ICELANDIC INTERNATIONAL DEVELOPMENT AGENCY

Icelandic development assistance to the Namibian Maritime and Fisheries Institute

An internal evaluation commissioned by the
Icelandic International Development Agency

Tumi Tómasson

June 2002

CONTENTS

APPENDICES

TABLES

EXECUTIVE SUMMARY

The Icelandic International Development Agency has supported maritime training in Namibia since 1992 through technical assistance and material support. Initially one instructor was provided, but since 1995 the involvement has been much larger, including the placing of six instructors at the Namibian Maritime and Fisheries Institute (NAMFI) in Walvis Bay for most of the period and considerable support in building up infrastructure, providing training for Namibian teachers and teaching aids.

The project was last evaluated in 1998. At that time it was envisaged that ICEIDA's support would come to an end in 2002. The cooperative agreement with Namibia is to be revised later this year. The board of ICEIDA therefore commissioned an internal evaluation of its support to NAMFI and a request for views on reducing and eventually withdrawing its support. Preparations for the evaluation started in Iceland in January 2002. This was followed by two weeks spent on-site in Namibia in late February-early March, interviewing representatives of most stakeholders and assembling additional documentation. At the end of the stay in Namibia, feedback meetings were held with management and staff at NAMFI and in the Ministry of Fisheries and Marine Resources (MFMR). A draft report was distributed in early May and feedback received by early June. The final report was presented to ICEIDA in June.

Fisheries are one of the main industries in Namibia and accounts for about 5-8% of the GDP and a quarter of the exports. The fishing fleet consists of about 300 vessels, of which about 260 are registered in Namibia. The fleet is modern, and unlike most other African countries, there has been no development of artisanal fisheries. Namibians do not have a merchant fleet. There is only a small number of vessels other than fishing vessels. These are part of the harbour services, coast guard and some smaller vessels involved in diamond dredging. The training at NAMFI is thus mainly aimed at officers and crew on fishing vessels. Those aspiring to gain higher qualifications will have to go abroad to get the required sea-time.

Fisheries have traditionally been in the hands of foreigners and immigrants, as the coastline is bordered by a desert and the main population lives inland. Since independence, it has been a policy of the Namibian authorities to increase involvement and responsibility of Namibians in the fishing industry through a policy of Namibianisation. This includes granting fishing licences, allocating quotas to Namibians and relating quota fees to the proportion of crew with non-Namibian citizenship. Qualified Namibians should be in high demand. The response of the government and cooperative partners has been to aim at training a large number of officers at NAMFI. At present the annual output of graduates from NAMFI exceeds the eventual need for normal recruitment into the field, once the objective of Namibianisation has been achieved.

The emphasis of the assistance in the early years was to produce qualified engineers and deck officers for the fishing fleet, but less attention was paid to preparing Namibians to take over the teaching. For the past three years there has been an increased emphasis on institutional capacity building. Even so, progress has been slower than anticipated, and it is evident that NAMFI will not be able to fulfil its role

without external support for some years to come. At present there are 21 teachers at NAMFI, nine of whom are sponsored by international development agencies in Iceland, Norway and Germany. The nine carry 60-70% of the teaching load, as some of the Namibian instructors are away on training, and others are in junior positions and lack the qualifications to teach many of the subjects. The conditions for service for Namibian instructors appear to be poorer than in the private sector, where demand is high, not least because of government policies and incentives.

NAMFI is managed by a special trust, and is thus nominally independent from the Ministry of Fisheries and Marine Resources. In effect, the MFMR has a considerable influence on its running. The chairman of the trust is a former permanent secretary of the MFMR and the present permanent secretary is a member of the trust as well. Over the last five years, the financial contribution of the MFMR, through allocations from the Marine Resources Fund, has gone from over 90% of the total budget for NAMFI to less than a quarter. This reflects in part increased fees and numbers of students from the private sector, but also a reduction in real terms in the government contribution.

Germany has this year withdrawn its support from NAMFI and NORAD which has been a major contributor of development aid to fisheries in NAMIBIA will withdraw its support to NAMFI by the end of 2003. This year a new four year project sponsored by the EU and the Spanish International Development Cooperation has started at NAMFI. These changes call for an increased flexibility on ICEIDA's behalf.

It is proposed that ICEIDA continue its support to NAMFI at a somewhat reduced level, but that a decision on final withdrawal be deferred until 2004/2005. The number of full-time Icelandic instructors at NAMFI should be reduced to three as from the beginning of next year, but there should be scope to provide short term technical assistance to the equivalent of 1-2 full time instructors.

Continued ICEIDA support should work towards establishing a fully functional and effective maritime training institution in Namibia. This also necessitates increased commitments on the behalf of the Namibian side. Any support given should thus be conditional on counterpart contributions. A new plan of operations should include an explicit schedule for increased contributions by Namibia. This schedule should include a plan for hiring, training and retaining Namibian teachers, and securing adequate funding for the institution.

INTRODUCTION

Background for the evaluation

ICEIDA has been involved in development cooperation in Namibia since independence in 1990. At first, the Icelandic assistance focussed on the operation of a research vessel and marine research. In 1992 ICEIDA started to support maritime training in a small way. After an evaluation in 1993 the importance of the training component grew and later support to research was phased out and eventually withdrawn in 200/2001. Since 1995 ICEIDA has contributed 250-300 000 US$ annually to maritime training in Namibia. A formal evaluation of the country programme was carried out again in 1998. The evaluator suggested that the technical assistance to maritime training should be phased out over a four year period (1999-2002). For various reasons, this did not happen.

ICEIDA's involvement in maritime training in Namibia has been both multi-faceted and long-term. The current Plan of Operations for ICEIDA's assistance to maritime training in Namibia, signed on 15th February 1999, will expire on 31st December 2002. At the same time the general agreement for development cooperation between Iceland and Namibia will come up for revision. Current indicative plans of ICEIDA assume a phasing out of support to maritime training, with all support being withdrawn by the end of 2004. The ICEIDA Board decided to have an internal evaluation carried out in preparation for discussions on the future direction of development cooperation in maritime training to be held with Namibian authorities later this year. The evaluation could also assist the Board in formulating its ideas on development cooperation in Namibia over the next few years.

Several other development agencies have been and still are involved in marine training in Namibia, as will be discussed in more detail later.

Project documents do not state clear objectives for the assistance to training but there appears to be an implicit assumption that the purpose is two-fold:

- Assistance with training for the fleet
- Assistance with training of trainers

This evaluation will be guided by these assumptions. The Terms of Reference for the evaluation included the following:

- The evaluation is being undertaken at the request of ICEIDA and ICEIDA's board of governors in order to study the grounds for continued cooperation and to make recommendations for future direction and development of the ICEIDA assistance.
- The evaluation will focus on providing information for ICEIDA.
- The evaluation will consider outcomes of the project.

- The report shall outline a proposal for the project completion and a timetable for the phasing out of the project.

The full terms of reference are presented in Appendix 1.

Methodology

Preparations for the evaluation began in February 2002 with the formulation of the terms of reference and assembling of documents in Iceland. The evaluator arrived in Namibia on 27 February.

Initial discussions were held in Windhoek, at the Ministry of Fisheries and Marine Resources (MFMR) and with some of the members of the Trust of the Namibian Maritime and Fisheries Institute (NAMFI). In addition, further documentation was collected.

This was followed by a nine day visit to the coast where most of the time was spent at Walvis Bay, but a short trip to Luderitz was also undertaken. The ICEIDA country director and the management of NAMFI provided various documents and written information and assisted in the planning of interviews with NAMFI staff, students and various other stakeholders. All those approached during this evaluation were most helpful. Some of the information asked for was however not always readily available.

On the final day in Walvis Bay feedback meetings were held with the NAMFI director, and with the deputy director and the ICEIDA country director. Feedback meetings were also held with several persons at the MFMR in Windhoek the following day, before leaving Namibia.

The evaluation schedule is presented in Appendix 2, list of informants in Appendix 3 and list of documents consulted in Appendix 4.

FISHERIES IN NAMIBIA

Introduction

This is not intended to be an exhaustive account of fisheries in Namibia. First some features of the nature of the fisheries will be highlighted, leading to its history and development, including training and training needs, and other factors that have an important bearing on the project being evaluated.

The natural environment

The marine ecosystem off Namibia is highly productive because of upwelling caused by the Benguela current. Upwelling brings cold nutrient rich waters from up to 300 m depth to the surface along the entire coast, although some areas are more strongly influenced than others. The current is wind-driven and its strength depends on the strength and persistence of trade winds, which show considerable inter-annual variation, leading to changes in productivity and thus ultimately fish production. Such changes are first noticed in relatively short lived pelagic species, but are ultimately felt in all stocks. Fluctuations are thus a natural feature of the fishery.

Development of the fishery

There are only two harbours along the entire Namibian coast. The Namib desert effectively separates the coast from the inland areas where most of the Namibian population live. The only people living in the desert are the San or Bushman people, who have no tradition in fisheries. Historically, the fish stocks in Namibian waters have been exploited by other nations, notably South Africa, and later other foreign fleets as well. Before Namibia gained independence, South African fishing companies had bases in Luderitz and Walvis Bay. Officers on board fishing vessels were usually either Afrikaners or South Africans of Portuguese origin, and crew members were drawn from people of mixed race in the Cape, the Cape Coloureds. Black South Africans were brought in as contract workers to work in factories on land. The communities in Walvis Bay and Luderitz were separated based on the principles of the South African apartheid policy. This is still very much in evidence today. At the time of independence marine stocks were depleted and large trawlers, including an estimated 150-200 Spanish trawlers, were fishing in territorial waters.

The Namibian fisheries can be divided into a few quite distinct categories. The main fisheries are those for hake (demersal), horse mackerel (midwater) and pilchard (pelagic), but in addition there are some small but lucrative fisheries for other species, such as some demersal fish species, tuna, crab and lobster. Total landings in 2000 were about 587 000 tonnes, including 163 000 t of hake, 344 000 t of horse mackerel and 25 000 t of pilchard. Maximum sustainable yield is estimated in the range of 760-940 000 t.

The export value of fish and fish products doubled from 1996-2000, reaching 2 833 million N$ and accounting for approximately a quarter of the value of exported goods in 2000. Exports of ores and minerals accounted for 53%, which is mainly because of diamond exports (38%). Diamonds are in part mined from the seabed and in Luderitz there are about 20 small vessels (30-60 GRT) engaged in this business. In terms of GDP the contribution of fisheries has fluctuated between 5.2 and 7.9% from 1993-2000.

The right to fish is granted on a 4-10 year basis and by the end of 2000 there were a total of 154 holders of fishing rights, with a total of 309 licensed vessels. The fishery is regulated by the setting each year of a Total Allowable Catch, which is divided into quota allocations among the right holders. One of the government's main strategies in Nambianising the fisheries sector is to encourage fisheries companies to create employment on shore and to hire Namibians to work on their vessels. Those receiving a quota pay a fee which varies according to species, what proportion of the catch is brought for processing on shore and the percentage of the crew holding Namibian citizenship. In addition there are other fees, including the Marine Resources Fund levy, which is a certain amount per quantity caught. The Marine Resources Fund is managed by the MFMR and used to finance research and training. The income of the fund is variable, depending on catch. Another important strategy for Namibianisation is to make trained Namibians available for positions of responsibility.

Prior to independence, fisheries had been identified as a major force in the economic development of the new nation. Several development organisations expressed an interest in assisting Namibia in this field. Among these was ICEIDA which from the beginning assisted with research and stock assessment. Later, as Namibianisation became a key element in the policy adopted by the new government, the emphasis of the assistance shifted to training of officers and crew for the fishing fleet.

The fishing fleet in Namibia

There are about 300 fishing vessels in Namibia. Most of these are owned by Namibian individuals or companies, but other are leased or operated through joint venture agreements.

The number of Namibian registered vessels in 1999 has been summarised in Table 1, according to size and engine power. The vast majority are fishing vessels; there are no freighters and about 20 small vessels are involved in diamond mining. In 1999 there were a total of 259 registered vessels, including two patrol vessels and four research vessels.

Table 1. The number of Namibian vessels registered in 1999, according to size and engine power, as summarised in a recent article in the ICEIDA Newsletter.

According to tonnage (GRT)		According to engine size (kW)*	
Size	Number of vessels	Size	Number of vessels
<25	12	<350	86
25-200	107	350-750	83
200-1000	97	750-1200	36
>1000	37	1200-3000	40
Research and patrol	6	>3000	14
Total	**253**	**Total**	**259**

*Information about the size of engine was missing in 41 cases. These have been distributed proportionally amongst the size classes.

Estimates of the number of crew on the vessels varies according to sources, perhaps because some include those who do not have fixed positions, but relieve during holidays, sickness or training. In 1998, the number of crew was estimated at 6583, and this figure had risen to 7530 in 2000. The proportion of Namibian nationals remained fairly constant at about 65% during this period. This includes crew on all fishing vessels operating in Namibian waters, both those registered in Namibia and abroad. The proportion of Namibian crew varies according to the type of fisheries. The crew is almost entirely Namibian on the smaller vessels used for line fisheries and rock lobster fisheries, but only 5-7% of the crew are Namibian in the mid-water horse mackerel fishery which employs large (>100 m) Russian factory trawlers.

Need for trained officers and training activities.

Estimates of the number of officers trained to different levels of competency and needed to man the fleet also varies, but appears to be around 1300. In addition, all seafarers are required to undergo training in basic safety courses, which are compulsory.

In 1993, Thompson and Mullin (GOPA consultants) did a major analysis of the needs, facilities and options for the training of engineers and deck officers for the fishing fleet in Namibia. The needs assessment was based on the assumption that all officer positions in the fishing fleet should be occupied by Namibian nationals by 2004. Subsequent studies have likewise assumed that Namibians would occupy all officer positions by the end of 2004.

In 1993 (and technically even today, even if training according to the IMO's STCW-F 1995 convention was adopted in 2001) the competency requirements were still those prescribed by South African Law. These requirements and the training needs as estimated in 1993 are shown in Tables 2 and 3.

Table 2. Number and qualifications of deck officers on fishing vessels in Namibia, according to the size of the vessel and operational area. Included also is the estimated training need if the goal of full Namibianisation was to be met by 2004, and the number of passes in each category in 1994-1999

Vessel GRT	**Operational area**	***Number of certified deck officers required***			
		Grade 1	Grade 2	Grade 3	Grade 4
<100	within 50 miles				2
25-200	within 200 miles			1	2
100-600	within 200 miles		1	1	1
>600	within 200 miles		1	1	2
any tonnage	anywhere	1	1	1	1
No. est. in 1993 to be trained **by 2004**		**(10)**	**174**	**353**	**402**
Number of passes by 1999		**-**	**30**	**37**	**106**

Table 3. Number and qualifications of engine officers on fishing vessels in Namibia, according to the size of the main engine. Included also is the estimated training need if the goal of full Namibianisation was to be met by 2004, and the number of passes in each category in 1994-1999

Size of main engine	***Number of certified engine officers required***			
	Super 1	Grade 1	Grade 2	Grade 3
<150 kW				1
150-350 kW			1	
350-1000 kW		1	1	
>1000 kW	1	1	1	
No. est. in 1993 to be trained by 2004	**72**	**222**	**354**	**162**
Number of passes by 1999	**27**	**42**	**97**	**10**

The numbers in Tables 2 and 3 indicate the number of passes required, taking into account that to enter Grade 3 the student must have completed Grade 4, and to study for Grade 2, Grade 3 must have been successfully completed. The total number of positions estimated in 1993 was 970. The calculations were based on the assumption that half of the foreign officers working in Namibia in 1993 would acquire Namibian citizenship and that by 2004 all officers would be Namibian. For this to materialise, an estimated 80-100 people had to be trained to various levels of certification per year. In 1994-1999, NAMFI and its predecessors produced on average 58 certified officers per year, a total of 347 passes. Since most students pass more than one grade, the total recruitment of Namibians with officer qualifications is just over 200, roughly equally divided between deck and engineering officers. Information on the retention time of NAMFI graduates in the industry is not available. Some of the industry representatives interviewed during the current evaluation mentioned instances of Namibian engineers leaving the industry after few years, once they had saved enough money to set up a garage or some other small business in their home town. It might be informative to study the nature and rate of dropout of qualified Namibian officers from the fishing industry.

According to a revised feasibility study from July 2000 for an EU funded project, 706 officer positions in the fishing fleet need to be filled to ensure full Namibianisation within five years. This means that about 170 people have to pass various levels of certification per year in 2000-2004. In addition 160 students should complete induction and safety courses per year and 30 fish processing candidates should be trained annually. The project is starting in 2002 and although the output of NAMFI was well over 58 in 2000 and 2001, it was still far below 160.

Development of maritime training in Namibia

Because of the geographical situation, small scale or artisanal coastal fisheries have never developed in Namibia. The fleet has always been industrial and this has called for formal training of officers and crew. In 1987 a mining company, The Rössing Foundation, established a general vocational training centre in Luderitz. After independence the centre started to offer training for fishermen and motormen, to the lowest level of certification offered by the South African maritime training and certification system, which is the system that was used in Namibia until 2001. In 1993 it became a maritime training centre.

In Walvis Bay the fishing industry established the Seaman's Training Centre in 1986, which also trained to the lowest level of certification. This centre was primarily at the initiative of the pelagic sector and training took place during the off-season, from September to January. In addition some engineers received basic training at the Institute of Mining and Technology in Arandis, some 95 km out of Walvis Bay. After independence in 1990, Walvis Bay remained under South African rule until 1994.

After handing over, the MFMR acquired sites for training in Walvis Bay and started building up a maritime training institute. The establishment of the Namibian Maritime and Fisheries Institute (NAMFI), was legalised on 4 July 1996 with the foundation of The Namibian Trust for Maritime and Fisheries Training, which now is the party responsible for maritime training in Namibia and the operation of NAMFI.

To begin with, training took place both in Luderitz and Walvis Bay, but from 1998 the Board of Trustees decided that most of the training should take place in Walvis Bay and the facilities in Luderitz regarded as a satellite campus. Today, activities in Luderitz are limited to 3-5 day compulsory courses for seafarers in fire fighting, first aid and safety at sea.

INTERNATIONAL SUPPORT TO MARITIME TRAINING IN NAMIBIA

Support received from ICEIDA

Icelandic development assistance to Namibia was already in preparation prior to independence in 1990 and at the beginning assistance focussed mainly on the operation of a research vessel and scientific advice. The first research vessel, the RV Benguela, was operated by Icelandic crew from August 1990 until March 1994, when the Benguela was replaced by a new research vessel the RV Welwitschia. In 1992-4 ICEIDA provided an instructor to teach general seamanship and safety courses at the Rössing Foundation in Luderitz.

An evaluation carried out in 1993 found that the training assistance had been successful and recommended that ICEIDA expand its involvement in maritime training. This was reflected in the plan of operations signed in 1994, where there was a special emphasis on training. It was realised that there had to be a long term commitment to training, and technical assistance was pledged for "the next decade or so"[1]. In 1995 when the Namibian Maritime and Fisheries Institute was established in Walvis Bay, ICEIDA provided six instructors.

At this time the EU was showing an interest in supporting infrastructure development and the Spanish Government in providing additional technical assistance. These plans are now finally coming into fruition, and will be described in the next section. Lack of facilities and poor institutional structure meant that ICEIDA assistance was less effective than planned and in 1997 ICEIDA provided four new classrooms.

In a second evaluation in 1998 it was concluded that the technical assistance provided had mainly focussed on "gap filling" rather than "capacity building". It should be noted however that the prerequisites for capacity building had improved considerably since 1992. The evaluation recommended a gradual withdrawal of Icelandic teaching

[1] Plan of operations for training and fisheries research projects. An agreement between MFMR and ICEIDA, signed 23 September 1994.

staff over a four year period, from 1999-2002. The emphasis was to be on capacity building and suggested that all Icelandic instructors have Namibian counterparts during the last year of support. This was reflected in the plan of operations, signed in early 1999. ICEIDA was to "make training opportunities available to prospective teachers at NAMFI" and to contribute "6 marine teachers to work at the NAMFI for the years 1999 and 2000. In the years 2001 and 2002 the number of teachers may be reduced depending on availability of Namibian replacement teachers"[2].

In spite of the increased emphasis on counterpart contributions, the ICEIDA assistance has not been reduced, and it is still mainly in the form of the provision of full-time instructors. Until the end of 2001 there were seven full-time Icelandic instructors teaching at NAMFI, and six since the beginning of 2002. Of these one is the deputy director, one the head teachers and a third one is an adviser to the head of the engine department. Of the six, three worked in the deck department and three in the engine department.

There is a shortage of well qualified Namibians for teaching posts at NAMFI. This means that Namibian teachers have to be trained to higher levels of certification. Namibian teaching staff has thus to spend long periods of time in training elsewhere or gaining experience at sea. Even so it appears that less has been done to ensure counterparts to the Icelandic instructors than could reasonably be expected. At the time of the evaluation, two Icelandic instructors had Namibian counterparts.

Since the establishment of NAMFI it has been on the agenda of the MFMR to change the structure of maritime training in line with international standards set out by the STCW 95 convention of the International Maritime Organisation. This called for major re-structuring of the training, to meet the new standards and make outside inspections possible: new curricula needed to be developed, new course materials and lesson plans written, facilities improved and administration of the training made more efficient. As these changes became more imminent, ICEIDA responded by increasing its assistance, with an increased focus on infrastructure and institutional capacity building. At the end of 1999 the number of Icelandic instructors was increased to seven, and in 2000 ICEIDA provided additional four classrooms and library support, including books to the value of US$ 10000. Although much has been accomplished it is evident that the functioning of NAMFI rests heavily on ICEIDA staff, in particular the deputy director. It is especially important that Namibian staff be involved in the changes the institute is going through and made responsible for their implementation.

Increased demands on school experience were placed on new instructors recruited by ICEIDA, and it can be said that the hiring of an experienced trainer and school

[2] Plan of operations for training and research in fisheries. An agreement between MFMR and ICEIDA, signed 15 February 1999.

manager in mid 2000 constituted a watershed in the ICEIDA assistance to NAMFI. He is at present the deputy director of NAMFI and the current director relies heavily on him in building up the institute and trying to meet the IMO requirements. In July 2000 a professor and a lecturer from the Iceland University of Education held a course for the teaching staff at NAMFI. In addition ICEIDA has increasingly provided teaching equipment and training opportunities in Iceland for Namibian instructors.

NAMFI does not appear to pay competitive salaries to its teaching staff. With the strong incentives to Namibianise crew on fishing vessels, it is easy for qualified teachers to find good positions in the fisheries sector. It is important that those teachers trained by NAMFI and ICEIDA be committed to continue in the service of NAMFI upon the completion of their training. This can be done through binding agreements, but to secure a long-term solution improved conditions of service must be offered.

Involvement of other development agencies and current developments

A number of other development agencies have been involved in maritime training in Namibia, although so far none has had the same level of involvement as ICEIDA. Germany has provided both material support and technical assistance. To begin with there were three German instructors. Later they were reduced to two and since 2000 there has been German instructor whose salary has been topped up by CIM. As from April 2002, he has been on the payroll of NAMFI. This marks the end of German support to NAMFI.

NORAD has been a major supporter of development in Namibian fisheries. NORAD is supplying a new patrol vessel and has been training its crew. As part of that, NORAD has paid for curriculum development work (carried out by Westfold College, Norway) and training of Namibian instructors in Norway and there have been two Norwegian instructors at NAMFI since the beginning of 2000. This support was given to make it possible for NAMFI to provide training to Class 2 level for officers on the new patrol vessel which will be delivered in June 2002. Such training has been offered and advertised by NAMFI in August 2001 and again in early 2002. There have however been no applicants, neither from the MFMR, other government institutions nor the private industry. NORAD's support to NAMFI was to finish at the end of 2002. It has now been extended to 2003, when it will definitely come to an end, as the Norwegian parliament has decided to withdraw all development aid to Namibia.

Since 1994 there have been discussions with the Spanish development authorities to provide technical support linked to EU funding to improve and expand the infrastructure at NAMFI. NAMFI has received some support from Spain in the form of teaching aids and financial support, but the project discussed since 1994 is finally coming into fruition in 2002. The EU and Spain will each contribute 1.9 million Euro

over the next four years. About half of the EU grant will go towards renovations of existing buildings and the construction of new facilities, and the other half for buying furniture, training aids, library books, workshop tools and microbuses. An agreement has already been signed with a building contractor and it is expected that all renovation and construction work will be completed by the end of 2002.

This EU assistance is linked to a technical assistance programme by the Spanish International Development Agency. According to the project proposal, Spain will provide four instructors, in the areas of navigation, engineering, safety and fish handling and processing for a four year period. At the same time they will pay for the training of four NAMFI instructors in Spain to the management level according to the standards required by the STCW95 convention of the IMO, and NAMFI will hire four new instructors to get in-service training at NAMFI during the same period.

The overall objective of the EU and Spanish projects is to increase the number of those trained to various officer levels to 160 per annum, in order to provide a large enough number of trained officers available to enable full Namibianisation of the fishing fleet over a period of four years. In discussions with the EU representative in Windhoek it was evident that continued ICEIDA technical support was considered necessary to meet this objective.

NAMIBIAN MARITIME & FISHERIES INSTITUTE

In 1994 the main maritime training activities were moved to Walvis Bay, with the establishment of the Walvis Bay Maritime School. In 1996 the Namibian Maritime & Fisheries Institute (NAMFI) was formally established when the operations in Luderitz and Walvis Bay came under one management. The new institute is independent and under the management of a special trust.

Board of trustees

In July 1996 a trust was founded by the Minister of Fisheries and Marine Resources as the senior management body for NAMFI. The primary objective of the trust is:

> To further the practical education of Namibians who possess the necessary skills so as to enable them to take up qualified positions within the maritime and sea fisheries industries in Namibia; in particular, but without limiting the generality of the aforegoing, as certified officers on board fishing vessels, or other skilled positions on ships or in regard to the functioning of harbours, and in regard to the processing and marketing of fish and maritime products. (Clause 3.1 pages 3-4)

The number of trustees are to be 5-15. These are appointed as follows:

- By the Minister of Fisheries and Marine Resources (2)
- By the Minister of Works, Transport and Communication (1)
- By the Minister of Vocational Training, Science and Technology (1)
- By the Namibian Ports Authority (1)
- By the trade unions of those working in the fishing industry (1)
- The director or directors of NAMFI are ex-officio members of the trust

In addition the trustees can nominate up to five members of the private or public sector engaged in maritime or sea fisheries industries, and from time to time additional trustees, without exceeding the maximum of 15. For most of the time the number of trustees have been 11, including three from the industry. At present they are nine.

The trust is responsible for managing the finances of the institute and the hiring of a director or directors. According to the deed, the trustees shall each year submit an annual report to the Minister of Fisheries and Marine Resources before the last day of July, along with an audited balance sheet for the previous financial year (1 April to 31 March).

So far the trustees have held 31 meetings. No annual reports have been submitted to the minister, but the current director has produced two bi-annual reports since his appointment in early 2001. Audited balance sheets were not made available to the

evaluator, but (draft) budgets from since 1998/99 were provided, including one for the coming financial year.[3]

Senior management

The current director came to NAMFI as a deputy director in mid 1999. In mid 2000 he became acting director and was appointed to a five year term in early 2001. After high school he joined MFMR in 1991 and did a nine month training course in fisheries economics and surveillance in Italy in 1992. In 1993-1994 he did a trainers course in Ireland. In 1994 he became head of the fisheries inspectorate in the Karas region and started teaching on the FIOC in Luderitz in 1994. In 1997 he completed a post-graduate diploma in fisheries policy and planning from Hull University and a six month diploma in HACCP principles in northern England in 1998. Last year he completed a one year senior management programme at Stellenbosch University in South Africa.

The director has many irons in the fire and is often out of the office. He relies heavily on the deputy director, a post currently filled by an employee of ICEIDA, an experienced teacher and manager from the Icelandic Maritime Training College. During this period of institutional building and changes in the educational system at NAMFI, it is very valuable to have a person with such experience. Along with his administrative duties however, the deputy director carries a full teaching load, and he does not have a counterpart. It is important that there be somebody to alongside him to learn the ropes and assume responsibility

Staffing

The staff at NAMFI has been growing and there has been a particularly rapid expansion in the number of Namibian staff in the last year or two. Currently there are 12 Namibian instructors (of which 3 are women), including one head of department and two junior instructors. The need for instructors has been variously estimated, usually between 17 and 21 (Table 4). Administrative and support staff now number 14.

Teaching staff

Right from 1994, NAMFI has been supported by several development agencies. This support includes 8-10 expatriate lecturers during most of the time, of which ICEIDA has supplied 6-7. The salary costs of expatriate lecturers are carried by development agencies and are not reflected in the budgets. In the early days, most of the teaching was carried out by expatriate lecturers. Even if this is still so, more than half of the lecturers are now Namibian, which explains a sharp rise in salaries costs in the last few years (see Table 5, page).

[3] It is of interest to note that the budgets are not set up according to main categories or costs, but are mainly in alphabetical order.

Table 4. Current complement of instructors at NAMFI, Namibian and expatriate, and the need as estimated at different times.

Department	Current - Namibians	Current - expatriates	T&M 1993	Ingram 1996	Rist 1996	Links 2002
Deck dept	4	5	5	5-6	1-2	6
Engine dept	4	3	4-5	4	4	7
Safety & Tech	3	1	4-5	5	1-2	4
General	1	0	1-2	2	-	2
Fish process	0	0	2	4	2	-
Total	**12**	**9**	**17**	**21**	**9**	**19**

There are now three teaching departments. The intention is to abolish this structure and instead have coordinators for each line of training. Lecturers should be able to teach across different courses. It is however useful to use the current structure to assess the situation and form an opinion of future needs.

The *deck department* has currently 9 instructors. This includes the deputy director who carries a full teaching load and the chief instructor who was on sick leave at the time of the evaluation. In addition there is one recently employed ICEIDA instructor on a two year contract and two Norwegian instructors who will not be funded beyond 2003. There are three Namibians in the department, two instructors and one junior instructor. In addition there is one temporary instructor. Of the four Namibians, only one was teaching when the evaluation took place. One had just arrived from training in Iceland and was on leave, and another was expected back from training in Norway at the end of March 2002.

The *engine department* has 7 instructors. Three of these are Icelandic. One of them servers also as adviser to the head of department and one has no teaching duties this term (first half of 2002), but is setting up a functional machine workshop for training. There are four Namibian instructors, including the head of department. One of these had just arrived from 8 months training in Iceland and another one was expected to return from two months of studies in Norway towards the end of March. The other two were teaching full time, but one of them had resigned and the other one was not sure about his future at NAMFI due to poor salaries.

The *safety and fishery department* is headed by a German instructor who has been funded by CIM. His appointment with CIM was terminated at the end of March 2002 and he is now on the payroll of NAMFI. In addition there are three Namibian instructors. One Namibian junior instructor left the department last year.

In addition there is one locally employed instructor with permanent residence in Namibia. He has a variety of duties, teaches English and mathematics, and his superior knowledge of computers is in much demand.

In total there are 21 instructors of whom 9 are expatriates funded by various development agencies. According to various need assessments (Table 4) and the fact that during the time of the evaluation NAMFI was in full operation with 13 full-time teachers, present staffing levels appear to give good scope for training of Namibian instructors and the development of new syllabi and facilities.

The Namibian lecturers still need however to undergo considerable training for a Namibianised NAMFI to be able to provide training to an international standard. It seems clear that NAMFI to a considerable extent will have to depend on expatriate lecturers for some years to come.

There has been a fairly high turnover of local instructors at NAMFI, due to poor conditions of service. This is something the Trust of NAMFI is keenly aware of, but lack of funds make it difficult to deal with this issue. To be able to offer training to international standards NAMFI needs to have qualified staff. The challenge is not only to employ and train instructors, but also to retain them and offer career prospects.

Because of the aggressive government policy of Namibianisation, the industry will be willing to hire well qualified staff and are in a position to pay considerably higher salaries that those on offer at NAMFI. The prospect of long times out at sea is however less attractive to women than men, which may explain the relatively high ratio of Namibian women teachers at NAMFI.

It is the policy of NAMFI to have their instructors trained in the final stages of operational and management levels outside Namibia. During the time Namibian instructors are away for training, teaching must still go on. This then creates the problem that there may be a lack of counterparts to the expatriate staff teaching at NAMFI. It is important that NAMFI hire a full complement of Namibian staff as soon as possible.

Administrative staff

Apart from the director there are six other administrative staff members, including a secretary, accountant, stores controller, personnel officer and registration officer, and another seven maintenance and temporary staff. Most of the administrative staff seemed fairly recent in their posts, relatively inexperienced and in need of considerable supervision and on-the-job training.

It was evident from how difficult it was to access information that neither the finance department nor the registry were fully functional. Good record keeping is a fundamental aspect of any training institution. From the data the evaluator received in Namibia of the intakes during 2000 and 2001, one could not deduce the number of applicants for each course or what percentage passed entrance examinations. It was also not possible to see from where the students came, the industry, MFMR, other government bodies or if they were private. Such information however is necessary for the planning of the operation of NAMFI and to determine what level of financial support is needed from the government.

The administrative staff still needs considerable training and strong guidance during this phase of institution building. Although many of the outside interests of the director might benefit NAMFI in one way or another, more attention should be paid by him to managing the institution, developing workable procedures for the smooth operation of the training operations, and the training of his staff.

Training courses offered at NAMFI

Namibia does not have any freight fleet to speak of. Most of the vessels are fishing vessels, although some vessels are used by the mining companies, as diamonds are extracted from the seafloor at shallow depths (less than 20-30 m), and then there are patrol vessels and harbour tugs. This means that most of the demand for officer training is at Class 6 and Class 5 according to the STCW95 convention, and only a handful of officers, mainly on patrol vessels and tugs need certifications beyond that. Consequently NAMFI mainly concentrates on the needs of the fishing fleet, although there is no fundamental difference in many aspects as to the required training between different types of vessels. Engineers on fishing vessels should understand and be able to work on refrigeration systems, but there is no fundamental difference in the types of engines used. NAMFI has so far provided three basic types of training.

Training of deck officers and engineers for the fleets

Although NAMFI itself only became a legal entity in its current form with the establishment of a trust in 1996, NAMFI is usually taken to have started in 1994, when South Africa handed over Walvis Bay and the Namibian government moved most of its maritime training to there.

Namibianisation has always been high on the agenda of the Namibian government, as has the policy of providing opportunities to make a career in fisheries to people who traditionally have not been involved in fisheries. The latter has in part been promoted through the so-called *cadet* scheme. In 1993 University of Namibia offered a preparatory year for about 30 candidates selected to start officer's training in 1994. Since then NAMFI itself has offered a five week course in English, mathematics and applied science to those who have failed the entrance examination. Each year about 30 students enter through this cadet scheme. They are selected out of about 400

applicants. About a third of the applications come from the coastal communities (Luderitz, Walvis Bay and Swakopmund), but candidates from these communities only make up about 5% of the entrants selected. This should probably be a cause for concern.

Most of the cadets thus do not have any prior experience of the sea, they are from inland communities and have limited understanding of what awaits them. Of the 200 or so who have entered through the cadet scheme, about 10% have dropped out. NAMFI has to organise sea time for its cadets. Some of the larger companies take on cadets for sea time. Some of the cadets may only have completed an induction course at NAMFI before going out to sea. All the companies consulted in this evaluation complained about the lack of discipline and the unrealistic expectations of the cadets. The cadets also complained about the treatment they receive and the lack of supervision they get on board. It seem that both parties may have unrealistic expectations, and neither appears to have been made clear their role and responsibility.

NAMFI must correct this situation and it is apparently doing so by firming up the discipline within the institution, among staff and students alike. An information brochure distributed by NAMFI may give candidates the wrong impression by detailing what positions they may achieve, without giving any indication about the time such studies take or the route to get there. Only a proportion of those with the papers permitting them to become captains or chief engineers on large fishing vessels will actually achieve such positions.

The management of NAMFI has decided that as from 2002 it will take 32 cadets per year in a single intake, 16 in deck and 16 in engine. This is the maximum that can be accommodated, as it is difficult to secure training places on board fishing vessels. The MFMR has entered about an additional 70 of their own staff into the cadet programme, to be trained for officer positions on patrol boats and research vessels. The Namibian Ports Authority has also had a number of their staff trained at NAMFI.

Other candidates entering officer's training, either as engineers or deck officers, are either privately funded or sponsored by their companies. In 1994-1999, 106 new deck officers and 98 new engineering officers of various ranks passed one or more courses at NAMFI. It is clear that a substantial proportion of the candidates for officer training at NAMFI have been recruited through the cadet scheme.

New training standards

As from 2001, training at NAMFI has followed the standards set out by the IMO STCW95 and STCW-F conventions. Here the lowest qualification is Class 6, which

requires 6 months of course work and two year sea time. Those previously holding Grade 4 in the old system have to undergo a bridging course to be able to continue their studies according to the new system. Those having completed Grade 3 in the old system can enter Class 5. Holders of Grades 1 and 2 may need to add some courses before being awarded a Class 5 certificate.

The new system is described schematically in Appendix 5 and Appendix 6. As before, those entering NAMFI have to pass an entrance exam in English, mathematics and applied science. To be eligible to write the exam, a candidate must have completed grade 12, completed grade 10 with English, mathematics and science and be at least 25 years old, or be an experienced seaman. Those failing the entrance exam have the option to undergo a 5 weeks refresher course in the subject(s) failed and re-take the exam(s).

To enter Class 6, two years of sea time is required. Those who do not have the required sea time, usually cadets or privately funded students, will undergo a six week induction course before doing 24 months of sea time. Although they could do the six month course before or after completing a part or all of their sea time, experience has shown that it is best to complete all the required sea time before starting the course work.

Assessment and certificates of competency

In the past all assessment was carried out by external examiners. The exams were usually oral, although some chart work was tested in writing. NAMFI instructors did not necessarily set the exams or participate in the testing, and NAMFI did not keep detailed records of the exams. The external examiner sent the results to the students who had to take them, along with confirmation of their sea time, to the Department of Maritime Affairs (DMA) at the Ministry of Works, Transport and Communications, who would then issue a certificate of competency.

Now NAMFI does the assessment, but an inspector from DMA, trained by the IMO, keeps track of NAMFI to verify that the training and exams are up to standard. A recently established registry at NAMFI keeps records of students and their exam results. There is though still room for improvement. The record keeping is not computerised and it is difficult and time consuming to access and summarise information about applicants and students. It should be relatively easy to install such a system and get training in its operation, as other training institutions in Namibia, such as the University of Namibia and the Namibian Polytechnic undoubtedly have it.

Short courses in first aid, fire fighting and safety at sea

By law, all seafarers must undergo different types of short courses on safety, which had to be completed by February 2002. These are three courses that take in total 13-14 days. There has been an increased activity in these courses in recent years and during the second half of 2001 over 1000 seafarers completed them. The target set by the government has not yet been reached, but it is clear that this type of training will become a smaller part of the activities and income of NAMFI in the future, as only new entrants will be required to undergo these courses, while those having completed them will have to attend short (1-2 days) refresher courses every few years.

Training of Fisheries Observers and Controllers (FIOC)

Since 1994 the MFMR has trained staff to act as observers on large vessels to make sure they follow the regulations and also to sample the catch for stock assessment and other research purposes. This scheme had been managed by the current NAMFI director and when he came to NAMFI as a deputy director in 1999, it was decided to get NAMFI to manage this training. The course takes one year, including 3 months in-service training at sea. A group of 25 students undertook the course in 1999/2000, but since then the training has been under review and in April 2002 a group of 23 started the course, which is in part taught by NAMFI instructors. Most instructors, e.g. those teaching law and enforcement, and fisheries biology and scientific sampling, come from other institutes. NAMFI has been promoting this course within SADC, in association with a large EU funded project on Fisheries Monitoring and Surveillance off Tanzania, South Africa, Namibia and Angola.

Proposed course in fish processing

One of the objectives of NAMFI is to train people for the fish processing industry. In the proposed development assistance by the EU and the Spanish International Development Agency, training in fish handling and processing is envisaged. No details appear to have been worked out as yet, as regards target groups, content or length of training. This year however, at the request of the industry, NAMFI is offering a course for technicians in charge of the maintenance of machinery in fish processing plants. In the EU/Spanish plans it is anticipated that NAMFI will train 30 students per year in fish processing.

Managing finances

During the fiscal year 1999/2000, the total expenditure of the MFMR was about N$ 136 m.[4] Of this government funding through the main budget accounted for 47%, the Marine Resources Fund (MRF) 9%, and the remainder, 44%, was donor aid in the form of non-capital support. These figures indicate that the ministry as a whole has a shortage of funds for managing operations and a shortage of trained personnel to carry out its functions. The MFMR continues to rely heavily on donor aid, and it

[4] 1 N$ is approximately 0.09 US$

acknowledged assistance from 10 countries and organisations during the 2000/2001 financial year.

The ministry does not take a direct responsibility for the financing of training through its budgetary allocations. Financing of NAMFI operations is basically the responsibility of the board of trustees. In a strategic plan for MFMR in 1999-2003 the role of the ministry in training is seen as being that of a co-ordinator and facilitator:

> Continuing the process of Namibianising the fishing sector will require ongoing commitment to human resource development. We [MFMR] will continue to play a role in this process as facilitator and co-ordinator of funds. We will also input into training needs and content, the setting of training standards, and develop policy and legislation. (page 17, Planning in Action)

According to the budgets provided, the total operational costs of NAMFI have risen from N$ 2.9 m in 1998/99 to an estimated N$ 10.5 m during the 2002/2003 financial year (Table 5). The amounts have not been adjusted for inflation, so they are not directly comparable. According to official statistics inflation has been about 10 % per year.

Table 5. Summary of the financial budgets presented by NAMFI, contribution from the Sea Fisheries Fund and proportion of budget going to salaries and wages (all figures are in 1000 N$)[5]

Financial year	**1998/99**	**1999/00**	**2000/01**	**2001/02**	**2002/03**
Estimated total expenditure ***N$***	2 879	3 170	4 436	7 949	10 454
Contribution from the Sea Fisheries Fund N$	2 630	2 292	2 585	1 300	2 585
% of total budget	91.3	72.3	58.3	16.3	24.7
Salaries and wages of Namibian staff N$	791	1 160	2 248	2 630	4 607
% of total budget	27.5	36.6	50.7	33.1	44.1

Government contributions, for example through the Marine Resources Fund or through training of MFMR staff, appear to have been fairly constant around N$ 2.5 m in absolute terms, but in real terms this reflects a reduction of about 30%. Allocations to training from the Marine Resources Fund in 2000/2001 was only N$ 2.1 m out of a total fund of N$ 18.3 m. Most of the fund is used to finance research.

[5] These figures are estimates made at the beginning of the financial year, but are not based on audited budgets, which were not available. The only change made is the MFMR contribution in 2001/02 which was about half the one budgeted.

Government contributions towards the operation of NAMFI have gone from over 90% of the operational costs in 1998/99 to less than 25% in the current year. This reflects to some extent a changed clientele of NAMFI. During the first years, training of cadets and government staff was the main activity at NAMFI, while today more students come from the industry or are privately funded. Exact breakdown is not available. It should be kept in mind that more than half the teaching staff of NAMFI is paid for by donors, and neither their salaries nor other donor contributions are reflected in the budgets.

It is not known how well the budgets summarised in Table 5 reflect reality. Thus a surplus of N$ 0.9 m and N$ 0.1 m was indicated for the past two years. For the coming financial year the budget indicates a surplus of N$ 1.1 m. At the same time NAMFI had to resort to using reserve funds to finance its activities during the 2001/02 fiscal year, as expected contributions through the Marine Resources Fund managed by the MFMR did not materialise. According to the Permanent Secretary this was because the income of the fund was less than anticipated. This shows the problem of depending on a fund whose income varies with catch, while there is less leeway to adjust the expenditure of training and research accordingly. It has been pointed out earlier that fluctuations in catch are normal and to some extent even predictable in the Namibian fisheries.

According to the budgets provided, increased income of NAMFI is being generated through increased tuition and course fees. This reflects in part increased fees, but also to a large extent increased throughput in short compulsory safety courses. It can be expected that the demand for those courses will soon be saturated and will taper off. It was also apparent through discussions with company managers, that they considered the fees to be expensive. This especially applied to the companies in Luderitz who in addition to school fees and salaries have to pay for travel and accommodation for their staff in Walvis Bay. It may therefore be unrealistic to expect fee generated income to continue to increase at the same rate as in the past. It is also of interest to note that the government does not appear to pay NAMFI according to the fee structure but decides for itself how much to pay the institute for training its staff and other cadets.

Judging from the minutes of the board meetings, the financial situation appears to be fairly tight, and the board has discussed a number of options to increase the income of NAMFI. These options include registering NAMFI as a vocational training centre, which might make it eligible for support from the Ministry of Vocational Training, Science and Technology. Such an application was sent off towards the end of 1997, without a visible result. Earlier this year NAMFI applied for a "training quota" of hake, with a view to selling it to the highest bidder in the industry. But trading in quotas will leave NAMFI open to criticism, especially as the director of NAMFI and

some of the Trust members have declared interests in some of the fisheries companies. The advantage may be that the price of quota on the open market can be expected to rise as the allowable catch is reduced. An income generated this way may vary less than incomes based on levies imposed on total catches.

Finally there is the idea of offering courses to other SADC nations. This may be a real possibility, and the director of NAMFI has taken on a 40 day consultancy to estimate training needs in Angola, Namibia, South Africa, Mozambique and Tanzania for a SADC project on Monitoring, Control and Surveillance of Fishing Activities. EU funding of US$ 6.3 million has been secured for the project which started in February 2001 and is expected to run for 5 years. It is in particular the training of fisheries inspectors that NAMFI hopes to be able to sell to other SADC nations. Although this may alleviate NAMFI's financial problems in the short term, it is unlikely that SADC countries will continue to send candidates for training in Namibia unless they are funded by a third party. Eventually, NAMFI must be able to offer quality training based on the needs in Namibia, financed by the users of the training.

EFFECTIVENESS

The building up of a national maritime training institute and training a cadre of qualified officers for the industry is a long term process. This is especially true in Namibia, where the general level of education is low and the fishery is relatively industrialised. It must also be considered that for historical and geographical reasons, most of Namibians do not have a fisheries tradition. The policy of the government to promote a fisheries career for people with no fisheries background has not speeded up the process. However, expectations have been high, perhaps based on feasibility studies setting unrealistic targets for Namibianisation of officers and crew.

Activities and inputs: a summary

Assistance from ICEIDA
It appears that the capacity of NAMFI increased considerably after ICEIDA built four classrooms in 1997 and another four in 2000. It should be noted that many students go to sea after a six week induction or familiarisation course, and only return to take classes for their first certification after 18-24 months of sea time. There may thus be a time lag of 2-3 years from when capacity in increased until it is fully felt in the number of graduates.

It is clear that ICEIDA has during the current phase of its assistance gone from gap filling to institutional capacity building. However, the plan presented in the evaluation report form 1998 may have been too optimistic. The withdrawal of assistance by 2002 as envisaged in the plan of operations from 1999 could be premature. This was becoming clear in 2000, after a difficult year in 1999 due to conflicts between the instructors and the director at that time, and the preparation of the changes to bring the training in line with the IMO's STCW95 convention.

Although it has not always been smooth sailing, there is no doubt that ICEIDA's contribution to maritime training in Namibia is favourably viewed by most stakeholders, even if there was the occasional dissenting voice. Most want to see a continued Icelandic involvement, including other development agencies which have also supported NAMFI. The main criticism, coming from students and co-instructors, was that the Icelandic instructors are sometimes poorly organised and not always very engaging lecturers. They often do not have any background in teaching, so the structure of the courses and teaching techniques can be inappropriate. However this is made up by their vast and relevant experience, which to the students becomes especially important when they return to NAMFI after being out at sea. This is also seen as one of the main strengths of the Icelandic instructors by the industry. The Icelandic lecturers are seen as being resourceful and experienced, and their presence

strengthens the fisheries sector in general. It should be noted that this has also been to the advantage of Icelandic commercial interests in the Namibian fishing industry.

Outputs

Training capacity

If the total number of officer positions in the Namibian fishing fleet will be 1300 and the average sea time of officers is 25-30 years, the annual recruitment of officers will be about 40-50, provided a "normal" age structure. If half of these have to complete Class 6 and Class 5 and a few continue to Class 4 and higher levels, this might mean a training need of 70-80 per year, or an intake of about 40 per term. This is substantially less than the current capacity of NAMFI. According to the deputy director NAMFI now has the capacity to offer officers' training in 5 classes of 14 students per term, or 140 per year. Given a pass rate of 70-80%, this equates to 100-110 passes per year at various levels of certification. As the general level of education in Namibia improves, the need to provide refresher courses to those failing the entrance exams may gradually disappear and the pass rate improve.

The contrast between eventual training needs and the training capacity at NAMFI is even greater if one looks at the objectives of the new EU/Spanish project which aims to increase the output to 160 officers trained to various levels of certifications per year. Assuming a pass rate of 70-80%, 200-230 candidates must be admitted into officer training per year over the next few years to achieve this aim. Of these, about 30 will come through the cadet scheme, leaving the industry and government bodies, such as the Namibian Port Authority and MFMR, to provide 200 candidates per year able to pass the entry exams. Although the number of applications from the industry has risen in recent years, this is probably an unrealistic target.

The number of applications for officer training in the last three semesters is summarised in Table 6. The demand for training is highest at the lowest level of certification, but information on how many of those have passed the entrance exams has not been made available. All those qualifying have been able to commence their studies. The number of applications for training at higher levels has never exceeded 14, the maximum admitted per class, and in three cases out of nine the number of applications has failed to reach the minimum of six required to offer a particular class.

Table 6. Number of applications for officer training at NAMFI in 2001 and 2002.[6]

	Deck department			**Engine department**	
	Class 6	Class 5	Class 4	Class 6	Class 5

[6] In addition there were 325 applications to the cadet scheme in 2001, of which 42 were admitted. So far there have been about 400 applications for 32 places on the cadet scheme in 2002.

1. semester 2001	76	12	11	24	13
2. semester 2001	45	3	0	112	13
1. semester 2002	100	12	7	79	4

In addition there will be a need to provide short compulsory courses for crew of about 2-300 per year. NAMFI will also provide FIOC training for the MFMR. Much of the instruction will be provided by temporary teachers from other institutions, and the need will eventually not exceed an intake of 20-25 students every 3-4 years. Finally there is training to be provided for staff of the fish processing industry. The type of training to be offered and training needs have yet to be specified and assessed.

Training of officers and crew

In 2000, 102 students passed different levels of examination for deck and engine officers and in 2001 a total of 87 students underwent 6 month officer training and 35 did bridging courses to qualify for continued studies under the IMO approved system of training and certification.

In addition to the training to a level of officer certification, NAMFI runs five week refresher courses for those failing the entry exam and induction courses and a large number of seafarers receive training in safety at sea, first aid and fire fighting. In 1999 and 2000 3-400 persons completed short term safety training of this nature and in 2001 they numbered about 1600.

Training of trainers

Currently there are 12 Namibian instructors at NAMFI. Of those one has already resigned and at least one more is contemplating leaving. The current number of teaching staff, including expatriates, is 21. The eventual need for qualified teaching staff may be less, although estimates have been as high as 21 (Table 4). It appears that there is still a need to recruit up to 10 additional Namibian instructors. Namibians qualified to teach at NAMFI are not readily available. Therefore considerable effort still needs to be put into the recruitment of new staff, and training of existing and new Namibian staff, before the goal of a fully Namibianised institute offering training to international standards is achieved.

Training of staff takes a long time, and may require the staff be abroad for long periods of time, like the ones who have spent 8 months in Iceland. Five of the current Namibian instructors were originally recruited through the cadet scheme six to seven years ago, and are only by now reaching operational level. Only three of the Namibian staff are at "operational level", or have qualifications equivalent to Class

4/3 in the new system. NAMFI is supposed to offer training to the level of Class 4/3 and thus the instructors need to have gained at least that level of certification (operational), and it is considered desirable that head of departments have Class1/2 certification (management level).

Namibian instructors also need teacher training, and in this regard it is important that the ICEIDA staff has such background as well, and that they have counterparts during their term in Namibia.

Adapting to new standards

In 2001 NAMFI started teaching according to the standards set by the IMO's STCW95 convention. This brings about major changes in the operation of the institute and the demands made on the teachers, and the Icelandic staff have been actively engaged in the re-writing of curricula, setting up of new training facilities and preparing new materials.

CONCLUSIONS AND RECOMMENDATIONS

The promotion of Namibians to the highest officer levels in the Namibian fishing fleet has not been as rapid as optimistic assessments of training needs have assumed. In any society, not least those with a strong tradition for fisheries, those with qualifications have to prove themselves before ascending to position of top responsibilities. This may take many years, and most never make it to the highest ranks. There is no reason to believe that this process should be faster in Namibia. The policy of promoting individuals from inland communities with no experience or tradition in fisheries might slow this process down, even if relatively capable students can be selected through the cadet scheme.

It is unrealistic that fishing companies who run large and highly sophisticated and expensive vessels are willing to sacrifice efficiency and profits to make top positions available to relatively inexperienced Namibians. This is even more true if they do not find that they have the right attitude and lack the resourcefulness and sense of responsibility required out at sea, where the operational expenses are high and the cost of the company to bring a vessel in for repairs may be large.

The support ICEIDA has given to maritime training in Namibia has been highly valued, by the authorities, students and the industry alike. Gradually, facilities and institutional capacity have been built up. There is however still some way to go before NAMFI will be able to manage to serve the modern fishing industry in Namibia without external support.

******

Today the training capacity of NAMFI is at least double the average output for the period 1994-1999, and considerable progress has been made in training of Namibian instructors. ICEIDA has played an important role in developments so far and its continued support is seen as important by all stakeholders. To make future support efficient and effective, it is important that there be a change in emphasis, taking into account current status and anticipated developments.

- *It is important to try to see how ICEIDA can reduce its involvement and ultimately be able to leave NAMFI in a position where it can manage on its own. This will call for an increased commitment by the MFMR, which itself is still quite dependent on donor support.*

It may not be possible nor desirable to aim for full Namibianisation of the fleet in the next four years, and thus it may not be necessary to increase the capacity of NAMFI above current levels. That should at any rate not be the goal of ICEIDA's support.

- *The primary objective of ICEIDA should be to contribute to building up an effective maritime training institute at NAMFI, but not to increase the capacity beyond present levels. The emphasis should be on a close scrutiny of the nature of the training and the characteristics of the graduates undergoing the training, what is expected of them and the conditions facing them in their work.*

The Spanish International Development Agency project will provide four highly qualified teachers and training to management level of four NAMFI instructors. NAMFI will hire four new instructors as a counterpart contribution. To retain the same number of instructors from Iceland would probably lead to a considerable decrease in the efficiency of the ICEIDA contribution, as it is not likely that there will be enough students to train.

- *It is therefore recommended that ICEIDA decrease the number of instructors to three as soon as contractual obligations with individual instructors make it possible, and possibly later on to two. It is important that those hired by ICEIDA be professional trainers, capable of working towards developing appropriate syllabi and the quality assurance system required by the IMO in close cooperation with Namibian counterparts.*

A much needed renovation, infrastructure development and provision of library books and teaching aids is planned through the EU support, which will start this year.

- *With the major investment in infrastructure and equipment by the EU, there should be no need for ICEIDA to continue its contribution in these areas.*

It is a common enough experience that development projects do not always develop as envisaged in project proposals. One of the strong points of ICEIDA is the short and direct lines of communication between the offices in Iceland and Namibia, and the relative flexibility it has in providing assistance. This may become very important in the next few years at NAMFI.

- *It is recommended that support be in the form of short term technical support. It will be easier to apply pressure on the Namibian authorities and the Trust of NAMFI to increase their contribution if most of the ICEIDA support is not tied up in resident instructors. This could for instance be used to provide experienced instructors for one term to assist counterparts in developing teaching facilities, plans and materials, in specific areas. It is suggested that the equivalent of the cost of one to two full-time instructors be budgeted for such short term assistance for the years 2003 and 2004.*

The training of an adequate number of Namibian instructors is a long-term and costly process. It is also important that Namibian teachers get exposed to a variety of

circumstances and experiences. No doubt an addition to the assistance the Spanish will offer in this field will be both necessary a welcome.

- *It is proposed that ICEIDA continue to offer Namibian instructors the opportunity to gain sea time and experience in Iceland. ICEIDA should also consider offering scholarships to Namibian instructors for further training in the region, e.g. in South Africa or Tanzania.*

An adequate level of funding for NAMFI needs to be secured, either through direct budgetary allocations or through increased contributions from the Sea Fisheries Fund. This may be difficult to effect as the MFMR is quite dependent on donor support which is likely to be much reduced in the next few years.

- *Any future assistance given by ICEIDA should however be contingent upon increased contributions from MFMR towards the operational costs of a fully functional NAMFI. This not only means the hiring of more local instructors, but also creating a structure of advancement to be able to reward, motivate and retain them.*

It is important that the contributions of ICEIDA continue to develop from gap filling to institutional development. Technical assistance should be provided with this in mind.

- *It seems reasonable to request NAMFI to hire a local person for the position of deputy director, and that the current deputy director become the adviser to that person. Likewise, other ICEIDA hired instructors should be provided with counterparts.*

ICEIDA has already been involved in maritime training in Namibia for over a decade and much has been achieved. It is unlikely however that NAMFI will be able to reach the international STCW-95 standards for which Namibian authorities are committed within the next few years without provision of some external support.

- *It is therefore recommended that ICEIDA should be prepared to continue its support for some years to come. The support should be reduced gradually. The extent and exact nature of further support should be decided after a review in late 2004 or early 2005.*

APPENDICES

Appendix 1. Terms of Reference for the evaluation

Project background
The Namibian Maritime and Fisheries Institute (NAMFI) in Walvis Bay started operating in 1995. ICEIDA's involvement in the project began in 1994, and was intended for completion in 2004. ICEIDA has supplied five to seven Icelandic instructors (six in 2001 and 2002), constructed eight temporary classrooms, purchased computers and software, and provided engines and engine parts, navigation and various other equipment, for instruction purposes.

The evaluation is to be carried out in early 2002

Reasons for the evaluation
The evaluation is being undertaken at the request of ICEIDA and ICEIDA's board of governors in order to study the grounds for continued co-operation and to make recommendations for future direction and development of the ICEIDA assistance.

Scope and focus of the evaluation
The report shall outline a proposal for the project completion and a timetable for the phasing out of the project.

The evaluation will focus on providing information for ICEIDA.

The evaluation will consider outcomes of the project.

Information collected will be both qualitative and quantitative. After preparation by the evaluator time will be spent on-site involving:

- observations of college activities,
- interviews with key informants, including the Ministry, board members, representatives from the fisheries sector, staff and students,
- analysis of documents produced during the project period and/or by NAMFI and
- collection of other information pertinent to the training offered by NAMFI.

A draft 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 sent to the Ministry of Fisheries and Marine Resources.

The evaluator
The evaluation will be carried out by Dr. Tumi Tómasson, Director of the United Nations University Fisheries Training Programme in Iceland.

Timetable and reporting
Preparation for the evaluation began in February 2002. Fieldwork will be carried out in Windhoek and Walvis Bay in March 2002 with a draft report being prepared on-site.

The final report will be submitted to the ICEIDA Board of Governors in English in late June 2002.

APPENDIX 2. Record of evaluation activities

January-February	Preparations in Iceland, evaluator selected, TOR prepared, documents assembled and preparations started in Namibia.
26 February	Meeting in Maputo with Dr. Björn Dagbjartsson director of ICEIDA until February 2001 and currently ambassador of Iceland to southern Africa
27 February	Arrival in Windhoek
28 February	Meetings with Mr. Ebson Hoesb, senior training officer MFMR and a member of the board of trustees for NAMFI, Mr.Paul Nichols, special adviser MFMR and Dr. Vilhjálmur Hansson Wiium, economics adviser, MFMR. Further documentation obtained.
1 March	Meetings with Ms Nangula Mbako, permanent secretary of MFMR and a member of the board of trustees for NAMFI, a second meeting with Mr. Ebson Hoesb and a meeting with Mr Matthy Mattheus Nangolo, director of maritime affairs of the Ministry of Works, Transport and Communications and a member of the board of trustees for NAMFI. Meetings at the University of Namibia.
2 March	Meeting with Mr. A.Z. Ishitile, former permanent secretary of MFMR and a director of the board of trustees for NAMFI since its inception in July 1996. Currently the manager of own consultancy firm. Reading of documents
3 March	To Walvis Bay. Reading of documents
4 March	Meetings with Mr. N.B.X. Links, director of NAMFI. Meeting with ICEIDA staff in Walvis Bay.
5 March	Interviews with teaching and managerial staff at NAMFI
6 March	To Luderitz. Visits to companies and interviews with managers organised by Ms. J. Damens, instructor at NAMFI
7 March	Interviews in Luderitz continued. Back to Walvis Bay. Interviews with students at NAMFI. Second interviews with the director of NAMFI, and Mr. G. van Straaten, liaison officer. Managers of one fishing company in Walvis Bay interviewed.
8 March	Interviews with a student and managers of fisheries companies in Walvis Bay. Interviews scheduled by Mr. G. van Straaten. Information on finances and students provided. Reading documents at the ICEIDA office.
9 March	Report writing
10 March	Report writing
11-12 March	Feedback meetings
March-May	Report writing in Iceland. Initial feedback and discussions with the deputy director at NAMFI and the economics adviser to the MFMR.
May	Draft report circulated and comments received.
June	Draft revised and final report submitted to ICEIDA

APPENDIX 3. Key informants

NAMFI staff
Mr. Ralph Bussel, junior instructor engineering department, fitter and turner.
Mr. Geir Eilertsen , head of deck department, NORAD
Mr. David Hamupembe, head of engineering department
Mr. Nadir Hussein, junior instructor, no department
Mr. Ingólfur V. Ingólfsson, instructor and adviser to the head of the engineering
Mr. Sigurður Jónsson, instructor, deck department, ICEIDA
Ms. Mariam Kambinda, junior instructor, deck department
Mr. A.W.E. Kakoro, junior instructor
Mr. Lothar Kuchenmeister, head of safety department, CIM (German Development Cooperation)
Mr. Nicholas B.X. Links, director
Mr. Mike Lloyd, senior instructor, safety department
Mr. Merero Marenga, junior instructor, engineering department
Mr. Elfar Óskarsson, instructor, engineering department, ICEIDA
Mr. Haakan Pedersen, instructor, deck department, NORAD
Mr. Vilmundur Víðir Sigurðsson, deputy director, ICEIDA
Mr. Eyjólfur Valtýsson, instructor, engineering department, ICEIDA
department, ICEIDA
Mr. George van Straaten, liason officer

NAMFI students
Mr. Nathaniel Anpindin, deck officer through the cadet scheme
Mr. Lester Da Silva, engineer through the cadet scheme
Mr. Gavin Goagoseb, deck officer through the cadet scheme
Mr. Tobias Nambala, deck officer through the cadet scheme

Representatives of the fishing industry in Namibia
Mr. Jan Arnold, managing director, NAMSOV, Walvis Bay.
Mr. J. Bergh, human resources manager, Lalandii Ltd. Luderitz.
Mr. André Brink, fleet manager, Lalandii Ltd. Luderitz.
Mr. Simon Cummings, managing director, Blue Ocean Products Ltd. Walvis Bay.
Mr. Harald T.J. Dennewill, Overberg Fishing Company, Walvis Bay.
Mr. Lukas Els, vice chairman, small boat owners association, Luderitz.
Mr. Gunnar Harðarsson, fleet manager, Hangana Seafood Ltd. Walvis Bay
Mr. Rainer Horsthemke, managing director, Hangana Seafood Ltd. Walvis Bay.
Mr. Riaan Lottering, agency and procurement manager, NAMSOV, Walvis Bay.
Mr. Roy Marsden, managing director, Walvis Bay.
Mr. Dawid M. Pokolo, senior manager, human resources. NovaNam Ltd. Luderitz.
Mr. Peter M. Raubenheimer, fleet manager, Seaflower Whitefish Corporation Ltd. Luderitz.
Mr. José M. Ruiz, Overberg Fishing Company, Walvis Bay.

Board members of NAMFI
Mr. Ebson F. Hoeseb. Training officer, MFMR
Mr. A.Z. Ishitile, former Permanent Secretary of MFMR and chairman of the Trust
Ms. Nangula Mbako, Permanent Secretary of MFMR

Mr. Matthy Mattheus Nangolo, Director Maritime Affairs, Ministry of Works, Transport and Communications.

Others
Mr. Juan Arroyo, head, Spanish Cooperation, Embassy of the Kingdom of Spain in Namibia (by telephone)
Dr. Björn Dagbjartsson, Ambassador of Iceland to southern Africa, with residence in Maputo, and former director of ICEIDA
Mr. Steinar Hagen, counsellor for development, Norwegian Embassy in Pretoria (by telephone)
Prof. J.P. Msangi, Head: Department of Natural Resources and Conservation, University of Namibia
Mr. Malan, counsellor Delegation of the European Commission in Namibia
Dr. Orton V. Msiska, Department of Natural Resources and Conservation, University of Namibia
Mr. Paul Nichols, special advisor, MFMR
Mr. Henning Nygaard, port director, Luderitz, and former instructor at NAMFI (NORAD)
Mr. Marcus Theobald, counsellor Delegation of the European Commission in Namibia
Dr. Vilhjálmur Hansson Wiium, Economics Adviser, MFMR

APPENDIX 4. Documentation

Project documents

1993. Analysis of the training needs of the fisheries industries and the Ministry of Fisheries and Marine Resources, main report. GOPA consultants, report by D. Thomson and R. Mullin, 146 p.

1994. General agreement on forms and procedures for development cooperation between the Government of the Republic of Iceland and the Government of the Republic of Namibia, signed 22 September 1994.

1994. Plan of operations for training and fisheries research projects. An agreement between MFMR and ICEIDA, signed 23 September 1994. 10 p.

1996. Project dossier for fisheries training institute at Walvis Bay and Luderitz. Draft, prepared for the Delegation of the European Community in Namibia by A.H. Ingram, February 1996. 56 p. plus appendices.

1996. Report on Walvis Bay Maritime School and the Operations Centre Walvis Bay. A report containing recommendations on the implementation of the EU project, by Rudolf Boy Rist, October 1996. 32 p. plus appendices.

1996. Deed of Trust. The Namibian trust for maritime and fisheries training. 16 p.

1998. Recommendation for an improved maritime training in Namibia. Högskolen i Vestfold, Faculty of Maritime studies. Report by Per-Einar Rosenhave and Ulf Leslie Hallenstvet.

1996-2001. Minutes of 30 meetings of the board of trustees for NAMFI, July 1996-October 2001.

1998-2002. Financial budgets for NAMFI from 1998/1999 to 2002/2003.

1999. Plan of operations for training and research in fisheries. An agreement between MFMR and ICEIDA, signed 15 February 1999. 6 p.

1999. Correspondence in April and June 1999 about complaints from Deck Cadets of class VI:

22 April. Letter to Mr. G. Kings, Director of NAMFI and Mr. Alfred Rafnsson, lecturer, ICEIDA, from Ole Angell education coordinator.

22 April. Letter to Mr. Alfred Rafnsson, lecturer, ICEIDA, from Mr. Graham Kings, Director of NAMFI

26 April. Letter to Mr. Graham Kings, Director of NAMFI from Mr. Alfred Rafnsson, lecturer, ICEIDA.

9 June. Letter to the Permanent Secretary of MFMR, from six ICEIDA lecturers and two German lecturers at NAMFI.

2000. Updated feasibility study on the upgrading of the Namibian Maritime and Fisheries Institute, Walvis Bay, on behalf of national authorising offices of the European Development Fund. Project number: 7 ACP NAM 63. Prepared by W.G. Wilson. Second draft 14 July 2000. 62 pp. incl. annexes and financing proposal.
2000. Hand over of books donated by Namfi's library by Iceida. Report by Ingólfur V. Ingólfsson.

2000. Namfi verkefni. Skýrsla Ingólfs V. Ingólfssonar verkefnisstjóra, 15. maí 2000.

2000. NAMFI Verkefnið. Skýrsla Ingólfs V. Ingólfssonar verkefnisstjóra 10. ágúst 2000.

2000. Developments at the NAMFI. Letter to the director of ICEIDA from N.B. Links, acting director of NAMFI, 23/8/2000.

2000. Towards Namibianization of the Maritime and Fisheries Industry. Document prepared for the second national development plan (NDP 2) 2001-2005. N.B.Links.

2000. Letter requesting further ICEIDA assistance, sea time for instructors and salary for replacement instructor. N.B. Links, acting director 18/9/2000.

2000. Letter requesting an extension of agreement of ICEIDA support to NAMFI. N.B.X. Links, 30/11/2000.

2001. Technical assistance for the improvement of the maritime and fisheries training levels in the Namibian Maritime and Fisheries Institute (NAMFI-Walvis Bay). Spanish agency of international cooperation. 22 p.

2001. Connection between the Namibian education system and entry at NAMFI, and a plan of operations for 2002. Document dated December 2001.

2001. Results of the strategic planning workshop for the Namibia Maritime and Fisheries Institute. Facilitator Steven Hochobels.

2001. Namibian Maritime and Fisheries Institute. An information leaflet produced by NAMFI.

2001. Bi-annual report for 2000. Prepared by N.B.X. Links, director of NAMFI.

2001. Bi-annual report October 2001. Prepared by N.B.X. Links, director of NAMFI.

2001. Skýrsla frá Vilmundi Víði Sigurðssyni, 25/1/2001.

2002. Records of students enrolled in induction and certification course at NAMFI in 1998-2001.

2002. Quota application to MFMR. NAMFI, February 2002.

2002. Árið 2001. Skýrsla verkefnisstjóra ÞSSÍ við NAMFI. Vilmundur Víðir Sigurðsson, apríl 2002.

ICEIDA policy, board meetings, travel reports, articles in newsletters and comments

1997. Frásögn af ferð Björns Dagbjartssonar og Hjálmars Jónssonar til Afríku 1.-13. júní 1997.

1997. Frásögn af ferð til Namibíu 6.-10. október 1997 með Þorsteini Pálssyni, sjávarútvegsráðherra.

1998. Evaluation of the co-operation programme between ICEIDA and Namibia. Nordic Consulting Group. Final Report September 1998. 30 p. plus appendices.

1998. Skýrsla um Afríkuför 21.01-04.02 1998. Hilmar Þ. Hilmarsson, Björn Dagbjartsson og Helga Kristjánsdóttir.

1998. Skýrsla um ferð með utanríkisráðherra til sunnanverðrar Afríku 13.-28. ágúst 1998.

1999. ICEIDA Annual Report 1998.

1999. Skýrsla um ferð til sunnaverðrar Afríku 31.01.-16.02. 1999. Þórdís Sigurðardóttir.

1999. Skýrsla um ferð til Namibíu 17-22. maí 1999. Björn Dagbjartsson.

1999. Skýrsla um ferð til Afríku 21.08.-06.09. 1999. Björn Dagbjartsson og Jón Skaptason.

2000. Skýrsla um ferð til Afríku 22.01-11.02.2000. Björn Dagbjartsson og Árni Magnússon.

2000. Frásögn af ferð til Afríku 28.10.00-09.11.00. Árni Magnússon, Björn Dagbjartsson og Sigfús Ólafsson.

2000. Fundargerð 224. fundar Þróunarsamvinnustofnunar Íslands haldinn mánudaginn 17. janúar 2000 kl. 12:00 að Rauðarárstíg 25.

2000. Fundargerð 225. fundar Þróunarsamvinnustofnunar Íslands haldinn mánudaginn 21. febrúar 2000 kl. 12:00 að Þverholti 14.

2000. Fundargerð 230. fundar Þróunarsamvinnustofnunar Íslands, haldinn þriðjudaginn 22. ágúst 2000 kl. 12:00 að Þverholti 14.

2000. Fundargerð 233. fundar Stjórnar Þróunarsamvinnustofnunar Íslands, haldinn mánudaginn 20. nóvember 2000, kl. 12:00 í Þverholti 14.

2000. Fundargerð 234. fundar Stjórnar Þróunarsamvinnustofnunar Íslands haldinn mánudaginn 18. desember 2000, kl. 15:00 í Þverholti 14.

2000. Langtímaáætlun Þróunarsamvinnustofnunar Íslands fyrir árin 2000-2004.

2000. ICEIDA 1999 Annual Report.
2000. Skólaskrifstofur fyrir sjómannaskólann í Namibíu afhentar. Fréttabréf um þróunarmál. Desember 2000. Ingólfur Vestmann.

2001. Annual Report 2000. ICEIDA.

2001. Frásögn af ferð til Afríku 14.02.01-07.03.01. Árni Magnússon, Björn Dagbjartsson, Sighvatur Björgvinsson og Elín R. Sigurðardóttir.

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

2001. Þróunarsamvinnustofnun Íslands. Ágrip af 20 ára sögu. Fréttabréf um þróunarmál. Apríl 2001. Björn Dagbjartsson.

2001. Sjómannaskólinn í Walvis Bay. Staðan í dag. Fréttabréf um þróunarmál. Apríl 2001. Vilmundur Víðir Sigurðsson og Eyjólfur V. Valtýsson.

Other sources consulted

1989. Oceans of life off southern Africa. Edited by Andrew I.L. Payne and Robert J.M. Crawford. Vlaeberg publishers, Cape Town.

1993. Evaluation of development assistance. Handbook for evaluators and managers. Royal Ministry of Foreign Affairs, Norway. 123 p.

1999. Planning in action. A strategic plan of the MFMR for 1999-2003. 30 p.

2000. Employment creation. A report by A. Iyambo, minister of fisheries and marine resources, presented to the cabinet. 16 p.

2001. Annual report 2001. NAM 001. Fisheries Sector Agreement. Presented to the annual meeting between Namibia and Norway on the fisheries sector agreement on Thursday the 11th of October 2001. MFMR, 97 p., incl. appendices.

2001. Review of the Norwegian assistance to the country programme. Development in the fisheries sector in Namibia (NAM 001). By Rudolf Boy Rist, Evan Thomas and Hilton Staniland. Final report 27 September 2001. 46 p. plus appendices.

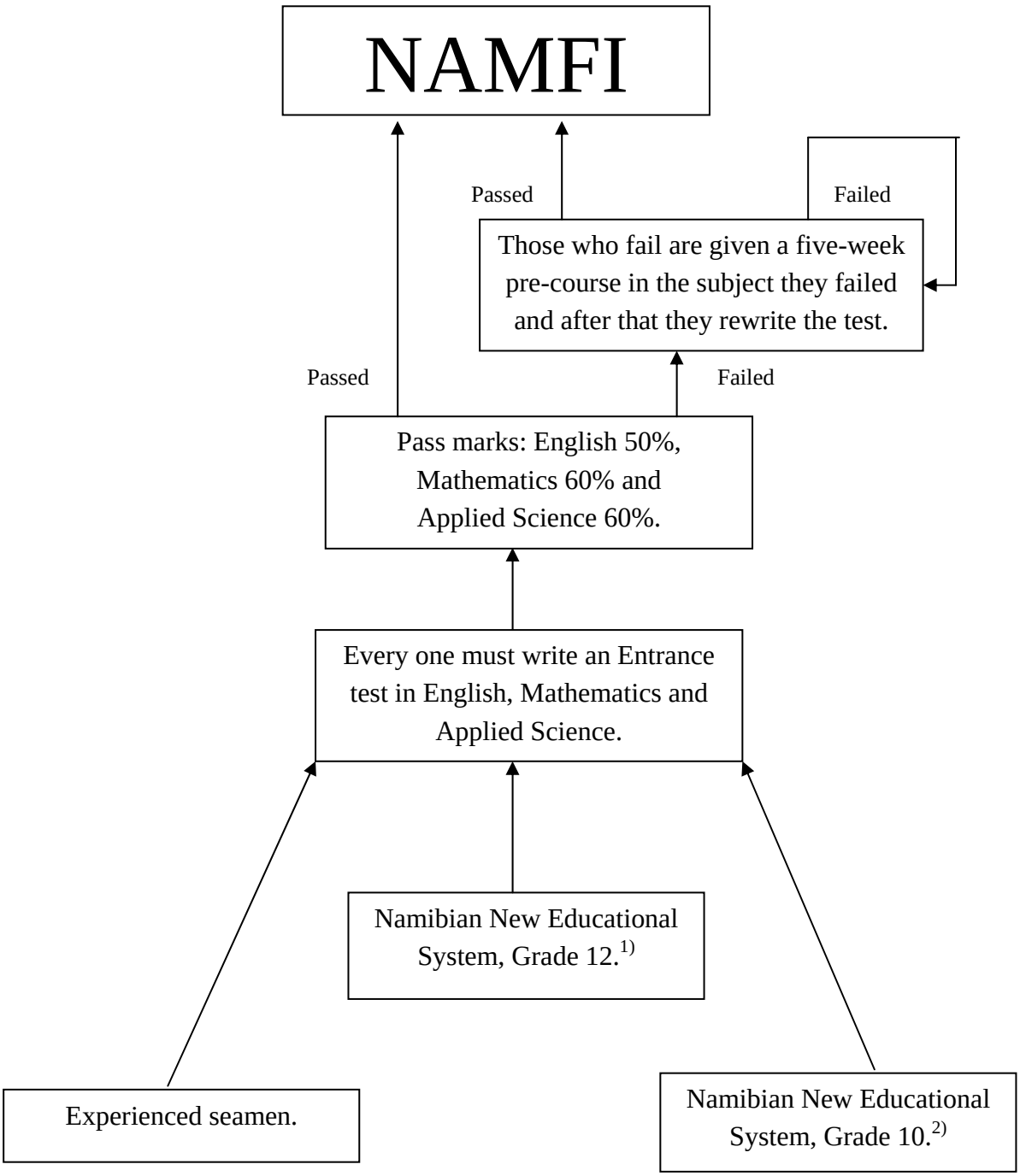
2001. National accounts 1993-2000. National planning commission. Central bureau of statistics. 33 p.

2001. Draft of a new law on the education, training and certification of Namibian seafarers. Department of Maritime Affairs, Ministry of Works, Transport and Communication. 57 p.

2002. Annual statement on the status of the Namibia fisheries sector. Dr. Abraham Iyambo, Minister for Fisheries and Marine Resources. January 2002. 22 p.

2002. Annual report 2000. MFMR, 23 p.

Appendix 5. Connection between the Namibian Educational System and entry at NAMFI (provided by the deputy director)



1) Grade 12 is the highest school certificate in the Namibian new school system.
2) Grade 10 and age 25 years is the lowest school certificate accepted, with Maths, Science and English.

Appendix 6. Possible paths to Class 1 deck and engine certification at NAMFI (provided by the deputy director)

STCW 95