

Evaluation of the Diploma Course for Management of Health Services

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Table of Contents

1. INTRODUCTION AND BACKGROUND	3
2. METHODOLOGY.....	5
2.1. GENERAL APPROACH	5
2.2. METHODS	7
2.2.1. Measuring reactions.....	8
2.2.2. Measuring learning.....	8
2.2.3. Measuring skills.....	9
2.2.4. Measuring attitudes.....	9
2.2.5. Measuring performance	9
2.2.6. Quality of training	9
3. FINDINGS OF THE EVALUATION	10
3.1. STRENGTHS OF THE DIPLOMA COURSE.....	10
3.1.1. The diploma course as an in country training	10
3.1.2. The diploma course targets mid-level management staff from districts and governorates	11
3.1.3. The incentive of the diploma certificate.....	12
3.1.4. The contents of the training program	12
3.1.5. The duration and format of training	13
3.1.6. Development of training tools and materials.....	13
3.2. WEAKNESSES AND CHALLENGES	13
3.2.1. Unclear organization and weak ownership by the MoH directorates.....	14
3.2.2. Field supervision either non-existent or very weak	16
3.2.3. Lack of specialized training	17
3.2.4. Skills	17
3.2.5. Target groups	17
3.2.6. Sustainability of the course	18
3.3. FINDINGS OF THE EVALUATION FRAMEWORK.....	18
4. CONCLUSIONS AND RECOMMENDATIONS.....	27
5. ANNEX 1. TERMS OF REFERENCE.....	29
6. ANNEX 2: RESUME OF THE EXPERT	32

1. Introduction and background

The aim of this report is to present and discuss the findings of an evaluation exercise that was undertaken to assess the performance and impact of a one-year training program in health care administration in Yemen. The training program, which is designated as “Diploma Course in Health Care Administration” (DCHCA), was launched in 2004 and aimed at building management capacities at district and governorate levels. The evaluation examined the extent to which the DCHCA was effective in equipping district managers with desired skills and knowledge. It also verified whether or not the skills and knowledge gained were applied by the managers to improve the performance of health services at the institutions they serve.

The DCHCA is implemented as a part of the EU-program to support health sector reform in Yemen. This five-year program aims at strengthening the ministry of health capacity to reform and improve structure and operation of health system reform in Yemen.

A key strategic element of the health sector reform policy is decentralisation of the health system. Decentralisation entails the creation of effective management structures and processes at peripheral levels, including service providers, district and governorate management teams. These management structures are meant to carry out most of the management functions at the peripheral level. Meanwhile, the Ministry of Health will continue to play a greater role in policy development, planning, monitoring and evaluation of the national health system.

The DCHCA was delivered by three national institutions: 1) the national management training center, 2) the Amin Nasher high institute of health sciences and 3) Sanaa high institute of health sciences.

The course encompassed ten modules:

1. Planning and strategic management
2. Management of human resources,
3. Management information systems,
4. Quality management,
5. Financial management,
6. Monitoring and evaluation,
7. Operational and applied research,
8. Management of pharmaceutical supply,
9. Primary health care management, and
10. Health sector reform in Yemen.

Each of these modules encompassed a one-week class work that aimed at presenting the conceptual and technical background information of the different topics related to the module. Further, the class work was supplemented with a

three-week field training, in which students were required to apply the concepts and skills they learnt in the class work in their workplaces.

In the first year of the DCHCA 20 district management staff successfully completed the training and returned back to their district. This evaluation aims at assessing the experience of the students with training and their judgment of the impact the training has had on their performance. The ultimate goal is to draw recommendations to improve the quality of training new participants will undergo in the second year of the course.

2. Methodology

2.1. General approach

The overall goal of this evaluative research was to examine the quality and effectiveness of the DCHCA and to assess the impact of the DCHCA on trainee management-related performance at their workplaces.

For the evaluation purpose, a hybrid approach was used that combines two well-established approaches of evaluation of management approaches. These approaches are the **Kirkpatrick** evaluation approach and the **Bramley** holistic evaluation approach.

The Kirkpatrick training evaluation is the best known, most recommended and widely used approach (Bramley, 1996; Graig, 1979; Phillips, 1983). Its framework uses four levels of evaluation (reaction, learning, behaviour and results) based on questions to be answered by different means. This framework has had widespread and enduring popularity (Alliger and Janak, 1989).

With this approach, each level is called a step. Step 1 covers reactions and is defined as trainees' "liking of" and "feeling for". Questions include: Were the participants pleased with the program? How much information was conveyed to participants? Step 2, learning is defined as "principles, facts and techniques understood and absorbed" by trainees. Questions include: What did the participants learn in the program? What did the participants absorb and understand? Step 3, behaviour, is defined as "using learned principles or techniques at the job". Questions include: Did the participants change their behaviour based on what was learned? Step 4, results, is referred to simply as the ends, goals or "results desired such as reduction of costs, reduction of turnover and absenteeism; increase in quality of services. Questions include: Did the change in behaviour positively affect the organisation? Did it produce, for instance, cost savings, work output improvements, and/or quality changes?

As Phillips (1983) established, training is not conducted simply for the sake of learning something. Its main concern is to bring about positive change in the participant, and "the impact on the organization is the ultimate outcome of any training program". But such an ultimate outcome is almost impossible to measure, since changes in the organization could be produced by many other factors, and from which it is difficult to isolate training (Bramley, 1996).

Furthermore, an extensive review of literature management training evaluation by Alliger and Janak (1989) revealed that in practice, most training was evaluated on the reaction level only. Evaluation at the results level was almost non-existent, and very few facts, rather than opinions, were known about the changes that training might have produced on individuals' performance and how that might have improved an organization's performance.

Hulme (1990) asserted that evaluation exercises begin with evaluation of the quality of the training input itself; then the trainee's reaction to a training activity and opinions on its potential use; then come evaluations of the proximate impact of training on the individual (in terms of learning and performance)" (Hulme1990:13).

Hulme added that evaluators, rightly or wrongly, use these exercises to make inferences about the results achieved at the other end, such as the impact of the output. As a result, “most evaluation material focuses on ‘improving’ training practice rather than ‘proving’ its contribution in enhancing the trainee’s average job performance”.

Critics also involve others aspects; for example, the Kirkpatrick model has been criticised on the basis of problematic assumptions identified by Alliger and Janak. For instance: (1) the levels are arranged in ascending order of information provided; (2) the levels are causally linked (which means that training leads to *reactions*, which leads to *learning*, which leads to *changes in behaviour*, which leads to *changes in the ultimate goal or results*); (3) the levels are positively correlated. They demonstrated that none of the assumptions was valid. They concluded that each of the assumptions in Kirkpatrick’s model as well as those in most other models of training evaluation can be logically questioned (Alliger and Janak, 1989). Their conclusion means the evaluation levels of *reaction*, *learning*, *behaviour* and *results* should be analysed individually and not related to each other. If they are correct, then applying Kirkpatrick’s model could raise another issue. Those methods which rely on the reaction level should be seriously questioned for use as an indicator of effectiveness or in producing conclusions about impact. Tools and techniques to measure complex levels such as behaviour and results need therefore to be developed properly to assess training objectives.

Bramley (1996) analysed holistic evaluation approaches. He suggests that most of them resemble the four evaluation levels proposed by Kirkpatrick and that many courses are monitored only at the reaction level; furthermore, after looking into how the evaluation was performed, he pointed out that the perceived objective of training was that “trainees should enjoy themselves”.

Bramley (1996) identified common components found within holistic evaluation frameworks. Two broad areas were differentiated: evaluation (a) during training, and (b) on the job afterwards, including organisational effectiveness and socio-cultural values.

During training, components evaluated included:

1. Judgement of quality of trainees’ experiences
2. Feedback to trainees about learning
3. Measures of gain or change in learning
4. Feedback to trainees about methods
5. Relevance of learning goals
6. Measures of the value of learning or changes in behaviour
7. Retrospective feedback to trainers

All of these components can be related to the reaction, learning and behaviour levels proposed by Kirkpatrick. Components of organisational effectiveness and even social or cultural values can be related to the results level, as shown below.

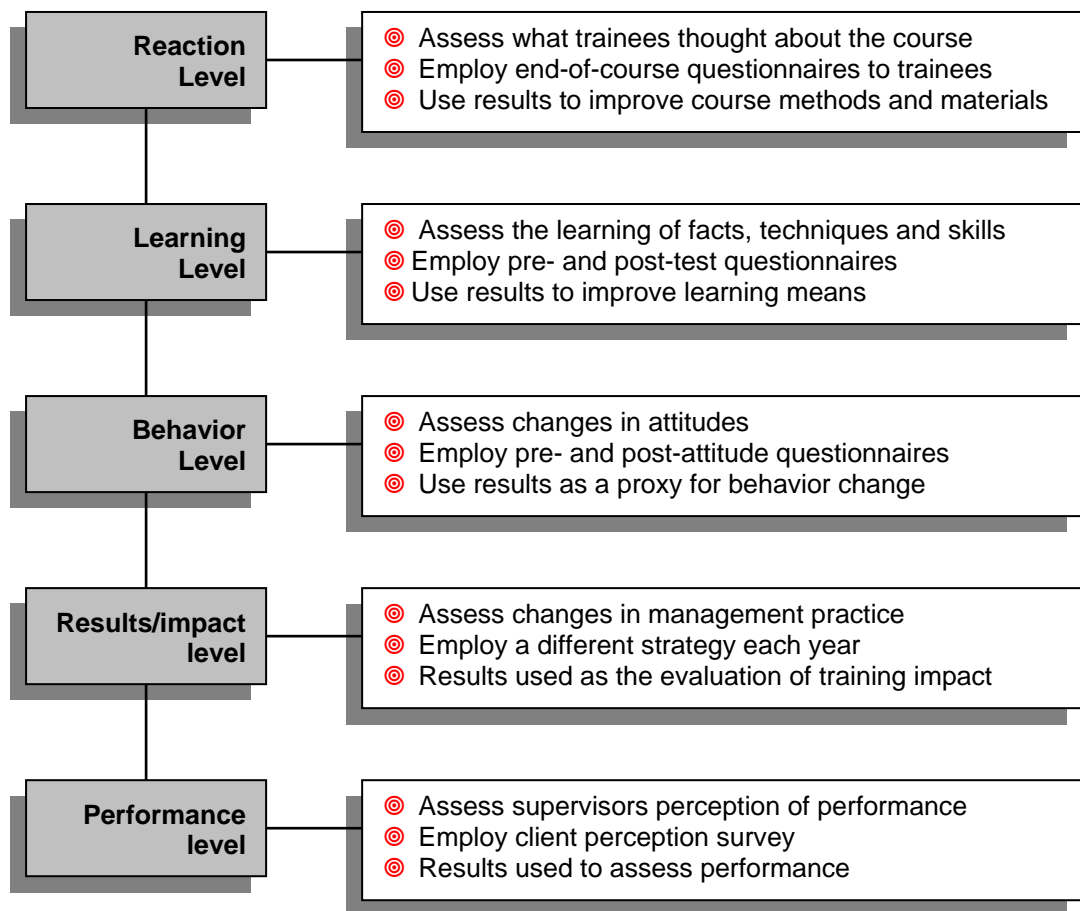
Components evaluated on the job after training:

1. Measures of change in organisational performance

2. Implementation of individual/action plans or projects
3. Measures of social cost and benefits
4. Human resources accounting

In this study the two evaluation approaches of Kirkpatrick and Bramley were merged into a hybrid framework to ensure that learning during the diploma course is against changes in job behaviour and performance. This entails that job behaviour/performance objectives should describe what successful trainees are expected to do when back in post. The evaluation framework used in this study is illustrated in figure#.

Figure #: *Evaluation framework*



2.2. Methods

Two methods were used to collect information necessary to effectuate the holistic evaluation approach described in the last section; 1) in-depth semi-structured interviews and focus group discussions.

Semi-structured interviews were used with:

1. Trainees who successfully completed the first course of the training programs. These trainees were enrolled from eight governorates,
2. Directors of relevant general directorates and programs in the ministry of health,
3. Directors of Aden's Amin Nasher high institute of health sciences and Sanaa's high institute of health sciences, and
4. A sample of trainers and instructors involved in the delivery of the diploma course

Focus group discussions were used with:

1. District supervisors where trainees were enrolled from,
2. Directors of 18 high institutes of health sciences

2.2.1. Measuring reactions

Participant feedback or reaction was assessed in a semi-structured in-depth interview. The interviews covered a variety of areas, including: program content, instructional materials, out-of-class assignments, presentation methods, instructors, facilities, field assignments and general course evaluation. The administration of questionnaires was not used since questionnaires are considered to be the least reliable means of assessing reactions of trainees. International experience with reaction questionnaires indicated that participants are often too polite in their ratings, and a good reaction rating at the end of the training is no guarantee that they will put into practice what they have learned.

In-depth interviews allow the discussion of rating criteria, elaboration of reasons for different reaction levels and the administration of a variety of qualitative methods. Further, in-depth interviews enjoy higher privacy, confidentiality and security for the participants than written questionnaires.

2.2.2. Measuring learning

Following Bramley (1996), who indicated that "learning affects the whole person, and increases in knowledge or skills will usually result in different attitudes to some aspects of the work", learning needs to be measured from different perspectives. One is to measure changes in knowledge, and another to measure changes in skills. Both were done by in-depth interviews. For each module of the diploma course 10 modules, a core list of competencies (knowledge and skills) were identified. Students were asked one or more question about each module and whenever necessary the issue was further elaborated. Further, the before and after training tests that institutions used to administer before and after each educational module were analysed. The before and after training tests on knowledge are simple questionnaires containing theoretical questions on the main topics introduced in the diploma training program. Through these tests, the evidence of new knowledge acquired was examined.

2.2.3. Measuring skills

Students were asked whether or not they master specific skills that were supposed to learn in the training course. Whenever a student stated that they master the skill, the student was set a task. The trainee can also be watched as they perform the work, so that methods used could be assessed as well as the outcome. According to Bramley, observation is a flexible technique for collecting evaluative data. Effective training also needs some estimate of what the trainee can do before training.

2.2.4. Measuring attitudes

Phillips (1983) suggested that the link between attitude and performance is an important issue in human resource development. A positive attitude is more likely to be associated with better performance than a negative one, as much research has indicated. Attitude testing was more complex than the previous data-collection tools, and needed more elaboration, and greater effort at interpretation. For the purpose of attitude testing, during the in-depth interviews sentences were used as the vehicles by which attitudes are expressed. According to the test participants were required to decide which of a series of phrases best expresses his feelings about a designated topic or, alternatively, whether or not a given sentence is indicative of his attitude. Attitude tests focused on a wide range of things, including management style, conditions of work, reform policies and the management course itself.

2.2.5. Measuring performance

Performance of trainees after training was first assessed by the trainees themselves. Each trainee identified the function he usually performs in his post and was required to judge thereafter for each of these function whether or not his performance has been impacted by the training. Answers were further elaborated and discussed.

To avoid the bias that could have arisen due to the subjectivity of trainees assessment of their performance, district supervisors were involved in the assessment of trainees' performance after training. Focus group discussions were held with district supervisors, in which they were required to judge the improvement of trainees' performance of the different management functions. Criteria to assess improvement were discussed and the causal relation between training and change in performance was identified.

2.2.6. Quality of training

The quality, efficiency and effectiveness of training were discussed and elaborated in in-depth interviews with trainers, MoH officials and directors of training institutions. Further, options to escalate the delivery of the diploma course, ensure sustainability and improve quality of training were discussed with the directors of the high institutes of health sciences in 18 governorates. In two focus group discussions.

3. Findings of the evaluation

3.1. Strengths of the diploma course

There was a consensus among all participants (trainees, trainers, head of institutes and MoH officials) over the following strengths of the diploma course.

3.1.1. The diploma course as an in country training

One of the major strengths of the diploma course is that it is being delivered in-country by national institutions in the language of the trainees (Arabic language) and more importantly in a setting that accurately reflects the actual working environment of trainees.

Participants indicated that external aid for training middle-level health managers in Yemen and in other developing countries encouraged in the past sending trainees for training courses abroad. This approach proved expensive and ineffective since there is usually no guarantee that trainees will return back to serve in their countries after completing training. This is particularly true for masters- and doctoral-level post-graduate training.

Further, training abroad requires language competencies and educational prerequisites which are difficult to fulfil by the majority of mid-level management staff in Yemen.

Finally, training abroad decapitates management offices because trainees are usually sent for long duration away from their posts.

It was argued by several participants that the old strategy of sending the majority of trainees abroad offered more benefits to the developed countries' training institutions than to the managers from developing countries.

More often than not, training abroad has been the only choice offered by donors, which focused on selecting high-level management staff usually from the central MOH. In-Yemen training that would strengthen local expertise and institutional capacity has not been an option before the initiation of the health sector reform program. In the past, donors used to favour their own or other developed country institutions as providers, to the extent of excluding any other alternative sources of training, presumably because of a perception that the quality is likely to be higher. Some participants criticised some donors for providing training to meet "donor needs", including commercial or political interests, promoting a favourable image of the host country, and winning influential friends, rather than considering what might actually be best for the recipient country.

With the emergence of a strong national vision for the development of management human resources, several in-country training programs in management were delivered and many donors shifted to support in-country training. In this regard, the contribution of the EU program to support health sector reform in Yemen was very much appreciated by participants. The financial and technical inputs of the program to the diploma course were said to have played a substantial role in the successful implementation of the course.

On the other hand, participants stressed that overseas training serves in many cases the personal interests of individuals at the expense of gains in managerial skills. Sometimes, recipients of scholarships regard a scholarship to study abroad as a reward, a vacation, or a “junket” rather than a learning experience. This can compromise the quality and performance of training participants and affect the attitudes of those who would otherwise be more concerned about their learning responsibilities, since mere attendance at an overseas course increases an individual’s prestige within an organisation. Moreover, it is widely known that for some students a significant attraction of overseas training lies in the opportunity to save money from their subsistence payments.

Participants identified several strong arguments that favour the diploma course in-country training as a better use of external aid, including:

1. More people could benefit from the training
2. Staff would not need to be removed from workplace for long periods of time
3. Local institutions’ capacity for training could be strengthened
4. Focus of training could be more geared towards local context, rules and attitudes
5. Training could be linked to reform policies and strategies.

3.1.2. The diploma course targets mid-level management staff from districts and governorates

Participants very much appreciated the fact that the diploma course is the only certificate training program in Yemen for mid-level management staff from districts and governorates.

Notion was made to three other management training courses which were or are being delivered in Yemen. These are:

1. Primary health care management advancement that was delivered by the Liverpool School of Tropical Medicine,
2. Diploma in Community Medicine delivered by the Yemeni Council for Medical Specialisation, and
3. Health Administration Course delivered by the Yemeni Council for Medical Specialisation.

The primary health care management advancement training course was offered by the Liverpool School of Tropical Medicine. The impressions of the participants were not very positive about the course. The course contents were said to have been very general and in general were not suitable to the local conditions in Yemen. Further, the course language was English, which presented a real problem to the majority of trainees. Finally, the training course was delivered once and the number of trainees was not sufficient to bring about real changes in management practices.

The diploma of community medicine is offered by the Yemeni Council for Medical Specialisation. Among other modules, a module on health care administration is

taught as an integral part of the curriculum. This module is said to be very good in preparing doctors to take up management positions at the district and governorate level. However, the majority of the district management team members cannot take part in the course, since only doctors are eligible to enrollment.

In 1996 the Yemeni Council for Medical Specialization organized in collaboration with Amin Nasher Institute in Aden a diploma course in health care administration. The course was not repeated afterwards.

Now the DCHCA is the only systematic training opportunity available in Yemen to Mid-level managers from districts and governorates levels. All participants stressed that the DCHCA should be institutionalized in the high institutes of health sciences to ensure its sustainability in the future. The MOH was urged by the participants to show stronger commitment towards the program to ensure that the mid-level management staff will continue to enjoy such an opportunity of training and development.

3.1.3. The incentive of the diploma certificate

The diploma certificate earned by trainees upon successful completion of the course was said to be one of the strongest motivating factors for students to take part in the course. The diploma certificate offers the opportunity of career development and toping-up the salaries of trainees. However, it was not clear to many participants whether or not the diploma certificate will be recognized by the Ministry of Finance and the Ministry of Civil Services Affairs.

The incentive of the certificate was indicated to be stronger than any other motivating factor. It was said to be even stronger than the financial incentives offered by short-term training courses organized by different donors. Participants believed that the diploma certificate will ensure that the demand among district and governorate management teams for the DCCHA will continue to be high in the future.

3.1.4. The contents of the training program

The contents and structure of the DCCHA was appraised by participants because:

1. The contents were tailored to build capacities in management functions, such as planning, management of human resources, financial management, etc. Such an approach was said to be very helpful for trainees in digesting the concepts related to each management function and simplified the translation of these concepts into actions in realities.
2. The comprehensive approach of the DCCHA was very much appreciated by trainees since students were exposed to concepts covering the entire spectrum of management functions. The comprehensive approach allowed students to have a holistic understanding of the management needs and functions at the district and governorate level. This approach was said to be much better than short training courses, which usually offer cut and pieces of management concepts that are usually difficult to interrelate with each others.

3. All trainees indicated that the DCHCA was the first real opportunity for them to understand the policies and strategies of the health sector reform in Yemen. Concepts such as decentralization were seldom discussed in a comprehensive way as it was done in the course.

3.1.5. The duration and format of training

The DCHCA was delivered in modules over one complete year, whereas each module encompassed a one-week class work and a three-week field work. The duration and format of the DCHCA was appraised by the participants because of the following reasons.

1. It offered student sufficient time for training on each module and on the entire spectrum of modules.
2. Trainees were able to take part in such a long-term duration of training (one whole year) without being obliged to leave their posts in districts and governorates. In other terms, the DCHCA achieved the dual goal of long-term training without interrupting the work of district management teams in any serious manner.
3. In each module, students were first given a comprehensive theoretical and conceptual background on the issue of the module. Then, students were given the opportunity of applying the knowledge and concepts they learnt to their districts. This approach helped consolidate management concepts and relate them to real problems in the community.

3.1.6. Development of training tools and materials

A great deal of work was made to produce 1) readers to students on each module and 2) guides for trainers on the topics to be discussed and the educational methodologies to be used in each module. Participants indicated that such materials were a great help to students and trainers and constitute a real asset for the sustainability, standardization and quality assurance of the learning activities of the DCHCA.

Readers offered the students the opportunity to review the topics they learnt every day in the course and to relate topics of different modules. The readers were also good references for students after they returned back to their workplaces.

Trainers appreciated the guides for trainers since it offered a clear framework for the learning objectives, the teaching methods, the topics of discussions and examples of problem-solving exercises.

3.2. Weaknesses and challenges

Although the DCHCA represented an important development in management training in Yemen, several weaknesses and challenges were identified by the participants.

3.2.1. Unclear organization and weak ownership by the MoH directorates

In the inception phase of the DCHCA a management structure of the DCHCA was proposed and agreed that depicted the different roles of various parties involved in the delivery of the DCHCA. According to this management structure, three roles were identified.

The beneficiary, which is the MoH represented by the general directorate for human resources development (GDHRD). The role of the GDHRD was suggested to:

1. Coordinate among different general directorates of the MoH and help them identify training needs, skills and competencies to be acquired by the trainees and best approaches for training. Directorates that were suggested to be involved in this process were: 1) GD for planning, 2) GD for human resources management, 3) GD for family health, 4) GD for statistics and research, 5) GD for financial affairs, 6) quality management program, etc.
2. Develop an overall plan for training of mid-level management staff and set criteria for performance assessment of trained management teams.
3. Purchase training services from the institutions involved in the delivery of the DCHCA through service agreements,
4. Select candidates for training according to the training plan,
5. Coordinate among various training courses in management and health administration and avoid overlap and duplication,
6. Evaluate the quality, effectiveness and impact of the training activities, and
7. Develop plans to support trainees after completing the DCHCA.

The provider, which are the three training institutions involved in the delivery of the training modules. The roles of the providers were suggested to:

1. Develop the curriculum and modules of training to respond to the needs identified by the beneficiary,
2. Make available good trainers and field supervisors who are able to deliver the training in the required quality,
3. Organize, manage and provide the logistic support for the training sessions throughout the course,
4. Provide coaching and technical support to the trainees in the field,
5. Make available references, textbooks and educational materials required for the successful delivery of the educational modules,
6. Evaluate the students and issue the diploma certificate to the successful students.

7. The providers' services are purchased according to a service agreement by the GDHRD. The fees for training are negotiated between the provider and the beneficiary (the GDHRD) and paid for by the beneficiary. The fees were suggested to be a matter for negotiation every year.

The financier. The financier is basically the MoH and other international organizations and donors working with the MOH. The GDHRD was suggested to coordinate the contribution of the different donors, market and raise funds for the DCHCA and manage the funds channeled to the course.

The logic behind differentiating among the three roles was to:

1. Set-up a contractual relation between the beneficiary and the providers of training services, according to which the providers must conform to quality standards of training. The contractual relation would strengthen the supervisory and evaluative role of the GDHRD over the training activities.
2. Incorporate the DCHCA into an overall plan of human resource development managed by the GDHRD to ensure best utilization of resources and avoid duplication and overlap of training activities.
3. Strengthen the coordination among donors role of the GDHRD in the area of training and development of human resources.
4. Escalate the training benefits to all districts and governorates and not limit it to certain districts financed by certain donors program, and
5. Ensure sustainability of the DCHCA after the termination of the EU-project, since the GDHRD can continue in raising funds from other donors or allocate financial resources from its own budget to the DCHCA.

The experience of the first year of implementation of the DCHCA showed that these roles were not respected. The GDHRD and other directorates of the ministry of health were not properly involved in the management of the course. Instead, the providers dominated the management of the course, the delivery of training and the coordination among donors. The consequences of such domination of the providers included:

1. Many directors of the general directorates have had little knowledge about the DCHCA. The involvement of the general directorates was very weak. Many directors felt excluded and developed therefore negative attitudes towards the DCHCA.
2. Many directorates continued to deliver training on areas covered by the DCHCA. In some occasions training on the same issues were provided to the same participants of the DCHCA by the directorates. This caused confusion to the students and wasted training opportunities which could have been better planned if directors of the directorates were more actively involved in the management of the course.
3. Since the directorates were not involved in the management of the course, the national policies and systems of those directorates were not adequately incorporated in the DCHCA. Just to give one example, the quality management program of the MoH developed national quality standards, tools

and systems, which were not incorporated in the quality management module of the DCHCA.

4. Because different parties did not adhere to their roles, a counterproductive state of competition emerged among different parties involved in the diploma course. Two important examples could be given here to exemplify such a counterproductive competition:
 - a. The National Management Training Center (NMTC) is said to overtake many of the functions supposed to be the responsibilities of the general directorates for human resources development. While the NMTC is intended to provide short training courses in management according to a national plan for management training developed by the GDHRD, the center is said to be uncooperative in this regard.
 - b. The two other institutes involved with the NMTC in the delivery of the diploma course voiced concerns about the dominant role of the NMTC. Their argument goes this line: Although diploma certificate is issued by these two institutes in Aden and Sanaa and that the NMTC cannot issue the certificate, the two institutes are both responsible for the delivery of only four modules out of the 10 modules of the DCHCA. The NMTC alone delivers 6 modules and is responsible for the overall management of the course. Such an imbalance of contribution and authority was described as counterproductive.

3.2.2. Field supervision either non-existent or very weak

The structure of the DCHCA placed a special emphasis on the field-assignments and on-job training. According to the design of the DCHCA, in each module students were supposed to attend a one-week intensive class-work, followed by field work assignments at their workplace for three complete weeks. The evaluation by the students and the district supervisors revealed that the field training was the weakest component of the course. The following shortcomings were indicated:

1. Field supervision was either non-existent or very weak. Field visits if they took place were for only half-day.
2. The field training was shortened to only one week instead of three weeks. Further, the field assignments of every two modules were merged together. This causes a great deal of confusion among students and reduced the benefits of the field assignments.
3. The short duration of the field training and merging the field training for different modules did not give students sufficient time to digest the huge flow of information during the intensive class work.
4. Governorate's coordinators who were appointed to facilitate the field training were:
 - a. not adequately informed about the training,
 - b. were not trained on the topics of the DCHCA,

- c. provided very little help to students, and
- d. did not devote enough time to students.

3.2.3. Lack of specialized training

The initial concept of the DCHCA identified four major specialization tracks for participants. It was planned that all students should attend a number of general courses before they select one of the major specialization tracks. These tracks were:

1. General management,
2. Management of human resources,
3. Financial management, and
4. Information management.

The DCHCA in its first year of implementation did not comply with this design. Instead, equal emphasis was given for all modules and students were not given the opportunity to specialize in one of these tracks. As a result, the time devoted to each module was too short to attain real impact on the students' knowledge, attitudes and skills. Students complained that the short time devoted to each module (practically one week of lectures) did not give them a real opportunity to improve their skills or entirely digest the concepts they were exposed to.

3.2.4. Skills

There was a consensus among trainees that the DCHCA was very weak in improving their practical skills. The emphasis of the course was on transferring knowledge through lectures. Very little attention was given to skills development. For instance, training on computer was almost absent in the course. Students had expectations to be trained on software programs that can be used in different management functions such as Microsoft Project Mangers for planning functions, spread sheet based programs e.g. Microsoft Excel for financial management, SPSS or EPI-Info for research functions, Microsoft Access for management information systems. Such training did not take place.

3.2.5. Target groups

One of the most controversial issues related to the DCHCA is the eligibility criteria for enrollment in the course. The majority of students, trainers and district supervisors indicated that participants should have at least a secondary school certificate as a prerequisite for enrolment in the course. If the diploma course continues to enroll staff with educational attainment less than secondary school, the value of the diploma certificate will be severely compromised. Further, the probability that the Ministry of Finance and the Ministry of Civil Services Affairs recognize the diploma certificate will be almost Zero.

It was said that the huge difference in the educational background of trainees could hamper the quality of training and make the course boring for those with

higher educational levels and over-challenging to those with lower educational attainment.

Students indicated that staff whose educational attainment is less than secondary school could be trained through short training courses and not necessarily through the diploma course.

3.2.6. Sustainability of the course

Strong concerns were raised around the sustainability of the DCHCA. Participants indicated that the continuity of the diploma course will be severely undermined after the termination of the EU-program. If a proper structure and organization of the course management is not reached, it will be extremely difficult to ensure funds to finance the students or the training institutes.

3.3. Findings of the evaluation framework

The following tables present the results of the analysis of the evaluation framework. Findings are organized under reaction, learning, behavior, impact and performance levels.

Reaction Level: Curriculum and reader

Module	Relevance	Comprehensiveness	Clarity	Language	Presentation	Practicality	Overall assessment
Health Sector Reform	Very Good	Excellent	Very Good	Very Good	Good	Good	Very Good
Planning	Very Good	Satisfactory	Satisfactory	Good	Good	Good	Good
Monitoring and Evaluation	Good	Poor	Poor	Poor	Poor	Poor	Bad
Human Resources	Very Good	Very Good	Very Good	Very Good	Good	Very Good	Very good
Financial Management	Good	Satisfactory	Poor	Satisfactory	Satisfactory	Bad	Satisfactory
Management information	Good	Poor	Poor	Poor	Poor	Poor	Bad
Applied Research	Very Good	Very Good	Very Good	Very Good	Good	Good	Very Good
Quality Management	Very Good	Good	Satisfactory	Satisfactory	Poor	Poor	Satisfactory
Primary Health Care	Very good	Good	Good	Satisfactory	Satisfactory	Good	Good
Supply Management	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory

Assessment scale: Excellent, Very good, Good, Satisfactory, Poor

Reaction Level: Learning and teaching methods

Module	Students' participation	Quality of lectures	Practical exercises	Problem solving	Educational tools	Quality of presentation	Overall assessment
Health Sector Reform	Very good	Excellent	Very good	Good	Very Good	Excellent	Very Good
Planning	Very good	Very good	Excellent	Good	Very good	Very good	Very Good
Monitoring and Evaluation	Satisfactory	Satisfactory	Satisfactory	Good	Good	Good	Satisfactory
Human Resources	Good	Good	Satisfactory	Satisfactory	Good	Very good	Good
Financial Management	Poor	Poor	Poor	Poor	Poor	Poor	Poor
Management information	Poor	Good	Satisfactory	Poor	Good	Very good	Satisfactory
Applied Research	Poor	Good	Poor	Satisfactory	Satisfactory	Good	Satisfactory
Quality Management	Satisfactory	Very good	Satisfactory	Satisfactory	Good	Very good	Good
Primary Health Care	Good	Excellent	Very good	Good	Very good	Excellent	Very good
Supply Management	Poor	Good	Poor	Poor	Satisfactory	Good	Satisfactory

Assessment scale: Excellent, Very good, Good, Satisfactory, Poor

Reaction Level: Training environment

Module	Module organization	Regularity of learning activities	Adherence to time schedule	Availability of learning resources	Student friendly environment	Treatment of students	Overall assessment
Health Sector Reform	Very good	Very good	Excellent	Good	Good	Very good	Very Good
Planning	Excellent	Very good	Very good	Good	Good	Very good	Very Good
Monitoring and Evaluation	Satisfactory	Good	Satisfactory	Very good	Good	Excellent	Good
Human Resources	Good	Good	Good	Good	Good	Very good	Good
Financial Management	Poor	Poor	Poor	Poor	Satisfactory	Satisfactory	Poor
Management information	Good	Very good	Very good	Good	Good	Very good	Very Good
Applied Research	Satisfactory	Satisfactory	Satisfactory	Good	Good	Excellent	Satisfactory
Quality Management	Good	Good	Good	Good	Good	Very good	Good
Primary Health Care	Excellent	Very good	Very good	Good	Very good	Very good	Very Good
Supply Management	Satisfactory	Good	Satisfactory	Poor	Satisfactory	Satisfactory	Satisfactory

Assessment scale: Excellent, Very good, Good, Satisfactory, Poor

Reaction Level: Field training and supervision

Module	Regularity	Sufficiency	Coaching	Problem solving	Presentation	Evaluation	Overall assessment
Health Sector Reform	Poor	Poor	Good	Poor	Good	Good	Good
Planning	Poor	Poor	Poor	Poor	Poor	Poor	Poor
Monitoring and Evaluation	Poor	Poor	Satisfactory	Poor	Satisfactory	Satisfactory	Satisfactory
Human Resources	Poor	Poor	Poor	Poor	Poor	Poor	Poor
Financial Management	Poor	Poor	Poor	Poor	Poor	Poor	Poor
Management information	Poor	Poor	Good	Poor	Good	Good	Good
Applied Research	Poor	Poor	Satisfactory	Poor	Satisfactory	Satisfactory	Satisfactory
Quality Management	Poor	Poor	Poor	Poor	Poor	Poor	Poor
Primary Health Care	Poor	Poor	Poor	Poor	Poor	Poor	Poor
Supply Management	Poor	Poor	Poor	Poor	Poor	Poor	Poor

Assessment scale: Excellent, Very good, Good, Satisfactory, Bad

Reaction Level: Assessment of trainers' performance

Trainer	Institute	Technical knowledge	Communication	Presentation	Commitment	Overall assessment
Abdallah Rashid	Amin Nasher Institute	Poor	Poor	Poor	Poor	Poor
Abdel Jabar Ali Abdullah	National Training center	Excellent	Excellent	Excellent	Excellent	Excellent
Abdul Aziz Najmel Deen	Sanaa High Institute	Good	Poor	Good	Poor	Satisfactory
Abdullah Sharaf	Sanaa High Institute	Good	Poor	Satisfactory	Satisfactory	Satisfactory
Ahmed Aklaan	Sanaa High Institute	Good	Poor	Satisfactory	Satisfactory	Satisfactory
Ali Bin Buraik	National Training center	Very good	Very good	Very good	Very good	Very Good
Ali Jahaf	National Training center	Excellent	Excellent	Excellent	Excellent	Excellent
Fayssal Al Awaddi	National Training center	Good	Satisfactory	Satisfactory	Poor	Satisfactory
Hesham Al Khubash	Amin Nasher Institute	Good	Good	Poor	Very good	Good
Helal	National Training center	Poor	Poor	Poor	Poor	Poor
Jamila Awad	Sanaa High Institute	Good	Poor	Poor	Good	Satisfactory
Qaed Abadi	National Training center	Very good	Very good	Very good	Very good	Very good
Lutfi Ismail	National Training center	Poor	Poor	Poor	Poor	Poor

Trainer	Institute	Technical knowledge	Communication	Presentation	Commitment	Overall assessment
Mayhoub Mukbil	National Training center	Good	Good	Good	Good	Good
Mohamed Al Fakeeh	National Training center	Good	Good	Good	Good	Good
Salih Ahmed Al Hakam	Amin Nasher Institute	Excellent	Very good	Good	Very good	Very Good

Learning Level: Knowledge, skills and attitudes learnt

Module	Concepts	Technical knowledge	Know-how	Practical skills	New attitudes	Communication skills	Overall assessment
Health Sector Reform	Excellent	Excellent	Satisfactory	Satisfactory	Excellent	Very good	Very Good
Planning	Very good	Very Good	Satisfactory	Poor	Good	Good	Good
Monitoring and Evaluation	Very good	Good	Satisfactory	Poor	Good	Good	Good
Human Resources	Good	Satisfactory	Satisfactory	Poor	Good	Good	Good
Financial Management	Poor	Poor	Poor	Poor	Poor	Poor	Poor
Management information	Good	Satisfactory	Poor	Poor	Good	Satisfactory	Satisfactory
Applied Research	Very good	Satisfactory	Poor	Poor	Very good	Good	Good
Quality Management	Very good	Satisfactory	Satisfactory	Poor	Very good	Good	Good
Primary Health Care	Excellent	Excellent	Good	Satisfactory	Excellent	Very good	Very good
Supply Management	Good	Satisfactory	Satisfactory	Poor	Good	Satisfactory	Satisfactory

Assessment scale: Excellent, Very good, Good, Satisfactory, Bad

Behavior, impact and performance levels: Assessed by trainees and district supervisors

Management training impact domains	Conceptual	attitudinal	Behavioral	Skills	Creativity, innovation	Communication	Overall assessment
Planning	Very good	Good	Good	Poor	Good	Very good	Good
Management information	Good	Good	Poor	Poor	Poor	Good	Satisfactory
Human resources	Very good	Good	Good	Poor	Good	Very good	Good
Quality assurance	Good	Good	Good	Poor	Poor	Good	Satisfactory
Financial management	Satisfactory	Poor	Poor	Poor	Poor	Satisfactory	Poor
Monitoring and evaluation	Good	Satisfactory	Satisfactory	Poor	Poor	Satisfactory	Satisfactory
Research	Good	Satisfactory	Satisfactory	Poor	Poor	Good	Satisfactory
Supply management	Very good	Good	Good	Satisfactory	Satisfactory	Good	Good
Team work	Very good	Very good	Very good	Very good	Satisfactory	Very good	Very good
Community involvement	Very good	Good	Good	Poor	Poor	Very good	Good
Decentralization	Very good	Very good	Very good	Good	Satisfactory	Very good	Very good

Assessment scale: Excellent, Very good, Good, Satisfactory, Bad

4. Conclusions and Recommendations

The main conclusions and recommendations to be drawn from this evaluation are:

1. The Diploma course in Health Care Administration was in general successful in training mid-level management staff at district level. It is recommended to continue supporting the course both technically and financially.
2. The management of the course should be institutionalized in the general directorate of human resources development, which should play in the future a more active role in fine-tuning, managing and evaluating the course. The GDHRD is recommended to coordinate the selection of candidates for training, raise funds for their training and ensure sustainability of the delivery of the course. The GDHRD is recommended as well to have contractual relation with the institute delivering the course.
3. It is recommended that the delivery of the diploma course should be restricted to the Amin Nasher High Institute of Health Sciences and Sanaa High Institute of Health Sciences. The two institutes are recommended to run parallel courses and to be responsible for the delivery of all modules. The two institutes will need to be supported by qualified trainers, a role which the national management training center in Sanaa is recommended to play.
4. Trainees for the second year of the course should be selected from the high institutes of health sciences in the governorates. There are 10 governorate's institutes affiliated to the high institute in Sanaa and 8 institutes affiliated to Amin Nasher Institute in Aden. Two to three trainees can be enrolled from each governorate's institute to be trained in Aden or Sanaa institutes according to their affiliation.
5. The trainees from the governorate's institutes should be equipped with necessary knowledge and skills that enable them after their graduation to deliver the diploma course in their institutes.
6. The National Management Training Institute is recommended to focus on providing short training courses for district management teams which are not related to the diploma course.
7. The field training was the weakest component of the diploma course. To strengthen the quality of field training, it is recommended to incorporate the WHO-supported community health management training program into the diploma course instead of the current field training. The WHO training program is well structured and aims at training district management teams in their workplaces through a problem-based approach.
8. There was evident difference in the quality of trainers. Further, the number of trainers involved was too big and not justified. It is recommended to select only one good trainer for each module and provide them with good financial incentives to ensure their commitment and motivation.
9. The structure of the district management teams should be reconsidered. Clear job descriptions of the district management teams need to be formulated and proper management procedures are to be developed and installed. These are essential requirements to improve the performance of

the district management teams and enhance the impact of the diploma course training on their performance.

10. The financial management module needs to be redesigned and improved. The module received the worst scores among all modules in almost all aspects.
11. The teaching and learning methods of some modules need to be more interactive and participatory. Emphasis should be placed on practical aspects and based on real problems.
12. Development of trainees' skills was the weakest aspect of the training impact. It is recommended to incorporate training of the following software in the various modules of the course.
 - a. Microsoft project manager should be incorporated in the planning module,
 - b. Microsoft access should be incorporated in the management information system module,
 - c. Microsoft excel should be incorporated in the financial management module, and
 - d. SPSS should be incorporated in the research module.
13. It is recommended to introduce specialization tracks or concentrations in the diploma course. Students should attend lesser number of general modules and the duration of the modules should be increased.
14. Training institutions should be paid a flat rate per trainee according to a contract or service agreement held between the general directorate of human resources development and the training institute. The scholarship rates for trainees should be increased to cover the costs of transportation, accommodation, supplies and field work in a realistic manner. Trainees should be paid by the general directorate of human resources development and not by the training institutions.
15. The students' readers and trainers' guides that were developed in the first year are satisfactory in general. It is recommended to support the production of these materials after improving the following aspects:
 - a. Extending the parts related to skills and competencies,
 - b. Adhering to a uniformal format, style and approach,
 - c. Improving the presentation of the materials through illustrations, diagrams and summary boxes, and
 - d. Developing an electronic version of the materials

5. Annex 1. Terms of reference

Support to Health Sector Reform in the Republic of Yemen

European Commission - Ministry of Public Health and Population

Project No. YEM/B7-3000/IB/98/0710

TERMS OF REFERENCE:

HUMAN RESOURCES MANAGEMENT SPECIALIST

Evaluation of the Diploma Course for Management of Health Services

International short-term expert under EC Technical Assistance for the Programme Support Stage (PSS) 2004

Objective of the consultancy:

The objective of the assignment is to carry out an independent evaluation of the design and first year of implementation of the training programme for district health managers ("Diploma Course for Management of Health Services") set up by the project in cooperation with three national health training institutions in 2003/2004, as well as to make recommendations and prepare a Workplan for expansion of the course to training institutions on the Governorate level.

Expertise required:

An international Human Resources Management Specialist, with experience in development, implementation and evaluation of training programmes for personnel in the health sector in developing countries. The expert needs to have a university degree in public health or educational sciences, at least 10 years of professional experience, as well as full proficiency in the Arabic language (speaking, reading, writing), in order to evaluate the training programme, which is documented and taught in Arabic only. Former experience in Yemen would be an asset.

Description of the consultancy:

The assignment will take place in Sana'a, Republic of Yemen, with travel to project districts and training institutions outside of Sana'a as necessary. The duration of the assignment will be 23 days, to take place in March 2005. The expert will work closely with the three training institutes implementing the course.

Tasks for the assignment:

1. Carry out a complete evaluation of the Diploma course, focusing on the following elements:
 - a. Appropriateness of the course set-up (modularity, teaching done by three institutes, relative weight given to class-room teaching vs. field

assignments, distribution of modules between institutes vs. capacity and competency of the institutes, etc.)

- b. Content, completeness and appropriateness of the course curriculum as applied in the course
- c. Appropriateness and quality of teaching methodology and the training materials used
- d. Qualifications, capacity and quality of the trainers and field supervisors of the course
- e. Capacity and performance of the training institutes to implement the course, including all aspects of course administration, coordination between institutes, teaching, field assignments monitoring and quality assurance of the course
- f. Role of the course and integration of it in the wider field of health training courses
- g. Appropriateness of the procedures for selection of trainees (primary selection criteria, nomination procedures applied by Governorates, actual selection process applied by committee, etc.)
- h. Performance of the Steering Committee and Management Committee charged with oversight and administration of the course, and appropriateness of their terms of reference
- i. Appropriateness of the course budget, efficiency and appropriateness of financial procedures and payment of trainers assessed against the background of financial administration of similar courses in the country
- j. Impact of the training course (performance of the trainees in their working environment in the district health offices, gains in efficiency and effectiveness of district health management as a result of the course, etc.)
- k. Sustainability of the course (expected percentage of the overall course cost carried by the Ministry, how successful were the institutes to attract donors to sponsor the course, how stable can future donor support expected to be?)

2. Explore future directions for the development and expansion of the course

- a. Based on the findings of the evaluation, make recommendations for improvement of any aspects of the course, which are performing sub-optimally; develop a priority list of action items; give special attention to the quality of teaching
- b. Make recommendations and (jointly with the training institutes) develop a workplan for the further expansion of the course and integration into the wider field of health training courses; give special attention to the sustainability of the course

- c. Prepare a phased Workplan for expansion of the course to training institutions on the Governorate level, with the final aim to enrol four members of the district health management teams of all 300 districts in the country in the Diploma Course within the next 10 years.
 - d. Identify recourses (capacity building of trainers and administrators, training materials, equipment, buildings) needed by the training institutes to reach universal coverage of all districts, prepare a phased approach
 - e. Make recommendations for coordination of funding to the course by the Government and donors
3. Write and present a comprehensive report of all the findings and recommendations of the consultancy

6. Annex 2: Resume of the expert