MALAWI ENVIRONMENTAL MONITORING PROGRAM

Quarterly Report Covering the Period of July-September 1996

The quarter's activities are presented below by program component as presented in the Annual Workplan: 1 July 1996 - June 30, 1997. The five components are:

- improve catchment monitoring
- develop prototype environmental information system
- expand environmental monitoring technologies
- strengthen environmental training and research; and
- strengthen environmental policy and legislation development and institutional capacity.

General Overview of Implementation Progress

Positive actions have been taken in each component area, though it has been necessary to reschedule some anticipated activities. At the request of the USAID Mission, it was agreed that technical assistance would be provided to assist with the development of strategic options for supporting community-based natural resources management activities in Malawi. The TOR for the activity were developed cooperatively by the UA/CU Chief of Party and the Mission's SO2 Team. A request for bids was announced in August and bid materials were under review as the quarter drew to an end. The contract for execution of the CBNRM assignment was initiated with ULG Consultants, Ltd. based in Harare, Zimbabwe and work is scheduled to commence in Malawi by the end of October, 1996. While this activity was not budgeted under the original COAG which became effective on March 14, 1996, it was agreed that short-term technical assistance resources allocated for the environmental policy and legislation component under the NATURE program would be reassigned to support this priority activity.

Procurement of project-related equipment to support the environmental monitoring program is underway. Computers, digitizing equipment, and color printers have been specified and submitted for competitive procurement. With the expansion of the GIS training program to include faculty associated with Malawian research institutions and the branches of the University of Malawi, planned procurement under the project has been accelerated for FY 96 and the first quarter of FY 97. A total of fifteen computers, fully equipped with the necessary software, voltage protection units, and color printers, are to be provided to Malawian institutions under the Malawi Environmental Monitoring Program.

A source of some concern for effective project implementation is the lack of progress in obtaining authorization of the Annual Workplan (AWP). The AWP was presented to the USAID Mission in draft form on June 18, 1996 and resubmitted with the requested revisions for approval by the USAID Mission Program Manager. As of September 30, 1996, no suggestions for revisions or request for clarifications had been presented by the USAID Mission to the UA/CU Project Director or Chief of Party. In the absence of specific guidance, project implementation has

proceeded under the assumption that activities detailed in the AWP draft were acceptable to the Sponsor.

During this period, the MEMP COP and Environmental Policy Technical Advisor also participated in a series of meetings and discussions with MoREA officials in an effort to identify and seek resolution to any concerns held by our GOM counterparts regarding the procedures and content of implementation as detailed in the AWP. As of the end of this quarter, no formal recommendations had been received from MoREA regarding the draft AWP.

Dr. Hutchinson, UA Principal Investigator, visited Malawi for ten days in August to review startup activities for the NATURE and PLUS programmes as well as to consult on the status of workplan implementation. Very useful discussions were held with MoREA officials and USAID staff at that time. Three issues in particular were addressed with Mrs. Esther Medi, the Principal Secretary of the Ministry of Research and Environmental Affairs. The first issue addressed was the need for the development of a strategic plan for environmental monitoring by the GOM. The need was recognized by senior ministry officials and a workshop for the development of a strategic plan was held in September.

The second issue, which constitutes a point of considerable concern for the ministry, is the availability of Mr. Burger to provide technical assistance and support for the monitoring program since his promotion to the position of Chief of Party. The expansion of the scale of the MEMP program from one to a total of four expatriate technical assistance positions clearly required nomination of a COP. Given Mr. Burger's intimate involvement with the project so far, he was the logical choice for the position. The availability of technical expertise in the Environmental Monitoring Unit was further reduced by the departure of the unit head, Mr. Kamperewera, to commence a Master's degree program in the U.S.

The third issue addressed was the continuing need to recruit administrative support for field activities. Funding for the position of an administrative assistant was provided under the Cooperative Agreement and recruitment for the position was discussed with the Ministry as early as April 1996. While the ministry's selection process eventually resulted in the identification of a capable candidate, the person identified was not acceptable to the Ministry and the recruitment process was ultimately unsuccessful. Filling this position with an able employee remains a priority for successful implementation and will significantly reduce the level of effort the COP must accord to logistic and administrative concerns, thereby freeing him for other technical assistance activities.

Component One: Improve Catchment Monitoring

Activities

A technical review workshop was held in Mangochi on the 27th of July which focused more on the development of output based workplans supported by itemized budgets than on a review of the previous years progress. The detailed budgets produced by the agencies will be used on a trial basis to see if budgeting linked to results improves the data collection, analysis and reporting from

the catchments. The report for the workshop is yet to be produced, however the resolutions from the workshop included;

- increased awareness of environmental issues using the findings from the MEMP catchments,
- formation of a Core Committee to provide oversight on the implementation and reporting of the MEMP,
- more targeted training for all participants in the MEMP, improved collaboration amongst the ADDs, catchment committees and District Offices, and
- consideration of decentralization of some monitoring responsibilities and resources to the ADDs, District Offices, and catchment committees as an approach to normalization of sectoral environmental monitoring activities.

Due to some confusion as to whether joint or separate workplans would be produced for USAID and the Government of Malawi, follow-up sessions to the above workshop were held in Salima and Lilongwe to develop a three year Government of Malawi monitoring program. The long term goal of this exercise was not only to identify what support would be provided by the UA/CU team to the GoM workplan, but to begin the development of a national monitoring strategy with additional components which may require support from other sources.

During the Salima workplan preparation meetings, a visit was made by the EMTA and SEO to the GEF Lake Malawi Biodiversity Project at Senga Bay. One of the objectives of this programme is to develop a better understanding of how changes on terrestrial ecosystems are affecting aquatic ecosystems in the rivers and lake. To this point the GEF programme has expressed an interest in the data collected from the Chilindamaji catchment at Nkatha Bay. Discussions with the Science Officer at Senga Bay focused on use of the GEF laboratory to complete nutrient analysis during the upcoming growing season. The GEF programme is developing a working relationship with the Dept. of Hydrology and further discussions may result in the relocation or positioning of the MEMP American Sigma automatic samplers onto a major river(s) in the Shire or Lake Malawi catchments. These samplers have collected little data over the past two growing seasons in their current installations in Chulu and Kamundi. Some parts have been removed from the remaining two units in the Departments storeroom.

Upcoming activities

Dr. Don Slack will complete a three week watershed management consultancy (two weeks in Malawi) to assess data from previous two seasons with an objective to streamline and rationalize the amount of data that is being collected from the catchments. In an effort to increase in-service training opportunities, all short term technical advisors are being requested to conduct one day training seminars for the MEMP Desk Officers and other interested parties as part of the presentation of their draft findings.

Farmer orientations and training are proposed prior to the onset of the rains. Presentations of revised *First MEMP Monitoring Report* and the findings from the *Social Indicators Report* to the catchment committees and DDCs are proposed as an awareness activity for the upcoming activities during the growing season.

Quarterly Activity Results and Indicators

The proposed activity for this quarter was *public sector agencies able to undertake analysis of existing data and present the findings to inform policy*. This activity began in Mangochi where the Senior Environmental Officer (SEO) who authored the first monitoring report presented a summary of the document at the workshop. Feedback from this presentation generated a recommendation that the findings be reviewed and a modified report prepared for presentation to District Development Committees (DDCs) and the catchment communities. The UA Principal Investigator and Norbert Henninger, environmental information specialist from the World Resources Institute, both provided comments on the initial monitoring report. As Mr. Kamperewera has left for overseas studies, Mr. Wongani Phiri has been tasked with incorporating the comments into the report and preparing presentations to be made at the district level during the upcoming quarter.

The second activity proposed for this quarter was "intensive catchment monitoring technologies documented and evaluated." Due to scheduling conflicts, this activity did not begin until September 29th which will delay much of the anticipated output from these activities until the next two quarters. The anticipated outputs from these activities are:

- procedures and explanations of methodology updated in Field Operations Guide;
- report detailing methods with application for each technical area; and
- sectoral reports produced consistent with recommended format.

Potential constraints and proposed solutions

The major constraint to improving catchment monitoring remains generating useful information from the catchments in order to justify the level of effort necessary to collect, analyze and report on the findings from the exercise. Without developing a clearly understood results driven budgeting process, it is unlikely that the pilot performance based system proposed in July will have much impact other than providing justification for withholding further funding for catchment monitoring from the implementing agencies.

Component Two: Develop an Environmental Information System (EIS)

Activities

An initial meeting for an advisory group to the EIS was held in Lilongwe. The *Proposal for the Development of an EIS in Malawi* was reviewed and comments were incorporated into what is hoped to be the working document for the development of the EIS. UNDP is funding a consultancy to identify agency-specific indicators that might be used in the development of District-based State of the Environment Reports. A workshop is proposed for mid November to discuss the consultancy's findings.

Discussions were held with visiting World Bank missions on support for the EIS through their Environmental Support Project. The World Bank has provided funds for support of the Environmental Focal Points to provide data to populate databases on the NEAP themes. Papers were prepared for the PPF and PIP funding documents.

Upcoming activities

If the UA/CU workplan is approved, a one week design mission for the EIS is proposed to begin at the end of November. The design team will include members from Arizona, Clark, IUCN/ROSA, the World Bank EIS Advisory Group, and the World Resources Institute.

UNDP has proposed to fund an Environmental Focal Points workshop which may be utilized to update exisiting databases on current and proposed environmental projects in the agencies.

Quarterly Activity Results and Indicators

The proposed activity for this quarter was "development of a prototype EIS with an application that addresses a national environmental problem." The anticipated outputs from this ongoing activity are:

- proposal reviewed and approved by internal and external stakeholders, and
- detailed description and catalogue of existing data sources.

Achievements

The EIS design proposal was presented and reviewed by an audience from both within and outside Malawi. The development of a detailed data source catalogue was assigned to a staff member of the Environmental Monitoring Unit in cooperation with the Environmental Focal Points.

Potential constraints and proposed solutions

The EIS as currently proposed will consist of three sections, the MEMP unit will provide analysis and reporting, the Documentation unit will archive and catalog environmental data sources, and the Environmental Focal Points will be responsible for data collection and dissemination. Currently there are EIS staffing limitations in MoREA for the focal points and the MEMP unit. It is hoped that one of the currently vacant Senior Environmental Officer positions will be filled and that that officer will take responsibility for the development of the Environmental Focal Points and integration of their input into the EIS.

Component Three: Expanded Monitoring

Area Sample Frame (ASF)

Activities

A follow-up visit was made in August to check on the stratification of the primary sampling units (PSUs) and secondary sampling units (SSUs) and to assess the 1995 aerial photography. In addition, the U.S. Forest Service provided a multi-resource inventory specialist to work on developing a complementary woodland resource assessment techniques with the Dept. of Forestry.

Due to concern over the availability of staff to analyze large numbers of water samples, and the fact that the PSUs are not stratified by slope classes, it has been proposed to limit water sampling and off site sampling on the major drainages in the ADD. Likewise, changes in soil erosion rates

will be estimated using a generalized Soil Loss Estimation Model For Southern Africa (SLEMSA). The reports from this consultancy detailing these changes have not been received yet from the U.S. Forest Service or AAIC. Dr. Hutchinson and the EMTA prepared a revised questionnaire which has been circulated and commented on.

Upcoming activities

Depending on the availability of local currency funds and the availability of staff to complete the stratification of the SSUs, a trip is proposed for November or December to train the ADD enumerators to administer the survey instrument.

Quarterly Activity Results and Indicators

No activity results were proposed for this quarter. The anticipated output from the exercise, a report detailing the purposes and procedures of development of the ASF has not been completed.

Potential constraints and proposed solutions

The major constraints to the successful implementation and evaluation of the ASF remains the provision of local currency funds and the availability of staff from LR&CB, Forestry and Water.

Public Lands Utilization Study (PLUS)

Activities

Level 1. Physical Characterization of Public Lands (national, digital level of analysis)

Spatial Data Collection and Base Mapping.

The 1984 TM images for all of Malawi have been purchased; selection of scenes for 1994 is underway.

A change in management at IFDC has delayed receipt of digital LREP data – the new IFDC management and the UA are communicating in hopes of obtaining soils and agro-climate data. It is not clear at this time whether these will become available at this time. The PLUS Field Coordinator is working with LR&CB to assist UA researchers in obtaining these data.

With the assistance of the Ministry of Land Valuation, the digitization of Agricultural Schemes has begun. Ministry of Agriculture representatives from each ADD are auditing the initial scheme list compiled by MoLV in an attempt to fill in missing information and provide maps where they do not exist in MoLV files.

The Dept. of Forestry has requested that the boundaries of the forest reserves also be digitized (from 1:250,000 survey sheets, as the Forestry/Swede Study (1993) digital boundaries were based on image interpretation and do not match the surveyed boundaries.

Digitization of the pilot study area of 1:50,000 Survey Sheet data for the Domasi watershed (site of the pilot study) within the Zomba National Forest has been completed.

Classification and Change Detection. Analysis has begun on the 1984 TM imagery.

Summary Data Extraction. To begin in October 1996.

Level 2. Land-use Characterization of Public Lands (field-intensive level of analysis)

Creation Rationale. The Dept. of National Parks and Wildlife have completed their list. Forestry has submitted a copy of the "forest reserve register" to address this issue. The LR&CB is pursuing the Agriculture Scheme list through the ADDs and suggests it will be available in mid-September. Forestry has proposed to submit a copy of a "forest reserve register" to serve this purpose. The PLUS Field Coordinator has requested a copy as soon as possible.

Methodology and Logistics. Final revisions to the socio-economic methodology have been made and issued to over 75 interested parties at the recent lands workshop. A Malawian field coordinator has been identified, pending final approval from the Ministry of Natural Resources.

Fieldwork. The pilot study around Zomba National Forest is now completed. Data entry and analysis are under way. Rapid Rural Appraisal, Key Respondent, and Formal Survey questionnaires have been revised based on the experience obtained in the pilot. Work in Mulanje National Forest begins 2 October 1996.

Ranking. The ranking of protected areas by MoLV, Forestry, Parks and Wildlife, and MoREA is complete. The criteria they agreed for the process were:

- 1. Pressure: actual and potential human impact on public land and resources;
- 2. Risk: threat to watershed protection, biodiversity, habitat, etc.
- 3. Opportunities: potential for the protected area to provide "lessons learned" (i.e. strong case study potential) which could be applied to other areas.
- 4. Alternatives: protected areas with management strategies already in place which integrate community use with official resource use.

The rankings submitted by all agencies were first aggregated by simple linear combination for discussion at the 29 August 1996 Steering Committee meeting. Those present at the meeting requested further evaluation so that the views of Forestry and Parks & Wildlife could be fully incorporated into the final list. A series of meetings with representatives from all four agencies led to a final list of sites for Level 2 field analysis:

| Protected Area | Туре | Region | Rank | Proposed Schedule |
|----------------|----------------------------|---------|------|--------------------|
| Zomba | Forest Reserve | South | 3 | 1 Aug - 30 Sep 96 |
| Mulanje | Forest Reserve | South | 2 | 1 Oct - 9 Nov 96 |
| Liwonde | National Park | South | 1 | 10 Nov - 19 Dec 96 |
| Dzalanyama | Forest Reserve /Ag. Scheme | Central | 5 | 3 Jan - 11 Feb 97 |
| Vwaza | Wildlife Reserve | North | 4 | 12 Feb - 24 Mar 97 |

Quarterly Activity Results and Indicators

The life of activity result for the PLUS sub-component is "policy makers use information provided by EM/EIS activities." The anticipated output from this ongoing activity is: " 'Atlas' of public lands in both digital format and hard copy produced and distributed." Progress has been made in implementation during this quarter that will lead to fulfillment of the activity result as stated. The only significant obstacle to timely implementation has been the delay experienced in procuring usable satellite images and in obtaining LREP data. Both issues are being pursued.

Component Four: Training and Research

Activities

The post for the Environmental Scientist was advertised internationally by the UA and regionally by the University of Malawi. Over fifty applicants responded to the advertisements. A search committee was formed by Dr. Hutchinson to evaluate the twenty applications that had met the required qualifications. A short list of five candidates and two alternates was identified and submitted to the University of Malawi. The list of seven was reviewed by the University of Malawi and ranked in order of preference. One of the short listed candidates withdrew prior to the invitation for interviews and another after the review. Three candidates will be invited to Arizona for interviews in October.

The Environmental Monitoring Technical Advisor met with Mr. Michael Calvin of the U.S. Forest Service to discuss the application of NDVI satellite data to monitor fire incidence, frequency and distribution. Mr. Calvin was visiting the SADC region to prepare a document on Fire Management for Southern Africa for consideration of funding by USAID's Regional Office in Gaborone. Discussion focused on the use of Nyika National Park as a possible pilot area for the development of a fire monitoring and information system. Additional linkages with the programme could include community-based fire management and training in fire management.

The first in another series of three GIS training courses began on September 25th at the Agriculture Policy Research Unit (APRU) computer training facility at Bunda colleges. Agencies were requested to propose computer literate candidates for the courses. The University and the Land Husbandry Training Centre were requested to propose candidates who will become future trainers in GIS. Up to twenty-four candidates were proposed by the agencies with eighteen arriving for the opening of the course.

The choice of the APRU facility appears to have been appropriate in that it allowed the students to review and discuss the day's lessons amongst themselves after the formal course presentation while using the computers to practice their new skills. This has not happened when previous courses were held in town. However, dissatisfaction by a small group of trainees with the facilities and the allowances provided resulted in a self inflicted one day stay away by all students while the organizing Ministry was petitioned for additional funds. As a result of these actions, a few students withdrew from the course. An evaluation of the trainees capabilities and possible application specific projects will be included in the report presented by the Clark trainers.

Upcoming activities

Recruitment of the Environmental Scientist should be completed in October, with the successful candidate proposed to arrive in-country during December or early January.

MoREA has proposed to conduct an inventory of existing environmental research activities and to develop an environmental research strategy. With the provision of local currency funds, pilot environmental research projects may be evaluated and funded.

Quarterly Activity Results and Indicators

The proposed activity for this quarter was the provision of in-service training in geographic technologies. The proposed indicator of performance is "18 technicians from public agencies and UNIMA system trained and capable of conducting research relevant to environmental monitoring." While the basic training session began with 18 trainees, a total of fifteen successfully completed the course.

Potential constraints and proposed solutions

Although it is normal to have some start-up problems when moving to a new facility, the problem with the initial GIS course could be resolved as suggested by the Principal of Bunda College by providing the funds to cover course costs directly to APRU or Bunda College. As MoREA is no longer hosting the GIS courses and does not have a participant in the course to act as a contact person, this proposal may simplify the channel of communication and allow for future issues to be resolved by the host institution itself.

Component Five: Strengthen National Environmental Policy Development and Institutional Capacity

Activities

The Environmental Policy Technical Advisor (EPTA) arrived in-country on June 8th 1996, and occupied an office in MoREA from June 17th. In the absence of an agreed workplan for the USAID/University of Arizona Cooperative Agreement the following paragraphs summarize substantive work undertaken during the quarter. The first four headings correspond to tasks identified in the UA/CU draft workplan.

Development of a Composite Action Plan for review and reform of policies, institutional roles and legislation for E/NRM. The development of sectoral action plans was well advanced by the date of arrival of the EPA. Overall coordination was provided by the Dept. of Environmental Affairs, assisted by a local consultant lawyer Mr. G. Zibelu Banda . Mr. Banda's services were financed under the UNDP/UNEP Environment and Law Programme. The EPTA worked with Mr. Banda to assist each of the following agencies to focus and refine their sectoral action plans:

- Ministry of Lands and Valuation (MoLV/PPU)
- Department of National Parks and Wildlife (DNPW)
- Forestry Department
- Fisheries Department
- Department of Water Resources
- Department of Irrigation
- Land Resources and Conservation Branch, Ministry of Agriculture and Livestock Development (LRCB/MoALD)

- Department of Local Government, Ministry of Local Government and Rural Development (DLG/MLGRD)
- Department of Environmental Affairs, Ministry of Research and Environmental Affairs (DEA/MoREA)

A draft Composite Action Plan was presented by the EPTA to the National Legal Task Force on July 13th, and in more detail to the NATURE Program Implementation Committee (PIC) on August 9th. As a result of feedback from these meetings the action plans developed by DI /MIWDR and LRCB/MoALD were further modified with assistance from the EPA, with the latter still under development at the date of reporting.

A draft budget for the Composite Action Plan (CAP), indicating GOM (NATURE/NPA) and other donor support, and a summary of the CAP capable of being monitored, were in an advanced but incomplete state at the end of the quarter awaiting further technical and financial information from participating agencies.

Refinement of draft Performance-Based Budget Support (PBBS) Guidelines

The EPTA met with the Secretary to the Treasury and officials of the Ministry of Finance, USAID and MEPD on August 1st to resolve financing issues associated with the PBBS, specifically those arising from: (a) the phase difference between NATURE tranches and the GOM budget cycle, and (b) the relationship between PBBS program budgets and the recurrent expenditure ceilings. Following further discussions with USAID and sectoral agencies, the EPTA provided comments on the draft PBBS guidelines to the Ministry of Economic Planning and Development (MEPD) on August 9th, and suggested revisions to remove inconsistencies and tighten the criteria for PBB program preparation.

Donor Coordination Following the lead taken by USAID in initiating donor coordination meetings in the field of E/NRM, the EPTA commenced a series of meetings with donors and team leaders of donor-funded field programs late in September. Support has been received for the initiation of GOM/donor meetings to be held in alternate months and to be chaired by the Principal Secretary of MoREA. A draft agenda is in preparation for the first meeting, which is expected to be held in November. Close informal contacts have been maintained with FAO, UNDP and the World Bank.

Sustainable financing for E/NRM programs A presentation of financial management services available from the Merril Lynch International Bank Ltd. was provided in Lilongwe on August 17th for the benefit of the Wildlife Society of Malawi and other interested parties, including prospective trustees of the Mount Mulanje Conservation Trust. The EPTA attended the presentation with a view to assessing the bank's possible contribution to the development of an endowment trust under the NATURE Program. Given Merril Lynch's recent experience of working with USAID on the creation of a conservation trust in Mexico it is felt that the contact established is potentially useful.

Initiation of a study into Community-Based Natural Resource Management (CBNRM) in Malawi. The CBNRM component of the NATURE Support Project has yet to be designed. After protracted discussions it was agreed in July that the UA would take the lead role in mounting or sub-contracting a study to identify and develop options for programming USAID funds in support of CBNRM in Malawi. Working closely with the Chief of Party and with guidance from USAID the EPTA participated in the development of a Scope of Work for the study, in approaching and liaising with five regional entities and a number of individual consultants and in proposing criteria for selecting between competing proposals. By the end of the quarter two informal proposals had been received, and technical adjudication completed.

Documentation of actions accomplished by GOM in satisfaction of NATURE tranche one conditions. Research was undertaken in September into the details of actions completed in satisfaction of NATURE tranche one conditions, outstanding actions still required and necessary supporting documentation. By the end of the month a letter summarizing actions completed and a letter of Intent specifying GOM activities for tranche two were both complete in draft form.

Other activities The EPTA attended and participated in the following workshops:

- MEMP Annual Review Workshop, Mangochi (July 24th-25th)
- Awareness-raising workshop for politicians and District administrators, Blantyre (August 14th-15th)
- Land Utilization Studies Workshop, Natural Resources College (September 24th)

Land Utilization Studies Steering Committee meetings were attended whenever possible. The EPTA provided informal support to the World Bank (IDA) Fisheries Development Project Supervision Mission, September 9th to 18th, briefing mission members and attending a wrap-up meeting in the Ministry of Natural Resources on September 18th. In addition, the EPTA visited the Mua/Golomoti and Ntchisi Forest Reserves, Kasungu National Park, Nkhotakota Wildlife Reserve and the Dwangwa Sugar Corporation.

Quarterly Activity Results and Indicators

The role of the Environmental Policy Technical Advisor in supporting the policy reform and institutional development aspects of the NATURE Program is described, often rather tangentially, in the Program Grant Agreement and accompanying documentation, and also in the amended University of Arizona/Clark University Cooperative Agreement. Component 5 of the UA/CU draft Annual Workplan spells out the tasks to be undertaken by the EPTA much more precisely, and also imposes a time schedule and monitoring plan. The EPTA is given scope to comment on or refine the draft workplan, and was expected to do so by August 15th. This task was not completed, but brief comments will be made here in fulfillment of that obligation.

Firstly, it should be noted that each of the tasks identified under Component 5 were drawn directly from the Program Grant Agreement, i.e. they relate directly to the NATURE policy matrix. To this extent, no substantial changes could be made to the workplan without also altering the NATURE agreement. Secondly, the time schedule attached to specific tasks was linked to the expected periodicity of the NATURE tranches: it is understood to be tentative, and is for the most part beyond the control of the EPTA or other individuals.

Given these considerations, it is not the intention of the EPTA at this time to propose any alteration to the draft workplan, beyond minor shifts in expected timing or assignment of responsibilities which will be indicated in detail at such time as the workplan is finalized.

Potential constraints and proposed solutions

The role of the EPTA is to a large extent one of an informed coordinator rather than as an advisor, a role which requires good communications, mobility and efficient office/secretarial backup. Operational conditions varied from very poor at start-up (no direct-line telephone, computer or printer) to moderate by the end of the quarter (telephone in office and home, computer, but no printer, email facility or secretarial/administrative support). The EPTA does not have a counterpart within MoREA at the operational level, since the Deputy Environmental Coordinator (the nominated counterpart) is heavily committed to other programs, and a newly recruited policy/planning professional has not yet been able to find housing accommodation in Lilongwe. This is not seen as a serious problem at present, since much of the work undertaken is of a one-off rather than continuous nature, but this situation will be monitored and opportunities to integrate the activities of the EPTA more beneficially with MoREA's functions will be actively sought. The EPTA has succeeded in maintaining frequent contact with the Environmental Focal Points in the main E/NRM line agencies.