# ASSESSMENT AND IMPACT
# OF THE CBNRM EXPERIENCE IN AFRICA

Brief Presentation of the Plan for Data Management and Analysis
(logo: SNV/IUCN Botswana)

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This assessment and estimate of impact will be based in major part on the review of a significant number of cases, or mini-case studies. An immediate issue is the extremely wide variety of CBNRM experiences. They range from the minuscule to the very large, span many types of natural resources and production systems (forestry, animal husbandry, fisheries, upland or irrigated agriculture, wildlife/protected areas, etc.). They have also taken place in many ecological settings, and under various institutional contexts. Still, there's no alternative to going through the process of review, collation, classification, organization, synthesis and analysis.

The plan to carry out this process of review, organization and analysis centers around a main relational database, and is designed to serve several related objectives:

- General use - The time-consuming process of gathering, collating and organizing information must serve other purposes than that of this particular task order. Consequently, as much of the basic documents and sources will be included in the final product, made easy to find through hyperlinks to text (.doc) or web page (.htm) information. In fact, one of the database tables (bibliography) will allow for searches, and will be used to generate a simple annotated bibliography.

- Completeness and transparency - All findings and conclusions will be based on information presented and organized in one or several of the database tables.

- Openness and expandability - Within the objective constraint of relying on one widely used set of related software tools (Microsoft Office Suite) every effort is made to allow users to modify or expand the various database tables for their own purposes, or to build on this model for further work. Another aspect of openness is that the structure is kept simple and well documented enough to facilitate importing or exporting information to/from the various database tables

The plan revolves around a relational database with four main database tables, as shown in Figure 1: bibliography, determinants, micro and macro/trend data. Each CBNRM experience reviewed and included in the analysis constitutes a case, and becomes the Primary Key for all tables. Each case has various types of information relating to it in each of the database tables, the structure of which is, obviously, the same for all existing cases. For instance, a case of

wildlife management in Botswana is represented by a record with various descriptive fields in the Bibliography database table. As Figure 2 indicates, information on determinants of success or failure is entered as one (subjectively defined) record in the set of fields corresponding to the Determinants database table. Various data available at the community level are entered in the Micro data table, while relevant macroeconomic and overall environmental data appear in the Macro data table.

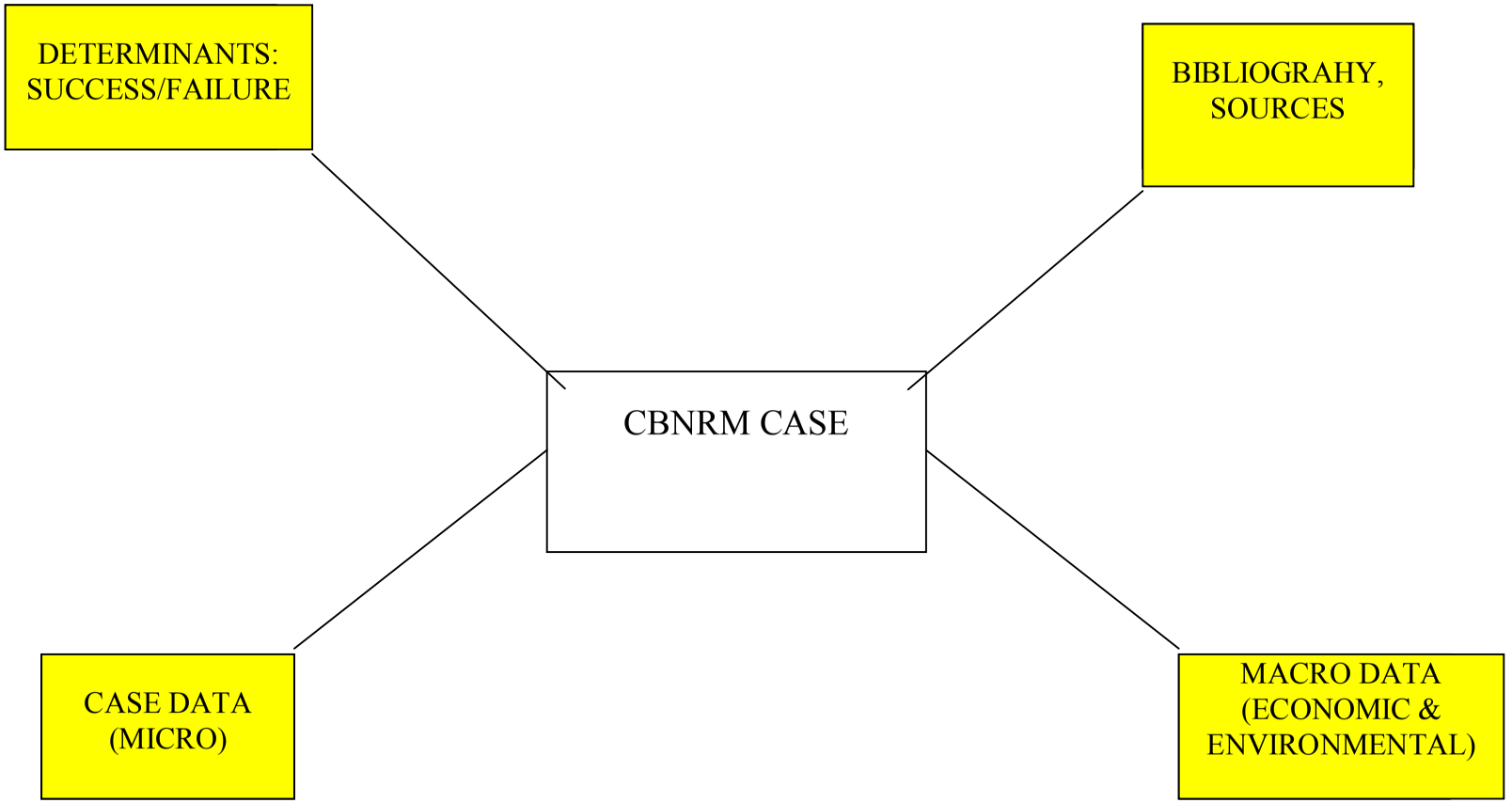
The system is not overly tidy, because not all correspondences between the Primary Key and datatable records are on a one-to-one basis. For instance, a single document or source may provide information about several cases. Conversely, a well-known CBNRM experience may be have been written up in multiple documents. Also, most of the macro economic or environmental data (i.e. at the country level) should apply to several cases in any given country. Some duplication will therefore take place, but it is more an issue of data management efficiency than of soundness in analysis and results.

It is likely that some levels of analysis will require that information on all or a subset of cases be extracted from two database tables, for aggregation or analysis, or both. The design will take this into account.

Because the review of cases is barely started, it is not yet clear what specific variables will appear as fields in the database tables, and which type of statistical analysis will be most appropriate. The type and statistical 'qualities' of the final data sets will define this. For the same reason, it is too soon to describe what kind of graphic representation will eventually be carried out, but the relevant database tables will be structured with this in mind from the start.

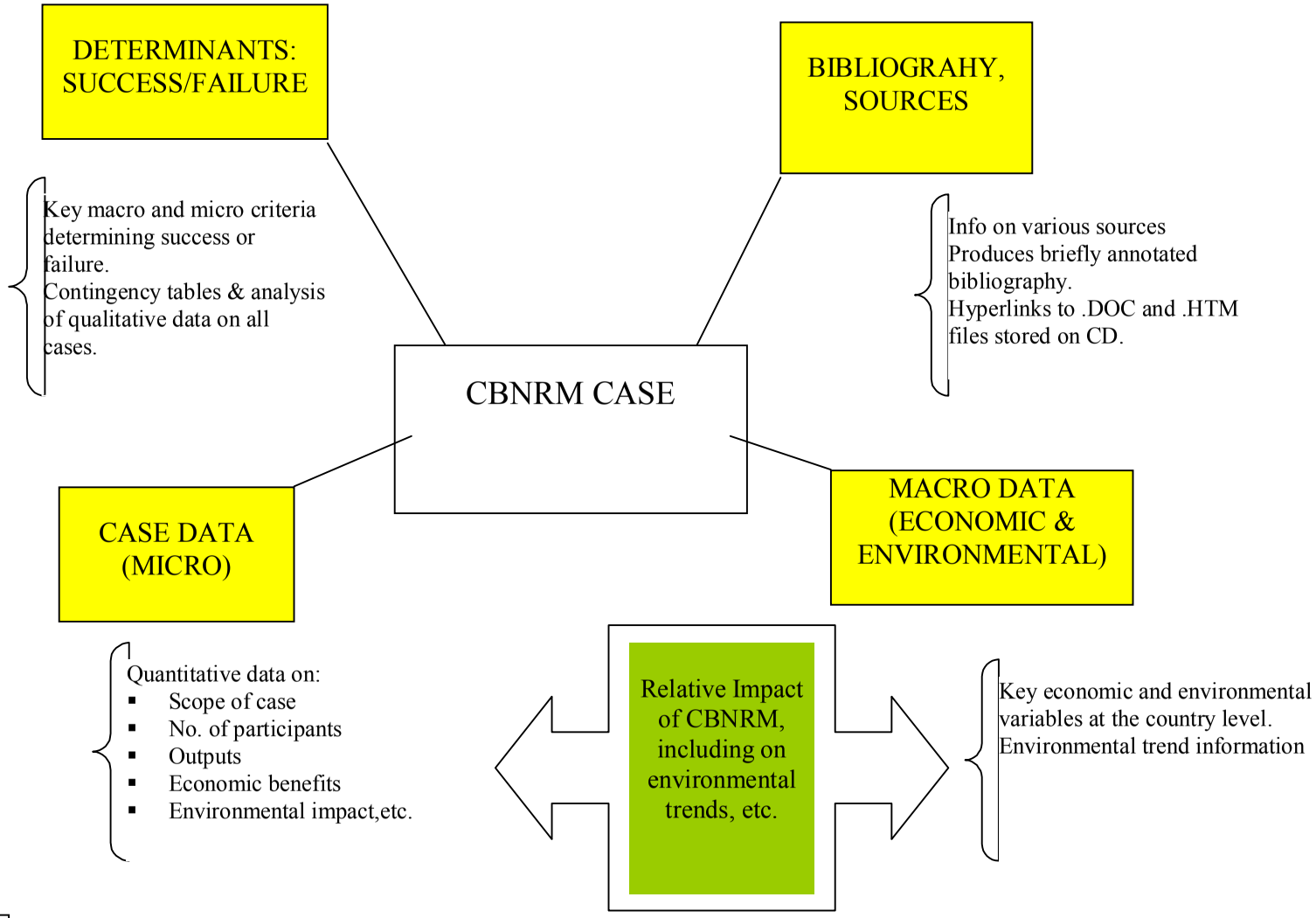
As usual, all questions, comments and suggestions are most welcome.

Fig. 1. BASIC STRUCTURE OF THE RELATIONAL DATABASE - ASSESSMENT OF THE CBNRM EXPERIENCE IN AFRICA




Version 12/17a

Fig. 2 BASIC COMPONENTS OF RELATED DATABASES, INPUTS AND PRODUCTS

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