Methodological Appendix 2
PISCES Field Manual

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PISCES: Participatory Institutional Survey and Conflict Evaluation Exercise.

WORKSHOP MANUAL AND TOOLKIT

INTRODUCTION

Conflict is a growing characteristic of tropical fisheries, yet relatively little is understood about the process that leads to conflict in this sector. For the purposes of this research, conflict is being defined as a situation of non-cooperation between parties with conflicting objectives. Its main focus is non-violent conflict. There is growing recognition that fisheries are experiencing rapid change that is putting increased pressure on management systems and resources. Conflicts may emerge as the ability to solve problems through the expansion of exploitation becomes more difficult and the allocation of diminishing resources becomes increasingly inequitable. By understanding how change in a number of factors causes conflict, it is hoped that more appropriate management systems able to cope with change and conflict might be identified or developed.

THE ORIGINS OF PISCES

PISCES was development by Bennett and Jolley in April 2000 as part of a DfID funded project looking at the Management of Conflict in Tropical Fisheries[1]. The objective of PISCES was to devise a simple, rapid and comprehensive tool that would enable the collection of information on conflict in artisanal fisheries in Ghana. PISCES evolved out of a series of meetings with Ghanaian collaborators and was shaped by the constraints facing the project: time and money being the foremost of these. We needed a tool that would enable some quite specific information to be collected through a process of semi-structured interviews with key stakeholders in artisanal fishing villages. Recognising the nature of the working day in Africa, it was also felt that each interview should be no more than an hour long – most of the interviews were conducted on the spot and it was felt important that the respondents' attention and willingness to participate be maintained throughout. The shorter the intrusion into their working day, the better.

PISCES worked well in the Ghanaian context, but has, as yet, not been tested elsewhere. It is has been devised in such a form that it should be readily adaptable to a number of cultural contexts with minimum changes.

The inspiration behind **PISCES** was the extensive work already done on participatory appraisal techniques. However, PRA techniques do not readily lend themselves to collecting information on a specific topic, so a variety of the more pertinent tools were chosen and added to the collection.

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[1] This project started in January 1999 and will run until January 2002. The project is funded under the Fisheries Management Science Programme of the Department for International Development. The project is conducting research into the fisheries of 3 countries: Bangladesh, Ghana and the Turks and Caicos Islands in the Caribbean.

PISCES consists of a number of different elements.

Participatory Geographic Information Exercise

Spot mapping or *sketch mapping* is a simple procedure of laying down on paper the important features of an area, which can be related in spatial terms or referenced geographically (Pido *et al.* 1996). Spot map*s* are usually applied to relatively small areas such as villages and portray an aerial view showing important features such as household clusters, fishing areas, farming areas etc.

The Participatory Geographic Information Exercise (PGIE) is similar to spot mapping but covers a larger geographic area, and includes interactions and characteristics of neighbouring communities (such as access to fishing grounds). PGIE maps can generate large amounts of information very quickly, and may be conducted on a one-to-one basis with a key informant (i.e. the Chief Fisherman), or within a group environment (i.e. group of fishermen). Figure 1. Gives an example a PGIE map showing information relevant to conflict study.
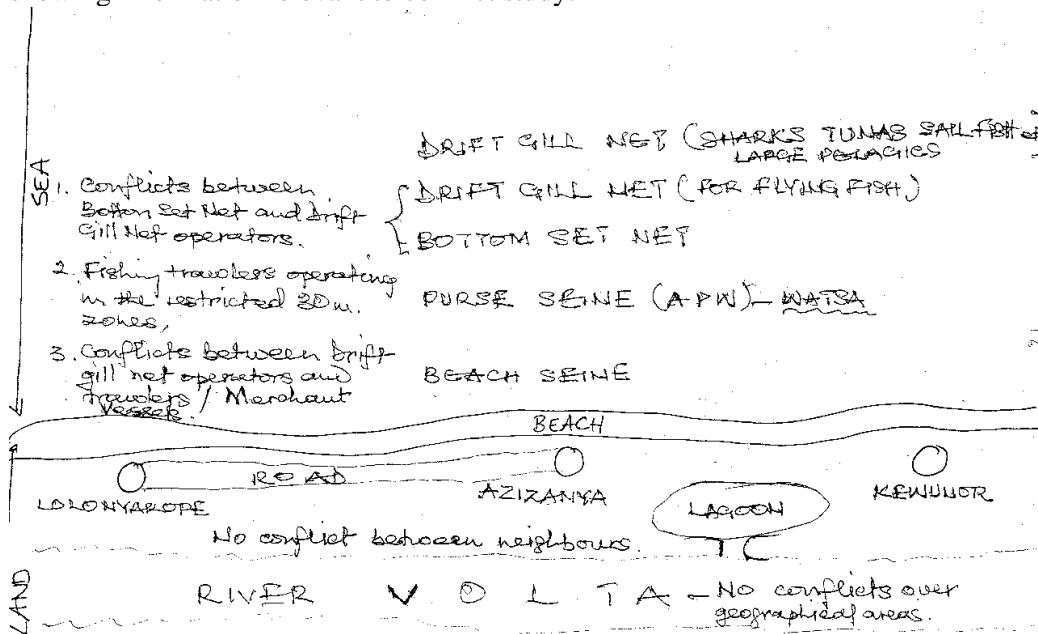

Figure 1: PGIE

Time-lines

Timelines give a clear idea of what events in the past are considered important and how they occur in sequence. They can be used to represent information provided by informants about the past (Townsley 1993). In the Ghanaian case, the time-lines were done at the end of the interview and proved to be a popular and entertaining way of rounding off the meeting.

Timelines could be used for example, to record the following:

-        The history of the community

-        Changes in fishing practices and new technologies
-        Introduction of regulations
-        Conflict
-   Other issues considered important by the village

Figure 2 gives an example of a timeline in relation to conflict.

In this case it will be noted that no conflict is mentioned, although the impact of sea-erosion which has put additional environmental stress on the community is logged.
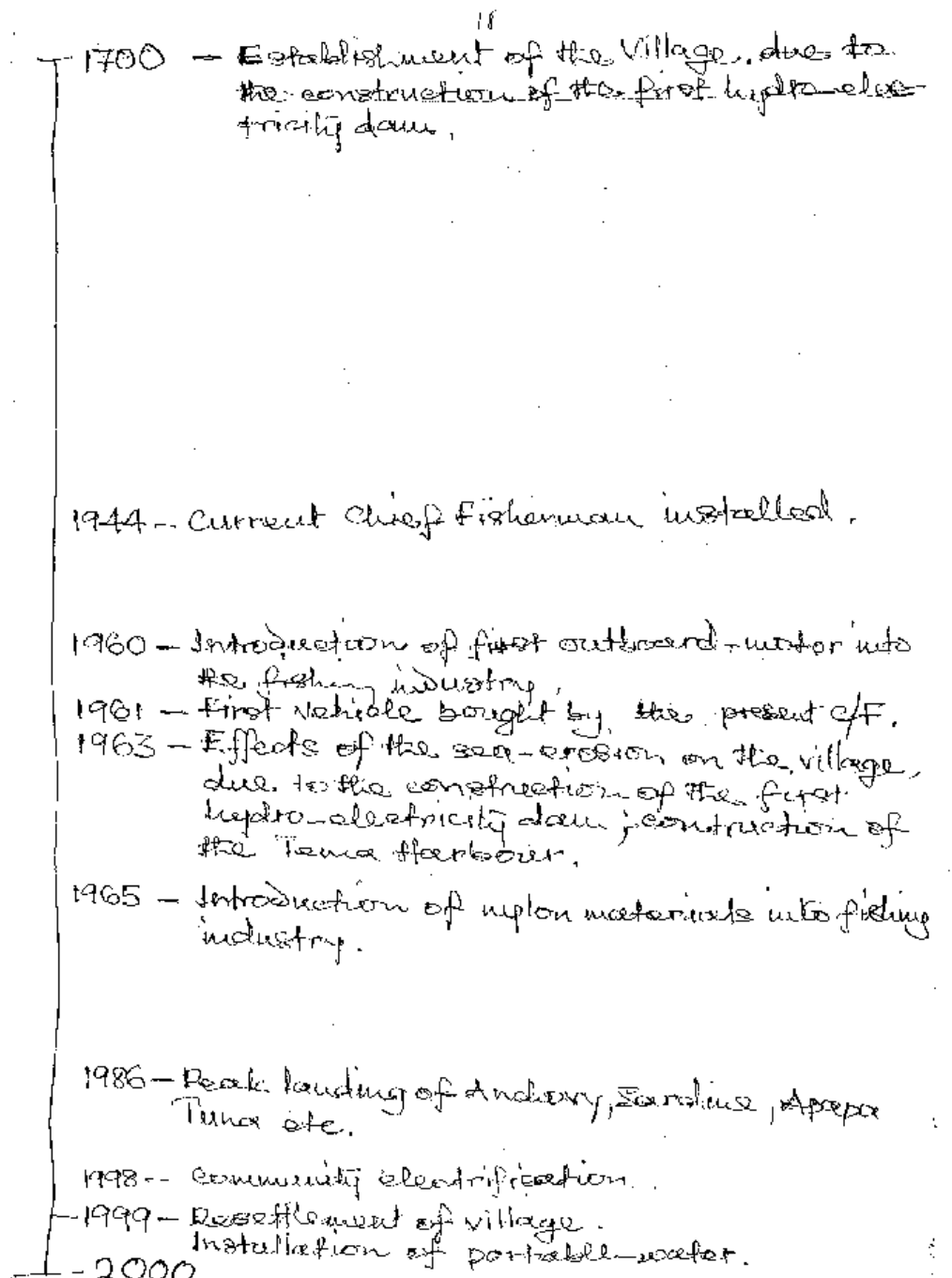
Institutional Wheels

Institutional Wheels can be used to show the relationships between different persons, groups and organisations within the community. Particularly useful in identifying potent conflicts between different interest groups, Institutional Wheels also clarify roles of individuals and organisations. They are prepared based on data provided by informants about groups and organisations. Figure 3 gives an example Institutional Wheel in relation to conflict issues. The inspiration behind the institutional wheel was the Venn Diagram tool common to PRA. Although Venn Diagrams have a useful function, in this context they were felt to be too long-winded and complicated.   Here,
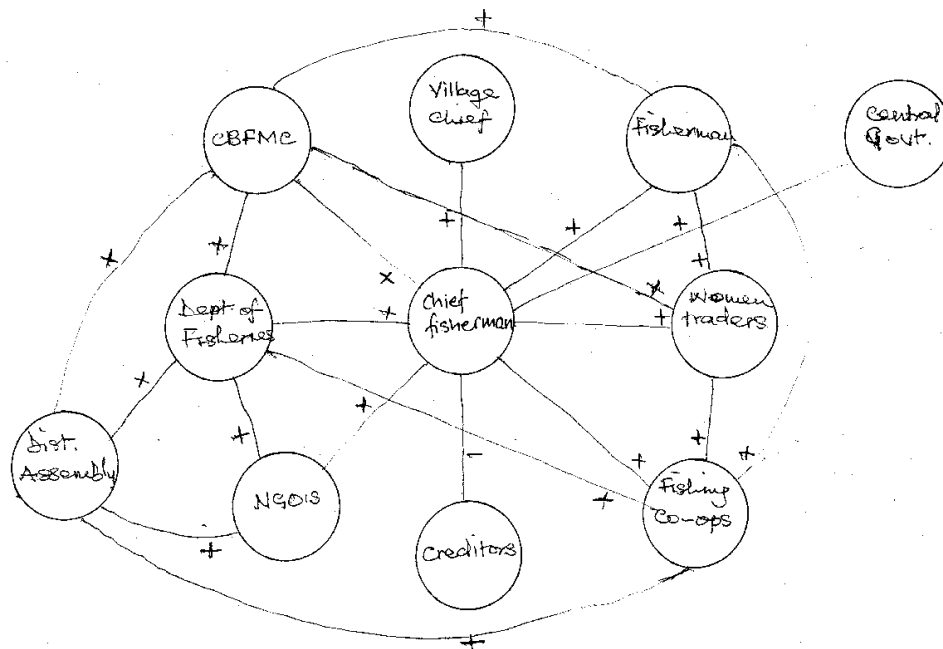
the Institutional Wheel is used to map the positive, negative or perhaps neutral relationships between various stakeholders in the community. An interesting result of using Institutional Wheels in Ghana was that the same patterns of relationships emerged in the villages interviewed.

Semi-structured interview (SSI)

The semistructured interview (SSI) is a field technique where the informant is guided by the researcher in session interview by means of a key, predetermined set of questions (Pido *et al.* 1996). Through a series of trial and error, the questions were whittled down to the essential number to elicit the information required without a) extracting information on the non-problem problem and b) creating repetition and thus confusing the respondent. The questions were divided into a number of sections. The first set out to establish if there was any conflict (and if yes, what sorts of

conflict), how that conflict was solved, if the method could be improved, what were the most frequent conflicts and the hardest to solve. In order to put the conflicts into some sort of context, the next section asked about the legal status of the community, the political and economic influences on their life, and the worst and the best change that had happened to the community during the life time of the respondents and the degree of control they felt they had over their fishing practices.

In the ethos of PRA, the questions were structured in such a way as to allow the community to come up with the answers, rather than the questions prompting them in a particular direction.