the 1980s, though with an emphasis on the merchant sector until the present project.

Teaching syllabi for Class III Fishing (engineering and nautical) have been developed by the ICEIDA lecturers though not in collaboration with one another. It appears that the new syllabi are based in part on existing syllabi at the college and in part on the general guidelines issued under the STCW-F convention. A difficulty with the writing of the syllabi is that no model IMO syllabi exist internationally for fishing courses, as in the case for merchant courses. General guidelines for fishing courses were published earlier this year but are not at the level of specificity required for a teaching syllabus. A project activity planned for 2002 is the production of instruction manuals to accompany the syllabi.

It is worth noting at this point that many of the Class IV Merchant and Class III Fishing courses have been taught at the same time, as shown in Table 1 and in Appendix 6.

Table 1 Courses taught in 2001

	Specific training for merchant vessels (Class IV)	Common core for all shipping vessels: Class III Fishing Class IV Merchant	Specific training for fishing vessels (Class III)
<i>Nautical courses</i>	Cargo handling Practical work	Construction/stability Safety Meteorology Navigation Ship handling/seamanship Communication Watch keeping Chart work Practical work	Fishing gear technology Practical work
<i>Engineering courses</i>	Bench and tools Workshop practices	Maritime/safety Knowledge and watch keeping General marine engineering Ship construction and stability Marine electrical engineering Main marine machinery and auxiliary Using tools and working practices Workshop practices	Refrigeration and deck machinery Workshop practices

The draft fishing syllabi were tested during the campus training of the group that took the Class III Fishing course from November 1999 to June 2000 (Group 1) and again with a similar group from January 2001 to August 2001 (Group 2). The syllabi provide for classroom instruction and practical activities for a period of 24 teaching weeks. There are 24 hours of instruction per week (see Appendix 6).

Students for the two courses (Class III Fishing, Class IV Merchant) were admitted at the same time and have been taught together in 2000 and 2001 and only split during the fishing aspects of the course. In 2002 the college intends to offer a Class III Merchant course and to offer a third group of students the Class III Fishing course. Thus two separate courses are planned for 2002 requiring more teaching activity from local staff than was needed in 2000 and 2001.

No training vessel has been available for practical work during campus training although this is considered desirable. Workshops and sheds are used though for teaching a variety of skills.

The on-site training is followed by sea training of 12 months on attachment to fishing companies and organisations. In some cases students complete sea training before on-site training. A Cadet Record Book for the Class III Fishing (Engineering) and a Sea Phase Training Portfolio for the Class III Fishing (Nautical) have been produced. The engineering material is based largely on earlier material produced at the college for merchant training, and the nautical material has been adapted from published material. Officers on fishing vessels are required to supervise students and guide them through a series of tasks on board fishing vessels. Students are also required to write work descriptions of a variety of tasks (projects), producing a portfolio of their work in preparation for competence examinations.

*The elaboration of syllabi for both campus and sea training has been on schedule. The syllabi for campus training have met expectations though they still require testing and revision both with regard to content and time allocations. The proportion of time spent on lectures seems to be very high in some subjects and it is hoped that in the preparation of the instruction manuals provision will be made for activities of a practical nature.*

*It is regrettable that a common approach to the layout and development of the two Class III Fishing syllabi was not adopted by the ICEIDA lecturers. It is recommended that this be remedied during testing and revision in 2002.*

*There has been only an element of consultation with staff of the college during the development and testing of the new campus syllabi. The emphasis was on working with the counterparts and their departure or absence means that new members of staff have not been part of the process of developing and testing the syllabi. This situation must be rectified during 2002 through carefully planned in-house development and evaluation activities.*

*The sea training portfolios have been favourably received but their use and effectiveness have yet to be assessed. Officers and crew of fishing vessels are not accustomed to providing the type of detailed supervision required and this issue must be addressed during revisions in 2002 in order to create a common understanding of the purposes of sea-training. There are problems with attachments on fishing vessels as a result of limited opportunities in the fishing industry.*

*The materials for sea-training phase have been developed with little consultation with local staff or the fishing industry. At the time of the evaluation no plans were in place for the involvement of staff in monitoring the attachment process and use of the materials. The ICEIDA lecturers have been responsible for many of practical aspects concerning the attachments, from discussions with the industry about the placement of students to accommodation arrangements for them. All aspects of the attachment process must be integrated into normal college activities and local lecturers should become involved as soon as possible.*

#### Activity 2: Elaborate plan of training and actual training of lecturers

As mentioned earlier, the engineering counterpart to the Icelandic lecturer has been absent for much of the project period. He was absent on training sponsored by JICA from June to December 2000. In April 2001 he went for further technical training at the Malawi Polytechnic and will be absent on paid leave until early 2003, though he works at the college during his vacations.

The nautical counterpart had been in Japan for two months in late 1998, prior to the arrival of the ICEIDA Fishing lecturer in March 1999. Through the ICEIDA project he went to Iceland from August 1999 to February 2000 to attend a six month long professional course at the United Nations University Fisheries Training Programme (UNU FTP). Shortly after his return from Iceland he left for England without informing the college. The fishing lecturer has since then identified an instructor whom has proved to be a valuable asset in all practical teaching, and the two have worked closely together.

Some lecturers have received computer training through the ICEIDA-supported project.

New counterparts have been appointed recently but as yet no plans are in place for their training.

Training of college staff was discussed by the project management group and the ICEIDA project manager in Malawi asked for a training plan to be prepared. The project plan for 2001 and 2002 incorporated in-house training of lecturers but the nature of the training was not clear and no in-service activities for the staff have been conducted during 2001.

*No formal training plan was prepared and the mobility of local staff has been high. Counterparts received training, in part at JICA expense, but this has not yet been of much benefit to the development and teaching of fishing courses. The engineering counterpart is still in training but will not necessarily return with increased expertise in fisheries. Training in gear technology undergone by the nautical counterpart and*

*supported by ICEIDA did not benefit the college or development activities. On-the-job training is of a general nature and has not focussed on developing fisheries expertise in the college. Plans are yet to be made for the training of newly employed staff.*

### Activity 3: Teaching by ICEIDA lecturers at the college

No clear guidelines were laid down at the beginning of the project for the teaching load to be carried by the expatriate lecturers, though the project document described an input of “two full-time instructors”. According to the terms of reference their duties were to include “compiling lecture notes, lesson plans and details of practical exercises for the teaching of courses and classes in navigation marine engineering and seamanship. They will also be in charge of all tools, materials, books and software supplied for the program and will compile requests for placing orders.” In practice their teaching load was particularly heavy during the first half of 2001 when some members of college staff were away on training, on sick leave or left at short notice.

Timetables for the Class IV (merchant) and Class III (fishing) courses taught in 2001 indicate that up to 19 hours of lessons a week (of 24 hours) were common to both courses, which means that the lecturers provided a service to merchant marine training activities as well.

*It is evident that the presence of the expatriate lecturers enabled the college to offer teaching in a variety of courses during the project period. Although the project was focussed on the development of courses of study pertaining to fishing vessels, the Icelandic lecturers also taught some merchant courses.*

### Activity 4: Set up shorter courses and carry out training for the sector

Syllabi for the Able Seaman (AB) and Motorman (MM) courses have also been developed and tested in 2000 and 2001. In 2000 and 2001 four AB courses and two MM courses were offered. In all 40 passed the three AB courses and the fourth one which will finish on 7<sup>th</sup> December 2001 has 16 participants. Eleven passed the 1<sup>st</sup> MM course. The 2<sup>nd</sup> MM course will finish on 7<sup>th</sup> December 2001 and it has 12 students who successfully completed the 3<sup>rd</sup> Able Seaman course, which finished on 26<sup>th</sup> October 2001. In both years those in the first AB course had the opportunity to continue into the MM course. The evaluation team was able to observe a number of lessons and to interview several students on the AB and MM courses that were in progress.

Plans have been made for the preparation of 3-5 day courses at local community level which will focus on safety issues as well as maintenance of outboard engines. None have been offered as yet. Information has been shared recently with Mpwepwe College of Fisheries on the running of these courses. Both colleges have shown an interest in cooperation though no formal plans are yet in place.

*The short courses appear to be particularly successful though some fine-tuning is still required with the level of difficulty of material being presented to students. Observations revealed that lecturers had different expectations of the demands which could be made on students. All courses are taught in parallel but it would appear that a serial presentation of some topics could be adopted in order to smooth out learning difficulties experienced by students.*

*The courses have been well-attended and well-managed with students showing great interest though some problems arise when intake requirements are relaxed under pressure from sponsors, which could result in lowering the standards of the courses.*

*The college management and the ICEIDA staff have shown considerable interest in the development of local community courses. Although the evaluators do not doubt the need for such courses caution is recommended noting the impact this could have on the core activities of the project. The project should concentrate on the revision of syllabi for the formal training levels before venturing into local courses. Furthermore it is felt that these courses should be planned and offered in close operation with training and extension services within the Department of Fisheries, which has the mandate for extension work within the fisheries sector in Malawi.*

#### Activity 5: Procure material and equipment

Over a hundred books were selected by the ICEIDA lecturers and added to the library. The library is used not only by the college staff and students but also by staff of the Malawi Lake Services and the Marine Department. The Mpwepe College of Fisheries also has a good library on most matters pertaining to fisheries and a mutual lending service is in place.

Various pieces of equipment, particularly of relevance to the fishing courses, have been procured locally and abroad. To facilitate the proper use and storage of the equipment two sheds were built and costs met by ICEIDA during the project period.

Through the project the college plank boat has been rebuilt in cooperation with staff of the Mpwepe Boat Yard. Students participated in some of the rebuilding, on the completion of which the designer of the boat gave students a lecture on making and maintaining such boats. Some practical teaching takes place using the boat.<sup>5</sup>

*Appropriate books and equipment were selected and are being well used. The library is not however connected to the Internet. Despite the fact that Internet services in Malawi can be both erratic and expensive it is worth considering use of the Internet as a viable option in accessing new materials and information concerning marine training.*

*The sheds erected with funding by ICEIDA are frequently used and provide welcome protection from the elements and safer storage of materials. Local production of wooden "net needles" for making and repairing nets is an interesting initiative. Low cost life-vests made from materials available locally were referred to in a classroom lecture; the production of such equipment could be carried out during practical activities.*

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<sup>5</sup> The evaluators were treated to a memorable late afternoon trip on the boat past villages near Monkey Bay.

## Main outputs

Main outputs according to the project plan	Indicators
Functional fisheries training. Syllabi for training both fishing skippers and marine engineers for fishing vessels. Trained technical personnel for fishing vessel operation. Malawian lecturers trained in the implementation of the fishermen syllabi. Training material and equipment. Skilled personnel for the sector.	Professional level teachers are trained. Professional level personnel are trained for the fisheries. Number of mishaps and accidents in connection with fishing lowered.

Some outputs have already been referred to above, such as syllabi, training of lecturers and procurement of equipment and materials. Other expected outputs were functional fisheries training and provision of skilled personnel for the sector.

### Output 1: Functional fisheries training

Some requirements for functional fisheries training are in place such as the syllabi and equipment. However it cannot be said that a system for functional use of the syllabi by the staff has been established yet. A transfer of expertise has been minimal both with regard to external training and in-house training.

There was always the risk that trained staff would not remain at the college and this has proved to be the case. One counterpart left the college immediately after fisheries training in Iceland. Another risk was the absence of key staff while on training during implementation. The other counterpart has been away from the college for lengthy periods. This same lecturer was in addition designated as a counterpart to the expatriates in the projects being supported by JICA and by ICEIDA and this represented a conflict of interest.

*Although a good relationship exists between local and ICEIDA staff such that informal discussions and consultations take place, there are no indications that a formal mechanism has been in place for transfer of relevant practical expertise and the maintenance of academic standards. For example, there is no evidence of a process of systematic monitoring of the implementation of the new syllabi and feedback from those using the new syllabi.*

*A more effective process for the transfer of expertise might have been possible if there had been a clearer definition of responsibilities within the college work, including the designation of a lead person accountable for project implementation.*

### Output 2: Provision of skilled personnel for the sector

Perhaps the phrase “a drop in the ocean” would be appropriate to describe this output. No formally assessed and up-to-date need for training for operators of fishing vessels was available at the outset of the project. During the project period and in the near future several dozen cadets, able seamen and motormen have or will have received training. This in itself is commendable. Mobility within and out of the sector is however considerable at some levels, such as the community level, and not enough at

other levels, such as senior management positions for highly trained and well-educated individuals. The former situation can be looked upon as a benefit to society in general given a belief in the usefulness of education of any kind. The latter can be demotivating and can lead to a waning of interest in training opportunities at higher levels, such as Class II and Class I.

Several of those interviewed pointed out that the fishing industry requires skilled personnel both at sea and on shore. One interviewee pointed out that nobody wants to be a sailor his whole life and that perhaps the Marine Training College should broaden its training options.

Another issue that cropped up was whether the Ministry of Transport and the Marine Department would enforce IMO regulations for trained personnel on board ship. In the short-term some operators regard their activities as being more profitable if untrained experienced personnel are employed on board. In another instance it was noted that existing crew did not necessarily welcome the addition of trainees on board when perks such as sharing catch beyond the target for the day were being distributed amongst crew.

*The provision of skilled personnel for the sector is in many ways an unrealistic output for a two-year project. There is no doubt however that project activities and the provision of training for fishing vessel operators have created a high level of interest amongst school-leavers though in some respects the industry itself still needs convincing.*

#### Views of stakeholders on the effectiveness of the project

The evaluation team has tried to summarise the effectiveness of the project so far, from the viewpoint of the major stakeholders in the training for fishing vessel operations (Table 2).

**Table 2** Views of stakeholders on progress of project so far

<i>Stakeholders</i>	<i>Progress</i>
Ministry of Transport	Satisfied with what has been achieved, but feels that the college is still at the development stage and needs continued support, particularly with the establishment of an "assessment unit". Still need to reach agreement with the fishing industry (e.g. MALDECO) on training needs.
College principal	Satisfied with development so far of syllabi and attachment materials. Realises that there has been a problem with training and retaining counterparts. Is interested in the running of short courses at local level.
College lecturers (now on campus). <i>The current lecturers are not familiar with the project document and have few expectations with regard to the achievement of objectives with regard to the syllabi and portfolios.</i>	Satisfied with the procurement of materials and equipment, and the building of the sheds. As yet are not involved in the revision of the syllabi for the longer courses. Are not involved in the attachment process, including the development of materials and practical arrangements concerning students.
College students – long courses – short courses	Students on the longer courses are pleased with the campus training they have received so far, but are not yet in a position to comment on the use of the portfolios for sea-training. Students on the short courses are very pleased with the AB and Motorman courses.
ICEIDA lecturers	Satisfied with the production of the draft syllabi and portfolios. Satisfied with the teaching of the long and short courses. Very satisfied with the procurement of materials and equipment, and the building of the sheds. Regret that a transfer of expertise to local staff has not taken place as envisaged.
Department of Fisheries – Extension and training activities, Mpwepwe College, Fisheries Research Unit <i>Not acquainted with the project plan.</i>	Would like to be of assistance in advertising the college within the region. Would like to cooperate on the development and running of short courses. Have encountered some difficulties with the attachment of students during sea-training, some of which could be rectified by more consultation and the reaching of agreements. Have expressed some doubts on the adequacy of the practical skills of earlier graduates from the college.
Fishing industry - MALDECO <i>Not acquainted with the project plan.</i>	Are supporting the attachment of students during sea-training. Would like to be more involved in the selection of students. Have reserved judgement on the adequacy of the training been offered.
ICEIDA management in Malawi (new manager from the beginning of 2001) <i>Awaiting the results of the evaluation</i>	During project meetings have indicated satisfaction with some aspects of the project and dissatisfaction with others. Would like to see the college and the Malawi government taking more responsibility for certain aspects of the project and fisheries training.
ICEIDA management in Iceland <i>Awaiting the results of the evaluation</i>	Are cautious in their assessment of the project but feel that better planning and preparation in the early stages of the project could have made the activities and inputs more effective.

## EFFICIENCY

### Planning and preparation of project activities

The project document was prepared during 1998 after a formal approach to ICEIDA in early 1998. The project was approved formally in early 1999 and very shortly after the nautical lecturer appointed by ICEIDA took up his position at the college, followed a few months later by the engineering lecturer.

There appear to have been several shortcomings with the planning of the project and the preparations made by ICEIDA and the college for its implementation. Project activities are not outlined in much detail which, while allowing a certain flexibility and freedom of interpretation, also led to a lack of direction and accountability of behalf of both parties. The fact that it was an “educational” project seems to have been overlooked with the difficulties of developing syllabi and ensuring a transfer of expertise being vastly underestimated.

*Any further project activities must allow for inputs by educational experts on syllabus and curriculum development, on teaching methodology and assessment techniques and on staff development. A project coordinator who is directly involved in project activities must be appointed and a project team made up of local and ICEIDA staff must collaborate in the planning and implementation of all activities. Fewer daily demands should be made of the ICEIDA staff such that their expertise and experience of fishing vessel operations can be used to advantage while all staff members, and particularly local staff, assume responsibility for teaching activities.*

### Project management

In the project document it is a requirement that the major players in the project, the Marine Administration, the ICEIDA Project Manager, the ICEIDA instructors and their counterparts should form a project management group (PMG). The responsibility of the PMG has been to manage the project activities in order to ensure effective implementation. The PMG was set up as stipulated in the project document at the outset of the project activities. This also means that participation in the project meetings was limited to these individuals and the contribution of local staff was not ensured since counterpart contribution was intermittent at best.

The first meeting was held on 21<sup>st</sup> May 1999 and a total of seven meetings have been held, the last one in October 2001. The ICEIDA Project Manager has chaired the meetings and most of the meetings were not held on the college campus but rather at the Marine Headquarters office in Lilongwe. One of the counterparts acted as secretary of the meetings. During a typical PMG meeting, the major agenda item was a discussion of a report on the progress of the project activities. The ICEIDA instructors cooperated with their counterparts in preparing the reports and the principal took a lead role in the presentation of the reports. The PMG was instrumental in resolving some issues, considering project plans and providing direction on project implementation in general. The PMG therefore made decisions concerning implementation of the project.

*Reasonable progress has been made towards the main project objectives as we have seen in the previous section with visible outputs being realised in most instances. The funds provided by ICEIDA for the procurement of materials and equipment has been used well and efficiently. The building of the two sheds for practical work in engineering and fishing was not an input in the project plan. The management style, which allowed for decisions to be made as the structure developed and needs arose, was flexible and has led to a good use of resources.*

### Entry requirements to the college

Minimum entry requirements for the new Class III (Fishing) courses are school-leaving certificates, obtained after 12 years of schooling.

- For the engineering courses a good background in physics is required and some tertiary training recommended. It should be noted that in the early 1990s incoming students for the merchant courses required a tertiary diploma in engineering for the engineering courses or A-level passes in mathematics and a science subject and indeed some entered with B.Sc. degrees with majors in mathematics and physics.
- The nautical courses (fishing) require either a Certificate in Fisheries Management, a certificate from the short course for able-bodied seamen (AB-course) with twelve months at sea or other tertiary training with an emphasis on mathematics or science.

Some organisations have insisted on the admission of students who they intend to sponsor, despite the fact that some of these students do not meet the minimum requirements. This is particularly true of the short courses.

*Some concern has been expressed that new recruits for the fishing courses do not have a strong enough background in mathematics and physics nor enough sea experience. The possibility of developing a short introductory science and mathematics course for students has been mentioned but a limiting factor in the admission of new students is the level of science education being offered in secondary schools in Malawi.*

### Gender, human resources and the fishing sector

Women in Malawian fishing communities are traditionally involved in processing and trading of fish. In order to maximise Malawi's benefit from the fisheries resources, extension work focusing on selling and processing, the use of ice, cleaning of fish, hygiene and various means of preventing post-harvest losses must be introduced in the fishing communities. Such activities can be foreseen under the umbrella of the Malawi Marine Training College and would in particular benefit women and their involvement in the fishing industry.

From the project document

The lecturers and management of the College are aware of the importance and need to involve more women in the Marine Sector professions. While it is felt from experience that women may initially find it difficult to work on merchant ships due to

long periods at sea, there is more chance for them to work on fishing ships as they operate on daily schedules by law.

Recruitment of girls/women is still problematic because the institutions from which the college recruits its trainees do not have many women with the required entry qualifications. In addition to the lack of information about the opportunities for women at the College, many secondary school graduates do not have the required grades in science and mathematics subjects and they shy away from applying for training. For example out of 200+ applications for training courses in Engineering Class III (Fishing) and Master Fisherman Class III the college plans to start in January 2002, only three applicants were women. This was despite the clause in the advertisement that “women are encouraged to apply.”

Though the marine industry has not had much experience in working with women professionals the experience of a female trainee and the female lecturer at the college shows that the sector is women friendly and that women can work comfortably within it. The college is women friendly as the new hostel has provisions for women students. Women professionals appear to be treated on an equal basis by their male counterparts.

Capt. Manduwi, the only woman lecturer at the college, has been appointed the Gender Co-ordinator of the college due to her participation in an IMO program on gender. She is yet to make plans on how to interest more women and girls to join the sector. She sees her main work in promoting women participation as that of undertaking civic education in the Marine sector, the technical training institutions and selected secondary schools. This will help to raise awareness both in the industry and educational institutions on the potential and opportunities for women to work in the marine industry.

*The appointment of a gender co-ordinator is a start in the right direction. However there is a danger of perceiving gender issues as concerns of and by women only. The involvement of the college as a whole is still lacking.*

*The co-ordinator should, as soon as possible, draw up a plan on promotion of increased participation of women in the sector and ICEIDA should consider supporting the plan. She should build connections with institutions that are responsible for the promotion of gender equality to obtain necessary support.*

### Educational practice

This project is of an educational nature and in order for the objectives to be effectively and efficiently reached the inputs and activities should have been based on sound educational practice. Some time was spent during the evaluation on ascertaining the nature of the instruction offered at the college. The construction of the syllabi has also been considered as well as assessment practices.

Students reported that they seldom received course outlines during the campus training. Some handouts, particularly of diagrams, are distributed to students during lessons. Often notes are copied from the blackboard.

AB and Motorman courses were in progress during the evaluation mission and the evaluators observed classroom teaching by some lecturers and briefly observed some practical activities supervised by lecturers and support staff. Instruction is mainly in English in these courses but it is reported that occasionally there is a need to revert to the vernacular. A high level of interest was shown by both staff and students but interaction between teacher and students was most often limited to the teacher asking whether the students understood – “Do you follow?”, “Are you comfortable?”. Sometimes students were rebuked for lack of their educational qualifications and inability to understand and follow a lesson. Students took few notes while the teacher spoke and most often only wrote down notes that the teacher put on the blackboard. Simple explanatory diagrams were not always copied down by the students, giving the observer the feeling that only “words” mattered. New technical words being introduced by the teachers were not written on the board.

During the evaluation mission Groups 1 and 2 students currently undergoing sea-training on attachment to the MALDECO fishing company and the Fisheries Research Unit were interviewed. They appeared to be satisfied with their on-campus training but Group 2 had only received the new/revised record books for sea-training after the commencement of their attachment during sea-training phase. Students are required to build up a portfolio of completed tasks during their attachment under the supervision of officers on board fishing vessels. At the time of the evaluation mission it appeared that some supervisors had not been adequately briefed on their duties.

Examinations are written at the end of courses. The new engineering syllabus generally indicates that continuous assessment would make up 40% of the mark and 60% from a final assessment. The nautical syllabus does not give any guidelines on assessment.

The courses have been taught according to syllabi that were still being developed when teaching began. As yet no instruction manuals have been developed. It would be hoped that in their preparation demands appropriate to tertiary level training will be made of students. The acquisition of knowledge and skills is emphasised in vocational training of the type being offered by the college, but rote-learning should not be encouraged through the setting of tests which encourage memorisation rather than application.

Library services are well-used but no information technology is available. Neither the librarian nor the students have access to a computer or the Internet.

*Much modern educational practice is built upon the active participation of the learner in the learning task, as well as a high level of interaction between teacher and learner and also between learners. Concept development rather than rote learning is emphasised. Knowledge is not transferred directly from the teacher to the learner but knowledge and common understandings are constructed during a series of carefully planned activities. Direct instruction, group work, problem-solving and practical activities are all used to engage the learner. In planning lessons, the teacher must always consider the tasks to be carried out by the learner before, during and after instruction. Each and every lesson should have an aim and should involve an element of assessment.*

*It would appear that there is a need to develop the teaching and assessment skills of the lecturer, where assessment is considered in the broadest possible sense and involves the development of questioning technique. Although the development of teaching capacity is a necessary condition for better use of classroom and time spent of tasks carried out by students, it is not sufficient. Students enter the college with a lengthy experience of school lessons where teachers talked and students listened. Attention should also be paid to the development of study skills of students and a different set of expectations about what classroom life should be.*

#### Competency of trained personnel and the assessment unit

It was hoped that the project would lead to increased safety on board. As yet no information is available on the safety at sea and indeed it is too soon for the present training to show any effects. However we can consider the nature of the training and assessment being received by students.

Students undergo examinations at the end of their on-campus training. Considerable attention has been paid in marine training over the last 20-30 years to the use of tasks and guided assessments during practical training. Students are also required to prepare portfolios and produce them when presenting themselves for the competency examinations.

From the beginning of the project there has been a discussion on an assessment unit within the Marine Department but this was not included in the list of activities to be carried out. The establishment of the unit is now becoming a reality. One of the current lecturers, who has newly returned from a graduate program in maritime education and training, has been earmarked for a post at headquarters and will have the task of establishing formal procedures for independent assessment of students for Certificates of Competency. It is likely that an Examinations Board will be convened when necessary in order to prepare examinations and carry them out. They will be in three parts – written, oral and practical.

At least two issues of concern emerged during the evaluation. Students currently on attachment were worried that the assessments would not be related to their training on campus and were concerned that the ICEIDA lecturers would not be in place to take part in the assessments, as they have done during the project period. Another potentially more serious issue, which has been mentioned elsewhere, is that practical part of the assessment is at risk as no vessel is available at the college, and no funds are available to hire a vessel for the assessments.

Fears were also expressed in some quarters that the level of practical training and the development of competencies is not all that could be desired of personnel responsible for the operation of vessels, both merchant and fishing.

Through the JICA project equipment to the value of several million US \$ were procured. During the ICEIDA project some of this equipment has not been in use because of malfunctions or inadequate preparation of staff to use this equipment. Only one staff member was trained to use the equipment and he was away on training for a

considerable period. Some of the equipment, such as the radar simulator and that related to chart work, is important for both training of personnel for both the merchant and fishing sectors. The new counterpart to the nautical ICEIDA lecturer is currently being trained in the use of some of the JICA equipment by a colleague.

*The Marine Department has set itself the task of reaching IMO standards with regard to personnel on board merchant and marine vessels. To reach these standards a good understanding of the purpose of practical training and the placing of this training in a larger context is essential. It is highly unlikely that the IMO would regard the Certificates of Competency as meeting their standards if the assessments have not involved a practical component. Every effort must be made to deploy resources in such a manner that the syllabi are in accordance with IMO standards and that the examinations are in accordance with the syllabi and involve practical components.*

## IMPACTS AND EMERGING NEEDS

### Foreseen impacts

*Impact on the fishing industry/market:* The overall impact of the project is that it has demonstrated that it has developed the desire in the fishing industry for the need to have skilled workforce in sufficient quantities. The original need for training of the type being developed at the college came from the supply side. The demand side of the training (the market) was dormant and its needs for such training were not felt. For example MALDECO fisheries the main potential employer of the output from this training expressed the desire to employ more of the graduates from these courses after experiencing the level of expertise the students on training demonstrated during the sea phase training. The project has therefore stimulated the market and is creating demand for the MTC outputs and confirmed the project purpose that of producing skilled workforce.

*Impact on college lecturers:* More desire for being professional on how the lecturers teach their subjects. Before the project was introduced at the college lecturers taught and their demands for training were more on the technical side. However the process of implementing the project has revealed to most of the lecturers that in addition to the content of the courses they have to impart to students the methods they use are equally important for effective learning.

*Impact on the skills of the people working on the fishing vessels:* While it may be too early to expect the number of skilled fishermen and crew on fishing vessels in Malawi to have reached the levels of efficiency, the need for appropriate training in this area being felt at all levels and other needs have emerged as a result. There were indications from one fishing company providing the sea phase training to some students that they seemed to be better skilled and possessed more expertise than members of the company who had on-the-job-training.

*Impact on the number of courses and trainees:* The number of courses and the intake for training has more than doubled in the last two years. Two courses for engineering students, both merchant and fishing, have been conducted with a total intake of 49 of whom 29 were in the fishing courses. In Group 1 seven students were enrolled in Class III (Master Fisherman) while eight enrolled in the Class III Marine Engineering/Fishing. In the second course (Group 2), eight and fourteen students enrolled for the Master Fisherman Class III and Marine Engineering respectively. A total of 27 students have completed the fishing courses and five their competency examinations. Most of them were undergoing sea phase training in late 2001 and students in Group 1 are expected to do competency examinations in December 2001. In addition 4 Able Seaman and 2 Motorman courses have been held during the project with a total enrolment of 87 students.

### Unforeseen impacts

*Impact on entry qualifications for the marine and fishing courses:* Although the project was directed at training for fishing vessels, project activities have had an effect on training for the merchant marine sector in that it is becoming more clear that the needs of the merchant sector, although similar to those of fishing sector, they may not be the same. They may require different grading and admission criteria.

*Impact on the management of training:* Management issues needing to be resolved at the college have come into clearer focus during the project, especially during the evaluation itself. Issues of project leadership, coordination and collaboration, a stable human resource, clearly defined responsibilities and roles were revealed during the evaluation as important in running a training institution like MTC to provide effective training.

*Impact on facilities:* Improvement of facilities for practical activities has improved the on-campus training but has also highlighted the need for further improvement, in particular the need for a training vessel.

*Impact on the level of awareness about the fishing industry:* The project has revealed that not much knowledge and information is available about the fishing industry as a market for the expected outputs from college. It has become more apparent that it is not only necessary for college to collaborate with the industry but also to explore and develop a better understanding of the needs of the industry so that the needed numbers of skilled people are produced at the required time.

The project has created an opportunity for the college to see itself in the context of the total fishing sector not only of the fishing industry. The college is therefore slowly altering its mandate by embracing the training needs of the local fishermen and starting to think of offering community based fishing programs.

*Impact on collaboration with other organisations:* The process of developing training programs has brought about the realisation by the college that to carry out the process of development, it can source the expertise of other professional individuals and institutions in the areas it may be deficient, such as curriculum development and management.

#### Emerging needs

*Perhaps the most outstanding impact of the project is that it has created an awareness of needs that would not have surfaced if the project were not in place (Table 3).*

Some of the needs that have emerged have direct relevance on the achievement of the project purpose and objectives. Such needs have been considered in the recommendations for further support if the project is extended.

**Table 3**      **Emerging needs**

<i>Stakeholders</i>	<i>Needs emerging</i>
Ministry of Transport	To reach IMO standards the development of an assessment unit will be necessary.
MTC management (Board has not met since 1998)	Training needed across the board, including higher-level management training and community training. Need for standardised assessment after sea-training. Further work necessary on gender issues though a start has been made. Need to explore funding issues including contribution of fishing industry and regional training. Need to explore sustainable mean of sponsoring of individual students.
MTC students – long courses – short courses	Need to look into the role of the fisheries industry prior to or early on in the training with regard to employment opportunities and to finding a balance in supply and demand. Need to establish agreements and standard procedures for the placing of students during sea-training, including clarification of expectations of the different parties and division of responsibilities. Need to ensure that entry standards are upheld despite pressure from sponsors.
ICEIDA lecturers	Need to ensure recruitment and retention of trained staff at the MTC. Need to build in processes for the transfer of expertise between individuals. Need to define structures and responsibilities for the management of project activities. Need to train at different levels, including at community levels.
Department of Fisheries – extension, training, Mpwepe, FRU	Need to establish a Memorandum of Understanding concerning cooperation between the Ministry of Fisheries and the Ministry of Transport in the area of training. Need for participation on the selection of students. Need for information exchange on market needs for trained human resources. Need to establish a common understanding of the purposes of sea-training, the roles of students and the duties of the College and the host organisation during the attachment.
Industry - MALDECO	Need for participation on the selection of students. Need for information exchange on market needs for trained human resources. Need to establish a common understanding of the purposes of sea-training, the roles of students and the duties of the College and the host organisation during the attachment.
ICEIDA management	Need for a Memorandum of Understanding between the Malawi government and the Icelandic government. Need to prepare ICEIDA staff more thoroughly for project activities prior to engagement in implementation. Need for better preparation by ICEIDA and the host country for the arrival of ICEIDA staff.

## SUSTAINABILITY AND MANAGEMENT ISSUES

*What benefits of the project will continue if and when ICEIDA-support is withdrawn? In general it is hoped that ICEIDA projects will result in the establishment of management mechanisms which could stay in place after financial support is withdrawn.*

### Two issues concerning sustainability

It should be clear from the outset that there are two dimensions to the issues of sustainability in a training project of this nature.

- One dimension is the extent to which the college is given support by headquarters the Marine Department which is one department in the Ministry of Transport. The college is at the mercy of certain governmental procedures regarding staffing and revenue, which cut across many Ministries and government departments. A change in these procedures is not carried out lightly and certainly not at the level at which the college functions. Examples are the stringent rules governing the collection of revenue from college operations *as a government institution* and the lack of flexibility in offering staff employment packages worthy of their education and experience.
- The other issue that affects sustainability are the relationships that the college has with industry partners in merchant marine and fishing. The college seeks to serve industry through the provision of training personnel, which in turn provides the college a service through selection and sponsorship of students and their placement during practical training. Here the college can take a much more proactive stance with regard to sustainability than it can in its relationship with the government, where of necessity the relationship is more reactive.

The college must at all times be aware of the needs of the industry and try to meet them through consultative relationships and the drawing up of agreements. It is worth noting that the “industry” is both private and public. MALDECO has been the largest player in the private sector with regard to fishing, but the privatization of Malawi Lake Services, the most long-serving and loyal partner in the public sector, may have implications for the sustainable management of the college in general, especially if fishing and merchant courses can be taught together as has been the case in 2000 and 2001. An important player in the public sector for the sustainability of the activities initiated by the project is the Department of Fisheries, both through its own training activities and the need for trained staff on its research vessels. Both ICEIDA and the college may encounter difficulties in establishing formal agreements with the Fisheries Department, though informally and at lower levels, good relationships exist.

### Strategic management and the Board of Governors

The sustainability of the project depends, to a certain extent, on the various levels of the college management structure, particularly the Board of Governors, taking ownership of the project. Established through the Education Act of 1993, the Board of

Governors of the Marine College is the policy-making body for the college and should make final decisions on college activities, including the approval of curriculum of the college, receipt and control of funds for the college. The Board, as provided for in the Act, delegates some of its powers to the Principal for example the day-to-day control of finances and management of the college.

Since 1993, four boards have been appointed each for a period of two years. The chairman has remained however the same for the entire period. The Secretary to the Board is the principal. The last board was appointed on 22<sup>nd</sup> June 1999 and was dissolved in August 2001. The last board met only once, in June 1999, during its tenure of office and this was when the project was just starting. The Act requires the Board to meet four times a year but provision must be made for its activities in the budget, which is drawn up by the principal. It is said that the main reason for the non-functioning of the Board is lack of funding; allowances must be paid to all to Board members who attend meetings.

It would seem however that during the formative years of the college the board played very critical role in putting in place appropriate policies for the effective functioning of the college. It also worked on the issue of the resource base for the sustainability of the college, as government funding became increasingly difficult with the introduction of the cash budget system. It therefore introduced cost-sharing initiative of training with the consumers of the training and the opening up of the college to countries within the SADC region.

With the increased problems of financial resources of the college, board meetings were chopped off the list of college activities. To keep the college functional the department of Marine Services and the Principal of the college are now performing the functions of the board. The Chairman of the Board until August 2001 was only being informed of the developments at the college, as meetings were not possible despite him requesting for the meetings. This arrangement is not provided for in the Act that established the Board.

The Board would appear to be too large in order to function effectively as a management body, especially since most members are actually *ex officio* members. It is estimated that one meeting would cost MK140.000. The College received MK250.000 for running expenses in November 2001.

The department and the Principal should manage the Board account, which ideally should have been managed by the Board and this raises the issue of accountability and transparency although government auditors audit the accounts. It appears that the Accountant and the Principal alone see to the running of the account.

The Marine Department considers the Board to play an important role for effective management of the college. The efforts of the department to appoint a new board have not been fruitful. It is not clear however how the Board will function if and when it is appointed, as there is no financial provision for the Board in the current budget of the College. It may not be until the new financial year, which starts in June 2002, before any assurance for money is made to enable the Board to meet. It was the view of some people that the college would function better if it became a semi-autonomous institution rather than being wholly under a government department.

*The ICEIDA-supported project, as well as the new syllabi, which have brought about considerable change to the activities of the college have not been discussed nor approved by the Board as required by the Act. This means that the project does not enjoy ownership at this upper management level. The absence of this management mechanism runs the risk of raising the issues of transparency and accountability, both with regard to decision-making and the auditing of funds.*

*The Secretary for Transport should facilitate the appointment of the Board of Governors for the Marine College and make it functional by clearly budgeting for it. ICEIDA may consider supporting some costs of its meetings for a period of one year until provision is once again made for the Board in the budget. The value of the Board may not be apparent at campus level but if the Malawi Government is to understand and appreciate the efforts being made at the college and by ICEIDA to provide marine training for the fisheries sector, then the high-ranking government officers on the Board should meet regularly if only to receive information.*

### Managing people

The Principal as the head of the college is the chief executive for the institution. He identified two offices as counterparts from among the lecturers at the college one at Principal Lecturer (Nautical) level and the other at Lecturer (Engineering) level and they were to work with the ICEIDA lecturers upon their arrival. However the office arrangements for the counterparts and the ICEIDA lecturers do not promote interaction between them as the former occupy one office and the others a different office.

Although the counterparts were expected to be full-time counterparts, it would seem they were also counterparts to the technical staff of the JICA supported project. Both projects offered training abroad and both counterparts were away on training between August and December 2000. The counterpart on the engineering side went to Japan through the JICA project while the other on the nautical side went to Iceland. This was during the same period that the ICEIDA instructor (nautical) went to Iceland for medical treatment. The two nautical instructors were however able to work together on some aspects of gear technology in Iceland during this period.

The Principal left for training in Japan immediately after the return of the nautical counterpart while one other lecturer also left for Scotland on training. Activities in the nautical section of the project were greatly hampered. When the counterpart on the nautical side returned from the training he worked on the project for only a few weeks and left the college in March 2001 without any formal handover. The counterpart on the engineering side also went on study leave from June 2001 for two years. From the inception of the project, there has been high mobility of staff in general and of the counterparts in particular and this got worse in 2000 and 2001.

There is some hope however that the counterpart on the engineering side will return after his studies as he comes to the college during holidays. It is said however that his leave of absence is in the long run beneficial not only to the college but also to the project activities. In addition as government is still paying his salary while he is on training, this could be considered as government commitment to ensure better-trained staff for the college.

The departure of the two counterparts affected effective implementation of the project for some months. In addition what the lecturers had learned from the counterparts was lost to the project, at least in the case of the nautical counterpart. It would seem that there is a need for more staff than the counterparts to be involved in the project activities.

Apart from the departure of the two counterparts there is general shortage of teaching staff as one lecturer died in October 2001 after a long absence on sick leave and yet another left the college. At the time of this evaluation, there were only two permanent lecturers at the college. In order to rescue the situation the PMG decided to recruit three additional lecturers. The ICEIDA Program Manager agreed to pay salaries and house allowances of these lecturers until December 2001 when government will put them on its payroll as civil servants, as indicated in the minutes of the PMG of 28<sup>th</sup> March 2000.

This staffing situation has affected the implementation and management of the project and as a result much of the work that could have been done by the counterparts has been done by the ICEIDA lecturers.

Even though the two counterparts were designated it should be noted that nobody was assigned the responsibility of coordinating the project. The need for leadership and management structure with well-defined responsibilities at the college level is an aspect that was not thought out and is therefore absent in the project implementation process. There has been no-one to give direction on a daily basis and to provide linkage between the college administration and the project. As a result the ICEIDA lecturers found themselves in a situation whereby they have had to carry out some administrative duties instead of focusing on academic aspects of the project.

The evaluation team was informed that the structure of the college, which was established in 1989, was reviewed in 2000 by the Department of Human Resources and recommendations were made in the report that came out in August 2001. In addition to upgrading existing positions, some posts have been added particularly on the teaching side. The lowest position on the teaching staff is now that of Senior Lecturer P8. Four new positions are provided in this structure for lecturers in fishing, two on the nautical side and two on the engineering side. Two junior positions of instructor have been added to run lower level courses such as community-based courses for the local fishing communities. The college still awaits authority from the Department of Human Resources Development and Management in the Office of the President and Cabinet to start implementing the new structure. The principal indicated that the filling of the positions in the new structure may not be completed until in the 2002/2003 financial year although it is hoped that this could start by January 2002.

*The college has not been particularly effective in managing its staff and as a result this has negatively impacted on the implementation of the project. Counterpart and on-the-job training has not been achieved as the project has just started with new counterparts in 2001 and with other new staff at the college. The creation of the new positions will greatly reduce the problem but this will depend on how fast these positions are filled. The filling of the position of the head of the academic department at the college needs urgent attention, as this will provide leadership to the project. Alternatively, in the absence of such an officer, the Marine Department or the college should appoint a dynamic person to act as a project co-ordinator.*

### Managing finances

The main source of funds for college activities is the government allocations through the department of Marine Services whose amounts vary from month to month. The college is short of funds to effectively run its operations since it is allocated less than its requirements to manage the college. For example in November it was allocated about MK60.000 for running expenses (which is less than US\$1000). However the college as a government institution is expected to raise revenue that is deposited in the government's consolidated account to which the college has no access according to government regulations. In addition the cash budget system which government uses makes it difficult for the college to get its financial needs met by government when cash-flow needs are highest.

On the other hand, the Board of Governors, which has powers to raise money for the college, has not been able to raise any because it has not been functional for a long time. The only money that has passed through the Board's account in recent years is the money from ICEIDA for the salaries of the temporary lecturers and scholarships for the students sponsored by the project.

To ensure effective management of the money, the college has two posts in the accounting department which manages the college funds but only one post is filled. The college follows government rules and procedures in the management of the funds. Government audits its books of accounts, including those of the Board, on a regular basis. There would however appear to be a lapse of management in that the no provision has been made for the fishing courses in the budgets, but apparently this is to be remedied from mid-2002.

The funds of the project are managed by one of the ICEIDA lecturers who have also seen to most of the purchasing of project equipment and materials. All the equipment that has been bought was in consultation with the counterparts and approved by the PMG. The flexibility that the project document provides has enabled the PMG to decide what other needs project funds can meet which relevant to the project objectives. Project finances are also used to constantly bail out the college on its financial requirements on minor items, including basic office supplies.

*The major problem the college has is not how to manage funds, but rather how to source funds as the allocation from the government is very small. The college is put in a situation whereby it has to depend on the project to finance some of its daily operations. On the other hand the need for funds is not necessarily visible to the Malawi Government since the fishing courses have not been provided for in the college budget.*

### Managing operations

The college has standard procedures and requirements for recruitment of students for the various courses it runs. For the longer courses they are advertised in the national newspapers while the short courses are locally advertised along the lakeshore areas. The applications are short-listed and those found qualified are called for interviews, after which suitable candidates are selected. However the selection of the candidates has not necessarily involved the industry and the industry feels very strongly that it

must be involved. In addition to this procedure, the college admits students that have been selected employing company such as the Army, Malawi Lake Services and MALDECO, which are the major suppliers of candidates. In such situations the college has sometimes relaxed entry requirements, not always to the advantage of the cadet or his colleagues.

The college has a complicated system of managing the students when they are on sea phase training after completing six months of campus training. The sea phase training runs for 12 months at the end of which they are expected to do competence examinations.

The college arranges the placement with the relevant companies. When their employers send students, the company is expected to pay for their training. In the case of training for the fishing sector that has taken place under the ICEIDA-supported project there has not been a standard way of sponsoring scholarship and other students, especially during their sea phase training. The companies that have sponsored their employees for campus training continue to be responsible for their upkeep and pay them their normal salaries. For those that are sponsored by ICEIDA, and are attached to MALDECO the college has arranged with the company to pay their board and lodging allowances of K1500, while ICEIDA pays the personal allowance of K600. One of the students on an ICEIDA scholarship is with the Fisheries Research Unit for his attachment and ICEIDA pays both allowances. On the other hand three students that are self-sponsored and are attached to the Malawi Lake Services are accommodated at and fed by the College.

The process of identifying places for placement of students has been initiated by the Principal but the follow up and ensuring the technical and social well being of the students has been undertaken by the ICEIDA lecturers with no involvement by the other college lecturers and minimal involvement by the principal

*The admission of students from companies without due consideration of their qualifications has the potential of lowering the standards. Involvement of the stakeholders in the selection process is essential and may reduce this problem. More systematic arrangements and policy guidelines are necessary for the attachment period with maximum involvement of the college lecturers. On the other hand lack of information on the extent and nature of the market creates uncertainty in planning for courses and the intervals at which they should be offered.*

### Managing markets

The mandate of the college is to train for the sector. Up until the project started, its major focus has been the engineering and nautical merchant sector. The major suppliers of students have been Malawi Lake Services and the Army. These two organisations therefore affect the market and the need to train. However the market for the college has expanded with the introduction of the fishing courses which is bringing in other stakeholders. The fishing industry is very small with MALDECO being the only major player. The company has only three vessels and it sees itself as not needing more than two Master Fishermen in the next year from the college. On the other hand the college feels that there is need to train more people in fishing at Class

III in both engineering and nautical areas. This assumption is not backed up by concrete evidence since the college has not explored the industry.

Both MALDECO and Malawi Lake Services are members of the Board of the Marine College. However with the inactive state of the Board, the participation of the market in decision-making for the college is as of now non-existent. The effect of privatisation of the Malawi Lake Services from 1<sup>st</sup> December 2001 on the college is not yet known. The board does not seem to have any operational committees, which could provide for more participation in the activities of the college. There is no up-to-date information on the state of the fishing market and its specific needs. For example, while the college is planning to run another course for fishing at Class III level, the current students on placement and the fishing industry itself are not certain that these people will be absorbed because there are few vacancies. It is the understanding of the college that most of the officers and crew operating the few fishing vessels may not have the appropriate skills as they been trained on-the-job. On the other hand the fishing industry feels there is no problem in having such people as long as it is able to make money. As long as the Marine Services does not enforce the necessary regulations for fishing operations, the industry does not see the importance of employing well-trained and qualified operators.

Mpwepwe College of Fishing is planning to undertake a study to determine the training needs of the local fishing communities, which will enable the designing of appropriate courses

Some organisations expressed the need to participate more closely in the activities of the college such as the recruitment of students and the process of their training especially the placement part of the training.

*It is important that the Marine Services department intensifies its role of law enforcement to enable the fishing vessels operators to start to see the need for trained staff. The college should develop a better understanding of the fishing industry and run the courses based on specific needs in addition to liaising with Mpwepwe on the planned study.*

### Managing information

The structure of the college provides for clear channels of communication from one position to another. However the absence and subsequent sudden departure of the Principal Lecturer, who was the senior academic and acted as deputy to the Principal, disrupted the flow of communication between the teachers and management. There is no clear structure for the management of information concerning the project or other academic activities in the college. College management meetings seem to have been erratic if any at all. Communication between the counterparts and the ICEIDA lecturers has depended on *ad hoc* encounters. No formal project meetings seemed to be organised except for the PMG meetings.

The library is a useful source of information. The members of staff, students and the surrounding communities make good use of the library. With more books bought through the project, the library has been reorganized. There is a qualified librarian who is responsible for the management of the books. It appears however that there is a problem of people not being able to return the books after use. The current recall

system does not seem to work especially since the system is not computerized. The computer that was bought to facilitate the management of the library is yet to be put in the library. This could provide a starting point for the college to access information from the Internet and from other libraries both nationally and internationally.

The need for lecturers and other staff members to have information technology skills was identified and in-house computer training is on-going. However the local lecturers are not connected to the Internet and sourcing of information from other institutions is not possible.

*Despite the fact that there is a defined line of command in the college, it does not seem to be very effective due to the gaps resulting from high mobility of people and the absence of clear channels for communicating information. Little use is made of the information technology in the college to access and manage information because of lack of such facilities.*

#### Factors affecting sustainability

Some factors affecting sustainability are summarised in Table 4:

Table 4 Factors affecting sustainability

Political	<ul style="list-style-type: none"> <li>▪ Ineffective Board of the college</li> <li>▪ Lack of political will and commitment</li> <li>▪ Existence of a dependence on donor funding for any development to take place.</li> </ul>
Institutional	<ul style="list-style-type: none"> <li>▪ Absence of management structures and mechanisms at the college</li> <li>▪ Undefined roles and responsibilities</li> <li>▪ Vacant positions and high mobility of lecturers and counterparts.</li> <li>▪ Little involvement of other lecturers other than the counterparts</li> <li>▪ Little transfer of expertise from the ICEIDA lecturers to the local lecturers due to poor planning for that process.</li> </ul>
Economic and financial	<ul style="list-style-type: none"> <li>▪ Inadequate information about the size and nature of the fishing industry</li> <li>▪ Inadequate government financial allocation to the college, which makes the college dependent on project funds for its day to day operations.</li> </ul>

Technological	<ul style="list-style-type: none"><li>▪ Little expertise and knowledge to use the equipment supplied by JICA.</li><li>▪ The lack of a training vessel for a more practical and hands-on approach to learning.</li></ul>
Socio-cultural	<ul style="list-style-type: none"><li>▪ Dependence on projects as a way of sustaining the college</li><li>▪ Gender imbalance – marine training and the marine industry has been a male dominated sector and little effort has been made to involve women</li></ul>
Environmental	<ul style="list-style-type: none"><li>▪ Close cooperation is necessary between the Ministry of Natural Resources/Department of Fisheries, the Ministry of Transport and the fishing industry. Trained fishing personnel will be a key factor in the management of natural resources.</li></ul>

## LESSONS LEARNED

The designing and the implementation of the project have provided a number of useful lessons which provide an opportunity for the Malawi government, especially the Marine Administration and the college, and the Icelandic government, especially ICEIDA, not only to improve the current project but also for cooperation in future activities.

*It is difficult to avoid the conclusion that a culture of dependency on project funds and initiative has developed at the college over the last 15 years with a steady input of technical assistance from different partners and the strengthening of the college infrastructure through building construction and provision of materials and equipment. Project activities have not yet been integrated into what might be considered a normal part of college affairs; within the staff distinctions are made between “them” and “us”. The evaluators have drawn the attention of the staff to this and have emphasised that it is essential for the college to begin to take responsibility both psychologically and financially.*

The developmental and operational lessons presented here are perceived from the point of view of the various stakeholders as well as the evaluation team.

### Developmental lessons

1. In formulating a project proposal using the LFA, the components must provide not only a logical flow but also reflect the processes that may be followed during implementation of the project. Setting clearer targets, an achievable timeframe and realistic indicators and outputs would have made implementation easier.
2. The absence of realistic and reasonable conditions for both governments to fulfill before and during project implementation did not promote commitment to and ownership of the project particularly on the part of the Malawi government. In any project, demonstrated commitment must be sought for effective implementation and sustainability of the project beyond the project life. The existence of a non-binding environment promoted an attitude of “them and us” and expectations that the project is there to solve all the institutional problems.
3. Project implementation that is more flexible and responsive to opportunities has a better chance of achieving its objectives. The project did not make use of opportunities such as teamwork, observation of lessons, development of syllabi through evaluation, short-term preparation of classes, long-term revision of syllabi and use of expertise from other institutions. If these opportunities had been used, they may have led a better transfer of skills and knowledge, effective participatory learning on the part of the students and a sense of ownership of the project. More efficient and effective outcomes on the part of the college staff could have been achieved than is the case.
4. Implementation of two or more projects funded by different sources at the same time requires a lot of co-ordination and cooperation. A mutual understanding of the roles of the JICA and ICEIDA projects in the development of college self-sufficiency could have enhanced project outcomes. Making the same person

counterparts for two projects was unrealistic as it overburdened the officers concerned and sometimes created conflict of interests.

5. Although the Logical Framework Approach was used in planning the project, the main activities and inputs were not defined in detail but presented in general terms. This appears to have had both advantages and disadvantages. The lack of definition led to a flexible approach to project implementation. This has enabled such activities as the construction of sheds for practical activities in fishing gear technology and engineering, the provision of scholarships to students on short and long courses and the meeting of costs incurred in hiring temporary lecturers while waiting for government approval of posts. One disadvantage is that increasingly the project has borne the operational costs of training in order to facilitate the running of courses and provision of essential supplies for office and practical work, on-campus training and the supervision of sea-training. Another disadvantage has been that for much of the time, particularly in the early stages, activities have not had a clear focus and direction nor a transparent structure for monitoring and feedback.

#### Operational lessons

6. It is important to consider seriously the nature of the job and the type of qualifications appropriate for the persons who can do that job effectively. Having expertise in a given field like fishing was necessary but in the case of this project it was not the only requirement. The project is educational in nature involving the process of developing curriculum (syllabi are a major component of the curriculum). Curriculum development and evaluation needs expertise and skills. Neither the ICEIDA lecturers nor the college lecturers have much experience in this area.
7. The ICEIDA lecturers were not adequately prepared by ICEIDA before taking on the assignment, either in Malawi or in Iceland. This contributed to a lack of direction in the initial stages and during implementation, particularly on matters such as the transfer of expertise. Much time was therefore spent by ICEIDA staff on understanding the assignment and what was expected of them.
8. The absence of a clearly defined management structure with clearly defined roles and responsibilities hampered implementation. As the ICEIDA lecturers made efforts to meet their targets, they took on responsibilities which in a normal project implementation environment should have been taken on by the counterparts. Appropriate mechanisms were not in place.
9. In a situation where it is known that the people are very mobile, it is wiser to involve more than one counterpart. The project suffered more than would have been the case if all the teaching staff were involved from the beginning. The departure of the counterparts would have had less impact.
10. Cooperation and collaboration with relevant organizations is vital for effective implementation of any project at different levels both within the public service and private sector. This promotes the sharing of information and clears unknown fears about each other. MTC has not taken the lead in ensuring that there is clear understanding and appreciation of what the college is doing and thereby to source support where it is needed. Institutions in the maritime sector

feel they have a role to play and the college has not stretched out to reach them as yet.

11. The process of project implementation will always bring out other needs, some of which may be relevant and others may not. The project has been able to single out the relevant needs and attended to them wherever possible.

## CONCLUSIONS AND RECOMMENDATIONS

### Conclusions

Earlier in this document a detailed discussion has been presented on five crucial issues in the evaluation of a project. The following points were made in the Terms of Reference for the evaluation:

- Relevance: Are the objectives worthwhile? Does the design of the project support the objectives?
- Efficiency: Has there been an efficient use of resources in the project? What problems have arisen? Could they be avoided in a second phase?
- Effectiveness: Has the project achieved its objectives? What has facilitated or prevented the effectiveness?
- Impact: What are the positive and negative effects of the project? What are their causes?
- Sustainability: What benefits of the project continue beyond donor involvement?

The main conclusions of the evaluation team are presented in Table 5.

Table 5 Conclusions reached on the project

Relevance	There is no doubt that the project is relevant to the Malawi government in the context of its strategy of poverty reduction. Trained and skilled human resources in the fishing industry will help the exploitation of the fish resource in Lake Malawi and also the management and conservation of these resources.
<i>Effectiveness</i>	Project activities have been effective in developing and promoting training for fishing vessel operators at a professional level. Draft syllabi and sea-training guides have been prepared and teaching facilities have improved.
<i>Efficiency</i>	Efficiency of the activities has been hampered by several factors, including a project plan not prepared in sufficient detail, inadequate preparation by both cooperative partners for the activities, difficulties within the college in the provision of counterparts and other operational difficulties, such as lack of transport for staff and students. More interactive approaches may have facilitated the transfer of expertise.
<i>Impact</i>	The project implementation has been for two years only and it is too early to see the impact of better training on the safety and efficiency of fishing vessel operations. However, some impacts have been observed such as increased awareness of the need to understand the fishing market better and to work more closely with industry. The number of students applying for the third Class III fishing course to be offered in 2002 exceeded all expectations.
<i>Sustainability</i>	The absence of effective management structures at the college and the dependency syndrome puts in question the sustainability of the training and activities initiated so far. There is however a lot of goodwill surrounding the project and it may be possible to develop sustainable measures by the setting of conditions for further support. For example, there is need for visible commitment by ensuring that critical posts are filled, the board and other management structures are functional, and adequate resources are allocated. A development of the sense of ownership on the part of the college staff through participation in project activities is necessary.

### Scenarios

It is possible to construct several scenarios for the extension of project activities.

#### *Scenario 1*

No extension of funding recommended. This would mean halting project activities immediately as the project has completed the two years initially promised by ICEIDA.

#### *Scenario 2*

Direct extension recommended until the end of 2002, using a similar format to that already in place. Full withdrawal at the end of 2002. No conditions set.

#### *Scenario 3*

Extension recommended until the end of 2003 with an emphasis on staff training. Some conditions to be met by the Malawi Government during 2002 if funding and support are to be provided for 2003. Some new activities added to meet the need for a broader base of training such as a project component on local community training. ICEIDA expertise could be provided in the form of short-term consultants during 2003.

#### *Scenario 4*

Extension recommended until 2004/2005. Similar to Scenario 3, but in addition there would be a commitment to long-term training for college staff.

The rationale for the different scenarios and a summary of projected activities are described in Table 6.

**Table 6** Scenarios for extension of project activities

<i>Scenario</i>	<i>Rationale</i>	<i>Main activities</i>
1, end of 2001	There has been a satisfactory achievement of most project objectives. Group 1 students are finishing their attachments, Group 2 have begun, draft syllabi are in place as well as temporary lecturers.	Wind up project activities  External factors are unpredictable and risks outweigh benefits.
2, end of 2002	This scenario is envisaged as a means of achieving more fully objectives in the current project plan. The focus is in involvement of college staff and a teamwork approach to the revision of the Class III syllabi. Some in-house training on teaching methodology and assessment. <i>This scenario requires the preparation of a new project plan for 2002 that incorporates the lessons learnt to date.</i>	Activities include third testing of new syllabi, involvement of college instructors in monitoring of Group 2 students in attachment and increased emphasis on in-house training, ideally through local workshops or short courses, including UNU FTP. Teaching methodology and assessment would be priority areas of training. Planning for and implementation of plans on gender awareness creation.
3, end of 2003	Developing a broader focus which involves meeting the need for training across the board, including Class II, local community training and training of college staff. Making an input into the activities of the Assessment Unit/Examinations Board. <i>This scenario requires the preparation of a new project plan that incorporates the lessons learnt to date. Conditions with regard to sustainability to be met by Malawi Government during 2002 before support is provided in 2003. ICEIDA support could be in the form of short-term consultancies rather than full-time staff in the year 2003.</i>	Activities include a modified approach to cooperation, involvement of all staff, responsibility, testing and monitoring of an entire training process from campus to Certificate of Competency (Group 3), local workshops and short courses, and short-term sponsorship (e.g. UNU FTP), attention to IMO guidelines and development of the assessment unit. Teaching methodology and assessment would be priority areas of training but there would also be an emphasis on offering Malawi staff experiences on fishing vessels. Continue gender activities to community level and follow up.
4, until 2004/05	Similar to Scenario 3, but with an added focus on local community training within the fishing sector in Malawi and more short-term and long-term training for staff of the college. <i>This scenario requires the preparation of a new project plan that incorporates the lessons learnt to date but introduces a new element of local community work, which adds an extra dimension to the type of training offered.</i>	A pilot project component for local community training being introduced in 2003 with full implementation in 2004. Plans made in 2002 for short and long-term training of staff.

More details of activities are given in Appendix 7, but it must be emphasised that these are only suggested activities. Final components must be developed and agreed to in consultation between all parties.

### Recommendations

**The evaluation team recommends that plans be made for Scenario 3 i.e. definite extension until the end of 2002 and provisional extension until the end of 2003.** It is important both for the college and for ICEIDA that the conditions set for evidence of commitment and sustainability on the part of the Malawi Government during 2002 are adhered to strictly. No extension must be offered if these conditions are not met; if they are met, then emerging needs and sustainability can be addressed in a constructive way.

The following recommendations are made in the light of lessons learnt and should be incorporated into any new project document. They are presented as a set of guidelines for the planning of Scenario 3 under the following headings:

1. Approach to cooperation and capacity building
2. Curriculum development and evaluation processes
3. Conditions to be met by the Malawi Government
4. Project management.

#### 1. Approach to cooperation and capacity building

##### *Roles of college and ICEIDA staff*

In planning for the project extension, provision must be made both for the roles carried by college staff and those by ICEIDA staff during the implementation of the project. There must be a move towards a project conception whereby the project is implemented through a series of activities carried out both by the college and by ICEIDA. Some activities will be carried out jointly and some separately. The project plan should indicate who is responsible for each activity and who will carry it out. There should be a visible attempt to create a broad spectrum of responsibility, from project title through the objectives to the activities.

College and ICEIDA staff members have different capacities and areas of expertise. Each can learn from the other. Mechanisms must be planned, constructed and implemented for the formal and informal transfer of expertise and development of capacity. ICEIDA inputs could involve either present staff or short-term consultants, both during 2002 and 2003.

##### *Role of Ministry of Transport and college administration*

There are several areas of cooperation within the marine sector and connected to it that have emerged as important to the development of training of fishing vessel operators and broader training for the fisheries sector. These areas of cooperation must be explored and clarified and where appropriate, provision must be made for the drawing up of agreements where the roles of the cooperative partners and the roles of the Ministry and the college administration are defined. Such partners include relevant ministries and government departments, the Government of Iceland and companies involved in fishing. For example, closer cooperation is encouraged with the Department of Fisheries, both at headquarters and at the Mpwepwe College of Fisheries. Attachment conditions for students at the Marine College should be in

accordance with the guidelines being developed by TEVET (technical, entrepreneurial, vocational education and training).

## 2. Curriculum development and evaluation processes

### *Roles of college and ICEIDA staff*

It is generally accepted that curriculum development is a precursor to staff development and that institutional evaluation is closely linked to the professional development. Just as it is necessary for students to be active learners in the classroom, it is equally important for teachers to be active teachers as well as learners in the workplace. It is important that both college and ICEIDA staff become actively involved in the testing and revision of the fishing syllabi and the ongoing evaluation of project activities.

### *Role of outside expertise*

It is felt by the evaluation team that the most effective way of preparing the staff for an active involvement in curriculum activities is to bring in change agents for short periods at regular intervals during the project period. The outsiders, who could be from institutions in Malawi or from Iceland, should be asked to develop a long term in-service training plan for professional skills development. This should address an understanding of curriculum issues and the development of curriculum, instructional and assessment skills. The course should begin as soon as possible and new materials published by the World Maritime University would provide an excellent beginning<sup>6</sup>. We envisage joint planning by the outsiders and those involved in the project in the college, such that course activities are directly related to the regular duties of staff and contribute to the revision of the syllabi, both for campus teaching and the attachment portfolios. Both merchant and fishing lecturers should take part in the course.

## 3. Conditions to be met by the Malawi government

### *What is realistic? What is most urgent?*

Several shortfalls in financial and operational management at the college have been identified during the evaluation mission. Some of these are crucial to the smooth operation of the college and the fulfilling of its mandate, others are merely troublesome. Outstanding issues, such as the completion of the hostel that has been funded by JICA, must be attended to immediately. Progress is being made towards the filling of upgraded posts; this must be expedited. The Board of Governors has not met since 1998 and there appear to be several explanations for this. There appears to be little contact between the principal and the chairman of the Board.

### *Sustainability*

The Minister of Transport is responsible for appointing the Board. The Board of Governors appointed in February 1999 met only once in June 1999 and was dissolved in August 2001. There appears to be several explanations for this including lack of resources and efforts to appoint a new board have not been fruitful.

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<sup>6</sup> An ideal publication for a course on teaching methods has recently been published by the WMU: Fisher, Darrell and Muirhead, Peter. 2001. *Practical Teaching Skills for Maritime Instructors*. WMU Publications. Available from the World Maritime University, PO Box 500, S-201 24, Malmo, Sweden.

If the ICEIDA project is to be extended into the year 2003 it is essential that the Board be appointed and facilitated to meet at least for the mandatory times in the year 2002 and that it begins to take over ownership of training for fishing vessels operators. So far this training appears only to have project status and no provision has yet been made to sustain it. At present funds from the ICEIDA scholarships and for lecturers are paid into the deposit account held by the Board and yet the Board does not seem to be in control of the account and was not fully aware of this arrangement and the project itself. It is essential that a visible financial commitment to this training be made. It should not be forgotten that the presence of the ICEIDA project has facilitated certain aspects of training for the merchant sector as well and that sustainability issues at the college have reached a critical stage.

#### 4. Project management

##### *Coordination and management*

A more viable structure for the coordination of project activities must be found for the next phase than has been in place during the present phase. It is important that a project coordinator be appointed by Malawi and that several Malawian staff become part of the development team. Project Management Group meetings should be chaired by the principal of the college and not by the ICEIDA Project Manager. All staff involved in project activities at the college should be consulted and kept informed of developments.

The evaluators do not however recommend that the deputy principal, who has yet to be appointed, should be the project coordinator. The overall management of academic affairs at the college should focus on the long-term sustainability of training in both the merchant and fishing sectors through the combined efforts of the principal and vice-principal. Project management should focus on short-term developmental aspects. Consultation between the management and the development teams should however be frequent.

A more effective management structure within the college and the implementation of the revised structure recommended by the Department of Human Resource Development and Management would facilitate the running of project activities and their integration into normal activities at the college.

##### *Accountability*

Accountability for project activities should rest with all those involved in them. The team is aware that the college management is cautious about being held accountable for activities over which they have no financial control. Thus the comments made above under point 1 about the nature of cooperation become even more important. It does not follow that only those with a responsibility for funds are accountable. The project plan must make clear from the outset who is responsible for the outcome of activities and who takes part in them. Clear guidelines must be set with regard to the nature and timing of processes and outputs.

## APPENDICES



## APPENDIX 1            Terms of reference for the evaluation

### **Terms of reference for the evaluation of the ICEIDA-funded project at the Marine Training College, Monkey Bay, Malawi to be carried out in late 2001**

#### Project background

A two-year ICEIDA-funded project at the Marine Training College (MTC) in Monkey Bay, Malawi started in late 1999. The objective of the project is to develop a syllabus and improve the capacity of the MTC in training of navigation and engineering officers for fishing vessels.

Some difficulties were encountered by both partners during implementation of the agreement and ICEIDA agreed to continue the funding to Icelandic instructors until 2002 and 2003.

Two full-time ICEIDA instructors have been engaged at the college working on syllabus development and participating in relevant teaching activities. The syllabi for some courses in engineering and navigation were fully developed in 2000 and two courses based on the new syllabus have been held during 2000/2001.

The evaluation is to be carried out in late 2001.

#### Reasons for the evaluation

The evaluation is being undertaken at the request of ICEIDA and the Surveyor of Vessels [Director of Marine Services] in Malawi in order to ascertain the extent to which the goals of the project have been achieved.

Should the evaluation indicate the feasibility of funding a second phase, the report will outline a proposal for its implementation, the funds envisaged and a timetable for phasing out the project.

The evaluation should also provide the staff of the MTC with information which could assist in planning and implementing activities at the college.

#### Scope and focus of the evaluation

The evaluation will focus providing information for decision-makers, both in Malawi and Iceland, but will also be a learning exercise for the MTC.

The project was planned using the Logical Framework Approach thus the evaluation will consider the goal and purpose of the project, as well as inputs and outputs. In addition the evaluation will consider unintended outcomes of the project.

Information collected will be both qualitative and quantitative. After preparation by the evaluators in Iceland and Malawi time will be spent on-site involving

- observations of college activities,
- interviews with key informants, groups and individual staff and students,
- analysis of documents produced during the project period and/or by the MTC, and
- collection of other information pertinent to the training offered by the MTC.

A draft of the report will be prepared on-site in order to facilitate discussions on sections of the report, thus increasing the reliability and validity of the information presented in the report.

The final draft will then be submitted to the ICEIDA Board of Governors and the Board of Governors of the MTC.

#### Issues to be covered in the evaluation

In keeping with the Logical Framework Approach issues of relevance, efficiency, effectiveness, impact and sustainability will be considered.

- Relevance: Are the objectives worthwhile? Does the design of the project support the objectives?
- Efficiency: Has there been an efficient use of resources in the project? What problems have arisen? Could they be avoided in a second phase?
- Effectiveness: Has the project achieved its objectives? What has facilitated or prevented the effectiveness?
- Impact: What are the positive and negative effects of the project? What are their causes?
- Sustainability: What benefits of the project continue beyond donor involvement?

Attention will be paid to human resource management, information management, operations and finance within the MTC and its working environment. Technological and socio-cultural factors affecting MTC and project implementation will be considered.

The evaluation will consider the extent to which the partners have worked towards keeping the terms of the project contract.

The evaluation will be sensitive to unintended outcomes of the project.

The evaluators will seek the involvement of the staff of the MTC and project participants during the evaluation in order to support the learning process which such a project seeks to develop. The evaluation will also involve consultations with other relevant local and government authorities.

#### Evaluation team

There will be two members of the evaluation team, one nominated by ICEIDA (team leader) and one by the Surveyor of Vessels in Malawi. Team members should have relevant experience in developing countries and a good understanding of training and management issues. ICEIDA will cover the costs of the evaluation.

#### Timetable and reporting

Preparation for the evaluation will begin during the period August-October 2001. Field work will be carried out in Monkey Bay in November 2001 with a draft report being prepared on-site. The draft will be commented on by ICEIDA and relevant authorities.

The final report will be submitted to the ICEIDA Board in December 2001.

(Prepared and approved in August 2001)

APPENDIX 2 Record of evaluation activities

August-October	Preparations in Iceland and Malawi, selection of evaluators, documents assembles
11 <sup>th</sup> November	Evaluator from Iceland
12 <sup>th</sup> November	Short discussion at the ICEIDA office in Lilongwe (M, K) First meeting with Mr Msowoya, Director of Marine Services Departure for the lake (ICEIDA director, M, K)
13 <sup>th</sup> November	First meeting with Mr Makulusa, Principal of the Marine Training College (M, K) Tour of facilities (M, K) First meeting with ICEIDA lecturers (M, K) Preliminary plan for other interviews (M, K)
14 <sup>th</sup> November	Meeting with one of the ICEIDA lecturers (JP) (M, K) Observation of a lesson by an ICEIDA lecturer (JP) (M) Interview with two college lecturers, Mr Nyirenda and Mr Sadyalunda (K) Interview with a college lecturer, Capt. Mhango (M) Meeting with the other ICEIDA lecturer (PP) (K)
15 <sup>th</sup> November	Visit to MALDECO (M, K) First meeting with Mr Manduwi, Marine Engineer (M, K) Meeting with students on attachment at MALDECO (M, K) Lunch-meeting with one ICEIDA lecturer (PP) (M, K) Tour of accommodation facilities (M, K) Continuation of meeting with students (M, K) Second meeting with Mr Manduwi (M, K) Meeting with Mr Magasa, Operations Manager (M, K)
16 <sup>th</sup> November	Interview with a college lecturer, Mrs Manduwi (K) Discussion with one ICEIDA lecturer (PP) and brief observation of a practical lesson on nets (M) Interview with Mr Sankhulani, college librarian (M) Second meeting with the college principal (M, K) Short visit to the Fisheries Research Unit (JP, M) Interview with a college lecturer Mr Kazembe (M) Interview with a student attached to the Fisheries Research Unit (K)
17 <sup>th</sup> November	Report writing
18 <sup>th</sup> November	Report writing
19 <sup>th</sup> November	Observation of lesson taught by a college lecturer, Mr Nyirenda (M) Interview with a college lecturer, Mrs Manduwi (K) Observation of a lesson by an ICEIDA lecturer (PP) (M) Interview with the Acting Assistant Chief Fisheries Research Officer, Mr Banda (M, K) Brief observation of a practical lesson in the metal workshop (JP) (M) Interview with three students on the Motorman course (K) Interview with a college instructor, Capt. Fulundiwe (K) Report writing (M, K)

20 <sup>th</sup> November	Preparation of materials for college feedback meeting (M, K) Observation of a lesson by a college lecturer, Mr Sadyalunda (M) Observation of a lesson by a college lecturer, Mrs Manduwi (K) Preparation of materials for college feedback meeting (M, K) Feedback meeting on initial findings with academic staff (M, K)
21 <sup>st</sup> November	Meeting with General Manager, Capt. Nkhana, and Shipping Services Manager, Capt. Likukuta, Malawi Lake Services (M, K) Third meeting with the principal (M, K) Report writing (M, K) Visit to Mpwepe College of Fisheries and meeting with acting deputy principal, Mr Chamveka (M, K) Report writing (M, K)
22 <sup>nd</sup> November	Departure for Lilongwe Meeting with Chief Fisheries Officer (Extension), Mr Bandula, and Principal Fisheries Officer (Training), Mr Nyirenda (M, K) Report writing (M, K)
23 <sup>rd</sup> November	Report writing (M, K) Meeting with ICEIDA project manager (PS) (M, K) Report writing (M, K)
24 <sup>th</sup> November	Report writing (M, K) Meeting with ICEIDA project manager and lecturers (M, K) Report writing (M, K)
25 <sup>th</sup> November	Report writing (M, K) Draft report to ICEIDA staff, college principal and Director of Marine Services before departure of evaluator from Iceland (M, K)
November-December	Second meeting with Mr Msowoya (K) Meeting with Mr Mpata, Chairman of the Board of Governors (K) Follow-up on information in Malawi and Iceland (M, K)
mid-December	Meeting in Iceland with headquarters staff and Project Manager from Malawi (M) Presentation of report

APPENDIX 3 Informants

Mr A D B Msowoya	Director, Marine Services
Mr S M pata	Ex-chairman, Board of Governors, Malawi Marine Training College (MMTC)
Mr L G W Makuzula	Principal MMTC
Mr Jones Kazembe	Lecturer MMTC
Captain Manduwi	Lecturer MMTC
Captain Mhang	Lecturer MMTC
Mr P L Nyirenda	Lecturer MMTC
Mr F Sadyalunda	Lecturer MMTC
Mr L R. Fulundiwe	Instructor MMTC
Mr Sikwesi	Instructor MMTC (attended meeting, not interviewed)
Mr E A Sankhulani	College librarian
Ms Þ Sigurðardóttir	ICEIDA Country Manager, Malawi
Mr J Pálsson	ICEIDA Lecturer, MMTC
Captain Þ Þórarinnsson	ICEIDA Lecturer, MMTC
Mr Sunduzwayo Chaula	Student Class III Master Fisherman
Mr L Chirwa	Student Class III (Fishing) Engineering
Ms Blessings Genti	Student Class III Master fisherman
Mr G Jalasi	Student Class III Master fisherman
Mr J Mabvuka	Student Class III Master fisherman
Mr R Malowa	Student Class III (Fishing) Engineering
Mr C Msuku	Student Class III Master fisherman
Mr S Mtegha	Student Class III Master fisherman
Mr B F K Nkhondo	Student Class III (Fishing) Engineering
Mr M Saeni	Student Class III (Fishing) Engineering
Mr P M Kanyerere	Student (Motorman course)
Mr E O C Mtegha	Student (Motorman course)
Mr F Magasa	Operations Manager MALDECO
Mr P S Manduwi	Marine Engineer MALDECO
Captain N C Nkana, Captain K C Likikutu	General Manager, Malawi Lake Services Shipping Services Manager, Malawi Lake Services
Mr D D Bandula	Chief Fisheries Officer (Extension), Department of Fisheries
Mr Moses Banda	Acting Chief Fisheries Officer, Fisheries Research Unit
Mr J Chamveka	Acting Deputy Principal, Mpwepe College of Fisheries
Mr M Nyirenda	Principal Fisheries Officer (Training), Department of Fisheries



## APPENDIX 4            Documentation

### **Project documents**

1997 Assistance to the Marine Administration and Marine College, from A.D.B. Msowoya (Letter to the ICEIDA Director, Dr. B. Dagbjartsson, 8 October 1997).

1998 Assistance to Marine Administration and Marine College in Monkey Bay in Malawi Ministry of Transport: Project submission (Proposed Draft documents) (1998).

1998 Some questions concerning the project at the Marine College, Monkey Bay (Fax from Marine Training College, 26.03.1998).

1998 Ministry of Transport, Project Submission (Proposed Draft Document) (Fax from Marine Training College, 26.03.1998) [Includes itemised budget].

1998 Draft 3: Project Submission (Proposed Draft documents) Title: Assistance to Marine Training College and Marine Administration of the Government of Malawi by the Government of Iceland (1998).

1999 Project document. Title: Assistance to Marine Training College and Marine Administration of the Government of Malawi by the Government of Iceland. (signed February 1999).

1999 Minutes of a meeting between representatives of ICEIDA and Malawi Marine Administration held in Lilongwe, 5 February 1999.

1999 Malawi Marine Administration, Fisheries Department (Minnispunktar).

1999 Minutes for ICEIDA project review meeting held at marine headquarters, Lilongwe on 21st May 1999.

1999 Minutes of the second ICEIDA project meeting held on the 22nd of June, at Marine Administration Headquarters Lilongwe.

1999 Memorandum, Concepts for training of fishing vessel engine operators, 27.09.1999 (Jóhann Pálsson).

1999 Report of the Project Progress presented at the 3rd meeting of the Project review meeting held on 5<sup>th</sup> October 1999.

1999 Minutes of the 3rd ICEIDA project meeting held at Marine Headquarters, Lilongwe on the 5th of October 1999.

2000 ICEIDA Progress report to be presented at the Fourth ICEIDA Project meeting on 28th March 2000 (Monkey Bay, 21 March 2000).

2000 Minutes of the fourth ICEIDA project progress review meeting held at Marine Headquarters, Lilongwe on 28th March, 2000.

2000 Fax, Development of training courses. Sent by Mr A. Helgason and Mr G. Mwanza.

2000 ICEIDA Project progress report to be presented at the fifth ICEIDA project meeting to be held on 31st October 2000.

2000 Minutes of the fifth ICEIDA project progress review meeting held at Marine Headquarters, Lilongwe 31<sup>st</sup> October 2000.

2000 Assistance to Marine Administration of Malawi and Malawi Marine Training College. Project Plan 2001-2002.

2001 Minutes of the meeting between ICEIDA representatives and the Marine Services on ICEIDA's support to the Malawi Marine Administration.

2001 Project document. Title: An extension of Assistance to Marine Training College and Marine Administration of the Government of Malawi by the Government of Iceland. (Draft, not signed).

2001 ICEIDA Project progress report to be presented at the sixth ICEIDA project meeting to be held on 24<sup>th</sup> May, 2001.

2001 Minutes of the sixth ICEIDA project progress review meeting held at Marine College in Monkey Bay, on 24<sup>th</sup> May 2001.

2001 ICEIDA – Malawi. Bi-annual Report January -June 2001. p. 10-14.

2001 Request for project evaluation, from A.D.B. Msowoya. (5 June 2001).

2001 Terms of reference for the evaluation of the ICEIDA-funded project at the Marine Training College, Monkey Bay, Malawi to be carried out in late 2001 (August 2001).

2001 Project progress report to be presented at the Seventh ICEIDA project meeting to be held on 9<sup>th</sup> October 2001.

2001 Minutes of the seventh ICEIDA project progress review meeting held at Marine College in Monkey Bay, on 9<sup>th</sup> October 2001.

2001 A report of completed and uncompleted activities (Þórmundur Þórarinsson).

2001 Marine College. Budget 2002.

### **The Marine Training College**

1991 In-Depth Evaluation Report of Assistance to the Marine College School and Maritime Administration (Eyre, J., Williams, M. and Simbeye, E.).

1993 Education Act : Marine Training College, Board of Governors 1993.

- 1993 Report on Conditions of Service for Seamen working in Government Vessels, May 1993.
- 1997 Marine College Courses and Award Rules, August 1997.
- 1998 The Malawi Marine College : 1998 Academic Handbook.
- 1999 Cadet Record Book (Engineering) Compiled by L S Banda 1999.
- 2000 Evaluation report of JICA technical Support to the Marine Department, March 2000. Reported by Norio Okuda, L. Banda and O. Chirwa.
- 2000 Deck Cadets Record Book (Nautical) Compiled by G H K Mwanza.
- 2000 Syllabi for Nautical Department, September 2000 [Merchant].
- 2000 Syllabi for Engineering Department, Marine Training College [Merchant].
- 2001 Detailed syllabi for Master Class III Fishing and AB-course.
- 2001 Sea Phase Training Portfolio (Master Fisherman Class III).
- [2001] Fishing Vessels' Stability.
- 2001 A report of completed and uncompleted activities. (Þórmundur Þórarinnsson).
- 2001 Instructions and Teaching Syllabus for Motorman Course. Marine Engineering Department.
- 2001 Cadet Record Book for Marine Engineering Class III (Fishing). Marine Engineering Department.

### **ICEIDA policy, Board Meetings, travel reports and comments**

- 1998 Principles and priorities of ICEIDA the Icelandic International Development Agency a brief summary.
- 1998 Skýrsla um undirbúning nýrra verkefna í Mozambique og Malawi. (júní 1998).
- 1998 Skýrsla um ferð til Mozambique, Namibíu, Malawi og Cabo Verde dagana 9.09 – 22.10 1998 vegna undirbúnings þróunarsamvinnuverkefna.
- 1998 Fundargerð 211. fundar Þróunarsamvinnustofnunar Íslands haldinn miðvikudaginn 25. nóvember 1998, kl. 15:00 að Rauðarárstíg 25.
- 1999 Skýrsla um ferð til Malaví og Mozambique dagana 17.01-5.02 1999 vegna undirbúnings þróunarsamvinnuverkefna.
- 2000 Úr ferðaskýrslu Björns Dagbjartssonar frá 22.01 – 04.02 2000.
- 2000 ÞSSÍ: Langtímaáætlun Þróunarsamvinnustofnunar Íslands fyrir árin 2000-2004.

2001 Frásögn af ferð til Afríku 14.02.01 – 07.03.01.

2001 Fundargerð 238. fundar Stjórnar ÞSSÍ haldinn mánudaginn 19. mars 2001, kl.15:00 Þverholt 14.

2001 Skýrsla vegna ferða á vegum Þróunnarsamvinnustofnunar Íslands til Malaví og Mósambík 19. apríl til 6. maí 2001.

2001 Minnisblað 28.05 vegna dagskrárliðar nr. 16 (Frásögn af ferð til Afríku) á stjórnarfundi ÞSSÍ fimmtudaginn 17. maí 2001 (ME).

2001 Athugasemdir vegna fundar gerðar starfsmannafundar í Malaví 19/4/2001, frá Árna Helgasyni (27. júlí 2001).

### **Other sources consulted**

1985 Høyteknologisk skipsdrift og kvalifikasjonskrav – en forstudie. Report by Leif Chr. Lahn, Arbeidspsykologisk institutt, Arbeidsforskiningsinstituttene, Oslo.

1985 En evaluering av studieevalueringer – endringsmuligheter I den maritime høyskoleutdanning. Report by Leif Chr. Lahn, Arbeidspsykologisk institutt, Arbeidsforskiningsinstituttene, Oslo.

1992 Action Research in Professional Work: Developing new practices through design, dialogue or learning? Paper presented by Leif Chr. Lahn at the AERA Annual Meeting, San Francisco, April 1992.

1995 Ninth International Conference on Maritime Education and Training held in Kobe, Japan. Proceedings.

1993 Evaluation of Development Assistance. Handbook for Evaluators and Managers, November 1993. Prepared for the Norwegian Ministry of Foreign Affairs by Knut Samset Scanteam International, Oslo.

1998 Naval Instruction: A Comparative Research Study. Doctor of Education Dissertation submitted by Lieutenant Commander Steven Wilkinson to the Faculty of Education, Deakin University, Australia.

2001 Document for guidance on Training and Certification of Fishing Vessel Personnel. 2001 Edition. FAO/ILO/IMO.

APPENDIX 5 LFA project matrix

<b>Development objectives</b>	<b>Indicators</b>	<b>Risks/external factors</b>
To provide the Fisheries in Malawi with sufficient skilled and adequate work force to meet higher technology (needs of larger fishing vessels and fishery industry in the future) and secure better income and safety for the fishermen.	At least the larger fishing vessels on Lake Malawi manned by educated and trained Malawian officers and crew	The government continues to promote new technologies and privatisation process in the fisheries sector
<b>Immediate objectives</b>	<b>Indicators</b>	<b>External factors</b>
To increase the capacity of the M.C. to educate and train officers for the fishing fleet up to a standard of IMO certificate and other crew. To train Malawian lecturers. To provide basic training material.	Full capacity of the M.C. to train work force needed and meets demands from the sector.	Sufficient funding in local currency to run the training programs and the School.
<b>Main outputs</b>	<b>Indicators</b>	<b>External factors</b>
Functional fisheries training. Syllabi for training both fishing skippers and marine engineers for fishing vessels. Trained technical personnel for fishing vessel operation. Malawian lecturers trained in the implementation of the fishermen syllabi. Training material and equipment. Skilled personnel for the sector	Professional level, teachers are trained. Professional level, personnel are trained for the fisheries. Number of mishaps and accidents in connection with fishing lowered.	The staff at M.C. remains and uses the skills and training obtained. The trainees remain in the fisheries sector and use the skills obtained.
<b>Main Activities</b>	<b>Main inputs</b>	<b>External factors</b>
Elaborate plan of training and elaborate syllabi. Set up IMO'S standards Set up shorter courses and carry out training for the sector Teach/train at the M.C. Train Malawian lecturers. Procure material and equipment.	Two full time instructors for two years. Training scheme for the teachers of M.C. Funding for procurement of basic equipment and teaching material.	Candidates available to be trained as teachers. Candidates available for fisheries training. Vessels available for the practical training.



MASTER CLASS IV MERCHANT AND MASTER FISHERMAN CLASS 3 TIME TABLE

DAY OF THE WEEK	08:15-09:45	09:15-10:15		10:45 – 11:45		13:30-14:30	14:30-15:30
MON	CONSTRUCTION/STABILITY  SINGINI <b>NAVIGATION CLASS</b>		T E A  B R E A K  T E A	CATCH HANDLING- <b>MUNDY</b>  OR CARGO HANDLING- <b>CHISENGA</b>	L U N C H	WATCH KEEPING <b>MHANGO</b>	
TUES	SAFETY  <b>MHANGO</b> <u>NAVIGATION CLASS</u>			METEOROLOGY  <b>MWANZA</b>		FISHING GEAR TECHNOLOGY <b>MUNDY</b>  OR MERCHANT SHIP OPERATIONS <b>CHISENGA</b>	
WED	METEOROLOGY  <b>MWANZA</b>	NAVIGATION  <b>CHISENGA</b>		COMMUNICATION  <b>MWANZA</b>		FISHING GEAR TECHNOLOGY <b>MUNDY</b>  OR MERCHANT SHIP OPERATIONS- <b>MHANGO</b>	
THUR	SHIP HANDLING/SEAMANSHIP  <b>MUNDY</b>			WATCH KEEPING  <b>MHANGO</b>		CHART WORK  <b>CHISENGA</b>	CHART WORK  <b>CHISENGA</b>

FRID	<b>PRACTICALS</b>		<b>PRACTICALS</b>		<b>PRACTICALS UP TO 14:30</b>
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**ENGINEERING DEPARTMENT    MERCHANT CLASS IV/FISHING CLASS III    TIME TABLE**

<b>DAY OF THE WEEK</b>	<b>0830 – 0930</b>	<b>0930 – 1030</b>	<b>1100 – 1200</b>	<b>1315 – 1415</b>	<b>1415 - 1515</b>
<b>Monday</b>	Maritime Safety <i>L. Manduwi</i>	Maritime Safety <i>L. Manduwi</i>	Marine Safety Knowledge & Watch keeping <i>L. Banda</i>	General Marine Eng  <i>L. Banda</i>	General Marine Eng  <i>L. Banda</i>
<b>Tuesday</b>	Ship Construction & Stability <i>H. Singini</i>	Ship Construction & Stability <i>H. Singini</i>	Marine Electrical Engineering <i>L. Banda</i>	Main Marine Machinery & Auxiliary <i>J. Pálsson</i>	Main Marine Machinery & Auxiliary <i>J. Pálsson</i>
<b>Wednesday</b>	Main Marine Machinery & Auxiliary <i>J. Pálsson</i>	Main Marine Machinery & Auxiliary <i>J. Pálsson</i>	Marine Electrical Engineering <i>L. Banda</i>	Bench & Tools (Practical) <i>H. Singini</i> OR Refrigeration & Deck Machinery <i>J. Pálsson</i>	Bench & Tools (Practical) <i>H. Singini</i> OR Refrigeration & Deck Machinery <i>J. Pálsson</i>
<b>Thursday</b>	General Marine Eng <i>H. Ikehata</i>	General Marine Eng <i>H. Ikehata</i>	Using Tools and working Practices <i>H. Singini</i>	Marine Electrical Engineering <i>L. Banda</i>	Marine Electrical Engineering <i>L. Banda</i>

<b>Friday</b>	Workshop Practices				
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Possible activities in a project extension  
(I=ICEIDA, M=MTC, Mp=Mpwepwe)

Year	Activity	Scenario →	1	2	3	4	Responsibility	
2001	Participate in Competency assessments for Group 1		x				I	
	Wind-up project activities		x				I	
	Prepare for handover		x				I/M	
	<i>End of scenario 1</i>							
2002	Develop a team approach for project activities and explore new ways of transferring expertise between parties			x	x	x	I/M	
	Define structures and responsibilities for the management of project activities.			x	x	x	I/M	
	Test and revise Class III syllabi – Group 3			x	x	x	I/M	
	Prepare and test instruction manual			x	x	x	I/M	
	Prepare and monitor attachment of Group 3, including consultations on the role of supervisors and revision of portfolio			x	x	x	I/M	
	Monitor attachment of Group 2			x	x	x	I/M	
	Test and revise syllabi for Able Seaman and Motorman courses			x	x	x	I/M	
	Prepare and implement in-house training on teaching and assessment			x	x	x	I/M	
	Contribute to development of Assessment Unit			x	x	x	I/M	
	Participate in Competency assessments for Group 2			x	x	x	I/M	
	Develop plans for integrating gender			x	x	x	M	
	Work towards the reaching of formal agreements between partners (Iceland, Malawi)			x	x	x	I/M	
	Reach agreements between major partners in Malawi with regard to training for the marine sector on such issues as entry qualifications, selection of candidates, sponsorships, attachments, employment options and enforcement of regulations.			x	x	x	M	
	Fill 75% of newly upgraded posts and continue working on improvement of working conditions.			x	x	x	M	
	Cooperate with Mpwepwe on preparation of local community training					x	x	I/M
	Prepare long-term training plans for teaching staff						x	I/M
	Wind-up project activities				x			I
Prepare for handover				x			I	
	<i>End of scenario 2</i>							
2003	Monitor attachment of Group 3 and revise the portfolio				x	x	I/M	
	Contribute to question-bank (Assessment Unit)				x	x	I/M	
	Test and revise local community training package				x	x	I/M, Mp	
	Develop, test and revise Class II syllabi				x	x	I/M	
	Finalise agreements between Malawi and Iceland				x	x	I/M	
	Monitor gender issues				x	x	M	
	Long-term training in progress				x	x	I/M	
	Wind-up project activities				x	x	I	
	Prepare for handover				x	x	I/M	
	<i>End of scenario 3</i>							
2004	Long-term training in progress					x	I/M	
	Implement local community training package				x	x	I/M, Mp	
2005	Long-term training in progress					x	I/M	
	Wind-up project activities				x	x	I	
	Prepare for handover				x	x	I/M	
	<i>End of scenario 4</i>							