A GUIDE TO NATIONAL TRAINING NEEDS ASSESSMENT FOR HUMAN SETTLEMENTS: A COMPETENCY BASED APPROACH

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FOREWORD

For many years, the United Nations Centre for Human Settlements (Habitat) has been concerned with building up the capacities of developing countries to plan and deliver training which will provide skills needed to implement urban programmes. Among the many strategies proposed by the Centre is the careful and continuous assessment of training needs. However, efforts to strengthen the capacity of developing countries to carry out training needs assessments have been severely hampered by the lack of procedures and guidelines. As a first step in filling this gap, initial research and field testing of systematic training needs assessment methodology for human settlements institutions were carried out in I986-I987 by UNCHS (Habitat). A manual, subsequently published by UNCHS (Habitat), documents the results of field testing and furnishes guidelines on conducting needs assessment at the organizational level.

This publication represents another step toward the development of practical guidelines for conducting training needs assessments. Here, the objective is to build a capacity within a developing country to assess, at the national level, the training needs of administrative, professional and technical personnel who are concerned with human settlements. This publication is intended for we by operating agencies as an aid in making training decisions and by training institutions as a guide for upgrading their training programmes.

I wish to thank Dr. Fred Fisher and Mr. David W. Tees for preparing this guide in collaboration with UNCHS (Habitat) staff, and with SGV Consultants who were responsible for its field-testing in Nepal.

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INTRODUCTION

Carrying out training needs assessment for an entire country is a daunting task. This is true for at least two reasons. First, the sheer magnitude of the undertaking is intimidating, particularly if the goal is to pinpoint the training needs of all human settlements workers in the country. Secondly, there are no existing programmes or methodologies available to guide such an undertaking. It is the purpose of this guide to address both these concerns. The study advances a methodology and presents some guidelines for undertaking a national training needs assessment. More importantly, the study brings a new perspective to national assessments: it removes the task from the "overwhelming" category and puts it in the "workable" and practical range of activities.

The rationale for a national training needs assessment

Public and private institutions have come to rely on training to develop critically needed administrative, professional and technical competencies. The importance of training for human settlements development is underscored in the following quote from a recent United Nations report:

"The complex issues involved in human settlements development, particularly at the local level where projects and programmes are implemented, call for considerable training. The spectrum for such training should be very wide, reflecting the scope of human settlements concerns, and should create the technical skills to meet all needs, from the operation of services to the formulation of policy and programmes at the highest levels of administration."[(1)]

The importance of investing in the competence of the national workforce is underscored by Ginzberg and Voita who point out that " ... human capital, defined as the "skill, dexterity, and knowledge" of the population, has become the critical input that determines the rate of growth of the economy and the well being of the population."[(2)] Although dependent on training, institutional leaders are increasingly critical of training accomplishments. One criticism of training is that there is insufficient needs analysis to match the training to be done with the performance requirements of the organizations concerned.

Training needs assessment is a term used to describe any systematic attempt to diagnose changing work requirements and to develop creative training responses to needs as they are discovered. Although advocated in literature as a critical element in the training process, needs assessment is sadly neglected in practice.[(3)] When it is undertaken, training needs assessment is used at the individual work unit or organizational level.[(4)] Seldom, if ever, has training needs assessment been used to identify and analyse needs on a nationwide scale.

In the opinion of the consultants, training needs assessment can and should be used at the national level for at least four reasons:

(a) **Increase operational efficiency.** Millions are spent each year on training in the public and private sectors of many countries, in the hope of improving worker efficiency and effectiveness. However, it is not known how much improvement in human performance is occurring or what is the return on the investment. To determine these, it is necessary to have national standards of competence derived from competency-based training needs assessment. Without standards of this kind to measure current performance and plan appropriate training, answers to questions about performance are mere speculation.

(b) **Upgrade the national labour force.** Developing countries are strongly motivated to replace expatriates with native-born citizens in key managerial, professional and technical positions. Training plays a central role in the realization of this national goal. However, the usefulness of training depends on the availability of a system that can ensure that scarce training resources are not wasted, and that training is provided when and where it is needed. This cannot be achieved without systematic training needs analysis.

(c) **Strengthen national training institutions**. It is common practice for private and public agencies in many countries to send their employees outside the country to be trained. This practice is expensive for the user-agency and costly to the national economy in that it exports capital and denies work to local training institutions. The availability to local training institutions of nationally derived training needs information would give these institutions a competitive advantage over outside organizations. Moreover, these institutions would be able to design programmes with the greatest learning value for those to be trained.

(d) **Preparing today for the demands of tomorrow.** National institutions are preoccupied with tomorrow's needs and how to prepare for them. Economic development plans, workforce plans, and capital facilities plans are examples of efforts to anticipate and prepare for the inevitability of change. Unfortunately, upgrading the skill requirements of the country's workforce often lags behind the introduction of new programmes and technologies. This need not be the case. The appraisal of reliable trend information in the process of analysing training needs can help to ensure that workers receive training not just for old job demands but for new ones as well.

Needs assessment methodologies

There are two methods for training needs assessment - the problem-analysis method and the competency-based method. Other methods are variations of these two.[5]

Problem-analysis method

A key aspect of the problem-analysis method is the "collection and analysis of existing organizational data to extract meaningful conclusions about the needs for training."[6] The problem-analysis method involves organizational self-examination aimed at discovering discrepancies in individual, unit or organizational performance. The problem-analysis method also considers changes in policies, programmes and services that will require new knowledge or skills if they are to be carried out effectively. The problem analysis method is designed for use at the organization level. Typically, it is reactive, responding to what has occurred in the past, e.g., what has gone wrong.

Competency-based method

In this method of training needs assessment, emphasis is on locating and describing characteristics or "competencies" critical to successful performance and applicable to clusters of jobs in all types of organizations. These characteristics, in turn, can be used to measure actual performance. The results can be used in planning appropriate training for categories of workers with similar job requirements.

Unlike the problem-analysis method, the competency-based method is proactive. It attempts to create standards of excellence that provide organizations and institutions with a common language about performance. According to one authority, "the competency concept may be the most exciting and potentially promising idea to hit the training field since behavioral objectives."[7]

Conditions for making the process manageable

There is ample justification for widening the scope of training needs assessment in the human settlements sector. To make the task manageable, however, certain conditions must be accepted.

1. Needs assessment should support national development planning.
   A national assessment of human settlements training needs, using the competency-based method, is meant to be congruent with the national development planning process. It is intended as a qualitative guide for institutions and individuals in comparing existing performance with the ideal, in order to plan programmes of remedial training. It is not intended as a guide for diagnosing the performance problems of specific organizations or individuals. Competency-based training needs assessment is designed to be implemented through institutions in one or more sectors of a society, i.e., shelter, commerce, agriculture. The process; lends itself to periodic updating based on evolving needs and trends.

2. Needs assessment should not be stifled by overemphasis on analytical detail.
   The greatest threat to the success of a training needs assessment carried out on a national scale is the process's becoming "bogged down" in detail. Training needs assessment sometimes employs task analysis. This detailed and time-consuming venture, although useful at the job or individual level, is out of the question for a broad-scale process such as the one proposed here. The specificity or amount of detail required to carry out a training needs assessment diminishes as the scope of coverage expands.

3. Training should not be confused with pre-service education.
   Training is not education. The distinction is important when considering how to employ the training needs assessment process. Training is concerned with the competency of people who already are part of the national workforce, education is concerned with providing a knowledge base and thinking capacity needed by men and women to be productive members of the workforce at some future time.

Kerrigan and Luke define education as: ... classroom oriented instruction emphasizing cognitive learning and knowledge acquisition not immediately applicable or directly limited to one's specific organizational context." They define training as "job specific and organisationally related learning activities aimed at increasing an individual's job related knowledge."[(8)]

4. Training needs assessment should not be confused with workforce planning.
While workforce planning is a concern of all developing countries, it is important not to confuse its ends with those of training needs assessment. Workforce planning is concerned with the number of individuals required to fill certain roles in the" work setting at some future date based on the best projections that can be made at the time. Training needs assessment is intended to develop a plan for use by institutional leaders and training directors in deciding how training can be used to raise the average performance of existing workers to levels already achieved by their competent peers. These distinctions must be understood if training needs assessment is to accomplish its purpose.

5. The assessment process should be limited in scale.
The prospect of doing a training needs assessment on a national scale is a daunting one. One way of making it manageable is to limit investigation to administrative, professional and technical employees in the human settlements sector. This approach does not deny the importance of other workers. Rather, it emphasizes the reality of limited training resources and the need to focus on those who provide administrative, professional and technical leadership for the sector.

6. Strong institutional support is required for training needs assessment.
Training is designed to produce competent behaviour that will result in accomplishments that have value for society and its institutions. But, training is expensive. There seldom are enough resources to meet every training need. However, the consequences of not training are far more expensive than the costs of training in terms of failure to develop the potential of a country's human capital. Training needs assessment, based on an identification of critical competencies, can bring both rigour and direction to training investments.

Training is not an end in itself. It poses a challenge to a country's institutions to take advantage of the results of needs assessment to develop and conduct relevant training and to put the new skills to work in the furtherance of national goals. Commitment and support from key national organizations and training institutions are essential ingredients in the conduct and implementation of a successful training needs assessment.

Using this guide

This guide is intended for use in planning and conducting a national training needs assessment using what is called "the competency-based assessment method."

Chapter I explains how to activate a competency-based training needs assessment of administrative, professional and technical (APT) employees in the human settlements sector of a country. This is accomplished by providing the assessment process with a solid organizational base and by providing training for those individual officials selected to carry out needs assessment tasks.

Chapter II describes the competency-based training needs assessment process and the development of competency standards which are to serve as bases for comparing the actual performance of APT employees throughout the sector with ideal performance. It also explains how to quantify the demand for competency-based training to guide sectoral training institutions in responding to the training needs of sectoral operating agencies.

Chapter III outlines alternative ways that sectoral operating agencies can use competency standards to meet the training needs of their APT employees.

Chapter IV sets out a strategic planning process for the development of specific training responses to needs identified through competency-based training needs assessment.

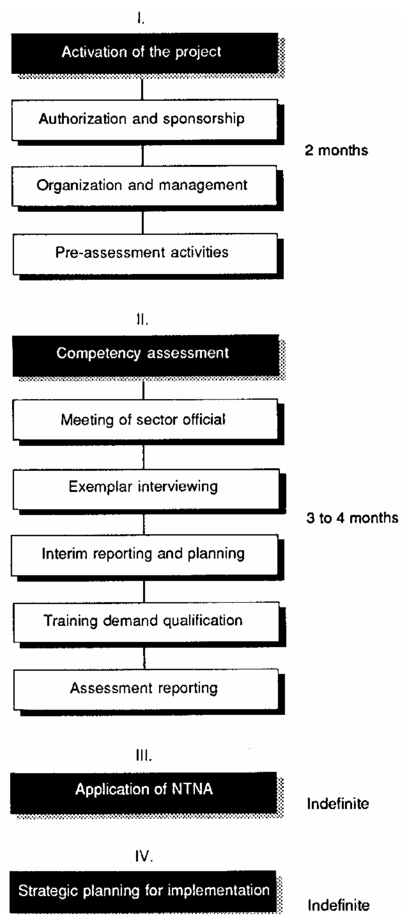
Chapter V is a case study of the field test of this assessment methodology. It was conducted in cooperation with the Ministry of Housing and Physical Planning, His Majesty's Government of Nepal.

The annexes contain specific tools for the use of assessors and other participants who take part in the assessment process. [9]

Footnotes

[1] United Nations Centre for Human Settlements (Habitat), *Global Report on Human Settlements, 7986.* (New York, Oxford University Press, I987), p. 115.
[2] Ginzberg. E. and Volta, G.J., "The service sector of the U.S. economy," in Scientific *American* (1981), No. 244 (3). pp. 48-55.
[3] Moore, Michael L., and Dutton, Philip "Training needs analysis: review and critique," in Academy of Management Review (July I978). p. 532.
[4] McGehee, W. and Thayer, Paul W., *Training in Business and Industry* (New York, John Wiley and Sons, 1961).
[5] Davis, Larry N., and McCallon, Earl, *Planing, Conducting and Evaluating Workshops* (Austin, Texas, learning Concepts, 1974), p. 39.
[6] *Manual for Training Needs Assessment in Human Settlements Organization.* (Nairobi, United Nations Centre for Human Settlements (Habitat), 1987), p.2.
[7] Zemke, Ron, "Job competencies: can they help you design better training?", Training (May 1982). p. 31.
[8] Kerrigan, John E., and Luke, Jeff S., Management Training Strategies for Developing *Countries* (Boulder, Colorado, Lynne Rienner Publishers. 1987), p.18.
[9] The reader is urged to read annex I before undertaking the assessment process since it explains the underlying theory for the competency based approach to training needs assessments.

The national training needs assessment (NTNA) process: Diagram of competency-based needs assessment and other training related activities



CHAPTER I

ACTIVATION OF THE PROCESS

Interest in a national training needs assessment process tends to be greatest among countries that understand the relationship between training and the achievement of national goals. The process often begins with discussions between officials of national institutions and representatives of UNCHS (Habitat) or other international organizations that offer training programmes and services. From these discussions comes an official statement initiating the process, usually on a limited scale within the country. This is followed by the organization of a small and well trained team that, with the help of an outside consulting group, develops a plan for carrying out the assessment.

Exhibit I outlines the steps required to get a needs assessment process off to a successful start.

Exhibit I

Steps in the activation of a training needs assessment process

Step I. Authorization and sponsorship
- Sectoral access
- Terms of reference
- Official notification

Step 2. Organization and management
- The lead agency
- The assessment team
- Selecting AT members
- Team leadership

Step 3. Pre-assessment activities
- Background studies
- Assessment team training and planning

Step 1 - Authorization and sponsorship

A successful national training needs assessment (NTNA) depends on proper authorization and strong sponsorship from the human settlements sector.

Sectoral access

Securing authorization to begin the process and sponsorship for assessment activities requires access to human settlements organizations and influential individuals. Two types of organizations or individuals are involved:

(a) Those whose approval gives sanction to needs assessment activities, such as a ministry concerned with human settlements, a central agency concerned with human resource development or personnel matters, or a national training institution;

(b) Those whose active sponsorship is necessary to provide access to needed resources. These might include public or private human settlements agencies that employ personnel with the special knowledge and skills needed for assessment activities.

Terms of reference

The conditions under which a training needs assessment is to be carried out in a country are contained in a document called the terms of reference (TOR). The TOR normally set forth:

(a) The assessment objectives;
(b) The roles and responsibilities of assessment agencies and assessment team members;
(c) The activities to be undertaken, with intended starting and completion dates;
(d) The products that will be provided, when assessment activities are complete.

The terms of reference are essential to the effective management of a competency-based training needs assessment. They provide sectoral officials with a blueprint for carrying out assessment activities. In the manner customary for approval of new projects, the terms are submitted for. review and approval by the appropriate human settlements agency. Typical wording for the TOR can be found in annex II.

Official notification

Following preparation and approval of the TOR, agencies within the sector are notified. The notification is prepared on behalf of the appropriate human settlements agency, to provide official authorization for the assessment process as a legitimate sectoral activity. The statement is disseminated through customary channels and used to promote interest and sponsorship of assessment activities among sectoral organizations.

Step 2 - Organization and management

The lead agency

The degree and type of institutional involvement in the management of an NTNA will vary from country to country. In virtually all developing countries, there are several national organizations that can assume the lead role. Among these institutions are:

(a) A central agency concerned with human resource development or personnel management (e.g., directorate of personnel management);
(b) A central ministry responsible for human settlements (e.g., ministry of public works and housing);
(c) A national training institution that works closely with human settlements (e.g., national institute of public administration).

No special methodology exists for selecting a lead agency. However, prior knowledge of these institutions and meetings with their representatives will help in choosing one of them for a leadership role.

More often than not, one agency will stand out as having a dominant role in the human settlements sector. This agency will be known by:

- Its technical expertise within the sector
- The linkages it has developed within the sector
- The leadership role it performs in facilitating human settlement policy and programme activities
- The services it provides in coordinating and communicating sector activities
- Its willingness to commit resources in support of worthwhile ventures
- An appreciation of the benefits to be derived from being involved an assessment project of this kind.

The agency that assumes the lead role in implementing a national training needs assessment should be aware of the benefits and costs associated with such a role. The benefits have been spelled out earlier in the Guide. Foremost among these is the development of an information base that can provide guidance and direction for human resource and institutional development policies and programmes on a sector-wide basis while also serving the needs of organizations and individuals involved in human settlements activities. The most obvious cost in taking the leadership role in the assessment process is the staff time and energy required to carry out a successful sector-wide programme.

The assessment team

The assessment team (AT) is a small group of dedicated individuals who have been identified by the lead agency to carry out many of the tasks critical to the ultimate success of the project. They will, in most cases, be directly involved in the day-to-day activities of the sector or be associated with the sector in some service capacity, such as training.

It is important to form a local assessment team for several reasons: First, the success of the project depends in large measure on having knowledgeable and dedicated staff to carry it out. Creating a team from the ranks of the sector itself is the best way to assure that these qualifies are present among team members.

Secondly, the assessment process requires considerable staff resources if it is to be implemented successfully. To contract an outside organization to assume all of the task responsibilities would be expensive and, probably, not the best use of scarce sector resources.

Perhaps the most important reason to create a local assessment team is the valuable professional and personal development experience the exercise provides those individuals who are selected to serve on the team. They will not only expand their knowledge and understanding of the sector but also develop diagnostic and analytical skills that will serve them and their organizations immediately and in the future.

The task of the assessment team is to manage and implement the assessment process. Essentially, the process involves: planning a sector-wide assessment strategy; organizing and carrying out a major data gathering and analysis effort; and, helping sector leaders develop policies and programmes that will maximize use of the data to improve the competence and overall performance of the sector's human and institutional resources.

Selecting AT members

Selecting a qualified and dedicated AT will be one of the most important tasks the lead agency will carry out. The number of members on the team will depend on several factors, including the magnitude of the sector and the time frame within which the assessment is to be carried out. How the team members are selected will depend largely on local customs and the *modus operandi* of the lead agency. In the field test of the methodology, the Joint Secretary of the Ministry of Housing and Physical Planning (the lead agency) sent letters to heads of the major sector organizations requesting them to nominate members for consideration as team members.

In the selection of the team, it will be important to develop criteria for selection based on the tasks to be performed and the benefits to be derived from the process. Following are some criteria deemed as important considerations in the selection process:

- Role specialization: education and work experience in one or more of the major functional areas of the sector, including management, finance, training, computerization, planning, construction and maintenance, research and development, and marketing, to name some of the more obvious areas of concern.

- Writing skills; the ability to organize and draft clear, concise statements of required competency for specific roles. This task is central to the assessment process. At least two or three members of the AT should have demonstrated writing skills in order to carry out the drafting of competency statements.

- Verbal communication skills, including the ability to listen for meaning and accuracy. Exemplar interviews are the most important source of competency data. Communicating with these exemplars in an effective way will be one of the most critical tasks to be performed by the AT.

- Interest in and appreciation of training and development will also be important.

Team leadership

It is often desirable to engage the services of an outside consultant or small team of consultants to provide professional guidance and leadership to the assessment process. Among the important criteria for the selection of such assistance is a demonstrated knowledge and experience in all aspects of the training field, with particular emphasis on the development and application of assessment methodologies. In addition to guiding the process, the consultant(s) must be committed to the gradual shifting of responsibility for process management to members of the AT. Central to the values of this NTNA process is local capacity building. This begins with development of the AT.

Step 3 - Pre-assessment activities

Background studies

Prior to actual fieldwork, the AT collects background material on the sector. Much of this material can be found in documents published by or maintained by the lead agency and other national organizations concerned with sectoral affairs. Especially useful sources of documentary information are the country's development strategy and multi-year plan, any studies of human settlements problems and concerns, reports issued by UNCHS (Habitat) and other international organizations, human resource/workforce studies and previous development assessment reports.

By analysing documents of this kind, AT members will become familiar with the country and the role of human settlements. Particularly, AT members will be able to:

- Assess the current level of development and any evidence of decentralization in governance and service delivery in human settlements;

- Determine the existing capability of the sector's administrative, professional and technical employees to execute existing and proposed development strategies;

- Identify the country's training institutions and their current training objectives and capabilities as these relate to human settlements.

In addition to obtaining documentary information, the AT might find it useful to interview selected sectoral officials. The interviews can be scheduled to help analyse and interpret information obtained from documentary sources. The objective of these early investigations is to familiarize the AT with the environment in which it will be working. Knowledge of the human settlements system and past efforts to meet its human resource development needs will help the team assess the magnitude of the task confronting it.

In the field test of the manual, the team leader and his colleagues, found three background sources particularly helpful. These were: (a) initial protocol meetings with various sector and support institutions; (b) sector studies conducted by government, donor and other organizations; and, (c) multiyear national and sector plans.

Assessment team training and planning

With the completion of sectoral background studies, members of the AT are exposed to several days of briefing and training to prepare them for assessment tasks. The use of an outside consultant to plan and carry out the training is desirable. All members of the AT are to be trained. If the workload is greater than expected, additional people can be included in the training, as determined by the lead agency. Before the training, each team member is given the following written materials:

- A modified version of the Nominal Group Technique;
- Procedures for conducting competency interviews;
- Copies of the competency investigation questionnaire;
- Several copies of the role/competency profile sheet.

(Copies of these materials can be found in the annexes to this Guide).

The training of AT members and related planning activities require from four to five days. An outline of training activities is as follows:

Day one. Review of workshop objectives and schedule. Exercise designed to initiate the process of competency interviewing. Briefing on the NTNA project and the field-test design. Discussion of obstacles in carrying out the project.

Day two. Small group exercises to identify factors to be considered in planning and carrying out an effective interview. Facilitator input and guided discussions to clarify and increase understanding of the interview process.

Day three. Skill practice exercise in competency interviewing with participants working in threes, using competency interviewing techniques. The process will replicate, as closely as possible, conditions expected to exist during subsequent field interviews. Presentation and discussion on the preparation of competency statements from interview results.

Day four. Continuation of skill practice exercise begun the p-receding day. Design and planning for a one-day plenary meeting of sector officials to be held on the first workday of the week following the workshop.

Day five. Planning for project implementation, including determining individual AT member's responsibilities, scheduling, resource requirements, end products, and a monitoring system. The workshop ends with an evaluation of the process and its value to participants.

Annex IV is a design and schedule for training AT members to conduct face-to-face interviews and to carry out other NTNA project activities.

The training design that is defined above and detailed in the annexes can and should be modified, if it seems desirable, to meet the needs and circumstances of the local situation. For example, it may not be possible to schedule all five days of training in one block. Or, a decision might be made to delay skill development on the writing of competency statements until after initial exemplar interviews have been conducted. As each stage in this process is implemented, some modifications may be necessary or desired in response to local conditions, or constraints. While the initial field test of the methodology followed closely the steps outlined in the Guide, some modifications were mode in response to circumstances at the time. The Guide is just that, a guide to action.

Summary

NTNA begins with strong sponsorship, a plan of action, a broad organizational base and a trained AT. Leadership for the NTNA comes from a central agency or ministry with strong ties in the human settlements sector. Responsibility for managing assessment activities is assigned to the AT, consisting of personnel who are on temporary loan from sectoral agencies and who are trained by an outside consulting team to carry out assessment activities. Activation of the NTNA can be expected to take approximately 60 days from the date of official project approval.

CHAPTER II

COMPETENCY ASSESSMENT

The first three steps in conducting an NTNA are concerned with sponsorship, organization and training of AT members. The next five steps are devoted to the collection and processing of information needed to assess sector-wide training needs. With this information, managers of human settlements organizations will have a method for deciding which of their APT employees need what kind of training. Directors of training institutions serving the sector will be able to plan and schedule training programmes with precision.

Exhibit 2 outlines the five steps for carrying out a sector-wide training needs assessment of APT employees.

Exhibit 2

Steps in competency-based training need assessment

Step 4. Meeting of sectoral officials
- Participants
- Suggested meeting design
- Finding exemplars

Step 5. Exemplar interviewing
- Conducting the interview
- Processing interview results

Step 6. Interim reporting and planning
- Convening the meeting
- Progress reporting
- Trend forecasting

Step 7. Training-demand identification
- Drawing the sample
- Conducting the survey
- Survey analysis

Step 8. Assessment reporting

Step 4 - Meeting of sectoral officials

The first formal undertaking of the AT is to invite representatives from public and private agencies throughout the sector to a one-day planning meeting. There are two reasons for convening this meeting:

- To have access to a knowledgeable and experienced group of sectoral officials in order to obtain valuable information needed for later stages of the assessment;

- To inform these sectoral officials about the training needs assessment process and to encourage them to use assessment results in upgrading the effectiveness of their own employees.

Participants

Representatives to the planning meetings are selected through information furnished to the AT by the lead agency. During the field test of the Guide, it was learned that it is important to invite individuals who are educated and experienced in the major roles associated with the sector's core activities. These include functional areas such as management, planning, maintenance and finance, to name a few.

Among others who might be considered as participants in this planning meeting are:

- Key officials concerned with human resource development in the sector;

- A committed training institute director who is unhappy about his or her organization's efforts to provide relevant training to its constituents;

- National planning and development officials who see their long-range plans obstructed by ineffective and inefficient operating agencies and are looking for ways to enhance performance;

- Operating agency executives who see serious deficiencies in the performance of their organizations and view training as an intervention to improve the situation.

Suggested meeting design

The meeting is opened by a prominent official from the lead agency who introduces the plan for initiating training needs assessment in the sector. By emphasizing the value to sectoral organizations of having a useful set of standards by which to measure sectoral performance, the official seeks to promote enthusiasm and commitment for participation in the process.

Exhibit 3 - Meeting of sectoral officials: Proposed workshop agenda

Morning

Session I

- Registration.
- Opening session: Welcome by senior sector official.
- Discussion of workshop objectives, project goals and the process of conducting a national training needs assessment.

Tea break

Session 2

- Individual task: Recording functional area of employment.
- Small group exercise: Defining functional areas of the sector.
- Reports, discussions and consensus on functional areas
- Lecturette: Role definition and NGT, (the Nominal Group Technique).

Lunch

Afternoon

Session 3

- Group exercise: Defining sector roles using NGT

Tea break

Session 4
- Group exercise (continued): Exemplar finding.
- Discussion of day's events and follow-up activities.
- Closing session.

Participants are then engaged by the lead AT facilitator in a warm-up activity designed to produce an important information output. Working individually, participants are asked to write on a sheet of pope r the functional area of the sector in which they are employed. To illustrate the meaning of the term, "functional area", the facilitator might provide the following example:

SECTOR:	HUMAN SETTLEMENTS
FUNCTIONAL AREAS:	MANAGEMENT PLANNING FINANCE CONSTRUCTION MAINTENANCE

Participants are then asked to compile a list of functional areas applicable to their sector, working in small groups. After five minutes of work, the facilitator asks for a report from each group. The results for each group are recorded on a chartpad. Through discussion, the various lists are combined into a single list that is acceptable to the participants.

Identifying sectoral roles

The lead AT facilitator briefs participants on the next activity. To begin the activity, the facilitator defines the term "role", [10] and continues by explaining that participants are being asked to generate a list of the most important roles that must be performed to accomplish the work of each functional area in the sector. The facilitator then explains the method to be used to generate the list of roles, the nominal group technique (NGT). For a detailed explanation of the NGT as applied to this task, see annex III.

The lead facilitator divides the participants into functional-area groups. Each group is concerned with a single functional area of the sector and is assisted by another facilitator who is a member of the AT. Each facilitator is skilled in the NGT and is familiar with the types of organizations and occupations that constitute the functional area on which his group will be working.

To illustrate what the output of the meeting is expected to be, facilitators supply their groups with a sample listing of roles.

When group members understand the task, the facilitator presents them with a worksheet at the top of which is printed the question they are to answer using the NGT. For a functional area on management, for example, the question might read as follows: "What are the most important roles your first-line supervisors must carry out to meet sectoral goals?"

Each group begins with the silent generation of ideas and continues to work through the various steps of the NGT as described in annex III, until a final list of roles is agreed upon. Each of the final roles consists of a title and a description much like the examples shown in exhibit 4. The duration of the NGT process generally is from 90 minutes to more than three hours, depending on the complexity of the topic and the experience of the participants.

Exhibit 4

Illustrative Training and Development (T&D) roles [11]

Training management: Planning and directing the training programmes of an organization

Training needs assessment: Identifying and defining gaps between ideal and actual performance and specifying the cause of the gaps.

Curriculum development: Defining and developing the courses required to attain a target level of proficiency for a particular group

Training materials development: Preparing written learning or instructional materials such as lesson plans, instruction guides, manuals, workshop guides or fact sheets.

Training delivery: Presenting information and directing structured learning experience so that individuals learn; or moderating/facilitating the learning process.

Training media development: Designing and preparing aids and devices needed for effective instruction.

Training evaluation: Identifying the extent, impact or attainment of training objectives.

The wording of NGT questions is crucial. Questions are written, reviewed and discussed by members of the AT and pilot-tested before they are presented to a group of participants. This is necessary to prevent misunderstandings that could impair the value of a group's contributions.

Finding exemplars

As explained in annex I, the term "competency" refers to the best instance of performance of a given role that can be found within the sector. To determine competency, it is first necessary to find the exemplar, that individual who is known to be among the very best in meeting the role requirements. When the exemplar is located, it is then necessary to determine what the exemplar actually does that accounts for the exemplary performance.

Participants at the assessment meeting are both a reliable and available source of information about exemplars in each functional area of the sector. For this reason, these individuals, still working in functional area groups, are asked to participate in an exemplar-finding exercise.

Several points were raised from the field test that may be instructive in the implementation of this exemplar finding exercise. First, there was reluctance on the part of some participants to name others as exemplars. If this happens, it is important to try to understand the reasons for their hesitation and also to explain once again the importance of this exercise and the honour involved in being so identified.

Secondly, if the group is not able to identify exemplars for certain roles, it will be important to have the group at least provide ideas about where they might be found. The group might specify, for example, what organization would have competency in this role specially. If this approach also fails to produce results, it may be necessary to convene a small group of specialists in the some role as a source of competency information.

To begin the exercise, the AT facilitator defines the term "exemplar." The facilitator then asks each group to report on the list of roles it prepared in the preceding exercise, Then, the facilitator asks participants in their groups to match roles with the names of exemplars individuals whose consistent effectiveness in meeting their work requirements clearly qualifies them to be considered as such.

To record this information, each group is given a worksheet that includes a set of instructions (see exhibit 5). Participants are reminded by the facilitator to include the name and organizational affiliation of each entry in the exemplar list. When participants have completed the task, worksheets are returned to the facilitator. Exemplar information contained on the various worksheets will be used by the AT in compiling a list of exemplars for interviews.

At the conclusion of the exemplar-finding exercise, the meeting is closed by the official who opened it with an expression of appreciation for the hard work and of high expectations for a successful project. Participants are told to expect an invitation to a follow-up meeting to review assessment results and discuss follow-up activities.

It is probable that some of the participants at the assessment planning meeting will appear on one or more of the exemplar lists. If this is the case, these individuals should be invited to stay another half-day so that they can be interviewed by a member of the AT. Encouraging participants to do this, particularly when they live for from the meeting site, will save time and expense.

Step 5 - Exemplar interviewing

When the exemplar has been located and the important roles that must be performed to accomplish critical goals have been assessed, the next step in the assessment process is to identify those activities of exemplars that account for their extraordinary accomplishments. The procedure used to draw out and articulate competency in performing sectoral roles is known as "competency interviewing". This procedure is carried out through a face-to-face interview between a member of the AT who has been trained for the task and an exemplar identified at an earlier stage of the assessment process.

To the greatest extent possible, competency interviews are to be conducted immediately after the assessment-planning meeting. This is for the benefit of exemplars who already are present and for interviewers who can avoid delay and possibly the necessity of travel to a distant town or village. When post-meeting interviews cannot be arranged, the interviewer will contact the exemplars that he or she is assigned to interview, to set mutually convenient times and places to meet.

Exhibit 5 - List of roles and exemplars by Organization	
Sector: ______________________ Functional area: ________________	
Instructions	
On the left side of the worksheet, make a list of the APT roles in your functional area. After listing the roles, think of individuals who perform in each of these roles in a consistently outstanding way. Write the names and organizational affiliations of these people in the space to the right of the role. If you want to include more roles and names than space permits, use the back of the sheet or additional pages as necessary.	
Role	Exemplar and organization
1.	1a.
	1b.
	1c.
2.	2a.
	2b.
	2c.
3.	3a.
	3b.
	3c.
4.	4a.
	4b.
	4c.
5.	5a.
	5b.
	5c.
6.	6a.
	6b.
	6c.

Conducting the interview

Exemplars are key to identifying critical competencies needed for outstanding role performance. There is an obvious difference in the performance of exemplars when compared with that of others in similar roles. The exemplars possess competencies that enable them to produce exceptional results, sometimes far beyond those that others have produced. However, exemplars may find it difficult to pinpoint the reasons behind their outstanding performance, without the help of a skilled interviewer. The procedure described in this Guide is intended to be an aid to the interviewer in obtaining meaningful competency data.

To make the process of competency identification as simple as possible, c) procedure called competency interviewing is used. This procedure is designed to analyse systematically the performance of an exemplar for the purpose of finding out the underlying competency in the exemplar's accomplishments and to describe this competency so that it may be used as a standard to guide the performance of others.

In the course of a competency interview with an exemplar, the interviewer seeks to find out several things:

(a) What the exemplar actually does that causes others to regard him or her as an exemplary performer in this role.

(b) Why the exemplar believes he/she is so successful in each area of accomplishment.

(c) What the exemplar has found necessary to learn to become so successful in his/her achievement.

(d) What the exemplar believes others in the same role must learn if they are to become equally competent.

(e) What changes the exemplar expects in the next five years that will affect his/her ability to continue to carry out the role in an exemplary manner.

(f) What the exemplar believes training institutions can do to prepare others to be exemplary in this role.

Instructions on how to plan and carry out a competency interview and to complete a role/competency profile sheet are described in annexes V and VI. The reader is urged to read these materials before proceeding further with this Guide.

The magnitude of the interviewing task will vary from country to country, depending on the number of AT members trained as interviewers and the number of exemplars scheduled for interviews. For planning purposes, a block of time between two and two-and-a-half months in duration should be set aside for the AT to conduct interviews and compile interview data.

Several time-saving measures should be considered by the AT in carrying out the interview task. In planning interviews, time can be saved by arranging on-the-spot interviews with exemplars who attend the initial planning meeting. Time also can be saved in the field by arranging for AT members to interview exemplars who live or work in the same or neighbouring centres.

Processing interview results

There are several steps in processing the results of the various competency interviews that make up this phase of the NTNA.

(a) Each interviewer prepares a typed transcript of each interview at the earliest possible time after completing the interview and identifies competencies from responses given by each exemplar.

(b) From the typed interview transcript, the interviewer extracts those characteristics of outstanding performance that set the exemplar apart from other individuals who occupy the some role. The resulting characteristics are written as competency statements and are recorded on 3 x 5 inch cards.

(c) Interviewers who have completed interviews with exemplars in the same role meet and work as a team to reach agreement on a common set of competency statements.

(d) Interview teams present, for discussion and comment at a plenary session of AT members, the competency statements compiled on their respective roles. Following the plenary session, interview teams reconvene to edit their statements as necessary and submit the result to the AT leader.

(e) The AT leader, together with representatives of various interview teams, prepares a role/competency profile for each sector role by functional area. Each profile includes an analysis of the impact of expected sector trends on the role.

(f) Data from various roles and functional areas are reviewed, cross-referenced and compiled by the AT into a sector wide role/competency matrix.

Without a doubt, the most challenging task in the entire assessment process is converting interview data into written competency statements that, in turn, can be used to develop training programmes for developing others. Not every member of the AT will be proficient in written communication. Because the written competency statements are so important and will be used by others who have not been involved in the assessment process, it is important to assign the best writers to this task, at least initially.

In the field test of the Guide, the AT members wrote the interview results, identifying "trigger" words or statements (those that describe critical skills or knowledge). The consultants to the project worked from the interview notes to prepare the competency statements. The statements were then reviewed with the team member who did the interviewing, with the exemplars themselves, and finally validated at a sectoral meeting of officials.

Since one of the most important by-products of the assessment project is skill development for members of the assessment team, efforts should be made to involve all AT members in the writing process. One approach to the writing task is to team those with strong writing skills with others who want to improve their skill levels. The person who is less skilled can initially summarize the important points for the person who is doing the writing. As their understanding of the process and what is important to include in the statements increases, each can take on more responsibility. In every stage of the assessment process it is important to match the concern for a quality product with the opportunity for competency development. In doing so, the project becomes a role model for the kind of behaviour that is central to the rationale for conducting a national training needs assessment. After all, the bottom line of the assessment is improved competency, based on what is possible. There is no better time or place to demonstrate this principle than through the project.

Step 6 - Interim reporting and planning

The assembly of competency data on key exemplars throughout the sector represents a watershed in the training needs assessment process. Before moving on to launch a sector wide survey of training demand, however, an intermediate step is necessary. This step is to convene a meeting of key human settlements officials: (a) to review results to date and activities planned; and, (b) to provide the AT with a collective appraisal of future trends and their impact on sectoral training needs.

Convening the meeting

Human settlements officials who attended the initial assessment planning meeting are invited to participate in the one-day progress reporting and assessment planning meeting. Other invited guests are exemplars who participated in interview activities and key representatives of training institutions serving the sector. The meeting is scheduled at an early date after role/competency profiles have been prepared and reviewed by the lead agency. It is opened by a prominent official of the lead agency who welcomes participants, outlines the purpose of the meeting and introduces team members.

The meeting has three purposes which are:

- To review the results of competency interviews with emphasis on how these data can be used to plan relevant training for APT employees who occupy or will occupy important sector roles;

- To describe the training demand survey scheduled by the AT and explain how the information obtained from surveyed officials can be used to plan and schedule training programmes;

- To prepare a forecast of trends affecting the sector in the next five years and the probable impact of these trends on sectoral APT roles and training needs.

Progress reporting

After introductions, the first order of business is a briefing for participants on exemplar interviews. The AT leader provides each participant with a notebook containing role/competency profiles. The team leader reviews the process by which the profiles were developed. Participants, particularly those exemplars who were interview subjects, are asked for their questions and reactions.

The second item is a presentation by the AT leader on the proposed training demand survey of sectoral officials. The AT leader explains why the survey is being undertaken and how the results will be used in conjunction with the role/ competency profiles. Survey forms are distributed by the AT leader for participants to complete before leaving the meeting or, as an alternative, within one week after returning to their organizations. Participants are asked to think of other sectoral managers or executives not present at the meeting who should be asked to respond to the survey. They are asked to furnish names and addresses to the team leader before leaving the meeting.

During the field test of the methodology, this meeting turned into a much longer one than had been expected. The participants were curious about the results, wanting much more time to be devoted to discussing these. The meeting, as a result, provided an opportunity to validate much of the competency data and to build commitment to its eventual use. Time probably should be allocated to provide for a more thorough review and discussion of the competency profiles.

Trend forecasting

The inevitability of change in the way the work of a sector is done makes it necessary to look beyond the present in determining training needs. For needs assessment information to be useful, it must include some forecasting of conditions which are expected to affect the sector during the next few years. This information will be used by the AT and sectoral training institutions in planning relevant training programmes.

The availability of sectoral leaders at this meeting provides the AT with a rich source of ideas and opinions about probable trends affecting the sector. Areas in which sector trend information will be obtained are:

- Policies and programmes
- Institutional/organizational relationships
- Economic conditions
- Technology
- Social conditions.

To identify the most important trends in each of the five categories, the workshop facilitator divides the group of participants into five smaller groups of about the same size. Each small group is assigned one of the five trend categories for discussion and is provided with its own AT facilitator. The facilitator in each small group, equipped with a chartpad and easel, leads participants in an exercise. To begin, the facilitator writes the following question on the chartpad:

"What changes in (specifies one of the five trend areas) will affect the way sectoral work is done during the next five years?"

Each participant writes some ideas on a sheet of paper. At the end of five to ten minutes, a structured reporting of ideas takes place. Each individual, in turn, presents one idea from his/her list. These ideas are recorded by the facilitator on a chartpad visible to all participants. There is no discussion. Listing continues until none of the participants has additional ideas to share.

After each of the five small groups has a list of trends related to its assigned category, the groups are brought back together by the workshop facilitator for a large group exercise. Lists of trends produced during the small group exercise are displayed so as to be clearly visible to all participants. When the trend lists are displayed, a worksheet entitled "Selecting and evaluating sector trends" (see exhibit 6) is distributed. Each participant is asked to complete a worksheet by observing the trend lists and selecting the ten trends that he/she believes have the highest probability of making an impact on the work of the sector in the next five years. Then, each participant is asked to rate each of the trends selected as either "high", "moderate", or "low," to the degree that the trend is expected to result in a need for APT training.

Completed worksheets are returned to the workshop leader. There is no sharing or discussion of the results. Results are compiled and analysed at a later time by the AT. Different weights are assigned to the various levels of training needs, as identified by the respondents. High responses would be given a weight of three (3); moderate responses, a weight of two (2); and low, a weight of one (I). After assigning these weights to each response, calculate a cumulative score for all responses to each trend and record the trend and total scores for each in priority order. (The highest rated trend would be priority number one; the second highest rated number, two, etc.)

These trends will be furnished by the AT to heads of training institutions for use by their training staff in curriculum planning. Meeting participants are given a copy of the final trends list or promised one by mail. Upon conclusion of the trend-forecasting activity, the official who opened the meeting closes it, expressing his appreciation to participating officials.

Exhibit 6 - Selecting and evaluating sectoral trends

Name ______________________________ Date ______________________________

Instructions

From the list of trends on the chartpad, select the 10 trends you believe have the highest probability of having an impact on the work of the sector in the next five years. Write these trends in the column provided, along with the number assigned to the trend on the newsprint. Read the first trend at the top of your list. Ask yourself, "Is there a high, moderate or low need to develop training programmes in response to this trend?" Indicate your answer with a checkmark. Follow the same procedure with each of the trends on your list.

Assigned number	**Statement of high-impact trend**	**Training Need**

		High	Mod.	Low

Step 7 - Training-demand identification

The identification of role-related competencies that are critical to the effective performance of a sector's APT employees completes one phase of the assessment task. Role/competency profiles, similar to the one shown in exhibit 7, provide the AT with benchmarks against which to measure the actual performance of APT personnel throughout the sector.

The next task facing the AT is to estimate the number of APT employees in the sector who could be trained to a higher level of competency. This estimate is made through a survey of public and private human settlements organizations conducted by the AT within each functional area, using data obtained from role/competency profiles. Compiling information on training demand in relation to specific roles and competencies will provide training institutions with a reliable basis for the design and delivery of relevant and timely training courses.

The survey of human settlements organizations is designed to produce three kinds of results:

- The relative competency of sectoral APT employees, from excellent to poor, in each area of competency required for role proficiency;

- The perceived importance of each area of competency to the mission achievement of sectoral organizations;

- The number of sectoral APT employees to be trained within specified time periods for each area of role competency.

This survey assumes that APT employees who lack the skill to perform certain roles at an average or above-average level of competence are candidates for training. This is true because training represents a possible remedy for substandard, performance. However, many performance problems faced by human settlements organizations do not occur because employees lack the skill to perform satisfactorily. On the contrary, there is an almost endless array of obstacles that can prevent otherwise competent employees from performing in an outstanding manner.[12] Nevertheless, as a basis for estimating training demand on a broad scale and for overall programme scheduling by training institutions, this method of forecasting is more than adequate.

Exhibit 7 - Human settlements role/competency profile

Functional area: _______________ Role: ______________________

Description:

____

____

____

Competencies

Competency 1:

____

____

____

Competency 2:

____

____

____

Competency 3:
____
____
____

Drawing the sample

The data needed to calculate existing demand for training in various role areas are obtained from a survey of public and private organizations in the sector. The procedure to be used will differ from country to country, but, in each case, a decision must be made by the AT on how to organize the survey, in order to obtain a representative sample of sectoral organizations. Such a sample is needed to determine the true magnitude of training demand under conditions where surveying every human settlements organization in the sector is impractical.

There are several ways to obtain a representative sample. For large countries with a large number of human settlements organizations, random sampling might be the only realistic course to follow. Should random sampling be the method of choice, the AT is advised to consult annex I for instructions on how to proceed.

In small countries, a representative sample may be obtained without sector wide random sampling. The AT may decide to sample 100 per cent of some types of sectoral organizations and a smaller percentage of the rest. For example, there may be only a limited number of organizations that do urban planning or that manufacture certain kinds of building materials. A 100 per cent sample of such organizations may be desirable. Geographic distribution of organizations between rural and urban sections of the country may also be an important factor in ensuring representation.

Conducting the survey

A sectoral competency survey requires between four and six weeks, including the time required for preparing and completing questionnaires and possible follow up. Each of the organizations selected for the survey is asked by the AT to complete and return a questionnaire that asks for:

- A classification of APT employees by role, according to their present levels of competency;
- The relative importance of each competency to the mission of the organization;
- The number of employees to be trained, by role, and the relative urgency of obtaining the training.

A survey instrument suitable for use in collecting role-related competency and training needs data from a sample of sectoral organizations is shown in annex VIII, together with instructions for conducting the survey.

Survey analysis

Survey analysis begins when the number of survey questionnaires returned is sufficient to make a reasonably accurate estimate of sectoral demand for training in terms of role and. competency. The steps to be taken by the AT in estimating training demand are indicated below:

(a) As the questionnaires arrive, record the responses for each survey questionnaire on a large tabulation sheet or use a computer equipped with a statistical software package.

(b) After entering the data, file questionnaires by functional area and role.

(c) When no further questionnaires are expected to be returned, compile the data in tabular form for each role and competency using one of the original questionnaires for recording summary totals.

(d) Finally, prepare a training demand estimate for each role and competency. There are several ways to approach this task, using both standard statistical approaches as well as experience and common sense.

If the training needs survey has used a representative sample of sector organizations to determine what institutions will be surveyed, the total demand for the sector can be determined though the processor extrapolation. If a decision is mode to utilize this approach, it may be useful to seek advice from outside the AT if no member is familiar with statistical techniques.

Two fundamental concerns cloud any effort to be too rigorous in quantifying the overall demand for training in the sector. First, it may be difficult to determine, with any accuracy, just how many persons are employed, or should be employed, in each role. Moreover, valuable time and other resources can be spent unnecessarily calculating the total training population.

Secondly, it may be impossible to train every person in every training need identified by the survey. Being precise about something that cannot be accomplished anyway can, at the very least, be an exercise in frustration. If the field test in Nepal is in any way representative, most surveys will unearth more demand than can be met with either present of future resources. It is not necessary to pinpoint and meet every need to develop a dynamic and responsive training programme. What is important is establishing priorities on those competencies that ore most important to the sector and ensuring that programmes are developed to help achieve these competencies. A quality assessment, based on this approach, will do much to prompt a quality response on the part of training-supply institutions. Rarely does one have to worry about attracting a sufficient number of participants to make the training cost-effective, **if** the training offered is of high priority to the client.

Step 8 - Assessment reporting

The concluding step in a competency-based training needs assessment is the consolidation of survey results and recommendations in a written report for submission to the lead agency. The final assessment report is intended to be more than a documentation of project activities. It is meant as on instrument for directing sectoral organizations and training institutions in a systematic response to the training needs of APT employees. The contents of a final assessment report normally include:

- An overview of assessment objectives and process;
- A list of organizations and individuals who participated in the process;
- Role/competency profiles by functional area;
- A consolidated role/ competency matrix;
- An estimate of training demand by sectoral role and competency:
- A sector-trends forecast;
- Specific application instructions for sectoral operating organizations. [(13)]
- A strategic plan for using assessment data to produce relevant learning programmes. [(14)]

One caveat to this proposed outline is in order. There may be circumstances, such as the way the project is carried out, that dictate a document or set of documents that will vary significantly from the format listed above. For example, a donor agency which has very specific guidelines about reporting might require a series of interim reports that make certain parts of the above outline redundant. As stated many times before in the Guide, if in doubt let the local situation be your guide.

Preparation of the final training needs assessment report will take from six to ten weeks, depending on the complexity of the data and the availability of support staff and facilities. Original copies of the report will be submitted to the lead agency. Other copies will be given to cooperating human settlements organizations and training institutions.

Summary

NTNA consists of two types of activity: (a) Identifying standards of competency for APT employees in critical sectoral roles; and (b) estimating demand for training among sectoral APT workers. At an initial planning meeting, critical roles and highly proficient role-performers, known as exemplars, are identified by key sectoral officials. Exemplars are interviewed by AT members who seek to identify those factors that account for their role-competency. Through a survey of key public and private organizations throughout the human settlements sector, the demand for training in each competency area is estimated. Final assessment reporting is designed to encourage use of assessment data as an instrument for sectoral policy development and improved management of human resources. It is also designed to be used as a source of information for curriculum planning by training institutions. The time required to complete the NTNA, from the date of the initial meeting through to final reporting, is between eight and nine months.

Footnotes

[(10)] For purposes of this Guide, a "role" is defined as a group of related activities that an individual performs in fulfilling the varied requirements of a job. A role is not the same thing as a job. An individual with specific job title will have at least one and possibly several roles to perform. A manager, for example, might be expected to function as administrator in one situation, negotiator in another and counsellor in still another. The roles an individual performs are determined by the requirements of the job and the situations in which the individual finds himself/herself. It is a person's ability to perform capably in one or more roles that makes that person valuable to the organization. The role-competency demonstrated by an individual is an important consideration in identifying training needs.

[11] *Comprehensive Profile of Competencies in the Shelter,* Technical Report, June 1991. (Manila, Sycip, Gorres, Velayo and Co. in association with Nepalconsult (P) Ltd.), pp. 29-34.

[12] For example, see *Manual for Training Needs Assessment in Human* Settlements *Organizations* (Nairobi, United Nations Centre for Human Settlements (Habitat), I987), pp. 62-63

[13] See chapter III of this Guide.

[14] See chapter IV of this Guide.

CHAPTER III

APPLICATION OF NTNA RESULTS

The first two chapters of this Guide are concerned with: (a) activating a competency-based training needs assessment applicable to APT employees of the human settlements sector, and (b) developing competency standards for use in upgrading sectoral performance through the appropriate use of training. This chapter of the Guide describes uses that can be mode of competency standards evolved from assessment activities.

There are three uses of the information and insights obtained through competency-based NTNA. They are:
- Policy development and direction
- Human resources development in operating agencies
- Development of relevant and effective training responses.

Policy development

A competency-based assessment is goal-oriented. It defines the human settlements environment in terms of desired standards and norms. Competency statements, which define desired levels of individual and role proficiency, also can be viewed as policy statements. Policy statements are statements of intent: so are competency statements. Competencies define expectations as standards of performance in relation to what currently exists.

Competency statements, as potential policy tools, can be used at several levels of a human settlements sector. They can be used to:
- Articulate standards of excellence for performance throughout the sector
- Define a desired level of management proficiency to be achieved within a five-year national development plan as it concerns housing and human settlements
- Establish a national training policy geared toward achieving defined levels of competency among pre-service and in-service trainees for the civil service
- Set a standard of community service that ultimately requires improved competency on the part of a local government's APT personnel if the goal of excellence is to be achieved.

To reiterate, the results of a competency-based assessment can be used to establish a wide range of policy standards to guide the human settlements sector in inducing a high level of service and performance.

Human resource development

Competency statements can also be used by sectional operating agencies. Competency statements are excellent tools to assist management in forging employee, team and organizational plans and strategies.

The following examples illustrate the usefulness of competency statements as management tools.

(a) A definition of supervisory competence, based on exemplary performance in the larger human settlements work community, can be used as a tool for reviewing past performance and setting new work goals for an individual supervisor whose work habits are less than satisfactory. **(15)**

(b) A housing corporation board of directors dictates a new level of mid management performance in terms of preventive maintenance. For these new standards to be accomplished, additional skills are required by the organization. The competency assessment data provide direction for acquiring these skills.

(c) After reviewing the definition of managerial competency, as described by the NTNA, a chief executive realizes that his/her organization is not achieving the level of proficiency possible in managing low-income housing estates. With policy board and top management-team concurrence, the chief executive sets a goal of cost recovery that is 25 per cent higher than present performance. In addition, he/she allocates funds to train his/her revenue-collectors in new collection procedures and methods based on training needs identified through the national competency assessment.

New training direction and responses

A competency-based training needs assessment will establish new standards and challenges for the training community. These standards can be used to carry out an in-depth analysis of current offerings, to determine if they help achieve those competencies identified as important to the "management and operation of human settlements. For example, current courses in management and public administration might be reviewed to determine if they are designed to help develop the skills that have been identified by exemplars as important to competent managerial behavior in human settlements organizations.

The competency statements, emanating from the national assessment, are benchmarks of excellence against which training institutions can judge their current programmes.

Summary

The applications of the results of the competency assessment are many. They can include the development of new policies and standards at various levels of the human settlements system; opportunities to guide development for individual employees, work teams and operating organizations; and baseline data for training institutions to assess their own programmes and activities in relation to the competency based training needs of their clients.

Footnote

(15) The United Nations Centre for Human Settlements (Habitat) has developed and is prepared to assist in the implementation of training needs assessments aimed at locating and remedying performance problems in human settlements organizations. The procedure to be followed is set out in a UNCHS (Habitat) manual, entitled, *Manual for Training Needs Assessment in Human Settlements Organizations.* The manual was published in 1987 and has been thoroughly field-tested in three human settlements organizations in Jordan and the United Arab Emirates. It provides officials of human settlements organizations with a comprehensive, systematic and practical approach for deciding who needs to be trained and for what.

CHAPTER IV

STRATEGIC PLANNING FOR IMPLEMENTATION

The previous chapter of this Guide outlines three uses of the information and insights obtained through a competency-based NTNA. In addition to these, there is another application strategy which is direct and initially involves the AT. This is an effort to develop a strategic plan for training implementation based on the needs assessment. It has two distinct tasks or phases. The first involves the AT in structuring both the data and the training environment to provide an effective response to the competency-based needs identified in the assessment process. The second involves training institutions responding to these needs.

Preparing the plan

After the AT receives questionnaire responses that quantify training needs, the next step is to develop a strategic plan to meet those needs. Here is a list of tasks to be carried out in developing a strategic plan for training implementation.

The first task is to review and compile questionnaire data received from operating managers. In performing this task it will be important to:

- Determine the number of persons who require training in each of the competencies
- Note the importance of these competencies to the organizations and managers responding to the survey
- Consider the time frames suggested for carrying out the training.

Because the survey does not involve a long and complicated questionnaire, it might seem simplistic. In reality, it provides most of the data needed to develop an effective and responsive strategic plan.

The second task is to conduct a preliminary assessment of resources available to meet these training needs. These resources will include:

- Training institutions, both public and private
- Individuals who might be effective trainers for specific competencies identified in the assessment process
- Funds that can be directed or generated to support this kind of training.

This is a task, which often benefits from creative thinking. For example, some of the most effective trainers are not located in training institutions. They are often managers, planners and other professionals who can be available for short assignments to assist in the training,

The third task is to assemble a small planning task force to assist in drafting the strategic plan. While the task of strategic planning can be carried out by a competent AT leader, it is important to involve key representatives of both users and suppliers of training at this point in the planning process. Such involvement increases commitment to the plan and also serves as a reality check to increase the potential for a practical approach to training.

The fourth task is to draft a mission statement that defines the overall goals to be accomplished through the strategic plan, and to write objective statements identifying specific expectations that can be met through training.

The fifth task is to prepare a list of criteria and standards to be used to guide the efforts of institutions and individuals who will be involved in implementing the plan.

The sixth task is to identify specific training needs to be met under the strategic plan, set priorities to provide guidance in sequencing training responses and indicate a realistic time frame for implementing the plan.

The final task is to develop a plan for monitoring and evaluating activities to be implemented under the strategic plan.

Role of training institutions

While the strategic planning process will be the responsibility of the AT - or the lead agency identified with the task of ensuring a competent workforce to achieve the human settlements agenda - the planning and implementation of training events will be, in large measure, the responsibility of the training supplier. Trainers also need to plan.

Following is a list of tasks, which training institutions should engage in to ensure that their training is effective and compatible with the competency requirements of the human settlements sector:

(a) Create a planning process that involves users of the training.

(b) Review and analyse the competency-based assessment information for clarity and understanding. This should be done with someone from the AT who is familiar with the data.

(c) Identify constraints to developing competency in the human settlements sector through training. This task should include constraints from the perspective of user organizations as well as training suppliers.

(d) Define the parameters for designing and implementing training based on the identified constraints. This is the time to begin answering such questions as: Who will be trained within what geographic area over what time period, given available resources?

(e) Determine the objectives to be achieved through training. This involves translating competency statements into behavioural outcomes to be accomplished through training interventions. These will involve increased knowledge and understanding, improved skills, changed attitudes, or a combination of these outcomes.

(f) Design the learning response. The design challenge has at least four dimensions to consider: (i) the training event as a total experience; (ii) individual learning modules within the total training experience; (iii) the various processes to be used in carrying out the training; and (iv) the content or substance to be imparted through training.

(g) Field-test the design. While this is important, it is not always possible. On the other hand, it is an opportunity to determine ways to improve the training design before it is offered as an ongoing programme.

(h) Fine-tune the training programme or event, promote it and offer it to those who need it.

Summary

The strategic planning phase is twofold. It involves planning by the AT, to ensure that a sector-wide training effort is undertaken based on results of the competency needs assessment. It also involves planning by training institutions, to determine the best way to translate training needs into meaningful learning experiences.

CHAPTER V

CASE STUDY ON FIELD TEST AND IMPLEMENTATION OF A COMPETENCY-BASED TRAINING NEEDS ASSESSMENT IN THE SHELTER SECTOR OF NEPAL

Overview

In 1991, UNCHS (Habitat) successfully field-tested and applied the national training needs assessment methodology. The present case study prepared by SGV consultants provides an overview of the field test conducted in cooperation with the Ministry of Housing and Physical Planning, His Majesty's Government of Nepal.

Background information

A field test of the National Training Needs Assessment (NTNA) methodology was conducted in 1991 in Nepal. The assessment was financed by the United Notions Development Programme and was executed jointly by the United Nations Centre for Human Settlements (Habitat) and His Majesty's Government's Ministry of Housing and Physical Planning (MHPP).[(16)] See exhibit 8 for an organization chart of the Ministry of Housing and Physical Planning.

The subproject, known as the National Shelter Sector Training Needs Assessment (NSSTNA), began officially in February 1991. The subproject staff consisted of a local assessment team of eight members from three departments and three allied agencies of MHPP, a professional staff consisting of two international consultants and one national consultant, and a national junior professional staff of two research officers and six research assistants. The NSSTNA subproject was conducted over a period of nine months from 15 February 1991 to 15 November 1991.

The scope of the subproject covers the assessment of training needs in both public and private institutions in the shelter sector. Most of the public institutions are offices of MHPP at the central, regional and district level, and institutions allied to the Ministry. Specifically, the public shelter institutions include a total of 228 offices, distributed in the five regions and 75 districts of Nepal. These institutions include: 164 central, regional and district offices of MHPP; 33 municipalities, 24 town development committees and eight institutions allied with MHPP. Estimates show that Nepal has 1,230 registered building contractors and 2,201 registered building materials producers. Likewise, there are private land developers, real estate brokers, contractors and construction workers, most of whom are not registered. There are no data available to determine their actual number.

In terms of people, employed, estimates of employment in public shelter institutions is close to 8,133 people. Some 4,112 or 54 per cent are employed in MHPP and allied institutions while another 3721 or 46 per cent are employed in municipalities and the Employees Provident Fund. Estimated employment in the private sector, by contrast, is nearly 20,010. Of this number, 5300 or 27 per cent are employed by building contractors and 14,702 or 73 per cent are employed by building materials producers.

Exhibit 8 - His Majesty's Government of Nepal, Ministry of Housing and Physical Planning Organizational Chart (1 March 1990)

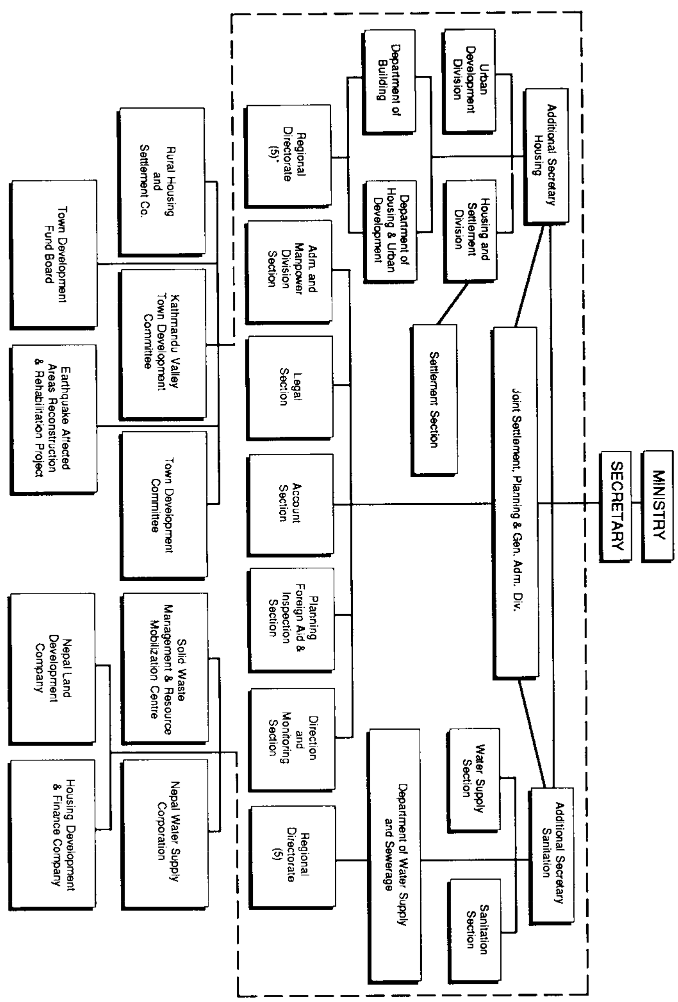
Subproject objectives

The NSSTNA had two broad objectives:

- To develop a national training strategy and action plan for the shelter sector of Nepal
- To refine the competency-based training needs assessment methodology developed by UNCHS (Habitat).

Three operational objectives to be achieved by activation of the NSSTNA were as follows:

- Preparation of critical roles and competencies in the shelter sector
- Identification of current demand in public and private-sector institutions for training related to the identified roles and competencies
- Assessment of resources within national and regional training institutions to implement training needed to meet sector



competency requirements.

Activation of the NSSTNA

The NSSTNA was activated in December 1990 when the Consultant[17] was notified by the UNDP Resident Representative in Nepal that implementation was to start officially on 15 February 1991.

Accordingly, members of the consulting team were mobilized and the international consultants arrived in Nepal on 14 February 1991. The subproject started officially with a meeting with the National Project Director of Policy and Technical Support for the Urban Sector Project and concurrently the Joint Secretary MHPP and the Chief Technical Advisor. During this meeting, issues related to office space, office equipment, use of computers and vehicles, and other matters were clarified and resolved.

Sector data gathering

From 16 February to 1March, subproject activity concentrated on protocol meetings with key sector officials, particularly within the central offices and departments of MHPP, institutions allied to MHPP, regional and district offices of MHPP departments, town development committees, and some training institutions. During these meetings, the Consultant took time to explain the nature, scope, objectives and benefits of the NSSTNA as well as to gather information, particularly with respect to functions, roles, and staff training in the sector.

In addition, relevant documents, reports, publications, papers and articles related to the shelter sector, particularly on functions, and training and development, were collected and reviewed. The results of these reviews and data gathered provided the Consultant with a broad understanding of the background and current situation in the shelter sector. Also, the data and information generated helped in preparing the inception report and in identifying the institutions or organizations (including their functions specific to shelter) that constitute the shelter sector.

Orientation meeting for senior sector officials

On 3 March 1991, a critical meeting was organized through the initiative of the National Project Director. Chaired by the Additional Secretary for Housing and Urban Development of MH PP, the meeting enabled the NSSTNA and other subcontractors to the Urban Sector Project to orient sector officers on the objectives, nature, scope, major activities and expected outcomes of their respective components. For the NSSTNA, this meeting was important in gaining the commitment of officials to support implementation of the assessment process. About 25-30 senior and mid-level officers attended the meeting.

Organization of the assessment team

An assessment team (AT) of eight members was formed on 4 March 1991. The AT members came from three departments of MHPP and three agencies or institutions allied with MHPP. They were chosen by their respective heads of offices based on criteria contained in a letter signed by the Joint Secretary of MHPP.

Assessment team training

A training programme for the AT and the national junior professional survey staff was implemented as soon as the team was organized. The training programme was conducted from 5 to 10 March 1991. At the start of the programme, each participant was given a packet of materials containing four items of information on the NSSTNA:

(a) An information leaflet on the NSSTNA subproject

(b) A description of a group data gathering method known as the Nominal Group Technique (see annex III)

(c) Description of the procedure to be followed by the AT in interviewing exemplars (see annex VI)

(d) Several copies of forms to record role and competency data extracted from exemplar interviews (see annex V).

The five-day training programme designed and suggested in the NTNA methodology was used. It included: a description and discussion on the nature, objectives and scope of the NSSTNA; exemplar interviewing; writing competency statements; and the conduct of various group processes. The training activities focused on role plays, demonstrations, group activities and individual work to prepare the AT and the survey staff for subsequent assessment work.

The competency assessment
Meeting of sector officers
Following the AT training, arrangements were mode for a meeting of important shelter sector officials. On the strength of a letter-invitation from the National Project Director and Joint Secretary of MHPP, the meeting was attended by 28 officials representing public and private institutions in the sector.

The sector officials were chosen on the basis of the criteria suggested in the Guide.

The meeting of sector officials included: a session on the nature, objectives, scope and outputs of the NSSTNA; group and plenary sessions to identify the functional areas comprising the shelter sector (e.g., management, finance, construction and maintenance, planning, and institutional development); group and plenary sessions to identify the roles performed under each of these functional areas; and group and plenary sessions to identify exemplars or leading performers for each of the roles.

During the final exercise, there were roles in which no exemplars were identified. In these cases, the officials identified institutions where exemplars or role specialists might be found.

Exemplar interview preparations
In cases where no exemplars were identified or only one exemplar was listed, a letter was sent to institutions believed to be sources of exemplars or role specialists. The heads of these institutions were asked to nominate exemplars or role specialists if such people could be found within their organizations. It was through this process that additional exemplars or role specialists were identified.

The list of exemplars was divided among the eight members of the AT and the eight survey staff/members. This was found to be the most efficient way to assign and schedule interview responsibilities.

Before interviews were scheduled and conducted, a letter was delivered personally by a member of the survey staff to each exemplar, explaining the nature and objectives of the NSSTNA and the need to interview exemplars to generate the required competencies. The letter also explained how the person was selected as an exemplar for a particular role. The interview appointments were either arranged at the time or later on by telephone,

For the purpose of providing a good sampling of roles and competencies, exemplars were identified and interviewed in the Kathmandu Valley and in the Eastern and Western Development Regions.

Exemplar interviews
Exemplar interviews were carried out over a one month period, working in teams of two, using the competency identification questionnaire (see annex VI). The questionnaire was pilot tested with exemplars in five different roles. Based on the results of the pilot test, the five major questions were retained. The AT and survey staff were advised to watch for confused or overly general responses that would yield too little information on the competencies required. In such cases, team members were instructed to ask follow-up question called "probes" to make sure competency information was detailed enough to serve as basis for writing useful competency statements.

Writing competency statements
After each interview, results were recorded and "trigger words" or key phrases for describing critical competencies were cited. Interview notes were reviewed by the Consultant and competency statements were written. After competency statements for each role were drafted, they were compared with interview results and revised as final competency statements.

In most cases, preliminary statements of competency had been prepared in advance by the Consultant based on information gathered through meetings and consultation with key officials, through review of relevant documents, and through insights gathered early in the project. In these cases, preliminary competency statements were compared with the preliminary statements, and reworded when necessary. Completed competency statements were presented to the AT and survey staff for review and comment before these were submitted to shelter sector officials.

Interim report meeting

After the competency statements were drafted, a second sectoral meeting of public and private shelter officials and several exemplars was held. In addition to being briefed on the progress of the NSSTNA, participants were asked to review and validate the competency statements.

Officials were also asked to forecast trends they believed would affect the shelter sector in the next five years and the probable effect of those trends on identified roles. Participants were divided into five groups as suggested in the Guide. Each group was asked to develop a list of changes in their respective trend-areas that were expected to affect the way sectoral work is done during the next five years. The group outputs or trend-list was displayed. Each participant was asked to select ten trends from the list that he/she believed would have the highest probability of making an impact on the sector during the next five years. The results of this exercise are shown in exhibit 9.

Validation of competency statements

An important step in the generation of competency statements is the validation process to ensure completeness and reliability. This took place either at the sectoral meeting or at meetings with exemplars or small groups of specialists. Following these meetings, the statements were finalized and incorporated into a technical report.

Sector survey of training demand

At this point, the AT was prepared to undertake a training demand survey of public and private-sector organizations to produce information on the role competency of APT employees in the sector. This information was to provide a database for estimating where, when and how much training should be provided for specific APT employees.

The demand survey began with the development of a separate questionnaire for each of the 66 roles, using the survey form shown in annex VIII of the Guide.

During this period, it was necessary to confirm the roles performed by each of the public and private shelter sector institutions so that a decision could be made about which questionnaire should be given to which institution. The information was also essential to determine the appropriate type and number of survey instruments to be produced.

Exhibit 9

	Trends	**High 3**	**Medium 2**	**Low 1**	**Cumm. Total**
1.	LOCAL RESOURCE/MATERIAL MOBILIZATION. Less dependent economy enhances the sustainability of local housing materials	18	5	1	65
2.	RAPID GROWTH OF URBANIZATION. Advanced housing and physical facilities concentrate in urban area	12	7		50
3.	PRIVATIZATION/PROMOTION OF PRIVATE SECTOR. Trend toward privatization of consulting and construction companies/agencies, high investment of private sector	8	10		44
4.	TOWARDS LOW-COST/COST-EFFECTIVE CONSTRUCTION. Construction of low-cost houses	9	7		41
5.	POPULATION GROWTH. Population increase will lead to making more national policies and programmes	12	2		40
6.	INDUSTRIALIZATION. Availability of materials concerned with housing sector	6	6		30
7.	PUBLIC AWARENESS. Toward better housing system	8	2		28
8.	HOUSING LOAN. Both from private and government sectors	8	1	1	27
9.	USE OF NEW MATERIALS. Precast/prefab concrete (roofs and partitions). Plastic/PVCs (doors and windows, finishes etc.)	6	4		26
10.	POLITICAL COMMITMENT/ECONOMIC PLANS. Promotion of housing	3	8	1	25

Questionnaires were pilot tested in selected shelter sector institutions in the Kathmandu Valley. The test revealed the need to ask how many of an institution's staff are performing in each particular role. Likewise, it was found that it was not enough to leave a questionnaire for someone to complete. In some offices, the questionnaire was passed from one official to another to be completed. It was decided, therefore, that AT or survey staff members should personally deliver the questionnaire to the person who was to complete it. The person delivering the questionnaire would then be available to assist the official in completing the form, if necessary. This process resulted in a questionnaire completion rate of nearly 100 per cent.

Drawing the sample

Since the central offices of MHPP and its allied institutions exist only in the Central Region (Kathmandu Volley), all of these offices were included in the survey. However, the departments of MHPP have regional and district offices through out the country. Likewise, the private sector, particularly building contractors, building materials producers, and land developers, has offices all over the country (see exhibit 10).

Because of the size of the country and the number of public and private institutions that comprise the shelter sector of Nepal, institutional sampling by district was necessary. Four factors were considered by the AT in selecting the sample: (a) geography; (b) organization level; (c) accessibility; and (d) population distribution.

Based on these factors, sample districts were selected and the following shelter sector institutions were included in the survey: district offices of the Departments of Building, Housing and Urban Development, and Water Supply and Sewerage; town development committee, municipality office; registered building contractors, building materials producers, and, land developers.

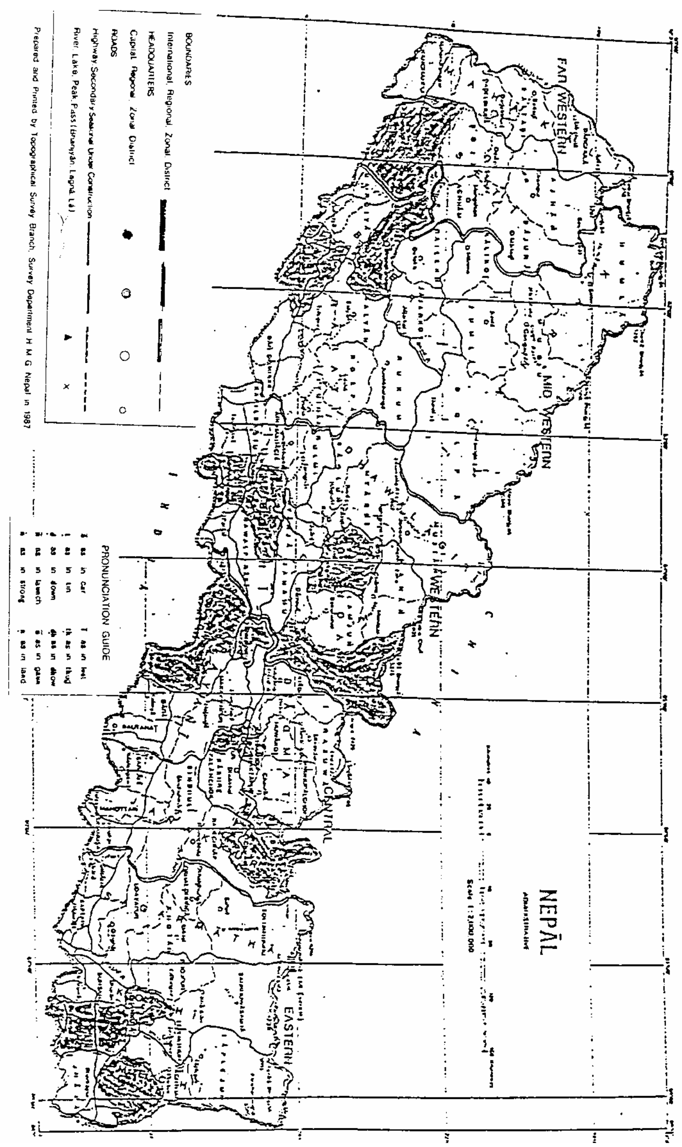
Conducting the survey

All members of the AT and the survey staff were fielded to eight different locations. The districts outside Kathmandu valley were grouped into eight clusters depending on accessibility by road as well as by air. Except in one district, Dolkha, located in the Himalayan ranges, the clusters were surveyed by groups of two or three members of the survey team. The questionnaire was personally delivered by the AT member or survey staff to the organization to be surveyed. In most cases, the survey staff member stayed to assist the officers designated to complete the questionnaire.

In the Kathmandu Valley, organizations included in the survey were divided among the AT members and survey staff who took responsibility for delivering, following up, or assisting in the completion of questionnaires. Data gathering in the Kathmandu area took longer than it did in other places. Often, officials who were designated to respond to the questionnaires were away from their stations or were busy attending to more pressing matters. In several cases, survey staff had to return more than five times to collect data before the questionnaire was completed.

Exhibit 10

Map of Nepal



The boundaries shown in this map do not imply official endorsement or acceptance by the United Nations.

Survey analysis

Tabulation and organization of survey data by functional areas, roles, competencies and geographic location were begun immediately after the data from outside Kathmandu were brought to the project office. Stratification was necessary to provide specific information to the institutions and to help systematize training planning. Estimates of training demand were analysed for each role and competency by types of sector institution at the central, regional and district levels.

To guide training Institutions in developing training strategies for the sector, training demand was estimated based on data collected at the regional and district levels. Data collected from the central offices of MHPP and allied institutions were presented separately. (See exhibit 11 for a sample of a country-wide estimate of training demand.)

Finally, data collected on actual competency levels and the importance of these competencies to the organization were similarly collected, organized and analysed to guide the preparation of training strategies and plans.

Assessment reporting

A final report was prepared listing training demands by roles and competencies and type of institution. Training demand also was presented by region to enable regional and district training institutions to prepare training plans that would address the needs identified.

The assessment report that would serve as a major input for strategic training planning included: (a) an overview of the assessment process: (b) training demand estimates and analysis by role, competencies, types of institutions and regions; and (c) recommendation for using the data to enhance competency throughout the sector.

Assessment of training institutions

Another major activity was the assessment of training institutions. It was initiated while competency profiles and questionnaires for the training needs survey were being prepared.

The assessment of training institutions was designed to:

- Determine current and potential training for the sector
- Assess the specific training delivery capabilities of sector training institutions
- Determine ways of strengthening MHPP training units to respond more effectively to training needs.

Selection of institutions to be assessed

A tentative list of training institutions was compiled using information gathered from key sector officials. The list was screened and modified by a panel consisting of the National Project Director and CTA, their respective senior staffs, and the Consultants.

The final list of institutions included the MHPP's in-house training units, eight centres run by other government agencies, the Institute of Engineering (three campuses) of Tribhuwan University, two technical schools and one private training institution.

Data gathering instruments and techniques

Two sets of questionnaires were prepared and field-tested: (a) one for training centres and in-house training units; and (b) one for the engineering institutes and technical schools. When this was done, the AT and survey staff were given detailed instruction on how to make the best use of the instruments.

In addition to the survey, interviews, document review and field visits to selected training institutions were valuable information sources.

Profiling and analysis

A profile for each institution was prepared consisting of a brief introduction, objectives, governance, organisational structure, training programmes, staffing, and training support facilities. Using these profiles, the capability of each institution was analysed to determine its ability to respond to the training needs of the shelter sector.

(A sample profile of training institution capability for the shelter sector, as extracted from the technical report, is shown in exhibit 12.)

Exhibit 11

Country wide estimate of training needs in a particular role/competency

Office: DHUD & DOB District Offices **Role:** C.45 Construction supervision

Locality: Number of staff who need training	**Central** 65	**Eastern** 55	**Western** 55	**M-Western 52**	**F-Western 31**	**Total**
(A) Immediately						
1. Prof. in construction	7	6	6	6	3	28
2. Planning skills	11	9	9	9	5	43
3. Timeliness	8	6	6	6	4	30
4. Work standards	4	3	3	3	2	15
5. Decision-making skills	7	6	6	5	3	27
6. Organization skills	4	3	3	3	2	15
Subtotal	41	33	33	32	19	158
(B) Within 12 Months						
1. Prof. in construction	26	22	22	21	12	103
2. Planning skills	24	20	20	19	11	94
3. Timeliness	20	17	17	16	9	79

4.	Work standards	25	21	21	20	12	99
5.	Decision-making skills	23	19	19	18	11	90
6.	Organization skills	20	17	17	16	9	79
	Subtotal	138	116	116	110	64	544
(C)	Beyond 12 Months						
1.	Prof. in construction	27	23	23	21	13	107
2.	Planning skills	19	16	16	15	9	75
3.	Timeliness	33	28	28	26	16	131
4.	Work standards	29	24	24	23	14	114
5.	Decision-making skills	29	24	24	23	14	114
6.	Organization skills	30	25	25	23	14	117
	Subtotal	167	140	140	131	80	658
	Total	346	289	289	273	163	1360

Preparation of the training strategy

One of the two major outputs of the Subproject is a shelter sector training strategy and action plan based on the training survey results and assessment of training institutions.

The sector training strategy included: (a) rationale and objectives; (b) review of the training needs and assessment of the training institutions; (c) mission and objectives of the training to be conducted through the strategic plan; (d) specific training needs to be met under the plan; (e) priorities to guide the sequencing of training responses; and (f) a plan of action that can be carried out over a period of years within the resource constraints and parameters of the sector.

Key representatives of the shelter sector, particularly from the MHPP and its allied agencies, were involved in developing the sector training- strategy. Likewise, the training community was consulted, particularly with respect to the training responses required to satisfy the training needs identified.

When the training strategy was completed, a seminar was conducted for representatives of the shelter sector and the training community. This seminar was viewed as a means for disseminating the action plan and generating suggestions for further refinement of the training strategy.

Outputs of the subcontract

As already stated, there were two major outputs of the NSSTNA:

- A comprehensive training strategy and action plan for developing the competencies and skills required to meet national shelter sector goals and objectives

- A camera-ready version of the NTNA methodology prepared by UNCHS (Habitat), entitled A *Guide for Assessing National Training Needs for Human Settlements.*

These major outputs were supported by three other technical reports: a comprehensive profile of shelter sector roles and competencies; an assessment of training institutions; and the identification of actual training needs of sector APT personnel.

Exhibit 12
Training Institutions and the areas of training they can provide for the sector

Institution		Functional area of training [a]									Total
		A	B	C	D	E	F	G	H	I	
In-house training units of MHPP [b]											
1.	Manpower Development and Informatics Section, DHUD	x	x		x	x	x	x		x	7
2.	Planning and Manpower Development Section, DOB	x	x		x	x	x	x		x	7
3.	Central Human Resource Development Unit, DWSS	x	x		x	x	x	x		x	7
Training Centres											
1.	Local & Urban Development Centre	x	x		x	x				x	5

2.	Nepal Administrative Staff College	x	x		x	x				x	5
3.	Revenue Administration Training Centre	x			x						2
4.	Survey Training Centre					x					1
5.	Women's Training Centre									x	1
6.	National Computer Centre			x							1
7.	Technical Training Section, DCVI						x				1
8.	Local Development Training Centre					x				x	2

Notes:
(a) Legend
A-Management, B-Training and development, C-Management information system, D-Finance, E-Planning, F-Construction and maintenance, G-Standards and regulation development, H-Research and development, I-Marketing

(b) In co-operation with other training institutions and/or resources.

Conclusions and observations

The field test of the UNCHS (Habitat) NTNA methodology in Nepal's shelter sector demonstrated several things.

First, the methodology can be used successfully on a national scale to assess the training needs of sector-wide organizations, both public and private. All of the objectives established for the NSSTNA by Nepal's Ministry of Housing and Physical Planning were met. At the time this case study was written, most assessment tasks had been completed and it is expected that the Ministry will use assessment results in its efforts to establish country-wide policies on training and human resource development. Revisions in the methodology and implementation guide were made by the project staff based on the field test experience and in consultation with the authors during their field visit to Nepal.

Secondly, a massive database on APT roles, competencies and training requirements now exists for the shelter sector of Nepal. Sixty six shelter sector roles in nine functional areas were identified by an assembly of top shelter officials. From over I26 interviews with exemplary performers in these roles, more than 350 competencies were established.

A subsequent survey of public and private organizations in 15 districts of the shelter sector produced an ambitious training agenda for Ministry consideration and for training suppliers nation wide. At the time that this case study was being prepared, a review of the capabilities of the country's training institutions was underway to determine how the sector's reported training needs could best be met.

Thirdly, in-country personnel with appropriate training can be used to carry out most assessment tasks with a minimum of external consulting assistance. An important by-product of the NTNA has been the building of local capacity within the Ministry of Housing and Physical Planning, and several allied institutions, to carry out projects of this type on an ongoing basis with a minimum of outside assistance. What has been learned by local staff from this project can be put to use in the near future for the benefit of this and other sectors in Nepal.

Fourthly, it must be pointed out that an NTNA is not an undertaking to be taken lightly. Funding considerations aside, a considerable investment of personnel resources and time from national and local institutions is required to carry out such a project successfully. However, the collection and analysis of data on roles and competencies throughout an entire sector of a country provides an extraordinary opportunity for systematic planning. Comprehensive data on training needs provides public and private officials with a foundation for the preparation of sector wide training policies, priorities and strategies. Training institutions, as a result of the assessment, would have c) reliable basis for the design of specific training plans and programmes for upgrading or maintaining the competencies of personnel in public and private organizations throughout the shelter sector.

In sum, the country's investment in NSSTNA has been quite small in comparison to the potential long-term gains in shelter sector productivity. Owing to the experience gained from this project in the shelter sector, NSSTNA will have equal or even greater benefit when used to assess the training needs of human resources in other sectors of the country.

Footnotes

[16] UNDP, Project NEP/88/054: Policy and Technical Support for the Urban Sector. It was undertaken at the request of the Government of Nepal as a subcontract to a larger sector project designed to improve the country's housing sector and building construction.

[17] The term "Consultant" as used in this case refers to the associated national and international firms (SGV Consulting. in association with Nepalconsult (P) Ltd.), and/or the team of consultants and national junior professionals.

ANNEXES

I. COMPETENCY AND TRAINING NEEDS ASSESSMENT

The introduction to this Guide provides a rationale for doing training needs assessment at the national level and suggests some conditions for a successful programme. In addition, the competency-based approach to training needs assessment was defined and distinguished from other approaches. In this annex, the discussion is expanded in order to provide a thorough understanding of the competency-based method. It includes a description of the factors that have a bearing on how competency is put to use in the service of a country.

Competency and accomplishment

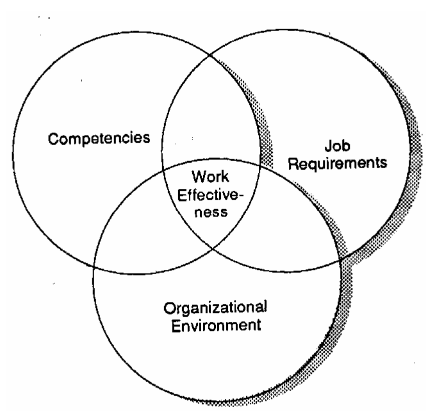
It is generally accepted that the purpose of training is to enable a person to perform effectively. Planning worthwhile training, however, requires knowing what effective performance means in relation to a specific set of jobs or functions. Boyatzis defines effective performance as the attainment of specific results (i.e., outcomes) required by the job through specific actions while maintaining or being consistent with policies, procedures, and conditions of the organizational environment." [18]

According to this definition, effective performance is related to three organizational components. The first is the competency (capacity for achieving specific results) that an individual brings to the job: second is the performance that is required from the individual; third is the organizational environment within which performance is to occur. Exhibit 13 is a model of effective performance showing how the three organizational components can interact so as to produce effective performance. The model suggests that the more congruent the three components are, the more likely it is that effective performance will occur.

Competency

According to Boyatzis, specific results occur in job situations because specific actions have been taken by the people concerned. People are able to execute these specific actions because of certain characteristics or abilities they possess. These characteristics are called "competencies". As stated above, a competency is the capacity for achieving specific results that a person brings to a job.

Exhibit 13
Interrelationship of factors that influence performance



In other words, competencies are a measure of potential. They reflect what a person "can do" but not necessarily what a person "will do." Two people with equal potential to perform might produce entirely different results. This is because many personal and environmental factors come into play to influence the way a person exercises his or her potential to perform. It is not unusual for a highly productive individual to begin performing poorly, for example, when given unreasonable assignments, when assigned to an incompetent supervisor or when faced with difficult personal problems.

People who are competent and who consistently demonstrate the very best instance of a particular performance are called "exemplars". As a rule, exemplars are not people who are endowed with great native intelligence or other special gifts.

Rather, exemplars are ordinary people who perform in extraordinary ways. Because of this, their actions can be duplicated by others.

Exemplars also provide a yardstick for what is possible. What they have achieved can be used to motivate others to outstanding performance. Before the first four-minute mile was run, for example, it was believed impossible. In 1964, Roger Bannister ran the mile in 3 minutes and 59 seconds. Within a year, several other runners had equaled or bettered Bannister's record. Today, athletes regularly run the mile in less than four minutes.

People are not competent apart from a specific function or task. A person who is an exemplar in one area might be incompetent in another. A skilled surgeon, for example, might perform poorly when giving health maintenance advice to a sick patient. For this reason, it can be concluded that competency is a relative term.

It has meaning as a measure of possible performance only in relation to a specific set of tasks and requirements.

Requirements

The work of a sector of a country's economy is divided into a variety of functions, activities or tasks. The work to be done requires people who are skilled as managers, planners, builders, maintainers, support personnel etc. The expectations of top management for the performance of people employed in these capacities are called requirements. Taken as a whole, the effort of people to meet the task requirements of their employers will result in the total performance of an organization in relation to its mission or purpose.

Any function in a sector will consist of a variety of activities and responsibilities. The performance of an individual responsible for a specific function can be measured by the output or results of that person's effort. For example, the output of a planner might be a plan; for a builder, a road, a bridge or a building.

Most functions, e.g., management, will involve a constellation of tasks. A manager might be expected to perform administrative tasks, coordinating tasks or supervisory tasks. The performance of a manager in various functional areas is linked to the production of the unit he/she manages. The vice president for new facilities in a construction company, for example, is a manager. The actions he/ she takes have a direct impact on and contribute to the performance of the new facilities division.

The work environment

Of equal importance to personal competence and a specific function to be carried out is the effect of the work environment on the individual. The environment provides the context for human action or performance. A person works in an organizational context while an organization functions in the context of a country's values, priorities and practices. The value placed on performance or competence cannot be measured apart from the context.

Suppose, for instance, that an engineer invents a new type of construction material that will dramatically lower the cost of housing. Is this a valuable accomplishment? Perhaps not in the context of an industry that provides an expensive product. In the context of a country that is attempting to lower housing costs, however, the engineer's performance is truly competent.

If context is important in determining the meaning of human accomplishment, some kind of system Is needed to reveal the point of view that governs how accomplishment will be measured in each case. Thomas Gilbert, an authority on human competence, has concluded that the value of an accomplishment in one context can be derived from the next-higher context of which it is a part. Exhibit 14, adapted from Gilbert's work, presents a hierarchy of accomplishment levels and examples taken from one sector of society. The intent of this figure is to demonstrate that the accomplishments made at any level can be expected to have social value only to the extent that they further the purposes of a higher level. [19]

An environment in transition means that what is considered good enough today might not be good enough tomorrow. The implications of this fact for the development of a competent workforce are obvious. Some effort must be made, imprecise as it might be, to predict the forces likely to affect the quality of performance in the future. This is the unique role and capability of competency-based training needs assessment.

Exhibit 14
Comparison of societal levels and the corresponding scope of accomplishment

Level	Accomplishment	Example
I. Society	Ideals that relate to the quality of life and require	Provide adequate shelter for every family

	specific goals if they are to be attained	
II. Sector	Goals that give performance its meaning and require policies for their attainment	Increase the ability of local authorities to design and implement shelter programmes
III. Organization	Policies that provide a basis for developing action programmes	Complete about 1000 low-cost shelter units in 100 villages in 24 months by using local equipment and materials
IV. Programme	Strategies that define the roles of institutional members and require plans for fulfilling them	Organize 10 special construction centres in various parts of the country to mobilize village resources to build shelter units using available labour and equipment
V. Activity	Tasks of institutional members responsible for one or more phases of accomplishment	Prepare a development plan for a community building to serve as a model for the local labour force in planning and constructing shelter units

Footnotes

(18) Boyatzis, Richard E., *The Competent Manager: A Model for Effective Performance,* (New York, John Wiley & Sons. 1982), p. 12.

(19) Gilbert, Thomas F., *Human Competence: Engineering Worthy Performance.* (New York, McGraw-Hill Book Company, 1978).

ANNEX II

TERMS OF REFERENCE TO ASSESS NATIONAL TRAINING NEEDS FOR HUMAN SETTLEMENTS

These terms of reference (TOR) are included to provide a format for and information about contracting for services that will assist in the implementation of an NTNA. They can also be used to define the scope of work required to accomplish the assessment in-house, tapping individuals from the lead agency or forming a combination of public agency officials seconded to the assessment effort.

The TOR, which follow, have been written to illustrate an approach which has been useful to other organizations in contracting for services or providing direction for internally administered and implemented projects of this kind. It is intended as a guide and not as a document to be adopted verbatim.

(Name of Lead Agency)
Terms of Reference

Title: Consultants (or agency task force) to guide the conductor a national training needs assessment for the (name of human settlements sector and country) and to provide the necessary support and training to carry out the project with a substantial local contribution.

Duration: Three-month lump-sum contract, to begin within 10 working days of the execution of a mutually acceptable consultancy agreement. (Duration might vary according to scope of effort and number of assessors involved.)

Purpose and scope: The main purpose of this project is to identify the training needs of human settlements on a national basis, using a competency-based approach to assessment. A further purpose is to train an in-country assessment team to assist in the assessment and to provide the knowledge, experience and skills required to carry out subsequent assessments in the country. Project outcomes include:

- A comprehensive list of administrative, professional and technical competency statements that define the knowledge, skills and behaviour required to carry out roles and responsibilities in the human settlements sector in a highly proficient and effective way;

- A trained cadre of local officers who can assist in the assessment, as defined by these terms of reference, and who can assist others in planning and implementing similar efforts in other sectors.

Tasks: The consultant (or task force) will be responsible for the following tasks:

- Develop and submit to the lead agency/project director a detailed work plan for conducting a competency-based NTNA and for training a cadre of local personnel to assist in the planning and implementation of the project (the assessment is to be carried out in accordance with the approach defined in a 1989 UNCHS (Habitat) publication, entitled *A Guide for Assessing National Training Needs for Human Settlements)*

- After lead-agency review and approval, conduct a reconnaissance on site to determine the resources required to carry out the NTNA, the roles and responsibilities of principal organizations and officers who will be involved in the assessment and a timetable of events to plan and implement the assessment

- Assist the lead agency in preparing a report on socio-economic political-environmental trends which are or will be affecting the overall performance of sector organizations and their officials

- Provide draft materials suitable for circulation by the lead agency to inform various organizations about the project, the benefits to be derived from it and the scope of the organizations' involvement which is required to carry out the project

- In collaboration with the lead agency, conduct a strategic planning session with the AT and other key officials and a multi-day training workshop with the AT

- Assist in conducting a one-day briefing and data-gathering workshop with key sector officials, to build understanding of and commitment to the project, to identify critical roles to be played within each functional area of the sector and to nominate a group of individuals (exemplars) who regularly outperform their peers in the key sectors roles identified earlier in the workshop

- Direct the AT in interviewing a sufficient number of exemplars in each functional area of the sector to provide guidance in determining national training needs from a competency based perspective

- Provide guidance and direction in the preparation of a final assessment report, which includes role definitions and competency statements in each of the APT areas required to ensure a high level of sector performance

- Assist in conducting a one-day debriefing and application session with key sector officials, to describe the competencies identified in the project and to provide information about the options for using the data to improve individual and organizational performance in the sector.

Payment: The lump-sum fee for these services is to be paid to the consultant in three equal payments as follows:

- one third upon submission of a detailed work plan

- one third upon completion of interviews, data collection and analysis

- one third upon completion of the final assessment report and the debriefing session with key sectoral officials.

The consultant will be reimbursed for actual travel and per diem costs incurred in accordance with the rules and regulations of the funding agency.

ANNEX III

MODIFIED VERSION OF THE NOMINAL GROUP TECHNIQUE

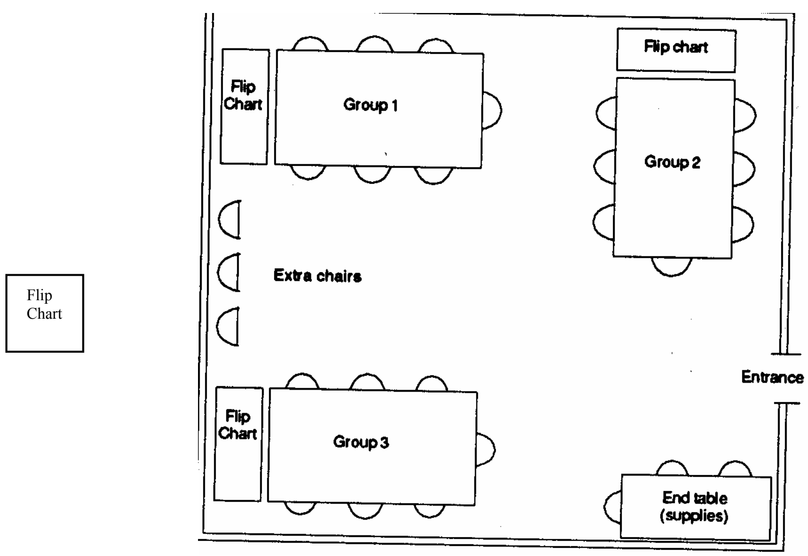
The Nominal Group Technique (NGT) [20] is a structured group meeting aimed at gathering information useful for problem solving. NGT was developed by Andre L. Delbecq and Andrew H. Van de Ven in 1968. Since that time, NGT has gained extensive recognition throughout the world and has been widely applied in health, social-service, education, industry, and government organizations.[21] NGT features the silent generation of ideas, the public recording of these ideas, individual prioritizing and group decision making on collective priority ratings.

The approach suggested by Delbecq and his associates has been modified somewhat, in order to serve the specialized data-gathering needs of the process described in this Guide. The time required to complete this version of the NGT is approximately three-and-a-half hours. NGT meetings normally consist of one to five groups of five to nine people, each group seated around a table that is open on one end (see exhibit 15). The open end is used for a flip chart-pad on an easel, to be used by the facilitator for the collection and public display of ideas furnished by members of the group. The facilitator has markers for writing ideas on a chart-pad and masking tape for taping chart paper to the wall of the room. Members of each group are provided with pencils and writing pads.

A meeting might involve several groups at separate tables. However, for purposes of illustration, the process will be explained in this Guide as if there were a single table of nine participants. The process consists of six steps.

The group facilitator opens the meeting with a cordial welcome, a statement about the purpose of the meeting, clarification of the importance of each member's contributions and clear indication of how the meeting's output will be used. For a meeting to identify tasks for a training and development unit, the facilitator might begin this way:

Exhibit 15 - Meeting room arrangement for three NGT tables



Facilitator

"I want to express my appreciation to you for attending this meeting. Each of you has a distinguished record in the human settlements training field and comes to this meeting highly recommended by your peers".

"Our objective is an important one. At the conclusion of this meeting, we shall have a list of from 72 to 25 training tasks. These tasks will serve as the foundation for the training needs assessment currently in progress. They will benefit organizations, educational institutions, training and development units and individuals practicing or expected to practice in the training field anywhere in this sector for years to come".

"In our meeting, it is important that each of us participates fully and equally. We are all important group resources, Our success as a group depends on every member sharing his or her knowledge and perceptions with other members frankly and without hesitancy. I appreciate, therefore, the willingness of every one of you to share your ideas fully and to work intensely during the three hours that we are together".

Step 1 - Silent generation of tasks in writing (15 minutes)

The first step in an NGT meeting is to have group members write down key ideas silently and independently. To prepare group members for this task, the facilitator passes out worksheets, one for each participant. A work-sheet is a sheet of lined tablet paper with the nominal question written at the top. The wording of the nominal question is important. The facilitator should use clear and unambiguous wording for the question to generate specific responses. An appropriate question, "What are the most important tasks your training unit must carry out to meet its objectives?," for example, should produce many useful task descriptions. This question is far superior to the general question, "What do training units do?"

Facilitator

"You will notice that the question which is the focus of our meeting is.. What are the most important tasks your training unit must carry out to meet its objectives?"

"I should like each of you to take 10 minutes to make a list of tasks in response to this question. Do this in a brief phrase or a few words on the work sheet in front of you. Please work independently of other members in identifying tasks, During this period of independent thinking, don't talk to other members, interrupt their thinking or look at their worksheets.

"Since this is an opportunity for each of us to make a contribution, I should appreciate intense effort for the next 10 minutes. At the end of that time, I shall call time and suggest how we can share what we have written. Are there any questions? Let's proceed then, individually, for the next 10 minutes".

Step 2 - Recording of tasks (30 minutes)

Starting at one end of the table, the facilitator asks a group member to read one of his task statements out loud. The statement is recorded by the facilitator on the pad. The next group member is asked for one of his statements. This process is continued until every statement from every member has been recorded. As sheets on the pad are filled, the facilitator tears them off and tapes them to the wall. Members are encouraged by the facilitator to "pass", if they have nothing further to offer, with the understanding that they may re-enter later with additional tasks that might occur to them. Discussions and side-conversations at the table are strongly discouraged by the facilitator while task recording is taking place.

Exhibit 16 is a partial list of statements that might be generated by a group of experts about the tasks that must be carried out by a sector training unit. There is an important reason for listing all of the statements before discussion: to prevent overlooking important tasks. The list of tasks also encourages piggy-backing (i.e., stimulating another member to think of a task that he/she did not remember during the silent period and which can be added to the list when that member's turn arrives).

Exhibit 16 - A NGT generated list of training unit tasks

1. Presenting information that helps people develop necessary job skills.
2. Facilitating group discussions.
3. Selling training programmes to prospective clients.
4. Defining what people need to know to become proficient in their present duties.
5. Packaging training materials in a coherent and organized way.
6. Identifying the impact of the training programme on participants.
7. Making necessary arrangements for the success of a training programme.
8. Producing audio and visual aids.
9. Managing and coordinating overall unit operations.
10. Preparing lesson plans and other instructional materials.

Step 3 - Serial discussion of tasks (60 minutes)

The facilitator explains that the purpose of this step is to ensure that everyone understands each task on the Chart-pad. The tasks are discussed one at a time, as written. Discussion of a task is to focus on bringing about understanding, not agreement or disagreement. Members are told that everyone is responsible for understanding each task and for making sure that other members of the group understand it as well.

It is important for the facilitator to "pace" the discussion, so that the last tasks on the list receive as much discussion as the first. The facilitator should not allow discussion to (a) focus unduly on any particular task, or (b) degenerate into an argument.

In the training-meeting example, the facilitator might say:

Facilitator

"Now that we have listed tasks on the chart-pad, I want to take time to go back for a brief review of each task".

"The purpose of this review is to give the author of each task a chance to clarify the meaning of the task and why it should be included in the final list of tasks".

"We shall, however, want to pace ourselves so that each task on the chart receives some attention from the group. For this reason, I might find it necessary, from time to time, to ask the group to move on".

"Finally, I want to point out that the author of a task should not feel obligated to clarify or explain his or her statement. It is possible that someone else might want to do that instead".

(Going to the chart-pad, the facilitator points to the first task on the list)

"Would anyone like to comment on task number one?"

Exhibit 16 - A NGT generated list of training unit tasks

1. Presenting information that helps people develop necessary job skills.
2. Facilitating group discussions.
3. Selling training programmes to prospective clients.
4. Defining what people need to know to become proficient in their present duties.
5. Packaging training materials in a coherent and organized way.
6. Identifying the impact of the training programme on participants.
7. Making necessary arrangements for the success of a training programme.
8. Producing audio and visual aids.
9. Managing and coordinating overall unit operations.
10. Preparing lesson plans and other instructional materials.

Step 4 - Analysis of tasks (45 minutes)

The average NGT meeting will generate from three to five tasks per group member. Through serial discussion, group members will come to understand the importance of each task from the point of view of its author. In some manner, however, the group must reduce or expand the list as necessary to cover all the key tasks that are to be performed.

It is at this point that the method being suggested in this Guide varies from the traditional NGT. To analyse the tasks presented and discussed previously, the facilitator divides the group of nine members into subgroups of three members each. Each subgroup is given a set of imprinted cards see exhibit 17.

The tasks on the chart-pad also are divided into groups of three, each of which is assigned by the facilitator to one of the subgroups. Subgroup members are asked to analyse the tasks assigned to them and to record the results of their analysis on the cards.

Facilitator

"We have now had some background explanation and discussion on our initial lists of tasks. Next we want to analyse each of these tasks thoroughly. To do this, I want you to work in groups of three for 45 minutes to an hour. The task for each small group is to answer several questions about each of the tasks.

(The large group is subdivided by the facilitator into three small groups of three members each.)

Exhibit 17 - Worksheet for analysing tasks

Task No. ________

(check)

( ) Discard the task

( ) Keep the task without change

( ) Combine the task with Task No. ______

( ) Reword the task as follows:

Facilitator

"The questions to be answered are printed on the worksheets I am handing out now, I want each subgroup to analyse about one third of the tasks on the chart-pad. The tasks to be analysed by your subgroup are..."

(The facilitator assigns about one third of the tasks on the chart pad to each of the subgroups.)

"I should like you to begin working on the task by placing the number of the task you are analysing on one of the cards. Discuss the statement, If you believe it should be discarded, kept unchanged, combined with another statement or reworded, share your thoughts with other members of your small group. Reach a group decision about the task and complete the card. Then, move on to the next card.

"Try to complete each card in five minutes or less (the time will depend on the number of tasks). Pacing yourself is important, so that the last statements get as careful analysis as the first.

Subgroups might not finish their work at the same time. Therefore, the facilitator might wish to caution the fast subgroups not to disturb the slow ones and to use the remaining time to review their work.

"Some of the groups have not yet completed their analysis of the tasks. If your group has finished, please take time to recheck everything, to be sure you are satisfied. Also, let's not disturb those groups that are still working".

When the three subgroups have completed the task, the facilitator instructs each subgroup to display its results.

"Now that all three groups are finished, there is one final step needed to complete our group task. Please tape each of your completed task cards on a piece of chart-paper. Then, tape the sheet on the wall (facilitator indicates the location) so that other subgroup members can see what you have done. Be sure to write your number at the top of the sheet so that the work of your group can be distinguished easily from the work of other groups".

After each subgroup has completed all the tasks in step 4, the facilitator calls for a 15 minute break. The break is necessary at this point in the NGT to give members a rest and to invigorate them for step 5.

Step 5 - Voting on tasks (30 minutes)

Upon completing step 4, each of the subgroups will have analysed between eight and 15 tasks. Completed cards will express the best judgement of the three subgroups about discarding, keeping intact, combining or rewording each of the tasks. Each of the cards, in turn, is taped to a piece of chart-paper and the paper is taped to a wall of the meeting room.

An important step in the process is letting each member of the group review and make an independent judgement about each of the tasks. This step is necessary first because it ensures judgemental accuracy. Secondly, it ensures the full participation of each member In the selection and wording of task descriptions.

The following method is used by the facilitator to arrive at a final decision on each of the tasks, a decision that reflects overall group preferences.

1. Cards prepared by each of the three subgroups on their assigned tasks are displayed.

2. Individual group members review and make independent judgements about each of the tasks, using a set of cards as shown in exhibit 17

3. Individual judgements are expressed as a simple "agree" or "disagree" vote on each of the tasks

4. Results of individual voting and the mean are determined and used as the training priorities.

The facilitator begins the recording and voting procedure with a statement like this:

Facilitator

"Each of the subgroups has completed an analysis of its group of tasks. The result of each subgroup's work has been posted on the wall for review by members of other subgroups. I should like you to leave your seats and review these cards. Take with you a set of voting forms being handed out now". (See exhibit 18.)

(The facilitator hands out voting forms, one for each group member)

"As you reach each task description, decide if you agree with it or disagree. If the task description is appropriate, check the "agree" block near the centre of the form opposite the description. If on the other hand, there is something wrong with the description, check the "disagree" block. If you do check the "disagree" block, enter your reason for doing so in the space to the right of your choice before moving on to the next statement.

Exhibit 18 - Independent voting form

Instructions

Start with task 1. If you feel that the task description is appropriate, check the "agree" block near the centre of the voting form and move on to task 2. If there is something wrong with the task description, however, check the "disagree" block. If you check the "disagree" block, enter in the space to the right of the entry your reason for that choice. Continue until you have agreed or disagreed with all of the task descriptions and have recorded your reasons for disagreeing.

Task Statement	Individual Vote	Reason for disagreeing
1.	Agree ( ) Disagree ( )	
2.	Agree ( ) Disagree ( )	
3.	Agree ( ) Disagree ( )	
4.	Agree ( ) Disagree ( )	
5.	Agree ( ) Disagree ( )	
6.	Agree ( ) Disagree ( )	
7.	Agree ( ) Disagree ( )	
8.	Agree ( ) Disagree ( )	
9.	Agree ( ) Disagree ( )	

"Think carefully about each of the task descriptions before making any entries on the voting form. Check the "agree" block only when you are satisfied that the description is important, does not overlap or duplicate another description and is properly worded. On the other hand, have a good reason for checking the "disagree" block for any task description. Take time to explain your reason".

When all votes have been recorded, the facilitator announces the result. Task descriptions with four or less "disagree" votes are accepted without further revision by the facilitator, since they have been approved by more than 50 per cent of the group. Descriptions with five or more "disagree" votes, however, are viewed as rejected and scheduled for further work.

When the tally is complete, the facilitator thanks group members for their efforts, explains what will be done with the meeting output and closes the meeting.

Step 6 - Feedback and recording (15 minutes)
As the voting forms shown in exhibit 18 are completed by group members, they are collected by the facilitator. With one member reading and the facilitator recording, the vote is recorded on a chart-pad tally sheet like the one shown in exhibit 19. An "x" entered in a box ( ) indicates that a member has registered disagreement with the task description.

Exhibit 19 - Chart-pad tally sheet

Instructions

Enter an "x" in the block opposite each task description where the group member has indicated disagreement with the description. Enter nothing if the member has indicated agreement with the description.

Task Number	Group member number								
	1	2	3	4	5	6	7	8	9
1.									
2.									
3.									
4.									
5.									
6.									
7.									
8.									

Footnotes
[20] The term "nominal group" means a group in name only and refers to individuals working as a problem-solving team who are not allowed to communicate orally.

[21] Delbecq, Andre L., Van de Ven, Andrew H., and Gustafson, David H., *Group Techniques for Program Planning.* (Glenview, Illinois, Scott, Foresman and Company, 1975).

ANNEX IV

TEAM DEVELOPMENT AND STRATEGIC PLANNING WORKSHOP DESIGN

Overview
The following workshop is designed to help the lead agency prepare the AT for its role and responsibilities in carrying out an NTNA. The workshop precedes the assessment-planning meeting and is scheduled after a final decision is made to proceed with the assessment. The workshop is a critical phase in the assessment process and needs to be undertaken with commitment and care.

Workshop objectives
1 . To increase participant knowledge and skill in data collection and analysis techniques, including:
- Planning and organizing interviews and group work conferences
- Carrying out competency interviews
- Conducting data-gathering meetings and workshops
- Recording and organizing data and information.

2. To plan for the project's effective implementation in accordance with local customs and practices.

3. To build an effective project team.

Timetable
The workshop will require five days of training, approximately eight hours per day.

Participants

The participants include the assessment team leader and up to 12 assessor-interviewers. While the assessors can be selected from a wide range of sectoral and training agencies, they should have considerable knowledge about and experience in human settlements management or the training of human settlements APT personnel. The criteria and process of selecting the AT who will participate in this training programme are found in the Guide. While the number of assessors required for the training will be determined by the lead agency and consultants, the total number should not exceed 12. Managing the team becomes more difficult if number of trainees exceeds 12.

Training staff

The training team should include two senior trainers, knowledgeable and experienced in interpersonal skills development, group processes, and the special data-gathering techniques to be used in the assessment. The training requires considerable individual coaching, thus the higher-than-normal trainer/trainee ratio.

<table>
<tr><th colspan="2">Proposed five-day workshop design</th></tr>
<tr><th>Proposed design</th><th>Trainer notes</th></tr>
<tr><td>Day 1

Morning session
❖ Welcome and introductions
❖ Workshop objectives, design, schedule, and logistics
❖ Individual and small group exercise: who do you admire most, and why?
❖ Total group session: to discuss the exercise and its implication for the project</td><td>This exercise is designed as an ice breaker and to help AT members begin to think in terms of individual attributes or behaviours of persons they know. The exercise develops information that is similar to the kind they will be asked to develop in the exemplar interviews conducted as part of the assessment process.</td></tr>
<tr><td>Afternoon session
❖ Presentation/discussion of NTNA project: history, goals and objectives, purpose and design of field test, expected outcomes
❖ Small group exercise: to identify the problems and opportunities involved in carrying out the NTNA project</td><td>Each small group will develop two lists: one outlining opportunities and the other constraints they believe will be associated with the project. The objective of the exercise is to help participants process what they have learned about the project and to get them to think in a systematic way, about their roles as assessment team members.</td></tr>
<tr><td>Day 2

Morning session
❖ Group reports/discussion of problems and opportunities</td><td>Group reporting on opportunities and constraints is an excellent time for the team leader to clarify any concerns AT members might have about their roles in project implementation. The focus on opportunities, as well as constraints, helps to highlight the benefits they will derive from involvement in the project.</td></tr>
<tr><td>❖ Small group exercise: Factors to consider in carrying out of effective interview</td><td>Form small groups of four to five participants to work on the task of developing a list of factors to be considered in carrying out a successful interview. After about 30 minutes, have each group report its findings. From this exercise a consensus can be reached on a set of criteria that might be adopted by the AT to set standards for the interviewing stage of the assessment process. Another approach to the exercise would be to have each small group define the competencies required of someone who would be considered an exemplar in an interviewer's role.</td></tr>
<tr><td>Afternoon session

❖ Factors in effective interviewing continued
❖ Large group exercise/discussion
❖ Lecture/discussion: planning for in-depth interviews</td><td>At this point in the workshop it might be useful for the team leader to give a short lecture or to lead a guided discussion on how to plan and carry out a successful interview. It is one way for the team leader to assert his/her leadership role in working with the AT and to assure that all of the major planning concerns are considered.</td></tr>
<tr><td>Day 3</td><td></td></tr>
</table>

Morning and afternoon sessions ❖ In-depth interviews and critiques (start)	All of day three would be devoted to practice interviews. Start the day's activities by doing a role-play of the process that will be used to conduct practice interviews. The role-play would involve three participants. One interviewer, one interviewee and one observer. Have the interviewee play the role of an exemplar, the interviewer the role of the AT, and the observer the role of evaluator of the process. After each of the players have carried out their roles, open the session to for a total group critique. After the group critique, break the participants into groups of three and have each participant play each of the three roles. Each round should take about 30 to 45 minutes. After the initial round, it may be useful to hold a large group discussion to determine how the exercise is progressing.
Day 4 Morning and afternoon sessions ❖ Design of sector official's planning meeting: plenary sessions and small group planning	This session is devoted to a planning workshop. Since the workshop will include a nominal group process, the workshop facilitator might want to start the day's activities by having workshop participants engage in an NGT around all the factors to be considered to ensure that the sector official's workshop design include: setting objectives, designing large and small group activities, deciding who will do what to ensure that the workshop is successful, determining resources including venue and materials, and the many other details that must be attended to if a workshop of this kind is to be successful. Depending on the experience of the AT in designing such an event, this planning session could take all day. If the task is completed earlier, move on to the final session, which is devoted to project planning for implementation.
Day 5 Morning and afternoon sessions ❖ Project planning for implementation: plenary and small group work sessions	At this point in the workshop, the workshop facilitator and the participants should have a good idea of what will be expected in carrying out the project. The remainder of the workshop will be devoted to developing an action plan. Since most group facilitators are familiar with this kind of planning exercise, it is not necessary to elaborate on the process at this time.
The workshop will conclude with an evaluation of its performance and outcomes	End of workshop, with an evaluation of the week's events based on the workshop objectives.

ANNEX V

THE COMPETENCY INTERVIEW PROCEDURE

The competency interview is a type of personal interview. It is conducted by a trained interviewer face-to-face with an exemplar who has a record of outstanding performance in the functional area from which competency data are being sought. The interviewer's task is to learn from the exemplar, through question and answer, what the exemplar does that other persons with similar responsibilities do not do as well and distinctive actions that result in the exemplar's extraordinary performance.

The three steps in competency interviewing are:
- Preparing for the interview;

- Conducting the interview;
- Analysing interview results.

Step 1 - Preparing the interview

Initial contact with the exemplar

Arrangements for an interview with an exemplar may be mode in various ways as dictated by local protocol. In some instances, for example, approval must be obtained verbally or in writing from the exemplar's superior officer before contact is mode with the exemplar. The most satisfactory approach, as a rule, is to write a letter to the exemplar asking for the interview. When writing or calling an exemplar to arrange for an interview, the following information should be furnished:

- The purpose of the interview
- How the individual to be interviewed was selected
- The interview date and time the interviewer has in mind
- How long the interview will last (about 60 minutes)
- Where the interview should be held (preferably in a quiet place, away from interruptions or distractions).

Since exemplars are exceptional people, the interviewer should compliment them about their accomplishments when corresponding with them. The importance of the exemplar's participation to the overall success of the training needs assessment should be emphasized as well. The exemplar should be made to feel that his or her contributions are important to the future performance of APT personnel throughout the sector.

It is good practice to contact the exemplar as far in advance of the intended interview date as possible to avoid inconvenience or scheduling problems. If contact with the exemplar is made by telephone, a follow-up letter is appropriate to confirm what was agreed on by telephone. As a form of courtesy, a copy of any correspondence concerning the interview is sent to the exemplar's superior officer. For further suggestions on the correct way to establish initial contact with an exemplar, the interviewer should ask the advice of the AT leader.

Background information

The interviewer should obtain as much information as possible about the exemplar before the interview. Types of information to be obtained include work history, education, accomplishments, and other details about the exemplar's life. Familiarity with the exemplar in advance of the interview will help the interviewer plan a better interview and communicate more effectively with the exemplar. Information about exemplars will be available through the AT leader and the lead agency.

Preparation for the interview

Each interviewer will be assigned a list of exemplars who are to be interviewed by a specified date. The task of the interviewer is to schedule and conduct an interview with each exemplar and then to compile interview results in writing.

Interviews are sometimes conducted by AT members working in teams of two. When this is done, one team member asks questions while the other records the exemplar's answers. This method was used in Nepal during the methodology field test.

Important considerations in scheduling interviews are the number of interviews to be conducted overall and the proximity of exemplars to one another. Interviews with exemplars whose work areas are farthest from the headquarter's office should be scheduled first. Exemplars whose work areas are far from headquarters but close to one another should be scheduled for interviews on consecutive days to avoid needless travelling for the interviewer. Interviews should be scheduled as early as possible in the interview cycle to allow enough time for the interviewer to reschedule interviews that have been postponed.

Each interviewer is supplied with interview materials. These materials consist of a set of key questions, to be asked in the order presented, and suggested "probe" questions that can be adapted to each interview situation. These questions are contained in a sample interview questionnaire shown in annex VII. Space is provided beneath each question for the interviewer's use in taking notes on key ideas during the interview.

Before each interview, the interviewer should review the interview guide and all written biographical information on the exemplar. Furthermore, the interviewer should prepare him/herself mentally for the interview, recalling the successes and failures of previous interviews.

A checklist of essential matters to be considered by the interviewer in preparing for each competency interview has been included in this Guide (see annex VI). Interviewers are strongly encouraged to read the checklist from beginning to end and to check the "yes" or "no" blanks opposite each of the questions. Conscientious use of the checklist will prevent mistakes and provide the interviewer with a way of evaluating his/her performance in each interview, with the goal of improving his/her performance with each in succeeding interview.

Step 2 - Conducting the interview

At the scheduled time, the interviewer arrives at the exemplar's office. Appointments should be kept on time. Otherwise, a good and sufficient reason should be given the exemplar. For example, an interviewer who has been delayed might place a call to the exemplar:

"I know we have an appointment at 3 p.m. My automobile has broken down outside the city. I have found another form of transport. I plan to be in your office not later than 4 p.m. I am very sorry for the delay.

The competency interview begins when the interviewer has arrived at the exemplar's workplace, the two have greeted one another and are seated in an office or quiet meeting place that is. as free of distractions and interruptions as possible. The interview is divided into three phases:

- Initiation phase
- Development phase
- Closing phase

Initiation phase (about 5 minutes)

Make casual conversation with the exemplar to "break the ice" - help the exemplar relax and feel at ease. Discuss "comfortable" things like the weather, recent local or regional events, or personal interests. Sometimes a glance around the office can suggest topics of conversation. In a natural way, initiate the interview by thanking the exemplar for taking the time for the interview and explaining exactly why the interview has been requested.

The interviewer should never assume that because he/she has written a letter explaining the interview and because the exemplar has accepted the invitation, everything is clearly understood. The exemplar has a right to receive a complete explanation, face-to-face. Never begin an interview by saying: "I am sure you know why I have asked to see you today?" Instead, repeat what was in the invitation letter and express appreciation for the exemplar's willingness to take the time for the interview. An opening of this kind will set the stage for a serious and purposeful discussion.

An interviewer might use the following words to initiate a competency interview.

Interviewer: "We are conducting interviews with individuals who are highly effective in a particular work role. These are people who do what they do better than anyone else in the same role. We call these people exemplars. They are individuals whose performance provides an example for others to follow,

"You have been selected as exemplar in the role of ...

(Specify the role)

"I want to ask you a few simple questions about your role. Your answers to these questions are extremely important. They will help me understand why you accomplish more than others in the some role. By learning how you manage to perform effectively, we hope to help others learn to be equally effective. Our interview should take about an hour".

Development phase (approximately 50 minutes)

The intent of the interview is to collect accurate information about exemplar performance, using the interview questionnaire in annex VII. The questionnaire consists of seven key questions and an assortment of optional probe questions. The first five key questions are to be asked by the interviewer as worded in the questionnaire and in the order presented. No question is to be omitted. Each set of key questions is meant to secure facts and opinions from the exemplar about one or more areas of role accomplishment. The five key questions are shown below:

1 . "When you think about the things you have accomplished in this role, which of them do you feel best about?"

2. "You say you feel best about ... (summarize exemplar's accomplishment). Tell me what specific knowledge, skill or attitude, or combination of these, accounts for your success in this area?"

3. "As you see it, your success depends on (summarize). Now, explain what you have had to learn in order to be as successful as you have in this area?"

4. "In your opinion, how can others in the same role learn to be as successful in this area of accomplishment as you have?"

5. "You have given me a very complete picture of this area of accomplishment. Now, I want you to describe another accomplishment in this role that you feel good about."

The fifth key question in each set is, in reality, the first question of the next key question set, assuming that the exemplar has another area of accomplishment to discuss. The five key question set may be repeated by the interviewer as many times as necessary to draw out information about each area of role accomplishment mentioned by the exemplar.

The sixth and seventh key questions are asked when the last set of five questions has been answered and the exemplar has no more areas of accomplishment to discuss.

6. "What new knowledge, skills, or attitudinal changes do you think someone will need to perform this role successfully five years from today?"

7. "What do you think training institutions could be doing to prepare others to be more competent in this role?"

Answers to the seven key questions, supplemented by answers to accompanying probe questions, will provide the interviewer with information needed to develop competency statements.

The interviewer is almost certain to find that some or many of the answers given by an exemplar to key questions are not satisfactory. Answers may be vague, lacking in detail, irrelevant, off the subject or overly complex. Responses that fail to answer the interview questions will produce little that is useful to the assessment process.

Incomplete or unresponsive answers can occur for many reasons. The exemplar may not understand the question or how much detail the interviewer is seeking. The interviewer may not understand the answer. There may be barriers that prevent the successful communication of information between the exemplar and the interviewer. When such problems arise, it is the task of the interviewer to recognize and correct them as discreetly as possible. The two techniques most often used by interviewers to obtain full and responsive answers to interview questions are (a) probing and (b) active listening.

Use of the probe

Probing is used to motivate an exemplar to explain his/ her answers more fully or to refocus the interview when the exemplar's answers are not responsive to a question. [22] By probing, the inter viewer can encourage an exemplar to clarify, expand, or redirect an answer without being openly critical of the answer. Shown below are some typical probing techniques.

1. Repeat the question.

When the exemplar seems not to understand the question, misinterprets it, cannot decide what to say, or strays away from the subject, It is useful, simply, to repeat the question.

2. Pause, as if waiting for a response.

The best way for the interviewer to reassure the exemplar that he/she is aware that the exemplar is beginning to answer a question, but has more to say, is to be silent. The pause, often accompanied by an appropriate nonverbal gesture, such as a nod of the head, gives the exemplar time to gather his/her thoughts.

3. Repeat the answer.

Simply repeating what the exemplar has said can stimulate further thought. This should be done while the interviewer is writing so that the idea is being repeated and recorded at the same time.

4. Ask for clarification or elaboration.

When probing, an interviewer might find it helpful, on occasion, to appear slightly bewildered by an exemplar's reply. With a probe, the interviewer might suggest that he/she has failed to understand. For example, the interviewer might say, "I didn't quite get that; could you tell me more?" This technique can arouse the exemplar's desire to cooperate. This probe should not be used too often, however, since it could imply to the exemplar that the interviewer is not listening or does not know a good answer from a poor one.

Shown below is a list of common probe questions and responses taken from several authoritative sources on interview techniques. [23]

- Repeat the question
- Anything else?
- How do you mean?
- Could you tell me more?
- What makes you so sure?
- What did you actually do?
- Is there some other reason?
- Tell me more about ...
- In other words, you are saying ...
- That's interesting. Can we move on to ...?
- I'm confused on one point. You said that ...

These probes indicate that the interviewer is interested and wants more information. Interviewers might find it helpful to write these standard phrases on a card for quick reference.

Active listening

Being a good listener is an essential tool of the effective interviewer. But, attentive listening is not a passive activity. It is hard work. The interviewer, as listener, must stay focused on the interview and take active steps to ensure that what has been said is being understood.

Several common barriers can prevent an interviewer from hearing what the exemplar is saying. The interviewer may be preoccupied with him/herself or unable to concentrate on the interview for more than a few minutes at a time.

An interviewer might, on the other hand, experience a feeling of awe or become status conscious when talking to an exemplar. Any of these conditions, if not recognized by the interviewer and dealt with, can interfere with the effectiveness of an interview.

There are a number of active listening techniques that can be used by an interviewer to improve communication with an exemplar. One simple method is to use smiles, nods and short verbal acknowledgements while the exemplar is speaking. Other methods are using "silence" to encourage greater elaboration of an idea by the exemplar and being careful not to interrupt except, when necessary, to put a discussion back on track. Frequent paraphrasing of an exemplar's ideas and occasional summarizing before moving on to a new subject are helpful to ensure that a message has been received as it was intended.

Closing phase (about 5 minutes)

When answers to the five key questions have been obtained for each area of accomplishment identified by the exemplar and when the exemplar has answered key questions six and seven to the interviewer's satisfaction, the interview should be closed.

Closing is a way of concluding a competency interview on a positive note, leaving the exemplar with a good feeling about the experience. In closing, the interviewer thanks the exemplar sincerely for permitting the interview. An opportunity is provided for the exemplar to ask questions and offer additional facts or opinions on anything that has been discussed. The interviewer concludes by describing what will be done with the interview results.

The interviewer might use the following phases, or similar ones, to close a competency interview.

Interviewer: "I've enjoyed talking with you, (use exemplar's name). We have only a few minutes left. I want to be sure you hove a chance to ask any questions about the project or offer further ideas about how others in your role might be helped to perform more competently".

(Allow time for the exemplar to offer comments or ask questions)

"We are most grateful for your time and interest in this important project. The information you have provided on your role will be used to write competency statements. Each statement is a description of the very best performance one should expect from an individual in this role. The statements will be used to evaluate actual role performance and to design training programmes to improve future role performance".

Step 3 - Analysing interview results

The process of analysing interview results takes place in several phases.

Phase one is concerned with the preparation of initial competency statements from information provided by exemplars during face-to-face interviews. This phase comes soon after interviews have been completed by various interviewers working independently.

Phase two is a small group activity in which several interviewers, who have gathered data from exemplars who occupy the same role, meet to compare results and reach consensus on competency statements for the role. Phase two ends when each small group presents a list of competency statements to other AT members at a plenary session.

Phase three begins when each group of interviewers meets with the AT leader for final editing of role/competency statements and prepares a role/competency profile for each role as described earlier in the Guide. Phase three ends with the development of a sector wide matrix that shows competencies for all roles for which each competency is critical.

Phase One: Competency identification

With the handwritten interview notes and a deck of colour-coded 3 x 5 inch cards, the interviewer or interviewers (if two AT members are working as a team) begin the analysis. The intent is to extract from interview materials those characteristics of the exemplar's performance that distinguish him/her from less competent performers in the same role. Generally, evidence of competency can be found in statements about accuracy, originality, timeliness, work quality, volume, or cost control. The interviewer should look closely for statements that reflect these qualities.

In reviewing interview notes, the interviewer or interviewers might highlight or underline phrases that characterize superior performance. For example, the phrase, "determined to get things done on time", is indicative of timeliness, one form of competency. Another, "search for new ways to solve problems", suggests originality. Still another, "strive to lower costs without sacrificing quality", suggests that the ability to control cost is an important competency for superior performance in this person's role. It is in statements like these in an interview transcript that evidence of competency will be found.

From the key phrases extracted from the interview transcript, interviewers write competency statements. A competency statement is a role-specific standard of quality against which the performance of an individual in the role can be measured. For competencies related to timeliness, originality and cost control, for example, interviewers might compose statements such as the ones shown below:

1. For a competency statement on timeliness:

   Can be relied upon to have work ready when promised through a combination of advanced planning and a determination to do whatever it takes to stay on schedule.

2. For a competency statement on originality:

   Conceives of solutions or approaches which do not occur readily to conventional thinkers and which, if accepted, could have a lasting impact on the sector and the nation.

3. For a competency statement on cost control:

   Skilled in cost estimation and diligent in seeking ways to do more for less at each step in project performance.

A competency interview should produce from six to 12 competency statements like the examples. Each competency statement is entered by interviewers on a 3 x 5 inch card.

Phase Two: Competency statement selection

AT members assigned to interview exemplars from the same role set meet together to agree on a common set of competencies for the role. Each member produces a set of 3 x 5 inch cards containing competency statements derived from interview data. With one team member acting as a coordinator, data cards with similar competencies are arranged in vertical columns on a table top. At the head of each column is another card, preferably in a contrasting colour, on which is written a three or four word generalization that describes what all of the cards in that column have in common. **(24)** For example,

Generalization: Original thinking (Yellow card)

Competency: Conceives of solutions or approaches which do not occur readily to conventional thinkers and which, if accepted, could have a lasting impact on the sector and the nation. (White card)

After assembling the initial competency statements into columns under appropriate generalizations, group members agree on a final set of competency statements and generalizations. This is done by careful review of all statements, combining similar statements, eliminating Inappropriate statements, and rewording of remaining statements for clarity and consistency. In formulating the final wording for competency statements, care should be taken by AT members to preserve the intent and, to the greatest extent possible, the actual wording of the exemplars from whose role experience the statements were derived.

Upon completing a preliminary list of competency statements, each AT group is asked to present its results at a plenary session of the AT. The suggestions of other AT members are taken into consideration by each AT group in compiling a final list of competency statements on its assigned roles.

Phase Three: Role/competency profiling

A profile specifies the unique configuration of competencies that an incumbent in the role must have in order to be successful. A typical profile includes a definition of the role, a description of each competency required for successful role performance and a forecast of anticipated changes in the role over the next five years. Profiles for each role are prepared by the AT leader with the assistance of representatives from each of the phase two groups in each functional area of the sector. A sample role profile, in completed form, is shown in step 7 of the Guide.

When role/competency profiles have been prepared for each role in each functional area of the sector, the AT leader coordinates the preparation of a role and competency matrix. The matrix shows the critical competencies for all roles in each functional area and, conversely, the roles for which each competency is critical. The matrix is constructed with a numbered list of competencies on the vertical axis to the left and a horizontal list of roles along the top. The appearance of an "x" in the space where a role and a competency intersect indicates that the competency is a critical one for that role.

Footnotes

(22) See *Manual for Training Needs Assessment in Human Settlements Organizations* (Nairobi, United Nations Centre for Human Settlements (Habitat), 1987), p.97.

(23) See, for example, Interviewer's Manual (rev. ed,) (Ann Arbor, Michigan, Survey Research Center, Institute for Social Research, The University of Michigan, I976); Benjamin, Alfred, *The Helping Interview* (New York, Houghton Mifflin Company, 1969); and, *Manual for Training Needs Assessment in Human Settlements Organizations,* (Nairobi, United Nations Centre for Human Settlements (Habitat), 1987).

(24) For a description of a unique method of assembling data called the "Crawford Slip Technique", see *Manual for Training Needs Assessment in Human Settlements Organizations,* (Nairobi, United Nations Centre for Human Settlements (Habitat), 1987), pp. 115-117.

ANNEX VI

THE INTERVIEWER'S CHECKLIST

This checklist is designed to help you perform more effectively as an interviewer. It should be completed after each interview to assess your performance. The first section concerns those details and tasks to be accomplished before the interview. The second section involves an assessment of your performance during the actual interview.

A. Preparing for a successful interview		
	Yes	No
1. Did you get background information on the exemplar and his/her accomplishments?		
2. Did you correspond with the exemplar about the interview or speak directly to him/her?		
3. Did you follow the necessary protocol in getting approval from the exemplar's organization and superior officer?		
4. Did you make advanced arrangements for a specific time and place to hold the interview?		
5. Did you arrange the physical setting of the interview to create a more conducive atmosphere for exchanging information and ideas?		
6. Did you have the necessary materials to carry out the interview		
7. Did you review your interview plan and notes before leaving for the interview?		
B. Carrying out a successful interview		
8. Getting off on the right foot.		
(a) Were you on time?		
(b) Did you initiate the interview with casual comments to put the exemplar at ease?		
(c) Did you explain the purpose of the interview and what you hoped to accomplish?		
(d) Did you mention that you would be taking notes?		
(e) Did you give the exemplar a chance to express any concerns about the interview?		
9. Asking questions		
(a) Did you start the data gathering by asking a broad, open-ended question about the exemplar's selection		
(b) Did you follow the questionnaire schedule?		
(c) Did you ask enough follow-up (probing) questions to get the information needed?		
(d) Did you ask enough questions to clarify or elaborate responses?		
(e) Did you ask questions to keep the interview moving, when necessary?		
(f) Did you avoid confusing the exemplar with questions that had more than one meaning?		
10. Listening		
(a) Did you use appropriate nonverbal gestures and short verbal acknowledgements while the person was talking?		
(b) Did you avoid interrupting except when necessary to put the discussion back on track?		
(c) Did you use "silence" to encourage greater elaboration?		
(d) Did you restate or paraphrase what the exemplar said to be sure you understood?		
(e) Did you avoid letting yourself be distracted during the interview?		
11. Ending on the right foot		
(a) Did you avoid going past the point where the interview should have ended?		
(b) Did you summarize the key points covered in the interview?		
(c) Did you end the interview on a positive note?		
(d) Did you express appreciation for the exemplar's time and effort?		
If you answered "no" to any of the above questions, take a few minutes before your next interview to review your written materials on effective interviewing and think about how you might improve your performance.		

ANNEXVII

THE COMPETENCY INTERVIEW QUESTIONNAIRE

General information

Role: ______________________________
Sector: ______________________________
Functional area: ______________________________
Date: ______________________________

Exemplar information

Name: ______________________________
Job Title: ______________________________
Organization: ______________________________
Address: ______________________________

Telephone: ______________________________

Interviewer's name: ______________________________

Read this before starting the interview

Put the exemplar at ease by engaging him/her in conversation and providing information on the purpose and nature of the interview. Be sure to have sufficient copies of this questionnaire for up to five rounds of key questions. Ask questions six and seven only once; do this after completing all of the preceding five-question rounds. Number each page of the questionnaire in the space provided at the top and enter the name of the exemplar being interviewed.

Reminder: Make liberal use of suggested probe questions located to the right of each key question or use any other follow-up questions that come to mind. Practice being an active listener. Make notes on the exemplar's key points using the space provided under each question in the questionnaire.

Turn the page
Begin the interview
Good luck!

Page (   ) Name (   )

Key Question No.1
When you think about the things you have accomplished in the role of (be specific) which one of these do you feel the best about?

Notes: ______________________________

____

____

Key Question No. 2
You say you feel best about … (summarize exemplar's accomplishment). Tell me what specific knowledge, skills or attitudes, or combination of these, account for your success in this area?

Notes: ______________________________

____

____

Key Question No. 3

As you see it, your success depends on (summarize). Now, explain what you have had to learn in order to be as successful as you are in this area?

Notes: ____

____

____

Key Question No. 4
In your opinion, how can others in the same role learn to be as successful in this area of accomplishment as you are?

Notes: ____

____

____

Key Question No. 5
You have given me a very complete picture of this area of accomplishment. Now, I want you to describe another accomplishment in this role that you feel good about.

Notes: ____

____

____

Key Question 6
What new knowledge, skills or attitudinal changes do you think someone will need in order to perform successfully in this role five years from now?

Notes: ____

____

____

Key Question 7
What do you think training institutions could be doing to prepare others to be more competent in this role?

Notes: ____

____

____

ANNEX VIII

PROCEDURES FOR IDENTIFYING SECTOR-WIDE TRAINING DEMAND FOR APT PERSONNEL

This annex provides a sample form and instructions for a survey of sectoral organizations. The survey is intended to secure a representative sample of APT employees from whom the demand for role-related training can be established by the AT with a reasonable degree of accuracy. Included in this annex is a discussion of the survey procedure, directions for preparing the survey questionnaire and a blank questionnaire suitable for reproduction.

Survey procedure

The choice of sectoral organizations to participate in the survey is made through a selection process described earlier in the Guide. After the organizations participating have been identified, role-specific questionnaires are grouped in accordance with the organizations to which they are to be sent. A separate questionnaire is included for each sectoral role that is performed by a surveyed organization's APT employees. Therefore, a surveyed organization might be asked to complete and return several questionnaires.

Administrative heads of selected public and private organizations in the sector are the target population for the survey. These officials (respondents) receive one or more questionnaires similar to the one shown later in this annex. Respondents are asked to specify the relative importance of each competency to the organization's mission. They are asked to classify their APT employees in each of four qualitative categories, ranging from superior to below average. Finally, respondents are asked to group APT employees to be trained into three categories of urgency to be trained, ranging in time from within 12 months to beyond two years.

Raising the response rate

Certain steps can be taken by the AT to encourage respondents to complete and return completed questionnaires.

I. Sponsorship. Distribute the survey questionnaires under the signature of a key official of the highest government agency in the sector. This might be the lead agency or another agency that is likely to be recognized and respected by respondents.

2. Cover letter. Convince respondents of the project's significance. In the following example, the Importance of the assessment and the respondent's potential contribution to its success are expressed:

   "… training is one of our country's principal strategies for building a competent and productive workforce, and yet our training institutions have often been criticized' for failing to provide training that is relevant to the needs of our administrative, professional and technical employees. One contributing factor is the absence of any systematic assessment of training needs on a sector wide basis".

   "Because this assessment has significant implications for the entire sector, we urge you to give the enclosed questionnaire your prompt attention and thank you for your cooperation in this important service".

3. Delivery of questionnaire. Although the postal system might be used to reach outlying areas of the country, survey questionnaires of this type are usually hand delivered to respondents. This approach assures the greatest return rate and provides an opportunity for the interviewer to meet personally with the respondent and to answer any questions. In some instances, it might be appropriate for interviewers to help respondents complete questionnaires.

Preparing and delivering questionnaires

The purpose of this survey is to identify APT employees in selected organizations who need training to perform competently in critical sector roles. A separate questionnaire is used for each role for which competency and training information is to be obtained.

Before delivering a questionnaire, the AT enters a description of the role and lists the competencies required for effective role-performance in the spaces provided. Each competency should be described in full to avoid confusing or misleading the respondent. Information on roles and competencies can be obtained by the AT member from role/competency profile sheets prepared during an earlier step in the assessment process. The number of competencies will vary from role to role.

The questionnaires are delivered to all officials selected to receive survey questionnaires.

A sample questionnaire for collecting information about estimated competency levels of APT employees and the need for training is shown in exhibit 20.

Exhibit 20 - Administrative, Professional, technical Personnel Training Needs Survey	
Your name:	
Time:	
Organization:	
Location:	
Instructions	
Your organization has been selected to participate in a survey of training needs for administrative, professional and technical (APT) employees. The information you supply will be combined with the results obtained from other sectoral organizations to estimate the demand for role-related training. Your participation in this survey is very important. We ask that you give as accurate picture of existing competencies and training needs as you can. This is necessary in order to plan priorities for training APT employees throughout the sector. In return, we promise that the information you provide will be held in strict confidence. To complete the questionnaire, begin by reading the role-description at the top of the questionnaire and the description of each competency needed for effective role-performance. Then, identify the employees in your organization who are expected to fulfil this or a similar role. Indicate opposite each competency description how many of these employees exhibit:	
1. Superior competence:	They can do **all** tasks required of the role.
2. Above average competence:	They can do **most** tasks required of the role.
3. Average competence:	They can do **some** tasks required of the role.
4. Below average competence:	They can do **very few** tasks required of the role.
When you have classified your employees by level of competency for each of the competencies on the questionnaire, you are ready for the next step. Under the columns on relative importance, enter, opposite each competency statement, your rating of the importance of that competency to the mission of your organization. Each competency should be rated as either:	
Very important:	Competency is essential for role performance
Important:	Competency is useful but not essential for role performance
Not important:	Competency is not required for role performance
Now for final step	
Given the number of employees by level of competency and the relative importance of each competency to the organization's mission, under the final columns to the right of the questionnaire, enter the number of employees to be trained. You may divide these employees into three groups, according to when you wish to schedule them for training. The categories range in time from:	
1. Within the next 12 months	
2. Within two years	
3. Beyond two years	
You may place as many employees in each time category as you wish. Now, please turn the page and begin the questionnaire.	

(Note: The actual questionnaire will be constructed by the AT using the format presented below.)

TRAINING NEEDS SURVEY QUESTIONNAIRE

Role:
Number of staff performing this role:

List of competencies	Indicate level of competency and number of employees in each category				Check relative importance of competence to your organization			Indicate immediacy of training and number of employees in each category		
	1	2	3	4	1	2	3	1	2	3

ANNEX IX

HOW TO DRAW A RANDOM SAMPLE

Let us assume that there are 100 (N) organizations from which a random sample of 10 (n) is to be drawn. Proceed as follows:

1 . Number the organizations, beginning with 001 for the first organization and ending with 100 for the hundredth organization. Notice that we have three-digit numbers in our population. If the total organizations was 1250, we should need four-digit numbers. In our case, we need to select three-digit random numbers in order to give every organization the same chance of selection.

2. Refer to exhibit 21 and use the first column. You will notice that each column has five-digit numbers. If we drop the last two digits of each number and proceed down the column, we obtain the following three-digit numbers:

104	854	521	007*
223	289	070*	053*
241	635	486	919
421	094*	541	005*
375	103	326	007
779	071 *	293	690
995	510	024*	259
963	023*	815	097*
895	010*	296	

The last number listed is 097 from line 35 (column 1). We do not need to list more numbers, since we already have 10 different numbers that qualify for our sample (007 appears twice but is selected only once). The starred numbers are the organizations chosen for the sample. These are the only numbers that fall in the range we specified - 001 - 100.

3. We need not start with the first row of column 1. We can select any starting point, such as the seventh row of column 2. We can also choose to progress in any way we want down the columns, across them or diagonally, as long as we decide ahead of time how we wish to proceed.

Exhibit 21 - Random digit table (26)

Line /Col.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1	10480	15011	01536	02011	81647	91646	69179	14194	62590	36207	20969	99570	91291	90700
2	22368	46573	25595	85393	30995	89198	27982	53402	93965	34095	52666	19174	39615	99505
3	24130	48360	22527	97265	76393	64809	15179	24830	49340	32081	30680	19655	63348	58629
4	42167	93093	06243	61680	07856	16376	39440	53537	71341	57004	00849	74917	97758	16379
5	37570	39975	81837	16656	06121	91782	60468	81305	49684	60672	14110	06927	01263	54613
6	77921	06907	11008	42751	27756	53498	18602	70659	90655	15053	21916	81825	44394	42880
7	99562	72905	56420	69994	98872	31016	71194	18738	44013	48840	63213	21069	10634	12952
8	96301	91977	05463	07972	18876	20922	94595	56869	69014	60045	18425	84903	42508	32307
9	89579	14342	63661	10281	17453	18103	57740	84378	25331	12566	58678	44947	05585	56941
10	85475	36857	53342	53988	53060	59533	38867	63200	08158	17983	16439	11458	18593	64952
11	28918	69578	88231	33276	70997	79936	56865	05958	90106	31595	01547	85500	91610	78188
12	63553	40961	48235	03427	49626	69445	18663	72695	52180	20847	12234	90511	33703	90322
13	09429	93969	52636	92737	88974	33488	36320	17617	30015	08272	84115	27156	30613	74952
14	10365	61129	87529	95689	48237	52267	67689	93394	01511	26358	85104	20285	29975	89868
15	07119	97336	71048	08178	77233	13916	47564	81056	97735	85977	29372	74461	28551	90707

16	51085	12765	51821	51259	77452	16308	60756	92144	49442	53900	70960	63990	75601	40719
17	02368	21382	52404	60268	89368	19885	55322	44819	01188	65255	64835	44919	05944	55157
18	01011	54092	33362	94904	31273	04146	18594	29852	71585	85030	51132	01915	92747	64951
19	52162	53916	46369	58586	23216	14513	83149	98736	23495	64350	94738	17752	35156	35749
20	07056	97628	33787	09998	42698	06691	76988	13602	51851	46104	88916	19509	25625	58104
21	48663	91245	85828	14346	09172	30168	90229	04734	59193	22178	30421	61666	99904	32812
22	54164	58492	22421	74103	47070	25306	76468	26384	58151	06646	21524	15227	96909	44592
23	32639	32363	05597	24200	13363	38005	94342	28728	35806	06912	17012	64161	18296	22851
24	29334	27001	87637	87308	58731	00256	45834	15398	46557	41135	10367	07684	36188	18510
25	02488	33062	28834	07351	19731	92420	60952	61280	50001	67658	32586	86679	50720	94953
26	81525	72295	04839	96423	24878	82651	66566	14778	76797	14780	13300	87074	79666	95725
27	29676	20591	68086	26432	46901	20849	89768	81536	86645	12659	92259	57102	80428	25280
28	00742	57392	39064	66432	84673	40027	32832	61362	98947	96067	64760	64584	96096	98253
29	05366	04213	25669	26422	44407	44048	37937	63904	45766	66134	75470	66520	34693	90449
30	91921	26418	64117	94305	26766	25940	39972	22209	71500	64568	91402	42416	07844	69618
31	00582	04711	87917	77341	42206	35126	74087	99547	81817	42607	43808	76655	62028	76630
32	00725	69884	62797	56170	86324	88072	76222	36036	84637	93161	76038	65355	77919	88006
33	69011	65795	95876	55293	18088	27354	26575	08625	40801	59920	29841	80150	12777	48501
34	25976	57948	29888	88604	67917	48708	18912	82271	65424	69774	33611	54262	85963	03547
35	09763	83473	73577	12908	30883	18317	28290	35797	05998	41638	34952	37888	38917	88050
36	91567	42595	27953	30134	04024	86385	29880	99730	55536	84855	29080	09250	79656	73211
37	17955	56349	90999	49127	20044	59931	06115	20542	18059	02008	73708	83517	36103	42791
38	46503	18584	18845	49618	02304	51038	20655	58727	23168	15475	56942	53389	20562	87338
39	92157	89634	94824	78171	84610	82834	09922	25417	44137	48413	25555	21246	35509	20468
40	14577	62765	35605	81263	39667	47358	56873	56307	61607	49518	89656	20103	77490	18062
41	98427	07523	33362	64270	01638	92477	66969	98420	04880	45585	46565	04102	46880	45709
42	34914	63976	88720	82765	34476	17032	87589	40836	32427	70002	70663	88803	77775	69348
43	70060	28277	39475	46473	23219	53416	94979	25832	69975	94884	19661	72828	00102	66794
44	53976	54914	06990	67245	68350	82948	11398	42878	80287	88267	47363	46634	06541	97809
45	76072	29515	40980	07391	58745	25774	22987	80059	39911	96189	41151	14222	60697	59583
46	90725	52210	83974	29992	65831	38857	50490	83765	55657	14361	31720	57375	56228	41546
47	64364	67412	33339	31926	14883	24413	59744	92351	97473	89286	35931	04110	23726	51900
48	08962	00358	31662	25388	61642	34072	81249	35648	56891	69352	48373	45578	78547	81888
49	95012	68379	93526	70765	10592	04542	76463	54328	02349	17247	28865	14777	62730	92277
50	15664	10493	20492	38391	91132	21999	59516	81652	27195	48223	46751	22923	32261	85653

Footnote

[26] Abridged from Beyer, William H., (ed), *Handbook of Tables for Probability and Statistics,* (2nd ed.), (Cleveland, Ohio, CRC Press Inc., 1968).