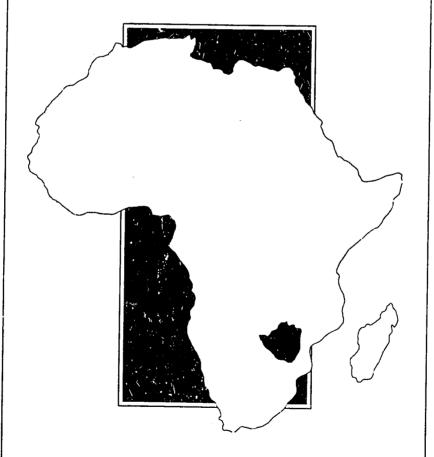
PARCS

PROTECTED AREA CONSERVATION STRATEGY

ASSESSING THE TRAINING NEEDS OF PROTECTED AREA MANAGERS IN AFRICA



ZIMBABWE





The WILDLIFE CONSERVATION SOCIETY

Biodiversity Support Program



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PARCS

Country Report: ZIMBABWE

Michael Dyer Consultant WORLD WILDLIFE FUND - US.

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EXECUTIVE SUMMARY:

ZIMBABWE TRAINING NEEDS AND TRAINING OPPORTUNITIES ASSESSMENTS

Introduction

Protected Area Managers (PAMs) play a vital role in the protection and conservation of Africa's rich biological resources. Protected area management in Africa is becoming an increasingly complex task requiring technical skills relating not only to wildlife and tourism, but to management, planning, law, policies, finance and accounting as well.

Traditional training institutions and programs for PAMs in Africa generally have not kept pace with the increasing demands on effective protected area management. The PARCS (Protected Area Conservation Strategy) project seeks ways to facilitate the process of addressing training needs in skills which PAMs themselves recognize a deficiency.

The PARCS training needs and training opportunities assessments address two questions:

- (i) What is needed in respect of PAM training to enhance the conservation of Africa's protect. areas?; and
- (ii) What can be done to provide such training for PAMs?

A questionnaire was designed to gather data on the skills required for protected area management and levels of skill PAMs currently possess. Differences between skills needed for the job and those actually possessed are recognized as a training need. Further information on training needs and training opportunities were obtained through interviews with PAMs and their supervisors.

Training Needs Assessment

Within the Department of National Parks & Wildlife Management (DNPWM), initial, basic wildlife management training is given at Mushandike College. Some formal, wildlife institutional training is provided for qualified and experienced intermediate staff at Mweka College, in Tanzania.

DNPWS has no "training plan" which is designed to ensure that all protected area management staff are trained in fields appropriate and specific to their present responsibilities.

Ten PAMs and two Regional PAMs completed questionnaires; interviews were also held with directorate staff at departmental headquarters.

Analyses of questionnaire data provided the backbone of the training needs assessment. The levels of skill required for the job (as set by PARCS² in the questionnaire) were first validated to ensure that the questionnaire truly reflected the scope of responsibilities held by PAMs in Zimbabwe. Training needs for each skill/competency were determined by a gap analysis which compared PAMs current skill levels with those that PAMs considered were needed for the job.

PAMs identified training needs in the following general areas:

- Representing the Protected Area and its interests in public meetings;
- Ensuring all activities within the Protected Area comply with laws and regulations;
- Ensuring Optimum Levels of Visitor Satisfaction;
- Awareness of Research Activities and Progress against Plan;
- Problem Analysis Skills;
- Written Skills;
- Policies & Procedures Skills;
- Creativity Skills; and

A Training Plan is defined here as a structured program that operates on a pre-set timetable to ensure all protected area management staff receive adequate and appropriate training prior to assuming their posts. It also provides professional development and refresher courses regularly and monitors and evaluates training programs undertaken

² The PARCS' team of consultants set knowledge levels based on their own experiences in protected area management in Africa and on comments and opinions from both government and NGO management professionals

Evaluation Skills.

More specifically, the following key areas of training were identified by PAMs:

- Law & Regulations: Balancing and evaluating the needs of involved parties.
- Research: Determining causes of why research programs are not running to time-table; and ensuring research reports are comprehensible to interested (public) parties
- Public Relations: Preparing press releases; building up networks of contacts and information on relevant meetings and/or events.
- Resource Management: Developing methods of achieving management area objectives.

Constraints on PAMs meeting their job responsibilities include:

- the lack of a well-structured In-Service training program that addresses the skill deficiencies identified by both PAMs themselves and their supervisors;
- the absence of a Departmental training plan implemented by a professional training officer; and
- finances to support more staff to attend formal wildlife training institutions.

FODs' training needs were identified as in the areas of:

- Tactical and Strategic Planning in Finance;
- Staffing;
- Protected Area Management/Development;
- Staff Training and Public Relations;
- Communication Skills;
- Understanding the Role of, and Designing Plans for, Research in Protected Area Management; and
- Business Administration and Law (regarding commer all operations within Zimbabwe's Protected Areas).

Many of the training needs identified by FODs are similar in scope to thos, of PAMs. However, FODs require higher level approaches to addressing their training needs in those subjects. If there is interest and available funds, special courses/seminars could be designed and run, with PARCS' assistance in Phase II, to provide some training for F 's.

Training Opportunities Assessment

Annexe 2 lists all the institutions presently (or recently) attended by staff of DNPWM.

Other training opportunities include 'Financial Management' at Public Service Training Centres in Harare and Bulawayo, and 'Policy & Planning' courses at the Zimbabwe Institute for Personnel Management (ZIPM).

The main constraint on PAMs attending these courses is financial (course fees).

A small number of PAMs have enrolled in correspondence courses which allows them to continue working full-time on their jobs while learning new skills.

Two training programs have been set up for protected area management staff (Assistant PAMs to Regional PAMs and FODs), one with assistance from the Canadian International Development Agency (CIDA) and the other as a joint venture between the Zimbabwe Ministry of Environment & Tourism (MET) and the Ontario Ministry of Natural Resources (OMNR).

The CIDA project is to be a series of ten-day, certificate courses covering protected area administration and management. The first of these courses is scheduled for October 1993 and entitled "Overview of Communications Function in Park Management". Topics to be covered are interpretation; tourism administration & public relations; personnel & financial management, and conflict resolution (e.c. CAMPFIRE).

The MET/OMNR program consists of two basic courses, one covering natural resource economics and the other, project appraisal and evaluation, for staff of MET.

DNPWM staff who have obtained certificates in these two courses include three ecologists and five Regional PAMs.

Recommendations

There are a number of possibilities for addressing the needs

of PAMs in areas identified by the PARCS project and DNDWM. They fall into two of the four basic types of training opportunity described in the questionnaire: (i) In-Service training and (iv) On-the-Job training.

In-Service Training

Greater attention could be paid to the role of In-Service training as a means of addressing the training needs of PAMs identified in this report. With Mushandike College about to play a much more important role in staff training, some thought should be given to developing and incorporating courses into the new curriculum that specifically address training needs identified by PAMs in this report. Course topics would be based on the 'Gap Analysis' as well as other needs deemed important by DNPWM.

If there is interest and available funding, PARCS' involvement in such a training program could consist of providing expertise in preparing a syllabus and materials for each course, developing a course schedule that would fit into DNPWM's general training program, and identifying potential course venues and instructors.

To undertake effective In-Service training, DNPWM must know what skills it requires of its protected area management staff, not only in general terms, but specifically for particular problems related to given protected areas and their environs. The principles of fire-management, population monitoring, culling, etc. are broad-based and widely applicable, but for specific situations in Zimbabwe there is the need for specialized knowledge of local conditions under which those broad-based principles operate.

The accumulated wealth of knowledge (years of experience, on-the-job training, attendance at national and international conferences) possessed by senior members of DNPWM staff ought to be tapped.

What this present training needs assessment has done, by involving PAMs in determining their own training needs, is highlight the relative simplicity with which areas of weakness can be strengthened.

All PAMs felt not enough attention has been paid to improving job skills through In-Service Training, yet it is probably In-service Training that is best suited to tackle the issues.

Even if DNPWM does not have in-house expert se to design and implement an In-Service training program for PAMs, it is certainly aware of those areas in which its staff needs

improved skill development. In addition, the DNPWM does have a pool of resources (long-serving, experienced staif) to develop those skills.

On-the-Job Training

This form of training is very much based on a PAM's individual initiative to recognize opportunities for enhancing job skills. One such opportunity would be seeking advice from, and/or working with, more experienced, senior colleagues. DNPWM may be able to encourage such "quality" contacts for PAMs by identifying senior staff members who have good communication skills and assigning to them for short periods, newly-appointed PAMs.

If there is interest and available rescurces, PARCS' contribution to On-the-Job training could be simply to provide PAMs with suggestions and materials for follow-up activities after spending time with a mentor.

In terms of training needs, On-the-Job training would probably best address the Mental & Social Skills identified in Section 2.3.8.3.

One objective of the PARCS project is to assist participating countries to develop appropriate and sustainable training programs for PAMs. Another object e is to promote inter- and intra-regional approaches to training by providing opportunities for contact between PAMs from different countries and for them to participate in regional training programs.

Within the PARCS Southern Africa Region Zimbabwe stands alone in the progress it has made towards involving communities in sustainable wildlife utilization projects (i.e. CAMPFIRE). Community-based programs in their infancy in Malawi, Botswana and Zambia could benefit from DNPWM's expertise in developing the CAMPFIRE program, especially the protocols linking conservation programs within protected areas and those on their peripheries.

The CASS/IUCN course may be suitable for only a certain cadre of protected area management staff, whereas a more broad-based, introductory course might to better for PAMs who are just beginning to become involved in their countries' community conservation programs. DNPWM could therefore play a lead role in the region in providing basic training for PAMs in this very important activity.

1.7

SECTION 1: PROTECTED AREA CONSERVATION STRATEGY (PARCS)

1.1 THE APPROACH

- 1.1.1 Africa's system of national parks and protected areas constitutes one of the most important safeguards of the continent's rich biological diversity. Protected Area Managers (PAMs), the decision makers in the field, play a critical role in the overall functioning of these areas. In recent years a number of observations on factors constraining effective Protected Area management, drawn from experiences in the field, have been made. They include:
 - a The job of a PAM is becoming an increasingly more complex task, requiring technical skills relating not only to wildlife a d tourism, but to management, planning, law, policies, finance and accounting as well.
 - b Traditional training institutions and programs in Africa generally have not kept pace with the increasing demands of the PAM's job.
 - c Courses offered at leading wildlife institutions are often too theoretical, academic, broad-based, host-country specific, and habitat-specific.
 - d Few PAMs have access to the formal training opportunities available.
 - e Few data exist on the effectiveness, relevance, and value of traditional and non-traditional forms of training for PAMs.
 - f The capacity for institutions to tain and develop training programs needs to be strengthened.
 - g Existing training institutions and programs need to revamp their curricula to address the specific needs of PAMs.
 - h Relevant training opportunities outside the traditional conservation sector need to be identified and made available to PAMs.

1.2 THE PROJECT

- 1.2.1 In light of the above the PARCS project seeks to address two questions:
 - (i) What is needed in respect of PAM training to enhance the conservation of Africa's Protected Areas?; and
 - (ii) What can be done to provide this training for PAMs?

PARCS is attempting to do this by:

- a undertaking an assessment of training needs,
 priorities, constraints, and opportunities for
 PAMs in three regions of sub-Saharan Africa (east,
 central, and southern);
- b establishing 'pilot' training programs in two Phase II focal countries to implement recommendations from the project's training needs and opportunities assessments; and
- developing a broad series of recommendations for training protected area management staff.
- The PARCS project is envisioned as a multi-year activity. During the first year (Phase I) an in-depth assessment of training needs, priorities, constraints and opportunities, will be completed in each region. Specifically, for PAMs, the assessment is designed to:
 - a assess skills needed for effective protected area
 management;
 - b assess present skill levels;
 - determine the types, amount and frequency of training currently received by PAMs;
 - d assess training needs of PAMs;
 - e identify constraints to adequate and effective training;
 - f identify the institutions and programs presently
 used for training;
 - g identify potential opportunities for relevant training; and

h identify pilot activities to test innovative training methods.

1.3 OVER-ARCHING QUESTIONS

1.3.1 Data generated by the training needs and training opportunities assessments will be used to answer a suite of over-arching questions which addresses the main points outlined in Section 1.2 above. These questions are listed below and are divided into broad, general categories of enquiry each with a sub-set of specific ones.

1.3.2 The Questions

1.3.2.1 What are the responsibilities of a PAM? Are they universally recognized?

- a What are the descriptions and understandings of the responsibilities of a PAM currently declared by resource management authorities?
- b What are the responsibilities recognized by PAMs?
- c How do PAMs perceptions compare with PARCS' perceptions?
- d How do trainers' perceptions compare with PARCS'
 perceptions?
- e Has the job of a PAM changed over the last 20 years?
- f What are others' perceptions? Do they match PAMs'
 and/or PARCS'?

1.3.2.2 What are the constraints on PAMs meeting their job responsibilities? Where does training fit in?

- a Where are the overall constraints?
- b What is the importance of training in overcoming constraints?

1.3.2.3 Are PAMs skilled to the level necessary to do the job? If not, where are the deficiencies?

a Are skills satisfactory compared to PARCS' perceptions of job skills?

1.3.2.4 What training has been received by current PAMs that is perceived by them as useful? How much? What kinds? And relevant to which job requirements?

- What existing training has been received by PAMs?
- b Comparisons of types of training received by PAMs (in respect of years of service) that has contributed most to gaining skills.
- c Does training received cover all major requirements of these areas?
- d How well does existing training prepare PAMs? Does type of training received reflect the degree for preparation of job requirements?
- e Does exposure to various conservation techniques (other than in-service training) improve PAMs skills and knowledge?
- f What do training programs aim for?

1.3.2.5 Assessment of Field Operations Directors (FODs)

- a What are the responsibilities of senior management positions?
- b What kind of training has been received in 'adse areas?
- c What are FOD training priorities?

1.3.2.6 What further training is required?

1.4 THE PROCESS

- 1.4.1 The PARCS project is managed by the Biodiversity Support Program (BSP) and implemented by a collaborative group of three NGOs: The African Wildlife Foundation (AWF), Wildlife Conservation Society (WCS), and World Wildlife Fund (WWF). AWF is the lead organization in eastern Africa, WWF heads PARCS in southern Africa, and WCS has assumed lead responsibility in francophone central Africa.
- 1.4.2 Funding for PARCS comes from the Bureau for Africa of the U.S. Agency for International Development (AID). Supplementary funding has been provided by WWF. AWF,

WCS and WWF have contributed staff time to the project as well. Furthermore, each collaborating organization is drawing from its expertise and experience with related on-going activities in the field, to enhance the PARCS assessments.

- 1.4.3 The methodology for the PARCS assessment was developed during a four-day workshop in Nairobi in August 1992. The workshop participants included the three NGO Regional Managers (RM), the BSP core-team member, and a facilitator (training specialist) from Price Waterhouse. [For full details on the methodology see Annexe 1 "Protected Area Conservation Strategy (PARCS): The Methodology".]
- 1.4.4 Following the workshop, the methodology was reviewed by a number of key members of the conservation community in Kenya and Zimbabwe and a sampling of wardens from several African countries. The RM in southern Africa conducted a trial assessment of training needs in Malawi between 13 September and 2 October, 1992. The methodology was also reviewed by the core team in September and amended in light of those reviews.

1.5 GOAL OF THE METHODOLOGY

- 1.5.1 The main tool of the training needs assessment is a questionnaire (Annexe 1) designed at the methodology workshop in Nairobi. A questionnaire approach was adopted for the needs assessment for the following reasons:
 - The questionnaire could be designed as a matrix and serve as an efficient and practical way to present the array of specific skills required for the job of a PAM.
 - b It would provide a convenient tool to compare outside assessments of the skills required of the PAM with the PAMs' own perceptions of required skills.
 - c It would provide a qualitative and quantitative means of assessing training needs.
 - d It would lend itself well to standardized data extraction, manipulation, comparison and analyses across the three regions of Africa.
- 1.5.2 A strength of the questionnaire is that it is not just a means of gathering information, but it is a training

tool in and of itself. The process of leading the PAM through the questionnaire has been designed to stimulate thought and discussion on the important facets of protected area management. In fact, the questionnaire may well influence the way some PAMs look at their jobs and their role in managing those Areas.

1.6 TARGET GROUPS

- The primary target group for the PARCS assessment is the Protected Area Manager 'PAM', the highest ranking manager on-site in a protected area. Across the many countries in the PARCS assessment, a wide variety of individuals with a multiplicity of titles may act as PAM (e.g., regional officers, warden, senior warden). In order to identify the appropriate individuals for the assessment in each country, it was necessary to carefully examine organizational structures and job descriptions.
- In some countries problems in protected area management may result from the placement of higher level staff who have little, if any, experience in such fields as management and planning. Hence, in countries where the PARCS RM and his/her core team representative deemed it possible and desirable, the assessment was broadened to include the level of management above the PAM (i.e., Field Operations Director (FOD) at the government's conservation authority's (CA) headquarters).
- It is also recognized that in many cases the job of PAM will eventually be filled by individuals immediately below this level (depending on organizational structures and the procedures of the organization). The RM and his/her core team representative may have therefore decided to include in the assessment, individuals directly below the PAM. In Tanzania, for example, there are senior wardens, wardens, and assistant wardens, so assistant wardens may be included in the assessment.
- 1.6.4 The categories of people who may have been asked to participate in the assessment are listed below:
 - a Subordinates to the PAM (e.g., assistant warden) and other individuals who are likely to work as PAMs in the future;
 - b Protected Area Manager (PAM);
 - c Officers senior to PAMs, and other individuals who

have recently worked as PAMs;

- d Field Operations Director (FOD);
- e Trainers/lecturers at wildlife institutions onere PAMs receive training; and
- f Research Officers.

1.7 TARGET COUNTRIES

- 1.7.1 The PARCS assessment is intended to cover as many countries in eastern, central and southern Africa as possible. In this way, the end roduct should provide a comprehensive assessment of the training needs and opportunities over a sizeable part the continent.
- 1.7.2 Practical realities, however, will inevitably dictate that in-depth assessments can only be done in some countries, limited assessments in others' and no assessments in yet others. In-depth assessments involve in-country site visits and follow the methodology described in this document. Limited assessments involve more cursory assessments, often conducted from outside the country using means available (limited use of the questionnaire through selective interviews and mailings, collection of baseline data through telephone interviews, literature searches, etc.).
- 1.7.3 The practical realities that dictate where assess nts are conducted include, but are not limited to:
 - a government cooperation;
 - b USAID cooperation;
 - c civil war/unrest:
 - d relative importance placed on a country's biodiversity and protected areas is a vis other countries in the region; and
 - e potential for follow-on activities.
- 1.7.4 A categorization of countries was made. Decisions regarding priorities for the use of time and funds among these countries was the joint responsibility of regional managers and their respective core team members.

1.7.4.1 The categorization of countries is as follows:

Eastern Africa

In-Depth Assessments: Tanzania (including Zanzibar),
Kenya, Uganda, Ethiopia.

Limited Assessments: Somaria.

Central Africa

In-Depth Assessments: Cameroon, Congo, Rwanda, Zaire.

Limited Assessments: Burundi, Central African Republic, Gabon.

Southern Africa

In-Depth Assessments: Botswana, Malawi, Zambia, Zimbabwe.

Limited Assessment: Mozambique.

Special Assessment: Republic of South Africa (training opportunities only).

1.8 PRELIMINARY GROUNDWORK

- 1.8.1 Regional Managers arranged an initial meeting with a senior official of the appropriate government CA in each country to describe the PARCS project. In a subsequent meeting, which may be have been attended by the authority's training officer as well, the following information was sought:
 - a organizational structure for the whole Department and, if available, for individual protected areas;
 - b minimum requirements for, and descriptions of, the job of PAM, FOD, and other positions as appropriate;
 - c training records;
 - d in-service training programs (how often provided?
 who plans them? numbers of staff attending
 courses? financing? etc.);
 - e formal wildlife training institutions used (vho attends them? how many?);

- f other training opportunities (workshops, semi.ars:
 who attends? how many? financing?);
- g number of Departmental training officers (job descriptions?); and
- h training programs (annual budget, evaluations, constraints).
- 1.8.2 Since PARCS is intended to be conducted in an adaptive way, reflecting the needs and wishes of government programs and interests in training, the government CAs were invited to plan how the PARCS project should be conducted.
- 1.8.3 It was explained to the CAs that the preferred (PARCS) strategy for conducting the questionnaire is for the RMs to hold interviews and discussions with PAMs and make site visits to directly observe Protected Area management. The RMs would, however, tailor their approach to individual country circumstances. Options for conducting the questionnairs were:
 - a to explain the questionnaire and have the PAM fill it out with the RM nearby to assist;
 - b to explain the questionnaire and leave it for the PAM to fill it out on his/her own time;
 - c to explain the questionnaire in a workshop and have PAMs fill it out individually;
 - d to mail out the questionnaire; or
 - e to use a consultant or colleague to do one or more of options a-c.
- 1.8.4 The CA Director was then invited to decide which thoo was best for the PARCS assessment, and requested to help set up meetings and/or workshops with PAMs. The Director was also asked to recommend people to talk to about training opportunities.
- 1.8.5 RMs then arranged meetings with FODs during which they were asked to complete the needs assessment questionnaire as an independent validation of PAMs' own responses.
- 1.8.6 Where appropriate, the RM discussed the FODs' position and training needs, including such topics as:

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a Strategic planning;

- b Development and compliance of policies, procedures, and standards;
- c Representation of organization and public relations;
- d Planning optimal deployment of well-motivated competent staff;
- e Development and achievement of operational plans and budgets;
- f Planning for availability and optimal deployment of technical specialist services from headquarters to protected areas;
- g Ensuring availability of hardware and software necessary to achieve organization's objectives, within budget; and
- h Managing concessions in protected areas.

1.8.7 The FOD was asked to:

- to verify that these are the key aspects of the job;
- to comment on the list;
- to indicate what kind of training is needed to accomplish these tasks; and
- to discuss what are the constraints to obtaining this training.

SECTION 2: TRAINING NEEDS ASSESSMENT

2.1 INTRODUCTION

2.1.1 Protected Area System

- 2.1.1.1 Zimbabwe lies within two phytochoria: the Zambezian Regional Centre of Endemism (ZRCE) and the Afromontane Regional Centre of Endemism (ARCE). ZRCE is dominated by Brachystegia-Julbernardia woodland and is the largest biome in the Afrotropical Realm with probably the widest range of vegetation types. Highland areas in the east and south-east (ARCE) are characterized by various kinds of moist and dry forest and high altitude grassland cover.
- 2.1.1.2 Twelve kinds of protected area occur in Zimbabwe, covering a total of about 56,700 km² or 14% of the country (Table 1).

Table 1 Protected areas of Zimbabwe, and their size (km²). IUCN (1987)

Protected Area	Number	Total Area (km²)
NATIONAL PARK	11	33 734
WILDLIFE RESEARCH	1	373
NATURE RESERVE	1	17
GAME PARK	2	210
BOTANICAL RESERVE	3	19
SANCTUARY	3	141
NATIONAL MONUMENT	1	7
PARK	1	12
SAFARI AREA	15	18 306
FOREST RESERVE	1	9
RECREATION PARK	13	3 818
BOTANICAL GARDEN	<u> </u>	3

2.1.1.3 The Parks and Wildlife Estate covers nearly 13% of

Zimbabwe's land area, half of which is National Parks. A further 40% of the Estate is given over to Safar. Areas (SAs) which have been set aside to preserve and protect natural habitats and their wildlife for consumptive and non-consumptive utilization of resources (Parks & Wildlife Act, 1975). The present, major use of SAs is hunting.

- The rest of the Parks & Wildlife Estate consists mainly 2.1.1.4 of Botanical Reserves, Gardens, Sanctuaries and Recreational Areas. Botanical Reserves & Gardens have been set aside to conserve individual plant species or plant communities; Sanctuaries, to conserve animals of special interest; and Recreational Areas for public use, including such activities as fishing, sailing, swimming and game "iewing.
- Forestry land is administered by a parastatal body, the 2.1.1.5 Forestry Commission. The main functions of forest conservation are watershed protection, commercial timber production and wildlife utilization (e.g. safari hunting).

2.1.2 Protected Area Authority

- Protected area management in Zimbabwe comes unde. ne 2.1.2.1 administration of the Ministry of Environment and Tourism. The Department of National Parks & Wildlife Management (DNPW $ilde{M}$) is responsible for the conservation and management of resources of the Parks and Wildlife Estate, and the enforcement of wildlife legislation on state land. In 1980 responsibility for enforcement of legislation was extended to communal lands as well.
- The organizational structure of DNPWM is given below. 2.1.2.2

DIRECTOR

DEPUTY DIRECTOR (Administration & Management) (Research & Training)

DEPUTY DIPECTOR

Chief Chief Chief Chief Chief CEO * T.E.I. Terres. Aquatic Warden Investig. Ecol. Ecol. (FOD) (FOD) Officer

Provincial Warden (Regional PAM)

Warden (PAM)

Senior Ranger (Assistant PAM), Rangers & Scouts

2.1.2.3 Associated Organizations

- 2.1.2.3.1 The increased role of wildlife in national and local economies has resulted in the establishment of various wildlife organizations in the private and nongovernment sectors.
- 2.1.2.3.2 The importance of wildlife utilization as a legitimate form of land use on private farms is addressed by the Commercial Farmers' Union (CFU) under whose umbrella the Wildlife Producers' Association (WPA) operates to represent the interests of large-scale commercial game farming.
- 2.1.2.3.3 WPA's counterpart in the communal farming sector is the CAMPFIRE Association. Under the Association, District Councils have been granted appropriate authority to manage wildlife on communal lands.
- 2.1.2.3.4 There are, in addition, other associations whose interests lie in research, promotion and production of specific wildlife species for commercial purposes. These include The Crocodile Producers' Association (CPA) and The Ostrich Producers' Association of Zimbabwe (TOPAZ).

2.1.3 National Conservation Policy

- 2.1.3.1 The 1975 Parks & Wildlife Act has provided the legal framework upon which Zimbabwe's present policy towards wildlife and related resources is based.
- 2.1.3.2 Government policy, defined by a 'Statement of Intent' (1992), sets out to:
 - maintain the Parks & Wildlife Estate;
 - ensure adequate protection of all ecosystems;
 - encourage conservation of wild animals and their habitats, recognizing that this is only likely to be successful if wildlife can be used profitably;
 - insist on environmental impact assessments on all developments that potentially threaten wildlife populations and habitat;
 - promote rurally-based wildlife industries;
 - harmonize management of the Parks & Wildlife
 Estate with efforts of neighboring communities who

- are developing wildlife as a sustainable form of land use;
- transform land use through CAMPFIRE programs under which rural communities benefit from sustainable use of wildlife and other resources;
- ensure wildlife is not under-valued;
- promote public awareness of wildlife issues;
- take necessary legal measures to prevent illegal use of wildlife;
- maintain commitment to wildlife research; and
- participate in international treaties and conventions which are consistent with Zimbabwe's policies for conservation and sustainable use of wildlife.
- 2.1.3.3 The policy further dictates that protected areas should be managed according to a Master Plan (not yet fully developed) whose purpose is ".....to co-ordinate and control the complex sets of interrelated decisions involved in the management of protected areas, and to render them mutually compatible and to improve the efficiency of use of finite financial and manpower resources." (FAO/SADCC, 1992).
- 2.1.3.4 The protected area conservation policy views tour as secondary to conservation objectives. The Zimbabwe Tourist Development Corporation (ZTDC), a parastatal, has a policy towards "high quality low volume" tourism, which aims to decentralize new tourist developments away from established resort/protected areas.
- 2.1.4 Status of Current Training Programs for PAMs
- 2.1.4.1 Recruitment to the post of PAM
- 2.1.4.1.1 The current recruitment procedure is to select persons, normally under 25 years old, with at least five subjects at 'O' level, three of which must be English, Mathematics, and one other science subject. Recruits are then sent to the Natural Resources College established in 1982 at Mushandike Sanctuary near Masvingo. The College offers a two-year, diploma course in 'Wildlife & Protected Area Management'. Graduates are appointed initially to the rank of

Ranger.

2.1.4. .2 Rangers are posted to a protected area for at least two years before taking an internal exam at DNPWM HQ, set by Departmental Section Heads. If they pass, this examination makes them eligible for the post of Senior Ranger (Assistant PAM).

At least three years' service as a Senior Ranger is required before consideration is given for the post of Warden (PAM).

Appointment to PAM is based on an interview with senior DNPWM staff and the Directorate. From initial recruitment to becoming a PAM, thus, takes from seven to ten years.

2.1.4.2 Mweka College has been used only sparingly to train protected area management staff, DNPWM preferring to use its own program at Mushandike College to provide the basis for PAM training. In the last five years, only two DNPWM staff have been sent to Mweka College; one for the two-year Certificate Course, the other for the three-year Diploma course.

Mweka-trained staff are recruited to Assistant PAM positions. One Ranger formerly trained at Mweka College is currently enrolled at the University of Dares-Salaam for a B.Sc. (It should be noted that entry requirements to Mushandike College are higher that those for Mweka College: five 'O'-levels instead four).

- 2.1.4.3 The College at Mushandike is presently undergoing a change in status. This year the Ministry of Higher Education has approved a new "National Diploma in Wildlife & Protected Area Management" which will place more emphasis or "hands-on" experience and provide greater detail in topics such as resource management. A new syllabus has been approved and will be available later. The new course is expected to start in January 1994.
- 2.1.4.4 It is expected that Mushandike College will become the venue for In-Service training for PAMs. However, at this stage not much consideration has been given to course content and structure.
- 2.1.4.5 Formerly, lecturers at Mushandike College were drawn from other ministries and departments, but it is hoped that the new diploma course will be taught by full-time, by DNPWM teaching staff, pending Public Service

Commission approval. There are also plans to link Mushandike College to the Department of Biology, University of Zimbabwe, to allow Mushandike diplomaholders to enroll at the University as undergraduates.

At present only Zimbabwe nationals are to be allowed to take the new diploma course, but that may change in the future.

2.1.4.6 Universities

- 2.1.4.6.1 Most opportunities for university training are for staff in the Department's Research Branch; however, some Management Branch staff do obtain degrees (e.g. one Regional PAM who obtained an agricultural diploma and thus gained entry into University of Zimbabwe, is now doing an M.Sc. at Salford University in the United Kingdom).
- 2.1.4.6.2 The University of Zimbabwe (UZ) offers a post-graduate (M.Sc.) course in Tropical Resource Management. Since 1980 seven staff have completed, or are in the process of completing, post-graduate degrees at UZ.

Other universities at which DNPWM staff have obtained, or are obtaining degrees, are listed in Annexe 2.

- 2.1.4.6.3 Over the last five years, between five and six staff per year have been ser overseas for university training. Most of these opportunities are package! by donors (e.g NORAD), but some staff take their own initiative to pursue opportunities at university.
- 2.1.4.6.4 When graduates return to DNPWM they are bonded for at least three years and cannot take jobs elsewhere. Of the twenty-four staff trained overseas between 1986 and 1992 only three have moved from the DNPWM collowing the bond-period: one went to teach at the University of Zimbabwe, another went to the Forestry Commission, and the third into industry with Shell-BP.

2.1.5 Other Programs

2.1.5.1 In the past PAMs have had the opportunity to attend short courses at various training institutions in Zimbabwe. These include 'Financial Management' at Public Service Training Centres in Harare and Bulawayo, and 'Policy & Planning' courses at the Zimbabwe Institute for Personnel Management (ZIPM).

The main constraint on PAMs attending these course. is financial (course fees).

2.1.5.2 A small number of PAMs have enrolled in correspondence courses which allows them to continue working full-time on their jobs whilst learning new skills.

2.1.6 Government of Canada Assistance

- 2.1.6.1 Two training programs have been set up for protected area management staff (Assistant PAMs to Regional PAMs and FODs), one with assistance from the Canadian International Development Agency (CIDA) and the other as a joint venture between the Zimbabwe Ministry of Environment & Tourism (MET) and the Ontario Ministry of Natural Resources (OMNR).
- 2.1.6.2 The CIDA project is to be a series of ten-day, certificate courses covering protected area administration and management. The first of these courses is scheduled for October 1993 and entitled "Overview of Communications Function in Park Management". Topics to be covered are: interpretation; tourism administration and public relations; personnel and financial management; and conflict resolution (e.g. CAMPFIRE).
- 2.1.6.3 The MET/OMNR program consists of two basic courses, one covering natural resource economics and the other, project appraisal and evaluation, for staff of MET.

DNPWM staff who have obtained certificates in these two courses include three ecologists and five Regional PAMs.

2.2 METHODS

2.2.1 Data Collection

- 2.2.1.1 Zimbabwe benefitted from being the last country to begin the training needs assessment since most of the "wrinkles" in the methodology had been sorted out during previous assessments in Malawi, Zambia and Botswana.
- 2.2.1.2 As Harare was the RM's base of operations during PARCS Phase I, meetings with PAMs and other protected area management staff were arranged and conducted opportunistically between visits to other countries.

2.2.1.3 Initially, long delays were experienced in receiving approval for PARCS work to begin in Zimbabwe, so it was not until mid-April 1993 that the first field-trip was made to hand out questionnaires and interview PAMs.

In all, eight visits were made to PAMs in the field between April and June. The ranks and categories of all respondents interviewed and/or asked to complete questionnaires are shown in Table 2.

Table 2 Summary of data collected in Zimbabwe between April and June 1993.

PEOPLE INTERVIEWED -	18	HOURS OF INTERVIEWS - 22
		

QUESTIONNAIRES:	GIVEN OUT - 14		COMPLETED - 12		
Position	Interview only	1	Method * 2	Total	
PAM + Asst PAM			10	10	
Regional PAM	2		2	4	
FOD (for PAMs)	3			3	
Field Associate	1			1	

TOTALS	6	12	18
TOTALD	JL		

^{1 =} questionnaire completed in presence of RM.

2.2.2 FODs Training Needs

2.2.2.1 The training needs of FODs in Zimbabwe were not determined through questionnaire analysis. These were discussed during interviews and based on questions set out in 1.8.6.

2.2.3 Data Analysis

2.2.3.1 Results from the analyses of questionnaire data were

^{2 =} questionnaire instructions were explained & respondents completed questionnaire on their own.

expected to provide the backbone of the training needs assessment. In the first instance it would be necessary to determine whether or not the levels of knowledge ('some', 'working', 'in-depth') considered appropriate by PARCS for skills in the various competencies within each Main Division of the Joh were in agreement with those considered appropriate by the different categories of respondents (Assistant PAMs, PAMs, FODs, Research Officers, Trainers, etc). A validation analysis was therefore designed which compared PARCS' scores with respondents' scores for each question. An average percentage agreement between PARCS' and respondents' scores was calculated and, if above 70%, the questionnaire was considered 'validated', with the levels of knowledge set by PARCS being considered on average to be correct.

- 2.2.3.2 To determine where a gap in knowledge occurred between what was required for a given skill (as set by PARCS and validated by respondents) and the actual level of knowledge possessed by each respondent, i.e. a training need, a 'gap' analysis was carried out. This analysis involved comparing PARCS' and respondents' scores and looking for positive differences (i.e. gaps of +1, +2 and +3). Positive scores arise when the level of knowledge set by PARCS for a given skill is higher than the level possessed by the respondent. The bigger the gap, the greater the training need. Negative scores and scores of zero indicate that a respondent has higher knowledge (or at least the same as set by PARCS) than that required for the skill in question.
- 2.2.3.3 Although PAMs were the principal target group for the training needs assessment, other groups (e.g. FODs, Research Officers, etc) were also asked to complete questionnaires. These questionnaires were used not to assess their own training needs but rather, to indicate what they thought the levels of skill knowledge were for PAMs they had worked with and/or supervised. This exercise was deemed important from the point of view of obtaining perspectives on PAMs skills and training needs from sources other than PAMs.

2.2.4 Analysis of Questionnaire

2.2.4.1 To facilitate analysis of all data generated by the questionnaire, a set of Data Sheets was designed to store and sort data and to facilitate computer analysis. The following seven Data Sheets comprised the set:

For recording 'Accountabilities & DATA SHEET A: Responsibilities' additional to those associated with each Main Division of the Job.

For recording scores of 'Knowledge' DATA SHEET B: skills (both the score which respondents considered to reflect the skill level required to do the job of a PAM, and the score which respondents considered reflected PAMs skill levels).

DATA SHEET C: For recording responses to statements on 'Mental & Social' skills.

DATA SHEET D: For recording responses to the three 'Attitudes' questions.

DATA SHEET E: For recording responses to knowledge of local languages and use of computers.

DATA SHEET F: For listing the three training priorities identified by responde. linking them to the 16 Competenci-11 Main Divisions of the Job in the questionnaire.

> Sheet F is also used to list the form of training considered best to address each

training priority.

DATA SHEET G: For summarizing training already received as described in Row L of the questionnaire.

2.2.5 Gender Ratio

2.2.5.1 The gender of each respondent completing a questionnaire was recorded to determine the relative proportions of men and women involved in protected area management in Zimbabwe.

> Of the fourteen Assistant PAMs, PAMs and Regional PAMs who completed questionnaires and/or interviewed, only one was female.

2.3 RESULTS & DISCUSSION

Throughout this Section of the report reference will be made

to figures and tables which present results drawn from various analyses of questionnaire data. Each figure and table is defined by a PARCS number which refers to the paragraph in the Results Section where the figure/table is presented. These PARCS numbers are to be used in all country reports to allow direct comparisons of training needs within and between countries in the three regions in which PARCS Phase I was conducted. However, because of individual country differences in data collection and presentation it may be necessary to include new figures and tables and/or delete others. Each figure and table when presented in its chronological order will, where appropriate, be accompanied by its PARCS number in parenthesis.

2.3.1 Data Collection

- 2.3.1.1 For a summary of the number of questionnaires given out and completed, and the nu ser of protected area management staff interviewed in Zimbabwe, see Table 2.
- 2.3.1.2 Twelve of the 14 (86%) questionnaires handed out were completed. Of those, three were returned after the deadline for computer analysis had passed; data or these were not included in computer assessments of training needs, rather, they were abstracted by hand and inspected for major divergences from computer generated results.

2.3.2 Respondents' Years of Service and Years as a PAM

2.3.2.1 The PARCS Reference Number, unique to each questionnaire, contained coded information on how long the respondent had been in the service of his/her department and how long he/she had held the post of PAM.

The years of service and years as a PAM for seven respondents in Zimbabwe are shown in Figures 1 and 2 (PARCS 2.3.3a and 2.3.3b).

2.3.2.2 Figure 1 shows that the seven PAMs included in the computer analysis (see 2.3.1.2) had served in the DNPWM for at least six years, five of those having more than 10 years experience. If data from the three latearriving questionnaires are added to the sample, the number of PAMs with more than 10 years departmental service increases to seven, and those with between six and ten years service increases to three.

For the entire sample (n = 12 questionnaires) the

average length of departmental service is 14.3 yr (range: 8-25). Only one PAM in the combined sample (computer-analyzed + visually-inspected) had less than five years of job experience; the average was 6.2 yr (range: 1-9).

- 2.3.2.3 It was found that PAMs who have held their posts for only a few years tend to place more emphasis on the role of formal training in skill development than more experienced PAMs, who consider on-the-job training equally, if not more, important. This finding needs to be borne in mind when interpreting some of the results of the training needs assessment.
- 2.3.3 What are the responsibilities of a PAM? Are they universally recognized?
- 2.3.3.1 PAM Job Description & Responsibilities
- 2.3.3.1.1 Among staff of the DNPWM, including the various categories of PAMs, FODs and other senior departmental officers, a high level of consensus was reached on the nature of responsibilities of PAMs. None of the respondents made any significant additions or deletions to Column 1, Rows A-K, under 'Accountability & Responsibilities' on the questionnaire.
- 2.3.3.1.2 Detailed job descriptions for PAMs were either nonexistent or non-available so that there was no possibility of matching PARCS' perceptions of responsibilities with official, departmental ones.

2.3.3.2 Validation Analysis for Knowledge Skills

2.3.3.2.1 In terms of validation between PAMs' and PARCS' scores for 'Knowledge' skills (Columns 2-7, Rows A-K), an analysis was conducted which compared the scores given by PAMs in the left-hand box of questions 1-64 under 'Knowledge', with those of PARCS. The results of the validation are given in Figure 3 (PARCL 2.3.4b). The six sets of histograms show where positive differences (values 0,1,2,3) and negative differences (-1, -2, -3) between PAM and PARCS scores for the six 'Knowledge' competencies occurred. Positive values (over-scored) indicate that PAMs consider the level of knowledge required to perform a given skill is lower than the level considered appropriate by PARCS, and negative values (underscored) indicate that higher levels 'f knowledge are required.

2.3.3.3 Technical (Wildlife & Tourism) Knowledge

- 2.3.3.3.1 There was broad, general agreement between PARCS and PAMs on the levels of technical knowledge needed for protected area management in Zimbabwe, with 80% of respondents validating the PARCS score in 9 of the 17 skills. Between 10% and 15% of PAMs considered PARCS to have set knowledge one category higher than was needed in seven skills. They were for:
 - anti-poaching techniques and safe practices with respect to wildlife;
 - ensuring optimum levels of visitor satisfaction;
 - intervention techniques and implications;
 - knowledge of the cultural context of the protected area's location and the relevance of all activities within the protected area; and
 - trends in the area's important natural and cultural resources.

On the other hand, between 40% and 80% of PAMs considered PARCS had not set the level of knowledge high enough for eight skills, including:

- knowledge of infrastructure, sitings, materials, etc;
- extension methodology;
- cultural setting of the protected area;
- the role of research & research methodologie
- public relations;
- environmental impact analysis; and
- resource surveys and monitoring techniques.
- 2.3.3.2 In Zimbabwe, great store is put in law enforcement and intervention techniques. The DNPWM is renowned for its anti-poaching and culling programs. For this reason, it is surprising that some (albeit a few) PAMs felt PARCS had overscored knowledge levels for these skills. The PAMs in question however, were either relatively new to the position, or, managed areas where law enforcement problems and intervention activities were not crucial issues.

The majority of PAMs thought their jobs required higher levels of technical skill in other areas where Zimbabwe is also considered a "regional" leader, viz. tourism and research. These findings probably point to the importance that PAMs place on the need to understand more fully the technical skills associated with these two Main Divisions of the Job.

2.3.3.4 Management Knowledge

2.3.3.4.1 A minority of PAMs considered PARCS to have overscored on two of the ten skills in this competency, <u>viz</u> management of casual labor, and protected area versus people conflict management.

Most respondents (55-85%) thought higher levels of knowledge were needed for nine of the ten skills, particularly:

- management of human resources (from 'working' to 'in-depth' knowledge); and
- the obligatory attendance at public meetings relevant to activities within the protected area (from 'some' to 'working' knowledge).
- 2.3.3.4.2 For Zimbabwe PARCS had clearly under-estimated the levels of management skills required of PAMs to carry out their jobs effectively; again, it points to the importance PAMs attach to this component of protected area management.

2.3.3.5 Planning Knowledge

2.3.3.5.1 PAMs responses to the levels of knowledge required in this competency were inconsistent. Six of the two reskills-- staff development and time-tabling; antipoaching patrol planning; intervention programs; community conservation programs, and planning for protected area management objectives and zoning activities within protected area-- were deemed overscored by about 10% of PAMs.

However, seven skills were thought to have been underscored by between 45% and 85% of PAMs: staff development and time-tabling; job planning; financial planning, budgeting & control; community conservation program planning; resource conservation planning, and most important of all (two categories of knowledge higher, from 'some' to 'in-depth'), development of research plans.

2.3.3.5.2 The variation in validation scores shown here probably reflects the different lengths of time PAMs have held their posts. With experience, PAMs are more likely to become involved in planning processes as their knowledge of protected area management broadens in scope.

2.3.3.6 Legal Knowledge

2.3.3.6.1 Between 30% and 90% of PAMs agreed that PARCS had set the appropriate level of knowledge required for the nine legal skills considered in the questionnaire.

However, a small percentage of respondents thought PARCS had set the level of knowledge required too high for four skills:

- laws relating to firearms, arrest, and human rights;
- laws governing intervention programs;
- legislation relevant to the export of materials and specimens; and
- to public relations aspects of protected area activities.

In five skills PAMs thought knowledge ought to be higher, 'In-depth' in all cases:

- employment law;
- contract law;
- laws governing concessions and visitors;
- legal aspects of community development; and
- laws of slander and libel.

The overall indications in Legal Knowledge were that PAMs considered knowledge levels needed to be higher than those set by PARCS, reflecting the important tole law enforcement plays in protected area management in Zimbabwe.

2.3.3.7 Policies & Procedures Knowledge

2.3.3.7.1 This competency had a high level of agreement between PARCS and PAMs. In only three of the ten skills did PAMs think that PARCS had overscored required knowledge levels, viz staffing policies; construction/maintenance procedures and standards, and community conservation policies.

On three other skills, PAMs thought PARCS had underscored knowledge levels: accounting; national conservation policy, and research policy & procedures.

2.3.3.8 Financial & Accounting Knowledge

2.3.3.8.1 The general consensus amongst PAMs was that levels of knowledge of finance and accounting skills need to be higher than those set by PARCS in five out of six categories, and in only one, research budget allocation, did a minority of PAMs think PARCS had overscored. Since PAMs have little or nothing to do with research budgets, this last observation comes as no surprise.

2.3.3.9 A measure of agreement for the validation scores (PAMs versus PARCS) was determined by considering all questions for which the validation scores were either +1, 0 or -1, i.e. relatively accurate. The percentage of responses in these three categories for all six competencies under 'Knowledge' are shown in Table 3 (PARCS 2.3.4c).

If the average of those responses in each competency is greater than or equal to 70%, then the PARCS score is considered validated and will be used in future analyses of comparison.

For Zimbabwe, competency averages ranged between 78% (Legal) to 100% (Policies & Procedures and Financial & Accounting), with an overall accuracy score of 93% (Table 3).

2.3.3.10 Two Regional PAMs were requested to complete the questionnaire in order the validate both the PARCS' and average country scores for each question (Table 4 [PARCS 2.3.4d]).

In general, there was close agreement between the target validators' scores and those of PARCS and PAMS.

2.3.3.11 Discussion

- It is a gratifying result that protected area management staff (PAMs, FODs, etc) in Zimbabwe agreed very closely with PARCS' perceptions of the scope of responsibilities and the levels of knowledge required of PAMs to carry them out. All felt that the questionnaire itself was an excellent and accurate tool to conduct a training needs assessment.
- 2.3.3.11.2 During post-questionnaire discussions with PAMs two important points were consistently raised
 - (i) the style and structure of the questionnaire greatly increased awareness of the scope of responsibilities and skills needed of PAMs in Africa; and

- (ii) for the first time ever, FAMs were given the opportunity to evaluate themselves in terms of job skills, at the same time contributing significantly to a needs assessment designed to address their own skills enhancement.
- 2.3.3.11.3 The questionnaire was further considered to be useful in setting down guidelines for training needs within DNPWS and stimulating the development of an effective In-Service training program for PAMs.
- 2.3.4 Are PAMs skilled to the level necessary to do the job? If not, where are the deficiencies?
- 2.3.4.1 'Gap Analysis' for Knowledge Skills
- 2.3.4.1.1 A 'Gap Analysis' was used to compare PAMs' 'Knowledge' scores against PARCS' scores. This comparison is designed to give an indication of the difference between PAMs' perceived skill levels and skill levels deemed necessary by PARCS.

The results are shown in Figure 4 (PARCS 2.3.5a). Each of the six histograms, representing the six competencies under 'Knowledge', show the differences in scores between PAMs and PARCS. Negative values indicate the PAMs' skill is higher than that required for the job; positive values indicate a training need, and zero values indicate exact agreement between PAMs and PARCS as to required knowledge. The greater se difference between PAMs' and PARCS' positive scores, the greater the training need in that competency.

2.3.4.2 Technical (Wildlife & Tourism) Knowledge

- 2.3.4.2.1 Training needs (i.e., scores > 0) were identified for 14 of the 17 skills (Column 2, Rows A-K) under Technical Knowledge. However, highest needs (scores >2) were recognized in eight of them:
 - anti-poaching techniques;
 - ensuring optimum levels of visitor satisfaction (two skills);
 - intervention techniques;
 - understanding reasons (regional/national/global) for the establishment of protected areas, and the importance of the areas' cultural/natural resources; and
 - resource survey and monitoring techniques.

2.3.4.2.2 The gap analysis identified training needs on two broad fronts, both of which are noteworthy. In the first instance, it comes somewhat as a surprise that technical skills were considered deficient in law enforcement, intervention techniques and tourism-related activities, areas in which DNPWM can lay claim to be leader within the southern Africa region (excluding perhaps South Africa). Secondly, the recognition by PAMs that they require higher levels of knowledge in resource survey and monitoring techniques shows that DNPWM has not yet fully addressed the "adaptive management" issue which DNPWM purports to champion.

2.3.4.3 Management Knowledge

- 2.3.4.3.1 There were training needs identified for six of the ten skills in this competency. Only one area however protected area versus people conflict management -- was identified as needing a much <u>higher</u> level of training (score of 2).
- 2.3.4.3.2 The need for further training in 'protected area versus people' conflict management is in keeping with Zimbabwe's position on involving local communities in the sustainable use of indigenous resources under the CAMPFIRE program. Most likely, what the gap analysis shows is a growing divergence between progress in community conservation work and PAMs' awareness of, but lack of familiarity with, new advances in that field.

2.3.4.4 Planning Knowledge

- 2.3.4.4.1 Planning as whole (Rows A-K) was a key training need, with eleven of the twelve skills identified as needing higher levels of training. Scores of 2 and/or 3 were recorded for four skills:
 - anti-poaching patrol planning;
 - development of long and short-term visitor plans;
 - planning management objectives for protected areas; and
 - the development of zoning plans.
- 2.3.4.4.2 The results here support the PAMs' view that PARCS had underscored the skills levels needed (validation exercise) for this competency. Planning is clearly a crucial area of the PAMs' job that requires further training inputs at all levels.

2.3.4.5 Legal Knowledge

- 2.3.4.5.1 Training needs were identified for eight of the nine legal skills listed. Two skills in particular were considered key areas for higher levels of training by more than 50% of respondents:
 - laws relating to firearms, arrests, and human rights; and
 - public representation of protected area interests.

2.3.4.6 Policies & Procedures Knowledge

- 2.3.4.6.1 Training needs were ranked high in six of the ten skills of this competency (scores of at least 2):
 - construction and maintenance policies;
 - protected area policies;
 - tourism;
 - intervention policies;
 - community conservation;
 - research; and
 - public relations.
- 2.3.4.6.2 Policies & Procedures is a competency with which PAMs have had little experience. It is a group of skills which is normally required of staff in more senior, decision-making positions.

However, as the scope of PAMs' responsibilities broadens they will be drawn into situations where knowledge of these skills is required, as indicated in particular, for dealing with community conservation programs.

2.3.4.7 Financial & Accounting Knowledge

- 2.3.4.7.1 Training needs were identified for three skills in this competency, all to do with budgeting for research activities and the financial aspects of community conservation programs.
- 2.3.4.7.2 Although PAMs may have little to do with deciding on what research is conducted in areas under their jurisdiction, the results here indicate that they would at least like to know more about how research budgeting and allocation are decided.

Similarly, with the increasing importance of community-based conservation/resource utilization programs

operating on the periphery of protected areas, PAMs are indicating they need to have a much better grasp of the financial aspects of such activities.

2.3.4.8 Discussion

2.3.4.8.1 Since target validators' (FODs) validation scores and those of PAMs themselves were similar to PARCS' scores (all > 70% agreement), no further gap analysis was needed to be carried out.

To determine where the training needs existed in the six competencies under 'Knowledge', the average (country) value of the difference in skill level (positive scores of 1, 2 and 3) between what PARCS considered necessary and what PAMs actually possessed, was calculated for each of the 64 questions under 'Knowledge' in the questionnaire (Table 5 [PARCS 2.3.5d]).

2.3.4.8.3 From Table 5, the highest difference between the average country score and PARCS' score (i.e. the greatest training need identified) was 1.29. This high value related to knowledge of regional/national/global context of the protected area's setting, development of long and short-term visitor plans, and the development of zoning plans for protected areas.

Other high scores (1.14) indicating training needs were found for:

- tourism infrastructure,
- site design and analysis,
- trends and requirements of important natural and cultural resources in protected areas,
- construction policies, and
- procedures and standards.
- 2.3.4.8.4 Data from Table 5 can be used to derive average scores for training needs in the eleven Main Divisions of the Job (MDJ). For Zimbabwe's greatest needs were found in:
 - E: Ensuring all activities within the protected area comply with laws and regulations;
 - F: Ensuring optimum levels of visitor satisfaction;
 - G: Ensuring agreed intervention programs are completed to budget and timetable; and

 K: Ensuring an appropriate balance between resource use and conservation the protected area.

2.3.4.9 Validation Analysis for Mental and Social Skills

2.3.4.9.1 Validation analyses were also carried out on 'Mental' and 'Social' skills (columns 8-14 of the questionnaire) using the "Yes" responses to questions under each of the seven competencies.

"Yes" responses meant that respondents agreed with PARCS that the skill under question was required for his/her job as a PAM. If the percentage agreement between PARCS and PAMs for "Yes" responses was >70% then the 'Mental' and 'Social' Skills component of PARCS' job description for PAMs was considered validated.

Figure 5 (PARCS 2.3.6a) shows that a high level of agreement between PARCS and PAMs was reached, with an overall accuracy score of 94%.

2.3.4.9.2 To find out where PAMs considered 'Mental' and 'Social' skills identified by PARCS as unnecessary or inappropriate for their job, an analysis of "No" responses was conducted (Table 6 [PARCS 2.3.6b]).

The principal areas (Main Divisions of the Job and Competency/Skill) where PAMs regarded skills unnecessary or inappropriate were as follows:

- (i) I: Awareness of research activities and progress against plan problem analysis;
- (ii) H: Ensuring harmonious relationships with neighboring communities evaluation; and
- (iii) G: Ensuring Intervention Programs are Completed to Budget and Timetable-- problem analysis, evaluation, oral and written.
- 2.3.4.9.3 Low scores for 'Mental' and 'Social' Skills are shown in Table 7 (PARCS2.3.7a1).

Low scores are those of value 1 or 2 (poor skills or none). Competencies identified as having significant training needs, i.e. high cumulative scores of 1 and/or 2, were 'Problem Analysis' and 'Written Skills'.

For Main Divisions of the Job, the highest cumulative scores was recorded for 'Representing the Protected

Area and its Interests in Public Meetings'.

2.3.4.9.4 Throughout the world's conservation arenas there has been a traditional rivalry between "management" and "research" camps. Both can argue convincingly that one is more important than the other. This situation has often led to serious rifts in conservation agencies, where management and research function separately, but supposedly towards common conservation objectives. It is now common-place in most Government protected area authorities that research staff have little understanding of, or interest in, management techniques and objectives, and vice versa. However, there is a move these days towards what is known as "adaptive management" which closely links research and monitoring with trial-and-error conservation management. PAMs therefore need to more fully understand and appreciate the role of research and be able to grasp the significance of research findings.

Under 'Mental & Social' Skills training needs, there appears to be a common theme related to understanding what research is all about. DNPWS should therefore take appropriate steps to ensure that PAMs who are eak in comprehension and evaluation of research procedures receive training that improves their ability to incorporate "research thinking" into management techniques and objectives.

2.3.4.10 Attitudes

2.3.4.10.1 Aside from possessing technical skills and knowledge, PAMs must develop leadership qualities which encourage suc rdinates to consider seriously their own roles in protected area management; team-building is an important component of a PAM's responsibility.

To discover how PAMs tackled the issue of instilling appropriate attitudes towards conservation in their staff, they were asked to indicate what methods they used, or would use, to instil work ethics, commitment to conservation, and positive attitudes towards local communities (Competencies 15, 16 & 17 in the Questionnaire).

The PAMs' responses (see Methodology, Annexe 1) were analyzed on the basis of their years of experience is protected area management.

- 2.3.4.10.2 Nine mathods for instilling work ethics were identified by PAMs (Fig 6 [PARCS 2.3.8a]), four of which were common to PAMs with between six and ten, and more than ten, years of service. These methods were:
 - reterring staff to Administrative Orders;
 - slowing hard work and dedication through example;
 - encouraging subordinate staff to participate in program development; and
 - ensuring staff are suitably equipped and motivated to carry out their tasks.

One other PAM with six to ten years service indicated that showing tolerance to others' points of view is appropriate way to instil work ethics in staff.

The remaining four PAMs, all with more than ten years of service, listed the following ways in which they instil work ethics:

- ensuring departmental objectives are properly explained to staff;
- showing understanding when taking disciplinary measures;
- providing attentive supervision when staff are given new responsibilities; and
- cultivating good working relationships with staff.
- 2.3.4.10.3 Only three methods for instilling commitment to conservation were listed by PAMs (Fig 7 [PARCS 2.3.8b]):
 - showing dedication to national, regional or local conservation objectives;
 - conducting regular meetings with staff to discuss the value of conservation; and
 - becoming personally involved in conservation activities such as school groups and willlife clubs.
- 2.3.4.10.4 Fig 8 (PARCS 2.3.8c) shows that the two groups of PAMs identified six methods of instilling positive attitudes to local communities.

PAMs with more than ten years of service identified five methods:

(a) accepting the validity of community

- participation in protected area management;
- (b) instructing staff on the value of harmonious relationships with local communities;
- (c) taking opportunities to provide employment for local communities, appropriate to the protected area's conservation objectives;
- (d) maintaining dialogue with local communities;
- (e) seeking ways in which tangible benefits can accrue to communities without jeopardizing the area's conservation objectives.

Those with between six and ten years, four (as (b), (c) and (e), & listening to and demonstrating willingness to understand community issues and problems].

2.3.4.10.5 The wide range of responses given shown here is probably a reflection of the relatively long time PAMs in Zimbabwe have had dealings in staff management and community liaison work. It may also be a reflection of how PAMs themselves were instilled in these issues by their former supervisors.

A pleasing aspect of the Attitudes analysis is the way PAMs feel that a participatory approach best serves to instil conservation ethics and commitment in their staff.

Every effort should be made to encourage and cultivate this kind of approach, especially in dealings with community- based conservation programs.

2.3.4.11 Language Skills

2.3.4.11.1 Since protected area and adjacent community-based conservation objectives frequently need to be linked to strengthen and support national/regional strategies for the rational, sustainable use of natural resources, PAMs are having to become increasingly involved with local community issues. Often, this involvement centers on resolving conflicts between protected area and community interests. The ability of PAMs to communicate effectively with community leaders, in the language spoken by local communities, over matters of mutual concern is seen by PARCS as an important asset for PAMs to have.

To find out to what extent PAMs possessed thi; basic ability, they were asked to indicate "Yes" or "No" to the question "Do you speak a language understood by local communities living around your protected area?"

2.3.4.11.2 The results are shown in Fig. 9 (PARCS 2.3.9) and clearly indicate that PAMS in Zimbabwe can communicate with community leaders through common language.

The reason for asking the question in the first place was not evaluate a PAM's skill in languages, but rather, to gauge the sensitivity of head quarter staff in positioning PAMs where lack of effective communication could hamper dialogue over 'protected area versus community' conflict resolution.

2.3.4.11.3 In discussing language skills of PAMs with FODs, the latter stressed the difficulties that arose when staff shortages interfered with assigning the right person to the right place.

At other times, DNPWS considered it expedient <u>not</u> to send a PAM to a given protected area, even though familiar with the local language, because of the potential influence community leaders could exert on PAMs who came from that, or a nearby, community.

2.3.4.12 Computer Skills

2.3.4.12.1 All PAMs responded that they had no computer skills whatsoever (Figure 10 [PARCS 2.3.10a]).

Upon being questioned, few considered computerliteracy would be important to their job.

2.3.4.12.2 The above view contrasts sharply with that of a FOD interviewed specifically about the importance of computing skills in protected area management. The FOD emphasized that for effective management of Zimbabwe's protected areas, PAMs must have computer skills that allow them to store, organize and analyze data (especially finance and accounts; population monitoring; keeping track of lost animals, etc).

Furthermore, knowledge of GPS technology will be needed for improved law enforcement/anti-poaching

programs.

2.3.4.13 Summary of Gap Analysis

- 2.3.4.13.1 Table 8 (PARCS 2.3.12h) summarizes the gap analysis results by presenting the 'average' gaps in skills, taken from all questionnaires. Skill gaps can be read across the table (i.e. the Main Divisions of the Job) or down it (Competencies).
- 2.3.4.13.1 Looking at Main Divisions of the Job, highest accumulative 'average' gap totals were found for:
 - J. Representing the Protected Area and ital Interests in Public Meetings (n=13).
 - E. Ensuring All Activities within the Protected Area comply with Laws & Regulations (n=10).
 - F. Ensuring Optimum Levels of Visitor Satisfaction (n=9.5).
 - I. Aware ass of Research Activities and Progress agains: Plan (n=9).
- 2.3.4.13.2 For Competencies, highest gap totals were recorded in:
 - 9. Problem Analysis Skills
 - 13. Written Skills
 - 6. Policies & Procedures Skills
 - 10. Creativity Skills
 - 11. Evaluation Skills
- 2.3.4.13.3 Looking at Table 8 as a matrix it is possible to identify specific areas where training needs are highest, by scanning for highest gap values (3).

Gaps of 3 were found for:

- Law & Regulations: Balancing and evaluating the needs of involved parties.
- Research: Determining causes why research programs are not running to time-table;

Ensuring research reports are comprehensable to interested (public) parties.

- Public Relations: Preparing press releases;
 Building up networks of contacts & information on relevant meetings/events.
- Resource Management: Developing methods to achieve management area objectives.
- 2.3.5 What training has been received by current PAMs that is perceived by them as useful? How much? What kinds? And relevant to which job requirements?
- 2.3.5.1 At the bottom of each competency column in the questionnaire (i.e. Row K) respondents were asked to indicate which type of training had contributed most to their current level of knowledge of skills in that competency.

Four kinds of training are recognized:

- Formal Wildlife (Institutional);
- Formal (Other), includes short courses at nonwildlife institutions, seminars, workshops, etc;
- In-Service; and
- On-the-Job.

Further information on training received during employment with DNPWM was recorded during post-questionnaire discussions with PAMs.

2.3.5.2 Table 9 (PARCS 2.3.12) shows which kinds of training have been received by PAMs in each of the sixteen competencies under Knowledge, Mental & Social Skills and Attitudes.

Formal wildlife training was indicated for thirteen competencies, and On-the-Job, for all sixteen competencies.

In-Service training was listed for the three competencies under 'Attitudes', and for only one other, Finance & Accounting, under 'Knowledge'.

No other types of training were indicated.

2.3.5.3 In order to find out how perceptions on training changed with the number of years of departmental service, PAMs were grouped into two categories of work: those with between six and ten years experience and

those with more than ten (there were none with five or less).

Each PAM was asked which kinds of training were considered to have contributed most to protected area management skills; the results are shown in Figs 11 & 12 (PARCS 2.3.12g2 & 3).

2.3.5.4 Less experienced PAMs (Fig. 11) showed no consistent pattern to the kinds of training considered to have contributed most to skills development. Formal Wildlife and On-the-Job were important for Kncwledge and Mental & Social Skills, and In-Service and On-the-Job for 'Attitudes' Skills.

However, PAMs with more than ten years experience indicated almost exclusively that On-the-Job training was most important to all aspects of the job (Fig 12).

2.3.5.5 It is expected that with increased job experience, PAMs' perceptions of various types of training and how they contribute to skill development are likely to change.

PAMs and Regional PAMs who were interviewed, but did not complete questionnaires, supported the view that with increasing time in the position of PAM, formal wildlife training takes on less significance and is replaced by On-the-Job training. However, they concurred that at some point later in a PAM's career formal training assumes an important role again, particularly at university level, where advanced knowledge in wildlife management techniques is obtained and needed for career advancement.

2.3.5.6 Training Priorities

- 2.3.5.6.1 After completing the questionnaire PAMs were asked to indicate their three most important training priorities (Table 10 [PARCS 2.3.11]). One objective of this exercise was to see if indicated training priorities matched training needs determined by the gap analysis (2.3.4).
- 2.3.5.6.2 Generally speaking this section of the questionnaire was completed very poorly, with four PAMs leaving responses to Training Priorities blank.

Where answers were given there was agreement between identified training priorities and needs-- particularly in Management and Legal skills and in Main Divisions of

the Job 'A' and 'F': Ensuring the Availability of Competent and Well-motivated Staff, and Ensuring Optimum Levels of Visitor Satisfaction.

- 2.3.6 What are the constraints on PAMs meeting their job responsibilities? Where does training fit in?
- 2.3.6.1 Protected area management in Zimbabwe has become an increasingly complex job. PAMs and FODs interviewed in the field and at Departmental head-quarters in Harare recognize a number of constraints on PAMs meeting the responsibilities associated with effective management of the country's protected area system.
- 2.3.6.2 DNPWM has, for a long time, taken the view that the training of PAMs is best achieved through its own departmental programs, principally the training course offered at Mushanidike College. However, Mushandike College presently trains staff only to the level of Ranger (Assistant PAM) and further training, up to the rank of PAM, is mostly on-the-job.

Unfortunately, the teaching program at Mushandike College is constrained by the lack of permanent staff, materials and books. Many PAMs feel the training at Mushandike College does not provide the sort of exposure and potential for networking with colleagues that training at Mweka College does (or would do).

Almost without exception, Zimbabwean PAMs feel that opportunities should be open to them to visit neighboring countries from time to time to liaise ith other protected area management staff and exchange ideas and experiences.

2.3.6.3 The principal constraint on meeting job responsibilities identified by PAMs was the general absence of management/development plans for protected areas and accompanying job descriptions germane to the implementation of such plans. Protected area management cannot be effectively implemented without area-specific management strategies.

If these plans and descriptions are in place then appropriate training programs could be instituted, based on PAM job descriptions and responsibilities tailored to each protected area's management objectives.

2.3.6.4 The route by which PAMs are recruited and the kinds of training they receive has been described elsewhere in

this report. However, once PAMs have been put into field positions few training opportunities have been made available to them.

2.3.6.5 Reference has already been made to a number of PAMs enrolled in correspondence courses, but these are mainly self-funded and course topics may not necessarily be relevant to the PAMs' job or responsibilities.

The two Canadian-assisted programs are very new and only a few PAMs so far have had the opportunity to participate in them.

- 2.3.6.6 Another new training initiative is the joint CASS/IUCN program "Social & Human Dimensions of Environmental Management" which has just taken its first intake of participants. The course is six weeks long and is currently being attended by mid-level staff of various forestry, fisheries and wildlife departments from Angola, Mozambique, Zambia, Malawi, Botswana, Swaziland and Zimbabwe.
- 2.3.6.7 Thus although basic training up to the level of Assistant PAM is mainly achieved through sending staff to Mushandike College; post-Mushandike training opportunities have up until now been quite limited.

The expected up-grading of Mushandike College, together with the two Canadian project and the CASS/IUCN program should provide better opportunities for professional development/refresher courses for PAMs (and possibly FODs) in future.

- 2.3.7 Assessment of Field Operations Directors (FODs)
- 2.3.7.1 Through interviews, FODs identified their training needs as the following:
 - Tactical & Strategic Planning in Finance;
 - Staffing;
 - Protected Area Management/Development;
 - Staff Training and Public Relations;
 - Communication Skills;
 - Understanding the Role of, and Designing Plans for, Research in Protected Area Management; and

- Business Administration and Law (regarding commercial operations within Zimbabwe's Protected Areas).
- 2.3.7.2 Many of the training needs identified by FODs are similar in scope to those of PAMs. However, FODs require higher level approaches to addressing their training needs in those subjects.

Special courses/seminars could be designed and run, with PARCS' assistance in Phase II, to provide some training for FODs.

2.3.8 What further training is required?

2.3.8.1 From the twelve questionnaires completed by PAMs and Regional PAMs, it was found that the average number of years of Departmental service was 16 (range 10-15) and the average number of years PAMs had held their posts was 6.3 (range 1-9).

A striking feature of this analysis was the almost complete absence of formal wildlife training received outside Zimbabwe-- none of the PAMs were graduates from Mweka College, for example. All training received was In-Service, at Mushandike (or McIlwaine, prior to Mushandike) and occasional seminars and workshops.

The principal form of training for PAMs appeared to be On-the-Job.

This lack of exposure to outside training opportunities is unlike any other country surveyed in the PARCS Phase I assessment, and is seen as a deficiency by PAMs.

- 2.3.8.2 DNPWM feels that its interests are best served by training PAMs in-country where specific training needs can be addressed under conditions most likely to be encountered by PAMs when executing their duties in the field. (One of the common complaints about Mweka College is the heavy focus on Tanzanian examples of protected area management principles and techniques).
- 2.3.8.3 Specifically, the answer to what further training is required for PAMs must take account of what PAMs themselves see as deficiencies in their protected area management skills and what their supervisors regard as deficiencies.

The PARCS project has highlighted key areas of skill improvement needed by PAMs in Zimbabwe to enhance their job performance see Gap Analysis above), and these are summarized below:

GENERAL TRAINING NEEDS

TECHNICAL Law enforcement; tourism; intervention techniques; resource survey and monitoring; knowledge of protected areas' cultural and geographical setting.

MANAGEMENT Protected area versus community conflict resolution.

PLANNING All Main Divisions of the Job, but with particular emphasis on law enforcement and management objectives.

LEGAL Public relations and representation; laws governing firearms, arrests and human rights.

POLICIES & All Main Divisions of the Job, but with

particular

PROCEDURES emphasis on community conservation and

intervention programs, tourism, research policies and public relations.

FINANCE & Research budgeting; community conservation programs

ACCOUNTING

MENTAL & 'Problem Analysis' and 'Written Skills' and SOCIAL SKILLS 'Evaluation'.

SPECIFIC TRAINING NEEDS

<u>Law & Regulations</u>: Balancing and evaluating the needs of involved parties.

Research: Determining causes why research programs are not running to time-table; Ensuring research reports are comprehensible to interested (public) parties.

<u>Public Relations</u>: Preparing press releases; Building up networks of contacts & information on relevant meetings/events.

Resource Management: Developing methods to achieve management area objectives.

2.3.8.4 While the questionnaire was important in assessing training needs as a whole for protected area management in Zimbabwe, the post-questionnaire discussions with individual PAMs shed light on more specific

requirements.

Reference to Table 1 shows that in Zimbabwe there are twelve categories of protected area. National Parks, Safari Areas and Recreational Areas combined are perhaps the most important in terms of human resources and funding requirements and public use.

However, there are other types of protected area which require specialist skills, skills that are not typical of PAMs in general. PAMs managing BOTANICAL GARDENS & RESERVES require expertise in both botanical and horticultural techniques, yet little attention is made to this. In addition to the more conventional skills in protected area management, PAMs in charge of Botanical Gardens & Reserves have identified training needs in:

- Herbarium and Nursery Management;
- Advanced Propagation Techniques;
- Maintenance of Horticultural Equipment;
- Plant Pests and Disease Control; and
- Soil Analysis.

There are institutes which provide training in the above topics (e.g. Harare Polytechnic & Rio Tinto College of Agriculture).

Where possible, DNPWM should ensure that any staff assigned to manage Botanical Gardens & Reserves receive appropriate training prior to their posting to these areas.

SECTION 3: TRAINING OPPORTUNITIES ASSESSMENT

3.1 PAMs receive their initial, formal wildlife training at the DNPWM's training college at Mushandike.

Later, based on eligibility and opportunity, PAMs may be sent to attend university or other institutes of highe learning.

Through discussions with DNPWM headquarters staff (including FODs) and taking information from the questionnaires, it was possible to draw up a list of the various institutions used by DNPWM to train staff (Annexe 2).

SECTION 4: RECOMMENDATIONS

- 4.1 What present programs could be enlarged/restructured to include training opportunities for PAMs?
- 4.1.1 There are a number of possibilities for addressing the needs of PAMs in areas identified by the PARCS project and DNPWM. They fall into two of the four basic types of training opportunity described in the questionnaire:

 (i) In-Service training and (iv) On-the-Job training.

4.1.2 <u>In-Service Training</u>

4.1.2.1 Greater attention could be paid to the role of In-Service training as a means of addressing the training needs of PAMs identified in this report.

With Mushandike College about to play a much more important role in staff training, some thought should be given to developing and incorporating courses into the new curriculum that specifically address training needs identified by PAMs in this report. Course copics would be based on the 'Gap Analysis' as well as other needs deemed important by DNPWM.

If there is interest and available resources, PARCS' involvement in such a training program could consist of providing expertise in preparing a syllabus and materials for each course, developing a course schedule that would fit into DNPWM's general training program, and identifying potential course venues and instructors.

4.1.2.2 To undertake effective In-Service training, DNPWM must know what skills it requires of its protected area management staff, not only in general terms, but specifically as well, for particular problems related to given protected areas and their environs.

The principles of fire-management, population monitoring, culling, etc. are broad-based and widely applicable, but for specific situations in Zimbabwe there is the need for specialized knowledge of local conditions under which those broad-based principles operate.

The accumulated wealth of knowledge (years of experience, on-the-job training, attendance at national

and international conferences) possessed by senior members of DNPWM staff ought to be tapped.

What this present training needs assessment has done, by involving PAMs in determining their own training needs, is highlight the relative simplicity with which areas of weakness can be strengthened.

All PAMs felt not enough attention has been paid to improving job skills through In-Service Training, yet it is probably In-service Training that is best suited to tackle the issues.

4.1.2.3 Even if DNPWM does not have in-house expertise to design and implement an In-Service training program for PAMs, it is certainly aware of those areas in which its staff needs improved skill development, and does have a pool of resources (long-serving, experienced staff) to develop those skills. That, at least is a start, and PARCS could assist DNPWM in developing and strengthening In-Service training as part of Phase II activities.

4.1.3 On-the-Job Training

4.1.3.1 This form of training is very much based on a PAM 3 individual initiative to recognize opportunities for enhancing job skills. One such opportunity would be seeking advice from, and/or working with, more experienced, senior colleagues. DNPWM may be able to encourage such "quality" contacts for PAMs by identifying senior staff members who have good communication skills and assign to them for short periods, newly-appointed PAMs.

Once again, if there is interest and available resources, PARCS' contribution to On-the-Job training may be simply to provide PAMs with suggestions and materials for follow-up activities after spending time with a mentor.

4.1.3.2 In terms of training needs, On-the-Job training would probably best address the Mental & Social Skills identified in 2.3.8.3.

4.2 Other recommended training initiatives and programs

4.2.1 One objective of the PARCS project is to assist participating countries to develop appropriate and sustainable training programs for PAMs. Another

objective is to promote inter- and intra-regional approaches to training by providing opportunities for contact between PAMs from different countries and for them to participate in regional training programs.

Within the PARCS Southern Africa Region Zimbabwe stands alone in the progress it has made towards involving communities in sustainable wildlife utilization projects (i.e. CAMPFIRE). Community-based programs in their infancy in Malawi, Botswana and Zambia could benefit from DNPWM's expertise in developing the CAMPFIRE program, especially the protocols linking conservation programs within protected areas and those on their peripheries.

The CASS/IUCN course may be suitable for only a certain cadre of protected area management staff, whereas a more broad-based, introductory course might to better for PAMs who are just beginning to become involved in their countries' community conservation programs. DNPWM could therefore play a lead role in the region in providing basic training for PAMs in this very important activity.

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Rome, p. 210.

SECTION 5: ACKNOWLEDGEMENTS

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PARCS Phase I has involved four NGOs - AWF, BSP, WCS and WWF - whose staff have contributed in many ways to the success of the project. Thanks to you all.

SECTION 6:

ANNEXES

ANNEXE 1:

PROTECTED AREA CONSERVATION STRATEGY (PARCS) THE METHODOLOGY

Protected Area Conservation Strategy (PARCS) The Methodology

June 1993

Biodiversity Support Program

The Biodiversity Support Program is a USAID-funded consortium of World Wildlife Fund, The Nature Conservancy, and World Resources Institute

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List of Acronyms

ARTS/FARA:

Office of Analysis, Research and Technical Support/Division of Food,

Agriculture, and Resources Analysis

AWF:

African Wildlife Foundation

BSP:

Biodiversity Support Program

FAO:

United Nations Food and Agriculture Organization

FOD:

Field Operations Director

IUCN:

International Union for Conservation of Nature and Natural Resources

NGO:

Nongovernmental Organization

PAM:

Protected Area Manager

PARCS:

Protected Area Conservation Strategy

PARTS:

Policy, Analysis, Research and Technical Support

SADCC:

Southern African Development Coordination Conference

USAID:

United States Agency for International Development

WCI:

Wildlife Conservation International

WWF:

World Wildlife Fund

Glossary of Terms

Core Team: U.S.-based representatives of the NGOs collaborating on the PARCS project.

Field Operations Director (FOD): Manager in the headquarters office (central or regional) who is responsible for managing field operations in protected areas across the country.

Formal Training: Training received through enrollment at an institute or university.

In-Depth Assessments: Assessments conducted under the PARCS project that involve in-country site visits and follow the methodology of PARCS Phase I.

In-service Training: Short-term training (less than 6 months) organized by an individual's employer (e.g., parks department) that is undertaken during an individual's term of service. Inservice training may be external or internal. External in-service training is provided by an entity other than the employer. Internal in-service training is provided by the employer. In-service training that is provided to new employees before they assume their responsibilities may also be called induction training.

Limited Assessments: Assessments conducted under the PARCS project that do not involve completion of in-country questionnaires.

On-the-Job Training: Training received through informal means during the normal course of work, such as being given or seeking guidance from other colleagues and supervisors, learning by doing, overlap with individuals formerly holding positions, and handover notes left by predecessors.

Other Training: Training received through means other than formal institutions, in-service training, or on-the-job training. Other types of training may include workshops, seminars and conferences.

Protected Area: An area of land and/or water that has been set aside, by law, to conserve natural resources and be managed by the public sector.

Protected Area Manager (PAM): Highest-ranking manager on-site in a protected area.

Regional Managers: Persons designated by the NGOs collaborating on the PARCS project to conduct the field assessments in southern, central, and eastern Africa.

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I. The Approach

- 1. Africa's system of national parks and protected areas constitutes one of the most important safeguards of the continent's rich biological diversity. Protected Area Managers (PAMs), the decision makers in the field, play a critical role in the overall functioning of these areas. In recent years, a number of observations related to training for effective protected area management, drawn from experiences in the field, have been made. They include:
 - o The job of a PAM is becoming an increasingly complex task, requiring technical skills relating not only to wildlife and tourism, but to management, planning, law, policies, finance and accounting as well.
 - o Traditional training institutions and programs in Africa generally have not kept pace with the increasing demands of the PAM's job.
 - o Courses offered at leading wildlife institutions are often too theoretical, academic, broad-based, host-country specific, and/or habitat-specific.
 - o Few PAMs have access to the formal training opportunities available.
 - o Few data exist on the effectiveness, relevance, and value of traditional and non-traditional forms of training for PAMs.
 - o The capacity for institutions to train and develop training programs needs to be strengthened.
 - o Existing training institutions and programs need to revamp their curricula to address the specific needs of PAMs.
 - o Relevant training opportunities outside the traditional conservation sector need to be identified and made available to PAMs.
- 2. In the early 1990s, a few members of the conservation community began to search for data to support or refute these observations regarding training and protected area managers. It was found that most recent assessments of training in Africa have concentrated on non-managerial staff in protected areas (particularly rangers). Those that concentrate on managerial staff have tended to focus on numbers of people requiring training to meet staffing projections. In 1986, for example, the United Nations Food and Agriculture Organization (FAO) provided a quantitative assessment of human resource needs for protected area management in Africa (Jingu, 1986). There was no attempt in this assessment, however, to examine the content of the

1

training being offered or to evaluate the merit of the training offered with respect to current needs in protected area management.

- 3. Dr. Graham Child and Leonard D. Sefu (1987) assessed the needs and priorities for training in wildlife management and utilization in the Southern African Development Coordination Conference (SADCC) region. The assessment involved structured questions that included a series of functions commonly undertaken by wildlife agencies. Top management was requested to rank these as having high, medium, or low significance within their overall operations. These functions were divided into skills needed to execute them. One of the main conclusions of the Child and Sefu report was that outside assistance should focus on middle or upper (or professional) level training. Particular emphasis was placed on equipping the warden grade to undertake its wide-ranging responsibilities, including command, control and development of lower leveis of field staff. The findings of the Child and Sefu report provided some relevant and useful data for the SADCC region. On the whole, however, the report does not provide sufficient breadth of data to support or refute the observations listed above.
- 4. The Protected Area Conservation Strategy (PARCS) assessment was developed, in part, to fill the data gap on training needs, priorities, constraints, and opportunities among protected area managers. The PARCS needs assessment builds on the breakdown of functions adopted in the Child and Sefu assessment, but expands the scope to include a broader range of skills. The PARCS assessment departs from earlier assessments, however, in a number of ways. First, it embraces a participatory approach in that the assessment allows protected area managers themselves to: (i) determine the skills required for the job of protected area manager, (ii) assess their own skill levels, and (iii) help identify where training is presently being obtained in the required skills. Second, the assessment identifies specific, targeted training needs and then examines a wide range of opportunities to match these needs. Finally, the assessment covers the bulk of southern, eastern and central Africa, thus enabling findings across countries and regions to be compared and facilitating the cross-fertilization of ideas and initiatives.

II. The Project

- 5. The PARCS project seeks to address two questions:
 - (i) What skills do Protected Area Managers need to enhance the conservation of Africa's protected areas?
 - (ii) What can be done to provide Protected Area Managers with training for these skills?
- 6. The PARCS project will address these questions by:
 - (i) undertaking an assessment of training needs, priorities, constraints, and opportunities for PAMs in three regions of sub-Saharan Africa (east, central, and southern):
 - (ii) establishing a pilot program in each of the three regions to implement recommendations from this assessment; and
 - (iii) developing a broad series of recommendations for training protected area management staff.
- 7. The PARCS project is envisioned as a multi-year activity. During the first year (Phase I) the assessment of training needs, priorities, constraints, and opportunities for PAMs will be completed. Specifically for PAMs, the assessment is designed to:
 - (i) assess skills needed for effective protected area management;
 - (ii) assess present skill levels;
 - (iii) determine the types, amount and frequency of training currently received;
 - (iv) assess training needs;
 - (v) identify constraints to adequate and effective training;
 - (vi) identify the institutions and programs presently used for training;
 - (vii) identify potential opportunities for relevant training; and
 - (viii) identify pilot activities to test innovative training methods.

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8. The information collected in Phase I will be used to guide the development of appropriate pilot programs for training in each of the three regions in Africa to test models of effective approaches, program structures, and teaching methodologies for training (years 2 - 5). At the conclusion of the project, specific training approaches will have been tested and a broad series of recommendations for training protected area management staff will have been developed.

III. The Process

- 9. The PARCS project is managed by the Biodiversity Support Program (BSP) and implemented by a collaborative group of three nongovernmental organizations: The African Wildlife Foundation (AWF), Wildlife Conservation International (WCI), and World Wildlife Fund (WWF). AWF is the lead organization in east Africa, WWF leads PARCS in southern Africa, and WCI has assumed lead responsibility in francophone central Africa.
- 10. Funding for PARCS comes from the Bureau for Africa of the United States Agency for International Development (USAID) through the Office of Analysis, Research and Technical Support/Division of Food, Agriculture, and Resources Analysis (ARTS/FARA) project for Policy, Analysis, Research and Technical Support (PARTS). Supplementary funding has been provided by WWF, with AWF, WCI, and WWF contributing staff time to the project as well. Each of the collaborating organizations draws from its expertise and experience with related ongoing activities in the field to enhance the PARCS assessments.
- 11. The PARCS project is led by a U.S.-based core team consisting of Kate Newman of BSP, Cynthia Jensen of WWF, and Amy Vedder of WCI. Regional Managers representing AWF (Deborah Snelson), WWF (Michael Dyer), and WCI (Annette Lanjouw) are conducting the PARCS assessments in the field. Barbara Pitkin of BSP coordinates the overall activities of the collaborative group, while Deborah Snelson provides field coordination of PARCS activities from the AWF office in Nairobi. Tim Resch is the USAID technical manager for the activity. Data analysis with Panacea software is being carried out by Vitalis Wafula of AWF.
- 12. The methodology for the PARCS assessment was developed during a four-day workshop in Nairobi in August 1992. The workshop was facilitated by Peter Woolf of Price Waterhouse, and attended by Barbara Pitkin, Michael Dyer, Annette Lanjouw and Deborah Snelson. Following the workshop, the methodology was reviewed by a number of key members of the conservation community in Kenya and Zimbabwe and a sampling of wardens from several African countries. The Regional Manager in southern Africa conducted a trial assessment of training needs in Malawi between 13 September and 2 October. The methodology was also reviewed by the core team in September and amended in light of those reviews. Further revisions were made following the mid-term review meeting for the project held in Harare, Zimbabwe, December 8 12, 1992. The Regional Managers conducted a data analysis workshop in Nairobi March 15 19, 1993. A second data workshop in Nairobi is scheduled for May .4 28.



IV, Target Groups and Geographical Focus

- 13. The primary target group for the PARCS assessment is the Protected Area Manager, the highest ranking manager on-site in a protected area. Across the many countries in the PARCS assessment, a wide variety of individuals with a multiplicity of titles may act as PAM (e.g., regional officers, warden, senior warden). In order to identify the appropriate individuals for the assessment in each country, it is necessary to carefully examine organizational structures and job descriptions.
- 14. In some countries, problems in protected area management may be a result of individuals at the directorate level who have little, if any, experience in such fields as management and planning. Hence, in countries where the PARCS Regional Manager and the relevant core team representative deem it possible and desirable, the assessment will be broadened to include the level of management above the PAM (i.e., Field Operations Director (FOD) at departmental headquarters).
- 15. It is also recognized that in many cases, the job of PAM will eventually be filled by individuals immediately below the level of PAM (depending on organizational structures and the procedures of the organization). The Regional Manager and the core team representative may therefore decide to include in the assessment individuals directly below the PAM level. In Tanzania, for example, there are senior wardens, wardens, and assistant wardens, so assistant wardens may be included in the assessment. In countries such as Zaire, where there are rarely managerial positions below the PAM, lower levels will not be included. There is no intention to extend the assessment to non-managerial protected area staff (e.g., rangers, scouts and technicians).
- 16. The categories of people who may be asked to participate in the assessment are listed below (i iv are listed in hierarchical order):
 - (i) Subordinates to PAM (e.g., assistant warden) and other individuals who are likely to work as PAMs in the future:
 - (ii) Protected Area Manager (PAM);
 - (iii) Officers senior to PAMs and other individuals who have recently worked as PAMs;
 - (iv) Field Operations Director (FOD);
 - (v) Trainers/lecturers at wildlife institutions where PAMs receive training; and
 - (vi) Research Officers

- 17. The PARCS assessment is intended to cover as many countries in eastern, central and southern Africa as possible. In this way, the end product should provide a comprehensive assessment of the training needs and opportunities over a sizeable portion of the continent.
- 18. Practical realities, however, will inevitably dictate that in-depth assessments can only be done in some countries, limited assessments in others, and no assessments in yet others. Indepth assessments involve in-country site visits and follow the methodology described in this document. Limited assessments involve more cursory assessments, often conducted from our ide the country using means available (e.g., limited use of the questionnaire through selective interviews and mailings, collection of baseline data through telephone interviews, and literature searches).
- 19. The practical realities that dictate where assessments are conducted include, but are not limited to:
 - (i) government cooperation
 - (ii) USAID concurrence/cooperation (for those countries being assessed with USAID funds)
 - (iii) civil war/unrest
 - (iv) relative importance placed on a country's biodiversity and protected areas vis a vis other countries in the region
 - (v) potential for follow-on activities.
- 20. A preliminary categorization of countries has been made. These categorizations may change as the assessments progress. Decisions regarding priorities for the use of time and funds among these countries are the joint responsibility of Regional Managers and their respective core team members.
- 21. The preliminary categorization of countries is as follows:

East Africa

In-Depth Assessments: Tanzania (including Zanzibar), Kenya, Uganda, Ethiopia

Limited Assessments: Somalia

Central Africa

In-Depth Assessments: Burundi, Cameroon, Congo, Rwanda. Zaire

Southern Africa

In-Depth Assessments: Botswana, Malawi, Zambia, Zimbabwe

Limited Assessments: Lesotho, Mozambique, Republic of South Africa (training opportunities assessment only), Swaziland

22. All countries given in-depth assessments will be considered potential pilot countries for Phase II. It is recognized that only USAID-assisted countries whose USAID missions have indicated that natural resource activities are a priority will be eligible for USAID follow-on activities. At the same time, it is expected that the Phase I assessment will provide the rationale for potential pilot programs in other countries to be funded by non-USAID sources.

Y. Preliminary Groundwork

23. For the countries in which an in-depth assessment is to be conducted, the Regional Managers generally initiate the process by sending a letter to heads of government departments that employ and train employees responsible for the management of protected areas to formally invite participation in the assessment exercise. Simultaneously, the BSP coordinator works with USAID to obtain formal clearances from the USAID missions to conduct the assessment.

The Initial Meeting

Regional Managers arrange an initial meeting with a senior official, usually the Director, at Departmental headquarters. If there is a person responsible for training stationed at headquarters, that person is also contacted. The initial meeting may be an informal one where the Regional Manager describes the PARCS project and requests information to be collected and/or appointments made in preparation for a more formal meeting. At the formal meeting at headquarters, a standard set of information is requested (see General Information on Training sheets), as well as the organizational structure for the whole Department and, if available, for individual protected areas.



General Information on Training

For the PAM and FOD, the following information is requested:
Minimum requirements for jobs
For subordinates to the PAM, the PAM, and FOD, the following information is requested:
Job descriptions for each type of job (if available, collect)Training records?
For subordinates to the PAM, the PAM, seniors to the PAM, the FOD, and the FOD's seniors, the following information is requested:
In-service training programs: Listing of titles/description How are they planned? How are decisions made on who will be trained? part of system personal initiative credentials funding other What is the basis for these decisions? General numbers of people trained per year
Formal wildlife training institutions: Listing of institutions How are decisions made on who will be trained? part of system personal initiative credentials funding other What is the basis for these decisions? General numbers of people trained per year
Other training opportunities (e.g., workshops, seminars): Listing of titles/description How are they planned? How are decisions made on who will be trained? part of system personal initiative credentials funding other What is the basis for these decisions? General numbers of people trained per year
Existence of training coordinator(s) within department?yesno If yes, what is the job description?

- -- Number of trainers
- --Percentage of annual recurrent budget spent on training
- --List, by donor, the amount of donated funds devoted to training, per annum and over last five years
- --Training material provided to staff? What kinds?
- --Any form of bonded service after training? How is it done? Regulations? Incentives/disincentives?
- --Has there been any evaluation of the training program?
- --General assessment of training?
- -- What are the constraints to training?

- 25. At the formal meeting at headquarters, a briefing is given on how the PARCS questionnaire may be administered. The preferred strategy for conducting the questionnaire is for the Regional Managers to hold interviews and discussions with PAMs and make site visits to directly observe protected area management. The Regional Managers must, however, tailor their approach to individual country circumstances. Options for conducting the questionnaire are:
 - Explain the questionnaire and have the PAM fill it out with the Regional Manager nearby to assist;
 - Explain the questionnaire and leave it for the PAM to fill out on his/her own time;
 - Explain the questionnaire in a workshop and have PAMs fill it out individually;
 - Mail out the questionnaire; or
 - Use a surrogate (e.g., consultant, colleague) to do one or more of the first three options.
- 26. PARCS is intended to be conducted in an adaptive way, reflecting the needs and wishes of government programs and interests in training. The senior official is invited to decide the best method for the PARCS assessment, and to help set up meetings and/or workshops with PAMs. The official is also asked to recommend people to talk to about training opportunities.

Meeting the FOD

- 27. The Regional Manager may then arrange meetings with FODs during which they are asked to complete the needs assessment questionnaire as an independent validation of PAMs' responses. It is explained that by rating the general skill levels of PAMs in the FODs' organization, training needs will be identified.
- 28. The Regional Manager may decide to discuss the FODs' position and training needs. This is intended to be an informal discussion. The Regional Manager presents the following as the main aspects of the FOD's job that may carry training needs:
 - 1. Strategic planning
 - 2. Development and compliance of policies, procedures, and standards
 - 3. Representation of organization and public relations
 - 4. Planning optimal deployment of well-motivated competent staff
 - 5. Development and achievement of operational plans and budgets
 - 6. Planning for availability and optimal deployment of technical specialist services from headquarters to protected areas

- 7. Ensuring availability of hardware and software necessary to achieve organization's objectives, within budget
- 8. Managing concessions in protected areas
- The FOD is asked to verify that these are the key aspects of the job and to comment on the list. The FOD is then asked what kind of training is needed to accomplish these tasks, what are his/her three priority training needs and the constraints to obtaining this training.
- 30. After the initial meetings have been concluded and the strategy for conducting the needs assessment has been set, the needs assessments are conducted as outlined in the following section.

VI. The Needs Assessment

- 31. A questionnaire approach was adopted for the needs assessment for the following reasons:
 - (i) The questionnaire could be designed as a matrix and serve as an efficient and practical way to present the array of specific skills required for the job of a PAM;
 - (ii) The questionnaire provides a convenient tool to compare outside assessments of the skills required of the PAM with the PAMs' perceptions of required skills;
 - (iii) The questionnaire provides a qualitative and quantitative means of assessing training needs; and
 - (iv) The questionnaire lends itself well to standardized data extraction, manipulation, comparison and analyses across and within the three regions of Africa.
- 32. A strength of the questionnaire is that it is not just a means of gathering information, but it is a training tool in and of itself. The process of leading the PAM through the questionnaire has been designed to stimulate thought and discussion on the important facets of protected area management. In and of itself, the questionnaire may well influence the way some PAMs look at their jobs and their role in managing protected areas.
- 33. All participants are allowed to keep a copy of the questionnaire upon completion. It is anticipated that the interviewee will refer back to the questionnaire and continue to think about the points raised and perhaps even use it to guide future work. In many African countries, educational material is scarce and, therefore, highly appreciated. It is our intention that the questionnaire will be a useful educational tool.

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Pre-Ouestionnaire Discussion

- 34. Before the questionnaire is filled out, the Regional Manager ¹ conducts a prequestionnaire discussion. In that discussion, the PARCS project and its goals and objectives are described. The questionnaire is introduced as the PARCS team's perception of the tasks, skills and competencies required of an effective PAM. It is explained that the questionnaire is a tool to help PAMs identify their own training needs. In their explanation of the PARCS process, the Regional Managers strive to dampen any unrealistic expectations for follow-on activities.
- 35. The Regional Managers then explain how to fill out the questionnaire. They explain that the main divisions of the job are shown in rows A-K and that the first column shows accountabilities and responsibilities associated with these main divisions of the job. The respondent's first task is to read these responsibilities and accountabilities and add or delete according to their own view of the job.
- 36. The instructions for completing the boxes in columns 2-7 are then given. Respondents are asked to read each competency and in the left-hand box indicate their own view of the level of knowledge needed to do the job of a PAM within their organization successfully. Then, in the right-hand box, they are asked to assess their own level of knowledge in this area. In the discussion of columns 2-7, it should be made clear that the questions do contain prompts reflecting the views of the team that developed the questionnaire as to the level of knowledge appropriate for the job; respondents should be encouraged to differ with these views where they see fit. It is useful at this juncture to show how the data will be extracted from the left- and right-hand boxes to indicate whether there is a training need (see para 65).
- 37. The instructions for completing columns 8-14 are then given. Respondents are asked to read each competency and first indicate whether they think it is required to do the job of a PAM successfully. Respondents are then asked to indicate their own level of ability in this area.
- 38. Instructions are then given for the questions immediately following the questionnaire. It is explained that columns 15-17 should be read to help spark ideas in answering the questions on work ethics, commitment to conservation, and attitudes towards adjacent communities. Respondents are told that these are difficult questions that require some thought and there are no wrong or right answers to these questions. The language and computer questions are then explained; the importance of language is explained with respect to working with local communities.
- 39. Respondents are told that when they come to the bottom of each column they should complete compartment L by indicating which form of training (e.g., formal wildlife training institutions, in-service training, on-the-job training, or other) has contributed most to their

While Regional Managers may utilize surrogates to conduct certain portions of the PARCS assessment, the term Regional Manager will be used throughout.

knowledge of the subject in that column. They are also asked to list any additional training received past primary school not recorded in row L on the blank final page of the questionnaire. Finally, they are asked to list their three training priorities on the last page of the questionnaire.

- 40. Direct examples from the questionnaire are used liberally in the pre-questionnaire discussion to help respondents understand how the questionnaire should be completed. Respondents are reminded to read the instructions carefully and to seek clarification on any words/phrases or instructions not clearly understood. Respondents are also reminded to continuously refer back to the main divisions of the job as they go down the skills/competencies columns.
- 41. Finally, respondents are reminded that accuracy and honesty are required in order to meet the objectives of the project and, therefore, the questionnaire is designed to be confidential and anonymous. Moreover, Regional Managers emphasize to participants that the assessment will not be used to assess individual training needs, but overall training needs throughout the protected areas in a country or region. Hence, it should be understood that people have nothing to lose/win by being anything but honest. Hence, there should be little reason for participants to deliberately provide inaccurate data.
- 42. Respondents are also informed that the approximate time it will take to complete the questionnaire is 2.5 hours. The questionnaire was created in the word processing program Word Perfect and has been produced in English and in French (see following Questionnaire).

PROTECTED AREAS CONSERVATION STRATEGY (PARCS): TRAINING NEEDS ASSESSMENT

Four organisations, the African Wildlife Foundation, Wildlife Conservation International, World Wildlife Fund and the Biodiversity Support Program are working together on a project called PARCS. One of the main aims of the project is to identify the skills required for the job of protected area manager and to assess the training needs.

To achieve this we have developed a chart of the typical skills (competencies) required to do the job of protected area manager. We would like you to assist us by doing two things:

- to check the appropriateness of the chart to your job
- · to assess your current skill level for each component of the chart

Before filling in the questionnaire please read everything through very carefully. This information will be confidential and will be used to build up an analysis of the training requirements for each country in Africa participating in the study.

The attached chart has 17 columns and 12 rows.

- Rows A-K show main divisions of the job.
- Row L will be used to identify the types of training you have already received.
- The first column shows 'accountabilities and responsibilities' associated with each division A-K. Please add any further
 accountabilities and responsibilities specific to your job by writing in the relevant compartment.
- Columns 2-17 show the competencies associated with your job in terms of knowledge (2-7), mental skills (8-11), social skills (12-14) and attitudes (15-17).

You will notice that some compartments are blank. These do not need to be filled in.

KNOWLEDGE (columns 2-7)

Knowledge has been grouped into four levels:

l. None has no knowledge of subject matter indicated

2. Some awareness of the subject and general applicability

3. Working sufficient knowledge to complete routine tasks

4. In-depth a breadth and depth of knowledge which enables initiative to be taken in non-routine situations

n/a = not applicable in present job. Please indicate your knowledge level.

We would like you to go down each column 2-7 and fill in the boxes.

In the left hand box put the number which corresponds to your view of the level of knowledge needed to do the job successfully.

In the right hand box (shaded) put the number which corresponds to your assessment of your current knowledge.

eg. in E5:

In-depth knowledge of relevant laws and regulations eg. firearms, arrest, charging and human rights

A [3]

Such an answer shows us that the person completing the questionnaire agrees that in-depth knowledge is needed (4 in the left hand box). By putting 3 in the right hand box the respondent has identified a training need.

When you come to the bottom of each column please complete the compartment (I.) by showing which form of training has contributed most to your knowledge of the subject in the column. These categories could include: Formal wildlife training institutions (please specify with dates), Other training opportunities (eg. workshops, seminars), In-service formal training (organised by your department), On-the-job training (skills learnt whilst doing your job).



Mental and social skills have been grouped into four levels:

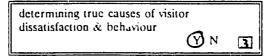
- 1. None
- 2. Poor
- 3. Satisfactory
- 4. Good

We would like you to go down each column 8-14 and fill in the boxes.

First of all indicate whether each skill is appropriate to your job by circling either Yes (Y) or No (N).

Then indicate in the right hand box (shaded) your level of ability for each particular skill regardless of whether it is applicable to your present job.

eg. in F9:



Such an answer shows that this skill is required and the respondent has the required level of skill to successfully complete this aspect of the job. Therefore in this particular case there is no identified training need.

When you come to the bottom of each column please complete the compartment by showing which forms of training have contributed most to your skills in the subject of the column. Use the categories described before. Please list the most important one first.

ATTITUDES (columns 15-17)

The chart indicates the principal attitudes of the job. All we require you to do is to answer three questions.

If you do not understand any of the questions in this questionnaire please leave the boxes empty and move onto the next question.

In order for you to keep a record of your completed questionnaires we are providing two copies of each section and a sheet of carbon paper. The WHITE sheets (numbers 1, 2, 3 \propto 4) are to be returned after completion. You may keep all of the COLOURED sheets. Once you have completed the questionnaire please carefully tear off the four white sheets and return them in the enclosed addressed envelope.

Thank you for helping us undertake this training needs assessment. We appreciate your time and input.







Biodiversity Support Program

Main Divisions of the Job	1. Accountability and Responsibilities	KNOWLIDGE
7,3,1, (),,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1. Accountantity and Responsibilities	2. Technical (Wildlife/Lourism)
I insure assummitty of a moderni and well-modes staff modes staff	Maximizing poleonial of informed stard Responsible for electroning training needs Responsible for recommendations and application of disciplinary measures	
	<u>'</u>	
B Ensure appropriate infrastructure within hudget	Responsible and accountable for maintenance, repair, rehabilitation and construction Recommending additional facilities	Working knowledge of infrastructure, construction, sitings, materials etc.
C Ensure transcial and accounting integrity of the protected area	Accountable and responsible for all revenue generated and dishursement (received from headquarters and receipts) Responsible for accurate accounting	
D Ensure development and achievement of tactical plans and hudgets and continbute to protected area strategic planning	Accountable for development of annual plan and budget of protected area Responsible for working within the agreed plan and budget Identify strategic options in the protected area and contribute to strategic planning	
E Ensure that all activities	Accountable for enforcement of law and	In-depth knowledge of safe practices with respect to widlife
within the protected area comply with laws and regulations	regulation and ensuring safe practices throughout the protected area	In-depth knowledge of techniques of anti-poaching
F Finsure ontimum tevels of visitor satisfaction	Responsible for ensuring that the nighest levels	In-depth knowledge of visitors' expectations
i i i i i i i i i i i i i i i i i i i	of visitors' services and practices under his/her jurisdiction are maintained	In-depth knowledge of protected area infrastructure techniques, site
		In-depth knowledge of interaction between tourist and local areas
C 5		
G Ensure agreed intervention (eg. early huming, problem animal control) programmes are completed to hudget and timetables	Responsible for design, implementation, and evaluation of intervention programmes to meet conservation objectives in the protected area	In-depth knowledge of intervention needs, techniques and implications
H Ensure harmonious relationships with	Responsible and accountable for design and	Working knowledge of extension methodology
neighbouring communities	implementation of a programme to achieve harmonious relations Responsible for for instilling acceptance by staff of the role of local communities in protected area management	Some knowledge of cultural and historical context for the location of protected area
I Be aware of research	Responsible and accountable for ensuring that	Warking knowledge of recently methodologies
activities and progress against plan	research programme is implemented according to the protected area conservation objectives	Working knowledge of research methodologies
,	and timetables	Working knowledge of the role of research in meeting conservation objectives
J Represent the protected	r Accountable for ensuring that the protected	Up-to-date working knowledge of all activities within the protected
area and its interests in public meetings	area is represented in every possible area Responsible for ensuring that the information	area
	available about the protected area is up to date	In-depth knowledge of the context of the protected area in the regional/national/global arena
K Ensure an appropriate balance between resource conservation and use in the	Responsible and accountable for design and implementation of resource management / protection strategies to meet protected area.	In-depth knowledge of types, locations, trends and requirements of important natural and cultural resources in the projected area
protected area	Responsible and accountable for the preparation, approval, and implementation of a	In-depth knowledge of types, locations, trends and requirements of threatened and endemic fauna and flora and the key species of the ecosystem.
	resource conservation management plan for the protected area	Working knowledge of environmental impact analysis techniques
	•	Working knowledge of surveys and monitoring techniques
		(field data collection/analysis)
L. Training received		

1 M				
3. Management	4. Planning	5. Legal	6. Policies/Procedures	1 maneraly accounting
Working knowledge of supervisory and personnel management skills	Working knowledge of scaeduling staff development & finiciardes	Some knowledge of confloyment laws	Instruction knowledge of staff policies, procedure, and practices	1
wante knowledge of human resources techniques and their application as appropriate (e.g., p.o. evaluation or worth of p.h. salary structuring, training needs analysis). Working knowledge of managing casual labour.				
Working knowledge of principles of	Working knowledge of job	Some knowledge of	In Jepth knowledge of	
Working knowledge of how to apply preventative maintenance	planning	contract law (for writing contracts to subcontractors)	In-depth knowledge of maintenance / construction policies, procedures and standards and procurement procedures	
	Working knowledge of financial planning		Working knowledge of accounting policy and procedures	Working knowledge of accounting and principles of internal control
	Working knowledge of planning, hudgeting and control		Working knowledge of overall strategies and direction of his/her organisation (national conservation policy)	
	In-denth knowledge of natrol planning needs	in-depth knowledge of relevant laws and regulations (e.g., firearms, arrest, charging, human rights)	In-depth knowledge of policies and procedures	
Working knowledge of management and accommodation and catering (acilities under protected area jurisdiction	In-depth knowledge of techniques in developing long and short-term visitor plans	Working knowledge of contract law as applicable to concessionaires and visitors	In-depth knowledge of visitor policies and procedures	Working knowledge of keeping records of visitor numbers and keeping receipts
Working knowledge of project (jub) management	In-depth knowledge of job planning	In-depth knowledge of relevant laws and regulations	In-Jepth knowledge of policies and procedures related to intervention	
In-depth knowledge of protected area vs people conflict management	Working knowledge of now to develop a confimulative conservation plan	Some knowledge of laws related to continuously development	In-depth knowledge of policies and procedures related to community conservation	Working knowledge of record keeping for financial dibursements to local communities In-depth knowledge of records of resource use or resources shared — both financial and in-kind distributions
	Some knowledge of development of research plan for the protected area	In-depth knowledge of legal aspects of collecting/exporting materials & specimens	Working knowledge of research policies and procedures	Working knowledge of budget & allocations for research activities
Working knowledge of the concept of public relations and methods of dealing with the inedia. Some knowledge of obligatory role (attendance) at meetings and awareness of activities around the protected area expedient to attend		In-depth knowledge of the legislation regarding protected areas Some knowledge of the laws of slander and libel	In-depth knowledge of the public relations policies, procedures and practices	
	Working knowledge of resource conservation management planning techniques and methodologies. In-depth knowledge of how to develop and implement protected area management objectives. In-depth knowledge of how to develop and maintain a protected area management zoning system.			Working knowledge of how to estimate costs for implementation of resource conservation management plan recommendations

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Main Divisions of the Job	Cl. Accountability and Responsibilities	MUNTAL SKILLS	
	The second and second summer	4. Comprehension	9. Problem Analysis
A Province availability of a competent and well- motivated staff	Maximizing potential of allocated staff Responsible for dentitiving training energy Responsible for recommendations and application of disciplinary measures	Per Sarana et la Concar Sestenti il 135 incoment	Personning causes of corresponding and behaviour
B I neure availability of appropriate intrastructure (within budget)	Responsible and accountable for maintenance, repair and renauditation and construction Recommending additional facilities	Sporting in incurrices and potential hazards	Determining causes of specific and frends on equipment and infrastructure failures
C. I asure financial and accounting integrity of their folicited area area.	Accountable and responsible for all revenue generated and disbursement (received from headquariers and receipts) Responsible for accurate accounting	Understanding financial implications of information Y/N	Determining causes of figures not reflecting the true situation Y. N.
D. Ensure development and achievement of factical plans and hudgets and contribute to protected area strategic planning	Accountable for development of annual plan and hudget of protected area Responsible for working within the agreed plan and hudget Identify strategic options in the protected area and contribute to strategic planning	Understanding implications of set objectives including their feasibility Y N	Determining true causes of failure to achieve plan and budget Y N
E. Ensure that all activities within the protected area comply with laws and regulations.	Accountable for enforcement of law and regulation and ensuring safe practices throughout the protected area	Understanding applicability of laws and regulations in protected areas	Determining true causes of incidences and trends in incidences Y N
F Ensure optimum levels of visitor satisfaction	Responsible for ensuring that the highest levels of visitors, services and practices under his/her jurisdiction are maintained	Recognising the significance of physical and statistical information regarding visitor impact.	Determining true causes of visitor dissatisfaction and hehaviour
G Prisure agreed intervention programmes are completed to budget and timetables	Responsible for design, implementation, and evaluation of intervention programmes to meet conservation objectives in the protected area	Understanding information that may lead to interventions Y. N	Determining causes of deviation from intended results of interventions
H Ensure harmonious relationships with neighbouring communities	Responsible and accountable for design and implementation of a programme to achieve harmonious relations Responsible for for instilling acceptance by staff of the role of local communities in protected area management	Understanding the significance of statistical, physical, written and oral information relating to community-protected area links	Understanding underlying causes of conflict both in the long and short term Y N
I Be aware of research activities and progress against plan	Responsible and accountable for ensuring that research programme is implemented according to the protected area conservation objectives and timetables	Understanding the significance of research findings and the function of research Y N	Determining causes of why research programme is not to timetable
J Represent the protected area and its interests in public meetings	Accountable for ensuring that the protected area is represented in every possible area Responsible for ensuring that the information available about the protected area is up to date	Understanding the significance of points raised during press and other meetings Y N	Determining the causes of adverse comments in press Y N
K Ensure an appropriate halance between resource conservation and use in the protected area	Responsible and accountable for design and implementation of resource management/protection strategies to meet protected area conservation objectives Responsible and accountable for the preparation, approval, and implementation of a resource conservation management plan for the protected area	Understanding of day-to-day and long term implications of the protected area s management objectives Y N Recognising and understanding the implications of potential environmental impacts of different activities	Identifying and determining the causes of conflicts between protected area resource conservation and use
L Training received			

		SOCIAL SKILLS		
10. Creativity	11. Evaluation	i 12. Orat	13. Written	14. Working with others
Developing on-the-job training	Usaloating statt performance	Counseiing stail	Sorting start at praisals and training torois	Motivating state
•	↓	ļ	+	
Creating adaptive solutions to intrastructural problems	Deciding priorities and selecting from alternative courses of action for maintenance and repair	to stall and contractors	& riting specification orders and instructions to third party Y N	Gaining the cooperation of suppliers and subcontractors
		Explaining financial implications to senior management and junior staff Y N		
Developing options to achieve plans and budgets in light of changing circumstances Y. N	Selecting priorities during budget preparation process Y N	Presenting plan and budget Y N	Preparing planning and hudget briefs for manager, justifying proposals Y N	Selling plan and hudget convincingly Y. N.
Having flexibility to reach compromises which respect objectives of the law	Bulancing and evaluating needs of the involved parties in spirit and letter of the law	Explaining proper procedures and regulations to residents and users of the profected area Y N	Writing clearly worded notices and instructions Y N	Gaining cooperation of wrong doers
Developing options for improving visitor anienties within nicans available Y. N.	livaluating options and selecting courses of action regarding visitor services Y. N	Cletting protected area's perspective across to visitors Y. N	Preparing interpretive materials Y. N	Dealing with dissatisfied visitors Y. N.
Designing (contributing to design) or adupting interventions to meet specific needs Y. N.	Selecting appropriate programmes and evaluating their success Y. N.	Giving clear instructions on technical intervention procedures Y N	Writing clear reports explaining intervention, its success, failure, etc. Y N	Gaining cooperation of local communities where appropriate Y. N.
Developing ideas for improving community/protected area relations Y N	Determining why certain community-related infiatives have achieved success Y N	Presenting information at a level appropriate to target audience Y N		Having cultural sensitivity Y N
Identifying opportunities for for the application of research Y. N.	Evaluating the results of research and their application Y N		Ensuring research reports are comprehensible for lay people Y. N	Establishing positive relationships with researchers Y. N.
Developing public relations materials (oral, written, etc.) Y N	Selecting materials appropriate for each meeting	Making formal public presentations and respond to questions unambiguously Y N	Preparing press releases Y N	Building up and maintaining network of contacts for information on all important/relevant meetings and events
Developing methods to achieve management zone objectives Y N				Working with local communities and other concerned naries during plan development and implementation

Mata Distance of the		ATTITUDES		
Main Divisions of the Joh	1. Accountability and Responsibilities	15. Work Ethies	16, Commilment to	17. Community
A l'insure availability of a competent and well- motivated statf	Maximizing potential of allocated staff Responsible for identifying training needs Responsible for recommendations and application of disciplinary measures	Secris (Successivin appraisa) and general staif dealings	instil commitment	Consists to femously including at the destrict for narmonous relationship
B. I'nsure availability of appropriate intrastructure (within budget)	Responsible and accountable for maintenance, repair and renabilitation and construction Recommending additional facilities	Honours contractual agreements in spirit and letter		
C Unsure financial and accounting integrity of the protected area area	Accountable and responsible for all revenue generated and disbursement (received from headquarters and receipts) Responsible for accurate accounting	Instils honesty		
D Ensure development and achievement of tactical plans and budgets and contribute to protected area strategic planning	Accountable for development of annual plan and budget of protected area Responsible for working within the agreed plan and budget Identify strategic options in the protected area and contribute to strategic planning			
E Ensure that all activities within the protected area comply with laws and regulations	 Accountable for enforcement of law and regulation and ensuring sale practices throughout the protected area 	Honesty, tolerant to others' points of view	Finding balance and understanding the needs of both conservation and the involved parties	Tolerance to others points of siew to minimize conflict between projected area and others
F. Fesure ontimum levels of systor satisfaction	Responsible for ensuring that the nignest levels of visitors services and practices under his/her jurisdiction are maintained		Needs to demonstrate commitment to conservation	Needs to demonstrate belief in salidity of including local communities in protected area management and enterprises linked to tourism
G Ensure agreed intervention programmes are completed to budget and timetables	Responsible for design, implementation, and evaluation of intervention programmes to meet conservation objectives in the protected area			
Il l'insure harmonious relationships with neighbouring communities	Responsible and accountable for design and implementation of a programme to achieve harmonious relations Responsible for instilling acceptance by staff of the role of local communities in protected area management			
I Be aware of research activities and progress against plan	Responsible and accountable for ensuring that research programme is it iplemented according to the protected area conservation objectives and timetables	Must have an open mind to research findings Must support role of research as a component of protected area management		
J Represent the protected area and its interests in public meetings	Accountable for ensuring that the protected area is represented in every possible area. Responsible for ensuring that the information available about the protected area is up to date.	Honesty, Integrity Must make clear when representing the protected area or a personal view Must never criticize the organisation openly	Demonstrated as absolute	Demonstrated as absolute
K Ensure an appropriate balance between resource conservation and use in the protected area	Responsible and accountable for design and implementation of resource management/protection strategies to meet protected area conservation objectives Responsible and accountable for the preparation, approval, and implementation of a resource conservation management plan for the protected area	Honours conservation objectives of resource management plan		
L Training received				
	·			

This chart indicates the principal attitudes of the job. All we	require is that you answer the following questions
As a manager how do you instil: 1. work ethics?	
b. commitment to conservation?	
<u>(</u>	
c. healthy attitudes to adjacent communities?	
(If you need more space use blank sheet on the next page)	
LANGUAGES	COMPUTERS
	COMPUTERS Do you use computers? If so, in what ways?
Do you speak a language understood by the local community adjacent to your protected area?	,

9,1

TRAINING PRIORITIES

Having completed this questionnaire a three greatest training needs? What service, on-the-job, or others)?	and thinking specifically of the requirements of form of training do you think would be best	of your job, what do you think are your to address these needs (e.g. formal, in
1.		
2.		•
3.		
This questionnaire was completed by:		Title (no name needed)
		Department/Section
		Organisation
		Country
	Date:	
How many years have you worked for	your department/organisation?	
If applicable, how many years have yo	ou been in charge of a protected area?	
What is the conservation status of you	ir protected area? (eg. national park, game	reserve etc)
What biome is most representative of marine, aquatic, dry forest, moist fore	of the protected area under your manageme st, desert	nt? (please circle) montane, savannah
Are you ma!e or female?	(Please tick appropriate box)	
PARCS REF NO:	Date	received:

REST AVAILABLE COOK

PAST TRAINING

Please list any additional training after primary school (with dates) not recorded in Row L (formal, in-service or other).

Post-Questionnaire Discussion

- 43. The discussions that follow the administering of the questionnaire are designed to elicit interviewees' views on training and potential innovative ideas for training. The discussions should flow freely, guided by the following questions:
 - 1. What is your overall impression of the questionnaire?
 - 2. Did the questionnaire teach you anything new about your job?
 - 3. Are there any important aspects of your job not covered by the questionnaire?
 - 4. Do you have any comments (positive or negative) about the questions?
 - 5. Has the questionnaire changed you idea of the role of a protected area manager?
 - 6. Would you have identified (or did you identify) your training priorities differently before reading the questionnaire?
- 7. What are the strengths and weaknesses of the present training in your department? Interviewers then lead a discussion of the different types of training (formal, in-service, on-the-job, and other).
 - 8. How would you evaluate the quality of the training in your department? Is more needed? Is better quality training needed? What are your suggestions?
 - 9. What kinds of training materials have you received? What is the source of these materials? On whose initiative have you received these materials?
 - 10. What constraints other than training do you face in your job?
 - 11. What are your three priority needs to fulfill your mandate as a protected area manager?

A written subjective assessment of training within the department is then requested by the interviewer.

44.		At the	close of	the sess	ion, the	Reg	ional Ma	anager.	s not	e how e	ach (questio	nnaire was	filled
out	and	other	relevant	details	on how	the	question	nnaire	was	conduc	ted,	where	applicable	, such
as:														

(a)	Croup	size:					
(b)	Time	taken	to	complete	the	questionnaire:	

- (c) If interviewee is known to the interviewer:
 - relevant details about the interviewee (e.g., experience, intellect, in what capacity known, and how long known)
- (d) Perception of overall level of comprehension of interviewees (including number of questions asked):

Amplification of Responses

- 45. One-on-one discussions may take place as the questionnaire is filled out. These discussions help the Regional Managers understand how well participants grasp the issues in the questionnaire and help validate the responses. As the Regional Manager meets with PAMs, he/she may collect a standard set of background statistics (see Background Information sheets). Other questions are used as prompts to provide an indication of the quality of the responses given to the questionnaire (see Indicative Information sheets). In addition, the Regional Managers conduct on-site visits whenever possible and attempt to verify the validity of responses.
- 46. The Regional Managers also attempt to verify the data they collect by: (i) asking the FOD to complete the questionnaire, assessing the skill levels required and the skill levels attained, in general, among the managers in the protected areas under their jurisdiction and (ii) interviewing appropriate field associates (individuals working with relevant nongovernmental organizations (NGOs) and other donors in the field) and asking them to complete the questionnaire, again assessing the skill levels required and the skill levels attained, in general, among PAMs with which they work.
- 47. The broad strategic recommendations from Phase I will be based on PAMs' perceptions of their own skill levels. Systematic skill level verification has not been built into the Phase I assessment but will be built into Phase II.

Background Information

For Each Reserve
Nar e of Reserve
Size
Years in Existence
Last Change in Protected Status (Year, Describe)
Predominant Habitat Type/s (Use International Union for Conservation of Nature and Natural Resources (IUCN) categories, plus marine)
Governing Institution: Name/s (Dept., Ministry) Government? Non-Government? Parastatal? Date of Last Change in Governing Institution
Funding Sources: Central Treasury? Direct Revenue from Reserve? Foreign Assistance? Sources Amount this Year from Each (This may be only relevant to national programs)
Technical Assistance: Source/s, Type, Amount
Does the Reserve Have: A Protection Force No. of Reserve Employees Biological Monitoring Program? No. of Monitors Community Liaison Effort? (Describe) No. of Employees Tourism Program? No. of Employees Safari Hunting Program? No. of Employees Research Program? (Describe) No. of Researchers Reserve-Level Training Program? No. of Trainers Annual Funding for Training % of Annual Budget Other (Specify)
Are Any of the Above Services Provided by Institutions or Individuals not Formally Part of Reserve's Organization (e.g., education program visits by national or NGO groups, research by university personnel)? Describe

		Illirasuucture	. Present	(e.g.,	16261 AG	ounumgs,	number	OI
Personne	el Information	on (At Reserve L	evel Only)					
		Structure (use orgevel Responsible?						
		Staff Position (e. lucation Officer,	g., Chief	Warden,	Assistant	Warden, Ch	ief of Gua	.rds,
Title		ative Assistant, N —	1echanic,	Guard):				
No. of P Responsi	ersons bilities							
Minimun	n Requirem	otion, if it exists) ents for Hiring: E Experience Skills	Education					
or actual each stafi E N	numbers for formal for the following formal for the following formal for the following formal	Skills s (answer with more the position): Experience in Re ional Years Expe	eserves					ion,
Staff Po		erent Personnel ir eded & No. of Pe rity	rsons for	Each:	_ N			
D	esirable			-				
Hired? Type/s:	YN_	•.	Personnel (•	ements as			\$ 4
D	esirable							

Indicative Information

Technical

1) Are there any endangered species resident in the reserve? What are they? (List) What is their conservation status? OK, Threatened? Abundant? Rare? Where found in reserve (habitat, geographical location)? If threatened, by what? How do you know?
2) Does tourism in reserve have any impact on wildlife: Positive impact? Y N What? Negative impact? Y N What? How do you know?
3) Are there species present in reserve that are important ecologically?Which?In what way? What role do they play?If their number were reduced or eliminated, what ecological results might occur?
Management
1) What do you look for in hiring a good guard? What procedure is followed if an employee is not working satisfactorily? What if he/she continues to work unsatisfactorily?
2) What kind/s of contact do you have with the public: Local? National? International? How important is contact with each of the above?
3) Do you personally write/do: Annual reports? Y N Other personnel who do Other regular program reports? Y N Other personnel Budget reports? Y N Other personnel Accounting? Y N Other personnel Guard scheduling, supervision? Y N Other personnel

Strategic Planning

1) Does the reserve have a management plan? Y N In progress Planned					
Date of formulation Date of last revision Is the plan used? Y N Somewhat Comments					
Is :. effective? Y N Somewhat Comments					
2) What plans/reports are regularly produced? (e.g., program, budget, patrols, visitor, research, education) Verify (ask to see and keep latest copies)					
Legal					
1) What is the legal status of reserve?					
2) What activities are illegal within?					
3) Is any extraction legal (renewable or non-renewable resources)? What?					
<u>Financial</u>					
1) Are regular reports compiled? (verify and keep)					
2) Are procurement and accounting done by the same or different people?					
3) Who must sign for disbursements/payments? How is this recorded?					

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VII. In-Country Training Opportunities Assessment

48. The Regional Managers conduct country-by-country surveys of institutions that provide training programs and opportunities. The Regional Managers use the questionnaire responses to help identify training sources that have been used by people who become PAMs, and then collect the following data on each training institution or program (see Training Institution's Background Information sheet). All available training materials and curricula are collected from the various training sources.

Training Institution's Background Information

Name					
Years in Existence					
Type: Governmental Non-Governmental Parastatal Other					
Supervising ministry, department institution					
Estimated annual program budget					
Estimated annual program budget Funding Sources: Government: Y N Dept.					
Course/Admission Fees					
Fee/Completion of Program					
Foreign Assistance? Y N					
For Each: Source Amount this Year					
Technical Assistance? YN					
For Each: Source, Type, Amount					
r or Eddin Bourco, Typo, Timount					
Technical Fields Covered in Training:					
Mark "E" if field is a primary emphasis (1-2 fields only)					
Mark "I" if field is included, but not primary					
Wildlife BiologyExtension/EducationReserve ManagementTourist Operation					
Reserve Management Tourist Operation Policies/Procedures Other (specify)					
Legal Planning					
Forestry					
Business:					
Administration					
Planning					
Financial Planning					
Personnel Management					
Number of Different Programs within Institution					
For Each Different Program:					
Type/Technical Fields (see above)					
Years in Existence					
Length of Training Program					
Frequency of Offering this Program: Continuous Yearly					
Other Regular Interval (specify)					
Irregularly (specify)					
"Degree" Conferred					
Admission Requirements: Education Experience					
Other (specify)					
Subjects/Course List/Themes					
-					

				Practical		On-Site	Other
(specify)_			Service				
Pre-service	e	In-S	Service				
Follow-Up							
Ind	ividual	Evaluat	tion Super	vision In	-Service		
Program E	Evaluati	on:Y_	N Date				
				or number/y	ear		
Number o			his past year				
			past 5 years				
			tory of program				
Full-Time							
No	•						
			is Program				
			iner Elsewhere _				
				um, minimum,	or number	s for each	
	iner if p						
H	lighest l	Education	onal Degree/Tra	ining	_		
Fro	m which	ch Instit	tution/Program?				
N			•	erience in Reser	ve	,	
	Wh	ere?					
Current C	!u rri culi	ıım:					
			date)	By Whom?			
Dat	te of Is	ist Revi	sion	By Whom? By Whom?			
Infi	ormatio	nal Mat	terials Used:	<i>Dy</i> 111101111			
			•	or			
7	raining	Manus	als? Y N	Name Author			
Training Manuals? Y N Name, Author Other (specify)							
`	J (3	pccity					
		•					
History Fo	llowing	Traini	ng:(Define base	number of gradu	lates and ti	me period bein	g considered
				ning session: 12			
				questions, give			5
•				1,		,	
Nu	mber G	etting J	obs in Field of	Training:			
			t Session	From last 5	years		
Average tenure (number of years) in Reserve Management:							
From Last Session From Last 5 Years							
Number Currently Working in Sector:							
From Last Session From Last 5 Years							
-			time limitation)				
-		(,				

49. In order to make preliminary assessments of the training sources, any available evaluations or reports on the training sources are collected. Trainers may also be asked to fill out the questionnaire in order to help evaluate the level of skill being taught in various courses. In addition, trainees (even though they may not be PAMs) may be asked to fill out the questionnaire to assess whether a course or program has accomplished training to a certain level (See alternative instructions for training institutions). Regional Managers will use PAMs' responses on the questionnaire and other information gleaned from the needs assessment to assess how well PAMs are being trained.

PROTECTED AREAS CONSERVATION STRATEGY (PARCS): TRAINING NEEDS ASSESSMENT

Four organisations, the African Wildlife Foundation, Wildlife Conservation International, World Wildlife Fund and the Biodiversity Support Program are working together on a project cailed PARCS. One of the main aims of the project is to identify the skills required for the job of projected area manager and to assess the training needs.

To achieve this we have developed a chart of the typical skills (competencies) required to do the job of protected area manager. We would like you to assist us by doing two trings:

- to check the appropriateness of the chart
- to assess the level of knowledge taught in a specified course at your institute

Before filling in the questionnaire please read everything through very carefully. This information will be confidential and will be used to build up an analysis of the training requirements for each country in Africa participating in the study.

The attached chart has 17 columns and 12 rows.

- Rows A-K show main divisions of the job.
- Row L will be used to identify the parts of the training course which are relevant to the column above.
- The first column shows accountabilities and responsibilities associated with each division A-K. Please add any further accountabilities and responsibilities specific to the job of protected area manager by writing in the relevant compartment.
- Columns 2-17 show the competencies associated with the job in terms of knowledge (2-7), mental skills (8-11), social skills (12-14) and attitudes (15-17).

You will notice that some compartments are blank. These do not need to be filled in.

KNOWLEDGE (columns 2-7)

Knowledge has been grouped into four levels:

. None has no knowledge of subject matter indicated

Some awareness of the subject and general applicability

3. Working sufficient knowledge to complete routine tasks

4. In-depth a breadth and depth of knowledge which enables initiative to be taken in non-routine situations

n/a = not applicable in present job. Please indicate your knowledge level.

We would like you to go down each column 2-7 and fill in the boxes.

In the left hand box put the number which corresponds to your view of the level of knowledge needed to do the job successfully.

In the right hand box (shaded) put the number which corresponds to your assessment of the level of knowledge taught in the course at your institute.

eg. in E5:

In-depth knowledge of relevant laws and regulations eg. firearms, arrest, charging and human rights

41 3

Such an answer shows us that the person completing the questionnaire agrees that in-depth knowledge is needed (4 in the left hand box). By putting 3 in the right hand box the respondent has identified the level of training provided.

When you come to the bottom of each column please complete the compartment (L) by showing which part of the training course contributes most to the knowledge of the subject in the column.

(PARCS INST)

Mental and social skills have been grouped into four levels:

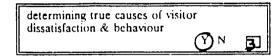
- None
- 2. Poor
- 3. Satisfactory
- 4. Good

We would like you to go down each column 8-14 and fill in the boxes.

First of all indicate whether each skill is appropriate to the job of protected area manager by circling either Yes (Y) or No (N).

Then indicate in the right hand box (shaded) the level of ability taught in the course for each particular skill.

cg. in F9:



Such an answer shows that this skill is required and the course teaches the level of skill needed to successfully complete this aspect of the job.

When you come to the bottom of each column please complete the compartment by showing which part of the training course contributes most to the skills in the subject of the column.

ATTITUDES (columns 15-17)

The chart indicates the principal attitudes of the job. All we require you to do is to answer three questions.

If you do not understand any of the questions in this questionnaire please leave the boxes empty and move onto the next question.

In order for you to keep a record of your completed questionnaires we are providing two copies of each section and a sheet of carbon paper. The WHITE sheets (numbers 1, 2, 3 & 4) are to be returned after completion. You may keep all of the COLOURED sheets. Once you have completed the questionnaire please carefully tear off the four white sheets and return them to the person organising this component of the PARCS project.

Thank you for helping us undertake this training needs assessment. We appreciate your time and input.







Biodiversity Support Program

(PARCS INST)

TRAINING PRIORITIES

Having completed this questionnaire of training should be focused on at if	and thinking specifically of the requirements institute?	its of a protected area manager, what areas	
1			
2.			
3.			
How many years have you worked for	your department/organisation?		
, , , , , , , , , , , , , , , , , , , ,	,,, g		
This questionnaire was completed by		Title (no name needed)	
		Department/Section	
		Organisation/Institute	
		Country	
	Date:		
PARCS REF NO:	Date received:		
		(PARCS INST)	

Q/

- 50. As time permits in Phase I, the Regional Managers also conduct a survey of possible training opportunities outside the institutions and programs already being utilized. Training opportunities in the country or at least in the region are sought that are cost-effective, efficient, local, culturally sensitive, on an appropriate scale, and that use local languages. Regional Managers visit such sources as: professional associations, employers' associations, consulting firms, universities, trade associations, accountancy firms, government institutions, tour/travel companies, hoteliers and hotel training schools, national institutes of management, law societies, and business management institutes.
- 51. In order to complete this part of the training opportunities assessment, Regional Managers first assess the data gathered in the region and determine the probable areas of need based on preliminary trends observed in the data. For each training need, possible sources of training are listed (for example, see below). Then, a few training needs are chosen for further information gathering.

Needs:

Opportunities:

Bookkeeping

Clerical school
Accounting firm

Industry

Personnel management

Business school

Management consulting firms

Industry

Tourist management

Hotel school

Business school

Tourism and safari companies

Law

Law school
Law firms

Infrastructure

Engineering firms

Department of roads training center

Strategic planning

Business school

Consulting firms

Industry



52. The following are four major categories of institutions that have the potential to provide training:

Training Institutions: Business Schools

Hotel Schools Law Schools

Public Works Training Centers (road building, vehicle maintenance)

Research Institutions: Zanzibar Marine Institute

Centre for Applied Social Sciences - Zimbabwe Desert Ecological Research Unit - Naimibia

Private Institutions: Law Firms

Accounting Firms
Construction Firms
Vehicle Repair

Facilities maintenance

Hotels

Safari Companies Tourism Operators Travel Agencies

Development or Conservation Projects

53. Regional Managers interview fairly senior members of chosen institutions. If training is not presently offered, they enquire whether they investigate future training possibilities. Regional Managers explain that PARCS is looking for non-traditional sources of training and information is being gathered on existing training institutions and private firms with expertise in that field. If they are interested in the concept, Regional Managers pursue additional information (see Alternative Training Opportunities Questions).

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Alternative Training Opportunities Questions

For Training Institutions

What is the objective of your institution?

Who are your students, where do they come from, why do they attend?

How is the school structured?

Degree? Course Structure? (e.g., full-year, partial, seminars, workshops, fieldwork)

Who are your instructors? What experience and education do they have generally? Do they work outside the institution?

General description of the curriculum

Where are the courses held? Many locations or one central location?

Is there field-based training, internships? (i.e., in a hotel, in an accounting firm)

Do you ever offer courses/seminars to outside groups (e.g., non-matriculated students, visitors) Would you be able to provide limited training to PAMS on certain topics to meet their needs? Could the training take place in the parks or would it have to take place in your facilities?

Could PAMS attend existing courses part-time or would they have to take the whole program? Could they only take one course?

How much would it cost? Are there government rates? Could it be free?

Do you have country orientation (e.g., Uganda Hotel school) or regional orientation (e.g., Mweka)?

Are you a private or government affiliated institution?

Do you receive donor assistance (financial or technical)?

For Private Companies

How does your staff get trained now?

Formal training (e.g., law school, business school)

On-the-job/in-service

Seminars/workshops

other? outside?

Do you provide any kind of in-service training? To whom? All levels? Could outsiders be brought into this system?

Do you ever provide training outside of your firm? Seminars? Workshops? Courses?

Do you know of anyone who does in your field?

Would you as an individual or your colleagues or staff be interested in providing semi-formal or informal training to PAMS in your field (e.g., seminars, lectures, field courses, refresher courses)?

What might it cost? Possible pro bono, government rates?

If not training itself, would you be willing to provide advice on addressing training needs in a cost effective, culturally sensitive way? (Efficient training that takes PAMS away from their jobs the least amount of time possible.)

Do you have affiliates in other countries, in the region or internationally?

Do your staff speak the local languages?

How long have you existed?

For Research Institutions

Do you train/instruct students or is the institution devoted purely to research?

Is the institution private or connected to the government somehow?

If you do training how is it organized? (Degree, partial degree, in conjunction with a university or school, seminars, lectures)

Do people come to learn from the outside (courses, lectures, informal)?

What training has your staff received at which levels? Receiving now?

Would you be interested in providing formal or informal training to PAMS either at your institution or in the field?

What would it cost, Government rate? free?

Do you have international or regional affiliations?

How long have you existed and expect to in future?

Development or Conservation Projects

What are the objectives of the project?

Do you provide training/instruction to staff assistants/local people? on-the-job, organized inservice, send them away for formal training?

Do outsiders ever come to the project for either formal or informal training/learning experiences?

Do your technical stare ever lecture, or instruct outside of the project?

Would you be interested in providing formal or informal training to PAMS either at your project or as a visiting lecturer?

How long is your project expected to last? How long will the experts remain in the field?

Do you already have any connection to a protected area system?

Could you provide training consistently, regularly or only when there is time?

What would it cost?

Do your staff and/or Principle Investigators speak the local languages?

54. The information gath red on alternative training opportunities will be utilized in Phase II of PARCS.

VIII. Out-of-Country Training Opportunities

BSP is building a database of selected training opportunities in West Africa and the Sahel and other training opportunities outside of Africa. When Regional Managers discover training opportunities in countries outside their region, they notify the Regional Manager in that region. As the Regional Managers discover training opportunities outside the three regions (e.g., West Africa, the U.K., the U.S.), they notify BSP to do the follow-up investigation. A catalog of training opportunities and resources will be available from BSP at the close of the project.

IX. Follow-Up Activities

- Regional Managers individually determine, on a case-by-case basis, whether to complete entire assessment in one lengthy trip to the country, or to complete the assessment in two or more trips.
- 57. Before leaving a country and depending on the particular strategy agreed for the assessment, the Regional Manager may hold a final meeting with the senior official(s) at headquarters to brief them on meetings and to elicit comments on training in general and the PARCS project in particular. Depending on USAID desires, the Regional Managers will also brief USAID on their activities in country.
- 58. When second visits are made to a country, the Regional Manager will bring senior level people involved in the assessment up-to-date on the progress of PARCS and report on any early trends in training priorities identified from a preliminary analysis of the questionnaires and training opportunities examined. They will also try to take any follow-up action requested.

X. Feedback

- 59. Regional Managers submit monthly reports to BSP. These reports are circulated to the other Regional Managers and members of the core team.
- 60. Regional Managers are in frequent contact with each other, the core team, and the BSP coordinator through telephone, courier, and fax. Meetings for the Regional Managers and meeting for the entire PARCS team are scheduled throughout the course of the year.

61. Copies of the final report will be distributed to all organizations/departments who participated in the project.

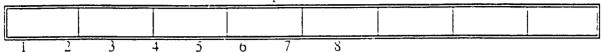
XI, Data Organization and Analysis

62. Data sheets for the questionnaire have been developed in Wordperfect (see following Data Sheets). Each Regional Manager transcribes the data onto the data sheets. These data sheets are then be sent to Nairobi for data entry. Data entry will be done throughout the life of the project.

PARCS Reference Number

63. A reference number system has been designated for each completed questionnaire. This system involves a unique number/letter combination and will allow for the sorting of data by several factors (e.g., country, biome, organization). The reference number consists of nine compartments and is filled out according to the instructions on the following page.

PARCS REFERENCE NUMBER Unique code for each individual questionnaire made up of 8 compartments.



Compartment 1:

I letter, 4 numbers

Regional Manager initial (D,A,or M)
Way questionnaire was administered (1-7)

Number of questionnaire (001-999)

Regional Manager

- 1. Explain questionnaire to PAM/FOD and fill out with Regional Manager nearby
- 2. Explain questionnaire to PAM/FOD and leave to fill out on own time
- 3. Explain questionnaire to PAM/FOD at workshop and fill out individually with Regional Manager nearby

Consultant

- 4. Explain questionnaire to PAM/FOD and fill out with consultant nearby
- 5. Explain questionnaire to PAM/FOD and leave to fill out on own time
- 6. Explain questionnaire to PAM/FOD at workshop and fill out individually with consultant nearby
- 7. Send out questionnaire by mail

Compartment 2: Position in organization of person being interviewed 1 nu aber (i.e., 1-9)

- 1. Position below that of PAM (e.g., Assistant Park Warden)
- 2. Protected Area Manager
- 3. Position senior to PAM (e.g., Regional Warden)
- 4. Field Operation Director (FOD) filling in questionnaire for PAMS
- 5. FOD (filling in questionnaire for own job)
- 6. Trainer at a formal training institute
- 7. Research Officer
- 8. Field Associates (NGOs/Aid Agencies)
- 9. PAM working in the private sector

Compartment 3: Organization 2 letter code, personal to each regional manager. If

compartment 2 is a trainer, compartment 3 indicates a code

for the course (e.g., diploma, certificate)

Compartment 4: Country (2 letter code)

Ethiopia ET Zimbabwe ZW Burundi BU Kenya KE Zambia ZA Cameroon CM Somalia SM CO Botswana BO Congo Tanzania TN RW Mozambique MZ Rwanda Uganda UG Zaire ZR Malawi MW Zanzibar ZN Swaziland SW Lesotho LE

Compartment 5: Years in service 3 columns. 1 letter, 2 numbers (i.e., A-D 01-99)

A: 1-5 years of service

B: 6-10 years of service

C: > 10 years of service

No. of years as a PAM

In cases where respondents do not indicate the number of years they have worked for their organization, or the number of years as a PAM, these spaces in the Reference Number should be left blank.

Compartment 6: Conservation Status 2 number column n=10-80 (using IUCN Management Categories as listed in McNeilly & Miller, 1984)

Second column is filled in if two protected areas are managed. Default is blank. If trainer is filling in the form: XX. If respondent is not working in a protected area (e.g., HQ) leave both columns blank.

Category 1: Scientific Reserve/Strict Nature Reserve

Category 2: National Park

Category 3: Natural Monument/Natural Landmark

Category 4: Nature Conservation Reserve/Managed Nature Reserve/Wildlife Sanctuary

Category 5: Protected Landscape/Seascape

Category 6: Resource Reserve

Category 7: Natural Biotic Area/Anthropological Reserve

Category 8: Multiple Use Management Area/Managed Resource Area

Compartment 7: Biome 2 letter code

First column is representative habitat. Second column is secondary/omer (default is blank).

M: Montane
S: Savanna
O: Marine
F: Dry Forest
Moist Forest
Regional/national

A: Aquatic X: If trainer filling in the form

Compartment 8: Gender 1 column

Male: 0 Female: 1

Data Sheet A

64. This data sheet allows the additional accountabilities and responsibilities that are identified to be compiled. The Regional Manager keeps a running total and codes according to compartment. These additional accountabilities and responsibilities will be reviewed to assess whether there are any common additions or if additions are country specific. This data will be used to validate the "accountabilities and responsibilities" section of the questionnaire.

PARCS DATA SHEET A

Parcs Ref. No:	Compartment No: A1 to K1	Additions and/or deletions to 'Accountabilities & Responsibilities'	
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Data Sheet B

65. This data sheet focuses on knowledge. Questions are numbered from the first one in compartment B2, down the columns to question 64 in K7.

Column A is already determined by the levels of knowledge in the questionnaire. These are already filled in.

Column B is the response in the left-hand box.

Column C is the response in the right-hand box

For Columns B and C, 0 = n/a, 1 = none, 2 = some, 3 = working, and 4 = in-depth.

Column D (A-B) is calculated by computer.

Column E (B-A) is calculated by computer.

Column F is either A-B or B-A, whichever is the positive value. This is the validation of the questionnaire. The bigger the number in this column, the greater the difference in perceptions between the developers of the questionnaire and the respondent as to the skill level needed to do the job of a PAM successfully.

Column G is A-C, the training need measure based on the PARCS skill level. In other words, if the questionnaire indicates that, for example, in-depth knowledge of relevant laws is required (4), but the respondent indicates that he/she only has a some knowledge of these laws (2), then a training need according to the PARCS team has been identified (calculated as 4 - 2 = 2; a 0 or negative value would indicate no training need).

Column H is B-C, the training need measure based on the respondents' skill level. In other words, if the respondent indicates that, for example, working knowledge of relevant laws is required (3), but the respondent indicates that he/she only has some knowledge of these laws (2), then a training need according to the respondent has been identified (calculated as 3 - 2 = 1; a 0 or negative value would indicate no training need).

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Data Sheet C

66. This data sheet is for "Mental and Social Skills". Questions are numbered 1 to 69 starting in A8 and going down the columns to K14. In the first column, the Regional Managers enter 1 for yes or 0 for no. The skill level column is to be filled in with a 1 (none), 2 (poor), 3 (satisfactory), 4 (good). The figure 1 or 2 indicates a training need: a 3 or 4 indicates no training need.

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Data Sheet D

- 67. This data sheet is for attitudes. The columns are coded according to the following generalized attitudes expressed by project participants.
- A. <u>Instilling Work Ethics</u>
- A1. referring staff regularly to Administrative Orders on codes of work conduct and behavior in staff meetings, seminars.
- A2. showing hard work and dedication through example
- A3. ensuring objectives of the organization are explained to staff
- A4. acknowledging good work in others while positively criticizing bad work
- A5. showing tolerance to others' points of view
- A6. showing understanding when taking disciplinary measures
- A7. providing attentive supervision to staff's work, especially when new responsibilities are given
- A8. developing performance appraisal schemes
- A9. encouraging subordinate staff to participate in program formulation
- A10. cultivating good working relationships which creates rapport for instruction
- All. ensure that staff are suitably equipped as regards their training and tools (equipment) needed to perform efficiently.
- A12. never criticize organization openly
- B. <u>Instilling commitment to conservation</u>
- B1. showing dedication to national, regional and local conservation objectives
- B2. explaining to staff the value of conservation by conducting regular in-service refresher courses on conservation ethics
- B3 demonstrating the importance of conservation in relation to human needs

- B4 becoming involved in extension conservation activities, especially with school groups/wildlife clubs
- B5 participating in the design, implementation and analysis of effective law enforcement programs
- B6 teaching protected area management that fully covers conservation concept
- B7 discouragement of activities contrary to the ethics of conservation (e.g., off road driving, killing animals, animal disturbance)
- B8 provide incentives for conservation staff especially the wardens who are lowly paid for outstanding performances etc so as to motivate them
- B9 teach cost and benefits of conservation
- B10 studying past conservation efforts and plans and learning from experiences of others and causes of their successes and failures
- B11 providing necessary working tools
- B12 reward parks or conservation areas with outstanding conservation records
- C. <u>Instilling Healthy Attitudes to Adjacent Communities</u>
- C1. accepting the validity of community participation in protected area management
- C2. listening to and demonstrating willingness to understand community problems
- C3. instructing staff on the value of harmonious relations with adjacent communities to the conservation objectives of protected areas
- C4. taking an active role in conflict resolution (e.g., problem animal control)
- C5. taking opportunities to provide employment for local communities as appropriate to the conservation objectives of the protected area
- C6. maintaining dialogue with local communities, and getting staff involved in keeping communities up to date with conservation developments in the area
- C7. seeking ways in which tangible benefits can accrue to communities without jeopardizing the area's conservation objectives

PARCS DATA SHEET D: ATTITUDES

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Data Sheet E

68. This data sheet pulls together the information on languages and computer use. Language responses are coded as Y (yes), N (no), or B (blank). Computer use responses are coded as Y (yes), N (no), or B (blank) and then 1 or 0 under uses for WP (word processing, AC (accounting/budgeting), and DA (data analysis).

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Data Sheet F

69. This data sheet looks at the three training priorities identified by the respondents and categorizes them into the compartments of the questionnaire. The categories are A-K and 2-17 as on the questionnaire: 18 is other. When the figure 18 is filled in a column, a comment must be added in the far right column as to what "other" is. Tick marks are made whether the training is F (formal), I (in-service), J (on-the-job), or O (other). When more than three training priorities are listed, only the first three are recorded.

PARCS DATA SHEET F: RESPONDENTS' STATED TRAINING PRIORITIES

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Data Sheet G

- 70. This data sheet summarizes training already received as described in compartment L and uses categories 2-17 as on the questionnaire.
- 71. Column 18 is for the name of an institute where known (a two-letter code is used) and column 17 is for details of the course (2-letter code is used). This primarily refers to formal wildlife institutes (i.e., those that will come under 1) and will allow Mweka/Garoua graduates to be pulled out. The type of training is divided into five sections:
- 1. Formal wildlife institute (e.g., Mweka)
- 2. Other formal training (e.g., seminars, workshops)
- 3. In-service
- 4. On-the-job
- 5. Other

If a respondent does not indicate what their course at a formal institute was (e.g., diploma or certificate) a dash is inserted in column 19.

- 72. In order to be able to record how recently the respondent has graduated from an institute, four sections have been put within row 1. This information is requested on the questionnaire. If a respondent does not indicate a specific date, "no date" is marked. As no dates are requested for the other types of training, there are no subsections in rows 2, 3, or 4. Under 5, however, other training is identified if it is deemed relevant. In this data sheet records are only made with a 1. In row 6, B is used to indicate that a blank was left in this compartment of row L (but other compartments in row L are filled in); a Z is used to indicate if all of the compartments in row L were left blank.
- 73. Column 20 is for other. A Z in column 20 will indicate that respondents were not asked to record additional training on page 4 of the questionnaire. A B indicates that respondents were asked to record their additional training on page 4 of the questionnaire, but the page was left blank. Column 21 is used for institute and column 22 for course.

PARCS DATA SHEET G: SUMMARY OF TRAINING RECEIVED

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Analytical Questions

74. Data generated by the training needs and training opportunities assessments will be used to answer a suite of overarching questions. These questions are listed below and are divided into broad, general categories of enquiry each with a subset of subordinate, specific ones.

What are the responsibilities of a PAM? Are these responsibilities universally recognized?

What are the descriptions and understandings of the responsibilities of a PAM currently declared by resource management authorities?

What are the responsibilities recognized by PAMs?

How do PAMs' perceptions compare with PARCS' perceptions?

How do trainers' perceptions compare with PARCS' perceptions?

Has the job of PAM changed over the last 20 years?

What are others' perceptions: do they match PAMs' and/or PARCS' perceptions?

What are the constraints on meeting these responsibilities? Where does training fit in?

What are the overall constraints?

What is the importance of training in overcoming constraints?

Are PAMs skilled to the level judged by this training needs assessment to satisfactorily do their job? Where are the deficiencies?

Are skills satisfactory compared to PARCS' perceptions of job skills?

Are there differences letween biomes in the technical knowledge of PAMs?

What training has been received by current PAMs that is perceived by them as useful? How much? What kinds? Relevant to which kinds of job requirements?

What is the existing training that has been received by current PAMs?



Comparisons of types of training received by PAMs, in respect of years of service, that has contributed most to gaining skills.

Does training received cover all major requirements?

How well does existing training prepare PAMs? Does type of training received reflect the degree of preparation for requirements?

Does exposure to various conservation techniques (other than in-service training) improve PAMs' skills and knowledge?

What do training programs aim for?

Assessments of Field Operations Directors (FODs)

What are the responsibilities of senior management positions (i.e., FOD)?

What kind of training has been received in these areas?

What are FOD training priorities?

What further training is required?

Where are the biggest gaps perceived by PAMs between self-evaluated skills and those required for the job?

Where are the biggest gaps perceived by others?

What are the contraints to training?

What present programs could be restructured/enlarged to include training opportunities for PAMs?

Are there other appropriate training opportunities that have not been utilized?

75. Regional reports and an integrated final report of the findings of the Phase II assessment will be produced in September 1993.

XII. References

Child. Dr. Graham, and Leonard D. Sefu. 1987. "Needs and Priorities for Training in Wildlife Management and Utilisation in the SADCC Region." Results of a consultant mission on behalf of the Coordinator for Forestry, Fisheries and Wildlife, Government of Malawi.

Jingu, R.A. 1986. "A Study on Wildlife and Protected Area Management Training and Manpower Requirements in Africa." United Nations Food and Agriculture Organization.

ANNEXE 2:

TRAINING OPPORTUNITIES ASSESSMENT

12

Institutions used by DNPWM for the training of Assistant PAMs and PAMs

Mushandike College, Zimbabwe

University of Uppsala, Sweden University of Wales, UK
University of Guelph, Canada University of California, USA
University of North Wales, UK Humberside College, UK
Strathclyde University, UK Stirling University, UK
Lancaster University, UK Colorado State University, USA
University of Bergen, Norway Aberdeen University, UK
Witwatersrand University, RSA Oxford University, UK
University of Alberta, Canada Frostburg University, USA
Regional Aquaculture Centre, Nigeria



ANNEXE 3:

'GAP ANALYSIS' RESULTS

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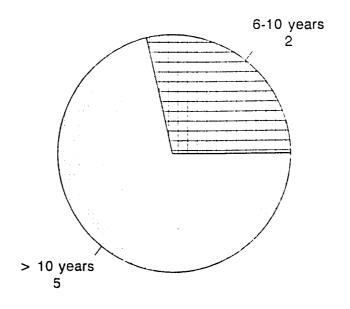
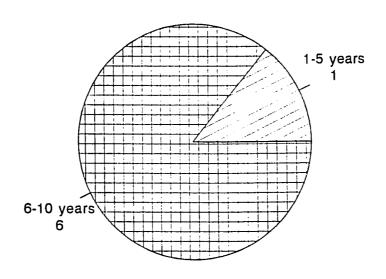


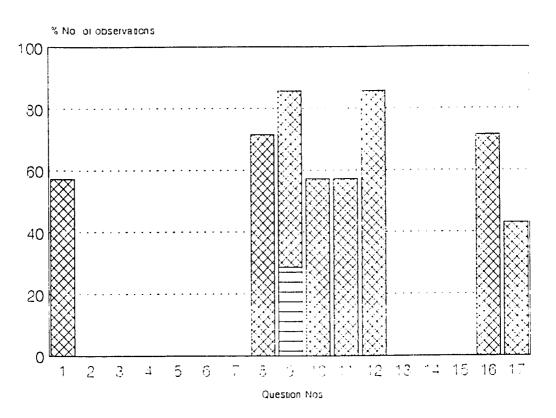
FIGURE 2:

Total Sample n = 9 (PAMS & Ass. PAMS combined: n=7)

2.3.3b Respondents years as a PAM Zimbabwe

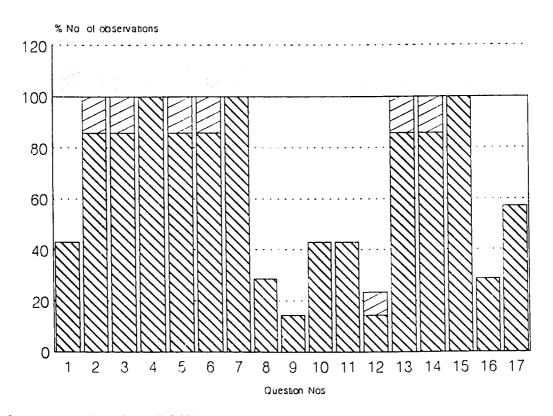


2.3.4 b. Validation analysis:Knowledge of FAMs relative to FAECS. Technical Fe scores: Empagage

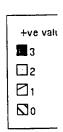


Total Sample n=9 (Asst PAMs & PAMs combined n=7)

2.3.4.b Validation analysis: Knowledge of PAMs relative to PARCS
Technical +ve scores: Zimbabwe



Total Sample n=9 (Asst PAMs & f'AMs combined n=7)



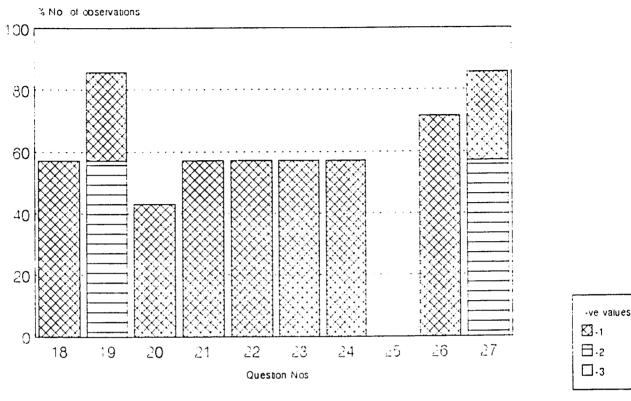
-ve value ☑-1

∃.2

□ -3



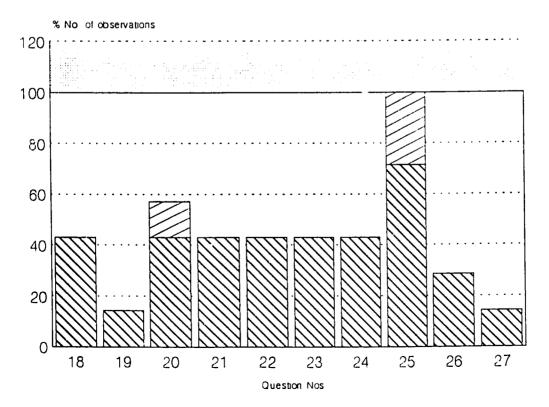
2.3.4 b. Validation analysis: Knowledge 11 PAMs relative to FARCO

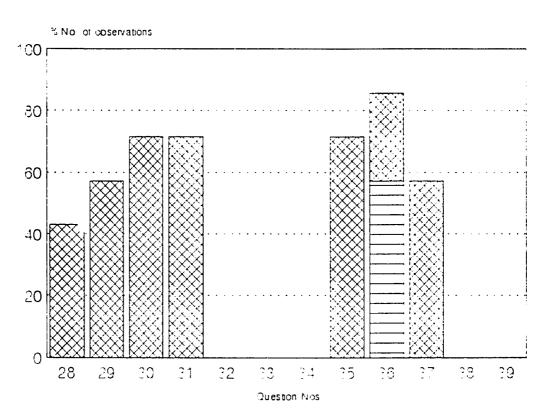


Total Sample n=9 (Asst PAMs & PAMs combined n=7)

2.3.4.b Validation analysis:Knowledge of PAMs relative to PARCS

Management +ve scores: Zimbabwe

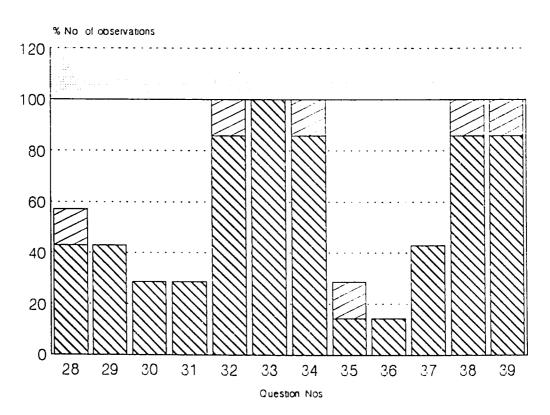


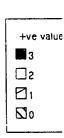


---e value □-1 □-2 □-3

Total Sample n=9 (Asst PAMs & PAMs combined n=7)

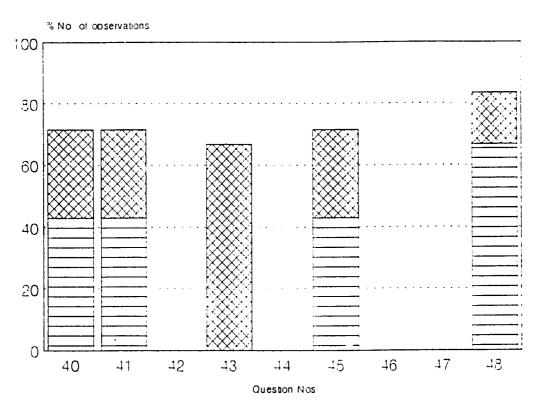
2.3.4.b Validation analysis Knowledge of PAMs relative to PARCS Planning +ve scores: Zimbabwe











-ve values

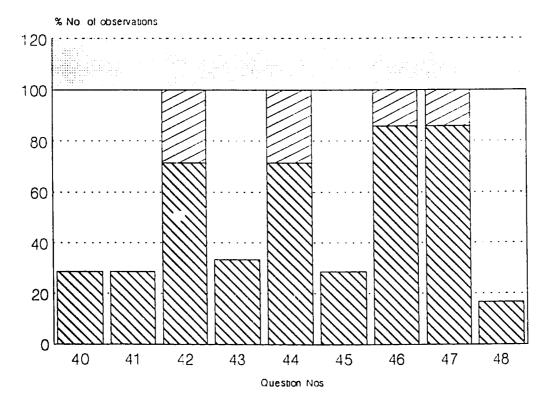
☐ -1

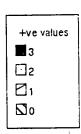
☐ -2

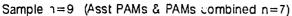
☐ -3

Total Sample n=9 (Asst PAMs & PAMs combined n=7)

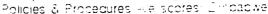
2.3.4.b Validation analysis: Knowledge of PAMs relative to PARCS Legal +ve scores: Zimbabwe

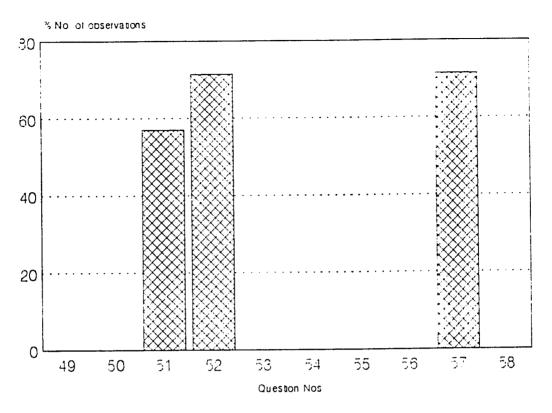






2.3.4 b. Validation analysis: Knowledge of PAV's relative to PARCS

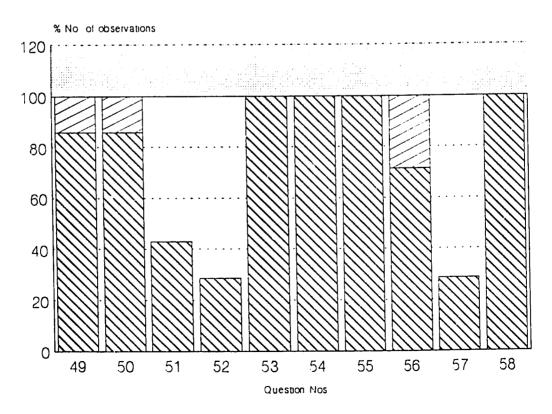




⊠-1 □.2 □-3

Total Sample n=9 (Asst PAMs & PAMs combined n=7)

2.3.4.b Validation analysis: Knowledge of PAMs relative to PARCS Policies & Procedures +ve scores: Zimbabwe

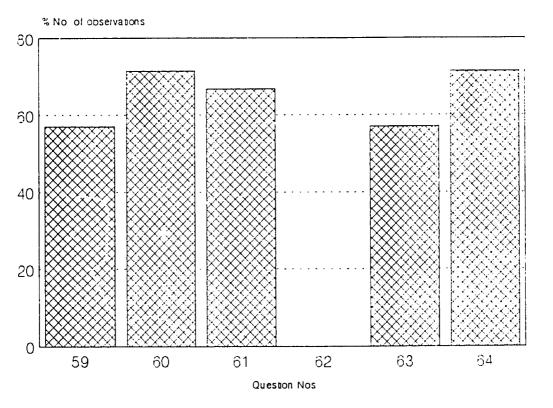


+ve value 3 □ 2 □1 \square 0

Total Sample n=9 (Asst PAMs & FAMs combined n=7)



2.3.4.b Validation analysis: Knowledge of PAMs relative to PARCS Financial -ve scores: Embabwe



-ve values ☑-1

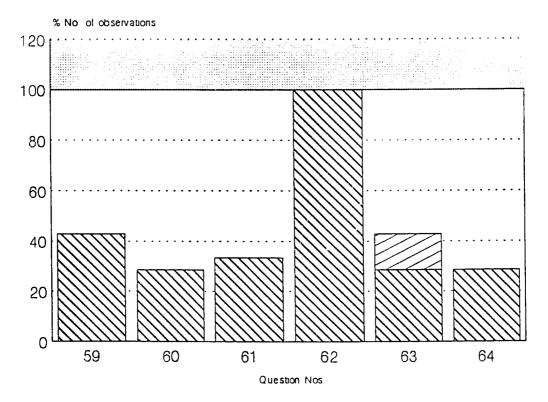
∃-2

3

Total Sample n=9 (Asst PAMs & PAMs combined n=7)

2.3.4.b Validation analysis: Knowledge of PAMS relative to PARCS

Financial +ve scores: Zimbabwe



+ve values

■3

| ⊠0

Total Sample n=9 (Asst PAMs & PAMs combined n=7)

2.3.4c PAMs' Measure of Agreement: PARCS validation score Zimbabwe

		Total % of combi	ned scores of -1.0.1
COMPETENCY	Question No	Question	Competency average
Technical	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	100 100 100 100 100 100 100 100 71.4 100 100 100 100 100 100	98.3
Management	18 19 20 21 22 23 24 25 26 27	100 42.9 100 100 100 100 100 100 100 42.9	88.6
Planning	28 29 30 31 32 33 34 35 36 37 38 39	100 100 100 100 100 100 100 100 42.9 100 100	95.2
Legal	40 41 42 43 44 45 46 47 48	57.1 57.1 100 100 100 57.1 100 100 33.3	78.3
Policy and Procedures	49 50 51 52 53 54 55 56 57 58	100 100 100 100 100 100 100 100 100	100
Financial and Accounting	59 60 61 62 63 64	100 100 100 100 100 100	100

Overall % accuracy score

93.4

Total sample: n = 9

Asst PAMs & PAMs combined: n = 7



TABLE 4:
2.3.4d Own score validation analysis: Knowledge average scores Zimbabwe

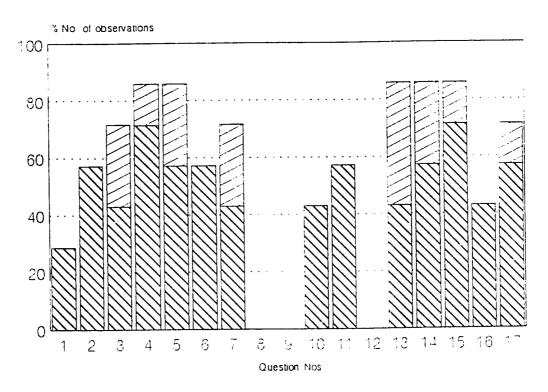
COMPETENCY	Os	Box	PARCS	At age Country				P	OSITION				· · · · · · · · · · · · · · · · · · ·
	Qs No.	No.	Score	/ Org. Score	1 n=	2 n=7	3 n = 2	4 n=	5 n=	6 n=	7 n≃	8 n=	9 n=
Technical	123456789011234567	BumereCIIKKKK	34444 44432 333444433	3.6 3.9 3.9 4 3.9 3.9 4 3.7 3.1 3.6 3.9 3.9 4 3.7		3.6 3.9 3.9 4 3.9 4 3.7 3.6 3.6 3.9 3.9 4 3.7	4 4 3.5 3.5 4 3.5 3 3 4 4 4.5 3.5						
Management	18 19 20 21 22 23 24 22 25 27	< < < BBFGH	3 2 3 3 3 3 3 4 3	3.6 3.4 3.6 3.6 3.6 3.7 3.7 3.7		3.6 3.4 3.6 3.6 3.6 3.6 3.7 3.7	4 3.5 3 3 4 3.5 4						
Planning	28 29 30 31 32 33 34 35 36 37 38 38 39	ABOD#FGH-KKK	3 3 3 4 4 4 3 2 3 4	3.3 3.6 3.7 3.7 3.9 4 3.6 3.4 3.6 3.9 3.9		3.3 3.6 3.7 3.7 3.9 4 3.9 3.6 3.4 3.9 3.9	3.5 4 3.5 4 3.5 3.5 3.5 4 4 4 3.5						
Legal	10 11 12 13 14 15 16 17	ABEFGH-1	2 2 4 3 4 2 4 4 2	3.1 3.7 3.7 3.7 3.7 3.1 3.9 3.9 3.9		3.1 3.7 3.1 3.7 3.1 3.9 3.9 3.0	3.5 3 4 3.5 4 3 2						
	19 50 51 52 53 54 55 66 57 58	ABCDEFGH-J	4 4 3 3 4 4 4 4 4 3 4	3.9 3.9 3.6 3.7 4 4 4 3.7 3.7		3.9 3.9 3.6 3.7 4 4 4 3.7 3.7	4 4 4 4 4 4 3.5 2.5 3.5						
1	59 50 51 52 53 54	COHI-K	3 3 4 3 3	3.6 3.7 3.1 3.4 3.4 3.7		3.6 3.7 3.1 3.4 3.4 3.7	4 4 1.5 1.5 2 3.5						

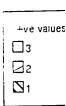
Total sample: n = 37 Asst PAMs & PAMs combined: n = 32



2.3.5.a. PAMs gap analysis relative to PARCS

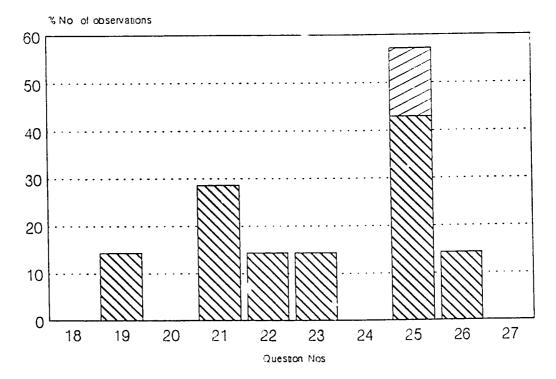
Technical Innowledge: Zimbabwe





Sample n=7 (PAMs & Ass PAMs)

2.3.5.a. PAMs gap analysis relative to PARCS Management Knowledge: Zimbabwe



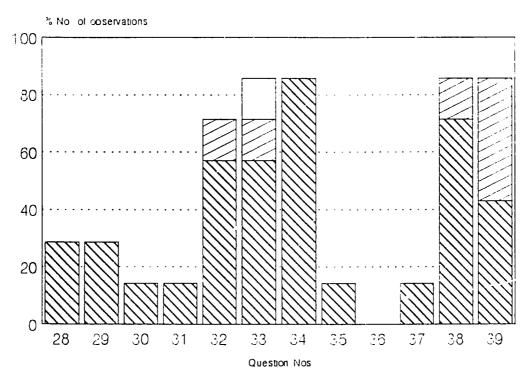






2.3.5.a. PAMs gap analysis relative to PARCS.

Planning Knowledge: Zimbabwe

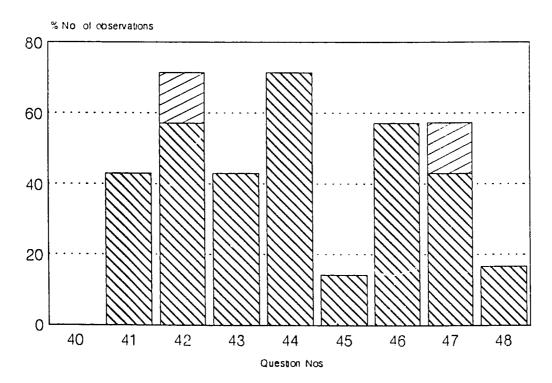


+ve values □3 \square_2 \square_1

Sample n=7 (PAMs & Ass PAMs)

2.3.5.a. PAMs gap analysis relative to PARCS

Legal Knowledge: Zimbabwe



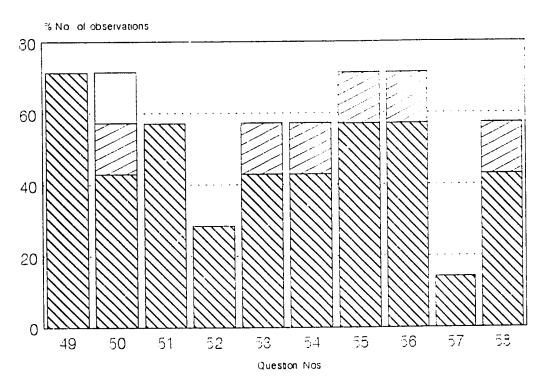
+ve values □3

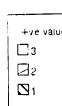
2

 \square_1

2.3.5.a. PAMs gap analysis relative to PARCS

Policies & Procedures inhowledge. Eimpapiwe

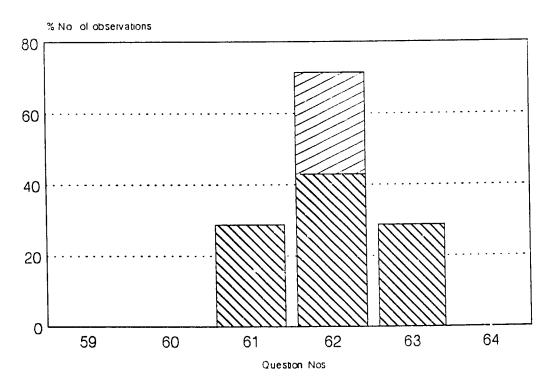




Sample n=7 (PAMs & Ass PAMs)

2.3.5.a. PAMs gap analysis relative to PARCS

Financial Knowledge: Zimbabwe

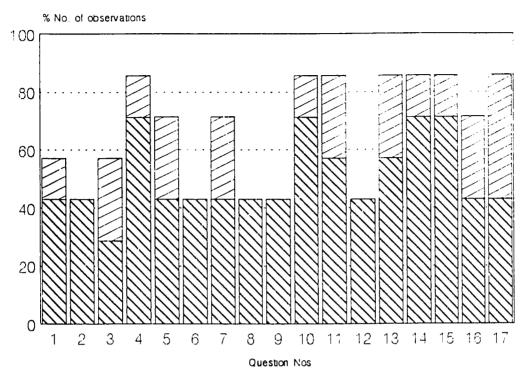








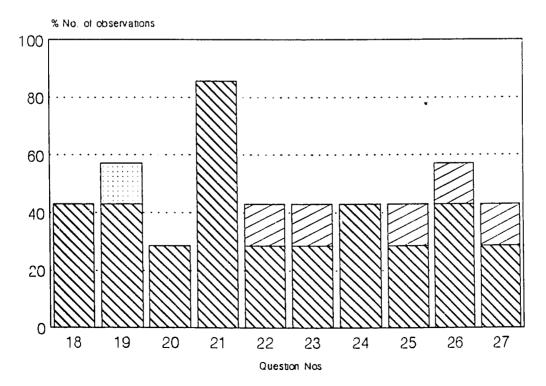
2.3.5.b. PAMs gap analysis relative to own score Technical Knowledge: Z.mbabwe

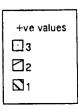


+ve values
3
2
11

Sample n=9 (PAMs & Ass PAMs: n=7)

2.3.5.b. PAMs gap analysis relative to own score Management Knowledge: Zimbabwe



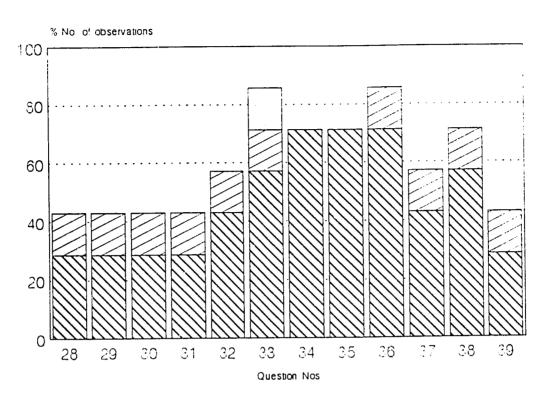


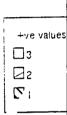
Sample n=9 (PAMs & Ass PAMs: n=7)



2.3.5.b. PAMs gap analysis relative to own score

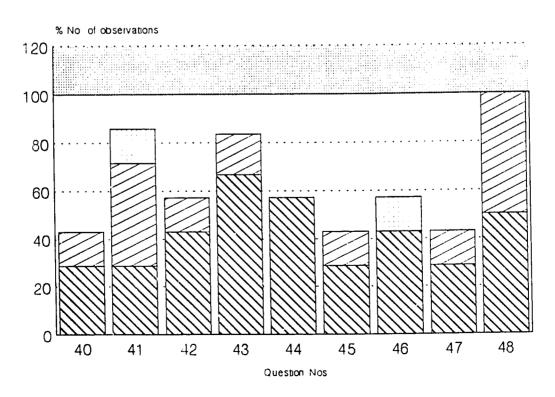
Planning knowledge: Zimbabwe



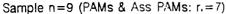


Sample n=9 (PAMs & Ass PAMs: n=7)

2.3.5.b PAMs gap analysis relative to own score Legal Knowledge: Zimbabwe



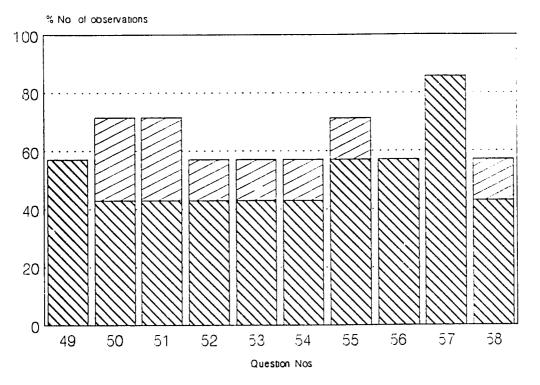






2.3.5.b. PAMs gap analysis relative to own score

Policies & Procedures Knowledge: Zimpapwe



+ve values

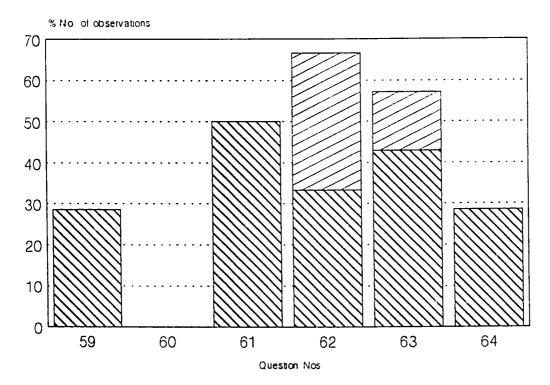
3

2

11

Sample n=9 (PAMs & Ass PAMs: n=7)

2.3.5.b PAMs gap analysis relative to own score Financial Knowledge: Zimbabwe



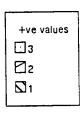


TABLE 5: 2.3.5d Parcs score gap analysis: Knowledge average scores Zimbabwe

COMPETENCY	Qs	Box	PARCS	Average Country				PC	OSITION				
COMPETENCI	χο.	No.	Score	/ Org. Score	1 n=	2 n = 7	3 n=2_	4 n=	5 n=	6 n=	7 N=	8 n=	9 n=
Technical	123456789011234567	######################################	34444432333444433	0.29 0.57 1 1.14 0.57 0 0.43 0.57 0 1.29 1.14 1 0.43 0.86		0.3 0.6 1 1.1 0.6 1 0 0.4 0.6 0 1.3 1.1 1 0.4	0.5 0.5 0.5 1.5 1.5 0.5 0.5 0.5 2.5 1.5 1.5						
Management	18 19 20 22 23 24 25 27	AAABBFGHJJ	3 3 3 3 3 4 3	0 0.14 0 0.29 0.14 0.14 0 0.71 0.14		0 0.1 0 0.3 0.1 0.1 0.7 0.1	1 0 0.5 0.5 1 1 0.5 2 1.5						
Planning	28 29 30 31 32 33 34 35 36 37 38 39	A B C D E F G H - K K K	3 3 3 4 4 4 4 3 2 3 4 4	0.29 0.29 0.14 0.14 0.86 0.86 0.14 0 0.14		0.3 0.3 0.1 0.9 1.3 0.9 0.1 0	1 1.5 1.5 1.5 1.5 2.5 2 1.5 0.5						
Legal	40 41 42 43 44 45 46 47 48	A B E F G H - J J	2 2 4 3 4 2 4 4 2	0 0.43 0.86 0.43 0.71 0.14 1 0.71 0.17		0 0.4 0.9 0.4 0.7 0.1 1 0.7 0.2	0 0.5 1.5 1.5 1 1						
Policy and Procedures	19 50 51 52 55 56 56 58	ABCDEFGH	4 4 3 3 4 4 4 4 3 3	0.71 1.14 0.57 0.29 0.71 0.71 0.86 0.86 0.14		0.7 1.1 0.6 0.3 0.7 0.7 0.9 0.9 0.1	1 2 1.5 1.5 1.5 2 2 1.5 1.5						
Financial and Accounting	59 60 61 62 63 64	CCHH-K	3 3 4 3 3	0 0 0.29 1 0.29 0		0 0 0.3 1 0.3	1 0 1 2 2 (.5						

Total sample: n = 9 Asst PAMs & PAMs combined: n = 7



2.3.5f PAMs Technical Knowledge skill level with respect to Biome: Zimbabwe '

													В	IOME	ES												
Question #		A			F			M			O			R			D			S			W			X	
	1	2	3	l	2	3	I	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
1					1 6 1		1	0	0								1		2	0	0					1	
2							1	0	0					! ! !							 	2	U	()			
3							1	0	0			<u> </u>			 				2	υ	()	2	0	()		<u></u>	
4						! !	1	0	0			! ! !					i I		2	2	0	2	()	()			
5	3						l	O	0										3	2	0					<u>. </u>	
6							1	0	0									 	2	O	0					i I	
7	- 1	1					1	0	0										2	2	0		i i				
8																											
9																							 				
10							1	0	0										1	0	0					i !	
11	-						l	0	0										1	0	0						
12																					i i						1
13							1	0	U										U	5	0						
14							l	0	0								i		2	3	()						
15	-						1	0	0										3	2	()						
16																			5	0	0						
17	<u> </u>						1	0	0								i I		3	2	0						

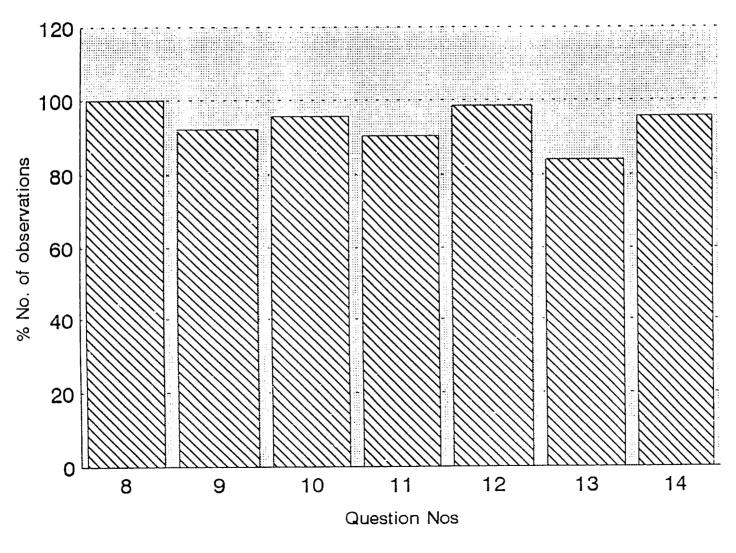
Total sample: n=9

2.3.5f PAMs Technical Knowledge skill level with respect to Biome: Zimbabwe

													Bl	ОМЕ	S												
Question #		A			F			M			O			R			D			S			W			X	
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
1					1 1 1	i i	1	0	0		i i						!		2	0	0			<u> </u>		<u> </u>	<u> </u>
2			!		! !		1	0	0		! ! !											2	Ü	U		<u> </u>	<u> </u>
3					! !	i !	1	0	0										2	0	0	2	0	0		<u> </u>	<u> </u>
4			!			!	l	0	0										2	2	0	2	0	0			<u> </u>
5					<u> </u>	! !	1	0	0		 								3	2	0					ļ 	
6					! !		1	0	0									l L	_ 2	0	Ü					<u> </u>	<u> </u>
7			 		1 1 1		1	0	0		; - ! !								2	2	0					<u> </u>	<u> </u>
8					1																			İ		<u> </u>	<u> </u>
9						1					! ! !													<u> </u>		<u> </u>	<u> </u>
10			!		 		1	0	0	Ì	·								1	0	Ü						<u> </u>
11					-	!	1	0	0		1						! ! !	i i	1	0	0			i 		<u> </u>	<u>i</u>
12			! ! !] 				i i		i i i	! ! !		i ! !	<u> </u>
13			 		!	!	1	0	0			†					1	: :	0	5	0		; ; ;	! ! !			<u> </u>
14			! 		!	!	1	0	0			 					1	; - <u></u> † 1	2	3	0		! !	1			i i
15		!	 		!	!	1	0	0		1	!					1	!	3	2	0						i
16			!		 	!		! !				!					1		5	0	0						<u> </u>
17			!		!	!	1	0	0		i !	!					i	i !	3	2	0		i I	! !		i 	! !

2.3.6a Validation analysis of Mental and Social Skills

PAMs Yes responses: Zimbabwe



Overall % accuracy score

93.78

☐% Score

2.3.6b Validation analysis of Mental and Social Skills PAMs Scattergram for 'NO' responses: Zimbabwe

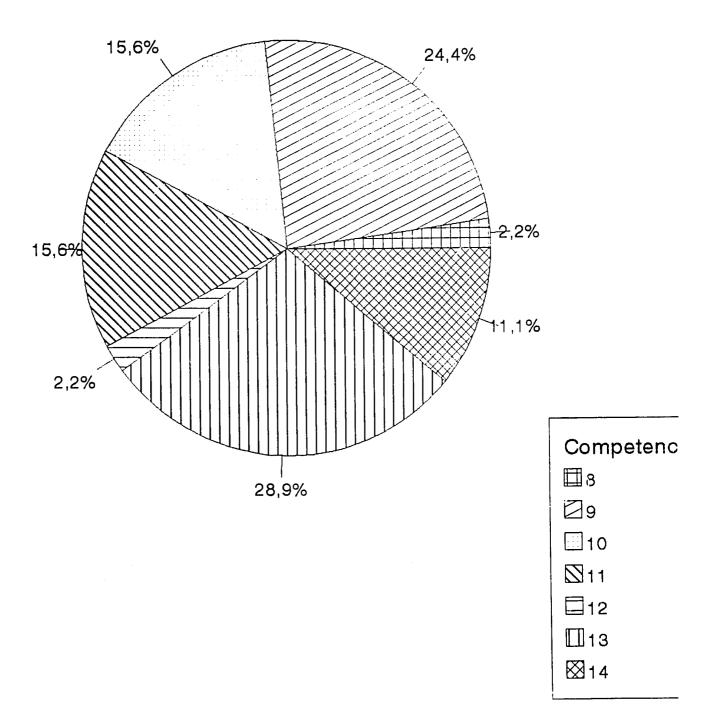
MAIN				MPETEN f respond			
DIVISIONS	8	9	10	11	12	13	14
Α							
В						14.3	
С		14.3					
D						14.3	14.3
E			14.3	14.3			
F				14.3			
G		14.3		14.3	14.3	14.3	
Н				28.6			
1		42.9	14.3	14.3		14.3	
J		14.3	14.3			14.3	14.3
К				Tuessilla i			14.3

Total sample: n=9

2.3.7a.1 Current Mental and Social Skill Level of Asst PAMs & PAMS: Low Skill Levels Zimbabwe

MAIN		(cumu		MPETE ore of all	NCY 1&2 res	ponses)		
DIVISIONS	8	9	10	11	12	13	14	Total
A						1		1
В						1		1
С		1	ý.			- 1		1
D		1					1	2
Е		1	2	3				6
F	1	1	1			2		5
G								
Н				1		1000 1000 1000 1000		1
ı		3	1	1		3		8
J		2		1	1	3	3	10
К		1	3	, governori , toka libe			1	5
Total	1	10-	7	6	1	10	4	40

Total sample: n=9



Total Sample: n= 9 Ass PAMs & PAMs combined: n=7



2.3.7b PAMs vs Validators Mental and Social Skills :Average scores Zimbabwe.

COMPETENCY	06	Box	Average Country				Р	OSITION				
COMPETENCI	Qs No.	No.	/ Org. Score	1 n=	2 n=7	3 n = 2	.1 n =	5 n=	6 n=	7 n=	8 n=	9 n=
Comprehension	1 2 3 4 5 6 7 8 9 10 11	ABCDEFGHIJKK	3.9 3.7 3.7 3.3 3.7 3.4 3.3 3.6 3.3 3.4 3.3		3.9 3.7 3.7 3.3 3.7 3.4 3.3 3.6 3.3 3.4 3.3	2.5 3.0 2.5 3.0 2.5 3.0 2.5 3.0 3.5 3.0						
Problem analysis	13 14 15 16 17 18 19 20 21 22 23	A B C D E F G H - J K	3.9 3.3 3.3 3.1 3.4 3.6 2.7 3.1 3.3		3.9 3.3 3.3 3.3 3.1 3.4 3.3 3.6 2.7 3.1	2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0						
Creativity	24 25 26 27 28 29 30 31 32 33	ABDEFGHIJK	3.6 3.3 3.4 3.0 3.6 3.1 3.6 2.9 3.4 2.9		3.6 3.3 3.4 3.0 3.6 3.1 3.6 2.9 3.4 2.9	2.5 2.0 1.5 2.0 3.5 2.5 2.5 2.5 3.0						
Evaluation	34 35 36 37 38 39 40 41	ABDEFGHIJ	3.7 3.7 3.7 2.9 3.3 3.3 3.1 3.0 3.4		3.7 3.7 3.7 2.9 3.3 3.3 3.1 3.0 3.4	2.5 2.5 2.5 3.0 3.0 2.0 2.5 3.0						
Oral	43 44 45 46 47 48 49 50	A B C D E F G H J	3.6 3.9 3.7 3.6 3.7 3.4 3.1 3.7 3.6		3.6 3.9 3.7 3.6 3.7 3.4 3.1 3.7 3.6	2.5 3.5 2.0 2.5 3.0 3.0 3.0 3.0 2.5						
Written	52 53 54 55 56 57 58 59	ABDEFGIJ	3.3 3.1 3.6 3.6 3.4 3.3 2.7 2.6		3.3 3.1 3.6 3.6 3.4 3.3 2.7 2.6	2.5 3.0 2.5 3.0 1.5 3.0						
Working with others	60 61 62 63 64 65 66 67 68 69	A B D E F G H K	3.7 3.7 3.3 3.4 3.7 3.7 3.7 3.3 2.7 3.1		3.7 3.7 3.3 3.4 3.7 3.7 3.7 3.3 2.7 3.1	2.5 3.0 1.5 3.0 3.0 2.5 3.5 3.0 3.0 3.5						

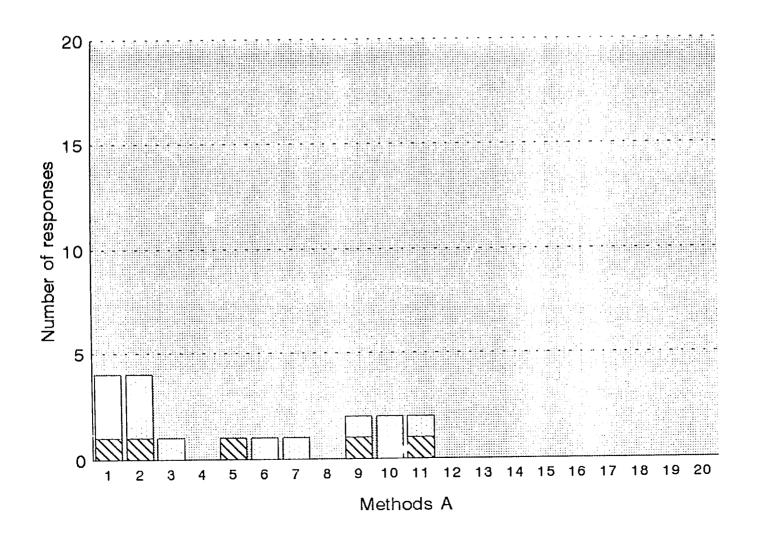
Total sample: n = 9



FIGURE 6:

2.3.8a PAMs Methods To Instill Work Ethics

Zimbabwe

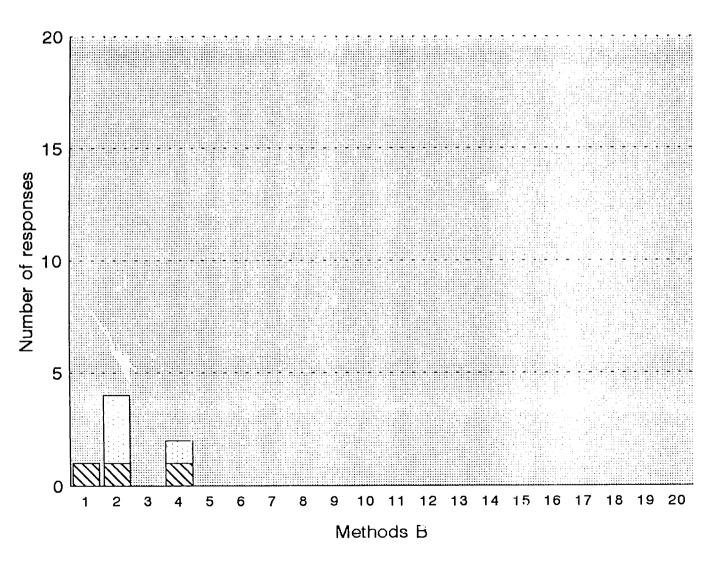


Years of Service

☐ >10 yrs

☑ 6-10 yrs

2.3.8b PAMs Methods To Instill Commitment to Conservation



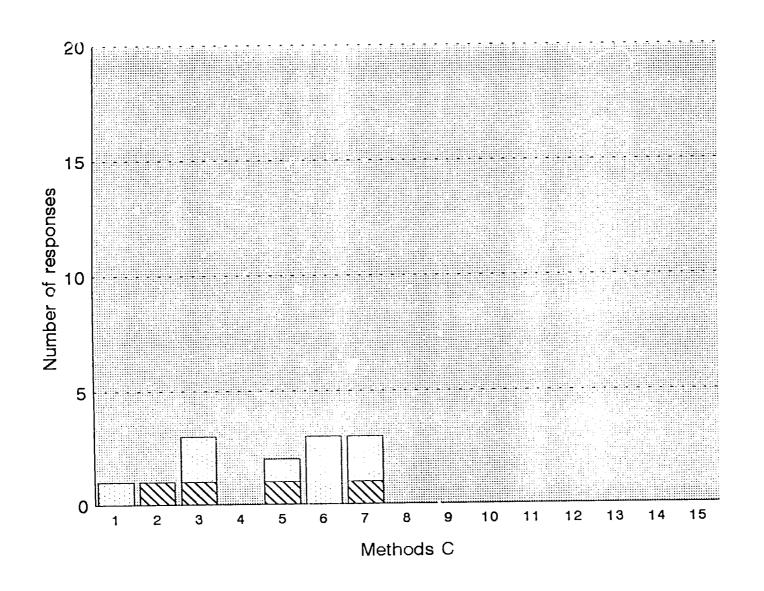
Years of Service

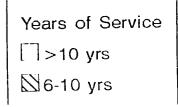
☐ >10 yrs

☑ 6-10 yrs

FIGURE 8:

2.3.8c PAMs Methods To Instill Healthy Attitudes to Adjacent Communities

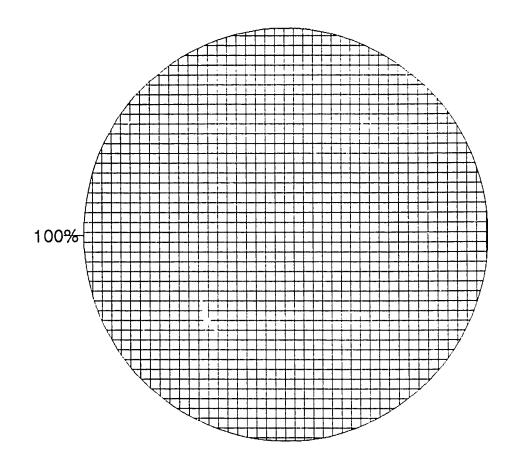






2.3.9. PAMs Language Skills

Zimbabwe

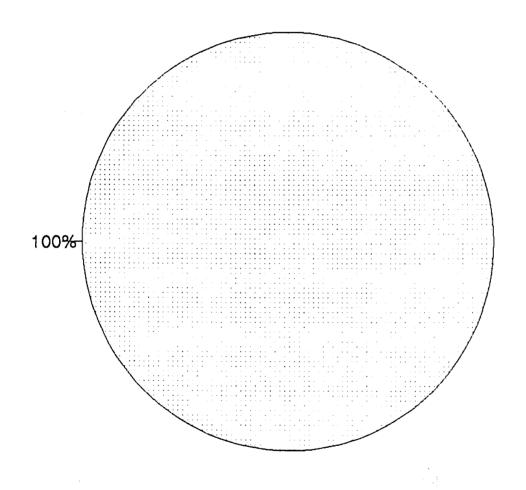


Language skills

Hes responses

2.3.10a PAMs Computer Skills

Zimbabwe



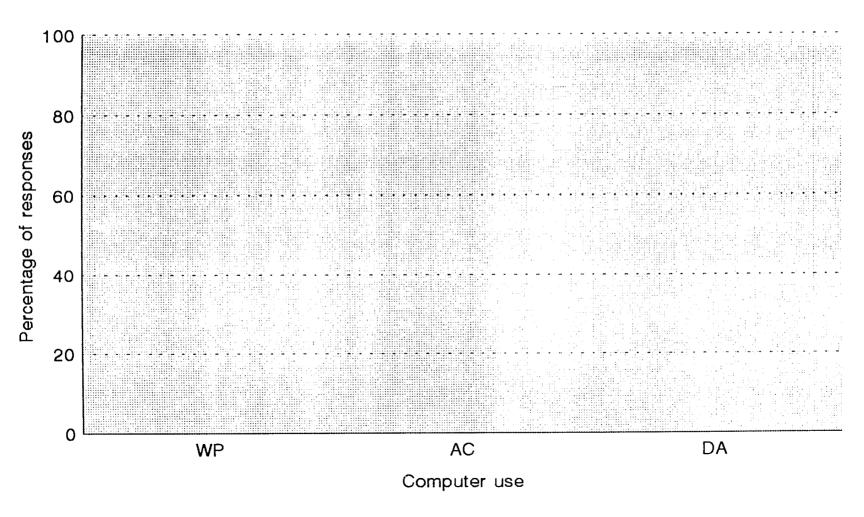
Computer skills

No response

Total Sample:n=9 (Ass PAMs & PAMs:n=7)

2.3.10.b PAMs Computer Uses

Zimbabwe



Total Sample:n=9 (Ass PAMs & PAMs:n=7)

TABLE 10:

2.3.11 PAMs identified Training priorities: Zimbabwe

								СОМР	ETENC	CIES								Takala
MAIN DIVISIONS	Blank	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Totals
Blank			1		2		1											4
Α	1		1										_					2
В																		
С							1											1
D				1				-										1
Е					1													<u> </u>
F		1	ı							ļ		· 						2
G									-									
Н																		
1	1						_											1
J																		
К																		
Totals	2	ı	3	1	3		2											12

Total sample: n=9

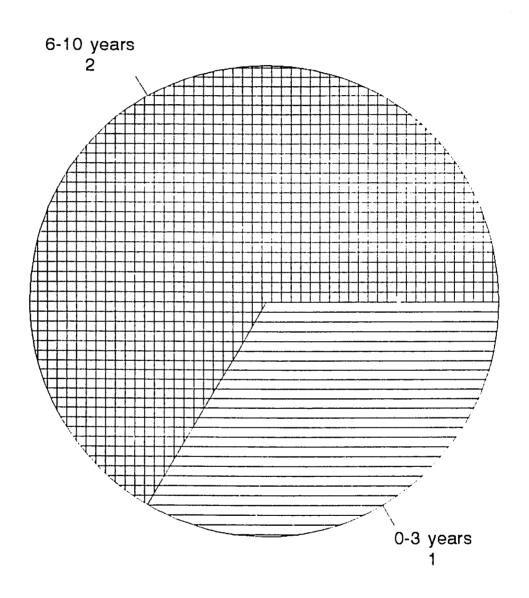


TABLE 9:

2.3.12 PAMs training received: Zimbabwe

	Competencies			OF TRAIN		
		Formal wildlife	Formal Other	In Service	On- the-job	Other
	2	-		_		
(a)	3	•				
	4					
Knowledge	5					
	6				•	
	7	=				
	8				•	
(b)	9	•				_
	10				6	
Mental and	11	•				
Social Skills	12	0			=	
	13				E	
	14	•			2	
(c)	15					
Attitudes	16					
	17					

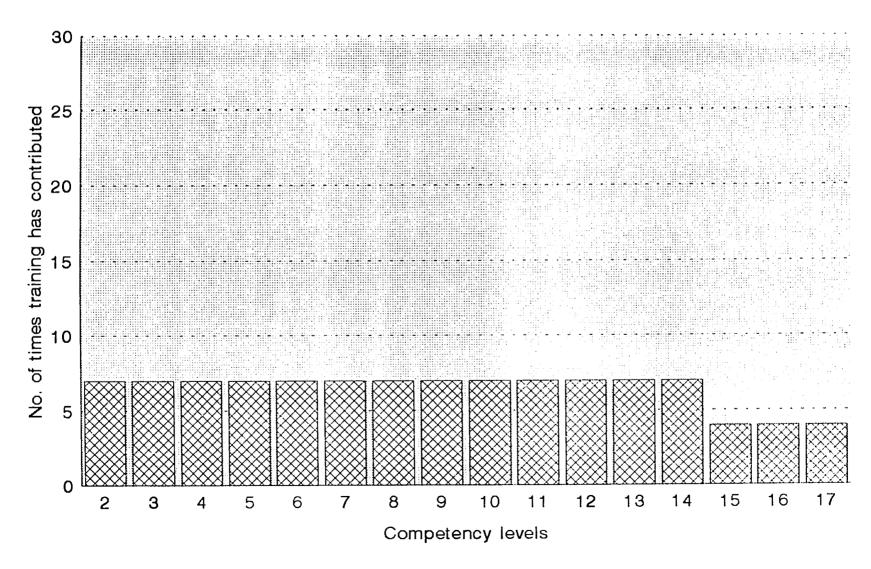
Total sample: n=9



Total Sample n = 9 (PAMS & Ass. PAMS combined: n=7)

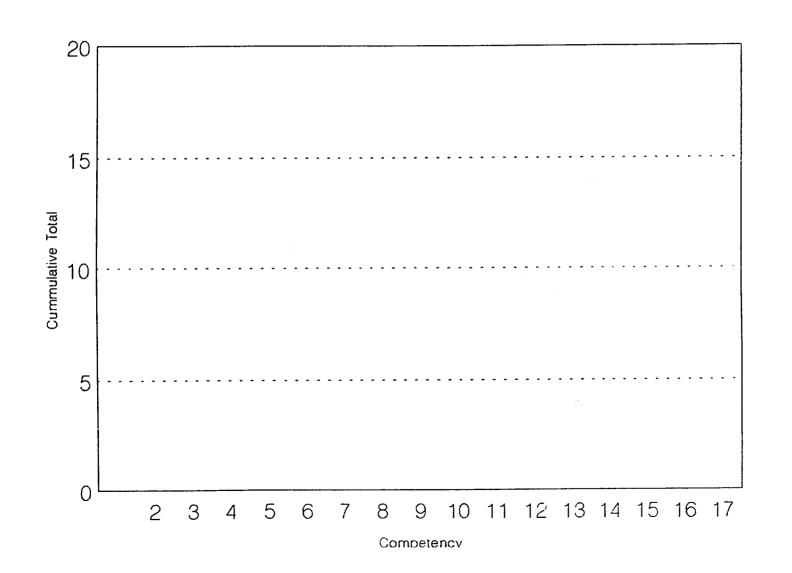


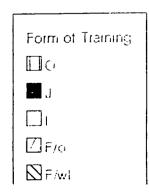
2.3.12.f. Training that has contributed most to PAMs skill level. Zimbabwe





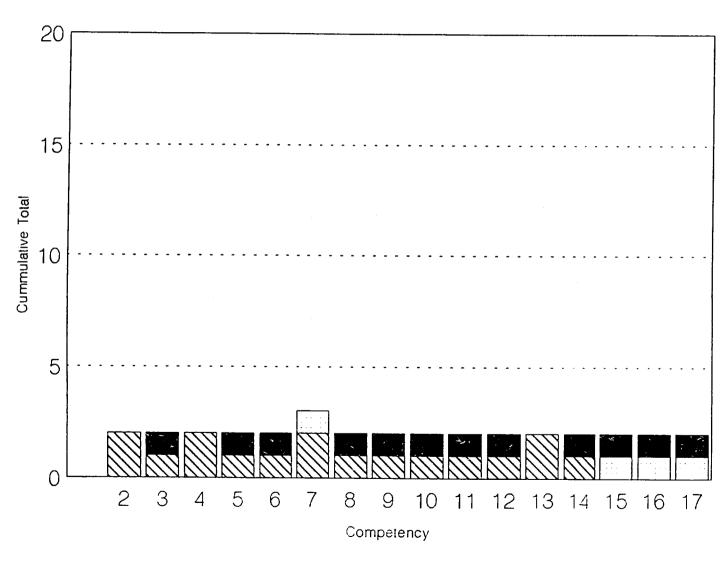
2.3.12.g.1 PAMs training that has contributed most: n=1-5

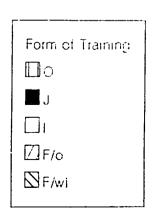




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2.3.12.g.2 PAMs training that has contributed most: n=6-10

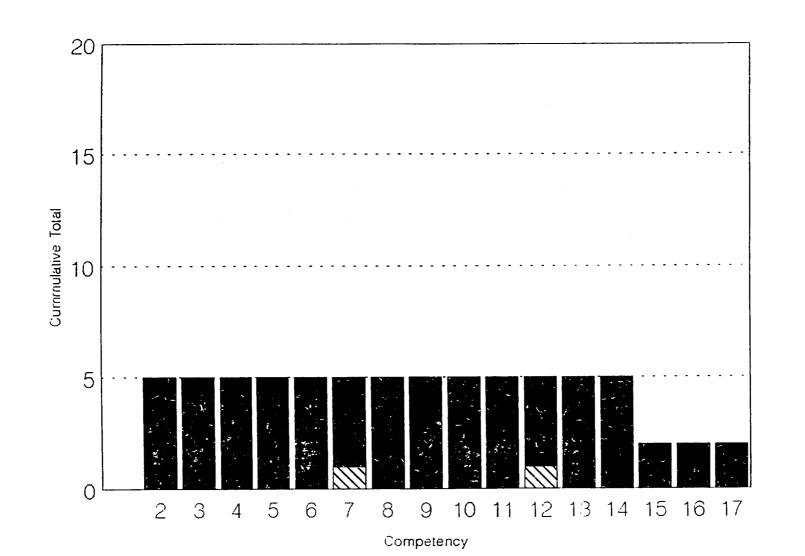


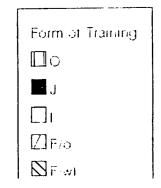


Total Sample n=9 (PAMs & Ass PAMs n=7)

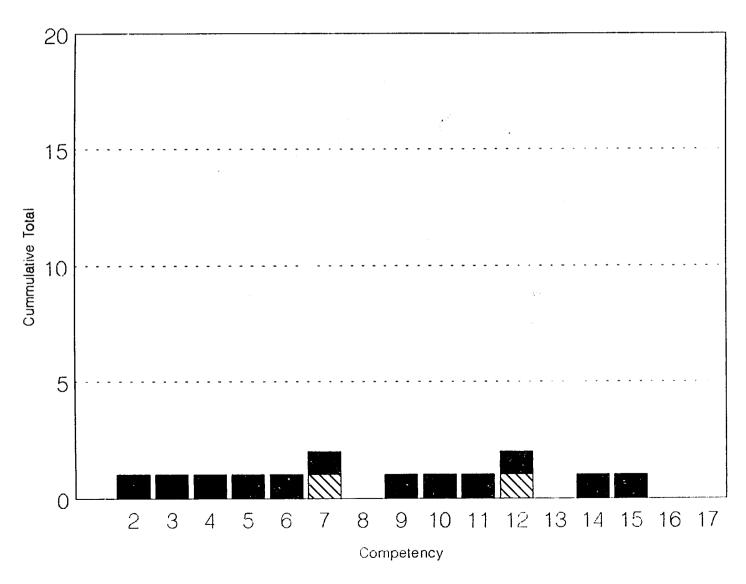
FIGURE 12:

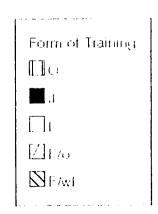
2.3.12.g.3 PAMs training that has contributed most: n>10





2.3.12.g.4 PAMs training that has contributed most: n>10 and training also received in last 5 yrs





Total Cample n=0 /DANAS 9 Ass DANAS n. 7

TABLE 8:

2.3.12h Training needs identified by gap analysis for PAMs & asst PAMs Zimbabwe.

					C	СОМР	ETENC	IES					
MAIN DIVISIONS			Knowle	edge					Mental	& Socia	al skill	s	
	2	3	4	5	6	7	8	9	10	11	12	13	14
A												1	
В					2							l	
С	1,01400820			agi b				1	Kajiri.	a Principal			1.5
D								1					1
Е	1		1	1	1			1	2	3			
F	1.5		2		1		1	1	1			2	
G	2		-		1	P., W.							
Н		1			1	1				1		Aaj	
I				1				3	1	1	ski.	3	
J	1.5		51.7883	0.5	1			2		1	1	3	3
К	ı		1.3					1	3	10000 10000	i.i	111	1

Total sample: n=9

2.3.12i Training needs identified by gap analysis for PAMs & asst PAMs Zimbabwe.

					(СОМРЕ	TENCI	ES					
MAIN DIVISIONS			Knowl	edge					Mental	& Socia	ıl skills		
	2	3	4	5	6	7	8	9	10	11	12	13	14
Α		1/0										<i>0</i> /1	
В					0/2							6/1	
С						1/0		0/1					
D			1/0					0/1					0/1
E	0/1		0/1	1/1	0/1			0/1	0/2	6/3			
F	1/1.5	1/0	0/2		0/1		0/1	0/1	0/1			0/2	
G	0/2				<i>0/</i> 1			- 	İ				
Н		0/1			0/1	0/1				0/1			
I				0/1				0/3	0/1	<i>0</i> /1		0/3	
J	0/1.5			<i>0</i> /0.5	0/1			0/2		0/1	0/1	0/3	0/3
K	0/1		0/1.3					0/1	0/3				0/1

Total sample: n=9

Asst PAMs & PAMs combined: n=7

Identified training priorities: represented by italics Total gaps: represented by normal numbers