



**CSPODP Sub - Project No. C042  
Fisheries Database Development  
Programme ITP, FFA.**

Special Report for Pau Woo  
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# PROJECT SUMMARY

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## **CSPODP SUB-PROJECT No. C-042**

### **FISHERIES DATABASE DEVELOPMENT PROGRAMME**

#### **OBJECTIVES**

The primary objective of the Fisheries Database Development Programme is to enhance FFA's regional fisheries database development priorities. This is focused on assisting FFA member countries to improve fisheries surveillance, increase the ability to negotiate and monitor fisheries agreements, strengthen economic analysis, upgrade computing skills in database management and enhance fisheries research.

#### **IMPLEMENTATION**

This CSPODP Sub-Project No. C-042, Fisheries Database Development Programme, has the following broad action strategies:

Engage the services of a database specialist to provide technical support to the information system requirements within FFA member country fisheries administrations.

Implement a work programme to assist member countries improve their fisheries surveillance initiatives, increase their ability to negotiate and monitor fisheries agreements, strengthen economic analysis, and enhance fisheries research and developments.

Co-ordinate consultancies on the following areas:

- Zones and delimitation
- Multi-user systems in member countries
- Implementation of mapping systems in member countries

#### **Database Administrator**

The post of Database Administrator (DBA) is held by Mr Ramesh Chand, a Fijian national. He is responsible for the activities implemented under this project. It is an important post within the Information Technology division, as identified in the Agency's corporate plan.

FFA's endorsement of the Windows 3.x environment for the PC computer in the first quarter of 1993 had significant implications for its member countries as developments at FFA almost always flow through them.

A significant development was greater appreciation by member countries of the value of analysing fisheries data using spatial distribution techniques. Overlaying fishing effort and catch data on maps of island boundaries and exclusive economic zones of member countries has unlimited use for scientists, fisheries managers, surveillance and enforcement personnel. After exhaustive evaluation, the Agency confirmed its commitment to adopting MapInfo for Windows as its mapping application choice.

In all the above activities, the Database Administrator was instrumental in our implementation strategies, in particular, providing technical support to member countries. The objectives of the CSPODP Sub-Project No. C-042, Fisheries Database Development Programme have been fully integrated into our Information Technology plans. The six-monthly reports for this project detail the specific activities involving the Database Administrator, and the contributions of this project to FFA's corporate objectives.

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## Consultancies

Perhaps the most important objective defined by this project is the establishment and maintenance of a central database of vessel catch and activities in the region. The availability of information on all fishing vessels operating in the region, and their activities while in the waters of FFA member countries, to fisheries managers and researchers will enable member countries to contribute effectively to national, regional and global fisheries issues. It will assist member countries with identifying their national and regional priorities, and clarify their responsibilities to global fisheries management. FFA registers its appreciation to all its donor countries, particularly Australia, Canada, European Community, and New Zealand for their financial support to enhance the sustainable management of the region's fisheries resources. The Agency specifically wishes to acknowledge the invaluable contributions from the Australian International Development Assistance Bureau (AIDAB) and the Canadian International Development Agency (CIDA) to the development of its Corporate Data Resource Management (CDRM). At around this time in 1993, FFA had only plans about developing corporate data models for its core business areas, and a dream to implement a robust client/server implementation utilising as much as possible of the available resources, hardware platforms and adopted software choices. With the assistance of these two donor organisations, the corporate data models for core business areas at FFA have been completed, and the dream is now a reality, all within a time span of 12 months.

FFA's "Corporate Data Resource Management" facility recognises the importance of information as a corporate asset, if it's current, accurate, and easily accessible.

FFA's Information Technology staff are very pleased that Mr. Pau Woo is visiting FFA at this time, since he was present at its headquarters when these plans were in their final review stage. He was very supportive of the priorities identified by FFA, and the action strategies being proposed. FFA tried its best to find management and technical resources of Canadian origin as participating partners in the implementation of its activities. Unfortunately, it was not possible for FFA to get an exhaustive list of Canadian companies interested in this part of the world. Communications became expensive and unclear, although FFA was very appreciative for the efforts of the few companies that responded.

FFA worked together with Ultimateast Data Communication Limited (UDC), a Canadian company from St. John, Newfoundland on the preliminary requirements of the CDRM project between February and May 1995. The limited funding available for this project however did not allow FFA to continue, although we have maintained a closer working relationship with staff at UDC. FFA instead sought funding support from other sources to commence work using the original consultant who scoped the project.

The next stages of the CDRM project will be finalised by the end of this week. Six corporate data models for core business areas at FFA have been defined. These are:

Vessel

Vessel Activity and Catch

Fisheries Agreements and Vessel Licenses

Violations and Prosecutions

People and Organisations

Marine Product Pricing

The Vessel data model redefines the requirements to be developed into the Regional Register of Foreign Fishing Vessels, currently maintained by the Monitoring, Control and Surveillance programme of the Agency. The current system needs modifications based on the finalised model, and to implement the standards adopted through the CDRM project.

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The application system based on the Vessel Activity and Catch data model has been developed and implemented. Data migration from the existing FoxPro version and system tests on the new Access version have been completed. At the end of this week, the system will be fully operational using FFA's client/server configuration.

The application systems for the four remaining core business areas need to be developed, tested and implemented. FFA hopes these will be partially addressed through CIDA funding under the Fisheries Database Development Programme. As there are numerous standards endorsed through the CDRM project which need to be used in all application system developments, FFA requires assistance in identifying a wider selection of potential Canadian expertise for this type of work. An alternative arrangement may be for FFA to seek the favourable consideration by CIDA and CORA of using some project funds on the current consultant. He has completed eighteen weeks working on the CDRM project, and has gained valuable knowledge on FFA's business areas. He will also assist FFA in finalising the action strategies and priorities for the next six months.

FFA also worked with DigiMap, a Canadian software house specialising in MapInfo for Windows. The activities we intended to address through this consultancy were aimed at providing FFA and the region with recommendations and strategies on analysing fisheries data using spatial distribution techniques. Although we were not successful in attracting DigiMap's attention to complete the project, their contribution to further development of our programme was appreciated. FFA and its member countries have endorsed MapInfo for Windows as the mapping application of choice. All FFA member countries, SOPAC and the South Pacific Commission have agreed to standardise on the recently released MapInfo for Windows version 3.0.

The CDRM project has identified an urgent requirement to develop a suite of MapInfo modules which can be implemented at FFA and member countries for routine fisheries data analysis. FFA hopes to work with DigiMap on a project to develop the relevant tools, including training and implementation.

### CONCLUSION

As it comes to its conclusion, the Database Development Programme has fulfilled its defined objectives, and contributed substantially to the sustainable development and management of fisheries resources in the region. Throughout the lifetime of the project, the senior management within the Information Technology programme has changed three times. The Database Administrator post has remained with one person, and is a significant factor in the success of this particular project. During the same period, there were major changes to FFA's executive management. The fishing industry also encountered changes, and management regimes in areas like the South Pacific had to adapt accordingly, and identify relevant priorities. The technology advances in computing and communication systems also changed dramatically. As these things evolved, FFA continued to assess and review its options, which was a major factor in the execution or non-execution of some of its priorities. The Database Development Programme came through the same experiences, and there are good reasons to accept the final achievements of the project.

The successful completion of the CDRM project in its current scope has provided FFA with a firm foundation from which to launch its Information Technology development activities over the next three years. The client/server model suitable for FFA has been established, tested and implemented. The hardware platforms and application software choices have been finalised. The working environment has been clearly defined, and its implementation outside FFA headquarters will be adapted to suit each member country.

FFA will continue the role covered by this project over the last five years. Although the resources available to the Agency are limited, FFA will provide the services to the best of its ability. FFA is fully aware of its priorities and goals, and appreciates the assistance and generosity of its donor

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organisations. In this respect, CIDA and its financial assistance is an invaluable source of inspiration.