



**BAY OF BENGAL PROGRAMME  
DEVELOPMENT OF SMALL-SCALE FISHERIES**



THE IMPACT OF MANAGEMENT TRAINING  
ON THE PERFORMANCE OF MARKETING OFFICERS IN STATE FISHERIES CORPORATIONS

BOBP/WP/22

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This paper reports the findings of an investigation on the impact of two training courses on fish marketing management held for fisheries officials of Tamil Nadu (December 1979) and Andhra Pradesh (November 1980). Participants of the two courses were interviewed in April 1981 as part of the investigation.

The courses (held in cooperation with the Governments of Tamil Nadu and Andhra Pradesh respectively), the investigation into their impact, and the paper produced as a result of the investigation, are activities of the Project for Small-Scale Fisheries Development of the Bay of Bengal Programme. It is executed by the Food and Agriculture Organisation of the United Nations (FAO) and funded by the Swedish International Development Authority (SIDA). It covers five countries bordering the Bay of Bengal – Bangladesh, India, Malaysia, Sri Lanka, Thailand. Its main aims are to develop, demonstrate and promote appropriate technologies and methodologies to improve the conditions of small-scale fisherfolk and the supply of fish in the small-scale sector in the five member countries.

This document is a working paper and has not been cleared by the Government or the FAO.

## **INTRODUCTION**

In December 1979 a number of Tamil Nadu fisheries officials attended a short residential course of training in the management of fish marketing, organised by the FAO/SIDA Bay of Bengal Programme. In November 1980 a similar course was held in Andhra Pradesh.

The participants of both courses were interviewed later (in April 1981) to find out what they remembered of the course, whether any of the information and skills imparted during the course were of help in carrying out their present duties, whether it was relevant to the management objectives that had been set, what effect it was having on their careers, what their current problems were and what suggestions they had for any future short course in fish marketing for management staff. Information was also gathered on each participant's position in the organisation which employed him, his position before he attended the course, and his duties. It was hoped this would provide some insight into whether the material presented in the course was appropriate and adequate for the intended purpose, and also whether the methods of teaching were effective. Such an insight would help in the planning and execution of future training courses not only in fish marketing but in other specialised managerial functions.

This working paper describes the two training courses and the subsequent investigation into their impact and effectiveness; it presents the findings of the investigation and some of the conclusions that can be drawn as well as some suggestions on the planning of future training courses.

The investigation was planned and conducted in the light of certain principles, now widely accepted and applied, regarding the purposes and methods of education and training programmes. Short notes have been appended to the working paper to assist the reader unfamiliar with current thinking on these matters to appreciate more fully the methods of investigation, the topics covered, the comments and conclusions and the suggestions for the future.

## **CONCLUSIONS AND RECOMMENDATIONS**

### **Impact of the Courses**

The study shows clearly that the marketing management training courses did not have much impact upon the subsequent behaviour and performance of the participants because of:

- (a) organisational constraints in the marketing corporations themselves;
- (b) a lack of information about supply, demand, and the manner in which the traditional marketing system functions;
- (c) specific local problems which became apparent when the trainees tried to put their newly acquired knowledge and skills to practical use; and
- (d) insufficient didactic planning and conduct of some parts of the training itself.

The impact of fish marketing management training courses could probably be improved if the training effort were more diversified and made up of different kinds of units, each designed to serve a particular purpose. The training should be coordinated with other measures such as research, organisational development and greater use of experts to provide advice not only during training courses but also and more especially on the job.

### **Future Training**

*Research:* Surveys should be conducted to furnish demand and supply data as well as information about the structure and functioning of the present marketing system.

*Organisational development:* The organisational structures of the marketing corporations have to be improved by establishing agreed, unambiguous operational goals. Among other things, the division of labour, the flow of information and the systems of accounting should be reviewed.

*General training:* A residential training course of a longer duration, covering all relevant subjects, would be useful.

*Practical work problems:* During the practical work sessions, specialised advice should be made available to in-service trainees to deal with specific problems not foreseen during the preparation and conduct of the formal training courses.

*Workshops:* Workshops of short duration should be held from time to time to exchange and generalise experiences and find solutions to new problems.

*Specific training:* Short-duration training in specific subjects should be provided, emphasising only knowledge and skills and in-depth study of subjects dealt with during the general training courses.

*Background materials and self-instructional materials:* To prepare, deepen and extend the understanding of all subjects dealt with in residential courses, background materials and self-instructional materials should be supplied to the trainees on all the subjects covered.

### **Methods of Education and Training**

*To summarize the educational findings:* All types of training activities – general training, courses on specialised topics, workshops, or any other—should conform to the following principles:

- Unambiguous and clear objectives should be set for the course of education and training, keeping in mind the objectives and functions of the corporations.

- The methods of instruction should be compatible with and appropriate to the goals.
- All lecturers and other instructors should be familiar with practical problems encountered by the corporations in their fields of operation and with the local fisheries and fish trade.
- The predominant style of training should be participatory.
- All relevant domains of learning, including pragmatic (skills), cognitive (abilities) and normative (attitudes and values), must be taken into consideration.
- Courses and elements or parts of courses must be so designed as to create intrinsic motivation in the individual trainee.
- The training should include the setting of tasks with a moderate degree of difficulty and with a flexible range of solutions ; a problem with a unique solution which is "*the answer*" is likely to be over-simple and unrealistic.
- The ways in which trainees can put the course to practical use should be elucidated.

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## 1. PURPOSE OF THE **POST-EVALUATION STUDY**

Does training really influence the professional performance of trainees? How can training programmes and courses be designed and run so as to produce the desired impact and achieve their intended objectives? What aspects and conditions should be taken into consideration in the planning?

There is a relatively simple answer to these questions. Empirical educational research as well as practical teaching experience confirm the common-sense view that training can indeed improve the professional performance of trainees, provided that

- their future professional environment, its demands and expectations are known;
- the needs and motives of participants and of society are identified;
- the planning and evaluation of the training programme not only take these preconditions into account but also conform to up-to-date educational standards.

At present, however, many training courses are organized by laymen, and are planned by: (a) describing a general target group (b) stating broad objectives (c) indicating the broad subjects to be covered and (d) engaging “external” consultants as lecturers. This procedure is inadequate in various respects. For example, the lecturers are not sufficiently familiar with the social, legal and economic background and the objectives, functions, operational constraints, organisation, methods and attitudes of the agencies which employ or are most likely to employ the trainees.

Another reason for inadequate course preparation is that many organisers of training courses are not familiar with the concept of “curriculum development”. This has been in vogue for some years in many countries in order to make school education, vocational training, university studies, and adult education more effective by bringing them more in line with the needs of individuals and society. Curriculum development tries to obtain and analyse information about the demands of future professional environments: and also about individual and social needs which have to be met by skills and knowledge which in turn have to be improved or created by training.

Moreover, the present practice often breeds failure as a result of insufficient course preparation, especially when the lecturers themselves are “practical” men and not professional teachers or instructors. For example:

- There is no precise didactic course planning, which alone can ensure that there is no overlap, that the learning and teaching proceed step by step, that references and links among various subjects are established in a logical way, that adequate techniques of motivation, reinforcement and feedback are applied, and so on.
- No objective test is carried out of success in learning: No tests at the end of the courses, no post-evaluation studies which alone can prove whether, and to what extent, skills and knowledge have been successfully transferred.
- As a result, clear information for all involved is lacking.

Such defects, on the one hand, hamper the direct impact of training as well as its long-term impact on professional performance. On the other hand, they prevent, in the longer run, organisations like the FAO Department of Fisheries from developing training methods in a systematic way, through learning from experience and by introducing improvements more or less continually.

The rationale of this working paper is threefold.

First, it tries to demonstrate the usefulness of post-evaluation studies and didactic analysis for fish marketing management training and suggests improvements in future courses. In so doing,



it deals with a specific type of training that is widely used: the single residential course. Second, it demonstrates by an example a general method of curriculum evaluation and thereby of analysing different curriculum elements, both macro- and micro-didactic, and styles of teaching. Third, the working paper generalizes its results and draws conclusions regarding supplementary and alternative training concepts and methods that might be used also in other fields.

Appendix 4 describes the methods used to evaluate the courses. For a brief account of the modern approach to education and training, see Appendix 6.

## 2. PLANNING AND CONDUCT OF THE TRAINING

For a description of the courses the reader should refer to BOBP/REP/9, "Report of the Training Course for Fish Marketing Personnel of Tamil Nadu" and BOBP/REP/12, "Report of the Training Course for Fish Marketing Personnel of Andhra Pradesh".

### 2.1 Macro-didactic structure

The programmes of the courses are given in Appendices 2 and 3. They emphasised an integrated planning/management approach towards the procurement, handling, processing, distribution, promotion and sale of fish in such a way as to achieve the objectives of the Tamil Nadu Fisheries Development Corporation (TNFDC) and the Andhra Pradesh Fisheries Corporation (APFC) respectively. These objectives included, for example: increasing the incomes of fishermen, and supplying larger quantities of fish at cheaper rates to less developed sections of society to meet their nutritional needs.

A so-called 'Business Game' served as a major tool to achieve the targets of the training. This was a version of a "game" developed by the White Fish Authority (now known as the Sea Fish Industry Authority) of the United Kingdom, modified and adapted to local circumstances and to the requirements and timetable of the courses.

During the game, the participants form small groups, each of which represents a fish marketing corporation. The various corporations simulate the business decisions and transactions of real-life fish marketing enterprises, competing with each other in procuring, processing, distributing and selling their fish. The students have to maintain proper accounts of their operations, which are evaluated after each period of the game. To provide the necessary background knowledge as well as additional information, lectures are given on accounting, management, fish handling and marketing facilities, methods of market research, marketing strategies, sales systems and pricing, and also on the socio-economics of small-scale fisheries.

The major teaching/learning methods used throughout the business game were small working groups and lectures. The lectures directly connected with the game served four different purposes:

- to brief the participants on the game procedures (the rules of the game).
- to help them understand the marketing operations to be carried out during the game as well as their documentation.
- to tell participants about modifications introduced from time to time in the rules of the game, and to inform them about rules that had to be defined before the start of each period of play, such as on fish prices, available quantities, etc.
- to provide feed-back to each team, at the end of each period of play, which in real life would have been supplied to them by clerical and financial staff, sales staff and so on: e.g. the results of their marketing efforts such as total fish quantities sold, and total income received.

If the business game were to be an effective method of conveying certain lessons, experiences and skills to the participants, it had to be played at sufficient speed to ensure that the consequences of various decisions made by the participating teams in the course of the game became obvious. The game was therefore played strictly according to the rules. Though these rules did not fully reflect the real-life situation in Tamil Nadu or Andhra Pradesh or in the two Corporations, discussion on how the rules differed from real-life situations and from the individual participant's past experience was not practicable in the course of the game because of time limitations.

While the business game represented the central didactic core of the structure of the training course, a supporting series of lectures on various topics such as marketing research, sales and price systems, handling and marketing facilities, socio-economic conditions in small-scale fisheries, etc., was meant to provide background information.

At the end of both courses, small discussion groups were established to consider the application of the acquired knowledge to practical fish marketing operations.

## **2.2 General conduct of the course**

In what follows, the differences between the two courses are pointed out; the didactic structure of the Andhra Pradesh course is explained in greater detail; and the major results of the evaluation of the Andhra Pradesh course carried out at the time (see BOBP/REP/12) are summarized.

Some predictions are then made about the impact of the course which will be compared with the results of the post-evaluation. It is assumed that as far as common curriculum elements are concerned – any conclusions based on the observation of the Andhra Pradesh course are at least partly, if not entirely, valid for the Tamil Nadu course also, since course planner, co-ordinator, chief instructors (with one exception), major subjects and teaching methods were identical.

Being two days longer than the Tamil Nadu course, the Andhra Pradesh course covered additional subjects. These were: the status of fisheries and fish marketing in the state, in particular the marketing strategy of the Andhra Pradesh Fisheries Corporation; its accounting system; and the sociological, economic and technical aspects of fisheries development in the state. Also, more emphasis was placed on organizational and management objectives in general and on Indian fisheries in particular, also on management as a professional skill and on performance criteria.

While the lectures on the status of fisheries and fish marketing in the state gave information about socio-economic conditions in coastal areas and about the general goals of government policies, they did not adequately cover two important aspects:

- (1) The operation of private fish traders (middlemen) was dealt with mainly as a moral issue. The account of the practical functioning of the present marketing system lacked a clear description of the different categories of persons involved in marketing, their functions in procurement, distribution and retailing, their social functions or their profit margins.
- (2) The fisheries were described in terms of resources, total landings development plans, craft and gear. The seasonal and geographical variations in catches and in the species composition of the catches, and the acceptability of the various species in the market were not described.

The lectures on planning and on formulation and use of management objectives in the fishery industry were rather general, and applicable to many countries in various parts of the world, developed as well as developing. There were no specifics on overall goals and too little problem-oriented discussion or reference to the implementation of the goals. This was illustrated by an inconclusive discussion on the failure of the cooperative movement in fishing villages. Present planning and management structures in fish marketing were not covered nor were the constraints under which they operate.

Thus though the additional lectures given in the Andhra Pradesh course gave the participants a better idea of the socio-economic conditions of the fisherfolk, they did not give a very clear idea of the fish marketing situation or of how the marketing operation is supposed to support the general objectives of the Corporation—to provide nutrition for lower-income groups, increase employment, minimise cost, maximize market share, or pay higher prices to fishermen. The business game showed that all these different objectives could not be achieved at the same time, partly because some of them are conflicting aims. It illustrated, among other things, that if a corporation competes with a private trader, it is unlikely to be able simultaneously to offer higher prices to fishermen and lower prices to consumers, unless subsidised. More especially, the kind of objectives noted above, and other social and political objectives, can never be achieved by a commercial enterprise, even a state corporation, which is not aware of the attitudes and methods of its competitors.

In such circumstances, the business game might have had a negative effect on the process of learning – on how to convert theoretical objectives into practical management decisions. It could have conveyed – perhaps at a sub-conscious level – the impression that the objectives are not relevant at all and that their only function is to window-dress what takes place in practice.

### 2.3 Style of training

When considering the style of training, the courses must be subdivided into three parts:

Part A—the business game including the lectures directly related to the game.

Part B – the additional lectures on marketing facilities, marketing research, etc.

Part C—the group exercises towards the end of both courses, which were intended to review the application of the knowledge that had been acquired.

#### 2.3.1 *The Business Game: participatory training*

The style of training dominating Part A can be described as participatory. During the teamwork, throughout the whole of the business game, the participants played a very active part in the learning process by analysing a given market situation, discussing strategies, suggesting solutions, etc. The trainees also initiated occasional discussions regarding the rules of the game and the criteria applied in the periodic evaluation of the teams' efforts. Sometimes the participants succeeded in persuading the instructors to modify the rules; these contributions were appreciated by the teachers.

The lectures directly associated with the game were also given in a cooperative style. During the entire duration of the game and the directly associated lectures, which together formed a complete didactic unit, the students were encouraged to state opinions, ask questions, criticize, suggest solutions. This aroused interest, and the ideas they offered helped to make the games more stimulating.

In the final session of the game, the evaluation of the overall course was left to the participants, thus stressing again the participatory character.

Research in education, industrial sociology and management psychology suggests that participative teaching methods are likely to produce certain predictable effects. The active involvement of the students in all stages and at all levels of the process of learning helps them identify with the goals and subjects. Subjects are learned more thoroughly and remembered longer than if a non-participatory style of training is adopted. Thus a cooperative style of training results in more permanent improvement. Further, it encourages subsequent self-motivated learning. Another major impact of a cooperative style of training is supposed to be the acquisition of critical, analytic and problem-solving skills: for instance, operational knowledge that can be applied to new problems and tasks.

As regards the interrelationship between macro-didactic elements and style of training, the target-oriented task represented by the business game, carried out in small groups—strictly following the rules of the game – was associated with a cooperative style of teaching and, thus enriched, became an enjoyable, cooperative exercise, the goals of which were largely thought out by each individual participant for himself. The results can be expected to be long-lasting: a problem-oriented flexible capability for management, planning and organization and a serious commitment towards an overall planning and management approach is likely to be created.

However, this might possibly give rise to problems, in view of the lack of clear objectives in the corporations and lack of links and references to the present marketing and management set-up.

The impact to be expected from this style of training was indeed what was observed in the follow-up evaluation which is the subject of this report and which will be discussed in detail. The adoption of this style of training may well, therefore, have contributed to the observed impact.

### **2.3.2** *The lectures: an autocratic style of training*

Part B of the courses contained the relevant technical information on fish marketing such as marketing facilities, fish handling, market research, management information and performance criteria, etc. The style of training adopted can be described as more or less autocratic – one-way communication between lecturer and participant; question-and-answer teaching; instructions, demands, test questions, praise and recognition directed towards individuals. This was the result of using a particular method of teaching, namely, the set-piece lecture.

The effect of an autocratic style of training can be expected to be – as far as the reaction of the students is concerned – either obedience and attempts to conform (with more externally motivated students) or lack of interest and opposition (with internally motivated students). As regards the effect on learning, swift observance of instructions is likely but no learning without the teacher's control; also likely are passive reception of knowledge and little independent thought. A possible positive effect (of autocratic teaching) is a quick transfer of technical knowledge to the learner.

The positive impact of an autocratic teaching style depends again on the relationship between goals and content, that is, on the macro-didactic structure. Only if the subject is taken up step by step in a goal-oriented, logical way, taking into account the existing knowledge and prior experience of the students, can a swift transfer of knowledge be expected with the help of autocratic teaching – always assuming that the students accept this style of training.

Nearly all the counter-productive kinds of reaction to this kind of teaching were in fact observed during the Andhra Pradesh course. The positive effect of transmitting masses of technical information quickly was probably achieved only in the series of lectures on “fish handling and marketing facilities,” “socio-economic conditions of fisherfolk” and “resources and utilization of fisheries”.

### **2.3.3** *The laissez-faire approach*

Although a very short part of the course, Part C was crucial, since it was explicitly intended to relate and apply the knowledge gained during the course to actual fish marketing conditions in Andhra Pradesh and Tamil Nadu and in particular to the practical duties of participants. It was characterised by a laissez-faire style of training. In the Tamil Nadu course, a group discussion referred the course contents to fish marketing in Tamil Nadu; in the Andhra Pradesh course, small groups simulated the implementation of an imaginary fish marketing project. Both formed the last exercises of the respective courses.

While it may be doubtful whether a ‘laissez-faire’ style is a style of training at all, it can be described as a totally learner-oriented way of teaching, where the role of the teacher is more or less reduced to the role of a consultant who may be involved by the learner or not. Thus ‘laissez-faire’ retains all the advantages of methods where the goals are thought out by each individual for himself, as with a cooperative style of training. However, its success depends more than anything else on certain preconditions such as practical and unambiguous management and planning goals, detailed information about relevant local conditions, etc.

Because sufficient information was not available to reflect the peculiarities of local marketing conditions in detail, and because clear, practical, unambiguous and compatible management and planning goals were lacking, the impact of Part C on the professional performance of the participants was expected to be negligible. This could already be foreseen in view of the vague conclusions of the small group projects and group discussions.

## **2.4 Micro-didactic structure**

The micro-didactic structure varied according to the style of training. If the micro-didactic structure is sound, it implies that the degree of professionalism in teaching is high.

Part A of the course, that is the business game, can be regarded as an example of thoroughly professional micro-teaching. The structure of the game helped motivate the participants. It also supported their active involvement in the learning process and helped them acquire and apply

new knowledge with speed and thoroughness. Further, the instructors helped improve the teams' performance, encouraged good work and explained mistakes and clarified misunderstandings. Other factors that helped positive motivation during that part of the course were the unambiguous rules of the game; a clear view of the tasks; the "sporting" competition among the teams; the chance for independent learning; and the relative ease of the tasks combined with a flexible range of possible achievements.

The motivation of the participants could have been improved further if the objectives of the 'real' corporations had been as clear as those of the 'business game' corporations, thereby making it possible to connect the subject matter of the game more closely with the learner's own interests and also to elucidate the ways in which the results of the training could be put to practical use.

Throughout Parts B and C of the course, there was no organized or systematic motivation of participants. This was because the response expected of the participants during these periods was given too little consideration. Since no particular response was intended, there was little.

While Part B of the courses included, if at all, only stages one and two according to the notation of learning steps and therefore excluded execution, practice and evaluation as well as transfer, Part C consisted only of the final stage, namely transfer—which, however, was not prepared for adequately by the previous periods of the course.

Only Part A was organised in such a way that different steps or stages of learning were considered, with the exception of the last stage which was left to the small group exercises towards the end of the course. On the whole, the micro-didactic structure was in line with the styles of training adopted during the different periods of the course and probably reinforced their long-term impact.

### **3. HYPOTHESIS ABOUT COURSE IMPACT**

#### **3.1 Analysis of course objectives**

To make any hypothesis about the impact of the course more specific and thereby more practical we have to refer it to an accurate structure of learning objectives. Since an appropriate list of objectives had not been prepared before the courses, it is not possible to do more than analyse the implicit objectives governing the training, as observed during the Andhra Pradesh course. Different types of objectives have to be taken into account, related to different domains of learning.

From observation of the Andhra Pradesh course, it appeared to have had the following objectives:

- (a) Objectives at the level of organizational, social, political and economic attitudes (normative domain of learning). The participants should understand and support the efforts of the Corporation:
  - (i) to pay higher prices to the fisherfolk
  - (ii) to provide employment in fish capture, fish marketing, fish handling
  - (iii) to provide food for lower-income groups, especially in rural areas, to meet the nutritional requirements of these groups
  - (iv) to reduce the role of middlemen and money-lenders in marketing
  - (v) to minimise costs within the marketing organisation, to maximise market share, to maximise profits
  - (vi) to conform to or adopt modern principles and standards of marketing, accounting and fish handling
  - (vii) to understand that the efforts to improve the social and economic conditions of small-scale fisherfolk with the help of better organized marketing can be successful, in the longer run, only if they are part of an integrated approach that covers also educational, cultural, housing, health and other aspects of community life, intended to improve the entire lifestyle and thinking of the fisherfolk.

(b) Objectives at the level of knowledge (cognitive domain of learning). The participants should acquire:

- (i) Knowledge about regional problems and prospects of fisheries, including:
  - a. information about problems and prospects of fish marketing in India
  - b. information about problems and prospects of fish marketing in the state
  - c. information about socio-economic conditions in fisheries in the state
  - d. information about the marketing strategy of the corporation type marketing organisation<sup>1</sup>.
- (ii) Knowledge about marketing, management and accounting tools and techniques such as:
  - a. information about accounting; roles of trading organizations; relevance of accounting, purchases, sales, working capital, balance sheet, source and use of cash, profit and loss account, product costs
  - b. information about the methods of marketing research
  - c. information about pricing and price policies
  - d. organisation and management of fisheries planning and policies.
- (iii) Knowledge about fish handling/marketing facilities.

(c) Objectives at the level of abilities and skills (pragmatic domain of learning).

Mainly with the help of the business game, the following should be developed:

- (i) the ability to analyse the situation of a marketing organization, as indicated by a profit and loss statement and by a balance sheet.
- (ii) The ability to develop an appropriate marketing strategy to solve marketing management problems by:
  - a. interpreting marketing research data in order to decide on the location of new fish markets
  - b. developing sales of fish from a coastal wholesale market
  - c. identification of labour requirements
  - d. deciding on the method of processing
  - e. organizing storage of fish
  - f. organizing a distribution system
  - g. planning sales and prices
  - h. using cash in a proper way
  - i. controlling all revenue from marketing operations.

(d) Objectives at the level of transfer abilities (transfer component):

- (i) To enable the participants to implement and supervise a regional fisheries marketing programme that takes into account the objectives of the training course discussed above.
- (ii) To design a market research study with the available resources, taking into consideration the regional conditions.

The foregoing didactical analysis of the curricula and conduct of both courses and the detailed list of course objectives enable a hypothesis to be formed about their practical impact.

<sup>1</sup>Up to here the objectives were especially adopted in the A.P. course. From here on they are valid for both courses.

### 3.2 The expected impact of the courses

The goals contained in objectives 3.1 (a), (l) to (vi) may be too general to be of guidance to practical marketing operations, more so because they were not translated into practical behaviour during the course itself. Also, they may have been ambiguous, as seems to be the case with the Andhra Pradesh course. Nevertheless, the participants were strongly encouraged — through intrinsic motivation, by organization of lessons, by a participative style of teaching and by other appropriate means—to pursue a target-oriented approach to planning and marketing.

This confusion between aims and precepts may have resulted in an uncritical acceptance of the lack of sufficient realism (case 1); or else in subsequent attempts to improve the real situation according to the knowledge gained during the course. This again may have been appreciated and encouraged by the superiors of the trainees (case 2), or it may not, in which case attempts to introduce change would have been hindered or ignored (case 3). Only case 2 represents a useful outcome of the training courses in this respect.

Although it was emphasized several times during the course that marketing should be linked with educational, social and similar welfare activities, no practical suggestions were made as to how this might be done. Thus the impact of the course in this respect can be taken to be negligible.

The information imparted during the courses about the present fish marketing systems and the marketing strategy of the Corporations, together with the knowledge about market research, pricing policies and pricing, and organisation and management of fisheries planning policies— 3.1 (b), (i) a to (i) d and (ii) b to (ii) d—was probably too general to provide guidelines for any practically observable professional action. Furthermore, the autocratic teaching style, a lack of clear relationships between goals and contents, an insufficient organisation of lessons (only the first two stages of learning were considered), probably stifled long-term ability to recall the contents of the lectures even in general terms, let alone acceptance of and identification with the implications and the attitudes and approach expressed therein.

However, detailed information was given on practical aspects of accounting and business administration —3.1 (b), (ii) a— and some on fish handling and marketing facilities, so that a positive impact on accounting and fish handling skills could be expected.

The foregoing observations suggested that the main objective of the training courses, at the level of abilities and skills, would not be fully achieved.

During the courses, there was no attempt to present and explain the marketing strategy of the Corporations; nor was information about the private fish marketing system (the competitors) presented during the courses. Thus it may not have been possible for the participants to analyse the condition of their marketing organisation and appreciate its marketing strategy, subject it to informed criticism and make suggestions for its further development — 3.1 (c) (i and ii) — leaving aside the question whether such matters were within their competence.

Regarding the achievement of objectives at the level of abilities and skills, the content and conduct of the courses suggest the following hypothesis:

- No market research data was available; the knowledge acquired during the course was not sufficient to allow participants to conduct their own market research studies. It was not within the competence of the participants to decide on or to suggest the location of new fish markets—3.1 (c), (ii) a.
- The main problem in actual fish marketing in Tamil Nadu and Andhra Pradesh was not—as in the business game— to develop sales from coastal wholesale markets, but to develop direct procurement from various scattered landing places. This was covered in a sense, to some extent, by the account of the socio-economic conditions of fisherfolk.
- Decisions on methods of processing, identification of labour requirements, organisation of fish storage and distribution—3.1 (c), (ii) c to (ii) f— may have been improved by the training, since abilities and skills in these matters were the core objectives of the business game, with its favourable participative style of training, organisation of lessons and good motivation.

A positive impact can furthermore be expected since it does not depend upon the existence of a consistent, unambiguous overall marketing strategy on the part of the Corporation. However, the participants probably had to overcome difficulties arising from local conditions which were not covered by the training course. As far as the achievement of objectives 3.1 (c) (ii) h and (ii) i – “using cash in a proper way” and “controlling all revenues from marketing operations” – is concerned, there is some doubt, because the present accounting systems of the Corporations and their organisational structures did not form part of the courses.

Finally, as regards what participants would remember, it was predicted that the course would probably be widely identified with the business game although the business game took up less than 40 per cent of the whole time. The reasoning was that the style of training and the micro-didactic structure would ensure that the business game made the most impact.

## **4. IMPACT OF TRAINING ON PROFESSIONAL PERFORMANCE**

### **4.1 Professional mobility**

The first question to be answered is: What happened to the trainees after the course? Are they still involved in fish marketing? Do they now hold more influential or responsible posts? Have they been transferred to posts outside the fish marketing sector? Questions of this type are about the professional mobility of the former trainees.

Of the 20 participants of the Andhra Pradesh course, all those employed by the Andhra Pradesh Fisheries Corporation in its fish marketing branch were interviewed six months after the end of the course. A small group of four participants were not interviewed since it was known that they were still with the Fisheries Department and had not been involved in marketing activities ever since the foundation of the APFC and will probably not be involved in fish marketing in the future.

As far as the APFC participants were concerned, all were still employed in the marketing branch (including fish and prawn processing and export) with the exception of one trainee who was, for the time being, occupying the post of refrigeration supervisor which better suited – according to him – his qualifications.

A group of nine participants who had joined the APFC just before the course started had since been designated Marketing Managers. This designation corresponds to the former designation ‘Marketing Officer’, used at the time of the course. Two former Assistant Marketing Officers had been promoted. On the whole, the appointment of the trainees to these posts was the main thing that had happened since the end of the training as regards professional mobility.



**Table 1**  
**Professional mobility (Andhra Pradesh course)**

Number of course participants by designation

	Trainee (Marketing)	Asst. Marketing Officer	Manager (Marketing)/ previously Marketing Officer	Manager (Diversified fishery products)	Frig Supervisor	Manager (Export)	Asst. General Manager previously Senior (Marketing Officer)
At the time of the course (November 1980)	9	2	3	—	—	—	2
At the time of the interviews (April 1981)	—	—	11	1	1	1	2

Regarding the appointments of the trainees, it should be noted that they were directly employed as Managers (Marketing) : thus the former rank of Assistant Marketing Officer had been skipped.

This rather homogeneous picture seems to have resulted because, first, all the interviewed participants came from one organization; secondly, the APFC is comparatively independent and exclusive: secondments from and transfers to the Fisheries Departments occur only from the AGM (Assistant General Manager) level upwards; moreover, the APFC recruits its own staff; thirdly, because the interviews took place only six months after the course.

For the Tamil Nadu course we received a different, a more heterogeneous picture, since the participants came from various organizations, since transfers and secondments from and to the Fisheries Department and TNFDC occur here regularly, and because the time gap between training and interviews was almost 18 months.

Of the 20 participants in the Tamil Nadu course, 16 were interviewed. Of the remaining four, one had left the cooperative society to which he belonged, while the other three were, at the time of the evaluation, stationed in rather remote places, so that it was not possible for the Fisheries Department to arrange for them to be interviewed.

An idea of the professional mobility of the Tamil Nadu participants is given in the following table:

**Table 2**  
**Professional mobility (Tamil Nadu course)**

	Participants not involved in marketing either at time of the course or at time of interview	Participants involved in marketing at time of course as well as at time of interview	Participants involved in marketing at time of course but not any longer at time of interview	Participants involved in marketing at time of interview but not at time of course
No. of participants	8	3	4	1

With two exceptions, the participants' ranks in the hierarchies of their respective institutions were still the same as at the time of the training course.

Practically all the staff of the specialised agencies such as the Fish Farmers' Development Agency and, in particular, of TNFDC are civil servants on secondment from the Fisheries Department and directly under it.

Half the participants from Tamil Nadu were not, at the time of the course, involved in fish marketing; what is remarkable is that, at the time of the interview, again half were not involved in fish marketing. Also interesting is that, while only one participant was transferred to a fish marketing post during the 1½ years after the course, four former participants were transferred from the fish marketing side to other branches of the fisheries administration. Considering that only three participants were always involved in fish marketing, it would seem that only a quarter of the participants had any chance to apply their training.

Although this is disappointing, it is to be expected because in Tamil Nadu the Fisheries Department is closely involved with its associated agencies, and the chance of an individual being transferred frequently to a different field of work is quite high. An attitude observed during the interviews at all levels of the organizational hierarchy was that the training effort is not wasted even if the acquired knowledge is never applied: the argument is that it contributes to the creation of the "universally educated" fisheries officer who can be transferred to any post regardless of the professional responsibilities it involves. Whether such a system, with its low levels of specialisation and continuity, is an effective one, is another matter.

## **4.2 Professional working environment**

In order to analyse the impact of a training course, the professional environment of those who have attended the course has first to be described. In particular, it is necessary to note the functional structure of the institution in which former trainees are working and which constitutes their working environment. The working of the Corporations was observed during the preparation for and in the course of the interviews and, at other times, in the course of BOBP activities.

It is also necessary to ascertain the job description of the participants, their daily routine, responsibilities and privileges; and to investigate their perception of problems encountered and improvements that have been introduced during the performance of their duties.

### *4.2.1 Andhra Pradesh course*

The following table shows in what type of office, shop, plant, etc., the former participants were working at the time of the interviews, indicating their duties in relation to the tasks of the whole institution and listing the participants' professional problems and successes. For these purposes the participants are numbered 1 to 16 and grouped according to similar designations. Only the most important aspects are included.

**Table 3**

**Improvements in professional performance of participants after the Andhra Pradesh training course**

Designation	Task of institution	Post description	Problems and improvements in professional performance
Manager (Marketing)	<p><i>APFC marketing unit:</i> Procurement of fish from villages and despatch to APFC stalls via consignment traders</p> <p><i>Staff:</i> Sr. accountant, accounts assistant, procurement assistant, helpers, also involved in packing, icing, and despatch.</p> <p><i>Facilities:</i> Vans, packing sheds, office.</p>	<p>Daily decisions on procurement quantities and sales channels, instruction of staff, supervision of accountants, organization of transport, implementation of socio-economic schemes like adult education and family planning, loans together with other agencies, <b>establishing</b> contacts with fishermen, attending co-ordination meetings with Deputy General Managers.</p>	<p><i>Improvements:</i> Transfer of middlemen debts to APFC. Better performance in procurement, family planning and adult education together with other agencies. Co-operation in transport with local traders, employment of headload traders for local sales. Start of a fish basket making co-operative. Fixed procurement prices and assured fish supply because of indebtedness to APFC.</p> <p><i>Problems:</i> Demand from fishermen for consumption loans and gifts, softening of fish during transport, lack of cold storage, disadvantageous commission sales.</p>
Manager (Marketing)	<p><i>APFC marketing head office:</i> Overall administration, sanction of expenditures, leave applications, supply of funds to marketing units, preparation of monthly planning meetings, purchase of equipment, etc.</p> <p><i>Staff:</i> Accountants, driver, secretary.</p> <p><i>Facilities:</i> Car.</p>	<p>Assisting Deputy General Manager in implementing administration work, maintaining files, organising purchases and despatch of equipment, transfer of funds to marketing units, processing of leave and other applications.</p>	<p><i>Problems:</i> Co-ordination of communication with marketing units and establishing of effective information flow; how to <b>forecast future</b> trends in fish marketing.</p>
Manager (Marketing)	<p><i>APFC marketing unit:</i> Procurement and despatch from various landing centres to various places outside the region.</p>	<p>Visiting procurement centres, maintaining Contacts with fishermen, deciding on sales, instructing procurement</p>	<p><i>Improvements:</i> Increase of procurement, four booths opened in high income areas. Assured supply be-</p>

	<p><i>Staff:</i> Accountant, procurement assistants, driver, packer.</p> <p><i>Facilities:</i> Van, packing sheds, office.</p>	<p>assistants, organizing transport, booking of trains, attending coordinating meetings with Deputy General Managers.</p>	<p>cause of indebtedness of fishermen to APFC.</p> <p><i>Problems:</i> Wastage during transport, not enough storage facilities, premature despatch because of irregular landings and lack of storage, difficulty in booking trains, sale of fish at reasonable prices.</p>
Manager (Marketing)	<p><i>APFC marketing unit:</i> Procurement of fish and prawns from villages, despatch to APFC stalls in other regions, sales via commission agents.</p> <p><i>Staff:</i> Accountant, procurement/packing staff, driver.</p> <p><i>Facilities:</i> Vans, packing sheds, office.</p>	<p>Maintaining contacts with the fishermen, organising transport, deciding on despatch, supervising staff.</p>	<p><i>Improvements:</i> Increase of procurement.</p> <p><i>Problems:</i> Getting into contact with fishermen at new villages, lack of cold storage, lack of transport, despatch of catch during peak season.</p>
Manager (Marketing)	<p><i>APFC marketing unit:</i> Procurement and despatch of fish from marine villages, fishing harbour and tanks, sales through own stalls, other units, and canteen, commission agents.</p> <p><i>Staff:</i> Accountant, sales, procurement, packing, canteen staff, driver.</p> <p><i>Facilities:</i> Van, cold storage, Packing sheds, office, stalls, canteen.</p>	<p>Organising procurement (for sales manager), deciding on prices (auction sales), quantities, transport, ice requirements, and co-ordination with sales manager.</p>	<p><i>Problems:</i> Competition from middlemen.</p> <p>Organising transport in view of irregular landing of relatively small quantities at scattered places. Difficulties in booking trains for transport.</p>
Manager (Marketing)	<p><i>APFC marketing unit:</i> Procurement and despatch of fish from marine villages with harbour to own stalls, canteens and commission agents.</p> <p><i>Staff:</i> Accountant, procurement, packing, sales, canteen staff, driver.</p> <p><i>Facilities:</i> Office, booths, refrigerated container, ice boxes, packing sheets, vehicles, canteen.</p>	<p>Contact with fishermen, fixing prices, instructing and controlling procurement staff, supervising sales, and assisting fish supply for booths.</p>	<p><i>Problems:</i> Seasonality of landing makes it difficult to ensure steady supply to stalls and canteens.</p>

Designation	Task of institution	Post description	Problems and improvements in professional performance
Manager (Marketing)	<p><i>APFC marketing unit:</i> Further distribution and sale of fish, receiving fish, cold storage, repacking, sales, transport to other places, sales through own stalls and canteens.</p> <p><i>Staff:</i> Canteen, sales, transport, packing, accounting, and office staff.</p> <p><i>Facilities:</i> Canteens, booths, vehicles, cold storage, and office.</p>	Planning and organising distribution of fish, supervising weighing, organizing transport, planning promotion, contact with municipality checking booths, and supervising accountant.	<i>Problems:</i> Negative approach of municipality towards opening of new stalls, too many responsibilities, insufficient division of labour, no telephones in the stalls leading to communication problems.
Manager (Marketing)	<p><i>APFC marketing unit:</i> Procurement of fish and prawn from a landing centre with harbour, sales of fish to own stalls and canteen, despatch to other APFC regions, commission sales, and despatch of prawns to APFC plants.</p> <p><i>Staff:</i> Procurement, sales, canteen, packing staff and driver</p> <p><i>Facilities:</i> Office, stalls, cold storage, canteen and ice plants.</p>	Contacts with fishermen, fixing rates, organising and deciding on transport and distribution.	<i>Problems:</i> Cold storage is not worthwhile using since it is too large. Organising railway transport.
Manager (Marketing)	<p><i>APFC marketing unit:</i> Procurement and sales from villages through own stalls. Despatch to other APFC regions.</p> <p><i>Staff:</i> Sales, procurement staff.</p> <p><i>Facilities:</i> 2 booths, 1 packing shed.</p>	Preparation of monthly profit and loss account, inspection of booths and procurement centre, contacts with fishermen and consumers, and organising transport.	<i>Problem:</i> Activities could be expanded if the services of another accountant and the use of an additional vehicle could be arranged.
Manager (Marketing)	<p><i>APFC marketing unit:</i> Procurement and despatch of fish from marine villages and fishing harbour, sales through own stalls, canteens, despatch to other APFC units and commission agents.</p>	Organising and supervising sales, planning of promotion campaign, supply to hotels, factory, etc. Sales via own shops, canteens via commission agents.	

	<p><i>Staff:</i> Accountant, procurement, sales, canteen, packing staff, driver.</p> <p><i>Facilities:</i> Cold storage, vans, stalls, canteens, packing sheds and office.</p>		
Manager (Marketing)	<p><i>APFC marketing unit:</i> Procurement of fish and prawns from lakes, despatch to APFC units and sales via commission traders.</p> <p><i>Staff:</i> Procurement staff, driver.</p> <p><i>Facilities:</i> Van, packing shed.</p>	<p>Checking of demand and prices, identifying materials required, organising transport, sending proposals to headquarters after sanction, carrying out operations and furnishing report.</p>	
Manager (Export)	<p><i>Export division, prawn freezing plants:</i> Receiving daily information of plant production, collecting information about demand and prices offered by importers, calculating costs; planning and organizing of operations.</p>	<p>Observation of export market, prices, sending offers to potential buyers, calculating costs, organising transport, clearing customs, negotiating.</p>	<p><i>Problems:</i> Shipping companies do not stick to earlier agreements, labour problems in harbour hinder loading, telex and phones too often out of order.</p>
Manager (Diversified Fish Products)	<p><i>Diversified fisheries product project:</i> Preparing a project proposal for diversified fisheries projects.</p> <p><i>Staff/Facilities:</i> only staff.</p>	<p>Preparation of the project report and its implementation, planning of fish filleting and mincing units, freeze drying units and fish meal plants.</p>	<p><i>Problems:</i> Long drawn-out but inevitable administrative problems.</p>
Refrigeration Supervisor	<p>Construction of ice plant. After completion, operation of ice plant.</p>	<p>Supervision and advice during construction work.</p>	
Assistant General Manager (Marketing)	<p><i>APFC marketing region:</i> Coordinating procurement and despatch to marketing units (previously only prawn procurement centres), sales through own shop, canteen and private traders.</p> <p><i>Staff:</i> Managers, officers, procurement, sales, canteen staff and drivers</p> <p><i>Facilities:</i> Vehicles, stalls, cold storage and packing sheds.</p>	<p>Supervising overall performance of marketing units, organising sales via private traders to Calcutta, planning new development schemes, attending coordination meetings with Deputy General Managers.</p>	<p><i>Problem:</i> Starting procurement at new places. Increase of procurement.</p>

Designation	Task of institution	Post description	Problems and improvements in professional performance
Assistant General Manager (Marketing)	<p><i>APFC marketing region:</i> Supervising and directing procurement and sale of fish and promotion in the region, organizing transport between other regions (central location), checking and consolidating profit and loss statements from marketing units, public relations, despatching prawns to APFC plants, selling fish through stalls and canteens and to commission agents.</p> <p><i>Staff:</i> Marketing officers, procurement, packing, accounting, sales, canteen staff and driver.</p> <p><i>Facilities:</i> Vans, refrigerated containers ice boxes, office rooms, packing sheets and stalls.</p>	Co-ordinating marketing units, supervision, involvement in procurement, contact with municipalities.	

The following information is intended to assist the reader in interpreting the information presented in the table and in judging its significance:

A short time after the training course took place, only four months before the interviews were conducted, a regional organizational structure was adopted for the Corporation. Thus while there is a deputy general manager in charge of the Corporation's fish marketing activities, four assistant general managers are in charge of different regions of Andhra Pradesh, each overseeing a number of managers on the next lower step of the hierarchy. For the purpose of coordinating and initiating marketing operations, a monthly meeting is held at the headquarters of the APFC, attended by all managers and assistant managers.

The flow of instructions regarding operations, however, goes directly from the deputy general manager to the managers, and the assistant general managers are not involved. This situation may undergo a change in the near future.

Procurement and sales statements are prepared on a daily basis. The procurement statements are filled in by the respective procurement assistants and specify quantity, variety and price of fish bought. In addition, a record of expenditures for procurement is maintained at the procurement centres, including also packing and handling expenditures.

The figures are consolidated monthly as a procurement and despatch statement. Sales reports are also furnished on a daily basis by the salesmen and consolidated monthly into a sales statement.

Once a month, a profit and loss account is prepared for each marketing unit, which is, however, not sufficiently detailed to allow different cost and capital components to be easily identified and appropriate future action to be planned accordingly.

During the interviews some of the course participants expressed dissatisfaction with the information flow in the organization and also with the instruction and guidance given to them. Some felt that there was not enough appreciation of effort and positive performance and doubted if the Corporation as a whole really tried to achieve the objectives mentioned during the training course. A few alleged that new, innovative ideas were not supported.

It was observed in some cases that the managers did not seem to be integrated as fully as might be expected into the corporate management structure; procurement assistants and salesmen performed some of the management and planning functions, to some extent independently of their superiors.

Much of this may be due to the fact that the transactions had more often the character of routine procurement and despatch than of real marketing operations.

The Corporation has managed to increase the amount of fish procured quite substantially by establishing direct links with the fisherfolk at landing centres, thus displacing middlemen-moneylenders, especially traders from outside, who are usually present at these centres during the season. This was done mainly by introducing loan schemes (operated in cooperation with the District Rural Development Agency, Fisheries Department and others) under which the fishermen could pay back their debts to middlemen and acquire new craft and gear. In return they had to surrender their catch to the APFC at prices fixed by the Corporation. Thus, from more than one point of view, APFC has taken over the role of the middlemen.

By comparison, direct sales to consumers in Andhra Pradesh seemed low, and fish had very often to be sold to private traders in Calcutta, who offered low rates which sometimes did not even cover the costs despite the high fish prices in Calcutta.

Because of the losses that had thus been incurred, some superiors (AGMs) did not support the enthusiastic approach of the former trainees. They asked why the Corporation should try and get rid of the local small private traders in favour of the big ones in Calcutta, if this meant that the Corporation had to lose money.

It has been observed that, on the long train journey to Calcutta, the fish transported in traditional baskets is subject to considerable softening and bacterial spoilage. Theft also occurs. All these



factors depress the returns of the APFC. A few of the interviewees had managed to reduce the transport problem slightly by combining with similar local traders – perhaps a more realistic and sensible approach to the middleman problem.

There seemed to be a shortage of infrastructural facilities like refrigerated containers and other cold storage, vehicles, etc. Power failures were a constraint on the use of even existing cold storage facilities. Scarcity or lack of storage facilities at landing centres also led to premature despatch of fish, regardless of market requirements and opportunities. On the other hand, existing facilities were sometimes not used because they were considered to be too large. This suggests that the design and use of facilities has not been properly planned.

All these shortcomings, if they indeed are significant, would at least partly explain the unsatisfactory commercial performance of the Corporation and at the same time reinforce the impression gained by outside observers that there is at present no integrated marketing approach, embracing both procurement and direct sales to consumers. Marketing seems to be more a matter of procurement and despatch of fish on the one hand and receipt and sales of fish on the other, without much coordination or feedback. There seems to be no aggressive, planned sales strategy or promotional strategy.

For an overall marketing strategy to be effective, information is necessary on which varieties in what quantities are available at what times of the year, in which regions; this information does not seem to exist or, if it exists, it does not seem to be used.

Another problem raised during the interviews was that of organising transport and planning distribution in the face of irregular landings of small quantities at scattered places. This problem occurs especially during the off-season.

Not much thought seems to have been bestowed on how to adjust seasonal variations in supplies—for example, by working out how under-priced varieties that are caught in the off-season could be sold in a processed form; how excess quantities landed during the season can be preserved; how the resources of the cooperatives not utilized during the off-season can be diverted to other activities, and so on.

#### *4.2.2 Employing institutions, posts and duties in Tamil Nadu*

The present posts and the fields of work of the participants in the Tamil Nadu course, together with information on the posts they occupied at the time of the training, are given in Table 4.

It appears that the training itself had no influence on mobility. The reasons, for example, why participants left the marketing sector some time after attending the training were—according to the interviews – promotion, deterioration of health, etc.

Although only four participants were really involved in fish marketing all of the time, the description of their professional environments provides some insight into the situation in the state capital (a big coastal city), the situation in an inland city and the overall situation in Tamil Nadu (see Table 5). This also includes information about other participants who were employed at least for some time in marketing before or after the course.

**Table 4**  
**Changes in professional environments of Tamil Nadu participants**

Type of mobility! immobility	Post at time of interview (field of work)	Post at time of course
Not involved in marketing, either at time of course, or at time of interview	Asst. Director (inland fish production)	Asst. Director (regional administration: marine)
	Inspector of Fisheries (loan collection)	Inspector of Fisheries (inshore fishing station)
	Coop. Sub-Registrar (inland fisheries)	—do—
	Asst. Director (regional administration)	—do—
	Asst. Director (regional administration)	—do—
	Inspector of Fisheries (inland fish production)	—do—
	Asst. Director (FAO counterpart)	Asst. Director (inshore fishing station)
	Inspector of Fisheries (administration of loan schemes)	—do—
Involved in marketing at time of course, not at time of interview	Rep. Manager (fish meal plant)	Secretary of inland fish production and fish marketing society
	Asst. Director (administration, inland fisheries)	Inspector of Fisheries (including fish marketing)
	Asst. Director (administration, inland fisheries)	Deputy Manager (inland fish marketing)
	Asst. Director of Fisheries (administration of FFDA)	Deputy Manager (fish marketing)
After course transferred to marketing	Inspector of Fisheries (inland city fish marketing)	Inspector of Fisheries (inland fish production)
	Involved in marketing at time of course and at time of interview	—do—
Involved in marketing at time of course and at time of interview	Deputy Manager (fish marketing)	—do—
	Inspector of Fisheries (State capital, fish marketing)	—do—
	Inspector of Fisheries (State capital, fish marketing)	—do—

**Table 5**

**Professional environments of some of the participants of the Tamil Nadu course**

[ 20 ]

Professional environment	State capital	Inland city	Whole state
Task of unit	<p>Procurement, storage, handling, distribution and sale of fish in state capital. Fish has to be procured at local wholesale markets to supplement irregular supplies from other states or other parts of the state. Sometimes fish has to be sold to private traders at times of insufficient public demand. Storage and handling (cleaning and cutting) have to be organized. In the light of what supplies are expected, distribution to a large number of stalls must be organized. Responsibility for stalls is divided among inspectors who inspect and furnish weekly revenue statements for the stalls and monthly expenditure statements. Office of the Managing Director of the Corporation (Director of Fisheries) furnishes a monthly profit and loss account. Technological facilities such as ice plant, cold storage deep freezers have to be maintained.</p> <p><i>Staff:</i> Inspectors, accountants, engineers, operators, handling staff, sales staff, drivers, office staff, etc.</p> <p><i>Facilities:</i> Vans, cold storage, fish stalls, deep freezers, etc.</p>	<p>Supervising/organising fresh water fish production (including rearing of fingerlings) and marketing from a reservoir. Fish is sold directly to the public at the reservoir, through corporation stalls in the city and in <b>rural</b> and to a large extent to private traders.</p> <p><i>Staff:</i> Inspector of fisheries, sub-inspector, salesmen, driver, unskilled labour for stalls, labour for ice plant</p> <p><i>Facilities:</i> Van, fish stalls, ice plant, deep freezers, cold storage.</p>	<p>Organising and steering procurement, distribution and sale of fish in the whole state under the supervision and instruction of the Managing Director of the Corporation (who is also Director of Fisheries in the State).</p>
Responsibilities of post	<p>Post: Inspector of Fisheries (TNFDC)</p> <p>Responsibilities: On a rotation system, alternate responsibility for various groups of stalls and for organizing receipt/handling/disposal of fish at cold storage, building working units, proposals for opening of new stalls.</p>	<p>Post: Inspector of Fisheries (TNFDC)</p> <p>Responsibilities: Supervising sales at reservoirs, maintaining contacts with fish merchants, organizing distribution to stalls, checking accounts, preparing plans for opening of new stalls, general administration.</p>	<p>Post: Deputy Manager (Processing Marketing). Highest ranked full-time post in fish marketing in the state.</p> <p>Responsibilities: Issuing financial funds for procurement, control of prices at procurement centres, preparing proposals for procurement and sales prices, and for acquisition and distribution of marketing</p>

facilities for submission to the Managing Director; studying local market trends, arranging for maintenance of marketing facilities and repairs, administration, payment of salaries, preparing plans for new sales and procurement sites, promotion campaigns, etc.

Problems/  
difficulties of  
performance

- If fish is bought directly from fishermen, varieties for which there is little demand have to be accepted with the rest of the catch. How to sell these varieties,
- Irregular supply of fish
- Workload too heavy
- No market research data before opening of new stalls
- During summer too much wastage
- Seasonal supply of fish from reservoir. In winter time when water level is high the catches are poor and accordingly only small quantities are available.
- Preservation of fish.
- Spoilage during hot season
- Use of deep freezers. Consumers prefer fresh fish. Frequent power failures in summer.
- Fixed prices in TNFDC which complicate competition with private traders.
- Ice plant can hardly be operated because of powerfailures in summer (no generator for independent electricity generation)
- No assured supply at reasonable rates
- Relatively high overheads

The kind of professional environment the fish marketing staff of the Tamil Nadu Fisheries Development Corporation were working in, can be described briefly as follows:

The procurement side has not been developed at all: permanent direct contacts with fishermen have been established scarcely anywhere. In the practical day-to-day work of former participants, there was— with one exception — no integrated planning of procurement, distribution and sales. Some posts in the Corporation were exclusively designated for procurement, others for sales, and there was little contact between the two groups. Thus, the procurement group bought whatever they could get for pre-determined prices—fixed at the TNFDC headquarters—and despatched it; the sales staff tried to sell whatever they got. When supplies were inadequate—which was the rule — they were supplemented by fish bought from private merchants, while if too much fish was bought from fishermen — usually varieties with low consumer preference — the surplus was sold to private merchants.

The problem of whether, how and where varieties low in the scale of consumer preference could be sold had not been tackled seriously.

The use of deep freezers for chilled storage of fresh fish is not the best practice. The condition of many freezers was poor.

Sales were well developed only in the state capital.

One social objective mentioned during the training course—to supply more fish at reasonable prices to low-income groups in remote areas—did not seem to be near achievement. On the contrary, the greatest successes were sales to medium and higher income groups in the state capital.

Generally, the observed procurement and sales prices were no lower than those in private enterprise fish markets.

On the whole, the evaluator formed the impression that the TNFDC still had a long way to go to achieve many of the objectives on which the training course had been based.

To ensure that the Corporation's activities such as the buying and selling of fish are business-like and economically viable, it may be advantageous to review the organizational structure and the accounting system. For example, only one profit and loss statement was prepared for the whole statewide organization, which suggests that the division of labour and responsibilities was not sufficiently developed.

## **5. PARTICIPANTS' PERSONAL VIEWS ON TRAINING IMPACT**

### **5.1 Tamil Nadu course**

The training course was widely remembered for the business game and the lectures on accounting, which did take up the greater part of each day (see BOBP/REP/9), but was not the only subject dealt with during the course. Other subjects, such as market research and pricing, were remembered — and that too vaguely — by less than half of the participants. The memory of the names of the lecturers is similar: the two lecturers responsible for the conduct of the business game were remembered by many more participants than other lecturers. Nearly all the participants said that they learnt in theory, the normal procedures in marketing— such as Planning of procurement, transport, storage, processing, handling and sale of fish, including assessment of demand, fixing of prices, accounting, etc. Some also mentioned that they learnt something about general objectives — e.g. the social obligations of fish marketing corporations — and these people said that, after having attended the course, they carried out their duties more conscientiously than they had been doing previously.

Those who had been involved in marketing appreciated the course more than those who had not been so involved. The majority of the participants had found that the starting point of the business game — an unsatisfactory financial condition owing to high overheads, low sales and

insufficient planning of operations, which could only be overcome by a better use of capacities, opening of new inland/rural markets, more promotion, increased turnover, better planning within the organization—was somewhat similar to the condition of the TNFDC in marketing.

However, many participants doubted if the business game—though it gave new insights and ideas — was in itself adequate to improve the present situation; they had to follow strict instructions and in real life were not in a position to plan and manage according to the ideas and methods illustrated by the business game. The actual planning and management within their Corporation differed in many respects from the planning and management in the business game. This, it was felt, considerably limited the practical impact of the business game.

Moreover, the specific local problems that occur at all stages of the marketing operations were — in the opinion of participants — not paid sufficient attention in the design of the business game. These included the scattered landing centres, the close relationships between the fishermen and the commercial middlemen, the lack of sufficient staff, the seasonality and irregularity of fish supplies, the policy of fixed prices and the way this was interpreted in the Corporation, which made it difficult to compete with private traders prepared to adjust prices as often as seemed desirable.

Most participants found the lectures on market research, pricing, etc., not applicable to the conditions under which they were working. Nor did the manner of presentation of 'marketing facilities' help them to improve their practical work. Nobody had referred to the background material presented during the course in their subsequent work — which does not say much for its practical relevance.

These alleged shortcomings were reflected in the participants' answers to a hypothetical question: What else would they want to learn from a similar training course in future? They suggested *inter alia* that information should be included on how to conduct a simple type of market research; practical knowledge on fish processing and fish handling, refrigeration and methods of fish preservation; how to improve the present TNFDC accounting and management information system and other practices.

The participants made it clear that they were not so interested in general information *per se* as in knowledge which was already prepared for application, which told, for example, in detail the steps to be taken if a given situation V was to be converted into the needed situation X. They also recommended that fish marketing management training courses should be of longer duration and that more field trips should be included.

## **5.2 Andhra Pradesh course**

Nearly all of the participants considered the initial lectures about fisheries and fish resources in Andhra Pradesh, the APFC marketing strategy and the socio-economic conditions of the fishermen to be useful. Since many of the participants were newcomers to fisheries, the lectures helped them — as they emphasised — to gain orientation and also to establish links with fishermen after starting work at their new duty stations. However, the impact of these topics was limited because the lectures did not contain enough detailed information. There may also have been insufficient planning of this part of the course in the didactical sense and not enough thought given to choice of training.

Only one participant took any initiative to link the marketing activities with socio-economic activities such as adult education, family planning, etc., which were carried out in cooperation with other agencies. Other participants were content with a better understanding of the behaviour of fishermen.

Participants said that they missed a clear sales strategy and product policy related to the fisheries situation in the State and to the resources and marketing situation. They often did not know where to sell which variety of fish. Some felt that their ideas and proposals about new products were not appreciated by their superiors. Others mentioned that they were not sure how to deal with the traditional marketing structure. Why did they eliminate private traders at the village level in order to sell the fish to much bigger private traders in Calcutta? Should they cooperate

with local traders at the village level to ease transport problems by collaborating to hire a van or cooperate with bicycle or headload traders?

Some participants stressed the lack of information regarding the seasonal availability of fish as well as the seasonal demand for fish in certain regions.

On the whole, the business game was found to be useful. According to the participants, it helped them to understand the interdependence of different marketing operations such as procurement, handling, storage, transport, sales, as well as to manage them accordingly. They remarked, however, that this approach could be put into practice only partly because of the hitherto limited development of the APFC fish marketing operations and because their individual responsibilities were limited.

The awareness of the interdependence of marketing operations was found to be useful when organizing the packing, handling and transport of fish and calculating the respective expenditures (procurement plus distribution); also for organizing receipt, distribution to stalls, and sales, and recording incomes and expenditures on this side: planned links did not exist between procurement and distribution on the one hand and sales on the other.

Most of the participants found the information on fish handling and utilization useful and applied it to operations such as icing, cleaning and packing of fish, for which they were responsible. Because of limited handling and storage facilities, the information regarding cold storage could not be applied.

Long journeys in trains in traditional baskets caused much spoilage which could not be prevented, however well the fish had been cleaned and iced. Such practical local problems left the participants feeling helpless. The spoilage and softening during transport substantially depressed the corporation's financial returns.

The lectures on market research were considered by most of the participants to be too general but at the same time too complex to form a basis for any practical action in Andhra Pradesh conditions.

Opinion was divided on the usefulness of the lectures on management performance criteria and management information. Some found them useful for discovering shortcomings in the present set-up such as a lack of feedback of information (was the price calculation a realistic one?), or a lack of information about buying and selling prices at other places; about the deposits of commission traders, etc. Others found the lectures too general and not applicable.

Of all the background materials distributed during the course, the manual of the business game was in use as a guide to accounting, planning and organizing operations; so was the background material about fish handling.

Asked if they thought that training courses such as the one in Hyderabad would be useful in future or if they would prefer some other kind of training to improve their performance and capabilities in their allotted tasks or to improve their general professional performance, they suggested that a similar type of course – but much more closely related to local circumstances – should be conducted. However, such a course should be followed by a second course which would deal with practical problems encountered during the application of knowledge acquired in the first course; it should also include some more specialized aspects of marketing such as information about traditional marketing channels; how to carry out simple market research; information on what strategic steps were under consideration for the purpose of developing the market for fish in Andhra Pradesh; product development; information on the regional, seasonal and species-wise availability of fish; seasonal and regional use of boat/gear combinations; a model for effective information flow within the organization; personnel management (target groups: fishermen, customers, staff).

## **6. TAMIL NADU AND ANDHRA PRADESH COURSES: SOME COMPARATIVE COMMENTS**

There are similarities in the results of the investigations into the two courses and also differences. The differences in the impact of the two courses are due to modifications in the programme of the course; to the two corporations having different styles, priorities and emphasis; and to the differences in age, prior education and experience of the participants in the two courses. Some of the differences in impact may also possibly have been there because the interval between the course and the interviews was significantly longer in the case of Tamil Nadu than in the case of Andhra Pradesh.

However, the similarities far outweigh the differences. This suggests that the type of marketing training given in Tamil Nadu and Andhra Pradesh is likely to result in a typical pattern of impact, even if the programme is slightly modified and there are differences in the professional environment of the trainees and in their socio-statistical status before the course.

The core of the training course, the business game, was effective in teaching both groups of participants something about the interdependence of marketing operations and about the component activities; how to plan procurement, transport, handling and processing, and sales, while dealing with the various components in a goal-oriented manner; how to maintain proper accounts for the operations; how to evaluate the extent to which their goals had been achieved; how to learn from the accounts the reasons for failures and how to decide on appropriate action, etc. While the idea of including social objectives was accepted, and while a great deal of knowledge and skills were acquired during the course, the problem was to put them to practical use in their present professional environment.

As recorded earlier, some participants said that they carried out their duties more conscientiously than before, and found it easier to plan their operations and account for them. However, they were allowed to plan and organize at a much lower hierarchical level than in the business game, working as they did under relatively strict instructions.

That is to say, the Corporations' style of management and the attitudes and general approach of their senior staff to the task of achieving the objectives of the Corporations were different from those assumed and taught by the designers of the business game.

In the Corporations, division of labour and responsibilities was much less well-defined. There was less use of accounting systems and of management information, less flow of information and less feedback than in the business game.

This situation is not altogether the consequence of direct, deliberate choice on the part of the senior management of the Corporations, who are subject to frequent transfers from post to post within the government. In too many senior posts in the Corporations, the incumbent does not hold office sufficiently long to become fully knowledgeable and effective. This, in turn, may at least partly explain the apparent lack of an overall marketing strategy; insufficient funds and staff to carry out such a strategy in the face of private competition; objectives that are sometimes ambiguous and often too general to be capable of translation into operational plans; inflexibility and lack of incentives; lack of understanding and moral support for marketing officers trying to act in a business-like way. It is doubtful if the marketing branches have been given sufficient independence and freedom of action for any objective to be achieved except at heavy cost.

These organizational constraints hampered efforts to put new ideas, knowledge and skills to practical use and led to considerable frustration in many of the former trainees. Paradoxically, this situation has arisen because the didactic design and conduct of the business game was so professional.

The impact of the training would have been greater if specific problems and features of fish marketing in local conditions had been more fully dealt with during the training—such matters as the close relationships between fishermen and fish traders/middlemen; seasonality and irregularity in supply of fish; and transport and storage problems.



Closer examination of the local situations reveals that such practical problems differ in detail and in intensity in Tamil Nadu and Andhra Pradesh. Moreover, the emphasis of the TNFDC is more on fish sales while the emphasis of the APFC is more on the procurement side—at least this was so at the time of the interviews.

The participants learned from the lectures about fish handling, how to ice fish, how to use cold storage, how to keep a fish stall in hygienic condition, which helped them (for example) to organize icing and packing in a more effective way, and to keep stalls and canteens relatively clean. However, the lectures did not equip them to handle other problems such as scarcity of adequate storage containers for long railway transport and the problems of temporary buffer storage of fish and transport of fish from remote landing centres.

As already remarked, the training units on pricing, market research and management information and performance criteria were, didactically speaking, inadequate in their design and conduct, consisting as they did only of lectures. These were in general to give any practical hints but produced an awareness that planned pricing policies, market research studies and a management information system would be useful.

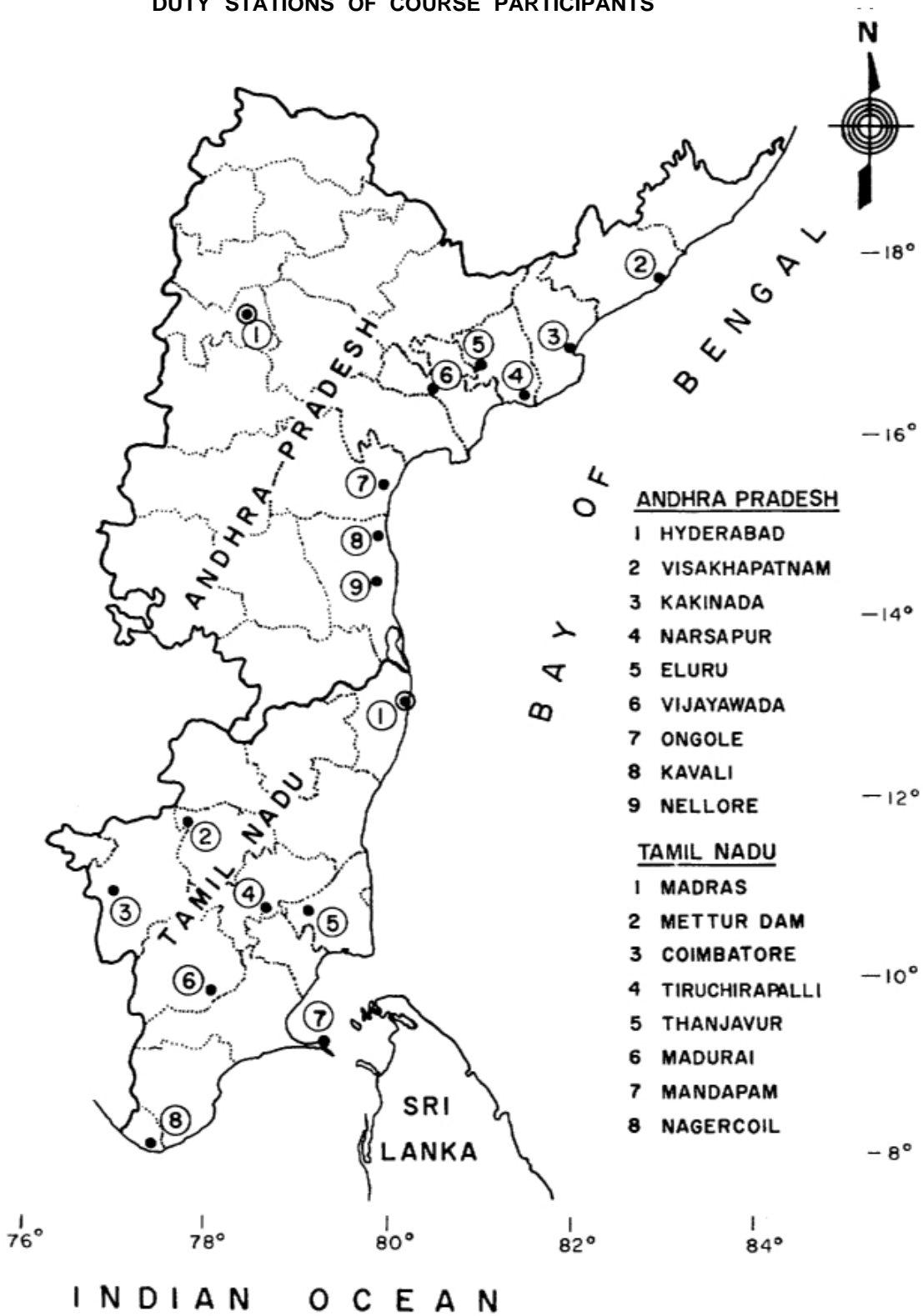
It was felt that before an overall integrated marketing approach could be implemented, more information was needed: first, about the seasonal species-wise and regional availability of fish and present trends therein; second, a detailed description of the traditional marketing system: what kinds of merchants are involved, what are their roles in procurement, transport, handling and retailing, how much capital they employ, and so on; and third, a detailed analysis of the market: what quantities of which species are at present sold in which places, what is the scope for increased supply? Also, cost/benefit projections are felt to be necessary especially for direct sales to backward but nearby areas where the purchasing power of the population is low but there is much malnutrition.

In the light of the above findings, it is hard to escape the conclusion that the business game should constitute a part of the training of marketing officers only in those cases where there is a commitment on the part of their superiors to the use of modern methods of management. Failing that, such training courses should be confined to more technical matters, which, however, should still include the proper design and use of accounting systems and simple methods of market research.

The other main conclusion that can be drawn is that the material presented in such courses of training should reflect and be closely related to the local situation. This requires that those who design and conduct such courses should first thoroughly familiarise themselves with the local situation and then adjust the content of their teaching accordingly.

Formal recommendations are presented earlier in the paper (pages iv—v)

DUTY STATIONS OF COURSE PARTICIPANTS



## Appendix 2

### Training Course for Fish Marketing

Personnel of Andhra Pradesh, 11—26 November, 1980

#### PROGRAMME

Date	Time	Details
November 11	<b>09.00—11.00</b>	Registration and introduction of participants
	<b>11.30—12.30</b>	Development of fish marketing in India, problems and prospects. Lecture by Mr. G. K. Rao, Secretary to the Government of Andhra Pradesh
	<b>13.00—14.15</b>	Resources and utilisation of fisheries in Andhra Pradesh Lecture by Mr. S. Banerjee, Director of Fisheries, Andhra Pradesh
	14.30—15.45	Socio-economic patterns Lecture by Dr. V. Abraham, Andhra University, Waltair
	15.45—16.45	Current fish marketing problems in Andhra Pradesh: Lecture by Mr. K. A. W. Yesudas, Deputy General Manager, APFC. (Andhra Pradesh Fisheries Corporation)
November 12	09.00—10.00	Organisation and management objectives, part I by Mr. Keith Haywood, White Fish Authority, United Kingdom
	10.00—11.00	Marketing strategy of APFC Lecture by Mr. K. A. W. Yesudas, Deputy General Manager, APFC
	11.15—12.45	Indebtedness and marketing margin in small-scale fisheries: Lecture by Professor S. R. Reddy, Andhra University, Waltair
	<b>14.00—15.30</b>	Organisation and management II: Mr. Keith Haywood, White Fish Authority, United Kingdom
	15.45—16.45	Introduction of business game: White Fish Authority
November 13	09.00—10.00	Setting up of business game: White Fish Authority
	10.15—12.15	Accounting I: Film strip: White Fish Authority
	<b>14.00—16.00</b>	Business game, period I: White Fish Authority

Date	Time	Details
November 14	09.00—12.30	Business game, period I: White Fish Authority
	14.00—15.00	Accounting II: Film strip: White Fish Authority
	15.15—16.45	APFC accounting system Lecture by Mr. K. V. Rao, Chief General Manager, APFC.
November 15	<b>09.00—11.30</b>	Business game, period I: White Fish Authority
November 17	09.00—11.00	Market research Lecture by Dr. U. K. Srivastava, Indian Institute of Management (I.I.M.), Ahmedabad
	12.30—13.00	Market research Lecture by Mr. A. Nordheim, FAO, Rome
	13.15—13.45	Quality control Lecture by Mr. A. Nordheim, FAO, Rome
	14.00—16.00	Pricing and price policies Lecture by Dr. U. K. Srivastava, I.I.M., Ahmedabad
November 18	09.00—12.30	Business game, period II: White Fish Authority
	14.00—16.30	Business game, period II: White Fish Authority
November 20	08.30—11.00	Business game, period III: White Fish Authority
	11.15—13.15	Marketing information and performance criteria Lecture by Mr. S. V. Rajeshwar, Administrative Staff College of India, Hyderabad (ASCI)
	14.00—16.30	Round-table discussion about future activities of the APFC
November 21	09.00—12.00	Business game, period III: White Fish Authority
	12.00—13.00	Business game, period IV: White Fish Authority
	13.30—15.30	Fish handling and distribution Lecture by Mr. H. Lisac, Fishery Industry Officer, FAO, Rome
	<b>16.00—17.00</b>	Marketing research requirements Lecture by Mr. S. V. Rajeshwar, ASCI, Hyderabad

Date	Time	Details
November 22	<b>09.00—11.00</b>	Business game, period IV: White Fish Authority
	<b>11.00—13.00</b>	Final session of business game
November 24	<b>08.30— 9.30</b>	Processing costs Lecture by Mr. Reddy, APFC
	09.30—13.00	Equipment and facilities for fish marketing Lecture by Mr. H. Lisac, FAO, Rome
November 25	<b>09.00—12.30</b>	Fish marketing project implementation in Andhra Pradesh (applied marketing research II) Mr. Ron Nicholson, White Fish Authority
	<b>14.00—16.30</b>	Fish marketing project implementation in Andhra Pradesh (applied marketing research III) Mr. Ron Nicholson, White Fish Authority
November 26	<b>09.00—12.00</b>	Closing of the course, issue of certificates

## Appendix 3

### Training Course for Fish Marketing

Personnel of Tamil Nadu, 3—14 December 1979

#### PROGRAMME

December 3

08.30

Inauguration  
Introduction and registration

10.00

Presentation of business management game  
and briefing on game procedures

13.00

Setting-up period of the business game

December 4

08.30

Business game: Setting-up period (continued)

10.30

Lecture: Marketing Management—J. Marjoribanks

13.00

First period of the business game

December 5

08.30

First period of the business game (continued)

10.30

Lecture/Film: Accounting I—R. Nicholson

13.00

Second period of business game

December 6

08.30

Second period of business game (continued)

13.00

Lecture/Film: Accounting II—R. Nicholson

15.00

**Third period of business game**

December 7

08.30

Third period of business game (continued)

13.00

Lecture: Consumer preference and demand for fish — Nirmal Singh

December 8

Field trip

December 10

08.30

Fourth period of business game

13.00

Lecture: Marketing facilities—M. T. Nathan

15.00

Fourth period of business game (continued)

December 11

08.30

Fifth period of business game

13.00

Lecture: Sales systems and pricing—B. V. Lanier

December 12

08.30

Lecture: Marketing research, with specific reference  
to small-scale fisheries—Nirmal Singh

13.00	Evaluation of business game
December 13	: Group discussions on marketing problems
December 14	
<b>08.30</b>	: <b>Course evaluation</b>
11.00	: Presentation of certificates and closing

## Appendix 4

### METHODS OF EVALUATION

#### Interviews:

The two training courses which are the subject of the working paper took place at the end of 1979 and the end of 1980. In 1981 an evaluation of the impact of the training was carried out. An investigator visited the participants at their duty stations, ascertained their job descriptions and daily tasks, and tried to find out how well they could remember and use the information and techniques imparted during the course. It was not possible before the investigation began to ascertain the participants' fields of work and foresee the possible influences of the training, so the use of a standardized questionnaire and observation guide was not appropriate. The study should rather be considered as a collection of separate case studies, each participant representing one case. In view of the diversity and unpredictability, an "open" non-standardized observation/interview guide or checklist was considered to be the most appropriate method of getting the required information.

The questionnaire/checklist which is reproduced below covered the following aspects:

- |   |   |   |
|---|---|---|
| (a) Socio-statistics                                | : | Name, sex, place/year of birth, marital status, designation, education, address                           |
| (b) Present professional environment:               |   | Institution:<br>Type of institution, number and type of personnel, facilities, tasks of office/shop plant |
|   |   | <b>Present post:</b><br>Title of post, duration, tasks and responsibilities.                              |
| (c) Influence of training on professional mobility  |   | Tasks and responsibilities of post held before attending the training course                              |
| (d) Problems and difficulties                       | : | Own problems  |
| regarding performance of duties                     | : | Problems of colleagues  |
| (e) Ability to recall training                      |   |   |
| (f) Suggestions regarding future training courses   |   |   |
| (g) Participant's professional plans for the future |   |   |

The interviews themselves were conducted both in a 'soft' and in a 'hard' way. The participants were first asked to answer questions one by one without any interference by the interviewer. In a second reinforcing session, the interviewer asked detailed questions in order to:

- verify if the interviewed participant had forgotten any aspects
- clear up misunderstandings and contradictions in the statements of the participants

- stimulate the participants to explain their reactions in a more problem-oriented way
- to examine the mutual links to other elements of the marketing system.

This had to be done in the first instance within the constraints of the interviewer's own prior knowledge of the kinds of topics that should be covered, that is to say, by his degree of familiarity with practical fish marketing. The circumstances differed between TNFDC and APFDC, as transpired in the course of the interviews. The result was that participants interviewed later were subjected to more detailed and informed questions than those who were interviewed earlier. There is, therefore, a bias in the results of the interviews but it is difficult to see how this could have been avoided. Repetition of the interviews might also have introduced bias, especially if the interviewees had talked to each other in the meantime.

The interviews have been analysed separately for each group of participants. This was necessary because there were differences between the Tamil Nadu course and the Andhra Pradesh course. The state of development of fish marketing was different in the two corporations. No attempt was made to draw general conclusions until the findings of both sets of interviews were available.

### **Working Environment:**

In the course of the interviews, opinions and attitudes of the participants arising from subjective impressions and other effects of the training courses were investigated. In addition, the two state corporations to which the trainees belonged were observed in order to ascertain their organisation and methods, the physical facilities they possessed such as cold storage, freezers, vehicles, and how they conducted operations such as the keeping of accounting books and other relevant forms, etc. This was done in order to contrast the views and statements of the participants with the reality of their marketing operations.

### **Didactic Structure of Courses**

**In order to analyse and interpret the impact of the courses in greater detail, improvements as well as failures in the practical work of participants had to be referred not only to the 'table of contents' of the courses (as given in the course programme), but to the way the material was presented during the course; that is to say, to the detailed didactic structure of the course and its performance.**

**Unfortunately, precise didactic plans for the courses did not exist.** However, in the case of the **Andhra Pradesh course, it was impossible to compensate for this deficiency by observing the conduct of the course to at least discern the 'implicit' didactic structure.** In the case of the Tamil Nadu course, which had been conducted earlier, this had not been possible.

By analysing the didactic structures, it is possible to construct a hypothesis regarding the impact of the courses on the practical work of the trainees. Without such a detailed hypothesis, it is not possible to use the results of post-evaluation studies to improve existing curricula—which, however, should be their main purpose.

### **Interview Guidelines**

#### 1 *Socio-stat/st/cs*

##### 1.1 **Name**

##### 1.2 **Sex**

##### 1.3 **Place of birth**

##### 1.4 **Year of birth**

##### 1.5 **Marital status**

##### 1.6 **Designation**

##### 1.7 **Education: (Educational institution, duration, degree obtained and main subjects, specializations in fish marketing)**



- 1.8 Postal address
- 1.9 Telephone No.
2. Present professional environment  
(if at present involved in marketing)
  - 2.1 Description of employer  
(office/shop/plant)
    - 2.1.1 Name and address of employer
    - 2.1.2 Tasks of office/shop/plant
    - 2.1.3 Number and type of personnel
    - 2.1.4 Facilities
  - 2.2 Personal professional performance
    - 2.2.1 Official title of post: since when has the post been held?
    - 2.2.2 Main tasks and responsibilities of the post
    - 2.2.3 Special problems regarding performance of personal duties and those of colleagues
3. *Designation, tasks and responsibilities before attending the training course*
4. *Influence of training on designation*
  - 4.1 For persons who have been involved in fish marketing before and after the course: Was there any improvement in their professional performance due to the course?
  - 4.2 For persons who had been involved in fish marketing before the course but shifted to other posts after attending the course: Why were they shifted, could this not have been prevented?
  - 4.3 For persons who had not been involved in fish marketing before attending the course and did also not apply for a marketing post after attending the course: Was this influenced by the course?
- 5 *Future professional plans*
6. *Memory of the training course*
  - 6.1 Do you remember when the course was held?
  - 6.2 Which lectures/topics do you remember?
  - 6.3 Which names of lecturers do you remember?
- 7 *Usefulness of topics*
  - 7.1 Which topics had been useful for your practical work? In what respect?
  - 7.2 Which topics had not been useful and why?
- 8 *Use of background* Did you use any of the background material later on ? Which ones?
- 9 *Future suggestions*
  - (a) Do you think training courses like the one in Madras/Hyderabad would be useful in future?
  - OR
  - (b) Do you think another form of support for your work would be more suitable?
  - (c) What are you interested in to learn during a future training course? What do you hope to get out of it for your work?
  - (d) What would you suggest as a more suitable form of support?

## Appendix 5

### LIST OF PERSONS INTERVIEWED

#### *Andhra Pradesh*

	Name	Designation	Duty Station
1.	G. Kashi Nath	Manager (Marketing)	APFC, Kakinada
2.	Krishna Kumar, K A	Manager-in-charge Diversified fishery products	APFC, Visakhapatnam
3.	Uma Maheswar Rao	Manager (Marketing)	APFC, Visakhapatnam
4.	Ch. Hanumantha Rao	Manager (Marketing)	APFC, Visakhapatnam
5.	Kilaparty Yenu Naidu	Manager (Marketing)	APFC, Visakhapatnam
6.	Bethapudi John Samuel	Manager (Marketing)	APFC, Visakhapatnam
7.	C. Abraham Melanothan	Manager (Marketing)	APFC, Hyderabad
8.	Syam Sunder	Asst. General Manager (Marketing)	APFC, Visakhapatnam
9.	D. V. S. Krishna Rao	Manager (Marketing)	APFC, Vijayawada
10.	B. Narasimha Reddy	Asst. General Manager (Marketing)	APFC, Vijayawada
11.	T. Suriyanarayanan	Refrigeration Supervisor	APFC, Narsapur (W. Godavari)
12.	T. Malkaiah	Manager (Marketing)	APFC, Nellore
13.	K. Krishnamurthy	Manager (Marketing)	APFC, Kavali
14.	B. P. Reddy	Manager (Marketing)	APFC, Nellore
15.	B. N. Nandipati	Manager (Marketing)	APFC, Ongole
16.	Ch. Rama Rao	Manager (Marketing)	APFC, Eluru

*Tamil Nadu*

Name	Designation	Duty Station
1. R. Rajamanickam	Asst. Director of Fisheries, deputed to Fish Farmers' Development Agency (FFDA) as Chief Executive (inland fish production)	Madurai FFDA
2. L. Innocent Leo	Inspector of Fisheries, deputed to Tamil Nadu Fish Development Agency (TNFD) (loan collection)	Nagercoil, TNFDC
3. A. Thiraviam	Deputy Manager, deputed to TNFDC (fish meal plant)	Mandapam, TNFDC
4. M. Swamidas	Deputed as Co-operative Sub-Registrar (administration)	Coimbatore, Fisheries Department
5. T. Jayaseelan Jeevanandam	Inspector of Fisheries (administration of inland fisheries)	Madurai, Fisheries Department
6. Kumar Mooper Subbiah	Asst. Director of Fisheries (administration of inland fisheries)	Madurai Fisheries Department
7. R. Neelakantan	Inspector of Fisheries, deputed to TNFDC (fish marketing)	Madras, TNFDC
8. K. V. Kesavalu	Asst. Director of Fisheries (regional administration)	Thanjavur, Fisheries Department
9. P. Viswanathan	Inspector of Fisheries deputed to FFDA (inland fish production)	Trichy, FFDA
10. N. Karuppanan	Asst. Director of Fisheries (inland fisheries)	Mettur Dam, Fisheries Department
11. Percy Clarence Ezekiel	Inspector of Fisheries (fish marketing)	Coimbatore, Fisheries Department
12. S. Pandurangan	Asst. Director of Fisheries	Madras, FAO counterpart
13. R. Venugopal	Inspector of Fisheries deputed to TNFDC (fish marketing)	Madras, TNFDC
14. T. Arumugam	Deputy Manager, deputed to TNFDC (fish marketing)	Madras, TNFDC
15. A. Thangamani Gurunath	Inspector of Fisheries, deputed to TNFDC (administration of loan collection)	Madras, TNFDC
16. R. Kannan	Asst. Director of Fisheries (administration of FFDA)	Madras Fisheries Department

## Appendix 6

### RELEVANT EDUCATIONAL CONCEPTS

The elements of the micro-didactic structure of a course of training should take into account such matters as reinforcement behaviour, motivation techniques and organization of lessons.

#### Motivation

The general concept of motivation describes the structure of the various motives occurring within an individual. "Motives" are the individual factors which, working together or against each other in a certain structure, lead to a particular type of behaviour. Motives can be regarded as either mainly "intrinsic" or mainly "extrinsic." While a spontaneous striving for activity and knowledge (internal cause) is to be regarded as "intrinsic motivation", motives which are directed towards the achievement of a goal (for example, to solve a problem in order to get a favourable comment or other recognition from the teacher; or to learn a skill in order to earn money) are "extrinsic" motivation. Practical, observable motivations as a rule contain both intrinsic and extrinsic motives. However, it is worthwhile to distinguish the intrinsic and extrinsic components since they have different properties and impacts. An adequate understanding of motivations would be very useful to understand the 'learner' and his role as an 'agent of change'. However, this way of thinking and acting may differ markedly depending upon cultural background and socio-economic circumstances as well as among different classes and groups within the culture. In practice, therefore, for the purpose of this working paper, a more narrow, practical definition in the educational sense is sufficient. In this context, 'motivation' describes the particular measures employed by the teacher in order to stimulate successful learning, as well as the type of willingness to learn that is present in the learner, although it must be borne in mind that the extent to which the motivation intended by the teacher really affects the learner and his willingness to learn must remain uncertain.

According to this definition, the teacher can influence motivation of students by:

- adopting certain types of behaviour which reinforce the students' learning
- applying special motivation techniques
- using a selected style of training (co-operative rather than autocratic) as discussed in the main text.

Reinforcement behaviour can use the means of oral recognition, non-verbal signs of friendly attention, favourable written comments on students' performance as well as granting favours, etc.

Regarding special techniques of motivation, there is a whole series of behavioural measures which can be used to create effective motivation.

These are—

- (a) setting of unambiguous objectives and a clear view of the subject as a whole;
- (b) connection with the learner's own interests and elucidation of the ways in which the results of his learning can be put to practical use;
- (c) setting of tasks with a moderate degree of difficulty and a flexible range of solutions;
- (d) interesting, challenging formulation of questions, such as creating surprise, arousing doubts, etc.;
- (e) feedback concerning success of learning.

## **Organisation of lessons**

Since the learning process in human beings occurs in different phases, effective teaching must rely on varying the methods; it should not be monotonous and unstructured. Depending on philosophical viewpoint and pedagogical orientation, different phase models of teaching and learning models have been developed and used in the course of the historical development of educational theory and practice.

Taking into account common factors used in different notations of learning steps, a concept of the learning process should include the following components which are also to be taken into consideration while organizing lessons:

- Stage 1 : Motivation/confrontation with difficulties. The learner has to see a problem, recognize a fault, ask a question, set himself a goal.
- Stage 2: Information/cognitive solution. The learner looks for information, acquires information, has insights, considers solutions, develops a plan of action.
- Stage 3: Execution/practice. The learner applies the knowledge collected during the previous stage and tries out his insights in reality by carrying out a piece of work, an exercise, a game, etc.
- Stage 4: Evaluation/transfer. The learner considers the result, ensures consolidation of what has been learned through practice and works out the general validity of the process which he has learned in an individual case. He anticipates and prepares the application of what he has learned to the conditions of his present and future professional tasks.

This notation of learning steps does not refer to an individual lesson but to a complete process of learning. However, training courses normally include several learning processes or didactic units.

## **Domains of learning**

Provided that a training activity is not merely theoretical, but is instead related to practical problems, the future professional behaviour of students can be influenced and improved by identifying the general objectives to be sought; this establishes guidelines for the pupil's studies.

It is not, however, possible to influence future action directly by teaching; it is possible to create a disposition to certain kinds of future action, e.g. to build up a readiness to act in a specific situation in a specific way.

Analysing the components of disposition to future action, four kinds can be distinguished: pragmatic, cognitive, normative, and transfer components.

- (1) Pragmatic components consist of rather practical pre-conditions of future action such as sensomotoric, behavioural, linguistic skills and abilities, and similar things often learned in games, in practicals and through demonstrations and films.
- (2) Cognitive components of dispositions consist of somewhat more abstract, intellectual pre-conditions for future action, such as theoretical, systematic knowledge, which is often learned from lectures, by reading books and background materials, studying tapes, slides and films.
- (3) Normative components consist of attitude-wise pre-conditions of future action. Apart from knowledge and skills, the willingness to act depends, on the one hand, very much on how a specific subject is presented in a specific situation, on the role of the acting person, on the expectations and roles of other actors, on how the acting person interprets his role and responsibilities, as well as on his perception of the expectations of the other actors and of their roles. On the other hand, the will to act depends on aspects like the perception of generally accepted standards and norms, on the clarity of these standards and on the emotional and moral attitudes of the respective person.

Because of lack of knowledge about the first complex of situational factors that influence attitudes, the curriculum could only take into consideration the latter and more general factors, such as perception of general standards and the clarity of norms such as the general goals of the corporations. Attitudes can be developed and changed in discussions.

- (4) Transfer components are pre-conditions of future action concerning the critical re-examination of traditional structures and the readiness to change and improve existing structures of society. Especially in developing countries, transfer abilities which are based on practical skills and experiences depend upon sufficient knowledge and progressive attitudes to guarantee that social change really takes place and that—in our case— better marketing strategies can be applied. Among other things, transfer abilities can be created in simulations and games, role plays, socio-dramas and small group discussions.

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