



*United Nations Development Programme
Africa Bureau*

Africa 2000

MONITORING AND EVALUATION

SYSTEM PRINCIPLES AND INDICATOR DEVELOPMENT PROCESSES¹

Section I

Monitoring and evaluation: Development Principles and Requirements

What do we mean by M&E? It is important to develop a common understanding of monitoring and evaluation. The following paragraphs are provided to clarify monitoring and evaluation concepts and jargon.

- 1) Monitoring should be understood as an integral part of day-to-day management. Monitoring can be defined as collecting, recording, communicating, analysing and using information for the purpose of management control and decision-making. The primary role of monitoring is to provide information by which management can identify and solve implementation problems, and assess progress in relation to what was originally planned. Monitoring can be used to track the procurement, delivery and installation of inputs; the progress of activities and the achievement of planned outputs. Monitoring can also help managers recognize and identify implementation problems and can be used to reschedule activities, i.e. to adjust workplans. Monitoring is a routine activity that provides information needed to know what is happening. It may also identify the need for additional information. Monitoring may involve the collation of data from existing sources (secondary data), and/or the collection of new data specific to the project needs (primary data).

¹ This is a draft designed to promote policy dialogue on the subject of M&E. As such it does not in any way represent the views and position of the UNDP, UNOPS or Africa 2000. Please feel free to comment on it and send you comments to Dr. BT Costantinos, UNDP Africa, One UN Plaza, New York, N.Y. 10017. E-mail berhe.costantinos@undp.org

- 2) A Management Information System (MIS) is the reporting system that is developed to allow monitoring to happen. The MIS defines who collects, processes and reports information, how they go about doing it, and when it should happen. Evaluation: on the other hand should be understood to be a periodic activity aimed at assessing the relevance, performance, effects and impact of a project within the framework of the stated objectives. It is the critical analysis of the achievements and results of a project, programme or policy compared to the intended objectives.

- 3) Evaluation occurs only PERIODICALLY and requires a more in-depth and comprehensive analysis of information to determine not just whether or not the targeted results have been achieved, but WHY and HOW. In evaluation, the objectives and design of a programme can be, and should be, questioned. How M&E can assist project management and decision-making? M&E can help to strengthen programme design and implementation, and stimulate partnership with other actors by:
 - a) Improving programme design - Systematic use of programme design tools result in the selection of indicators by which a programme can be monitored and evaluated. The process of selecting indicators provides a test of how valid, realistic and measurable project objectives are, and can therefore lead to improvements in project design. If you can't identify how to measure project objectives, these should be revised.
 - b) Consulting with stakeholders - Involving beneficiaries and other development partners in the selection of indicators and the monitoring and evaluation of progress improves ownership of the project objectives and targets.
 - c) Informing programme management - Providing continuous feedback during implementation enables managers to track progress towards objectives, and to adjust operations and reallocate resources to take account of achievements, opportunities and problems.

- 4) **Limitations of Monitoring and Evaluation:** An M&E system is only as good as its inputs and users. For monitoring to be effective, objectively verifiable indicators (OVIs) which reliably and meaningfully show progress of activities against stated targets have to be identified. This can only be done if appropriate and measurable targets have been identified in the first place. In other words, planners have to plan for monitoring and evaluation. Monitoring and evaluation can assist in identifying problems and help us to assess whether targets are being achieved. An evaluation report may also suggest possible solutions to problems, but monitoring and evaluation systems cannot make decisions for managers. Monitoring and evaluation may be regarded as a threat: On the other hand, if progress is good, staff are more likely to receive the credit they deserve. If progress is not as anticipated, monitoring and evaluation systems will help to identify the reasons for this, which may be external to the programme and/or outside the control of management. They can thus serve to protect staff from unnecessary criticism. Collecting and processing extra data costs time and money: There is always the danger of collecting too much data, which cannot then be analyzed properly. Only collect data that is essential to deliver the information required by management. It is important that other existing data gathering systems are reviewed to identify what information is already available for use.

- 5) **Key Principles in the Design of Monitoring and Evaluation Systems:** In order to understand why this consultant has undertaken the activities summarised in the following pages the principles involved in the design of programme monitoring and evaluation are summarised in the steps below.
 - a) **Review existing systems, tools and practices** - Where programmes are already operational, M&E system designers should build on the strengths of the existing systems and address felt and identified weaknesses.
 - b) **Review Implementation Procedures** - In designing M&E systems the following questions need to be answered to determine the information needs at the different levels of the organisation and

among partner institutions: Who is responsible for what? Who can decide what? Who is doing what? Who reports to whom? Which co-ordinating bodies exist? What organisational procedures and regulations govern how systems can be designed? (e.g. FAO fund disbursement systems)

- c) **Analyse Programme Objectives** -Clarify programme design in terms of the overall objectives of the programme, the immediate objectives and outputs to be achieved, what activities will be undertaken and the assumptions and external factors which are likely to affect implementation.
 - d) **Analyse Programme Implementation Strategies** - On process-type projects, the planned processes through which objectives will be achieved must be reviewed and clarified in order to identify milestones required for monitoring systems to chart progress.
 - e) **Select Indicators** - To determine progress in achievement of programme objectives, purpose and outputs, conduct of activities and utilisation of resources.
 - f) **Identify Means of Verification** - The following questions need to be answered: What data/information precisely is needed? Who will collect, analyse, document and forward information? Who will co-ordinate these activities? When will this happen?
 - g) **Identify required components of M&E System** – To identify how systems and sub-systems should be developed and integrated. Typically, programmes require an MIS for routine data handling, reporting and feedback and separate sets of procedures and mechanisms for evaluation.
 - h) **Design report formats and analysis summaries** – Identify the levels of reporting within the management structure and the needs of programme partners. The objective is to provide managers at different levels and development partners with access to relevant and timely information in an appropriate format which facilitates easy and rapid analysis.
 - i) **Prepare an implementation plan for the M&E system** – This should detail what staff and/or training is needed and how M&E system components will be developed and established.
- 6) Identification of Required Components of M&E System: After a preliminary assessment of the needs of the AFRICA 2000, it is anticipated that a Management Information System for the AFRICA 2000 would include the following:
- a) Financial Management Control Sub-system,
 - b) Time (Human Resource) Management Sub-system, and
 - c) Programme process, activity and output monitoring sub-systems.
 - d) Programme Evaluation systems would include sub-systems aimed at i) evaluating the efficiency and efficacy of Programme Implementation Processes (Delivery Systems), ii) assessing the quality of the outputs and results achieved, and iii) evaluating progress toward the achievement of programme objectives. It is understood that some components are also reviewing programme administrative procedures. These activities should be formally linked to the establishment of the programme MIS.

Africa 2000 monitoring and evaluation requirements can best, and most cost-effectively, be satisfied if undertaken on a combined and integrated basis to meet effect and impact assessment requirements. In this regard, input and output measurement, although essential, is not sufficient, and objectively verified information on process and effects should, as a minimum, be obtained during the time span considered for study. When designing such systems, a specific selection of the most pertinent process issues and measures of effect must be made before a project is implemented. A clear and deliberate distinction must be maintained between what is "useful" and what is "essential" in individual cases. The **substantive link between evaluation and policy analysis** should, in this regard, be fully exploited by assigning the examination of selected policy issues and equations, or particular aspects of them, to individual M & E

systems, thereby usefully drawing policy, evaluation, and project design together.² The "burden of proof" for the generation, collection, and recording of data lies with the data users. They must be identified and must provide a justification for such activities based on clearly defined information requirements, an analysis plan, and established information flow for feedback purposes. The fact that donors and beneficiaries (including recipient government and other organisations) have essentially the same information requirements should, in this regard, be emphasised. Requirements should not, therefore, be treated as extemporaneous, unique, or externally imposed on the people to "satisfy the needs of external agents".

AFRICA 2000 M&E as a whole should take full advantage of other on-going data collection efforts and local institutional capacities. Since they are by nature and design integral to larger national processes and data requirements. Supplementary data and needs for externally provided technical support should be kept of a minimum. When provided, such support should meet not only specified technical requirements but should also aim at the institution-building purposes; and statistical rigor and interference, although desirable, may have to be relaxed in view of cost and time constraints, and the need for practical and useful results. Indicators are not targets, and neither indicators nor targets should be confused with objectives. Targets are specified results in terms of quantity or timing (usually both), but these results may relate to inputs, outputs, effects or impacts. Indicators are used as markers of progress towards reaching intermediate or long-term objectives. They are not numerical targets in themselves.

Indicators should, in the ultimate analysis, be determined by the nature of the objectives and intended effects and impact. The first step, therefore, is a clear and unambiguous statement of the objectives, short-term, intermediate and long-term. These may pertain to increased outputs, such as construction of wells (short-term), or enhanced effects (intermediate-term) such as higher yields. Or they may be impacts such as eradication of poverty or better health of the target population (There is little conceptual problem with outputs and effects which generally are directly measurable, but concepts such as poverty are not easily measured. Hence the need for indicators which in this context are the (smallest number of) variables by which the objectives (less poverty, better health) can be comprehensively described and measured.³

Section II

Indicator development

Objectively Verifiable Indicators (OVIs) and Means of Verification: In order to monitor and evaluate programme outputs, effects and impact, qualitative and quantitative indicators have to be identified. Once programme objectives have been redefined in measurable terms, direct and proxy indicators of programme achievements can be identified. These OVIs need to be agreed and finalised at the M&E Workshop scheduled for August 26-28, together with the means with which the information will be collected. It is therefore recommended that prior to the workshop both the global component and regional component work to identify qualitative and quantitative indicators to measure the achievement of revised objectives and outputs.

Project Implementation Processes: Core programme implementation procedures and processes are unclear. In order to monitor progress in the implementation of the programme, programme implementation procedures should be reviewed periodically. This will clarify what activities will be undertaken by the programme, the milestones which will signify successful completion of the activities, and who has responsibility for undertaking activities and how these activities should be sequenced. It is therefore recommended that we analyse their functions and responsibilities using a Process Planning Framework. This output then be circulated to the regional components before the M&E Workshop in

² UNICEF (1985) Food Aid and the Well-being of Children in the Developing World New York

³ With water, for instance, it is first necessary to specify the aims in the light of a given programme: better health and sanitation status. Depending on the specifications, appropriate indicators may be selected.

August to enable them to use the model to review their own activities, and that the different analyses be reviewed and reconciled at the planned M&E Meeting.

AFRICA 2000 M&E Systems and Procedures: While it is expected that the AFRICA 2000 will have to produce hard copy reports for certain audiences, it is recommended that the core of the MIS be developed as a computerised system. If the same (tailored) set of templates for reporting is installed in all programme offices, data files can then be readily exchanged to produce reports and analysis with a common structure. In designing and developing these systems, it has to be recognised that time and funds are limited both for system development and for training staff in system use. It is therefore expected systems will have to be developed using components of MS Office 97, a software package already in use by the programme.⁴

Programme Activity, Output Monitoring and Time Management Sub-systems: The core of the proposed MIS would be an activity and output monitoring. This could be developed as a stand-alone database or could be linked to the time management system. Once programme processes are analysed and structured, computer-based planning, monitoring and time management systems can be developed to enable programme staff to plan activities, allocate resources and monitor the implementation of activities, the production of outputs and the use of human resources. Several possible software environments could be used for this including PIM software such as MS Project and database structures such as MS Access. However, a decision on which software to use and customise will be made after the M&E Workshop. Table 1. shows the genesis of indicators as far as they are designed to address in a systematic way the relationship to objectives, outputs, effects and impact. In this regard they are defined as⁵

- **variables that help to measure changes in a given situation.**
- **tools for monitoring and evaluating the effects of an activity.**

Indicators are defined as specific (explicit) and objectively verifiable measures of changes or results brought about by activity. In other words, indicators are designed to provide a standard against which to measure, or assess, or show, the progress of an activity against stated targets, towards delivering its inputs (input indicators), producing its outputs (output indicators) and achieving its objectives (effect and impact indicators)⁶. Indicators may be

- **direct, such as those cited above(usually monitoring indicators), or**
- **indirect (proxy), usually impact indicators used where direct measurement is not feasible or cost effective.**⁷

⁴ The AFRICA 2000 clearly needs a simple financial planning and expenditure monitoring system that can be used by all components. This should be structured so that financial planning can be done both against the different budgets for the programme and against the country and component work programmes approved by the donors and the Steering/Advisory Committees. The system should allow expenditures to be monitored against both budget sources and objects of expenditure by country and for each component. Such a system would probably best be developed using spreadsheet software with which all users are already familiar such as MS Excel. This could be customised so that each component would manage their own budgets and keep the global component updated by sending files as email attachments which could be imported into a central spreadsheet maintained by the OPS.

⁵ UNICEF (1985) Food Aid and the Well-being of Children in the Developing World New York

⁶ Such as the efficiency on agricultural package delivery (input), yield in farms (output), technology adoption rate (effect), and change in livelihood security (impact).

⁷ Such as the size of assets or holdings, type of house or consumption expenditure as proxy indicators for levels of income: and weight in relation to height as a measure of the health status of children.

Depending on AFRICA 2000 scope, content, and operational circumstances, impact measurement

may be feasible, and all opportunities to do it should be exploited, given existing resource and time constraints. However, it cannot, and should not, be treated as an automatic or standard objective of evaluation. In all cases where proposals for effect and impact measurement are made, particular emphasis must be placed on the assessment of practical requirements. What may be interesting and stimulating conceptually may not be feasible at the implementation level. Information collection for

	<i>hypotheses and assumptions about indicators</i>	<i>criteria for indicators</i>	<i>Indicators</i>
Objectives	Assumptions about relationships between objectives and impact indicators	Criteria for choosing impact indicators. Design criteria: accuracy, levels, timing	<i>Impact indicators</i>
Impacts	Hypotheses about how effects produce impacts:		
Effects	Assumptions about relationships between impacts / effects indicators	Criteria for choosing effects indicators. Design criteria: accuracy, levels, timing	<i>Effect indicators</i>
Outputs	Hypotheses about how outputs produce effects and external factors		
Inputs	Assumptions about relationships between effects / output indicators	Criteria for choosing output indicators. Design criteria: accuracy, levels, timing	<i>Output indicators</i>
	Implementation hypotheses		

"general", but not clearly specified, purposes is not justified. While the choice of indicators is a matter of common sense, or of experience and knowledge of statistical data source, certain rules of thumb can be applied. Thus, ideally, indicators should pass the test of

Validity	they should be valid units of comparison for people to understand and actually measure what they are supposed to measure, be statistically valid and used to represent the intentions of the goal to be achieved;
Reliability	verifiable conclusions based on them should be the same if measured by different people at different times and under different circumstances;
Relevant	should be relevant to sustainable livelihood issues. People would like to verify;
Sensitive	should be sensitive to changes in the situation being observed,
Specificity	this pertains to the ability of the indicators to work on specific verifiable areas of outputs based on available data;
Cost effectiveness	the results should be worth the time and money it costs to apply them; and
Timely	it should be possible to collect the data reasonably quickly.
Simplicity	simple indicators must be used that can be understood by the communities
Measurability	quantitative criteria to indicate change
Verifiability	measurement criteria lend to verification through means of verification and sources of verification

Few indicators can fulfil all these criteria. But they may still indicate direction and general magnitude, thereby assisting in comparisons over time or among different areas or groups of people at a point in time. As noted, choice of appropriate indicators is a task that requires experience and skill. It is an art rather than a science. It also requires thorough understanding of the information needs of management at the various levels, knowledge of how best to obtain the data for the indicators and of the

limits imposed by both costs and techniques⁸. A few other more technical considerations in the choice of indicators may be noted:

1. An important factor affecting the cost of data collection and the method of analysing it is the level of the data collected. Indicators may be aggregate at national level, derived from national sources and only applicable at this level⁹. A second category of aggregate indicators is derived at the local level (community, village, and district)¹⁰. A third category of indicators is derived from households or individuals, usually through census or sample survey¹¹. By and large, aggregate indicators are simpler to collect than household indicators. But because they cannot readily be disaggregated and therefore no distribution data can be obtained from them, they have limited utility. Hence, we cannot use the GNP to arrive at the gross product for a district or for the poor (though regional estimates are sometimes calculated). On the other hand, household data can be disaggregated, but it is generally costly to collect.
2. Not all concepts lend themselves to relatively simple, quantitative construction of indicators. Examples are the degree of popular participation or organisational structure of complex systems. Rather than trying to squeeze these complex concepts into a small set of numbers, descriptive statements might be prepared with indications of the direction of change.
3. Implicit in the points above, the number of indicators must be limited to keep information requirements and costs of collection to a minimum and to ensure focus on the most significant issues. Both indicators and related information requirements should be periodically reviewed to take into account changing needs or refinements in data quality. In this connection, present indicators, or indicators used in other projects, should be reviewed before new ones are considered. As far as possible the *indicators should be divisible by gender, income group*, etc., in line with objectives. Disadvantaged groups such as the poor and women cannot receive equitable benefits from development projects unless they are specified as beneficiaries, with strategies indicated whereby their disadvantaged position can be overcome and their conditions monitored. To repeat, aggregate indicators cannot usually be divided into sub-categories. Indicators based on the household or the individual are required to provide data separately for men and women or for socio-economic categories such as the poor or the land less.

Sources and means of verification

Decisions about indicators and data generally should be taken on the basis of available and potential sources. There is little purpose in compiling an ideal list, which is either too complex or too large. The first step in data collection, therefore, is a review of what exists in the way of information and sources. The review should cover both internal and external sources. In practice, it may often be found that data or data sources do not precisely fit the purposes but may be made to do so with marginal adjustments. Thus, for monitoring and evaluation purposes available, data on crop yields may require tabulating for a specific population. Health records kept in dispensaries might be improved with one or two additional entries per

⁸ Thus, the infant mortality rate may be a suitable indicator for monitoring health in countries with comprehensive systems of registration of vital statistics, i.e. births and deaths. It may be quite unsuitable for project monitoring where the target population or any one of its sub-divisions is small and/or where the data must be obtained by sample survey. To give another example, household income data as an indicator of living standards is notoriously difficult to collect and highly unreliable. For this reason, if it is used at all it should be supplemented with related data, of which ownership of visible assets-such as a house and consumer durable-may be examples.

⁹ examples are the gross national product(GNP)derived from national accounts or per capita consumption of calories and nutrients derived from national food balance sheets

¹⁰ Examples are whether schools are available in each village \ district surveyed and their condition.

¹¹ The degree of literacy and height and weight of children are examples.

patient and with simple analysis. Even in the best of cases, and in spite of the apparent wealth of secondary data, it will normally be necessary to collect additional information. The next step, therefore, is to decide what to collect and how. In turn, this may be a suitable time to review earlier requirements. It may be found that initial plans were unduly ambitious in the light of available resources and difficulties in data collection. There are basically six sources of data:

1. The management processes, which yield or can be, made to yield information-particularly on inputs and outputs-through periodic reporting systems.
2. Techniques that can be incorporated into enhancing livelihood security processes.
3. In-depth investigation of small samples of households or individuals, where the method of investigation is through detailed, open-ended questions and probes rather than set questionnaires.
4. Sample surveys of a medium-to-large number of households or individuals, normally using a set questionnaire with closed, alternative choice questions.
5. Interviewing key respondents for information on generic community characteristics and participant observation, for an analysis of the functioning and role of institutions, such as co-operatives, credit banks, marketing arrangements, etc.

Sample Size

The art of data collection is to select the appropriate source and method for a given type of data to manpower, technology and money. Medium-or large-scale sample surveys tend to be the most costly in terms of both manpower and money. Management can seldom cope with surveys it is proposed to devolve surveys to a central agency or an external body.

Even then, sample size should be kept to a minimum by one or more of several techniques now available, such as stratification (i.e. dividing the population into groups as homogeneous as possible with respect to the main variables examined and sampling a small number from each group) or sequential sampling. Actual sample size is determined by an estimate of the likely rate of change in the major variables and by the desired degree of probability that the survey results reflect reality rather than the chance effect of sampling. This can effect is expressed in terms of the "sampling error". The smaller the error, the more precise the estimate is said to be. Reducing the error, however, generally requires enlarging the sample, thereby increasing the cost. It has been pointed out, that for purposes of monitoring, estimates need not be "precise".

A point sometimes overlooked in survey design, however, is the need for a large sample so that data can be disaggregated. Separate estimates for, say, three separate socio-economic groups (to distinguish the poorest, for example) would often entail a much larger sample than for a single estimate covering the entire population. As noted, careful stratification of the population before sampling would help to keep the sample to a minimum, and it is usually worth spending time to investigate the possibilities for stratification.

AFRICA 2000 - Prototype

Presentation of Actionable Programmes

Strategic mission and plan (prototype)

The AFRICA 2000 mission is to support processes, which empower people and their institutions, in order to enhance their resources according to their own locally defined aspirations for the benefit of local livelihoods.

The programme globally executed by UNDP and implemented by the OPS. The three main components of programme development for the national AFRICA 2000 Programme are:

1. Developing ideas, design systems and actionable programme areas based on peoples' empowerment and adaptive strategies.
2. Develop natural resource management systems that enhance people's livelihoods
3. Organic networking for informed decision making and action.

Component I

Window of opportunities for empowerment, policy and strategy development

Programme Support Objective I

Develop ideas, design systems and actionable programme areas based on peoples' empowerment and adaptive strategies

Output 1.1: Participatory Assessment and Planning for Sustainable Livelihoods (PAPISL) manual produced, PAPISL conducted and popularisation of the methodology undertaken.

Activity 1.1.1: Develop locally, regionally and nationally relevant PAPISL methodologies.

Sub-activity 1.1.1.1: Literature review of RRA, PRA, PLA, TtT and other relevant participatory planning methods.

Sub-activity 1.1.1.2: Assignment of a task force to undertake the work of the PAPISL.

Sub-activity 1.1.1.3: Development of modules in selected villages and selected districts.

Sub-activity 1.1.1.4: Develop the various segments of the PAPISL manual in relation to the following modules.

Activity 1.1.2: Convene strategic PAPSLS involving relevant decision-makers

Activity 1.1.3: Convene PAPISL for policy design, environmental impact assessment and capacity building

Output 1.2: Document produced on cases of endogenous mechanisms for conflict resolution

- Activity 1.2.1: explore endogenous mechanisms for conflict resolution,
- Activity 1.2.2: documentation of adaptive strategies as case histories of environmental crisis management, local mediation study, gender sensitive methods, use of PRAs, interactive video

Output 1.3: Concept developed on conflict resolution – local mediation and video produced regarding endogenous mechanisms for resolving conflicts

- Activity 1.3.1: Develop a concept paper on how conflicts can be managed, on various ecological zones, resource paper and video.
- Activity 1.3.2: Adapt these relevant theoretical frameworks to local situations using the tools developed by activity 1.4.1 below

Output 1.4: Capacity of civil society organisations in natural resources management identified and enhanced and database on local institutions produced so that viable local institutions identified to collaborate for various activities

- Activity 1.4.1: Assessment of need for training trainers for enhancing local capacity development on grassroots indicators, support data base on civil society organisations.
- Activity 1.4.2: Production of document on indigenous natural resources management practices
- Activity 1.4.3: Training of trainers in Civil Society structure, function and leadership.
- Activity 1.4.4: Mapping and relating to local institutions.

- Sub-activity 1.4.4.1: Develop database templates and formats for collection, collation and synthesis of database.
- Sub-activity 1.4.4.2: Develop an organisational assessment partner agency check-list to study, monitor, evaluate and share the experience of local organisations in contributing to the realisation of their own, locally defined aspirations
- Sub-activity 1.4.4.3: Document experience of local institutions in indigenous natural resource management

Output 1.5: Sufficient resources including funds raised within country to support the activities of AFRICA 2000

- Activity 1.5.1: develop a fund raising manual for AFRICA 2000 National Programmes
- Activity 1.5.2: Develop strategies for local resource mobilisation and fund raising according to the fund raising manual prepared under 1.5.1
- Activity 1.5.3: Identify strategic partners in devolving the AFRICA 2000 responsibility and institutionalising the work of AFRICA 2000
- Activity 1.5.4: Develop strategies for community mission in integrating AFRICA 2000 ideals to the seasonal calendar of families

PROGRAMME SUPPORT OBJECTIVE 1

DEVELOP IDEAS, DESIGN SYSTEMS AND ACTIONABLE PROGRAMME AREAS BASED ON PEOPLES' ADAPTIVE STRATEGIES AND ALTERNATIVE NATURAL RESOURCES-BASED CONFLICT MANAGEMENT

YEAR 1	YEAR 2	YEAR 3
--------	--------	--------

<input type="checkbox"/> Prepare study proposal and approve <input type="checkbox"/> Finalise agreement with regional governments and other concerned organisations workshop <input type="checkbox"/> Study initiated <input type="checkbox"/> Produce video <input type="checkbox"/> Annual PRAs <input type="checkbox"/> Annual training workshops <input type="checkbox"/> Prepare for mapping of local institutions all regions <input type="checkbox"/> Case study of some local institutions on the mechanisms of operation <input type="checkbox"/> Produce database on local institutions <input type="checkbox"/> Develop fund-raising strategies	<input type="checkbox"/> Annual assessment report <input type="checkbox"/> Follow up studies/activities on adaptive strategies and conflict management – based on findings of previous efforts <input type="checkbox"/> Undertake study on conflict management or related subject in other regions <input type="checkbox"/> Annual training workshop <input type="checkbox"/> Production of video <input type="checkbox"/> Annual PRAs <input type="checkbox"/> Annual training workshop <input type="checkbox"/> Finalise activity on database on local institutions <input type="checkbox"/> Design mechanisms to utilise the information generated from the local institutions <input type="checkbox"/> engage in resource mobilisation	<input type="checkbox"/> Annual assessment report <input type="checkbox"/> Follow up studies/activities on adaptive strategies and conflict management – based on findings of previous efforts <input type="checkbox"/> Undertake study on same or related subject in other regions <input type="checkbox"/> Annual training workshop <input type="checkbox"/> Production of video <input type="checkbox"/> Annual PRAs <input type="checkbox"/> Annual training workshop <input type="checkbox"/> Foster collaboration with interested/ concerned organisations, <input type="checkbox"/> Community integration of AFRICA 2000 ideals achieved
---	---	---

Workplan

COMPONENT I		J	F	M	A	M	J	J	A	S	O	N	D
I	Output 1.1. PAPISL manual produced, PAPISL conducted /popularisation												
	➤ Develop PAPISL												
	➤ Convene PAPISL												
	➤ Use PAPISL for policy analysis												
	Output 1. 2. Document on endogenous mechanisms of conflict resolution												
	➤ Explore endogenous conflict resolution mechanisms												
	➤ Document case studies of adaptive strategies												
	Output 1.3: Concept developed on conflict resolution												
	➤ Develop concept paper												
	➤ Adapt theoretical frameworks												
	Output 1.4. CSOs NRM capacity identified, produce database on CSOs,												
	➤ Asses ToT needs on capacity building of CSOs												
	➤ Document on indigenous NRMP and CSOs												
	➤ ToT on CSOs nature												
	➤ Map CSOs												
	➤ Partner agency check-list developed for organisational assessment of CSOs												
	Output 1.5. Local resources and funds generated												
	➤ Develop manual on fundraising												
	➤ Develop local resources mobilisation strategies												
	➤ Identify national partners for AFRICA 2000												
	➤ Develop strategies to integrate AFRICA 2000 objectives with communities												

Component II

Natural Resource Management and Sustainable Livelihood

Programme Support Objective II

Develop people-based natural resources conservation, development and management methods that would contribute directly to people's livelihoods (incomes, assets, securities, etc.)

Output 2.1: characterisation of stakeholders in joint forest management.

Activity 2.1.1: identification of forest communities for characterisation of stakeholders in forest management

Activity 2.1.2: develop strategies for characterisation of stakeholders in forest management

Activity 2.1.3: undertake analysis of characterisation of stakeholders in forest management

Activity 2.1.4: document and disseminate characterisation of stakeholders in forest management

Output 2.2: A study of both local and external institutional constraints/ opportunities that limit/ support local resource management capacity, and the methods for overcoming/ taking advantage of these, and how local institutions can be supported in this.

Activity 2.2.1: Document local resource management systems in forest communities

Activity 2.2.2: Document and disseminate the finding

Output 2.3: Environmental education packages developed and disseminated

Activity 2.3.1: Curriculum development for grades 1st to 8th (Elementary schools)

Activity 2.3.2: Material development

Activity 2.3.3: Training of Trainers

Activity 2.3.4: Training workshop

Activity 2.3.5: Strategy for dissemination and education to about 400 schools and some communities

Output 2.4: Effective community Biodiversity programmes established

Activity 2.4.1: Document on Biodiversity conservation processes or experience in communities/their members

Activity 2.4.2: Church based Biodiversity programmes established

Activity 2.4.3: Locally initiated and supported PA nurseries established

Activity 2.4.4: Training of trainers

Activity 2.4.5: Training Workshops

- Training in locally funded PA nurseries and silviculture
- Training of trainers in environmental education.
- Training of trainers in Biodiversity conservation.
- Training of trainers in policy analysis.

BENCHMARKS

PROGRAMME SUPPORT OBJECTIVE 2

PROGRAMME MANAGEMENT

YEAR 1	YEAR 2	YEAR 3
<ul style="list-style-type: none"> <input type="checkbox"/> Identification of possible study sites <input type="checkbox"/> Identification of collaborating institutions and church partner agencies and other relevant organisations <input type="checkbox"/> Conduct assessment of participatory methodologies used in the country for national database <input type="checkbox"/> Conduct study on stakeholders interest in resource (forest) management <input type="checkbox"/> Annual workshop (training and dissemination) <input type="checkbox"/> initiate study on communities and bio-diversity protection <input type="checkbox"/> initiate study on local institutions capacity on resource management 	<ul style="list-style-type: none"> <input type="checkbox"/> annual assessment report <input type="checkbox"/> prepare guideline for establishing Church based bio-diversity protection programme <input type="checkbox"/> follow up study and activities based on findings of previous study <input type="checkbox"/> Annual training workshop <input type="checkbox"/> Produce training manual on environmental education, bio-diversity protection 	<ul style="list-style-type: none"> <input type="checkbox"/> annual assessment report <input type="checkbox"/> follow up study and activities based on findings of previous study <input type="checkbox"/> Annual training workshop <input type="checkbox"/> Attempt to develop short courses for training programme on environmental education, bio-diversity protection <input type="checkbox"/> Seek means to sustain the activities initiated through out the years

Workplan

COMPONENT II		J	F	M	A	M	J	J	A	S	O	N	D
II	Output 2.1: Characterisation of stakeholders in Joint forest management												
	➤ Develop strategy for identifying community forest users												
	➤ Identify community forest users												
	➤ Analysis of information												
	➤ Document and disseminate the finding												
	Output 2.2: Local capacity of CSOs on NRM studied												
	➤ Document NRM in forest communities												
	➤ Document and disseminate the findings												
	Output 2.3: Package on Environmental education developed & disseminated												
	➤ Curriculum developed for schools												
	➤ Material developed												
	➤ Define strategy for dissemination												
	➤ Training of Trainers												
	➤ Training Workshops												
	Output 2.4: e community Biodiverstiy programmes established												
	➤ Document local Biodiverstiy processes and experience												
	➤ Establish church based Biodiverstiy conservation programmes												
	➤ Local/PA tree nursery project supported												
	➤ Training of trainers												
	➤ Training Workshops (on 4 issues)												

Component III: AFRICA 2000 Networking

Programme Support Objective

Develop tools, methods, or skills on organic networking structures and systems for collecting, collating and analysis of information via multi-track communication to enable informed decision making by all stakeholders.

Output 3.1.1. Local information sharing mechanisms among concerned stakeholders supported

- Activity 3.1.1: support and facilitate record of local testimonials on various issues such as NRM, processes of disempowerment
- Activity 3.1.2: Forums provided to raise public awareness on local resource conflict and resolution and other related issues
- Activity 3.1.3: Produce and supply material on endogenous knowledge and institutions, which regulate NRM
- Activity 3.1.4: Develop sponsor representation at national and international forums of some community members to air their views on issues those concern AFRICA 2000 objectives.
- Activity 3.1.5: Utilise various communication facilities such as newsletters, mass media, and videos to facilitate dissemination and access of information
- Activity 3.1.6: Convene networking workshops

Output 3.2. Effective means of network with communities via school environment clubs established

- Activity 3.2.1: Establish /Centre for Human Environment chapters/committees in communities, with the help of environmental club members
- Activity 3.2.2: Strengthen community network of expertise mobilisation and provision
- Activity 3.2.3 Expand the concept /centre for Human Environment campfire to others by various means such as: sponsor visits, convene networking workshop to share experience, newsletter etc.

Output 3.3. Regional Exchange of publication and information on AFRICA 2000 programmes

- Activity 3.3.1: Regional printing and dissemination of AFRICA 2000 Newsletter
- Activity 3.3.2: Regional inserts to AFRICA 2000 newsletter on national local themes national and regional networking workshops
- Activity 3.3.4: Distribution of AFRICA 2000 Newsletter and publications as well as collection of material for publication
- Activity 3.3.5: Produce and supply information and material to extension staff that assist them to work more closely in partnership with local communities
- Activity 3.3.6: Convene networking meeting

Workplan													
COMPONENT III													
		J	F	M	A	M	J	J	A	S	O	N	D
Output 3.1	Local information sharing mechanisms among stakeholders supported												
	➤ Record of local testimonials on various issues such as NRM,												
	➤ Raise public awareness on local resource conflict and resolution												
	➤ Produce and supply material on endogenous knowledge on NRM												
	➤ Sponsor representation of some community members on certain forums												
	➤ Avail material on endogenous knowledge and institutions which regulate NRM												
	➤ Utilise various communication facilities to facilitate information access												
	➤ Convene Networking workshops												
Output 3.2	Effective means of network with communities via school clubs established												
	➤ Establish /Centre for Human Environment chapters/committees in communities												
	➤ Expand the concept /Centre for Human Environment campfire to others												
	➤ Strengthen community network of expertise mobilisation and provision												
Output 3.3.	Regional Exchange of publication and information on AFRICA 2000 programme												
	➤ Regional printing and dissemination of AFRICA 2000 Newsletter												
	➤ Regional inserts to AFRICA 2000 newsletter on national local themes on workshops												
	➤ Distribution of AFRICA 2000 Newsletter and publications and collection of material												
	➤ Produce and supply information and material to extension staff												
	➤ Convene networking meeting												
Output 3.4.	Regional Exchange of publication and information on AFRICA 2000												
	➤ Regional insert, printing and dissemination of AFRICA 2000 Newsletter												
	➤ Distribution and collection of material for AFRICA 2000 Newsletter and publica												
	➤ Produce and supply information and material to extension staff that assist them to work more closely in partnership with local communities												
	➤ Convene networking meeting												

Immediate objectives and outputs

for the MTCS as a tool of networking.

1) **Objective I: to identify and define stakeholders.**

a) Output I: mapping stakeholders

- i) Activity 1: identify and list all stakeholders
- ii) Activity 2: describe their strength and weaknesses
- iii) Activity 3: describe their stakes in SL
- iv) Activity 4: map how they relate to each other identifying areas of co-operation, dependency, service and conflict.

2) **Objective II:** articulate stakeholder messages for sustainable livelihoods that need to be communicated to other stakeholders clearly.

a) Output II: clear and unambiguous information on sustainable livelihoods articulated among stakeholders.

- i) Activity 1: Using PAPISL tools and helping stakeholder to articulate SL, define their priorities,
- ii) Activity 2: Use workshops and seminars to help evolve and ground the SL concept in local cultures, languages, metaphors and popular plays,
- iii) Activity 3: Undertake training of trainers for PAPISL to disseminate the percept and construct of SL.
- iv) Activity 4: Culturally and gender-sensitive curriculum development for civic education.
- v) Activity 5: Culturally and gender sensitive civic education training on sustainable livelihoods in each village of implementation.
 - (1) Sub-activity 1: Develop culturally and gender-sensitive radio in each village of implementation.
 - (2) Sub-activity 2: Culturally and gender-sensitive posters developed in each village of implementation to enhance development aspirations of the community.
- vi) Activity 3: Develop village level MTCS resource centres in each village of implementation.
- vii) Activity 4: Draw a programme of action to strengthen traditional communication channels in each village of implementation. (Church choir, drums, drama, and funerals) and draw a programme of action revitalise extension system in each village of implementation.

b) Output III: functional channels and media for information exchange developed.

- i) Activity 1: explore the use of video for public education.
- ii) Activity 6: Training in functional adult literacy for all interested adults in villages of SL implementation.
- iii) Activity 7: Peoples testimonials on successful adaptive strategies recorded on video and used for sensitisation and animation purposed in selected villages where the SL programme will be operationalised.

3) **Objective II: to identify tracks of communications at the (1) official, governmental, (2) non-**

governmental, (3) informal, private sector, (4) civil society organisations and community and (5) interpersonal levels.

- i) Output I: tracks of communications identified
 - (1) Activity 1: Identify and map out formal tracks of communications such as radio, government decrees
 - (2) Activity 2: identify informal communication media and channels such as informal market information systems, community networks, etc.
 - (3) Activity 3: identify interpersonal communication channels through the use of PAPISL methods

- ii) Output II: clear designations of tracks of co-operation, dependency, services and conflict, where one may arise, among stakeholders identified.
 - (1) Activity 1: identify and map tracks of co-operation between all stakeholders,
 - (2) Activity 2: identify dependency areas, especially where communities depend on government for policy and strategy and donors for money.
 - (3) Activity 3: identify service needs and provisional abilities among stakeholders,
 - (4) Activity 4: identify potential areas of conflict of interest among the stakeholders

4) Immediate objective III: to establish levels and types of gender-sensitive interaction among stakeholders

- i) Output I: national, district, community/village and household levels and types of interaction among stakeholders identified.
 - (1) Activity 1: Develop of gender-dynamic educational radio-communications.
 - (2) Activity 2: Develop gender-sensitivity of school curriculum relation to nutrition food production and utilisation for both girls and boys.
 - (3) Activity 3: Undertake five workshops, technical consultations to strengthen capacity of extension services to communicate gender sensitive messages on food security, nutrition and environment to both men and women.
 - (4) Activity 4: Use PAPISL sessions in all villages to enhance ability of women and youth and other marginalised groups to make informed contributions. This should enable them to participate fully in societal decision making and social development.
 - (5) Activity 5: Use PAPISL sessions in all villages to streamline convergence of knowledge concerning traditional socio-cultural context and contemporary perspective for sustainable livelihoods.
 - (6) Activity 6: Information about responsible reproduction including child spacing, family planning, STDs and HIV/AIDS widely diffused to youth, women and men disseminated in all villages.

5) Immediate objective IV: to map out and analyse stakeholder information needs.

- i) Output I: stakeholders clearly identified at the institutional, organisational and individual levels, and stakeholder information needs identified.

- (1) Activity 1: Mapping of all social organisational structures in selected representative villages.
 - (2) Activity 2: Study of these organisations in terms of their autonomy, complexity, capacity and cohesion.
 - (3) Activity 3: Train community's capacity to raise, manage and save funds to undertake development initiatives.
 - (4) Activity 4: Use T/fT tools Develop aspirations of the community.
- 6) Immediate objective V: **to define the thematic areas of interests of stakeholders**
- i) Output I: identified stakeholder thematic priorities.
 - (1) Activity 1: identify and document stakeholder priority in food security,
 - (2) Activity 2: identify and document stakeholder natural resources management,
 - (3) Activity 3: identify and document stakeholder employment /income generation.
- 7) Immediate objective VI: **to develop tools that would facilitate the MTC process**
- i) Output II: MTC organic networking policies, strategies, structures and processes identified.
 - (1) Activity 1: identify existing networks of traditional associations, women's networks religious and other networks
 - (2) Activity 2: map the structures of these networks
 - (3) Activity 3: describe the process that takes place in these networks – leadership, participation, actors and facilitators.
- 8) Immediate objective VII: **to establish the levels of stakeholder information entitlement.**
- i) Output I: inventory of communication media available to all stakeholders mapped out.
 - (1) Activity 1: traditional communicational channels, media, tools, and games identified.
 - (2) Activity 2: community meeting places, rules and participants of the meeting identified at different times.
 - (3) Activity 3: identify gaps and omissions in the information entitlement chart mapped out in the above output.
- 9) Immediate objective VIII: **to establish mechanisms for recording, collating, compiling and dissemination of local knowledge using agreed upon indicators. Indicators in this regard must attain, to a large degree the following criteria: validity, reliability, relevance, sensitivity, specificity, cost-effectiveness, timeliness, simplicity, measurability, and verifiability.**
- i) Output I: Adaptive strategies that lead to sustainable livelihoods recorded documented, analysed and made available for access by stakeholders, documentation of information on adaptive strategies which lead to, or have the potential to lead to, sustainable livelihoods.
 - ii) Output II: Local knowledge systems have constituency in the development community
 - iii) Output III: Popular development aspirations and perceptions of primary stakeholders (the

poor) adequately communicated.
iv) Output IV: community publishing established

- (1) Activity 1: packaging and dissemination of information sets on adaptive strategies to local communities and other interested groups.
- (2) Activity 2: provision of recommendations to policy makers and local communities through the identification of key interactions, synergies, antagonisms, etc. among traditional and contemporary knowledge and the relevant policy conditions under which adaptive strategies evolved.
- (3) Activity 4: identification, in a preliminary manner, of indicators of sustainable livelihoods in arid and semi-arid lands.
- (4) Activity 5: provide research partner agencies and other interested parties with information on the process and methodology used.
- (5) Activity 6: influence the outcome of the WSSD in the areas of poverty and sustainable development.
- (6) Activity 7: What kind of ecosystem, socio-economic and political changes have occurred in the project countries? Here we need to describe the signals and indicators of change. Consider a tabular presentation of data to put adaptive strategies data in perspective. Examples of indicators follow: ecosystem indicators,¹² socio-economic indicators,¹³ and political indicators¹⁴.
- (7) Activity 8: Macro-policy context: What national and international policies, i.e. agricultural, economic, environmental, social, impede or facilitate the achievement of sustainable livelihoods? Policies to be considered include macro-policy adjustments including structural adjustment programmes trade policy and the role of the formal and informal sectors.

BENCHMARKS
Programme Support Objective 3
Programme Management

YEAR 1	YEAR 2	YEAR 3
<ul style="list-style-type: none"> <input type="checkbox"/> Publish research documents for dissemination <input type="checkbox"/> Identify articles for national and regional AFRICA 2000 newsletters <input type="checkbox"/> Organise regular thematic workshops <input type="checkbox"/> Identify strong school environmental clubs and /Centre for Human Environment committees to regularly organise forums to support school environmental clubs in strengthening networking <input type="checkbox"/> Organise networking workshops 	<ul style="list-style-type: none"> <input type="checkbox"/> Annual review/assessment report <input type="checkbox"/> Identify training needs on various networking activities <input type="checkbox"/> Publish research documents for dissemination <input type="checkbox"/> Identify articles for national and regional AFRICA 2000 newsletters <input type="checkbox"/> Organise regular thematic work shops <input type="checkbox"/> Further strengthen link with school environmental clubs and /Centre for Human Environment committees <input type="checkbox"/> Organise networking workshops <input type="checkbox"/> Disseminate videos produced (if possible through mass media) <input type="checkbox"/> Distribute AFRICA 2000 publications <input type="checkbox"/> Identify other complimenting channels for 	<ul style="list-style-type: none"> <input type="checkbox"/> Publish research documents for dissemination <input type="checkbox"/> Identify articles for national and regional AFRICA 2000 newsletters <input type="checkbox"/> Organise regular thematic workshops <input type="checkbox"/> Identify strong school environmental clubs and /Centre for Human Environment committees to regularly organise forums to support school environmental clubs in strengthening networking <input type="checkbox"/> Organise networking workshops <input type="checkbox"/> Disseminate videos produced (if possible through mass media)

¹² agroecological zones; climatic variables including rainfall patterns and major droughts; soils status; extent of desertification; siltation rates; vegetation types and cover, etc.

¹³ the nature of enterprises; income sources and their distribution; migration and other demographic factors; employment; human health indicators (e.g. mortality rates); animal health indicators; rights, including grazing, land- tenure, tree tenure and land-use

¹⁴ the nature of government; the extent of centralisation and decentralisation of political authority (i.e. local self-government); system of procurement of goods and services including trade, financial flows to communities

<input type="checkbox"/> Disseminate videos produced (if possible through mass media) <input type="checkbox"/> Distribute AFRICA 2000 publications <input type="checkbox"/> Strengthen links with other organisations in the networking process	information exchange <input type="checkbox"/> Organise interest groups to on certain issues	<input type="checkbox"/> Distribute AFRICA 2000 publications
---	--	--

Workplan - MULTITRACK COMMUNICATIONS

	Quarters --->											
	1	2	3	4	1	2	3	4	1	2	3	4
Output I: mapping stakeholders												
1. identify and list all stakeholders												
2. describe their strength and weaknesses												
3. Describe their stakes in SL												
4. Identifying areas of co-operation, dependency, service and conflict.												
Output II: clear and unambiguous information on sustainable livelihoods articulated.												
1. Using PAPISL tools and helping stakeholder to articulate SL, define their priorities,												
2. Use workshops to ground the SL concept in local cultures, metaphors and popular plays,												
3. Undertake training of trainers for PAPISL to disseminate the percept and construct of SL.												
4. Culturally and gender-sensitive curriculum development for civic education.												
5. Culturally and gender sensitive civic education training on sustainable livelihoods.												
6. Develop culturally and gender-sensitive radio in each village of implementation.												
7. Culturally and gender-sensitive posters developed.												
8. Develop village level MTCS resource centres in each village of implementation.												
9. Draw a programme of action to strengthen traditional communication channels												
Output III: functional channels and media for information exchange developed.												
1. Explore the use of video for public education.												
2. Peoples testimonials on successful adaptive strategies recorded on video and used for sensitisation and animation purposed in selected villages												
3. Training in functional adult literacy adults in villages of SL implementation.												
Output IV: tracks of communications identified (1) official, governmental, (2) non-governmental, informal, private sector, (4) civil society organisations and community and (5) interpersonal levels.												
1. Identify and map out formal tracks of communications such as radio, government decrees												
2. Identify informal communication media and, etc.												
3. Identify interpersonal communication channels through the use of PAPISL methods												
Output V: clear designations of tracks of stakeholders co-operation, dependency, services and conflict												
1. identify and map tracks of co-operation between all stakeholders,												
2. Identify dependency areas, especially where communities depend on government for policy a strategy and donors for money.												
3. identify service needs and provisional abilities among stakeholders,												
4. identify potential areas of conflict of interest among the stakeholders												
Output VI: national, district, village and household stakeholders' interaction identified.												
1. Develop of gender-dynamic educational radio-communications.												
2. Develop gender-sensitivity of school curriculum relation to nutrition food production and utilisation for both girls and boys.												
3. Undertake workshops, technical consultations to strengthen capacity to communicate gender sensitive messages.												
4. Use PAPISL sessions in all villages to enhance ability of women and youth and other marginalised groups to make informed contributions.												
5. Use PAPISL sessions in all villages to streamline convergence of knowledge concerning traditional socio-cultural context and contemporary perspective.												
6. Information on responsible reproduction including, family planning, HIV widely diffused.												

Output VII. Stakeholders clearly identified at the institutional, organisational and individual levels.										
	1.	Mapping of all social organisational structures in selected representative villages.								
	2.	Study of these organisations in terms of their autonomy, complexity, capacity and cohesion.								
	3.	Train community's capacity to raise, manage and save funds for development.								
	4.	Use T/T tools Develop aspirations of the community.								
Output VIII: identified stakeholder thematic priorities.										
	1.	identify and document stakeholder priority in food security,								
	2.	identify and document stakeholder natural resources management,								
	3.	Identify and document stakeholder employment /income generation.								
Output IX: MTC organic networking policies, strategies, structures and processes identified.										
	1.	identify existing networks of traditional associations, women's networks, religious and others								
	2.	map the structures of these networks								
	3.	Process of networking – leadership, participation, actors and facilitators.								
Output X: inventory of communication media available to all stakeholders mapped out.										
	1.	Traditional communicational channels, media, tools, and games identified.								
	2.	Community meeting places, rules and participants of the meeting identified.								
	3.	Identify gaps and omissions in the information entitlement chart mapped out.								
Outputs XI: Adaptive strategies that lead to sustainable livelihoods recorded documented, & analysed										
	1.	Packaging and dissemination of information sets on adaptive strategies to local groups.								
	2.	provision of recommendations to policy makers and local adaptive strategies								
	3.	Identification of indicators of sustainable livelihoods.								
	4.	Provide research partner agency's with information on the process and methodology used.								
	5.	Influence the outcome of the WSSD in the areas of poverty and sustainable development.								
	6.	What kind of ecosystem, socio-economic and political changes have occurred in the project countries? Ecosystem indicators, ¹⁵ socio-economic indicators, ¹⁶ political indicators ¹⁷ .								
	7.	Macro-policy context								

INDICATORS

Expected output	Indicator	Verification	
		Means	Sources
· Organisational capacities identified	Studies completed on the proven track record of delivery of services and benefits to disadvantaged groups and low-income communities.	Undertake social diagnostics PRA	Community Africa 2000 and Partner agency,
· Organisational coherence and autonomy identified	The necessary organisational structures and administrative systems to make use of resources generated by local institutions achieved.	Systems evaluation	Community Africa 2000 and Partner agency
· Organisational capacities enhanced	Required number of community members and leaders with relevant knowledge, technical skills and experience to deliver services are in place.	Systems evaluation	Community leaders

¹⁵ Agroecological zones; climatic variables including rainfall patterns and major droughts; soils status; extent of desertification; siltation rates; vegetation types and cover, etc.

¹⁶ the nature of enterprises; income sources and their distribution; migration and other demographic factors; employment; human health indicators; animal health indicators; rights, including grazing, land- tenure, land-use

¹⁷ the nature of government; the extent of centralisation and decentralisation of political authority (i.e. local self-government); system of procurement of goods and services including trade, financial flows to communities

<ul style="list-style-type: none"> Organisational capacity and complexity identified and enhanced Community's collective ideology and vision focused on AFRICA 2000 goals 	well established financial control systems are these systems adequate to ensure the best use of resources and meet the basic standards of accountability values and vision and organisational cultures evolve that are consistent with the purpose and intentions of natural resource and social development;	Financial audit Efficiency audit Measures of livelihood security	Local agencies Africa 2000 and Partner agency Community Africa 2000 and Partner agency
<ul style="list-style-type: none"> Organic networking and autonomous relationship achieved Institutionalisation of organic networking enhancing the innovativeness of community members 	collaborative networks with local community organisations, government agencies, grass roots groups, and the leverage to maximise benefits and replicate services achieved ability to reach the designated beneficiary and can they mobilise the energy, enthusiasm and resources of beneficiaries to effect systemic and lasting solutions and The ability to innovate and be flexible to meet the differing and changing needs of the diverse constituencies.	Participatory monitoring and evaluation (PME) undertaken on a continuous basis.	reports of the PME
<ul style="list-style-type: none"> Organisational autonomy achieved 	civic education made relevant to the community values and aspirations Capacity to discern and determine centres of popular power bases for decision-making.	Community self evaluation and testimonials	Community testimonial reports
<ul style="list-style-type: none"> Curriculum developed for NTFP and critical community history 	curriculum used to train students curriculum has relevance to local people perception of forest utilisation	Self evaluation Expert evaluation	annual reports
<ul style="list-style-type: none"> Environmental education packages developed 	School clubs have EE packages to work with Schools use EE packages for educating communities	school club self evaluation	school reports
<ul style="list-style-type: none"> endogenous mechanisms for conflict resolution identified (, Africa 2000 and Partner agency) 	Ability of local institutions for voluntary problem-solving and decision-making methods most often employed in ANRCM -- conciliation, negotiation and mediation.	Undertake thematic PRAs in conflict management Community testimonial reports	Community Africa 2000 and Partner agency,
<ul style="list-style-type: none"> People informed on the theoretical framework on how conflicts can be resolved. 	level of articulation of issues in alternative conflict management in local communities. ¹⁸	thematic PRAs in conflict management Community self evaluation and testimonials Skill test PRAs	Community , Africa 2000 and Partner agency
<ul style="list-style-type: none"> Provide forums for local 	required number of community members and	Systems evaluation	Community

¹⁸ Existence of factors that shape the process and building community capacity for **ANRCM** -- relevant approach partner agency's, skills and concepts for the analysis, transformation and prevention of conflict and for initiation measures towards peacemaking, peace building and reconciliation; with the intention of facilitating policy analysis and the definition of indigenous knowledge, ideas and systems which embody and **ANRCM**. Existence of factors that shape the process and building community capacity for **ANRCM** -- relevant approach partner agency's, skills and concepts for the analysis, transformation and prevention of conflict and for initiation measures towards peacemaking, peace building and reconciliation; with the intention of facilitating policy analysis and the definition of indigenous knowledge, ideas and systems which embody and **ANRCM**.

communities to raise public awareness about resource-based conflicts.	leaders with relevant knowledge, technical skills and experience in conflict management;		and leaders Africa 2000 and Partner agency
· Gather and share information of use in the prevention/resolution of potential conflicts.	Well established documentation of alternative conflict management.	reports on documentation	Africa 2000 and Partner agency
· National alternative conflict management systems developed	utilisation of ANRCM in local communities	reports and documentation	Africa 2000 and Partner agency
· Exchange of experience between local and central institutions facilitated	Institutions have a better understanding	???? Community testimonial	Community Africa 2000 and Partner agency,
· Experience form Joint Forest Management and other partnerships to learn how they work and to demonstrate their potential · Find and disseminate information on new thinking, policies and instruments	Instruments evolved for the development of strategies and methods for overcoming institutional, legal and policy constraints,(and attitudes) that limit people's capacity to manage natural resources according to their own aspirations. Autonomy, complexity, capacity and cohesion of local institutions	???? thematic PRAs in conflict management Community self evaluation and testimonials Systems evaluation	Community Africa 2000 and Partner agency
· Communities and institutions networked	Demonstrate that communities and institutions have the potential to understand how to manage natural resources more sustainably and ability to disseminate and promote the sharing and exchange of information through various media which demonstrate local capacity	Opinion surveys and interviews Strategic PRA involving relevant decision-makers;	Community Africa 2000 and Partner agency,
· people networked · experience and information reflecting framers' perspectives on local resource management issues shared and disseminated.	Improved exchange of information.	thematic interviews and surveys	Community Africa 2000 and Partner agency