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GCP/RER/010/ITA

AdriaMed Social Survey of Albanian Marine Fisheries
Some Notes and Preliminary Information

Paper presented at the GFCM-SAC Sub-Committee on Economic and Social Sciences
(Malaga, 6th-7th May 2004)
1. Introduction

For fisheries management to be sustainable, consideration should be given to the social dimension of fisheries communities. Management success also depends on efficient communication among the different stakeholders; a knowledge of the fishing community is now considered a key aspect of the fisheries management process. The relevance of social issues is indicated in all 12 articles of the Code of Conduct of Responsible Fisheries. In a Sustainable Development Reference System, the social component is indicated as one of the main dimensions in the framework of the fishery system.

The knowledge of all the social aspects of fisheries is important as it provides a better understanding of the fishery system. In the past, the social aspects of the fishery sector have often been neglected; the complexity and interdependence of the social, economic and political profiles proved somewhat difficult to grasp. More recently an awareness of the importance of this aspect of the fishery sector has grown in national and international contexts, thus determining a need for deeper knowledge and for further investigation to promote the development of research in this field.

The success of fisheries policies at national and local level depends on the motivation and priorities of the resources users, a better understanding of which could help in the fisheries management process. Sociological analysis in fisheries represents a valid tool in order to understand the context of the fishing communities; in particular the factors that could influence the management of fishing activities and also to understand some of the circumstances in which the fishery system is established, from the working conditions to the fishing strategies.

*The preparation of this work has been promoted by the FAO-AdriaMed Project. The opinions, interpretations, conclusions or recommendations expressed in this document do not necessarily reflect the view or position of FAO or of the Countries and Institutions participating in the AdriaMed Project.

1This paper was prepared by M. Forleo. It is based on the AdriaMed Technical Document Social Survey of Albanian Marine Fisheries by Forleo M., Flloko A., Kristo R., Mannini P., Massa F. GCP/RER/010/ITA/TD (in preparation).


In the mandate of the SAC (Scientific Advisory Committee of the General Fisheries Commission for the Mediterranean) it is highlighted that the Committee must provide scientific, social and economic information, or advice relating to the work of the GFCM. The recommendation of the SAC to increase studies on the social component of fisheries, as well as the identification of some indicators for the studies on Operational Unit, has been adopted by the GFCM.

To obtain a detailed insight into the social context of the Albanian fisheries, the FAO Regional Project AdriaMed “Scientific Cooperation to Support Responsible Fisheries in the Adriatic Sea” implemented the research programme “AdriaMed Social Survey of Albanian Marine Fisheries”. This initiative was introduced during the second GFCM – SAC Sub Committee on Economic and Social Science (SESS) Working Group on Indicators as well as during the 6th SESS Sub-Committee meeting. This initiative was considered a positive contribution in the context of sociological indicators of Mediterranean fisheries.

During the third AdriaMed meeting on socio-economic aspects of the Adriatic Sea Fishery Sector, it was agreed to define content and methodological aspects of the socio-economic data collection for the study to be implemented in Albania. The social survey is being executed in cooperation with the Albanian Fisheries Directorate and AdriaMed.

This paper introduces the preliminary considerations resulting from the AdriaMed social survey of Albanian marine fisheries that was carried out in 2003. The objectives, the methodological approach and the structure of the survey are presented. Some considerations on the methodologies applied and results are also given.

2. Objectives

The aim of the study is to gain a detailed insight into the social context of the national fisheries. This is particularly relevant because Albanian fisheries have changed remarkably since the 1990s, making it necessary to know the current characteristics of the social component of the fishery sector. This will allow the identification of some of the crucial aspects, the knowledge of which will contribute to the amelioration and proper development of the national fishery sector.

Furthermore, the social survey is intended to provide the fisheries managers and administrations with an analytical tool to facilitate the identification of the target groups and to better know the livelihood of the fishers; the identification of the motivation of the resource users; the evaluation of the working conditions and fishing strategy; the understanding of the characteristics and the relations within and between the maritime districts; the business practices and strategy.

The results of the survey could also help in identifying and selecting a set of indicators useful not only for the Albanian fisheries but also for other fishing areas present in the Mediterranean area.

3. Activities and methodology

The main activities implemented for the social survey are summarised as follows:

a) the design of the work plan (objectives, actions, time);
b) the preparation of the questionnaire structure;
c) the survey sampling design and implementation;
d) the organization of the field recorder team;
e) the creation and perfection of an *ad hoc* Data Base;
f) the plan of data processing 1) for data base users, 2) for analytical purposes;
g) data processing;
h) interpretation of basic results;
i) further analysis (advanced processing, indicators, …);
j) objectives, methodology, result validation for further implementation.

At the present stage, points a) to e) have been completed, points g) to h) are in progress and the last two points are the object of preliminary considerations. There follow some details concerning the relevant activities under points a) to h) and a few insights on point i).

a) The work plan (objectives, actions, time)

The objectives and research actions were the result of formal\(^7\) and informal meetings between AdriaMed and the country experts. The width of research objectives and related activities indicated the need for a work plan of actions that laid down activities to be put in force, work stages and teams. Regarding the time scheduled, there were some delays between the collection of data, as is usual with direct surveys and the stage of actual data processing and interpretation. This is because of the amount of information collected, the qualitative nature of most of it (requiring preliminary standardisation before processing), the complex design of processing, even at the basic stage of descriptive statistics, further processing activities feeding back from interpretation needs. The next few months will be entirely devoted to the completion of the interpretative analysis.

b) The questionnaire structure

In the preparation of the questionnaire to be utilised in the social survey, the relevant socio-economic aspects were identified on three levels. The *individual*, which represents the basic

unit of the investigation. The social aggregation level is the *crew*, and the third level is the *maritime district*.

At each level, the questionnaire was designed to detect the characteristics of the single unit and the interaction of the single unit in the framework of the sector. The intention was to understand the socio-economic characteristics of each individual fish worker as well as the way in which this worker interacts with the other local fish workers. In the same way, the analysis proceeded to the levels of *crew* and *maritime district*.

Once the areas of study had been defined, the successive phase concerned the specific socio-economic data to be collected. The identification of these data was made possible by the initial compilation of all the possible socio-economic aspects that concern the various objects of this analysis. Following this, the information considered relevant was selected, thus eliminating the less significant data for the aims of the study, or alternatively the data already available from other sources were used when appropriate.

This selection process was also determined by the need to make the activity efficient, given that the interviews would be deliberately complex in order to reduce the error margin. Boxes 1, 2 and 3 show the main information requested at all three levels.

<table>
<thead>
<tr>
<th>1. Crew: working conditions and fishing strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 Working condition</td>
</tr>
<tr>
<td>• N° of relatives in the crew</td>
</tr>
<tr>
<td>• Kind of payment (salary, % of sales, …)</td>
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<tr>
<td>• Time of payment (week/month; beginning/end of period)</td>
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<tr>
<td>• Shared cost</td>
</tr>
<tr>
<td>• Risks at sea</td>
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<tr>
<td>• Occupational diseases, insurance and pension</td>
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<tr>
<td>• Employment contract</td>
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<tr>
<td>• Foreign people on board</td>
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<tr>
<td>2.2 Fishing strategy</td>
</tr>
<tr>
<td>• Decision level (community, vessel owner, crew members, …)</td>
</tr>
<tr>
<td>• Objectives (profit, household condition, cost efficiency, …)</td>
</tr>
<tr>
<td>• Household situation</td>
</tr>
</tbody>
</table>
To fulfill all the objectives of the research and because of the lack of existing data, it was decided to carry out direct surveys on these different aspects:

- a survey on **Personal data** (called Task 3.1)
- a survey on **Crew working conditions and fishing strategy** (called Task 3.2)
- a survey on **Maritime district characteristic and relationship** (called Task 3.3).

For the questionnaire to be well constructed and to allow a high level of answers, it was tested with local fishing operators and experts, modifying the questionnaire structure as necessary. It is important to stress that the people interviewed are fishing operators, especially ship owners and crew members, not others, such as consultants or accountants.

c) The survey sampling design

The field implementation of the survey is being carried out in commercial fishing ports of Lezhë; Durres; Saranda and Vlore, according to a random fleet segment stratified sampling design.
The selection of people interviewed (both ship owners and crew members) for each Albanian fishing port was intended to guarantee that all the strata from small (less than 12 m LOA) to larger scale fisheries are covered. This is because socio-economic analyses require the differentiation of strata and the separate study of at least small to medium-large fisheries.

All the interviews observed two fixed conditions: the numbers of fishers to interview and a minimum number of fishing vessels representing the fishers interviewed. Furthermore, for each fishing port a number of interviews were also made on the basis of the different fishing gear (surrounding nets, seine nets, trawls, gillnets, hook and lines) of each fleet segment present in the strata (i.e. less and above 12 m LOA). The total sample size was 183 fishers, interviewed (561 questionnaires), from 67 fishing vessels\(^8\) (30% coverage).

**d) The field recorder team and the field interview**

Following brief training, the field recorder team was properly acquainted with the data collection and compilation scheme adopted and with the different questionnaires: the questionnaire on personal data; the questionnaire on crew working conditions and fishing strategy; the questionnaire on maritime district characteristics and relations.

For the success of the survey (in terms of a high rate of answers and good quality of information), experience suggests that particular care be given to the choice of interviewers and their familiarity with fisheries. Interviewers were chosen among people who belong to the local fishing sector or who are well known to the local community, so as to be both well informed on the questions asked and to be accepted/known by the interviewees. For the same reason, before starting the survey, the whole project was introduced to the fishery communities by a key local expert to clarify the aim of the research, (of exclusively scientific nature) and the commitments required by the interviewers. Furthermore, the questionnaires had been previously tested during a pilot exercise. The overall supervision of the survey execution was in full coordination with the Albania Fishery Directorate.

**e) Data Base**

Data collected were organised in a database\(^9\) structured to insert, modify and browse information as well as to extract some basic statistical analysis and advanced statistical management of the archive according to the questionnaire structures. The data collected are analysed for each phase on the basis of the more common descriptive statistics and on the correlation links among variables. At the end of the three-step data collection process, the results of each step are interrelated to produce a complex socio-economic profile of each maritime district and for the fishery sector in Albania.

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\(^8\) The fishing vessels were selected from the Albanian Fishing Fleet Registry established in the framework of the AdriaMed support to the Albanian Fishery Statistical System.

\(^9\) The software application “Albanian Fishery SocialBase”. (Software used: Microsoft Access©) is developed by AdriaMed. The realisation of this application was carried out by Vincenzo Zeuli (FAO AdriaMed) and Marco Spinelli (FAO FIRM).
f) Data processing and interpretation

Before the data could be processed, it was necessary to undertake some preliminary categorisation and standardisation of elementary variables, mostly because of the qualitative nature of much of the information collected.

Data processing was planned to fulfil a double use for:
1. data base users
2. analytical purposes

For the data base users it was thought useful to create some elementary statistics (e.g. frequency tables, graphs) to give a general insight into the socio-economic situation of the Albanian fishery sector. These results are available in the structure of the data base. Together with the pre-arranged tables and graphs, users can extract further results from each question of the questionnaire on the basis of frequency tables.

For analytical purposes, the data processing consists of two steps: firstly, the application of common descriptive statistics on the whole sample; secondly, data will be analysed with reference to each segment obtained, sharing the sample according to three variables: the vessel dimension (<12 m; >12 m); the four Albanian ports; the interviewee’s position (owner and crew). In the following paragraphs there are some examples of results from this step of the project.

4. Preliminary considerations

As this is a preliminary explorative study, the validity of the methodologies adopted before any results are available is of particular importance. The formulation of the survey and the methodology adopted proved effective in terms of the information obtained and efficient with respect to the costs of the data collection.

As well as obtaining demographic information that was not otherwise available, the study allowed, among other things, an analysis of the motivation of the fish workers and of the intergenerational dynamics, and the interrelation between the various roles within the crew structure, the perception of strengths and weaknesses in the sector, within each maritime district and between the districts.

In order to give examples, the following graphs summarise some of the results that emerged from the study of the three areas (individual, crew and maritime district).
Fishers profile

Crew variability

Working in the fishery sector: motivations, diversifications, and perspectives
Intergenerational linkage

Membership

Fishing strategy
Markets

Perceptions of economic perspectives of fishery

Economic situation of fisheries in the districts

Economic situation of fisheries in each district (%)
Problem areas of fishing ports

![Problem areas (%)](image1)

Problem areas by vessel length classes (%)

![Problem areas by vessel length classes (%)](image2)

Crew relationship

![Aspects to change concerning the economic relationship between owner and crew (%)](image3)

5. Future activities

Further development of this research will follow three lines:

- Advanced statistical processing of socio-economic data on the Albanian maritime fishery sector;
- The survey data and results will be used to identify suitable indicators;
- A critical review of the project activities to validate and improve the objectives and methodology, so as to define a general framework for further implementation.

As a consequence of this study, a further direct aim of the research will be an attempt to identify a set of indicators that would be useful for the description and interpretation of the socio-economic context and also as a tool to support fisheries management.

Indicators are an essential tool to help make clear assessments of and comparisons between fisheries, to evaluate the contribution of fisheries towards the general aim of sustainable development and to support the fisheries management process. In this general framework, social indicators have recently acquired a great interest because of the recognized importance of the social sphere as one of the cornerstones of sustainable development and related policies.
in addition because of the delay in developing social aspects of fisheries in theory and practice.

On the basis of the experience gained through the social survey of Albanian marine fisheries some relevant points can be stressed:

- **Concept and definition**: what is social and to define it?
- **Linkages** to other dimensions related to sustainable development: How is a social sphere linked to others, most of all to economic issues? Which are the most relevant linkages to an environmental sphere?
- **Data sources**: in what way can available official data contribute to alleviate the problem/cost of direct data collection?
- **Tools**: how should we measure relevant social aspects which are mainly of a qualitative nature? Are the social (or socio-economic) indicators currently proposed sufficient to give some insights into the social reality of fisheries?
- **Interpretation**: how should reference points be defined?
- **Management**: how and in what way have social indicators been influential in the process of fishery management, not from a theoretical point of view but from an operational perspective?
- **Scale**: port, region, nation. For social data three scales are relevant. For some purposes, it is useful to consider all the scales; for other purposes, only a few relevant scales may be needed.
- **Time**: social conditions are subject to constant changes but generally not so frequent as for the other dimensions of fisheries (e.g. economic dimension). For some purposes, it could be useful to have a frequency related to the fishing season (e.g. crew variability, part time); other data can be collected on a yearly base or more (e.g. demographic data).

Future activities will consider all these factors in trying to formulate a proposal on a general framework for social analysis and indicators together with the economic and environmental dimension of fisheries.