A survey on socio-economic profiles of Sea fishing area:  
The case study of Termoli

Maria Forleo∗

Abstract

The results of a study aiming to analyse the fishery sector in Molise (Italy) are reported. The study was conducted by the Department of Economic, Management and Social Studies of the University of Molise in 1996. Economic and social aspects have been analysed, in particular a survey on the professional figures (fishermen and ship owners) has been carried out, based on a direct interview survey. The need to improve the information on the socio-economic aspects of the fishery sector is underlined.

1. Introduction

The present paper originates from some studies on the fishing industry conducted in the maritime area of Termoli on the Adriatic Sea coast of Italy. These studies were started in 1996 by the Department of Economic, Management and Social Studies of the University of Molise, with the aim of analysing the local fishing situation from a social and economic point of view.

Since any other source of detailed and adequate information on the local fishing systems, relating both to the economic and the social aspects, was lacking, the researches have been carried out with the purpose of meeting first of all a fact-finding requirement and then interpreting the conditions and the economic and social trends of the maritime area under study.

A particular attention has been given to the social aspects. This attention is due to the fact that, among the main profiles of analysis of the fishing industry, the social profile is the one where awareness is understood to be more incomplete: the social aspect is scarcely studied at both the level of individual local realities of fishing and at the level of the aggregate industry; moreover, in many cases the researches are socio-economic analyses where single social phenomena are usually investigated in connection with their economic relevance.

Official statistical data on this industry and on the individual maritime areas, even if with several limits on their date and their completeness, are as generally available as for the economic sphere, while the social sphere is only marginally represented through aggregate information on the work-force. For this reason, when the connection between social and economic phenomena is investigated, official statistical data are not suitable even for a tentative research.

∗University of Molise, SEGES Department, Agricultural Economics Area - Via De Sanctis, 86100 Campobasso, Italy; e-mail: forleo@unimol.it
This paper presents how the socio-economic thematic has been approached during the first part, basically explorative, of the research and then briefly discusses the evidences that have arisen on the topic.

Based on the previous observations, the direct survey methodology used for the research has been considered essential for an effective knowledge of the phenomena to be investigated. Several initial contacts with local institutions, mainly the trade unions, were preliminary to the direct survey. These contacts were intended to explain the research objectives, to discuss the planned analysis project, to evaluate interest and possible terms of cooperation. These contacts proved extremely useful in obtaining a general understanding of the reality of Termoli, with reference to the main fishing systems which are used there, each of them having specific technical, economic, social and organizational features.

Talks with local operators gave the opportunity to identify the economic activities and the professional profiles in the fishing activity in this harbour. In this regard it ought to be underlined that catching is the unique fishing activity in Termoli, while processing is completely absent; commerce suffers because of the pulverization of the local system and by the strong competition from adjoining maritime areas. Therefore, the research focused only on the activity of catching at sea, according to the systems that are used at present by the fleet of the Termoli maritime area.

One of the specific objectives of the researches which have been done has been a study on the professional figures who operate in the sea fishing industry, with reference to the main typologies of fisherman and ship owner. To that end, the contacts established with the respective trade associations allowed identifying all the people belonging to the different typologies at the individual level, whether associated or not.

On the other hand, the association channel has proved useful in circulating a trusting and collaborative attitude in the relationship between researchers and industry operators.

The small size of the Termoli fleet in terms of quantity permitted proceeding to a survey on the universe of boats with reference to the ship owners group; while, as far as fishermen are concerned, logistical problems limited the research to a sample of people resident there. The fishing operators have each been approached by an interview supported by a questionnaire especially designed, divided on the basis of each professional category and according to the following structure:

- Respondent’s personal data: age, education, marital status
- Family data: components, age, education, work
- Boat characteristics
- Fishing methods
- Work and crew related data
- Economic and legal profile of the relationship between fishermen and ship owner
- Category, harbour and industry related issues.

As a preliminary the questionnaire has been tested on a few subjects and then distributed with the proper improvements to the business operators. The basic features of the fishing company have been defined according to the subject matters of the questionnaire, with reference to factors of business, work and capital, and the environment where the company operates.

1 The following considerations offer a summary of the survey findings, detailed discussions can be found on the survey reports available at the SEGES Dept. of the University of Molise.
Harbour, commercial and processing facilities, and the trade associations are indirectly dealt with on the basis of the assessments the respondents have offered.

2. The structure of sea fishing in Termoli maritime area

To give a picture of the Termoli maritime area aggregate reality, a short discussion of the local sea fishing features precedes the analysis of the direct survey findings. These features have been gathered from data available through official sources, mainly the Harbour Master’s Office.

Companies and people employed in the fishing sector

Fifty six companies operating within the limits of the Termoli harbour are exclusively dedicated to the fishing activity in sea and lagoon waters; 51 of the 56 companies have a total of 191 people, while the remaining 5 companies did not give information about their work force; 35 out of 51 companies employ from 2 to 4 people. The relevance of these figures is better understood if they are compared with the corresponding figures concerning companies and people working in the Termoli harbour area. A total of 490 people are working not only in the fishing industry, but also in retail and wholesale commerce, in harbour services and in shipyards. Thirty nine percent of these 490 people are working in fish catching at sea. Even more noteworthy is the fishing companies' weight: they constitute 56% of the companies operating in the Termoli harbour. These figures are not very substantial when compared to other regional industries; however, they point out the relevance of marine capture fishery with respect to other fishing related activities in Termoli. The limited numbers of wholesale companies (about 20 companies with 40 people), the lack of processing companies (with a loss of added value to companies operating outside the region), and the relative weight of connected activities (2 shipyards are operating in Termoli, with 75 people) make the fishing system in Termoli and in the whole region substantially dependent on fish catching at sea.

A small size company profiles the average fishing company in Termoli. The fishing fleet comprises a great number of boats representing individual companies; therefore, in many cases the ship owner is also a crew member. There are no shipping activities of capitalistic or co-operative type.

The fishing fleet

According to the data of the local Harbour Master’s Office\(^2\), the motor ships of Termoli fishing fleet is not of big tonnage. This aspect is pointed out by the percentage distribution of units in different classes of gross tonnage: the cumulative percentage of units with a gross tonnage up to 10 tons is something more than 40% boats; the percentage is 63% for units with less than 50 tons, while the remaining 37% refers to units with less than 200 tons; no boats registered over 200 tons.

The fishing techniques utilized by Termoli boats are bottom trawling, pelagic trawl, long lining, and hydraulic dredge. Bottom trawling is the most utilized system; it is carried out by

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\(^2\) Data supplied by the Harbour Master’s Office and by the ship owners co-operative ‘La Motopesca’.
60% of the fleet. The second most important system is the flying net pelagic trawl. Boats utilizing only the dredge, a device for catching clams, are 22% of the Termoli fishing fleet. Vessels distribution, according to the fishing technique\(^3\), underlines the most important characteristic of Termoli fleet structure: it comprises boats authorized to operate exclusively within the limits of 20 miles off shore. Boats using multiple techniques for fishing along the coast, or dredges for clam catching, represent 47% of the fleet, while trawling boats are 35%. No boat in the maritime area carries out deep-sea or ocean fishing; besides the long distance between Termoli and the catching areas, huge financial investments would be required for equipping the boats for this kind of fishing.

During the first half of the ‘90s, the building of new boats positively affected the power of the fleet, both at the unit and at the total level. Thanks to the increased power of the engine, in many cases more than proportionate to the tonnage increase, increased power of the fleet has allowed for a longer stay at sea, for longer travels and for research of more productive areas. The rejuvenation of Termoli fleet favoured also a better contribution of innovative techniques and materials for boat building, and a wider diffusion of ancillary services for sailing, catching, and processing fish.

**Fish catching**

According to the data of Termoli Harbour Master’s Office, concerning the species that are sold on Termoli wholesale fish market, 83 species are caught in the sea of Termoli: 60 of them are fish, 10 are shellfish and 13 are clams. The Harbour Master’s Office estimates that a relevant quantity of fish is sold outside the official market, by means of private agreement between the ship-owner and the individual customers; however, the exact amount of this trade cannot be registered.

Codfish has registered a positive trend since 1990 (Figure 1). It represents 35% of the fish production and 20% of total catch, resulting the species more caught by Termoli boats and in great demand from the market; the red mullet is another important species among other fish landed in Termoli. Anchovies, pilchards and mackerels that are usually caught by Termoli fleet, reach a lower level of yield than in the past.

Among shellfish, the catch of which has a very low level (15% of the total catch), Norway lobster reach a certain importance probably for its commercial value. Squid, cuttlefish and mainly octopus represent 16% of total Termoli production. Among molluscs, clam fishery is quite important, since many Termoli boats (24% of them) are geared for this specific fishery.

\(^3\) The fishing technique has been classified according to fishing permit.
Figure 1. Fish catches in Molise: main species (quantities in quintals).

3. A socio-economic profile of fishing people: the results of a direct survey

The direct survey in Termoli maritime area has mainly interested the two major professional profiles in sea fishing: the ship-owner and the fisherman. The results are presented according to the outline of the interview plan. They are arranged in the following topics:

- The individual and his family
- The boat and its crew
- Institutions and connected problems

The summary presentation of the socio-economic outline of the two professional profiles is followed by some references to the main marketing problems that surfaced during the direct survey. These problems prove relevant for the entire maritime area both from the economic and the social point of view.

3.1 The fisherman in the Termoli maritime area

According to the estimate of Termoli maritime area trade organizations, about half of the fishermen come from outside the region, mainly from Puglia (Manfredonia, Molfetta). It has proved impossible to trace back people living outside the region; for this reason the survey reports only on Termoli fishermen; 32 of them have been traced back, and that figure is believed to represent a significant sample of the local reality.\(^4\)

\(^4\) This has not meant in a statistical sense, firstly because the number of fishermen in Termoli was known only some uncertain estimates, according to which our sample represents nearly 50% of fishermen living in Termoli. The significance of the results was discussed with local experts.
The family

Analysing the fisherman segment, the aspects concerning the individual and the family have been approached with particular care, since interesting findings were expected on the sociological profile.

First of all, data have been recorded about marital status, age and education level of the fishermen. It is worth noting that the survey was always dealing with local manpower; for this reason, in Termoli, unlike other maritime areas, the presence of workers from outside the EU is completely irrelevant.

A preliminary consideration has to be made on the personal data of the individuals who have been investigated. In particular, about 90% of them are quite young, between 25 and 45 years. Together with the young age, a great number of married people is found. Moreover, the age when the first son was born is very young; 66% of the investigated fishermen are less than 25 years old. Considering the high number of children, 2 or 3 per family in more than 70% of the fishermen households, this figure underlines an additional peculiarity of the surveyed category.

According to the data that have been collected, the majority of children are of school age; otherwise, they are employed as workers, clerks, and shop assistants. Only in few cases is the fisherman’s son himself a fisherman. Probably this fact is not only attributable to the son’s young age, it is also to be seen in connection with the query related to the working life the fisherman would like for his children. More than half of the interviewed people, which means about the totality of people who have given an exact answer, positively say they would not like their children to be fishermen; more than 20% would like their children to continue their studies.

In the end, it is interesting to evaluate the education level of the respondents. The highest educational qualification the fishermen possess is the vocational certificate. There are not any other secondary school certificates. The possession of a vocational certificate is not a recurrent circumstance, if we consider that 90% of the respondents conclude their scholastic experience at the level of compulsory school and 40% only reach the primary school certificate. The modest education level which the fishermen achieve should be interpreted together with the young age they normally enter their working life, 30% of them under 18 years and 80% under 20.

A great part of the respondents has never been employed in apart from fishing. Some of them, before entering the fishing industry, have been employed in the building industry, mainly as bricklayers. It is not easy to establish a connection between these two kinds of work, since in a sense they are totally different. However, the change should have evidently implied an improvement in the economic, if not social condition of the respondents. We should, however, bear in mind that the productive environment in Termoli was not offering many alternatives when the fishermen we are talking about were looking for their first job; that is the ‘70s for some of them and the last ten years for the others. The ‘70s represent the period of industrialization for Termoli in which urban concentrations were developed and lines of communication were increased.

This fact may have promoted a consistent demand of housing and industrial buildings. On the other hand the effect produced by the recent development of the hotel and tourist facilities, of

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5 It would be interesting to study the industry and also local peculiarity of these results.
the country housing and in general by an improvement in the socio-economic conditions of the local populations cannot be ignored.\textsuperscript{6}

Another aspect that has been examined is how the leisure time is spent. This is a well known indicator of the socio-economic development. First of all, the activity at sea comprises 4 working days of fishing (unless extra shifts are required due to bad weather conditions) and a fifth day of land activity for cleaning and maintaining the boat and preparing it for the next fishing week. Therefore the leisure time is basically confined to Saturdays and Sundays, and all the fishermen dedicate it to their families and their houses. No other leisure or social activities were apparent.

\textit{The boat and the crew}

The second part of the questionnaire on the fishermen comprises some aspects concerning boat characteristics, fishing kinds and techniques, and composition of the crew. According to all the surveys that have been performed, fishing takes place within 20 miles offshore. The technique generally used, except the case of entrapment, is trawling. The crews are composed of 3 to 5 sailors. The main professional figures in a crew are the captain, the motor mechanic (they frequently overlap), and one or more junior sailors.

The contractual relationship among crew members is regulated according to the local contract called ‘alla parte’, which establishes the share (parte) of the revenue originated by fish selling that each fisherman is entitled to, proportionate to his professional qualification. The contract also regulates the type and share of costs that are charged to the crew, the so called ‘monte’ (mount); it also regulates rights and obligations for both the fishermen and the ship owner. It seems that the implementation of this contract does not create difficulty for about one half of the respondents. The remaining 50\% say that the contract is not enforced, or rather that its correct enforcement depends on the fairness of the ship owner statements about the exact proceed of fish sales. The elements of dissatisfaction with the contract, when they are perceived, mainly consist in the regulation and remuneration of paid leave and recovered working days. Moreover respondents believe that charging the cost for net repair also to the crew is unwarranted, because nets should be part of the boat gear and therefore under the complete responsibility of the ship owner. They also believe that fishermen catching clams are more advantaged. As for the remuneration aspects, the salary is paid monthly; however, in some instances its exact amount can depend on the proceed from sales.

The paid biological fishing idle is evaluated favourably by almost all the fishermen for reasons of convenience: restocking the sea with fish, an opportunity for rest, a paid leave. The preservation of marine environment is not frequently addressed as one of the main motivations supporting the opportunity for an idle period. In two instances the idle period has been considered damaging as a cause for loss of potential revenues.

Boat maintenance both at sea and ashore, is an integral part of the fisherman job. It essentially consists of ordinary operations that, according to the specific skills, include net repair, bottom cleaning, painting, cleaning, and motor maintenance. Other ordinary operations are performed at the Termoli shipyard, extraordinary repairs of the electrical and

mechanical components are performed in San Benedetto del Tronto; and carpentry is done at Molfetta.

**The fisherman and his relationship with the institutions**

The subject of the last part of the questionnaire is the diffusion of an associational attitude among the fishermen and the identification of the problem that the fishermen perceive as related to their category, industry, harbour facilities and commerce.

As far as the association is concerned, the queries requested an evaluation about trade union activity and some specific initiatives they have been carrying out. On this subject, favourable and frankly negative judgements correspond, while 25% of the respondents are not willing to answer the query. A modest number of fishermen are aware of the union proposals on insurance on board the boat, paid leave, recovery, and biological idle. Another 25% of respondents believe that the union has never put forward any proposal, while half of them do not answer or are not aware of the problem. The category critical aspect is obviously the problem of safety at sea. Harbour facilities are given a negative evaluation for a number of inefficiencies that are partly due to its original construction; for instance the quite shallow water requires specific actions, partly due to intervened requirements. Among them, the most important problem is the limited mooring area, which is further worsened by the mooring of boats belonging to the adjoining maritime areas. For this reason long waits before mooring happen in some instances, with consequent slowing down of landing, thereby delaying or even jeopardizing fish sales.

As for a general assessment of the industry, no problems are underlined which have a particular importance; this finding, together with the high number of not answered queries, point to the fact that there is probably a gap in knowledge and relationships between the productive stage and the reality of the industry as a whole. Eventually the fishermen have been asked to give their assessment on the problems of the fish markets, which generally are enduring a rather critical situation because of the small number of dealings taking place. At the time of the survey there were a great number of problems concerning the markets. Respondents complain about the auction room opening hours, which are delayed with respect to the mooring of the boats; complaints are also made about the obsolete facilities, which extend the dealing time since they are lacking the basic services and are not automated. The bid down system gives the buyers the opportunity to lower the price to the point where the seller is compelled to exercise the right of withdrawing his product from the market. Moreover, the legal obligation to record each transaction does not enable the sellers to escape tax payment.

**3.2 The profile of the ship owner of Termoli maritime area**

Unlike the research on the fishermen, the survey on the ship owners encompasses a larger number of people, since it concerns 75% of Termoli operators.

**The ship owner and the family structure**

According to the survey the Termoli ship owner is between 30 and 60 years old, is married, and has two children (it is noteworthy that there are families with up to 5 children). The highest education certificate obtained by 80% of the ship owners before entering the work
force is the compulsory school. Half of them completed only primary school. As to the children, the elements that can present some interesting points for discussion are their education level and their working activity. For the first aspect, the importance given to education is apparent since a great number of the children pursue their studies even after completing compulsory school. This has a particular relevance because 30% of people, who have reached a secondary certificate, continue with university studies. This aspect is different from what has been observed for the fishermen children for reasons that might be of an economic rather than a cultural kind. It is necessary however to consider that the observations that have been expressed reflect the time of the survey. For a definitive assessment of the education level those individuals should be taken into consideration who have suspended or continued their course of study vs those who are already following a trade. A secondary certificate is possessed by people carrying on a clerical job, even if this is not the prevalent working activity among the children. As a matter of fact half of the people who are presently working are employed in the fishing activity. The sea, therefore, represents an element of continuity that generally goes back to the grandfathers, continues with the fathers, and is inherited by the sons. The education these people have received is seldom associated with a diploma, particularly vocational, while compulsory school also in this case is placed at the end of the scholastic career of the fishing people. Seamen vocational training is one of the most discussed issues, since it is considered essential for the involvement of young motivated people in this activity. Continuous formal training is also essential, mainly for motor mechanic chiefs and captains, due to technological innovations in boat equipment.

**The boat and the crew**

The characteristics of the boats observed were intended to define first of all a general framework of boat typology, navigation instruments, product preservation, and processing facilities. Successively, some aspects concern the state of technology, the innovations already introduced, and those in the future.

With reference to the fishing type and technique, as mentioned above, Termoli ship owners practice fishing within 20 mile from the coast of Molise, between the rivers Trigno and Saccione.

As for the gear installed on the fishing boats, three typologies are usually installed in Termoli boats, and they can be identified with reference to the scope they deal with: communications, depth of the sea monitoring, and navigation control. As for fish preservation facilities, a significant number of boats of the local harbour is equipped with refrigerators and ice-boxes; a few boats also have a freezer, but no boat is equipped with a deep freezer or fish processing facilities. Finally, with reference to the crew composition, normally it comprises the captain, the motor mechanic, and one or more sailors. In half of the instances observed, the ship owner is also part of the crew, often with the role of captain or motor mechanic: these three profiles generally overlap in the case of small boats. There are some instances, however, where the ship owner, if an aged man, carries out the role of a sailor, while another person, generally a young relative, is the captain. These situations are estimated to be determined by

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7 The first type of instruments comprises cellular phone, VHF and CB. Among the navigation instruments, there are radar, mainly used in bad weather conditions for obstacle detection and course identification, Loran, and the GPS plotter. While radar has an almost general diffusion, the Loran and especially the GPS plotter characterize basically medium-large boats. Among the under water control instruments, there are the ichthioscope (fish finder) and the sonar, which are installed only in a few boats of Termoli. The recording echo-sounder and the echo-sounder main are installed on almost all the surveyed boats.
a reason of succession rather than economic considerations; when the aged ship owner will leave his working life, the young captain will succeed the ship owner. Anyway, the family relationship has to be considered when it links together the members of the crew in small boats.

The ship owner and the institution related issues
A discussion of institutions and main industry related issues concludes the analysis performed on the fishing business and the professional profile of Termoli ship owner. The most important associations the ship owner maintains contact with are the Harbour Master’s Office, the Customs, and the local trade association. Moreover, in many occasions, opportunities of contact arise with other maritime areas, particularly those adjoining Termoli. The ship owners association provides some services to its members that include category protection, legal advice, management advice, and bookkeeping. Finally, with reference to the issues concerning the fish market, the harbour, the maritime area, and the industry, many problems are found which have already been underlined in the analysis concerning the fishermen, particularly those concerning Termoli harbour. As for the fish market, a further critical issue (estimated to be the most important), which increases the difficulties of fish markets performance, is the high quantity of fish imported from abroad that does not transit through the fish market. An equivalent disapproving judgement is expressed about the local commerce facilities, which will be discussed later. The most important issues concerning the industry are taxes, commerce and credit, and the lack of trained workers. A further aspect is that many ship owners require better information about the industry regulations. Actually, it is significant that more than 80% of respondents are not able to talk about the existence of regional laws concerning industry support.

Commercial activity
Termoli’s commercial structure has been in a state of obsolescence for many years\(^8\), but in our opinion this is not the only reason why the fish market does not function to the full, considering that, according to the operators, about 50% and maybe more of the effective caught is dealt with there. Two types of buyers take part in the commercial structure: wholesalers and retailers. Wholesalers buy most of the caught on sale (estimated over 80%) and then take care of selling the product to dealers or other wholesalers, and to only a low percentage of the fish processing companies\(^9\). Dealers who buy directly at the fish market are owners of fish shops, food shops, supermarkets, and restaurants. The fish sold in Termoli fish markets is mostly caught by small operators, that is, by those companies, lacking onboard equipment for fish preservation, who are compelled to sell their caught immediately. Conversely, the middle size fishing companies, besides having equipment for the preservation of the product, usually enter unofficial dealing with individual buyers. These dealings offer several advantages: first of all it is possible to achieve better sale prices than those which could be reached by means of a bid down system. As a consequence it is possible to sell in advance large quantities of caught, and, in that way, to plan catching activity better. On the other hand the buyer, usually a wholesaler, acquires a first choice product, avoiding the competition of other dealers, within and outside the fish market. In the commercial structure of Termoli the balance of bargaining strength is against the fishermen, both for the

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8 With reference to European Union Directive 493/91 and Italian Decree Law 531/92.
9 These companies are located outside the region, in Abruzzo, Marche and Sicily.
sale system (bid down) and the low number of buyers participating in the dealings. More often than not, the buyers enter an agreement and make fish prices drop to a very modest level.

3.3 Further developments of this research

The analysis of the professional profiles that constitute the fishing system is not exhausted by the ship owner and the fisherman, who are, however, the main players. There is a world of subjects and institutions that perform ancillary services to the fishing industry: they are related to boat equipment and fishing gear, to ship building, and to product processing, transport, and marketing. In the preliminary stage of the present research, the main objective has been the knowledge of the principal operators of the fishing system: ship owner and fisherman. This knowledge will be further improved in the next year when the survey on owners and fishermen will be updated. Therefore, the analysis of wider subjects and different professional figures will be approached later, with the aim of profiling the entire fishing process in Termoli. It is, however, interesting to underline some findings that the survey has pointed out from a social perspective. The first finding concerns the strong tradition and family values that are rooted in an activity which has been passed down from generation to generation. When the experience of the present day ship owners is looked at retrospectively, they entered their work life almost everywhere through the family company, not only because of the occupational crisis that sweeps around other economic sectors, but also for consolidating their fixed assets. This character of tradition that hands down the company from father to son is linked to a strong family organization of the crews of the fishing companies, where members of the same family are often employed in the most qualified positions (captain, motor mechanic). The family link constitutes a cohesive element between subjects that often keep within its limits their economic and social relationships. This link characterizes the industry with a strong closed attitude towards external members to the family and the company. Family, in a wider sense, often encompasses the company. On the other hand, the family bond could be estimated as the reason for the low rate of conflict within crews, for the poor interest and appreciation and also limited relationship that fishermen, but not ship owners, keep with the labour and trade organizations of the small fishing companies in Termoli10. As a consequence of the previous comments, labour mobility within and outside the industry is rather limited.

A further aspect is the educational level of people employed in fishing industry: they normally begin to work at sea as soon as they complete their compulsory study. When this is the case for younger people who have lately entered the fishing industry, some problems arise which this survey can only defer to a further elaboration. The first problem is the educational domain. In a world where the problems related to management, credit, technology, and law are becoming more and more complex, the fishing operators are probably wondering if the on job training is still adequate, or if professional training would be required with applicative contents and direct effects on the fishermen and ship owners activity.

10 Where, on the other hand, manpower is mainly local. On the other way, it is known that there are maritime areas, like for instance Mazara del Vallo, which are not characterized by a social climate, without conflicts between the ship owners and the sailors.
The comparative reading of local researches underlines both a need, sometimes latent, for professional training, and a lack of knowledge of basic technical and managerial aspects. In many cases this insufficient knowledge is not adequately satisfied even by external consultancy, since in many case they also lack a specific knowledge about the sector. When the decisions are examined about work and study taken within the family, it could be observed that some boys are pursuing their studies, while some other boys start their working life at sea as soon as they complete compulsory school\textsuperscript{11}. It should be presumed that the boys who enter working life have little vocation for study and are less interested in increasing their education. Furthermore, ship owners and fishermen show a prevailing attitude to favour a different industry than fishing for their sons, generally because of the hardship of work at sea and the low life quality. The considerations that have been presented could lead to underlining a tendency for the young people to abandon the fishing industry that they have traditionally and potentially fostered. This attitude introduces a breaking-off of continuity prospects in the industry. On the other hand, the fact that the human resources, which remain in the industry are those at the lower level of education, should encourage reflection about the economic and social effects on the industry itself. The situation anticipates the disappearing of Italian workers as far some fishing professional figures are concerned and the rising of extra-EU manpower for carrying out the less skilled jobs (the presence of extra-EU workers is already a reality; however, it is not quantifiable). These findings are estimated to have certain relevance, since the fishing industry in Termoli maritime area still represents an important industry in the local economy, not only from a historic-cultural perspective, but also from the point of view of business and occupation.

3.4 Information needs

One of the major results derived from the survey on the Termoli maritime area is the evidence on the lack of information on socio-economic aspect of fisheries sector at aggregate and local level. As claimed by the statistical and research institutions on fisheries, both international (from FAO to OCSE and UE, just to cite a few) and national, it is not possible to analyse the structure and the development of the fishery sector by considering only official data. Problems of reliability, completeness, and time reference require other methods to collect and analyse the economic and mostly the social performance on the sector. At this regard it could be necessary to consider and compare advantages and disadvantages of each method according to different criteria (reply, reliability, costs). Another problem concerns the collection data reference point. Obviously, there are different levels in collecting socio-economic data on fisheries (see for example the following picture) which are connected each other and goes from the smaller reference unit (the fishers) to the aggregate country and countries' network. As to the collection methods, and also for the reference point, it is necessary to exactly define objectives, time limits, costs, and reliability. Methods and reference points are strictly connected and before starting any research and statistical collection it is important to find for each objective, the more suitable reference point of collection data and the right method of analysis.

\textsuperscript{11} It would be interesting to verify, if and to what extent, entering working life during school age is determined by the economic reason of increasing family earnings, in as much as fishermen often have one-income families, or if it is the result of different kinds of reasons.
To create a homogeneous network of socio-economic data on fisheries is not a straightforward goal, nor it is a short time project. One of the first steps could be to detect the existing information on fisheries, both from official and unofficial statistical body, at aggregate and local level, from micro to macro perspective, just to appreciate the state of the art. This preliminary step requires strong attention and knowledge of the statistical system of each country. Attention has to be given to many aspects: which are the elementary data collected and his definition; the source institution, its nature (public or private), and the collection methods (census, sampling or something else); the level of desegregation at which data are collected; the period of time and the frequency of collection; the measurement unit and other relevant information. Once this preliminary step is performed, it allows a first common base of existing data to be defined. This common base is the starting point of the homogeneous network on which to evaluate further information needs.