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Report on a mission to Romania to investigate production, processing and marketing of fresh water fish.

16 November - 15 December 1992

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Glossary and abbreviations

EC	European Community
FCO	Foreign and Commonwealth Office
JAU	Joint assistance Unit of the Foreign and Commonwealth office
MAF	Ministry of Agriculture and Food Industries
MoE	Ministry of the Environment
MoI	Ministry of Industry
mt	Metric tonnes
NRI	Natural Resources Institute
ODA	Overseas Development Administration
SC	Commercial Society

£1 = 650 Lei (November 1992)

Summary and conclusions

Key findings

1. Existing regulations concerning the differences between production costs and retail price of fresh water fish products are preventing the development of the industry. Whilst the fisheries industry is not properly compensated for the high level of risk involved in production, the long-term nature of its investment and its high recurrent costs (feeds), there will be scant possibility of re-investment in more efficient and increased production. Progress towards a fully liberalised market in fisheries requires that these regulations be relaxed. Furthermore, although there is scope for further immediate support (recommendations 2, 8 & 10 below), the main recommendations made by the consultants will not be effective until such time as the constraints to innovation, enterprise and entrepreneurship are removed. We consider that the fisheries industries are a special case in this regard.

2. To date the focus of the freshwater fisheries industry has been on production. Understanding of marketing, retailing, cost management and business planning is limited.

3. Demand for freshwater fish of all species, but particularly endemic species, greatly exceeds supply. During the course of the visit fish producers stated, without exception, that they could sell all they could produce. Visits to retail markets and shops confirmed a high demand whenever fish was available for sale. No physical losses of fish were reported, or observed, during marketing.

4. The industry is constrained in its activities by a series of technical shortcomings in the methods used and the equipment available. Solution of the technical constraints should only be considered when the policy framework under which the industry will be operated and developed has been clarified and adopted.

Recommendations

A series of recommendations made in the main body of the report are listed below. Approval by the GoR of the first recommendation is crucial for the survival and future development of freshwater aquaculture in Romania, both during and after the transition of the economy. Many of the other recommendations made will only be effective if the first recommendation is acted upon.

1. The removal by GoR of all constraints to innovation, enterprise and entrepreneurship, including the removal of all price controls, is recommended. (see Para's 5, 30 & 110)

2. The creation and publication of a "Romanian Fish Marketing Bulletin" is recommended. The fishing industry has very little knowledge and virtually no experience of modern practices and standards for the distribution and marketing of fish and fish products in a market economy. It is intended that the bulletin should provide a forum for dissemination of domestic and international market information, and also provide a forum for discussion within the industry. The proposal provides for a two year supply of selected international journals and a desk top publishing package to aid preparation. It is further recommended that the bulletin should be published by the Fish Producers Association so that it is seen as an independent trade journal. The total cost of the package, which is presented for funding under the "Know how" scheme is estimated at £5,400. (see para 39 and Appendix 8)

3. It is recommended that the production and marketing functions of the existing fish producers should be separated with the creation of an independent, competitive retail sector. (see Para's 48, 74 & 110)

4. It is recommended that a dialogue be opened within the industry to discuss the issues involved in privatisation. (see Para 76)

5. It is recommended that market research should be initiated to provide basic information on consumer demand. A marketing brief for distribution to market research agencies and other possible suppliers is presented at Appendix 3. (see Para 102)

6. As consumer preference for fresh water fish is for them to be retailed in the live, or fresh iced form, it is recommended that the industry should concentrate its efforts in this area for the immediate future. In the present state of under supply the continuation of expensive secondary processing cannot be justified. (see Para 105)

7. The creation of a system of open, wholesale marketing is recommended to provide the link between the producers and retailers. (see Para 110)

8. To facilitate the introduction of a wholesale marketing system it is recommended that a "Technical Workshop" be held to enable the Fish Producers and MAF to discuss the many and varied issues and options in introducing a wholesale selling system and open access retailing. A proposal for the workshop is presented at Appendix 10. The proposal is presented for funding under the "Know how" scheme and is estimated to cost £10,120, for attendance by the UK consultants. (see Para 111)

9. If the technical workshop proposed above recommends the introduction of a wholesale system, with open access retailing, and this is accepted by GoR, it is recommended that a practical, pilot scale, wholesale marketing trial be conducted. Obor Market in Bucharest is suggested as a suitable location as the existing facilities can be adapted to meet the requirements of the trial. (see Para 112)

10. The training of GoR staff and officials in the industry is essential for the successful completion of the transition of the economy and its development in an open market. Several recommendations for UK training are made:-

i) MAF and MOE should nominate, as a matter of priority, candidates for the two study visits in inland water management and legislation agreed following the Blake and Domaniewski visit in July 1992. The two visits were costed at £10,240. (See Para 122)

ii) The three month course run by Humberside International Fisheries Institute in Fisheries Planning and Management is recommended for a candidate from MAF. This years course begins at the end of April 1993, attendance on this course, for which a place is available, will require immediate action. Costs are estimated at £11,482.
(See Para 125 and Appendix 9)

iii) A three month course in Fish Distribution and Marketing, with the emphasis on practical aspects facilitated by industrial attachments, is recommended. Consideration should be given to selecting a senior official from the Romanian Fish Producers Association for this placement, rather than a MAF officer. Humberside University in Grimsby can provide a tailor made course with suitable industrial attachments. NRI can arrange attachments at Billingsgate Market in London and with a retail fish trader in Kent. Costs are estimated at £12,654. (See Para 126 and Appendix 9)

iv) The trainees in planning and management, and distribution and marketing should be attached to NRI for one week at the end of their courses to prepare background review papers for the proposed workshop on wholesale marketing. Costs have been included in the estimates presented above. (see Para 127 and Appendix 9)

MAIN REPORT

A. Supply, Demand, Price, Marketing and Retailing

Introduction

1. During the last ten years of the previous regime, Government policies designed to repay national debt through exports resulted in very limited availability of meat. People were encouraged to eat fish for the good of the nation. Lack of adequate fish feed ingredients caused fish producers to concentrate on the culture of Chinese carps, to maximise production, but these are not a preferred species for consumers. The result is that fish in general are associated with the hardships of the previous regime, poor quality, long queues and high prices. A nationwide Government campaign of the time exhorted consumers with the slogan "not one dish without fish"!

2. Many consumers, particularly in Bucharest, gave up going to the fish shops to queue for fish many years ago. Romanian carp are so scarce at key times of the year that only the lucky few are able to be in the right place at the right time to buy. Demand for all freshwater fish, including the Chinese carps, exceeds supply. Price, under these circumstance, is of secondary importance to availability.

3. This raises a conceptual problem with addressing the terms of reference for this mission (see Appendix I). Is it possible to assess demand when consumers knowledge of the market is so imperfect? Who can tell how much demand is latent (ie, vested in those who are unaware of fish availability, have given up trying to buy fish, or are unable to reach the limited number of market outlets due to ill-health, work commitments or the cost of doing so)? Available information relates mainly to aspects of production and largely ignores consumption. This is the starting point of this study.

Supply and demand

4. Total yearly production of fish is believed to be in the region of 100,000mt[1/]. Confidence in this figure is high because the reasons for inflating production figures have been removed since the revolution. Of this 60,000mt are marine capture and 35,000mt inland fish (both capture and culture). There is some confusion about this last

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1/ The authors advise caution when dealing with Romanian statistics. Ben-Ner and Montias (1991, p163) assert that "statistical information about communist Romania is generally unreliable, more so than in other communist countries". As yet the statistics make no allowances for losses in quantity or quality and there is still a tendency for figures to reflect desired outcomes.

figure because it may not include up to 25,000 tonnes from those fisheries under the remit of the Ministry of the Environment (the Delta and mountain areas). There is no indication of the magnitude of fish produced by the informal market, either through illegal fishing or undeclared domestic production.

5. Roughly 15% of the inland fishery is capture (probably an under-estimate) and 70% of aquaculture production is introduced Chinese species of carp. These were introduced to meet production targets in the absence of sufficient supplementary feeds because they eat vegetation in the ponds and do not require such specialised feeding. An additional advantage of Chinese carp is that they do not compete for the same food as traditional carps and therefore can be produced in polyculture.

6. Excluding the river systems, there are 500,000 ha of water available to fisheries and it is felt that the total possible production from the inland fisheries could be as much as 200,000 mt per year.

7. Fresh water fish production from aquaculture is summarised in Table 1. Whilst there is some doubt about the overall accuracy of statistics on production (see Ben-Ner and Montias, 1991, p163), the general trend since the revolution has been for decline. This is accounted for by the removal from service of unproductive or uneconomic water bodies (the areas available for production fell by 8% between 1991 and 1992), and possibly by a trend toward increasing production of indigenous species. However, since the Chinese carp species grow in parallel, rather than competition, with indigenous species, a switch in production should not have affected overall output. Lack of feed inputs may have been a causative factor.

8. However, the authors consider that the main factor causing declining or static production has been a lack of incentive. Increased efficiency as represented by more output per hectare should be rewarded by higher returns to individual producers. This is not the case at present since prices are solely determined by costs and not by the consumers' willingness to pay.

Table 1: Fresh water fish production from aquaculture

	Year			
	1989	1990	1991	1992(1)
Production	47,122	36,433	28,539	33,422
Consumption	31,282	23,266	16,844	21,534
Stocks	15,840	13,167	11,695	11,888
Stocks as a % of consumption	34	36	41	36
Area available for production (ha)	-(2)	-	54,644	49,621
Productivity (mt per ha)	-	-	0.52	0.67

Source: adapted from figures provided by MAFI.

Notes:
(1) Production and consumption figures represent 11 months only.
(2) "-" denotes information unavailable.

9. Including capture and marine fisheries, it was estimated that about 90,600 tonnes were available for domestic consumption in 1991. With a population of about 25 million, per capita availability of fish is believed to be in the region of 3.6 kg per annum of which just over 1kg was from fresh water sources. Given that an average carp is at least 2kg market weight, and estimating family size to be 5 on average, this suggests that each family in Romania eats less than three fresh water fish a year.

10. It is estimated that food represents about 60% of average household expenditure. Consumers are highly sensitive to price change but are presented with very few consuming options (ie, there are not many substitutes). The consumer can choose to queue in state run shops for cheap fish or to buy meat from private shops at much higher prices.

Regional and sectoral differences in consumption

11. It is generally believed in Romania that the inhabitants of the Western parts of the country are less keen to eat fish. Producers in this area believe that to sell fish it must be live. Consumers in the Danube Delta region, on the other hand, are considered regular fish eaters who are less discriminating in their tastes or needs.

12. As a former Marxist state, product differentiation by class or income of consumer has not been high on the agenda. Since fish was not rationed in the market place by price, and production of the most desirable indigenous species was not enough to supply one fish to each family each year, distribution must have been either on a first come first serve or personal contact basis.

13. The present classifications used to define consumers are instructive. Urban consumers are divided into five classes, workers, intellectuals, clerks, retired people and women not working. In rural areas the all encompassing term "peasants" is added to this list. Whilst these groupings may have differing consumption patterns, little scope is left for differentiating between groups on the basis of age, sex, income, ethnicity or location of domicile.

14. There is a strong sense of social conscience among consumers. Even relatively well off consumers seem less concerned with the quality of the fish they are buying than the ability of poorer Romanians to eat fish when they want. Fish is considered an inferior commodity (ie, as incomes rise people wish to consume less of it): Romanians would prefer to eat pork or beef despite its much higher cost.

15. Nevertheless, even with meat now available in the market place fish producers sell all the fish they are able to produce.

B. Market preferences

16. A questionnaire survey of 3,350 consumers carried out by the Research and Production Centre for Fish Culture, Fishing and Fish (Processing) Industrialisation, Galati, in 1990 is revealing. Consumers were asked their preference for fish if fish were "freely" available. A total 92.5% said that they would like to eat fish between 4 and 6 times a month (ie, far more often than the average family can at present). Of those questioned, 86% claimed that they consumed around 8kg of fish per month. This figure may indicate the greater general availability of fish in the Galati area. The study revealed a great preference for fresh water fish (83.5%) and indigenous species (46.3% Caras and 47.8% Sheet fish/Zander).

17. Generalising from these figures, assuming 5 million households, of which 90% would like to eat 2kg of fish once a week, gives an annual upper level to demand of 468,000 mt of fish a year. This is around five times existing supply.

18. The importance of the Galati study lies mainly in the indication it gives of the lack of information available about consumer preferences. The need for qualitative market research is evident. This should be followed by limited quantitative market research concentrating on key market segments such as urban consumers in the higher income groups. A market research brief is attached at Appendix 3.

19. A Matrix summarising market preferences for fish and meat products in Romania is presented at Figure 1.

20. Pork and beef are much preferred to fish in all cases for a number of reasons including: ease of eating, convenience, tradition and versatility. These products are also benefiting from a post-revolutionary "honey-moon" period, as people get used to their increased availability. Furthermore, meat is not apparently subject to the marketing restriction that fish is: for example, many large cities have only one fish retailing outlet but now have numerous meat retailing outlets.

21. Large fish are preferred to small ones. This is associated with meat quality and social status. It is commonly believed that fish is not a "fulfilling" meal (or at least not as filling as pork). Thus larger quantities of fish have to be eaten to reach the required level of satisfaction. This confers a premium on larger specimens.

22. Live fish are preferred to fresh fish, but both are preferable to iced fish. There is a tradition of buying live fish in Romania, but in some areas this may have been due to the absence of alternatives (Arad and Timisiora sell nothing but live or recently dead fish). Like many countries with a less than perfect cold chain distribution system, the consumer is naturally wary of iced or frozen product since its history is unknown.

23. Indigenous species are preferred to imported ones (ie Romanian carp vs. Chinese carp). All consumers contacted agreed that indigenous species have better keeping and eating qualities.

Figure 1: Market preferences for fish products

Scale	Condition	Size	Species	Advantages for producer	Reasons given by consumers	Disadvantages for producer	In comparison with near substitutes
MOST PREFERED	Live	Large	Indigenous (eg, common European carp, pike and tench)	Survives well out of water	Tradition	Requires feeding	Pork
				Technology is known	Taste	Old species, therefore difficult to reproduce and select	
					Size		
	Fresh on ice						Beef
	Frozen						Fish
LEAST PREFERED	Processed	Small	Chinese carp	Needs no feeding	Boney	Not acclimatised	Sheep
				High rate of growth	Poor taste ("muddy")	Limited growth period	

24. An indication of the seasonality of supply and demand is shown in Figure 2. Supply depends largely upon the productiveness of the water bodies which peaks in the late summer (August and September). Other factors are the ice coverage of lakes, which makes exploitation difficult, and, in capture areas like the Danube Delta, official prohibitions on fishing.

25. Demand peaks during the major Orthodox and Catholic religious festivals, when consumption of meat is discouraged.

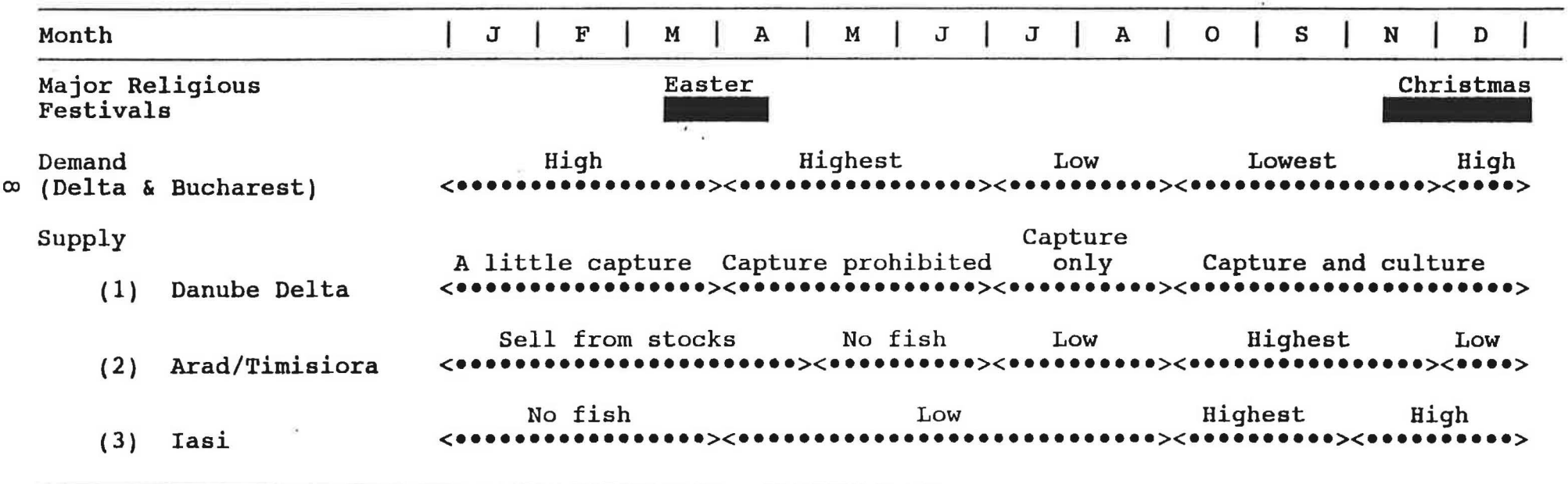
26. Fish are most abundant during the autumn when ponds are harvested and restocked with fingerlings. In the West of Romania, some fish are transferred into smaller ponds for winter to provide stock during the period January to April.

27. All areas experience periods of the year when fish are unavailable. In the Delta, fishing is prohibited from April to July to preserve stocks. In Arad, over-wintered stock generally run out in May and ponds are not fished until July. In Iasi, freezing of the ponds usually means that there is no supply between January and March. In several cases, lack of supply coincides with periods of peak consumer demand (ie, supply in Timisiora is low at Christmas and in Iasi they often have no fish for Easter). Fish available at these times would fetch premium prices.

28. In all the regions visited by the team fish (especially indigenous species) were under-supplied locally (ie, more people wanted to buy the fish than there were fish available). This was even true in Arad and Timisoira, where demand for fish is said to be low. Areas presently producing fish and transporting them to other regions for sale base costs on the cost of production plus the cost of transport. No additional value is added to cover the risk, entrepreneurial skill or extra effort involved. Several areas could sell their fish at a premium in Bucharest during periods of peak demand. They are presently discouraged from doing so by:

- ceilings on the difference between production costs and market price which prevent exploitation of marketing opportunities;
- high transport costs (relative to the permitted mark-up);
- lack of retail outlets (these are monopolised by Pescarul);
- insufficient knowledge of the market;
- lack of market intermediaries;
- lack of flexibility: ie, the need to maintain a flow of fish through their own retail outlets instead of taking the opportunity to exploit the markets when opportunities arise.

Figure 2: Seasonal aspects of Supply and Demand in Romanian Fisheries



Source: compiled from discussions with producers and consumers, Nov-Dec 1992

29. One method of overcoming these problems might be to introduce a limited open wholesale market for fish. This would allow access to regular fish supplies at wholesale prices for retailers, institutions and restauranteurs, whilst giving producers greater flexibility in their arrangements for sale. A proposal for investigation of such a market is presented at Appendix 4.

C. Pricing of fisheries products

Accounting and pricing methods

30. The existing and traditional method of obtaining final market price of fish in Romania is "cost plus" ie, a profit margin is added to the sum of all costs of production divided by throughput. Changes in prices must be notified three months in advance and at least three other autonomous businesses consulted. Presently, the margin between total production cost and final retail price (inclusive of all profit) is fixed at 30%.

31. Accounting practices are basic and provide managers with little real information. In effect, present systems have been used to maximise rather than minimise costs, since retail price is based on total cost, nominal profit and 30% mark-up. In order for managers to have some flexibility and to provide cash for working capital during periods of high inflation, it is the belief of the consultants that some costs have been exaggerated. Other aspects of costs, particularly the valuation and amortisation of fixed capital assets, also cause problems. The use of historical costs for valuation of plant means that few businesses are in a position to replace worn out machinery (especially imported plant). Much out-of date plant that should have been written-off is still included in the accounts.

32. Land is not included in the valuation of assets for accounting purposes. Prime industrial land in Iasi for example was valued at L28,000 per hectare in 1992, but since there is no free market in land this must be considered only indicative.

33. Though it is proposed to drop the limitations on mark-ups in the first half of 1993, it will take some time for producers and retailers to adopt new practices.

34. As a result of this system, the retail price of fresh water fish products does not reflect true market value. Inadequate marketing, inter-temporal price fixity, supply inelasticities and, to some extent, habit, all constrain profit maximisation. A number of other related constraints are listed below at para 49.

Inter-regional price variation

35. A range of prices for fisheries products were collected by the consultants and these are presented in Table 2. The accounting methods applied above to develop prices, plus the high level of inflation in Romania (around 20% a month) make comparison between different Commercial Societies difficult. Since all these prices are based on the cost of production rather than the market demand for the product, they can only be used for comparison of costs.

36. Prices for indigenous species (ie, Somn, Caras, Salau, etc) are somewhat meaningless since they rarely reach the open market in any quantity.

37. From interviews with consumers and retailers, live fish (only available regularly outside Bucharest) would sell at a premium of at least 25% over fresh or frozen fish, if price controls were removed. Similarly, consumers indicated that they would be prepared to pay up to 70% more for de-headed and gutted fish, indicating the value attached to the service of presenting the fish ready for the table. Marine fish tend to be cheaper than fresh water fish, reflecting the general market preference for the latter.

38. A comparison of prices with those of the black market is instructive. In most economies stolen fish are cheaper than fish bought through legal channels because of the low overheads of the seller and the necessity of a quick sale. However, the opposite is true in Romania, indicating that people could pay, and would be prepared to pay, much more for official supplies. Discussions with consumers and producers revealed that black market trading is highly formalised. The same people regularly sell certain types of fish at the same place and at the same time, providing a service that is lacking in the formal system. The price of fish on the black market should be used as a proxy indicator of the adequacy of the pricing of fish in the formal markets of Romania. When the price of fish on the informal market falls below that on the formal market it may be an indicator that price is beginning to adequately reflect the relationship between supply and demand.

39. There is a paucity of information about price variation. To address this, counterpart staff have been requested to begin collecting retail price information in major consumption areas on a month by month basis. This information will then be published in the proposed "Romanian Fish Marketing Bulletin" (see para 39 and recommendation 2).

Table 2: Retail prices of various fisheries products

Type	Item	Unit	Retail price L/kg								
			Bucharest (Obor)	Buzea	Galati	Tulcea (1)	Tulcea (2)	Arad (3)	Timisiora (4)	Black Market (5)	Average
Live	Romanian carp	<1kg						325			325
		1-2kg						377			377
		>2kg						422			422
	Chinese carp	<1kg						260			260
		1-2kg						286			286
		2-10kg						325			325
	Caras							260			260
	Salau (Pike perch)							1,547			1,547
	Somn (Wels catfish)	<1kg						1,053			1,053
	Somn (Wels catfish)	1-3kg						1,300			1,300
	Somn (Wels catfish)	3-10kg						1,547			1,547
	Somn (Wels catfish)	>10kg						1,742			1,742
Fresh, frozen and whole	Avat						260				260
	Romanian carp	<1kg	234	250	250	319	273	260			264
		1-2kg				345	299	300			315
		>2kg				416	364	338	275	500	379
	Caras	Small				215		208			211
		Large				247	247			300	265
	Platica (Bream)					247	234			300	260
	Chinese carp	<1kg		221	210	228	260	208			225
		1-2kg		228		273	293	230			256
		2-10kg	195			299	325	260		300	276
	Babusca, batca					247	215				231
	Danube Herring					325	455				390
	Somotei					325					325
	Somn (Wels catfish)	1-3kg				436	390	1,046			624
	Somn (Wels catfish)	3-10kg				520	455	1,238			738
	Somn (Wels catfish)	>10kg				585	520	1,394		600	775
	Salau (Pike perch)						780	1,238		600	873
	Lin (Tench)						208				208
	Bibin (Perch)						260				260
	Mackeral		299		364						332
	Horse mackeral		193								193
Head and guts removed	Caras					403					403
	Chinese carp	>1kg				403					403
	Chinese carp	1-2kg				436					436
	Romanian carp	>1kg				416					416
	Romanian carp	1-2kg	390			455					423
	Pana					910					910
	Platica					384					384
	Sturgeon					2,418					2,418

Type	Item	Unit	Retail price L/kg								
			Bucharest (Obor)	Buzea	Galati	Tulcea (1)	Tulcea (2)	Arad (3)	Timisiora (4)	Black Market (5)	Average
Salted	Caras		351		200						276
	Platica					338					338
	Babusca, batca					364					364
	Chinese carp	>1kg			385	351					368
	Chinese carp	2-10kg				338					338
	Danube Herring					618					618
	Somotei					540					540
	Lapti					384					384
	Tarama eggs					455					455
	Romanian carp eggs		600			930					765
						1,456					1,456
Fillets (whole)	Romanian carp					728					728
	Chinese carp			520		865					692
	Somn (Wels catfish)					1,040					1,040
	Chinese carp		744			1,235					990
	Bibin (Perch)					897					897
	Stiuca (Pike)					1,157					1,157
	Salau (Pike perch)					1,294					1,294
						1,996					1,996
Smoked	Danube sardines		490								490
	Danube herrings		539		520						530
	Batog (mackeral)		801		540						671
Canned products	Chinese carp in tomato	200g	190		130						160
	Sardines in oil	200g	175								175
	Mackeral in oil	200g	162						182		172
	Horse mackeral in oil	200g	162						175		169
Marinades	Mackeral	200g	170		120						145
	Mackeral	100g	100								100
Fish paste		100g	48								48
By-products	Heads			150							150
	Intestines			40							40

(1) SC Ecodelta, Tulcea
(2) SC Piscicola, Tulcea
(3) SC Piscicola, Arad
(4) Pescotim SA, Timisiora
(5) On roadside between Tulcea and Bucharest

The market pricing of fish products and the rates of return on capital employed

40. Table 3 shows how the farm-gate price of Chinese carp (less than 1kg) produced in Iasi as of 27th October 1992 was calculated. Final market price is calculated by adding 30% to the total figure.

41. Prices of individual items are calculated in Lei by dividing total cost by projected output to get a price per kg.

Table 3: Calculation of the farm gate price of Chinese carp

No.	Item	Price per kg (L)	Proportion of final price (%)
(1)	Capital costs 1/	28.35	10.50
(2)	Amortisation 2/	2.90	1.07
(3)	Energy	21.10	7.81
(4)	Total materials	52.35	19.39
(5)	Unskilled workers salaries	53.75	19.91
(6)	Social insurance and unemployment tax (25% of salary)	16.12	5.97
(7)	Total direct labour costs	69.87	25.88
(8)	Maintenance costs 3/	59.90	22.19
(9)	General expenditures 4/	39.37	14.58
(10)	Total general expenditure 5/	221.49	82.03
(11)	General maintenance 6/	16.61	6.15
(12)	Marketing costs 7/	3.57	1.32
(13)	Total costs of production	241.67	89.14
(14)	Profit 8/	20.47	7.58
(15)	Total with profits	262.14	97.09
(16)	Value added tax 9/	7.86	2.91
(17)	Farm-gate price	270.00	100.00

Source: based on figures provided by SC Acvares SA, Iasi.

Notes:
1/ All buildings and materials at historic rather than replacement costs.
2/ Depreciated in equal amounts over various periods.
3/ Calculated as 85.73% of the unskilled workers salary costs (7).
4/ Buildings and workers not directly related to production (ie, administrative staff), calculated as 57.75% of the total unskilled workers salary costs (7).
5/ Sum of materials (4), total unskilled salaries (7), direct production maintenance costs (8) and general expenditure (9).
6/ Calculated as 7.5% of total general expenditure (10).
7/ Calculated as 1.5% of total general expenditure (10).
8/ Calculated as 8.49% of total costs of production (13).
9/ Expected to be 3% as of 1st January 1993.

42. There seem to be some anomalies in this system. Firstly, maintenance costs appear twice. Secondly, the use of maintenance and indirect salary costs as a percentage of skilled workers' salaries, though the standard approach, seems an unusual method to adopt because it disguises the real possible costs of these two items.

43. Profits of 8.5% are low by any standards. In the context of 70% interest rates and a savings rate (the official alternative use of available capital) of around 25%, it is disastrous. Profit margins must be increased if producers are to survive.

44. Taking the example of Chinese carp, rates of return on capital are calculated in the following manner:

$$\frac{\text{Operating profit}}{\text{Total capital}} \times 100 = \text{Percentage return on capital invested in production}$$

or

$$\frac{20.47}{28.35} \times 100 = 72.2\%$$

45. Table 4 compares rates of return on invested capital for 6 examples produced by different companies. A note of caution. These rates of return have been calculated based on historical values of capital stock (ie, the price at which they were brought) and not their current values. Returns are subsequently greatly overestimated in real terms.

Table 4: Comparative rates of return on capital (%)

Species/product	Company	Rate of return (%)
Chinese carp (<1kg)	Acvares	72.20
Romanian carp (>1kg)	Acvares	35.94
Pike	Acvares	15.06
Caras	Acvares	62.96
Wells catfish	Acvares	15.06
Cyprinus carpio fillets	Piscicola	6.16

Notes: compiled from information provides by Acvares and Piscicola.

46. This demonstrates the difference in returns on capital invested between species that require supplementary feeding (ie, Romanian carp) and those that do not (ie, Chinese carp). Romanian carp need balanced supplementary feeds to grow well. Chinese carps, depending on species, can use the plankton growth from fertilization, or eat macrophytic vegetation.

Investigation of the accounting systems of fish producing businesses raises a number of other important issues. It is apparent that managers of these businesses are poorly informed about the financial returns from each individual activity they undertake. Before undertaking new activities,

there is no attempt to calculate break-even prices, estimate returns to scale, or ascertain a return on incremental capital invested. Managers were largely unaware of the productivity of their labour force in financial terms.

D. Marketing and retailing opportunities

47. All 32 fresh water fish producing companies carry-out processing, marketing, distribution and retailing activities. In a situation of under supply many companies have monopolies in their area of operation, there is no competitive pressure to enhance efficiency, and the whole system is unresponsive to consumer requirements. One measure which is recommended to overcome this problem is for Producing Companies to concentrate on production and for trading to be hived off to independant operators who may buy from any supplier.

48. The widespread separation of production and retailing functions is recommended.

49. As a result of constraints on mark-ups, lack of market knowledge and inexperience in all aspects of retailing, individual companies are not fully exploiting the marketing and retailing opportunities available to them. A far from exhaustive list of examples identified by the consultants is presented below:

(a) Quality. Live, fresh, frozen and processed fish each sell at one uniform price regardless of quality. There is no evidence of the price discounting common among fish trading in most countries when fish is losing quality. Similarly, fish of exceptional freshness or known better quality does not receive a premium.

(b) Time of sale. Consumers prefer to buy fish at specific times of day. In the past, supply to retail outlets has, by and large, depended on the time at which ponds have been netted. Fish is then sold at one price until it all goes. Consumers would be prepared to pay more for fish in the early evening than in the morning. In many areas consumers have given up going to fish shops at this time because they know that all the desirable fish will have been sold. Some fish should be held back and sold at a higher price to meet this demand. Higher prices could be charged at the beginning of the day and later reduced to clear remaining stocks.

(c) Production and product differentiation. Most producing companies also retail. For aquaculturists, this usually means a very limited range of products for sale. The ability or willingness of consumers to differentiate between similar products is presently underestimated, for example, three varieties of Chinese carp are marketed, one is much preferred by consumers because of its similarity to indigenous species, but the price of all three is the same. Market research proposed by the mission may provide further indicative information in this area.

(d) Branding. Producers of conserved and tinned fish have not yet taken the opportunity to brand their products. This would have the advantage of allowing better consumer loyalty and producers to develop higher income markets. Branded products are also known to be less susceptible to fluctuations in overall market demand.

(e) Processing at point of sale. Fish are sold whole. Consumers interviewed would like fish to be cleaned, de-gutted and de-headed. Many expressed an interest in buying parts of a fish or fish steaks. Not all fish consumers are families and a whole fish may be too much for a single consumer to eat at one meal.

(f) Specialist marketing. All fish are retailed through specialist shops. These are not necessarily the ideal place for the consumer to purchase fish. In Buzea, for example, 100,000 inhabitants have one fish shop. Opportunities exist for less capital intensive retailing that meets the needs of consumers. Possible alternative outlets could include temporary market stalls, barrows, converted bicycles and pick-up trucks. There is scope for producers to let their existing shops for the sale of non-fish items, or diversify their retailing activities directly[1/]. Counterparts at MAF have been requested to investigate the legal/health constraints to such activities with particular attention to local government health regulations.

(g) Merchandising. At present, the great majority of managers of retail outlets are paid fixed salaries, with no incentives. The introduction of incentives to increase profitability and to encourage the sale of less preferred products should be considered. Shops are unattractive and unappealing to the consumer. No information is provided on stock availability or prices. No additional services are offered. In most shops, consumers are not allowed to view the goods before purchase.

1/ A number of retail outlets visited by the team were already doing this.

1. Early morning harvest, Tiganasi Fish Farm, Iasi

2. Transferring the catch to a "live" transport tank, Tiganasi Fish Farm, Iasi.

50. Evening out supply and demand. One of the most commonly cited reasons for not fully exploiting marketing opportunities given to the consultants was the inability of the consumer to pay. This requires further analysis particularly in the light of interviews with consumers during the mission which strongly suggested that consumers would be prepared to pay more for good quality fish presented in the right way.

51. The present system rations valuable fish not by price but by market knowledge ie, you have to be in the right place at the right time to benefit from supply. What would happen if the system was changed to one based solely on price as a measure of value? Initially, prices of fish in high demand (ie, live or fresh, indigenous species) would rise. Some fish would transfer from low value local markets to higher value, more distant markets. Overall, it is believed that price will expand or contract to meet demand.

52. However, a number of conditions must be changed before such a system can be introduced. Firstly, producers' knowledge of the overall market for fish is limited, which reduces their ability to respond to short-term price fluctuations. Secondly, there are no market intermediaries who can put sellers in touch with buyers. Finally, retailers are not fully exploiting the potential of the market because they sell what they are supplied with, rather than buying what they know the customer wants.

53. The present marketing system is production and supply based and makes no attempt to identify or meet the needs of the consumer. Profits could be greatly improved by concentrating efforts in this area.

54. There is considerable scope for employment creation in the areas of fish marketing.

55. The consultants propose the following initiatives:
- The initiation of some small-scale market research to increase knowledge of aspects of demand,
- the assessment of the potential for wholesale markets,
- the initiation of a process of discussion about market formation,
- the production of a trade broad-sheet giving market information (the proposed "Romanian Fish Marketing Bulletin"),
- and, most importantly, the removal of restrictions on mark-ups.

E. Privatisation of the Romanian fresh water fisheries sector and the context of economic transition

56. Romania is in transition from a centrally controlled "command" economy to a free market economy where enterprise is rewarded by incentives. Attitudes towards incentives (and change in general) have been conditioned by nearly half a century of central administration. This applies to managers, workers (as represented by unions), academics and policy makers equally.

57. A central part of the transition is the movement of state assets into the control of individuals and groups of individuals. There follows a discussion of this process as it affects the fisheries sector and considers the present and future constraints which might affect this process. Three (or possibly four) levels of disaggregation of the problem are suggested for further consideration.

58. The privatisation of fish production, processing and retailing concerns is proposed to commence in 1993[1/]. This process consists of, firstly, a valuation of each firm's assets, a division of its share capital into public, private and corporate sections, and the floating of individual concerns onto the market.

59. The main way in which state owned firms will be privatised will be through a system of vouchers. The Agency for Privatisation will issue vouchers with a certain nominal value to every resident Romanian adult. Vouchers will then become tradeable among citizens and can be converted into shares in individual firms at fixed prices on a first come first served basis, or into shares in mutual funds. Employees will have priority for shares in firms in which they work. This method will be used to privatize 30% of the firms by value. The remaining equity will then be sold to the general public, with employees likely to enjoy rights to discounted shares[2/]. The Government of Romania hopes to attract considerable investment from overseas.

60. The great majority of fresh water fish producing concerns are made up of the following assets:

(i) Non-human:
- Fixed
  - water bodies (both natural and man-made)
  - buildings ie, offices, research centres, processing plants and retail outlets
  - machinery and transport
- Variable
  - fish stocks
  - fish feed stocks

1/ Marketing and distribution is presently in the hands of the individual producing businesses.

2/ This description was largely taken from A Ben-Ner and Montais (1991), pp166-167.

(ii) Human: Including production, retailing, processing, research, management and administrative staff.

61. The nature of fish farming and producing enterprises raises a number of issues with regard to the valuation of these assets for sale purposes. Fish is a highly perishable product that requires a degree of specialist handling, marketing knowledge and a willingness to accept risks. The production of fish through aquaculture entails heavy investment in fixed assets (ie, ponds) and a high percentage of recurrent expenditure on fish feeds. Unlike many agricultural enterprises which are based on annual crops, returns to carp production take three years to accrue.

62. The consultants have divided the issues into two main areas, firstly issues associated with the actual physical process of privatisation (and therefore directly controlled by the state) and secondly, issues affecting the value of enterprises during and after privatisation.

Factors affecting the process of privatisation

63. Four primary areas were identified:

(i) Asset bundling: is the collection of assets being offered for sale the most economically efficient? This refers to scale of the operation (larger businesses may benefit from economies to scale) and linkages (the beneficial connections between different elements of the same industry ie, production and processing). Differences in scale exist within businesses. For example, some of the fish producing businesses are very large with limited retailing outlets (ie, Pescaris SC in Iasi) whilst others have large retailing operations which are not fully supplied by their fish producing and processing concerns (ie, Pescarul SC in Bucharest). These differences also exist between businesses. One production concern controls 20% of total production, whilst others produce small quantities. This came about largely because of the geographical basis of fish production and distribution under the pre-revolutionary regime which required each county to have an "integrated" fish business. Differences in linkages refer to the degree of synergy between different aspects of production, processing, marketing and retailing elements within individual businesses. These can be vertical (ie, between production and retailing) or horizontal (ie, between production sites).

(ii) Management of assets: is the firm efficiently managed according to the needs of its future owners (ie, will privatised fish producing enterprises have as their primary goal the maximisation of returns to shareholders)?

(iii) Ownership of assets: will the assets of the firm be fairly and efficiently distributed (ie, who will gain most from the process: shareholders, workers or management)?

(iv) Resource allocation and social welfare: is fish production the most efficient use of these assets (for example some artificially created water bodies could be used for growing crops)?

65. Social and economic trade-offs exist between these levels of aggregation.

Factors affecting the value of assets

66. The following issues relating to ownership and valuation which are of immediate interest to all concerned, and are likely to impinge on the process of privatisation:

(i) Land ownership: In some areas the ownership of the land under ponds is in dispute. These are areas where water bodies have been created artificially. Current Government of Romania land tenure policy is allowing previous owners with the necessary proof to reclaim their land. How this land will be managed is in doubt. The problem is not uniformly spread throughout Romania, but falls more heavily on those businesses with artificial water bodies, than those with natural ones;

(ii) Debt: Many of the fish producing enterprises are heavily in debt. This has resulted from a number of factors including high interest rates, speculative borrowing for investment during the immediate post-revolutionary period and wage inflation. The solvency of several firms visited by the team is in doubt. Privatisation (combined with the introduction of laws concerning bankruptcy) may result in the transfer of assets from firms to creditors.

(iii) Artificial constraints on prices: At present, the difference between total production costs and retail price (including all profit and the cost of distribution) cannot exceed 30% of total costs. In addition, changes to the upper limit of prices must be notified to both government and competitors at least 5 working days before the changes take effect. This is a profound disincentive to profit maximisation.

(iv) Asset valuation: Methods of valuing fixed capital assets give a distorted picture of the overall value of fisheries enterprises. Many fish business have assets that have value on paper, but are of little value in reality. For example, fish processing plants in most districts are lying idle due to lack of demand and the high cost of inputs. Much old equipment which should have been written-off continues to feature in

the calculation of costs. Furthermore, depreciation of assets has been done at historical costs, making replacement unrealistic at today's inflated prices.

(v) Other distortions: These include a high degree of asset fixity (ie, inability for capital to switch from existing uneconomic functions at present to more economic uses in the short to medium term), controls on minimum wage rates, limitations to an enterprises ability to hire and fire, and no provision in law for bankruptcy. Furthermore, much of the rest of agriculture and industry in Romania receives state subsidy ranging from input supply to price support. All state subsidies to inland fish producers have already been removed.

67. It is unclear both to the authors and, it seems, to the managers of the firms involved, how these issues are to be addressed. In the absence of clear directions, companies are holding back from taking investment decisions.

68. Another area of uncertainty concerns the firms' ability to manage the new capital that is injected into them. Due to inexperienced management, and a poor policy environment, investors may not be willing to risk their savings in such companies.

69. The related questions of the control of monopoly power and the promotion of competition should feature in the Government's policy framework. In Eastern European countries where the process is more advanced (ie, Poland and Eastern Germany) privatisation has resulted in a great deal of vertical and horizontal integration. Their motivation for this has been to "consolidate market power"[1/]. The nature and scale of the fresh water fish producing industry means that monopoly power could easily be exerted by the combination of a few of the existing 33 concerns. The Government must seek to maximise efficiency whilst preventing monopoly.

70. On the other hand, the possibility of competition from indigenously produced substitutes (ie, marine capture fish and meat products) and imported fish products has not been fully considered. This may prove a particular problem for enterprises with a heavy commitment to fish processing who will have to compete against possibly cheaper imported products which may be perceived to be of higher quality (a common phenomena in countries starved of imported goods for long periods).

71. The threat from imports may be exacerbated by the present over-valuation of the Romanian currency. Whilst this makes the importation of capital goods cheaper, it under values exports and encourages imports of competing products.

1/ See Mayhew and Seabright, 1992, p105-129.

72. Another area in which macro-economic policy may affect privatisation is the Government of Romania's efforts to control wage and price inflation. These include limitations on borrowing (formally through the interest rate for capital and informally through the physical supply of capital to banks). Whilst these are essential measures, they provide a poor climate in which to extract even more liquidity from the economy by offering public assets for sale. Enterprises who feature low on the list of priorities for privatisation may find difficulties in meeting their target values.

73. In conclusion, the authors are concerned as to the state of preparedness of the fresh water fisheries sector for privatisation. Questions are posed concerning the scale and scope of the process and the control of its implementation. Three levels of disaggregation are suggested for further discussion. Firstly, at the level of Government, the political will and policy framework necessary to carry out the hard task ahead is in doubt. This will require, preventing inefficient allocation by dividing up presently integrated businesses, controlling monopoly power, adequately valuing assets and liquidating worthless assets. This includes preparing macro and micro economic environments which are conducive to privatisation (particularly with regard to price policy). Secondly, managers of enterprises seem largely unaware of their pivotal role in the process of privatisation. There has been no training, information is scarce and the banking system is wholly unprepared for the impact of privatisation. Finally, the consumers (present and future asset owners!) of these enterprises have been inadequately involved in the process of valuation and distribution of assets. It seems that the process may be more inequitable than it might have been.

74. The consultants wish to re-state the case for some fragmentation of the industry. It is felt that, in order to induce competition and enhance efficiency at all levels, the activities of fresh water fish production and marketing should be separated. There are a number of advantages to this. It will allow producers to concentrate on what they do best ie, producing high quality fish at the lowest possible cost. Considerable scope exists for market intermediaries and further retail outlets. A wholesale market in fresh water fish could develop, evening out supply and demand between seasons and between key areas of consumption in Romania. In the long term, increased competition at all levels of production, processing, marketing and retailing of fish products is to the advantage of the consumer who will benefit from lower prices, more choice, better service and higher quality.

75. Finally, a possible fourth level of disaggregation is suggested for discussion. This is the social and environmental value of water resources (to the individual, to agriculture, to industry and to the country as a whole both now and in the future). No guide-lines are available

for the valuation of these assets and this presents a potential future problem.

76. The consultants recommend that a dialogue be opened as soon as possible to discuss these issues. This should lead to actions which ensure that the privatisation of the Romanian fisheries industry is done in such a way that it provides the best possible service to the Romanian consumer, whilst maintaining the viability and profitability of fishing assets.

F. Constraints to maximising returns

77. The primary restraint on returns is the recently invoked law (Law 31) limiting the amount of value that can be added to a product between production and consumption. Farm gate profits are fixed at 10% over and above total production costs. Gross marketing margin between primary producer and consumer (including all intermediary transaction and costs) must not exceed 30%. This effectively sets a limit on profit, constrains investment and entrepreneurship and prevents growth.

78. Other problems (not necessarily in order of priority are as follows:

High inflation

79. In the early months of 1992 this was believed to be between 10% - 15% per month. This makes planning for investment difficult, discourages saving, and, under present accounting regimes, causes lags between official prices and the real value of production.

High interest rates

80. At present these are set at 70%, though a special rate of 15% has been set for agriculture in order to stimulate production. However, the consultants were told that banks do not have the funds to meet demand and there is an on-going discussion as to whether fisheries activities are included in the criteria for discretionary loans.

81. In the face of an administered pricing regime high interest rates have hit the freshwater fish production industry particularly hard. During the immediate post-revolutionary period many Societies borrowed heavily to expand production or to invest in processing. Shortage of fish has made processing in many cases a liability and repayments on loans have become a major drain on resources. Some Societies interviewed during the mission were borrowing from banks to meet wage bills. This state of affairs cannot continue indefinitely.

Poor purchasing power

82. At the time of the mission wage inflation was lagging behind price inflation. For example, in the period from October 1990 (when statistics recommenced after the revolution) to December 1991 overall wage inflation was around 233.7% whilst food prices rose by 390.4% (EIU, 1992, p20). This has reduced consumers' ability and willingness to buy fish. Poorer consumers have tended to switch from fish to meat since pork particularly is believed to be more filling and better value for money. Many producers believe (wrongly in the view of the authors) that the lack of purchasing power prevents them from increasing prices of fish in high demand.

Limited understanding of the market

83. Fish producers and retailers know little about the consumers (or potential consumers) of fish and fish products. There is no mechanism for gathering or distributing this information (ie, no trade journals, price information services or market intermediaries who carry out this function in most market economies).

Shortage and high cost of inputs

84. This is particularly true of fish feeds for production of traditional carp species. The problem is exacerbated by the undervaluing of the finished product, the excessive time lag between investment and return (ie, at least 2 years) and the distortions present in the production and consumption of meat products which make it easier for meat producers to obtain supplies.

Heavy taxes on profits

85. Law 12 discourages initiative and enterprise by imposing punitive taxes on profits above the prescribed level ie, 10% more than total costs.

Centrally fixed valuation of assets

86. This means that firms are unable to write off capital assets within their useful life and effectively discourages investment in new technology.

Poor infrastructure

87. Limited investment in roads, an unreliable rail freight system and over-investment in inappropriate transport (ie, refrigerated instead of insulated trucks), combine with high fuel costs to deter the sale of fish in more distant and possibly more lucrative markets. The consultants consider that the market for fish in Bucharest is particularly under-exploited.

Lack of policy framework

88. There are several key areas where the absence of clear direction from Government is affecting investment decisions. Firstly, there is the issue of land ownership and tenure which affects the rights to ponds and man-made water bodies. Secondly, there is the question of responsibility for environmental aspects of fish production (water resource allocation and use). Thirdly, it is unclear how fisheries research will be managed and directed. Finally, the issue of privatisation and how it will be managed hangs over the whole industry. See para's 56 to 76 above.

Inexperienced management

89. Many of the managers of these businesses or prospective business have little of no experience of managing enterprises whose purpose it is to maximise profits. Previously these businesses had maximising output as their primary objective. New skills must be learnt, particularly in the areas of marketing, investment strategies, cost management and, in most cases, retailing.

Lack of managerial incentives

90. At present the management teams of enterprises are paid a salary. In future they will also be shareholders. However, in order to attract and keep staff of high calibre further incentive schemes may be necessary ie, profit sharing.

Lack of capital and appropriate credit facilities

91. Existing banking structures are struggling to cope with the credit needs of agriculture. Fisheries activities are considered low priority. Managers of Fisheries enterprises need help from the banks on several levels. They need advice on loans, information on cash flow and general support services. Basic banking activities, such as clearing cheques, are not functioning properly at present. Given the high interest rates and the precarious financial condition of many of these companies, delays in payments could be fatal to the well-being of businesses.

Monopoly and monopsony

92. The majority of Romania's fresh water fisheries industry is made up of individual, independent integrated units. These units produce, transport, process and retail fish. The businesses vary in size considerably, some having possible monopoly power over production, others control a high proportion of the urban retailing outlets (ie, a potential monopsony on retailing of fish products). Whilst this may have been an efficient mechanism for distributing fish, it does not reflect market demand and may not be in the best interest of consumers or the nation as a whole.

Public attitude

93. There is a negative public perception of entrepreneurs, particularly those involved in marketing and distribution. For example, terms commonly used in market economics such as "market exploitation" or "profit maximisation" are considered synonymous with usury.

Conservatism and uncertainty

94. The move from the command economy to an economy where demand and supply are regulated by price is a great step. Naturally, many are unwilling to take risks and have no experience of doing so. Social security systems are in place but their ability to support is limited.

Labour relations

95. It is very difficult for businesses to make staff redundant. Labour Trade Unions are a very powerful interest group in Romanian Society. Management give little consideration to labour productivity and none of those interviewed during the mission were able to give an account of the productivity per person of their labour force. Wage rates are negotiated nationally and little scope exists for incentive structures.

G. Availability of feeds

96. In the immediate pre-revolutionary period, aquaculture production was concentrated on Chinese carp species to maximise total fish production (as measured by weight rather than value) and minimise the inputs necessary to produce fish. In post-revolutionary Romania, there has been a trend towards greater quantities of the more popular indigenous species. These fish require supplementary feeding to achieve reasonable production levels.

97. There is a general shortage of fodder in Romania and no pre-mixed fish feeds of any kind are available. Heavy subsidies at all levels in the animal production industry mean that fisheries have found sourcing any feed ingredients extremely difficult. Grain legumes (soya beans) are not grown locally and therefore have to be imported. Soya bean meal is used mainly by the pig producing industry which has the financial power to buy it in bulk.

98. The main indigenous crops are sunflower, barley, maize and wheat. Fish farms generally buy whole grains and mix their own feeds. The consultants could not find a market in cereal by-products.

99. Fish meal is available in very small quantities as a by-product from fish processing. It is generally of poor quality with a low protein content. An indication of prices of feed ingredients at the time of the mission is given below in Table 5.

Table 5: Prices of major feed ingredients

Ingredient		Lei/kg
Fish meal	40% protein	160
	60% protein	200-210
Mixed feed (maize and wheat)	7-9% protein	40
	15% protein	70
Soya bean meal		20-40
Sunflower seed meal		7-40
Barley/maize/wheat (whole grains)		60
Premix (vitamins and minerals)		Unavailable

Source: discussions with Commercial Fishing Societies

100. Feed conversion factors quoted to the team ranged between 2.5-3.5 kg of feed for each kg or Romanian carp produced. Much lower rates could be achieved with higher quality feeds.

H. Market research - fish consumption

101. Little is known about the consumption of fish in Romania. During the communist regime, it was assumed that the market was homogeneous. Fish was rationed by queues.

102. Market research is recommended to remedy this. A brief outlining the initial needs of a preliminary market research effort in presented at Appendix 3. The approach adopted is to undertake a number of group interviews to demonstrate the possibilities of market research to opinion formers in the Romanian Government and the fisheries industry. If successful, this would be followed by a more comprehensive market study including both quantitative and qualitative market research.

103. Early results of the market research should be widely publicised in the proposed "Romanian Fish Marketing Bulletin" (see Appendix 7) and be the subject of discussion at the proposed workshop on fish marketing (see Appendix 10).

I. Technical constraints in distribution and marketing.

104. The existing handling, processing, distribution and retailing systems are not geared up to the present, or anticipated, requirements of the industry or the consumer.

Any future changes should focus on the identified needs of the producers of fish to meet the demands of the consumer. Many of the fresh water fish producing associations are equipped with facilities for a range of processing and preservation methods, often based on raw material supplied from the now much reduced oceanic fleet. There appear to be few opportunities to cover costs with these plants in the current economic climate.

105. Distances to even the more distant domestic markets are within 6-8 hours driving time by road. In this situation the distribution of fresh iced fish, transported in insulated (not refrigerated) vehicles, is feasible. It is recommended that the industry concentrate on supplying live fish, or fresh iced fish, for relatively close markets and fresh iced fish for even the most distant domestic markets.

106. Farm grown fish and, to a lesser extent, the capture fishery in the Delta, can be harvested to meet fluctuations in consumer demand within the overall constraints imposed by the growing season and the aquaculture methods used. With the high cost of power to run refrigeration equipment for the production and storage of frozen products, and the need for an extensive distribution cold chain the provision of such facilities cannot be justified in the immediate future, particularly as consumer demand is presently for live or fresh fish.

107. The freshwater aquaculture industry should, as a first priority, concentrate on developing the infrastructure to supply live and fresh fish to the consumer. In the course of field visits during the mission it became apparent that many of the producing associations do not possess adequate facilities to market their fish. Vehicles, both for live and fresh fish transport are inadequate. Often, where they do exist, they are old and unreliable.

108. Many of the producers collect and store ice from their ponds in the winter. The quality of this ice in terms of water purity and the poor condition of the ice storage houses does not meet modern public health standards and it is also, apparently, illegal to collect ice from open water bodies. Pond ice would not meet international public health standards for use on fish destined for export. Mechanical ice plants do exist in some towns and cities but this ice is for general sale and fish producers may have problems in ensuring supplies in the summer months when overall demand is at a peak (much of the ice is apparently used for the cold drinks trade).

3. Whenever fish were on sale long queues of consumers' formed, retail shop, Iasi Market.

4. Consumer access to retail premises is sometimes restricted, Iasi.

109. Counterpart staff from MAF have been requested to carry out a survey of the numbers and condition of such vehicles and equipment available to the fish producing associations in Romania at the present time. Although a number of vehicles and trailers for the transport of live, iced and frozen fish were seen during the course of field visits, it was not possible to estimate total numbers of each type or their condition. In general all the vehicles seen had been in use for a number of years and were in a poor condition.

110. The present system for marketing fish, with controls on permitted price mark-ups, acts as a constraint on the industry. One of the main recommendation of the authors is that the GoR should remove all price controls in the production, distribution and retailing of fish and fish products. It is further recommended that GoR should replace the existing retailing activities of the producers with an independent, competitive retail sector. The creation of open, wholesale markets to provide the link between producers and retailers is recommended.

111. The authors have recommended that a technical workshop be held so that MAF staff and the members of the Fish Producers Association can discuss the many and varied issues that would be involved in introducing a wholesale marketing system and open access retailing. A proposal for the workshop is presented at Appendix 10.

112. If the Fish Producers accept the proposal for introducing wholesale marketing, with open access for independent retail traders, and the GoR will remove price control restrictions a practical, pilot scale, wholesale marketing trial is recommended. The object of the trial will be to test the concept of wholesale marketing and develop a system to meet the needs of the industry in Romania. Obor Market in Bucharest may be a suitable location for this trial as it has vehicle unloading facilities, it contains sufficient covered space to display fish and access for retailers can be fairly easily controlled. The experience gained during the pilot scale study would be used to formulate criteria and proposals for the introduction of wholesale fish markets in suitable urban centres throughout the country and an improved distribution system. A proposal is appended at Appendix 4.

113. Although a series of technological inputs are required to improve the distribution and marketing of fish, these can only be sensibly formulated after decisions have been agreed on any changes to the existing distribution and marketing system. The authors are very reluctant to recommend any technological inputs to improve the present distribution system as they would probably only increase the marketing costs to the producers.

114. If the GoR accepts the recommendation to remove all price controls in the industry and agrees to introduce a network of wholesale markets and private sector retailing, the following facilities and equipment would be required to develop an adequate infrastructure:-

- Ice plants and ice stores in the main production centres.
- Insulated vehicles for transportation of iced fish to the wholesale markets.
- Vehicles for the transport of live fish to market
- Wholesale markets with vehicle unloading facilities, a market floor for sales, a collection area for retail traders, live fish holding tanks, ice production and storage, and chill storage facilities for fish.
- In some wholesale markets it may also be necessary to provide facilities for the storage and sale of frozen oceanic fish.
- Design and construction of improved fish shops, stalls and mobile units for pilot scale testing.

115. The retail fish shops and markets visited by the authors were very uninspiring. Very few attempts were made by the shop managers or stall holders to attract customers or provide any sort of service, beyond the sale of whole fish. There would seem to be considerable scope to improve the return to the producers and traders by providing an enhanced level of service to the consumer. For example, by cleaning and cutting the fish to the customers' requirements. A number of consumers were interviewed and most indicated that they would use such a service if it was available, and be prepared to pay a reasonable fee. During a visit to the fish shop in Arad Market only live Chinese carp of 3kg, or heavier, were available and these were being sold whole. In a society where the purchasing power of a substantial part of the population is limited, such large fish must have been beyond the cash resources of many consumers. The shop staff did not offer portions of large fish to meet the needs of less affluent customers. We were informed that current health regulations did not permit fish to be cleaned, or cut on the premises. It would seem preferable to encourage cleaning and cutting in the fish shops, so that guts and other waste could be collected for acceptable disposal. All the fish are cleaned before cooking and the guts are spread around the residential areas of the towns and cities, where they presumably pose a greater nuisance problem, particularly in the summer months.

116. The concentration of fish retailing in relatively few outlets in the major towns restricts the availability of fish to the consumers. Fish is often only available from the shops for a small part of the day, even in the main fishing season. Deliveries from the farms often do no reach the shops until late morning or early afternoon. For much of the year fresh fish is not available and the shops are empty. Several of the fish shops visited were much larger than necessary for the trade carried out and less than half

the available space was being utilised. There would seem to be scope to change the usage of the existing shops to other goods and introduce smaller, purpose built shops, or stalls, for the retailing of live or fresh fish.

117. As many consumers live in high rise apartment blocks in the suburbs of the towns and cities there may also be prospects for direct 'door-to door' deliveries of fresh, iced fish with purpose built small vans, trailers and bicycles. Fish is highly perishable and does not mix readily with the consumers' other purchases. Interviews with a number of consumers indicated that they would appreciate a home delivery service for fish and would be prepared to pay extra for the convenience. Fish supplies to the smaller towns, villages and country areas are, at best, very irregular. Small mobile retail units would permit supplies to these areas to be developed.

118. There are specialised markets for many processed fish products which are under-exploited. Traditional salted, marinaded and smoked fish are poorly produced and poorly presented. Quality is uniformly poor.

119. No specific technical recommendations for the supply of new equipment has been made in this report, even though there is an obvious need for inputs to improve all aspects of the distribution and marketing of fish and fish products. The first priority must be for the GoR and the fishing industry to decide on how the industry will develop in the future. Once a decision on the strategy is agreed by all parties a proposal to implement this, including the marketing structures and equipment needed, can be formulated. A list of Romanian fish species, with scientific, Romanian and English names is presented at Appendix 6.

120. New European Community regulations for the handling, processing and transportation of fish and fish products come into force on the 1st. January 1993. These lay down strict guide-lines for all aspects of handling fish and fish products the are also applied to producers and processors in overseas countries that export to EC countries. None of the distribution centres or processing plants in Romania visited by the consultants fully complied with the new requirements. The use of natural pond ice to chill fish was commented on in Para 108. It is considered that the Romanian fisheries industries should, as a first priority, concentrate on developing the basic infrastructure to improve the supply of fish to the domestic market. Once this has been done the industry will be in a much stronger position to take advantage of any export opportunities that may arise in the future. Copies of the EC Directive on Fish and Fish Products and the draft UK regulations to implement the Directive have been sent to MAF.

J. Training

Immediate Training Requirements

121. Several UK training attachments have been recommended to meet some of the immediate needs of the inland fishing industry. The need for additional in-country training in the future is also discussed below.

122. Two UK study tours were recommended in the Blake and Domaniewski July 1992 visit report to look at the legislative and management frameworks required for the effective control, management and development of Romania's inland water resources. These have subsequently been incorporated in the JAU programme document and funds are available for Financial year 1992/93. A provisional programme of visits and attachments for the tours has been arranged by NRI.

123. MAF and MOE should, as a matter of priority, nominate candidates for the study tours.

124. The present visit identified two further immediate training needs and recommends that training courses in the UK are provided from the "Know how" funds. The transition of the economy, from command to free market, is posing additional problems that are beyond the experience and training of the personnel in the industry. Although many individuals are well trained and very experienced in technical and scientific subjects, their background is inadequate to meet the new needs for 1. fisheries planning and management, and 2. distribution and marketing.

125. The three month training course at Hull International Fisheries Institute in Fisheries Planning and Management would be suitable. The course for 1993 begins at the end of April. Estimated total costs for the course are £11,482.

126. Humberside University in Grimsby can provide a tailor made three month course in fish distribution and marketing. The course would place a strong emphasis on the practical aspects of the subjects, with a series of attachments to industry to highlight this. At the end of the course a two week attachment at Billingsgate Market in London to work with a fish wholesale trader/importer, the Inspectors responsible for hygiene and quality standards on the market, and a retail fish trader in Kent can be arranged by NRI. It is estimated that the course, including the attachments at Billingsgate and NRI would cost £12,154.

127. It is recommended that each candidate should be attached to NRI for one week at the end of their courses. The time would be used to assist them to prepare background papers to be presented at the proposed technical workshop to discuss the introduction of wholesale fish marketing in Romania. Costs for these attachments have been included in the total training costs.

128. A detailed proposal for the training attachments, with total costs for both courses estimated at £23,636, is presented at Appendix 9.

Future Training Requirements

129. Several training recommendations for short courses in the UK have been made above to address some of the more urgent and immediate needs of the fishing industry. There are however a number of other areas in the freshwater culture industry where training is required, particularly in business management and economics.

130. As Romania is only part way through the transition to liberalise the previous centrally controlled economy, with many of the old controls on trade still in force and no firm indication of when the liberalisation phase will be completed, it is difficult to make firm recommendations for further training.

131. The transition to an open market economy is and will continue to pose many problems to all sectors of the fishing industry. In the past the industry has been set production targets within a state subsidised system. Subsidies to inland aquaculture have already been removed and the producers are now faced with operating their associations on a commercial basis, although controls on permitted levels of mark-up and profit during selling have not yet been removed. In many respects they are poorly trained and experienced to cope with these responsibilities for production, distribution and marketing.

132. Training in modern, free market management and economic skills is essential for the industry to survive in the future and establish itself on a viable basis. This is a problem in all sectors of the economy and not one peculiar to fisheries. A long term solution to this problem can probably be best achieved by training trainers to maximise the take-up throughout the country. In the fisheries industry consideration should be given to providing training to staff of an educational establishment with strong links to the fishing industry; the University of Galati would seem to be a suitable institution.

133. It is recommended that consideration be given to providing short training courses, at some time in the future, to be presented by UK specialists to selected staff from the University in Business Management Methods and Applied Economics for Fisheries Industries.

134. A condition of providing the courses should be that the University gives an undertaking that the new information will be incorporated in the various graduate and undergraduate subjects taught. Special short courses should also be presented for managers, accountants and technical specialists from the fishing industry to disseminate the information.

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Appendix 1.

Terms of reference

1. Prior to departure the consultants will collaborate in a one week preliminary literature and trade survey of the marketing and processing options for known Romanian fish and fish products.

2. During the course of a four week visit to Romania the consultants will work with Romanian counterparts from MAF, MoE and Ministry of Home Trade in order to establish:

* the level of national demand including seasonal variability

* the preferred products including viable price structures for the national market

* the options for developing an export trade in fisheries products

* the options available for improving processing, packaging and distribution in support of both the national and any potential international markets

3. The consultants will prepare a preliminary "back to office" report of their main findings and recommendations within three days of return from the field visit. A final detailed report will be completed within four weeks of return from the field visit.

4. The consultants will, on return from the field visit, spend one week to prepare a "marketing brief" for separate publication, of inclusion as an Annex of the final visit report. The brief will contain a summary of the marketing and processing prospects for Romanian fish and fish products, with an indication of product types for which demand exists, prospective markets and values.

Appendix 2.

Itinerary

Date	Action/activity
Mon 16	British Embassy
	Robert Macaire, 2nd. Secretary Corina Paun
Tues 17	Ministry of Food Industries
	Professor Mircea Rauta, Faculty of Food Processing Industry and Aquaculture, University of Galati
	Dr.Razlau, University of Galati
	George Romanca, Service of Nature Conservation, Ministry of the Environment
	Nicolae Dimulescu, President of the Association of Fish Producers
	Niculae Angelescu, Technical Director, Rompesco S.A., Vice President of the Association of Fish Producers
	Bodescu, Department of Food, Technical and Research Institute, MAFI
	Viorel Zichil, Department of Food, Technical and Research Institute, MAFI
	Cornelia Ciguianu, MAFI
	Dan Vizitiu, Director, Nucet Research Institute
	Patrici, University of Galati
Wed 18	Departments of Commerce, Internal Trade and External Trade
	Maria Tirla, Ministry of Commerce and Tourism
	Emilian Draghici, Department of Trade
	Stefan Aurel, Prodexport SA Foreign Trade Company

Thurs 19 Pescarul processing plant and fish farms.

Radu Petru, Director
Luca Constantin, Processing Technologist
Niculae Angelescu, Technical Director,
Rompesco S.A.

Fri 20 Obor Market, Bucharest

Sat 21 Obor Retail Fish Market

Sun 22 Free

Mon 23 British Embassy

Bucharest - Iasi

Tues 24 Tiganesti fish farm

Florin Seiler, General Manager Fish
Breeding Research "Acvares"

Mircea Cuvinciue, Farm Manager

Retail market - Iasi

"Acvares" Fish Breeding Research Station

Liliana Pana, Hydrobiologist
Adriana Strat, Genetics selection and
Improvement
Dancit Ragea, Engineer
Ioan Vostinar, Engineer, Manager of
reproduction station
Elena Cuvincivc, Researcher
Vasile Vulpe, Ichthyopathologist
Elena Vostinar, Researcher
Elena Misaila, Biologist
Catalin Platon, Biochemist
Costica Misaila, Nutritionist

Wed 25 SC Pescaris SA, Iasi

Victor Bulgaru, General Manager
Gheorghe Norelu, Technical Manager
Cristea Georgica, Commercial Manager
Vasile Bobeica, Chief economist
Gheorghe Huianu, Farm Manager
Mariana Munteanu, Processing Technologist
Clementina Bulgaru, Engineer

Institute of Agronomy, University of Iasi

Thurs 26 Iasi - Bucharest

Fri 27 Aquaculture Research Institute, Nucet

Dan Vizitiu, Manager
Florin Nichifor, Chief engineer for production and research
Constantin Paraschiv, Chief accountant
Christian Stoicescu, Chemist
Mircea Deciu, Aquaculturist
Ing (Mrs) Viorica Vizitiu

Sat 28 SC Amblac SA, Buzau

Vasile Manole, General Manager
Vasile Sara, Economist

Sun 29 Report writing

Mon 30 Bucharest - Galati

PescoGal SC

Adriana Dimitri, Engineer
Garofita Tepelus, Aquaculturalist
Lucia Achimfa, Industrial technologist
Viorica Uleuca, Production technologist
Ileana Butunoui, Fisheries technologist
Ecaterina Virlau, Fish production technologist
Angelica Pacularu, Fish technologist
Claudiu Mardare, Mechanical engineer
Vladimir Talpes, Refrigeration engineer
Eftimue Zaharia, Electrical engineer
George Raslog, Assistant Director
Constantin Pecheanu, Director

Tues 1 University of Galati

Lucian Oprea, Senior Lecturer, Food Toxicology
Prof Jaiscanu Mihai, Rector
Prof Tofan Ion, Pro Rector
Prof Popa Cornel, Dean of Faculty of Food Industry and Technology
Prof Munteanu Daniela, Pro Dean of Faculty of Food Industry and Technology
Prof Vasilescu George, Hydro-biology and aquaculture
Prof Bacalbasa Dobrovici Nicolae, consultant
Prof Adam Alexandru, Fishing gear
Reader Stancioiu Soare, Ichthyologist
Reader Munteanu, Fish Pathologist
Reader Elancibun Saove, Ichthyologist
Reader Crista Victor, Fish farm technologist
Lecturer Razlog, Fishing technologist
Lecturer Andrei Ciolac, Aquatic ecologist

Assistant Lecturer Metaxa Izabel,
Ichthyologist
Cornel Ceapa, Hydrologist
Reader Costescu Cegar, Management and
marketing

Wed 3 Galati - Tulcea

SC Ecodelta
Mitrenca Nicolae
Jechila Nicolae

SC Pescicola
Manole Tanase, Commercial Director

Danube Delta Biosphere Reserve
Marian-Traian Gomoiu, Governor
Mircea Staras, Scientific Director
Grigore Baboianu, Director

Thurs 4 Tulcea - Bucharest

Fri 5 Agrofood Business Consulting SRL
Ion Sterpu

Sat 6 Report writing

Sun 7 Report writing and translation

Mon 8 Bucharest - Arad

Tues 9 Arad - Timosiora

Wed 10 Timisiora - Bucharest

Thurs 11 British Embassy
Bernhard Marshall
Corina Paun
Andrew Baldwin, EC representative

Fri 12 MAF

Picsiculture Organization "Rompescaria"
Nicolae Dimulescu, President of the
Association of Fish Producers

Stefan Tarabuta, Director General, Food Industries

Bucharest - Zurich - London

Appendix 3

Fish consumption survey: Market Research Brief

Background

1. A recent mission to Romania by two consultants from the UK Natural Resources Institute, funded under the British Government funded "Know-how" initiative, investigated the marketing of fresh water fish.

2. The main finding of the mission was that fresh water fish are currently an undervalued commodity in Romania with demand apparently greatly outstripping supply.

3. The consultants made a number of recommendations designed to support the fresh water fishing industry and address particular areas of concern. These included:

- freeing of existing formal and informal constraints to trade (including constraints on the difference between production costs and retail price)

- concentration of effort on enhancing the domestic distribution and marketing system

- separation of fish production and retail functions

- increased competition between retail outlets

- access to loan capital for market intermediaries

- provision of market information to traders

- development of wholesale fish markets

4. A common element in all these areas of concern is the lack of information about the consumers of fish products. Lack of supply, poor quality and limited product range mean that consumer choices have been very restricted. To this end the consultants identified a need to form a better understanding of the consumption patterns for fresh water fish in Romania.

5. Initially, a pilot study is proposed with the express purpose of displaying the possible benefits of further, more extensive, market research to opinion formers in Government and the private sector. For this reason, it is felt that the study should begin by concentrating on attitudinal aspects of demand and, therefore, be qualitative in nature. Subsequent studies may seak to quantify demand.

6. It is proposed that the "Know-How" initiative and MAF approach a number of local and international market research groups to submit fully costed proposals for exploratory research.

Objectives of the pilot phase

7. The overall objective of such a study is to enhance the incomes of fish producing, processing, marketing and retailing enterprises, create employment, and enhance the supply of fish to consumers.

8. The immediate objectives of the study are to identify key market segments, outline areas of growth or decline in demand, investigate consumer attitudes towards various fish products and competing/substitute products.

Information required

9. The data required falls into the following broad areas:

a. Reactions to improvements in marketing ie,

- product availability
- product quality
- product range
- access to the product
- product presentation

b. Consumer sensitivity to price;

c. The language client groups use to describe all aspects of the products and the marketing of the products;

d. Product preferences;

e. Seasonal, regional and ethnic differences in consumption patterns and product perception;

f. Consumers reaction to new methods of fish retailing ie, door to door trading;

g. Consumers reactions to improved presentation and options such as gutting, steaking, filleting etc.

Main activities

10. In the initial phase, qualitative market research is proposed involving a number of focus groups recruited to represent key market segments and socio-economic groups.

11. The results of these interviews should form the basis of a report to be presented to the Ministry of Agriculture and Food Industries for distribution to the Association of Fishing Industries, Research Establishments and Universities.

Recruitment

12. Key sectors of society should be represented including a range of urban and rural fish consumers, both men and women.

13. Where possible, focus group interviews should be conducted in an environment which is both familiar and comfortable.

Time-scale

14. The following time scale is proposed:

Recruitment and interviews - May/June 1992
Draft interim report - August 1992

Appendix 4.

Proposal for the preliminary investigation of improvements to fish marketing methods used in Romania

Introduction

1. This proposal concerns an initial assessment and subsequent feasibility study of appropriate wholesale and retail marketing systems in Romania. It results from the findings of a mission conducted by a Marketing Economist and a Fish Technologist from the UK's Natural Resources Institute, funded by the ODA's "Know-How" initiative during November and December 1992[1/].

2. The proposal is in two phases, a preliminary investigation of various marketing and retailing possibilities including discussions with all the key interest groups, and subsequently, a full feasibility study of a formal marketing structure.

3. The first element of this falls under the existing ODA "Know-how" initiative funded project and should be completed in 1993. The second is for consideration by an appropriate international donor.

Background

4. Before the Romanian revolution in 1989 fish products were supplied to consumers on a first come first served basis. Price was set by the cost of production. Supply of fish at these prices fell short of demand, particularly during peak consumption periods such as religious festivals.

5. The fresh water fisheries industry was designed to supply the maximum quantity of fish at the minimum input cost, regardless of quality. For this reason, the industry was divided into a number of self-sufficient, integrated, fish production and supply units producing mainly Chinese carp species which require few inputs (ie, feed). Demand, however, is for fresh indigenous species. Areas of surplus supply (ie, the Danube Delta Region and Iasi) were contracted to sell fish at fixed profit margins to areas of surplus demand (ie, Bucharest).

6. Whilst many of these arrangements still exist, the opportunities for increased profit from moving fish from areas of low demand to areas of high demand during peak periods of demand are now being considered. Traditionally, producers have managed their own sale through their own retail outlets or by processing the remainder. Fish processing is currently uneconomic in most regions of Romania due to high input costs and the lack of overseas markets.

1/ Bennett and Rogers (1992)

7. These integrated producing businesses were largely self-contained (ie, included production, distribution, processing, marketing and retailing). This meant that there was no necessity for any sort of independent marketing chain. There are no marketing intermediaries, no wholesale markets and little market information. In several important segments market penetration is still very low (ie. sales to restaurants and institutions).

8. Opportunities to increase profit by providing products and services that the consumer wants have, by and large, not been taken up. The primary reason for this is that the industry has concentrated on supply rather than demand. Fish (especially in the preferred fresh form) is a highly perishable product. Marketing it entails considerable expertise, good knowledge of the market place and an ability to accept a certain amount of risk. In most fish marketing systems, risk is reduced by selling fish through marketing intermediaries who have a good knowledge of their market. The consultants consider that two elements are necessary for the promotion of such a system.

9. Firstly, there should be a place where producers and buyers can meet to allow fish to trade in the condition and place where profit will be maximised.

10. Secondly, a network of market intermediaries and retail outlets suited to the needs of the consumers should be encouraged.

11. These activities should be conducted in conjunction with representatives of fish producers, fish processors, retailers, market owners, local and central government officials.

Objectives

12. To determine the type of market intermediary arrangements that would best suit the unique conditions prevalent in Romania.

13. To draw up a proposal for the investigation of the feasibility of such arrangements.

14. To investigate (and possibly demonstrate) the marketing opportunities that exist such as non-formal fish marketing, itinerant trading, selling to institutions and restaurants.

Main activities

15. Activities are divided into two phases, a discursive/exploratory phase followed, if necessary, by the formulation of a project proposal.

16. The following activities are proposed for Phase I:

(a) Discussions with key interest groups to determine what will be involved in setting up a wholesale market trial;

(b) Identification of a site for a trial wholesale market;

(c) Conduct a trial auction to assess the likely market reaction;

(d) Set up and conduct preliminary market research as outlined in marketing brief (Appendix 3);

(e) Conduct retail marketing trials using non-formal methods (ie, bicycles, barrows, vans etc);

(f) Initiate and assist in the holding of a workshop for the fishing industry to discuss and evaluate the options for developing fish marketing and retailing in Romania. The findings of activities (a) to (e) to be discussed at this workshop and marketing needs of the industry to be outlined.

17. Subject to the results of Phase I, the consultants should draw up a costed proposal for a feasibility study for assistance to fish marketing, involving both the organisation of the policy and regulatory framework, and the physical and managerial aspects of marketing. The recommendations should build upon the views of fisheries industry as expressed during the Phase I workshop. It should also be of demonstrable benefit to consumers of fish in terms of choice, price and quality.

Estimated costs

18. Costs for the first mission(s) are included in the present budget from the "Know-how" initiative for 1993.

19. The results of the study will be written up and, if wide scale wholesale marketing is feasible, will include a proposal for external funding to achieve this.

Appendix 5.

Survey of the market for Romanian produced fresh water fish products in mainland Europe and the United Kingdom

Introduction

1. Contact between Romania and buyers of fish products in the European Community countries has been limited since World War II. Historically, indigenous Romanian fresh water fish were sold in many of the capitals of Europe, many being consumed by Romanian expatriates and members of the Jewish communities.

2. During a recent mission to Romania, the authors were repeatedly asked their views on the potential market for Romanian fish in the EC. To address this question a brief survey was undertaken of sixteen major fish traders in France, Germany, Holland, the United Kingdom and Austria (a full list of names and addresses of those contacted during the survey is given at Annex A). These countries were chosen because they represent the main consuming areas for fish in Western Europe. In addition, Austria was included because anecdotal evidence suggests that this is a potential market, having a large population of recent migrants from several Eastern European states.

3. A semi-structured format was adopted to allow discussion of qualitative aspects while ensuring that the main quantitative issues (such as price and demand) were covered. A pro forma was used to collate the results. This is presented at Annex B.

4. The main products involved are captured and cultured indigenous fresh water fish species: European common carp, Pike, Perch, Wels Catfish, Pike-perch (Zander) and Sturgeon. These species can be supplied in a number of forms such as fresh on ice and frozen. Whole, filleted, cured and canned fish are available.

5. The objectives of the survey are given at Annex C. The reader is advised that much of the data presented is anecdotal and represents the perceptions of the buyers contacted at the time of the interview. The sample was purposive (ie, not random), therefore, caution should be used when generalising from the results.

Main findings

Germany (figures refer to former West Germany)

Background

6. In 1990, per capita consumption of fish was estimated at 14kg[1/]. German consumers have increased their consumption of fish and fish products as a result of reduced consumption of red meat on health grounds. Northern Germany consumes about 6 times as much fish as the Southern parts of Germany. The most popular fish is the Herring which has 30.5% of the market.

Survey results

7. There is a limited market in Germany for high quality fresh water fish, Wels catfish, Pike-perch and Sturgeon. Carp is produced locally or available at a lower price in nearby countries. The main importer from Romania is Planfish International who bring in Zander fillets from Tulca by air.

8. Quality criteria: live are preferred to filleted frozen, which in turn are preferred to fresh on ice. However, transport cost and reliability have discouraged the importation of fresh or live fish.

9. Reliability of supply is the primary criterion for success, followed by quality and price.

10. Uniform size pieces are preferred. For Pike-perch this means 300-600g fillets.

11. Average prices quoted (wholesale) for whole fish were as follows:

Table 1: Average wholesale prices for whole fish in Germany

Species	Dm/kg	US$/kg[2/]
Pike-perch	12	7.31
Pike	10	6.09
Catfish	8	4.88
Sturgeon	16	9.75

Source: Personal communications with German fish traders.

12. Prices fluctuate little during the year. Demand is greatest at Easter and Christmas, but at these times supply also increased sharply. The peak consumption period for all kinds of fish in Germany is between the Autumn and Spring.

1/ The following figures are taken from COSTAS R, (1992), European Community Seafood International Directory, 1992, EMAP Heighway, London.

2/ US$ = DM 1.64, January 1993

Netherlands

Background

13. The Dutch consume 14.2kgs per capita of fish a year. This has risen by 12% since 1980 as consumers become increasingly health conscious. The majority of this is Herring (7.7kg). Fresh water species account for only 0.9kg. As in other European countries, consumers are eating a wider variety of species, especially flat fish.

Survey results

14. Traders expressed interest in importing Romanian Pike-perch, catfish, eel and carp with a view to possibly re-exporting to Switzerland. Supply was considered a major constraint ie, it must be regular and in some volume (between 500kg and 1,000kg).

15. Traders are most interested in live fish, but would be prepared to buy fresh on ice and frozen fillets. Batches of fish should weigh between 5kg and 10kg.

France

Background

16. French consumption is 19kg per capita per annum. Much of this (73%) is eaten at home, but the restaurant trade offers good prospects. There are 8,000 fishmongers, more than any other EC country. French tastes are varied, but have recently moved away from fresh fish towards frozen pre-prepared dishes. The market is heavily dependant upon imported supplies.

Survey results

17. Again the greatest interest was in Pike-perch. One trader was importing from Estonia and Poland, via Denmark. Another was importing overland from Russia. This takes two days. Dead whole fish are more commonly traded than fillets. One company contacted sells 2-3 tonnes per week.

18. Pike and perch are also traded in small quantities, as are carp. The latter are sold mainly to the Jewish and Russian minorities in Paris.

19. Quality and quick delivery are the most important considerations for the trade

20. Average import fish prices quoted were as follows:

Table 2: Prices of fish in the French market

Species		Fr/kg	US$/kg[1/]
Pike-perch	- fillets	40-50	7.16-8.94
	- whole	25-50	4.47-8.94
Perch	- whole	10-20	1.79-3.58
Pike	- whole	13-30	2.32-5.37

Source: Personal communications with French fish traders.

21. Fish on ice should be packaged in boxes of between 15 to 20 kg each. Pike-perch are preferred in two size ranges, 1-2 kg and 2-4 kg. Perch should be between 300g and 700g. Quantity delivered is less important than regularity of supply, quality and deliveries of uniform size.

22. Pikes are mainly in demand between October and December and should be between 2-4 kgs. Demand peaks when Northern European lakes freeze up.

Austria

Survey results

23. Traders complained of unreliable delivery and variable product quality. Imports from Hungary, The Czech Republic, Yugoslavia and Germany are preferred.

24. Demand peaks in the winter months. However, the traders contacted were not hopeful of a big market for Romanian fresh water fish. There were keen to point out the tough Austrian import quality controls as a further barrier to trade.

25. Average wholesale prices quoted during the survey are shown in Table 3.

Table 3: Wholesale fresh water fish prices in Austria

Species	A.Sh/kg	US$/kg[1/]
Pike-perch fillets	100-200	5.80-11.59
Sturgeon - whole frozen	200-400	11.59-23.19
Perch - whole fresh	100-200	5.80-11.59

Source: Personal communications with Austrian fish traders.

1/ US$ = Fr 5.59, January 1993
1/ US$ = A.Sh 17.25, January 1993

26. One trader contacted imported nearly 150 tonnes of pike-perch from Romania last year in three consignments. This was to supply the summer demand for tourist on the Danube. Boxes of 5 kg of 10 kg are preferred. He complained about the quality of boxes currently being used by Romania for the export trade.

United Kingdom

Background

27. The UK market is dominated by White fish sales, mainly Cod and Haddock. Prices are high due to pressure on fish stocks and quotas. Per capita consumption is 10 kgs per annum.

28. Convenience products are the big growth area. Fresh fish is sold through fishmongers, whilst processed product are the domain of the multiple retailers. Fresh water products are dominated by Salmon farming in Scotland, which has grown to such an extent that prices are now comparable with cod.

Survey results

29. There is only a very limited UK market for carp among the Jewish population. Many suppliers buy indirectly through major EC middlemen in France, Holland or Denmark. Other sources include Canada and Israel. Prices quoted are shown in Table 4.

Table 4: Indicative prices for fresh water fish in the UK

Species	£/kg	US$/kg[1/]
Sturgeon - smoked fillets	12.00-16.00	8.00-10.67
Carp (fresh, whole):		
Mirror	0.80-0.95	0.53-0.63
Common	0.60-0.70	0.40-0.47
Chinese (grass)	0.80-1.00	0.53-0.67
Crucian	0.60-0.70	0.40-0.47

Source: Personal communications with UK fish traders.

30. Pike, perch and pike-perch are not consumed in the UK in any quantity. One buyer in Billingsgate market buys between 1/4 and 1/2 a tonne of carp a week, mainly sourced from France.

1/ US$ = £1.50, January 1993

Conclusions and recommendations

31. In all the countries contacted demand for fish products is increasing. This is due to the consumers becoming more health conscious and switching to fish from red meats.

32. The opening up of a number of producing regions in Eastern Europe has had an impact on the potential price of Romanian fresh water fish. These countries include former Czechoslovakia (carp and catfish), Estonia (pike-perch and carp), Lithuania (carp), Russia (pike-perch and sturgeon), Poland (pike-perch and carp) and Hungary (carp). There was also considerable production in the former East Germany which is now reaching the Western German market.

33. The main demand is for Pike-perch, either fillets or, in the case of France, whole fresh. These must be of high quality, white, of uniform size and supplied regularly by air. Some demand exists in Holland, Southern Germany and Switzerland for live fish, but transport costs may be the too high. The UK marketed does not buy pike-perch and uses only limited quantities of carp.

34. Some mis-conceptions still exist about fish arriving from Eastern Europe. For example, one major buyer observed that consumers were concerned about the effects of Chernobyl nuclear power station accident on fish quality!

35. Several of the traders contacted said that Romania has developed a bad reputation among traders for poor quality and unreliable supply. Justified of not, action must be taken to redress this.

36. Carp are not in demand. There is a small market for Jewish consumers during key religious festivals, but this demand is largely already met from indigenous production.

37. Many of the traders were concerned about Romania's ability to meet the stringent demands of the new EC fish import regulations with regard to quality.

Annex A

List of people contacted during the study

Germany

1. Mr Werdin, General Manager
   Planfish International
   Teichgut Freundstal
   8804 Dinkesbühl

   Tel: 09851 3089
   Fax: 09851 1383

2. Mrs Grasse
   Forellenzucht Schneemühle
   Pilsach D 8431

   Tel: 09186 1208

3. Mr Horst Wedel
   Am Sportplatz
   8500 Nürnberg-Boxdorf

   Tel: 0911 302785

4. Mr Hanig
   Internationale Fischhandels-Company mbH
   Halle IX
   Abt 19
   Bremerhaven D 2850

   Tel: 0471 73051
   Fax: 0471 76169

Netherlands

1. Mr Van der Weyst
   Aquafish
   Lekerseweg 4
   Venhorst
   NL 5428 NJ

   Tel: 4925 1900
   Fax: 4925 2112

2. Mr de Heer, Export Manager
   Slothouber Holding BV
   PO Box 85477
   Den Haag
   NL 2508 CD

   Tel: 070 3624780
   Fax: 0703609345

3. Mr van der Emt, Managing Director
Schmidt International
Zalmhaven 23
Rotterdam NL 3011 BR

Tel: 010 4332877
Fax: 010 4047387

France

1. Mr Georges Veerman, Director
Martin Import-Export SA
62 route de Mons
Mairieux
Maubeuge F 59600

Tel: 010 33 27648840
Fax: 010 33 27655522

2. Josnin Pêre et fils
13 rue de Calvaire
Passay
La Chevroliere F44118

Tel: 40313001
Fax: 40043980

3. Mr Audin
Pêche et Froid
Bld de Bassin Napoleon
PO Box 229
Boulogne sur Mer F62203

Tel: 010 33 21339233
Fax: 010 33 21808904

Austria

1. Mr Entres
C Warhanek KG
Trost Strasse 73-76
1100 Vienna

Tel: 010 43 1 6041 5810
Fax: 010 43 1 6020 1430

2. Gruber-Hella
Mühlgasse 9/18
1040 Vienna

Tel: 010 43 1 563 273

3. Mr Kusche
Cerny & Teklits KG
Treu Strasse 84
1220 Vienna

Tel: 010 43 1 3328 6440
Tel: 010 43 1 3566 4419

United Kingdom

1. Mr Graham Clarke
Hales Snails Ltd
Sulby House
North Street
Sudbury
Suffolk, CO10 6RE

Tel: 0787 310800
Fax: 0787 310153

2. C J Newnes & Partners
73 Billingsgate Market
London E14 7TQ

Tel: 071 515 0793
Fax: 071 538 4614

3. Lilo & Morris
Billingsgate Market
London E13 7TQ

Tel: 071 987 2268

4. Grivens Products Ltd
297 New X Road
London SE14

Tel: 081 692 6993

Annex B

[insert survey questions here]

[insert survey pro forma here]

Annex C

Terms of reference for a telephone survey of the market for Romanian Fresh Water fish products in mainland Europe

1. During a brief telephone survey of key individual buyers and traders of fish the consultant should undertake the following:

(a) To provide an indication of potential European demand for Romanian fresh water fisheries products;

(b) To identify potential markets and market niches;

(c) To ascertain the requirements of the market in terms of price, presentation, seasonality and quality criteria;

(d) To provide a list of potential buyers/contacts for the Romanian Government.

2. The survey should include at least one major trader in France, Germany, Holland and Austria.

Appendix 6.

Principal freshwater fish species of commercial and aquacultural importance in Romania.

Scientific Name	Romanian Name	English Name
Abramis brama	Platica	Common bream
Alosa pantica	Scrumbie de Dunare	Danube herring
Aspius aspius	Avat	Asp
Cyprinius carpio	Crap	Common carp
Carassius auratus gibelio	Caras	Gibel carp
Rutilus carpathorossicus	Babusca	Carpathian roach
Tinca tinca	Lin	Tench
Stizostedion lucioperca	Salau	Zander/Pike-perch
Esox lucius	Stiuca	Pike
Perca fluviatalis	Biban	Perch
Siluris glanis	Somn	Wels/Danube catfish
Salmo trutta	Pastrav indigen	Trout
Oncorhyncus mykiss	Pastrav curcubeu	Rainbow trout
Hucho hucho	Lostrita	Danube salmon Huchen
Ctenopharyngodon idella	Cosas	Grass carp
Hypophthalmichthys molitrix	Singer	Silver carp
Aristichtys nobilis	Novac	Big-head carp
Mugil cephalus	Laban	Grey mullet
Scomber scomber	Scrumbie albastra	Mackerel
Acipenser ruthenus	Cega	Sterlet
Polyodon spathula		Paddlefish

Appendix 7.

Proposal for setting up and publishing a "Romanian Fish Marketing Bulletin".

Summary

1. To provide much needed access to up to date, Western, general marketing and fish processing information, the supply of a range of trade and technical journals is recommended. The creation of a "Romanian Fish Marketing Bulletin" to disseminate processing, distribution and marketing news and views to the industry is also recommended. To facilitate production of the bulletin the supply of a basic desk top publishing package is recommended.

2. Costs.

	£
Journals 2 years supply @ £498.50 per year	997
Desk top publishing package (a budget, basic word processing package is available at approx £2,000)	3,655
5 day "one to one" training course in use of computer and publishing package	750
TOTAL COST	£5,402

Introduction

3. The fisheries industry in Romania is poorly placed to maximise the potential benefits of the transition from a centrally controlled to a free market economy. This is particularly true as regards the distribution and marketing of fish and fish products. Before the 1989 revolution the industry was production oriented, with virtually no attention paid to marketing. Prices are based on costs rather than the consumers willingness to pay. The industry has operated in relative isolation for many years and has little knowledge of variation in domestic and international fish prices, marketing and retailing methods and technical requirements for export.

Description

4. The objective of the proposal is to provide the commercial fish producers and traders in Romania with access to current, international, information on the processing, packaging, distribution and marketing of fish and fish products. This will be achieved by the supply, for a period of two years, of a limited range of technical, trade and

scientific fisheries journals. A list of recommended journals, with details of the publishers and costs is appended at the end of the proposal.

5. The journals should be held centrally in Bucharest and should be available for consultation by visitors from other parts of the country. The offices of the headquarters of the Fish Producers Association in the MAF building would provide a suitable location.

6. To aid dissemination of the information included in the journals and to act as a forum for discussion in the industry, the creation of a **"Romanian Fish Marketing Bulletin"** is recommended. The bulletin should, initially, be published quarterly and should include a synopsis of the contents of the international journals received. The bulletin should be distributed to managers and technologists in the field. to keep them abreast of the latest domestic and international trends. It is also anticipated that the bulletin will provide a means to disseminate information on fish trade and market information in Romania as the industry changes to meet the challenges of the transition in the economy.

7. To facilitate production of the bulletin it is recommended that Romania should be supplied with a basic desk-top publishing package. This will enable copy, cover and page formats, etc. to be held in the computer. A costed list of the equipment recommended, including parts and consummeables, with suggested suppliers is appended.

8. The authors recommend that the journal should be produced by the Romanian Fish Producers Association and not directly by the MAF. Although the officers of the Association and all the producers are still, effectively, employed by the State, it is anticipated that they will become independent in due course. It is considered important that the bulletin should be a journal of the trade and for the trade. The placing of the bulletin with the Fish Producers Association was discussed with the Chairman, Mr Dimulescu, who indicated that he would support the proposal as the bulletin would be of great value for his members. It is envisaged that, at the end of the project, subscriptions from members of the Fish Producers Association will meet the full costs of producing the Bulletin, without external support.

9. The appointment of an editor for the bulletin, with an office for the computer and printer, together with adequate space to display and store the journals is an essential pre-requisite for the proposal to be approved.

10. Computers are not freely available in Romania and it may be necessary to provide training for the editor in the use of the equipment and software. The chairman of the Fish Producers Association is a strong candidate for one of the UK training placements recommended in the report, as well being an obvious choice as editor for the bulletin. A one

week extension to the main course in UK to cover training in the use of simple desk-top publishing systems would seem appropriate. It may be possible to use *(hire)* the services of the British Council in Bucharest to provide editorial and technical assistance in establishing publication of the bulletin

Recommended Journals

Title	Publisher	Cost per year £
Fishing News International (monthly)	Fishing News Int. Audit House 260 Field End Road Middlesex HA4 9LT	35
Fish Farming International (monthly)	Fish Farming Int. Audit House 260 Field End Road Ruislip Middlesex HA4 9LT	35
Fish Trader (monthly)	FMJ Publications Queensway House 2 Queensway Redhill Surrey RH1 1QS	79.50
Seafood News (monthly)	EMAP Heighway MEED House 21 John Street London WC1 2BP	40
Infofish International (24 copies per year)	Infofish PO BOX 10899 50728 Kuala Lumpur Malaysia	17
Infofish Trade News (24 copies per year)	"	200
Seafood Leader (6 copies per year)	Seafood Leader 1115 NW 46th St Seattle WA 98107 USA	35
World Fishing (monthly)	World Fishing Royston House Caroline Park Edinburgh EH5 1QJ	57
	Total Annual Cost	**£498.50**

Equipment

Item	Supplier	Cost £
Desk-top computer.		

Elonex PC 433B DX
- 200 Mb HDD
- 8Mb RAM
- 2nd. floppy disc drive
- Keyboard
- Colour SVGA 14" Monitor
- Mouse
- Software included
  - DOS 5
  - Windows 3.1
		1485

Additional software packages - Word-4-Windows - Page Maker 4 (5)		145 250
Printer. Hewlett Packard Laser Jet 4		1150
Maintenance and Consummeables - Paper - Floppy disks - Toner cartridges - Cleaning aerosols	250 150 200 25	625
TOTAL COST		**£3655**

As a fallback, a lower cost package, with a less powerful computer, a non-laser printer and only basic word processing software is available for around £2,000, including consummeables.

Appendix 8.

Programme for UK visits and placements.

1. A number of UK study tours and educational placements for Romanian scientists and fisheries workers are recommended to provide training in specialist subjects where locally available knowledge is inadequate to meet the current and anticipated needs of the industry.

Development of legislation for fisheries and Water body management.

2. Two study tours were recommended in the report by Blake and Domaniewski of their visit to Romania in July 1992, and included in the project proposal resulting from the visit that has subsequently been agreed and initiated by the JAU/FCO. In the round up meeting with MAF at the end of this visit the authors stressed the importance for GoR to nominate candidates for these study tours as a matter of urgency as the necessary funds had already been allocated for the current financial year.

3. A Senior Staff member from both MOE and MAF should undertake a three week visit to UK to study regulatory mechanisms and to discuss with specialists solutions to specific Romanian issues in water management. The visit will concentrate on providing a sound legislative framework to meet the many and varied issues to facilitate the effective and sustainable management of the aquatic resources of Romania.

4. A programme of field visits and discussions will be co-ordinated by Dr Domaniewski of the University of Reading.

Fisheries Planning and Management.

5. A training placement for a Senior Staff member of MAF to attend a course in Fisheries Planning and Management is recommended. A suitable three month course is presented each year by the Humberside International Fisheries Institute. The course provides an in depth and comprehensive review of the many issues involved in planning and managing the development of fisheries. Privatisation of many industries in Romania, including fisheries, will present the Government with many new problems. The encouragement and control of the emerging private sector to increase production of the fisheries will require new strategies, together with the responsibility to ensure development of the industry on a sustainable basis in the national interest.

6. The Planning and Management course syllabus covers the following topics in three major modules:-

i) Foundation studies (3 weeks)
- an introduction to economics
- an introduction to fisheries economics
- an introduction to the use of micro-computers

ii) Fisheries Planning (3 weeks)
- the formulation of strategic plans
- report writing
- negotiation for implementation
- preparation of project proposals, including logical frameworks

iii) Management
- gaol-directed project management
- fish marketing
- the management of post-harvest technology
- fish stock assessment and fisheries management
- other topics, a range of options to meet the particular needs of individual participants are available, these have included financial management, law of the sea, company law and joint venture management

The course is university based and comprises lectures, case studies, group discussions and industrial visits.

Fisheries Distribution and Marketing.

7. The privatisation of the fishing industry is already taking place and the authors have also recommended that the Government controls on marketing should be removed to permit the development of a private retailing sector, where fish is allowed to find its true value in the market. This will present MAF and GoR with new challenges to formulate and introduce an effective system for the distribution and marketing of fish and fish products.

8. A three month training attachment is recommended for a Senior Official of the Romanian Fish Producers Association or, possibly, a Senior Staff member of MAF, to study the distribution and marketing of fish and fish products. The University of Humberside in Grimsby can offer a tailor made three month course in fish distribution and marketing. The course would cover the basic aspects of fish distribution and marketing, with particular emphasis on industrial visits and attachments to provide practical, first hand experience.

9. Attachments to the Fish Inspectors and a wholesale trader at Billingsgate Market in London and a retail fish trader in Kent can be arranged and are recommended. To facilitate this the participant should be attached to NRI for a two week period at the end of the Humberside course.

10. The authors have further recommended that a system of wholesale marketing should be considered for introduction in Romania. To facilitate this a "workshop" should be held so that fish producers and Government can discuss the issues involved and, providing the concept is accepted, prepare a strategy for its introduction.

11. The trainees in Planning and Management, and Distribution and Marketing should, at the end of their main courses, prepare briefs on the key issues and options available in the distribution and marketing of fish and fish products. These will be presented as discussion papers at the proposed workshop on wholesale marketing. It is suggested that a one week attachment to NRI is provided for this purpose.

12. The anticipated costs for the training attachments recommended in this section are:-

	£
Planning and Management	
Return flights - Romania/UK	900
Course fee at HIFI, includes accommodation	5,950
Meal allowances 84 days @ £32	2,688
1 week attachment to NRI to prepare brief for proposed workshop in Bucharest, 3 md NRI staff time	1,005
7 days subsistence @ £62.70	439
Local travel and book allowance	500
Total cost	**£11,482**
Distribution and Marketing	
Return flights - Romania/UK	900
Subsistence @105 days @ £62.70,	6,584
Course fee	3,500
14 day industrial attachments at Billingsgate market and with a retail fish trader (estimated nominal fees)	500
1 week NRI attachment to prepare brief for proposed workshop in Bucharest, 2 man days staff support time @ £335	670
Local travel and book allowance	500
Total cost	**£12,654**
Total training costs	**£24,136**

Appendix 9.

Terms of reference for the visit to Romania of a fish feed specialist.

1. The specialist will visit Romania for a period of six weeks as part of the on-going UK "Know How Fund" project to "provide assistance to the Government of Romania in improving the management and productivity of inland fisheries".

2. The original project document proposed that the fish feed technologist should concentrate on feeds for salmonids (trout). In the view of the authors the feeding of common carp to achieve better growth rates is of more immediate importance to the industry. Many of the inland producers of fish have undertaken to increase the proportion of common carp raised in the ponds and they are already facing severe problems in obtaining raw materials and formulating suitable feeds.

3. The fish feed specialist should undertake the following:-

a) Visit a range of fish farms, in different parts of the country, to establish the feed ingredients purchased and the methods of usage.

b) Assess the availability, cost and nutritive value of materials of potential use as fish feed ingredients.

c) In collaboration with counterpart staff at one or two centres investigate methods of developing new fish feeds, for both salmonids and cyprinids, to utilise any new ingredients and improve yields.

d) Examine the production methods currently used for the brine shrimp (*Artemia salina*), an important feed for fish fry, and advise on measures to improve production.

4. The fish feed specialist should prepare a draft preliminary report for round up meetings with the British Embassy and Ministry of Agriculture and Food senior staff. A detailed, final report should be completed within four weeks of returning to UK.

5. A proposal for a JAU funded project, under the "Know How" initiative, is currently being considered for a mission to investigate increasing the availability of raw materials and improving feed formulation for the whole livestock industry. If this proposal is approved it is anticipated that the feed technologist will participate in both missions. If this happens it will be necessary to consider changing the TOR's to prevent unnecessary duplication with the two visits.

Appendix 10.

A proposal for a "technical workshop" to discuss the options for market reform in Romania.

Summary

1. A proposal is presented for funding under the "Know how" initiative to organise a technical workshop in Bucharest for The Fish Producers Association and MAF to discuss options for reform in the marketing of fish in Romania, particularly the prospects for introducing wholesale selling and establishing an open, competitive retail sector.

2. The costs shown are for the attendance of a UK socio-economist and a post-harvest fisheries technologist at the workshop. It is anticipated that MAF will arrange a venue and provide for the attendance by officials from most, if not all the commercial fish producers.

	£
2 return air fares, London-Bucharest	1,800
2 X 8 days subsistence 16 days @ £70	1,120
2 x 10 days NRI B3 staff time @ £335	6,700
Incidentals	500
TOTAL	**£10,120**

Introduction

3. The existing distribution and marketing system for freshwater fish in Romania is controlled throughout by the Fish Producers, where each association has its own facilities for distribution and its own retail outlets. This system is relatively inflexible and takes little account of the situation in the market place. The restrictions on price mark-up and profit places the industry under severe constraint. Since the 1989 revolution production from the freshwater aquaculture industry has fallen as a result of the removal of State subsidies, but with the continued imposition of controls on selling. The uncertainties of the drastic changes associated with the transition of the economy from command to market has exacerbated the problems facing the industry.

4. In the opinion of the consultants, the controls on selling prices are central to the problems of the industry. It is recommended that GoR should remove all price controls in the fish industry as an essential pre-requisite for the proposed privatisation of the industry.

5. The existing structure of the industry, with the producers controlling all sectors of the market is not conducive to liberalising the economy. Producers, by training, background and, very often, inclination, have concentrated on aspects of production with the marketing of

their products as very much an incidental activity. The controls on prices provide an incentive to keep the distribution and marketing as simple and low cost as possible, to minimise erosion of the permitted mark-up and provide some profit.

6. To adapt to the changing circumstances it is recommended that a system of wholesale marketing is introduced. Producers would supply fish to the wholesale market for onward selling by a new, independent, competitive retail sector. This would allow the producers to do what they do best, that is, grow fish.

7. Such a radical change to the marketing system for fish will require approval by GoR and agreement by the Fish Producers to give up their existing marketing activities.

Presentation of a technical workshop

8. It is recommended that a technical workshop is held in Romania to allow GoR, MAF and the Fish Producers Association to discuss the issues involved in changing the distribution and marketing of fish and consider the options for introducing changes to meet the perceived needs of the industry and the consumer.

9. To allow a full discussion of topics that, in many respects, are totally new to the participants, it is recommended that the meeting be held over three full days. This will provide adequate time for informal discussions to consider the implications of any likely changes.

10. Training courses in the UK in Fisheries Planning and Management, and Fish Distribution and Marketing have been proposed elsewhere in the report. Each of the candidates has been tasked with preparing background papers on the options available in fish distribution and marketing for presentation at the opening session of the workshop.

11. It is further proposed that the organising committee for the meeting prepare a report for GoR, outlining the findings and presenting their recommendations for changes to the system for the distribution and marketing of fish.

<u>Objectives</u>

12. To co-ordinate and direct discussion on Market restructuring between policy makers and key business leaders.

13. To pull together various aspects of the "Know how" initiative inputs in the sector (including training, consultancy, market research and technical advice) and engender a dialogue on future options.

Outputs

14. The following outputs from the workshop ate envisaged:-

i) Proceedings to be published in Romania.

ii) Articles on markets, privatisation and water management to be published in the Romanian Fish Marketing Bulletin (which will be launched at the workshop).

iii) Prepare an "Action Plan" for future market structure, as a result of the workshop, for presentation to GoR. If a strong case for introducing a new system for marketing fish can be made, a draft proposal for submission to international aid donors, that includes the essential infrastructure, will also be prepared.

Costs

15. Know how initiative support is limited to the attendance of a NRI socio-economist and post-harvest technologist at the workshop. It is anticipated that MAF will arrange the venue and organise the attendance by representatives of the Fish Producers Association and commercial fish producing societies.

		£
a.	Two air fares Bucharest - London @£900	1,800
b.	Subsistence @ £70/day 8 days each	1,120
c.	NRI B3 staff time 10 days each @ £335	6,700
d.	Incidentals, (local travel etc)	500
	TOTAL	£10,120