

MALAWI HYDROGRAPHIC NATIONAL REPORT 2016



13-th Southern Africa and Islands Hydrographic
Commission (SAIHC)

28/03/2006

Cape Town (30-31 August 2016)

Presentation Outline

The background of the slide is a photograph of a vast, blue body of water under a clear sky. In the distance, a small boat with a red sail is visible on the water. The horizon is marked by a line of green, forested land.

- Hydrographic Survey Office
- Hydrographic Surveys
- New Charts and updates
- New publication and updates
- Marine Safety Information (MSI)
- C-55
- Capacity Building
- Oceanographic Activities
- Conclusion

Hydrographic Office

□ **Mandate**

- Carry out hydrographic Surveys :-
 - Lake Malawi
 - Lesser lakes (Lake Malombe, Chirwa and Chiuta)
 - Shire River, for safety of navigation.

□ **Hydrographic Surveys of Lake Malawi**

- Started in 1950s by British Admiralty.
- 1989-1999 resuscitation of hydrographic Surveys (French cooperation)
 - 70 ton RV. Timba was assembled
 - Single beam Echo Sounder, Syledis Beacon.

Hydrographic Office cont....

- ▣ 1999-2006 ICEIDA (Icelandic International Development Agency)
 - Continued Modernization of Hydrographic Surveys
 - ▣ Capacity building
 - ▣ Modern Equipment (GPS, SVP, Automatic Tide Gauges,)
 - ▣ Modern Software (for data acquisition and processing)
 - **Main Objectives**
 - ▣ Carry out Hydrographic Surveys of Lake Malawi
 - ▣ Print Charts covering the whole Lake Malawi
 - ▣ Update Lake Malawi Pilot Book
 - ▣ Help in Publication of Pilot Books

Hydrographic Surveys

- ❑ 40% of the Lake has been Surveyed
- ❑ Shire River partially surveyed (smaller hydrographic Launch)

Challenges

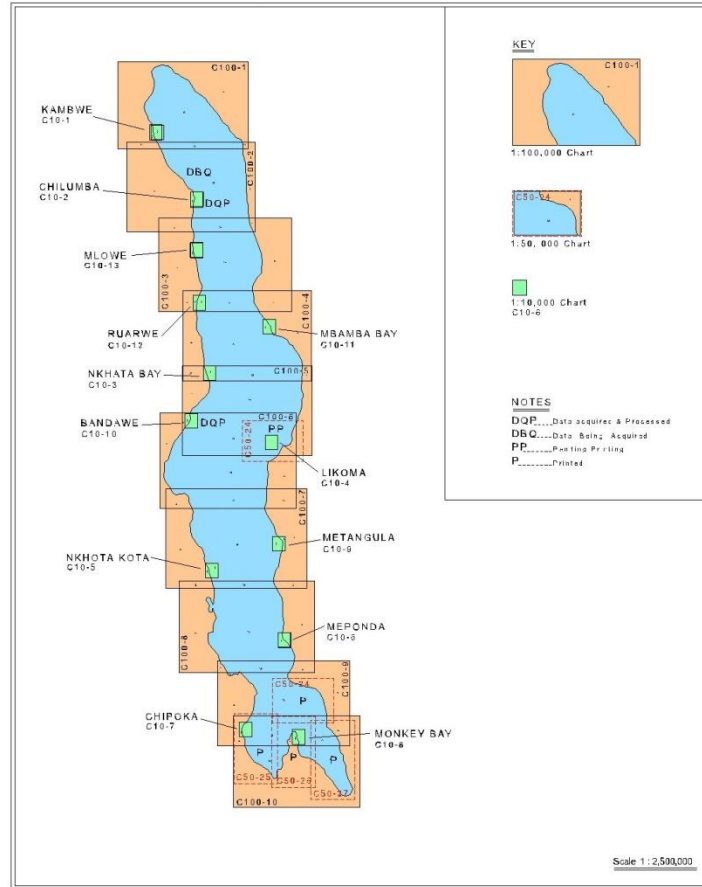
- ❑ Break down of the ship (RV Timba repairs now complete)
- ❑ Data acquisition and processing software needs to be updated.
- ❑ Modern equipment needs to be sourced (GPS, Single Beam Echo sounder, Side Scan Sonar, Automatic Pressure Tide Gauges)

New Charts & Updates

▣ The following Charts have been produced

Chart No.	Series	Status
C10-8	1: 10,000	Printed
C10-7	1: 10,000	Printed
C50-24	1: 50,000	Printed
C50-25	1: 50,000	Printed
C50-26	1: 50,000	Printed
C50-27	1: 50,000	Printed
C10-6B	1: 10,000	Ready ,Printed on demand
C50- 1B	1: 50,000	Ready ,Printed on demand
C10-4A	1:10,000	Data acquired & Validated
C10-2	1:10,000	Data acquired & Validated
C100-5	1: 100,000	Few profile to be redone in the field
C100-2	1:100,000	50% of data acquired

PROPOSED CHART INDEX



New Charts & Update cont...

- ❑ ENC's , RNC's and Pleasure Craft Charts are not in production, hope this will be a history once the proposed project with Norway materialize.
- ❑ Part of Approaches to Shire River Chart has been revised [▶](#)

Challenges

- ❑ Printing Press at Government Printer not functioning, and printing of map and Charts, relying on HP plotters, and currently have develop problems

New Publication & Updates

- ❑ Malawi Sailing Directions (not updated)
- ❑ Notices to Mariner (responsibility of Marine Department)

Challenges

- ❑ Lack of trained and experienced personnel (to update MSD)

Marine Safety Information (MSI)

Nation/ Area	INT Region	Local Warning	Coast Warning	Nav area Warning	Port Info	Master Plan
Malawi	H	Partial lake Pilot update	No	No	Partial	Marine Transport Sector

- Marine Services Department is responsible for MSI
- To this effect the Marine Services department is working on a Master Plan for the Marine Transport Sector.
- Main item of communication now is VHF radios

Challenges

- ▣ There is little coordination between Marine Department and Hydrographic office to develop reliable Marine Safety Information

C-55

- ❑ Charts are at scale 1:10000, 1:50000 and 1:100000
- ❑ Six Charts have been Printed - 1:10,000 and 1:50,000 series
- ❑ With the resources at hand, the status of hydrography and nautical cartography is fairly good as shown in the IHOCBC Malawi Visit Report 2008


Capacity Building

- ❑ Government has done its part in fulfilling its training obligation by training members at international and local institutions - STC in Netherlands, local universities Blantyre, Lilongwe and Mzuzu
- ❑ Through Cooperating Partners and IHOCBC - trained in France, Italy and South Africa.
- ❑ Currently training is sought for CAT A and B training in Hydrography (a place reserved for CAT A, problem is sponsorship)

Capacity Building cont....

- Gain experience during a multilateral project to survey Lake Malawi/Niassa (Malawi, Mozambique and Iceland)
- Joint project, Lake boundary delimitation between Malawi and Mozambique
- Once the proposed project materialize- Malawi hydrographic office and Norwegian Hydrographic office, experience and knowledge will be shared and acquired.

Oceanographic Activities

- ❑ Net work of Staff water gauges are maintained by Ministry of Water and Irrigation Department
- ❑ HSO was engaged in hydrographic surveys of shire river to provide data for lower shire flooding model and zero water gauge measurements 
- ❑ HSO maintains one automated pressure tide gauge (Monkey Bay)
- ❑ Sound Velocity profile and Grab Core
- ❑ A need for current meter for water current information on charts

Concluding Remarks

- ▣ The Engineering and Deck crew have shown immense capabilities and a milestone has been achieved which was in some circumstances not certain would be achieved considering the length of time that it has taken.
- ▣ We are almost certain that with the right cooperating partner such as Norway we can bring back the successes in the production of modern navigation charts, revision of the Lake pilot and monitoring the lake and river environment.

Conclusion cont...

- ▣ We have also trust in our erstwhile development partners who have shown a willingness to assist us even in the face of adversary.
- ▣ We appreciate the support both past and present from Iceland, Germany GIZ and Norway who have pledged to support Malawi including the mother body the IHO who have provided short training courses to our staff tirelessly every year and with such support we would like to assure our partners that the noble cause shown will not be in vain.

Conclusion cont...

- As a country we realize the vital role played by the water infrastructure and the requirement to develop it and not take it for granted.
- We are therefore happy to be here at the conference and meet again in amicable but serious discussions despite problems of finances that are always glaring their uncanny faces to stop us from sharing with the SAIHC community our zealous and worthy efforts at sustained establishment of a hydrographic concern.

Thanks for Your Time!!!!

Towards providing 100% Safety of Navigation through hydrographic Surveys



Equipments used

[back](#)



