UNIVERSITY OF DAR ES SALAAM

INSTITUTE OF RESOURCE ASSESSMENT



FIVE YEAR ROLLING STRATEGIC AND OPERATIONAL PLAN

2003/04-2007/08

REVISED AUGUST 2006

EXECUTIVE SUMMARY

This document presents a revised Five Year Rolling Strategic and Operational Plan (hereafter referred as the Strategic Plan) of the Institute of Resource Assessment (IRA), University of Dar es Salaam for the period 2003/2004-2007/2008. The Strategic Plan forms an integral part of the general Rolling Strategic Plan of the University of Dar es Salaam, which is built on the UDSM 2000 Institutional Transformation Programme.

The development of the Strategic Plan involved an internal workshop where all IRA staff participated. The process involved situational and SWOT analyses that reviewed among other documents, the previous Strategic Plan (1996/97 – 2000/2001), the IRA Research Agenda (2002), IRA Annual Reports, UDSM Rolling Strategic Plan and the UDSM 2000 Institutional Transformation Programme. The outputs from the above process included vision and mission statements, strategic objectives and activities, operation plan and a framework for evaluation of performance. Revision of the Strategic Plan was undertaken in August 2006.

Vision statement

The Institute to become a high performance and reputable institution that excels in research, teaching and service provision to the community in natural resources management at national, regional and international levels

Consolidated Mission Statement

To enhance sustainable capacity in human, financial and physical resources in order to excel in quality research, teaching and service provision to the community in natural resources management; and further IRA's image as a centre of excellence in knowledge creation and skills development at postgraduate level.

Strategic Objectives

Based on the situational and SWOT analyses the following strategic objectives were identified.

- Human resource capacity and development improved
- Infrastructure and facilities improved
- Marketing and public relations improved
- Quality of research, teaching and community service enhanced
- National and international links increased
- Participatory institutional planning and management enhanced

- Financial sustainability and management capacity enhanced
- Gender equity in place

This edition of the Strategic Plan is a review of the one published in 2003. It takes into account the implementation of the Strategic Plan up to August 2006.

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1. INTRODUCTION

The University of Dar es Salaam (UDSM) 2000 Institutional Transformation Programme set in motion institutional reforms that reflect the need for a competence-based service delivery throughout the University, including the Institute of Resource Assessment (IRA). The ongoing changes within the UDSM, at national and international levels also call for regular reviews of the Institute's Strategic Plan and its future mode of operation.

This document presents a revised Five Year Rolling Strategic and Operational Plan (hereafter referred as the Strategic Plan) of the Institute of Resource Assessment for the period 2003/2004-2007/2008. The Strategic Plan forms an integral part of the general Rolling Strategic Plan of the University of Dar es Salaam, which is built on the UDSM 2000 Institutional Transformation Programme.

The current edition of the Strategic Plan is a review of the one published in 2003. It takes into account the implementation of the Strategic Plan up to August 2006.

The historical background of the Institute is presented in Section Two of the Strategic Plan, and the institutional capacity in Section Three. Section Four presents the methodology involved in the development of the Strategic Plan. Also in this latter section the IRA strategic objectives are presented, vision and mission statements are provided and finally strategic options and activities are presented.

2. BACKGROUND INFORMATION

2.1 Historical Background of IRA

The predecessor of the Institute of Resource Assessment, the Bureau of Resource Assessment and Land Use Planning (BRALUP) was established in 1967 as a research wing of the then University College of Dar es Salaam in the Faculty of Arts and Social Sciences. The Management of the Bureau was under a Programme Committee drawn from the University, Government institutions and other bodies deemed relevant by the University. The Principal Secretary of the Ministry of Development Planning and Economic Affairs chaired the Programme Committee.

The mandate of the Bureau was as follows:

- To carry out research and develop research capacities pertinent to the social, cultural, environmental and economic development of Tanzania;
- To organize and assist research activities carried out by the staff of the Bureau and staff from other departments in related fields in the University of Dar es Salaam;
- To co-ordinate and assist research carried out by staff seconded from government, research fellows from other research institutions and other visiting research workers;
- To furnish advice, upon request, to the government, public and other organizations;
- To arrange conferences, seminars or postgraduate courses on natural resources and land use planning matters;
- To collect information necessary for the research activities of the Bureau;
- To contribute to the training of Tanzanian research staff within the areas of its competence and;
- To provide specialized teaching materials for the University of Dar es Salaam and other related institutions.

The following research themes were the main focus of research and consultancy activities of BRALUP:

- Monitoring and assessment of the environment;
- Food and agricultural production;
- Population analysis;
- Socio-economic analysis of water development;
- Transportation systems;
- Social services distribution.

In 1979 a review mission was commissioned to assess the performance of BRALUP over the period 1967-79 and concluded that the Bureau:

- Needed more capacity building;
- Was fairly interdisciplinary;
- Should maintain current themes but should also look for new initiatives;
- Should be an independent (autonomous) consultant;
- Should establish links but not chains and;

• Should be elevated to an institute after 3 years.

Following the recommendation by the Review Mission in 1979, the Government of Tanzania approved the establishment of the Institute of Resource Assessment in 1982. The mandate of the Institute remained the same as that of BRALUP, but research themes became:

- Natural Resources and Environment;
- Agricultural Systems;
- Population and Human Settlement; and
- Water Resources Management.

Remote Sensing and Geographical Information System (GIS) provides technical support in all research themes.

Some of the above research themes have been recently revised through the Institute's Research Agenda (2002). Others have been renamed to reflect the ongoing national and global changes and challenges. At the same time two new research themes have been added. Thus, the current main research themes are:

Natural resource management;

Agriculture, food security and poverty alleviation;

Environment;

Population and human settlement and;

Social and policy analysis

2.2 Organisation and Management of IRA

The IRA is managed by the Director who reports to the Chief Academic Officer. The Director is assisted by two Associate Directors (Academics and Administration). IRA has two management organs that facilitate decision-making process, which are, IRA Board and Management Committee. The former is a statutory organ of the University. The Management Committee is composed of seven section coordinators who are the principal advisors to the Director on planning and reviewing the Institute's research activities, teaching and service to community.

The sections represented in the Management Committee are: Natural resource management; Agriculture, food security and poverty alleviation; Environment; Population and human settlement; Social and policy analysis; Information Technology (IT) and applied remote sensing; and Training programmes. The Management Committee also include a representative from non-academic staff. The office of the Director is also assisted by an Manpower Management Officer and an Accountant.

3. INSTITUTIONAL CAPACITY

The institutional capacity of IRA presented in this section reflects the current capacity in terms of human resources, physical resources, research and training experiences.

3.1 Human Resources

3.1.1 Academic staff

- 2 Research Professors:
 - o 1 in Applied Ecology
 - o 1 in Demography
- 3 Associate Research Professors:
 - o 1 in Applied Geomorphology
 - o 1 in Water Resources
 - o 1 in Natural Resources and Environment
- 5 Senior Research Fellows:
 - o 2 in Sociology
 - o 1 in Local Institutions & Rural Planning
 - o 1 in Agricultural Economics
 - o 1 in Soil Science
- 5 Research Fellows:
 - o 2 in Agriculture & Natural Resource Management
 - o 1 in Soil Science & Natural Resource Management
 - o 1 in Agricultural Economics
 - o 1 in Sociology & Public Health.
- 7 Assistant Research Fellows:
 - o 1 in Forestry GIS and Remote Sensing
 - o 1 in Wildlife ecology

- o 1 in Ecology
- o 1 in Demography
- o 3 Environmental Sciences

3.1.2 Technical staff

- 1 Degree holder in Land Surveying (GIS Laboratory Scientist)
- 1 Degree holder in Electronics (Information Communication Technology ICT)
- 1 Diploma holder Crop Production (Senior Field Officer)
- 1 Diploma holder in Cartography, GIS (Cartographic Technician)
- 1 Certificate holder in Photo Interpretation, Lab Photographic Processing, Image Data
 Processing (Principal Laboratory Technician)
- 1 Certificate holder Rural Development Planning (Senior Field Officer)
- 1 Certificate holder Social Works (Senior Field Officer)
- 1 Artisan Full Technicians Certificate (Technician)

3.1.3 Administrative staff

- 1 Manpower Management Officer
- 1 Accountant
- 1 Supplies Officer
- 4 Office Management Secretaries
- 2 Drivers

3.2 Physical Resources

The Institute has relatively limited office space for its staff and maintains a well-developed technical and ICT capacity as described below:

3.2.1 Documentation unit

- About 400 Titles (BRALUP/IRA Papers, Reports, Notes and Service Papers from 1967-2002 (6)
- General Collection = 3, 700 (books etc)
- Theses = 63
- Conference collection = 56
- Periodical collection (journals) = 493

3.2.2 Aerial photo/remote sensing laboratory

- Aerial photo collection from 1950s to 1970s covering about 60% of the country.
- Satellite images collection in hard copies and chips 70x70 for the period 1972-1980 with Additive Colour Viewer
- Hard copies and Digital data of Land Sat TM images from 1980-1995 covering the whole country at a scale of 1:250,000.

3.2.3 Tanzania Natural Resources Information Centre (TANRIC)

From 1994 the Institute of Resource Assessment hosted the Tanzania Natural Resources Information Centre. TANRIC is a national depository of natural resources and environment data. It has technical and physical expertise in mapping land resources using remote sensing technology and geographical information systems (GIS). Also, it has a well-equipped GIS laboratory with modern facilities including 6 computers, two modern plotters, 5 digitising tables, and ArcGIS software. Since 2005 TANRIC ownership has been transferred to the Institute.

3.2.4 Information and Communication Technology (ICT)

The Institute has a local server and a Website hosted by the University Computing Centre. Most of the offices have computers with internet connections. The Institute has several scientific and field equipments, for example, electronic projector, GPS, digital cameras, etc.

3.2.5 Printing Services

There exists a printing facility for producing IRA publications. However, its use has been minimal over the last decade because of its outdated technology. Efforts are being made to acquire modern printing facilities to improve the capacity of the Institute's publication facility.

3.3 Research Experiences

The following sections provide a brief profile of the Institute's research experience.

3.3.1 Multidisciplinary and Interdisciplinary Research

Over the last 35 years IRA has built interdisciplinary/multidisciplinary research expertise and capacity with well-trained and qualified staff that has been involved in various integrated research activities in Tanzania. The capacity to handle integrated research can be demonstrated by the wide range of published materials available in the Institute, the University Library and in other institutions within and outside Tanzania. This particular strength has enabled the IRA to be a focal point on natural resource management, land use and socio-economic planning in the country.

3.3.2 Participatory Community Planning and Development

During the last three decades, IRA has acquired tremendous experience in developing methods and techniques for involving local communities in planning, managing and decision-making on sustainable development. Some of the best practice participatory planning initiatives tested in Tanzania include the following:

- Involvement of local communities around protected areas in planning and management of wildlife resources through Participatory Rural Appraisal (PRA) techniques.
- Facilitation via PRA of local communities in the Pangani River Basin, Lake Manyara Basin and Usangu Catchment Basin, to articulate the various constraints related to water use, its availability and associated water pollution and land degradation.
- Participatory planning for the conservation of the Kihansi Catchment Area.
- Participatory research on Bio-energy Options for Tanzania.

3.3.3 Appropriate Technology and Indigenous Knowledge

PRA techniques have been applied as an attempt to learn from the rural resource users, the indigenous knowledge that has worked for them and realized sustainable development. The IRA was involved in the Innovative Rural Action Learning Areas (IRALAS) Programme in Tanzania. Most of the techniques used addressed soil erosion, water management, pasture management, agricultural production, horticulture and rural energy (biogas). The results suggest that indigenous knowledge has the capacity to enhance sustainable resource management.

3.3.4 Environmental Impact Assessment (EIA) and Strategic Environmental Assessment (SEA)

IRA is among the leading local institutions in EIA and SEA training and practice in Tanzania and Southern Africa. In collaboration with the International Institute for Environment and Development (IIED), the IRA has developed EIA training manuals specifically for Tanzania. The manuals provide resource materials for EIA and its role in Tanzania. The manuals are designed to help improve understanding of the contribution that EIA can make towards sustainable development planning in Tanzania. The manuals also provide a resource for planners and policy-makers responsible for the development of institutional and regulatory framework for environmental management. The manuals have been tested in Tanzania and in the Eastern African region, and have been widely circulated for adoption and use.

3.3.5 The National Reconnaissance Level Land Use and Natural Resource Mapping

On behalf of the Government of Tanzania, IRA supervised the work on the National Reconnaissance Level Land Use and Natural Resource Mapping, which was a component of the Forest Resource Management Project (FRMP). This project utilized the Land Sat TM of 1994/95 and SPOT satellite data sets to produce land cover and land use maps for the whole country at the scale of 1:250,000. All the materials produced (both in hard copies and in digital formats), and the equipment used in this project were deposited at IRA. Information generated is available for public use.

3.3.6 Development of the Poverty-Environment Indicators for Tanzania

On behalf of the Government of Tanzania, IRA in collaboration with the Environmental Resource Management (ERM) and Oxford Policy Management Ltd (OPM) of the UK undertook the development of poverty-environment indicators for Tanzania. The project was carried out from May 2004 to August 2005. A total of ninety-nine poverty-environment indicators were developed based on the MKUKUTA (National Strategy for Growth and Reduction of Poverty) clusters, goals and objectives. Thirty-four indicators were proposed for inclusion in Tanzania's poverty monitoring system (PMS). Others were proposed as sectoral indicators. The purpose of the PMS-level and the sectoral indicators was to strengthen the understanding of poverty-environment linkages, and to monitor efforts to reduce poverty that depend on addressing poverty-environment linkages.

3.4 Training Experience

Since 2005 the IRA has established and is offering an MSc degree programme in Natural Resources Assessment and Management (MSc. NARAM) as one way of operationalising its vision. The main goal of the MSc NARAM Programme is to build professionals with innovative knowledge, skills, and values in integrated natural resources assessment and management in order to enhance understanding current natural resource management and environmental issues. In addition, IRA staff takes part in teaching and supervision of students in various departments and institutions within and outside the UDSM. IRA also offers short-term in-service courses in various disciplines. The examples of these courses include: EIA and SEA; Applied Remote Sensing and GIS; and Communicating Research Findings to Stakeholders.

3.5 Collaboration with Local and International Institutions

In order to strengthen the research, training and provision of public services capacity, the IRA undertakes collaborative activities with many other institutions inside and outside Tanzania. In many of these activities IRA plays the co-ordination role. For example, the IRA co-ordinated the Pangani River Basin Project which brought together researchers from Tanzanian institutions and the Centre for Environment and Development of the Norwegian University of Science and Technology. IRA also co-ordinated the research programme on Sustainable Agriculture in Semi-Arid Areas (SASA) in collaboration with the Institute of Geography of the University of Copenhagen. It also co-ordinated the Man-Land Interrelation in Semi-Arid Tanzania (MALISATA) research Programme that was jointly undertaken with Swedish Institutions. Other activities which the Institute co-ordinated include a comprehensive study on the management of wetland resources in the Usangu River Basin together with British Institutions and; Programmatic Environmental Assessment of Tanzanian National Park Roads, with American Institutions.

IRA has research agreements with many local institutions including faculties and institutes within the University of Dar es Salaam. Contacts are undertaken on a routine basis with government ministries, other public institutions and the private sector including, for example, TANAPA, Wildlife Division (WD), WWF and UNDP. Other links include collaboration with WARFSA, EAAIA, SAIEA, IAIA and PRB-UNFPA, University College London (UK); Catholic University Luveain (Belgium); University of Nairobi, Kenya Wildlife Services; the Global Change SysTem for Analysis, Research and Training (START); University of York-

Institute for Tropical Ecosystem Dynamics; The Pennsylvania State University; Copenhagen University; University of Axis - Marseille III – through the CLEHA-INSU Project; and the Institute of Water and Sanitation Development. The Institute has a system of affiliating research scholars from outside Tanzania in its areas of research, e.g. the joint research, staff and students exchange with Stockholm University.

4. THE STRATEGIC PLAN

This section presents the revised Five Year Rolling Strategic and Operational Plan of the Institute of Resource Assessment (IRA), University of Dar es Salaam, for the period 2003/2004-2007/2008. The Strategic Plan forms an integral part of the general Rolling Strategic Plan of the University of Dar es Salaam, which is built on the UDSM 2000 Institutional Transformation Programme.

4.1 Methodology for the Development of the Strategic Plan

The IRA mandate provides options for regular review of its existing institutional capacity and its research, teaching and services to the community in re-designing appropriate strategic options for the way forward. The development of the Strategic Plan involved an internal workshop where all IRA staff participated. The process involved situational and SWOT analyses that reviewed among other documents, the previous Strategic Plan (1996/97 – 2000/2001), the IRA Research Agenda (2002), IRA Annual Reports, UDSM Rolling Strategic Plan and the UDSM 2000 Institutional Transformation Programme. The workshop also undertook analysis of participants' expectations through a participatory planning process. The outputs from the above process included vision and mission statements, strategic objectives and activities, operational plan and a framework for evaluation of performance.

4.2 Strategic Objectives of the Strategic Plan

Based on the situational and SWOT analyses the following strategic objectives were determined.

- 1. Human resource capacity and development improved
- 2. Infrastructure and facilities improved
- 3. Marketing and public relations improved
- 4. Quality of research, teaching and community service enhanced
- 5. National and international links increased
- 6. Participatory institutional planning and management enhanced
- 7. Financial sustainability and management capacity enhanced
- 8. Gender equity in place

4.3. Vision and Mission of IRA

The process of developing the Strategic Plan included defining the vision and mission of the Institute as follows:

Vision

The Institute to become a high performance and reputable institution that excels in research, teaching and service provision to the community in natural resources management at national, regional and international levels.

Mission

IRA Mission is constituted from the following statements:

- To strengthen and maintain a sustainable capacity in human, financial and physical resources for quality performance in research, teaching and service provision to the community.
- To excel in quality research, teaching and service provision to the community in natural resource management.
- To further the image of the IRA as a centre of excellence in knowledge creation and skills development at postgraduate level and short-term training.

Consolidated Mission Statement:

To enhance sustainable capacity in human, financial and physical resources in order to excel in quality research, teaching and service provision to the community in natural resources management; and further IRA's image as a centre of excellence in knowledge creation and skills development at postgraduate level.

4.4 Strategic Options and Activities

The status and future direction of IRA has been discussed with focus placed on its Research Agenda, the Five Year Strategic Plan 1996/7 – 2000/01 and the UDSM 2000 Transformation Programme. Strategic options and activities were identified and, subsequently, strategic priority areas were mapped for implementation. These strategic priority areas are presented in the following sub-sections:

Strategic Option 1: Human resource capacity and development improved Strategic Priority Areas:

- Review existing staff establishment and aging profile
- Identify staffing needs based on the Research Agenda
- Recruit appropriate staff to fill-in gaps.
- Arrange and facilitate for staff training.
- Improve the morale of IRA staff

Strategic Option 2: Infrastructure and facilities improved

Strategic Priority Areas

- Establish an inventory of physical resources
- Procure physical resources to fill-in gaps
- Enhance the culture of accountability in the use of operational facilities and maintenance and management of physical resources.
- Develop/review operational policies of the Institute, e.g. transport and Information Communication Technology (ICT).

Strategic Option 3: Marketing and public relations improved

Strategic priority Areas:

- Regularly update IRA website
- Develop joint research proposals with stakeholders
- Conduct regular information dissemination of IRA activities through conferences, seminars and targeted training programmes
- Conduct market survey and needs assessment for IRA activities
- Participate in festivals/ exhibitions.
- Use media to disseminate information at national and international levels through media days and other mass communication channels
- Publish a biannual peer reviewed journal
- Publish annual research monographs
- Update IRA brochures regularly
- Conduct regular staff/student seminars within the UDSM
- Enhance the distribution of IRA publications in and outside the UDSM
- Run feature columns in newspapers regularly

 Host national and international conferences/workshops with key stakeholders regularly

Strategic Option 4: Quality research, teaching, and community services enhanced Strategic Priority Areas:

- Enhance quality control mechanisms.
- Carry out periodic in-service training for IRA staff.
- Promote exchange of information through ICT.
- Revive and conduct regular research seminar series in the Institute.
- IRA staff to Publish research findings in refereed journals annually
- Develop and undertake joint projects with stakeholders.

Strategic Option 5: National and international links increased

Strategic priority Areas:

- Utilise, update and manage IRA website
- Develop joint research, teaching and community service programmes
- Enhance staff/students exchange programmes
- Increase awareness (advocacy) among IRA stakeholders on its strengths in natural resources management and environmental information system regularly
- Strengthen existing links and explore new ones on the basis of IRA Research Agenda

Strategic Option 6: Participatory institutional planning and management enhanced Strategic Priority Areas:

- Ensure participatory planning and management
- Utilise operational plans in implementing the Institute's activities
- Conduct performance analyses on a yearly basis

Strategic Option 7: Financial sustainability and management capacity enhanced Strategic Priority Areas:

- Train IRA accounts and stores personnel in computerised accounting and storekeeping.
- Computerise the Institute's accounting and stores systems.

- Explore opportunities for joint research and community service delivery with both national and international stakeholders.
- Develop postgraduate and demand driven training programmes with national and international partners.
- Enhance marketing of IRA's institutional strength and programmes.

Strategic Option 8: Gender equity in place

Strategic Priority Areas

- Enhance and foster gender mainstreaming in IRA activities
- Maintain gender balance in staff recruitment

5. ANNEXES

ANNEX I: Log Frame for the IRA Rolling Strategic and Operational Plan

Outputs/Activities	Verifiable Indicator	Means of Verification	Assumptions
OVERALL GOAL: High performance and reputable institution that excels in research, teaching and service provision in natural resource management to the community at national, regional and international levels.	High quality scholarly outputs: Number of papers in referred journals Number of competitive postgraduate training programmes Number and quality of students trained	 IRA Annual Reports UDSM Annual Reports Reports from other institutions/stakeholders 	Political will to support and utilise research findings and competences in natural resource management in the national development agenda
PURPOSE: IRA to become a centre of excellence in knowledge creation, skills development and service delivery on natural resources management	 Number of quality projects implemented Number and quality of students trained Volume and quality of teaching materials produced Number of enquiries for service provision 	 IRA Annual Reports Rolling Strategic and Operational Plan, Academic audits UDSM Annual Reports 	Continued policy support in the implementation of IRA's Research Agenda and Rolling Strategic and Operational Plan

ANNEX II: Strategic Plan Indicating Strategic Options, Verifiable Indicators, Means of Verification and Assumptions

Options and Activities	Verifiable Indicator	Means of Verification	Assumptions
1.1. Review existing staff establishment and aging profile 1.2. Identify staffing needs based on the Research Agenda 1.3. Recruit appropriate staff to fill-in gaps. 1.4. Arrange and facilitate for staff training. 1.5. Improve the morale of IRA staff	 Updated staff establishment Staff requirements identified Vacant positions filled Number of Participants in various training programmes. Incentive scheme in place 	 IRA establishment IRA Annual Reports Progress of IRA Rolling Strategic and operational Plan 	The on-going UDSM 2000 Transformation will continue University-wide Human Resources Management Policy in place Staff Development Policy in place
2. Infrastructure and facilities improved: 2.1 Establish an inventory of physical resources 2.1 Procure physical resources to fill-in gaps 2.2 Enhance the culture of accountability in the use of operational facilities and maintenance and management of physical resources. 2.3 Develop/review operational policies of the Institute, e.g. transport and Information Communication Technology (ICT).	 An inventory of physical resources in place Missing physical resources procured Asset register and logbooks available Operational & Policy Guidelines adopted and updated 	 Stores Certification Annual Reports IRA Progress Reports Programmes for the policies 	Funding support for IRA infrastructure development and improvement available
 3. Marketing and public relations improved: 3.1 Regularly update IRA website 3.2 Develop joint research proposals with stakeholders 3.3 Conduct regular information dissemination of IRA activities through conferences, seminars and targeted training programmes 3.4 Conduct market survey and needs assessment for IRA activities 3.5 Participate in festivals/ exhibitions. 3.6 Use media to disseminate information at national and international levels through media days and other mass communication channels 3.7 Publish a biannual peer reviewed journal 3.8 Publish annual research monographs 3.9 Update IRA brochures regularly 3.10Conduct regular staff/student seminars within the 	 IRA website in place and managed Number of approved joint proposals for support/ funding Number of conferences, seminars and targeted training programmes conducted. A plan for media days and participation in festivals in place. Number of scientific/ technical publications for public use Number of Clients requests/enquiries Number of IRA Publications periodically distributed/ disseminated Number of conference/workshops 	 IRA Progress Report IRA Annual Report UDSM Annual Report 	Funding of IRA ongoing initiatives in marketing and public relations is available

UDSM	held/ co-organized periodically.		
3.11Enhance the distribution of IRA publications in and	nera, co organized periodicarry.		
outside the UDSM			
3.12Run feature columns in newspapers regularly			
3.13Host national and international			
conferences/workshops with key stakeholders			
regularly			
4. Quality research, teaching, and community services			
enhanced:			
4.1 Enhance quality control mechanisms.	Internal quality control procedure in	IRA Editorial Board	IRA Research Agenda will be
4.2 Carry out periodic in-service training for IRA staff.	place for IRA activities	functional	given support by the UDSM. and
4.3 Promote exchange of information through ICT.	 Staff training packages in place 	IRA Annual Reports	Government
4.4 Revive and conduct regular research seminar series in	Number of information exchange	• IRA Progress Reports	• IRA Rolling Strategic and
the Institute.	mechanisms in place	IRA website	Operational Plan will be given
4.5 IRA staff to Publish research findings in refereed	Number of seminars scheduled		support by the UDSM. and
journals annually	annually		Government
4.6 Develop and undertake joint projects with	Number of published journal papers		
stakeholders.	Number of joint research proposals		
	formulated		
5. National and international links increased:	TDA 1 to 1	TD 4 1 1	LIDGA (
5.1 Utilise, update and manage IRA website	• IRA website in place	• IRA website	• UDSM, government and
5.2 Develop joint research, teaching and community service programmes	Number of joint research, teaching	IRA Quarterly Reports	development partners will
5.3 Enhance staff/students exchange programmes	and community service in place	Annual Reports	continue to give financial support
5.4 Increase awareness (advocacy) among IRA	Number of staff/students exchange	IRA Progress Reports	in strengthening IRA links and networking
stakeholders on its strengths in natural resources	programmes estuctioned	• UDSM Annual	networking
management and environmental information system	Number of awareness creation What is a straight and the straight are straight as a straight a	Reports	
regularly	initiatives on IRA institutional		
5.5 Strengthen existing links and explore new ones on the	strength.		
basis of IRA Research Agenda			
6. Participatory institutional planning and management			
enhanced	• Number of forums involving staff in	IRA Quarterly Reports	IRA will continue to promote a
6.1 Ensure participatory planning and management	planning and management	IRA Annual Reports	culture of involvement of its staff
6.2 Utilise operational plans in implementing the	• Number of Institute's activities	• UDSM Annual	in planning and management
Institute's activities	carried out in accordance to the	Reports	
6.3 Conduct performance analyses on a yearly basis	operational plan		
	Number of annual performance		
	analysis implemented		

 7. Financial sustainability and management capacity enhanced 7.1 Train IRA accounts and stores personnel in computerised accounting and storekeeping. 7.2 Computerise the Institute's accounting and stores systems. 7.3 Explore opportunities for joint research and community service delivery with both national and international stakeholders. 7.4 Develop postgraduate and demand driven training programmes with national and international partners. 7.5 Enhance marketing of IRA's institutional strength and programmes. 	 IRA Accountant and Storekeeper trained in computerised accounting and store keeping Computerized accounting and documentation systems in place Number of joint research and community service programmes with both national and international stakeholders developed. Number of postgraduate training programmes. Number of IRA's institutional 	 IRA Quarterly Reports IRA Progress Report IRA Annual Reports 	UDSM, government and development partners will continue to provide financial support to IRA
8. Gender equity in place 8.1 Enhance and foster gender mainstreaming in IRA activities 8.2 Maintain gender balance in staff recruitment	Number of IRA's institutional capacity marketing initiatives in place. Number of stakeholders seeking IRA services and products Gender mainstreamed in all IRA activities Number of male and female staff recruited.	IRA Annual Report UDSM Annual Reports	UDSM Human Resources Policy will continue to support gender equity.

ANNEX III: Operational Planning For IRA Strategic Options and Activities

Strategic Options and Activities	Time frame		Targeted mitigation area	Responsible				
	2003/4	2004/5	2005/6	2006/7	2007/8		(quantitative/qualitative)	
Strategic Option 1: Human resource capaci	ty and dev	elopment	improved	•		•		
Priority activities								
1.1Review existing staff establishment and aging profile						All IRA staff	IRA Establishment	Director/ Associate Director (Administration)/ IRA Management
1.2 Identify staffing needs based on the Research Agenda						All IRA staff	IRA Research Agenda; IRA Establishment	Director; IRA Management/ Associate Director (Administration)
1.3 Recruit appropriate staff to fill-in gaps						IRA academic and technical staff	Budget allocation	IRA/UDSM
1.4 Arrange and facilitate for staff training						All IRA staff	Budget allocation; Identified training needs	IRA/UDSM
1.5 Improve the morale of IRA staff						All IRA staff	Financial resources	Director/ Associate Director (Administration)/ IRA Management
Strategic Option 2: Infrastructure and facil	ities impro	oved						
Priority Activities								
2.1 Establish an inventory of physical resources						IRA Stores Section	Stores expertise	Associate Director (Administration)/ IRA stores personnel
2.2 Procure physical resources to fill-in gaps						IRA Stores Section	Budget allocation;	Associate Director (Administration)/ IRA stores personnel /UDSM
2.3 Enhance the culture of accountability in the use of operational facilities and maintenance and management of						All IRA staff	Relevant IRA's internal policies	Associate Director (Administration)/ All IRA staff

physical resources							
2.4 Develop/review operational policies of the Institute, e.g. transport and Information Communication Technology (ICT).					All IRA staff	Operational policies	IRA Associate Director (Administration)/ UDSM
Strategic Option 3: Marketing and public re	elations im	proved	,				
Priority activities:							
3.1 Regularly update IRA website					IRA-ICT	ICT expertise	IRA/UDSM
3.2 Develop joint research proposals with stakeholders					IRA academic staff	Research Agenda; Researchers; Budget allocation.	IRA Section Coordinators/ Stakeholders
3.3 Conduct regular information dissemination of IRA activities through conferences, seminars and targeted training programmes					All IRA staff	Budget allocation; Research programmes	IRA Section Coordinators/ Stakeholders
3.4 Conduct market survey and needs assessment for IRA activities					All IRA Sections	Budget allocation	Director/ IRA Section Coordinators
3.5 Participate in festivals/ exhibitions					All IRA staff	Budget allocation; IRA Publications and other products	Director/ IRA Section Coordinators/ UDSM
3.6 Use media to disseminate information at national and international levels through media days and other mass communication channels					All IRA Sections	Budget allocations; IRA publications and other products	Director/ IRA Section Coordinators/UDSM
3.7 Publish a biannual peer reviewed journal					IRA academic staff	Budget allocation; Research programmes	Director/ IRA Section Coordinators/UDSM
3.8 Publish annual research monographs					IRA academic staff	Budget allocation; Research programmes	Director/ IRA Section Coordinators/UDSM
3.9 Update IRA brochures regularly					All IRA staff	Budget allocation; Research programmes and other activities	Director/ IRA Section Coordinators
3.10 Conduct regular staff/student seminars within the UDSM					All IRA staff; Students	Research programmes; Student works; Seminar schedule	IRA Associate Director (Academics)

3.11 Enhance the distribution of IRA publications in and outside the UDSM 3.12 Run feature columns in newspapers					IRA Academic Staff; IRA Publications Unit All IRA staff	IRA Publications; Budget allocation Research programmes;	IRA Academic Staff; IRA Documentation and Stores personnel
regularly					All IKA stall	Budget allocation	All IRA staff
3.13 Host national and international conferences/workshops with key stakeholders regularly					All IRA Sections	Research programmes; Budget allocation	Director/ IRA Section Coordinators/ Stakeholders
Strategic Option 4: Quality research, teachi Priority Activities	ng, and cor	nmunity s	ervices en	hanced			
4.1 Enhance quality control mechanisms					 All IRA staff	Research programmes; IRA's Editorial Board; Training programmes	Director/ IRA Section Coordinators/ IRA Editorial Board/UDSM
4.2 Carry out periodic in-service training for IRA staff					All IRA staff	Relevant Training programmes; Budget allocation;	Director /IRA Management/ UDSM
4.3 Promote exchange of information through ICT					All IRA staff IRA-ICT	ICT expertise; IRA website; Intra-network	Director/ IRA-ICT Expert /UDSM
4.4 Revive and conduct regular research seminar series in the Institute					All IRA staff	Research programmes; Budget allocation	IRA Associate Director (Academics)/ All IRA staff/Stakeholders
4.5 IRA staff to publish research findings in refereed journals annually					IRA academic staff	Research programmes; IRA Editorial Board; Budget allocation	Director/ IRA academic staff/ IRA Editorial Board
4.6 Develop and undertake joint projects with stakeholders					IRA academic staff	Research programmes; Budget allocation	Director/ IRA academic staff/ Stakeholders
Strategic Option 5: National and internation	nal links inc	creased					
Priority Activities							

5.1 Utilise, update and manage IRA website						All IRA staff; IRA-ICT	ICT expertise	Director/ All IRA staff/ ICT expert/ /UDSM
5.2 Develop joint research, teaching and community service programmes						All IRA staff	Research programmes; Training programmes; Budget allocation	Director/ Associate Director (Academics)/ Stakeholders
5.3 Enhance staff/students exchange programmes						All IRA staff	Exchange programmes; Budget allocation	Director/ Associate Director (Academics)/ UDSM/ Stakeholders
5.4 Increase awareness (advocacy) among IRA stakeholders on its strengths in natural resources management and environmental information system regularly						All IRA staff; IRA website; IRA Brochures	Research Programmes; Training Programmes; Publications and other products; Budget allocation	Director/ IRA Section Coordinators/ UDSM
5.5 Strengthen existing links and explore new ones on the basis of IRA Research Agenda						All IRA staff; Stakeholders	Research Programmes; Training Programmes; Budget allocation	Director/ IRA Section Coordinators/ UDSM
Strategic Option 6: Participatory institution	al plannin	g and ma	nagement e	enhanced	1			
Priority Activities						4.11 XD 4		D: /
6.1 Ensure participatory planning and management						All IRA staff	Rolling Strategic and Operational Plan	Director/ IRA Management/ UDSM
6.2 Utilise operational plans in implementing the Institute's activities						All IRA staff	Rolling Strategic and Operational Plan	Director/ IRA Management/ UDSM
6.3 Conduct performance analyses on a yearly basis						All IRA sections	Research Agenda; Rolling Strategic and Operational Plan; Quarterly reports; Annual reports; Publications	Director/ IRA Section Coordinators/ UDSM
Strategic Option 7: Financial sustainability	and manag	gement ca	apacity enh	anced	T	Г	Γ	Г
Priority Activities								

7.1 Train IRA accounts and stores personnel in computerised accounting and storekeeping.			IRA Accounts and Stores Personnel	Appropriate training programmes; Computing facilities; Budget allocation	UDSM/ Director
7.2 Computerise the Institute's accounting and stores systems			IRA Accounts and Stores sections	Computing facilities and infrastructure; ICT expertise; Budget allocation	Director/ UDSM
7.3 Explore opportunities for joint research and community service delivery with both national and international stakeholders			All IRA staff	Rolling Strategic and Operational Plan; Research Agenda; Annual reports; IRA website	Director/ IRA Section Coordinators/ Stakeholders
7.4 Develop postgraduate and demand driven training programmes with national and international partners			IRA academic and technical staff	Training needs assessment; Training programmes; Budget allocation	Director/ Associate Director (Academics)/ UDSM/ Stakeholders
7.5 Enhance marketing of IRA's institutional strength and programmes		-	All IRA staff	IRA Research programmes; Training programmes; Publications and other products; Budget allocation	Director/ All IRA staff/ UDSM
Strategic Option 8:Gender Equity in Place Priority Activities	1 1				
8.1 Enhance and foster gender mainstreaming in IRA activities			All IRA sections	UDSM Gender Policy	Director/ All IRA staff/ UDSM
8.2 Maintain gender balance in staff recruitment			All IRA sections	UDSM Gender Policy; Budget allocation	Director/ IRA Management/ UDSM

ANNEX IV: Performance Monitoring Plan during Implementation of the Strategic Plan

S/NO.	STRATEGIC OPTIONS/ACTIVITY	INDICATOR (as per Log frame)	DEVIATION/	CORRECTIVE MEASURE	REMARKS
		ACHIEVEMENT	VARIANCE	(Where Necessary)	
1.	HUMAN RESOURCE CAPACITY AND				
	1.1 Review existing staff establishment and aging profile	Accomplished	None	None	Ongoing process
	1.2 Identify staffing needs based on the Research Agenda	Accomplished	None	GIS expert, Ecologist, Demographer, librarian, ICT, Palaeontologist, Social aspects of Water Resources needed	Ongoing process
	1.3 Recruit appropriate staff to fill-in gaps	2 researchers recruited (Ecologist & Demographer)	Social aspects of Water Resources, ICT and Palaeontologist not recruited.	Advertise for GIS and ICT experts; Recruit Palaeontologist, Socio-economist-Water Resources	Ongoing
	1.4 Arrange and facilitate staff training	(X) academic and (Y) non-academic staff trained	Some staff not trained	Identify staff training needs (e.g. in EIA, SEA, SIA, GIS, teaching methods) Organize training	Identify training Opportunities Secure funds Carry out timely and regular training
	1.5 Improve the morale of IRA staff	Tea provided Transport provided Annual party Assistance at times of need	Impact not clearly known	Assess requirements for staff motivation. Promote conducive working environment Improve information sharing	Staff to indicate aspects for motivation (refer to earlier initiatives)
2.	INFRASTRUCTURE AND FACILITIES	SIMPROVED			
	2.1 Establish an inventory of physical resources	Resources listed at IRA/UDSM	Not done regularly	Do it regularly (as per specified audit periods)	None
	2.2 Procure physical resources to fill- in gaps	Different items purchased	Gaps not regularly addressed	Assess gaps regularly (e.g. power provision in case of cut off)	Participatory assessment of physical resources needed.
	2.3 Enhance the culture of accountability in the use of operational facilities and maintenance and management of physical resources	Procedures for accountability in place Operational policies and procedures in place	Procedures not adequately followed	Enhance awareness of procedures Ensure proper supervision of procedures	Ongoing process

	2.4 Develop/review operational policies of the Institute, e.g. transport and Information Communication Technology (ICT)	Transport policy reviewed	No ICT policy in place	ICT policy needed	Transport policy to be regularly reviewed
3.	MARKETING AND PUBLIC RELATION	ONS IMPROVED			
	3.1 Regularly update IRA website	Website in place Website updated	Not regularly updated	Ensure website regularly updated Establish committee for reviewing articles	Ongoing
	3.2 Develop joint research proposals with stakeholders	projects) in place	None	Advertise IRA to Stakeholders Identify more stakeholders for the different themes and integrate with them.	Ongoing
	3.3 Conduct regular information dissemination of IRA activities through conferences, seminars and targeted training programmes	Done through media day, training seminars (e.g. EIA, communicating research findings to stakeholders), and distribution of IRA publications to University library, University Departments, the Tanzania Library Services, national and international stakeholders; participation and presentations in national and international conferences/ workshop/symposia.	None	Conduct an impact assessment of disseminated information from IRA. Facilitate more dissemination using policy briefs, reports, etc. Undertake Official launching of IRA publications Organise annual IRA conference Establish IRA Journal.	unit to enhance wide dissemination of its publications Revive IRA Research and Publication Committee
	3.4 Conduct market survey and needs assessment for IRA activities	Market survey and needs assessment conducted for the MSc. NARAM	Not regularly done for other activities	Undertake regular market survey and needs assessment.	Ongoing process
	3.5 Participate in festivals/ exhibitions	Participated in annual festivals/ exhibitions organised by the UDSM	None	Organise occasional IRA exhibition day (to coincide with the IRA annual conference)	Ongoing process
	3.6 Use media to disseminate information at national and international levels through media days and other mass communication channels	Occasionally done	None	Need for more use of media to disseminate information	Ongoing process
	3.7 Publish a biannual peer reviewed journal	None Published Journal Committee in place	IRA Journal not yet established	Finalise establishment of IRA Journal	Ongoing process

	3.8 Publish annual research monographs	6 Monographs published	None	Continue preparing annual monographs	Ongoing process
	3.9 Update IRA brochures regularly	IRA brochure in place MSc. NARAM brochure produced and disseminated	IRA brochure not yet updated	Review IRA brochures	Ongoing process
	3.10 Conduct regular staff/student seminars within the UDSM	Seminars conducted	Seminars conducted irregularly	Conduct at least one seminar per quarter per research theme.	Research Theme coordinators to implement. Associate Director (Academics) to follow up.
	3.11 Enhance the distribution of IRA publications in and outside the UDSM	Implemented	Low production of IRA publications	IRA to utilise existing commercial printing facilities to enhance production and wide distribution of its publications.	Ongoing process
	3.12 Run feature columns in newspapers regularly	Not yet done	Feature articles not yet produced	Produce feature articles Arrange publications in selected newspapers. Prepare issues on policy briefs	Revive IRA Research and Publication Committee. Research theme Coordinators to facilitate preparation feature articles.
	3.13 Host national and international conferences/workshops with key stakeholders regularly	Work in progress	None implemented yet	Ensure national/ international conferences/ workshops with key stakeholders are regularly held	Research Theme Coordinators to select theme for the occasion.
4.	QUALITY RESEARCH, TEACHING, A	AND COMMUNITY SERVICES ENH	ANCED		
	4.1 Enhance quality control mechanisms	IRA Research and Publications Committee in place IRA Editorial Board in place	Research reports and papers produced but not published in the	Hasten establishment of IRA Journal UDSM to recognise locally	IRA research and publications committee to act swiftly
			IRA Research Report/Paper Series due to	published and peer reviewed research reports/papers and use them for promotion.	Proposal - Director to follow up

	4.2 Carry out periodic in-service	Occasionally done at UDSM,	change of UDSM policy towards journal papers. Growing training	Conduct regular training needs	IRA management to
	training for IRA staff	regional, and international levels	needs not adequately addressed	assessment	facilitate process
	4.3 Promote exchange of information through ICT	Staff have access to email and internet connections Capacity of IRA server expanded IRA has a functional website	IRA website not regularly updated.	Ensure capacity of IRA server is adequate Ensure website regularly updated	Ongoing ICT personnel to ensure efficient functioning of internet and website services
	4.4 Revive and conduct regular research seminar series in the Institute	Some seminars conducted	Seminars conducted irregularly	Conduct at least one seminar per quarter per research theme.	Research Theme coordinators to implement. Associate Director (Academics) to follow up
	4.5 IRA staff to publish research findings in refereed journals annually	Several articles published in refereed journals	It takes too long to get articles published	Hasten establishment of IRA Journal UDSM to fund publication in international journals	Ongoing
	4.6 Develop and undertake joint projects with stakeholders	Several projects in place	None	Advertise IRA to Stakeholders Identify more stakeholders for the different themes and integrate with them	Ongoing
5.	NATIONAL AND INTERNATIONAL L	INKS INCREASED			
	5.1 Utilise, update and manage IRA website	Website in place and updated	Not regularly updated	Ensure website regularly updated Establish committee for reviewing articles	Ongoing
	5.2 Develop joint research, teaching and community service programmes	Several projects in place MSc. NARAM in place Demand driven community service programmes in place	None	Advertise IRA to Stakeholders Identify more stakeholders for the different themes and integrate with them	Ongoing
	5.3 Enhance staff/students exchange programmes	None	None	Establish staff/students exchange programmes	Associate Director (Academics) to

					spearhead		
	5.4 Increase awareness (advocacy) among IRA stakeholders on its strengths in natural resources management and environmental information system regularly	Implemented (e.g. through board meetings, reports; participation in conferences, workshops, symposia; provision of specific training to various stakeholders, etc)	None	Further advertise IRA to stakeholders	Ongoing		
	5.5 Strengthen existing links and explore new ones on the basis of IRA Research Agenda	Ongoing	None	Continue strengthening existing links and exploring new ones	Ongoing		
6.	PARTICIPATORY INSTITUTIONAL I	PLANNING AND MANAGEMENT E	NHANCED				
	6.1 Ensure IRA participatory planning and management	Implemented through the IRA Management	Inadequate consultation in the IRA management planning process	Define Terms of Reference for Research Section Coordinators. Management committee sessions be preceded by Research Section meetings Research Sections to define annual targets	Director to define TOR for section coordinators Section coordinators to implement		
	6.2 Utilise operational plans in implementing the Institute's activities	Utilised	Limited financial resources.	Need adequate funding	Ongoing		
	6.3 Conduct performance analyses on yearly basis	Undertaken through annual reports, and annual party briefings	Rolling strategic and operational plan and IRA Research Agenda not regularly used in performance analysis.	Carry out annual review on the implementation of the IRA rolling strategic and operational plan, and IRA Research Agenda	Ongoing		
7.	FINANCIAL SUSTAINABILITY AND MANAGEMENT CAPACITY ENHANCED						
	7.1 Train IRA accounts and stores personnel in computerised accounting and storekeeping	Partly done, Accounts personnel trained in some computer skills.	Recurrent change of personnel inhibits continuity of skills gained	More in-depth training in accounting and storekeeping software needed	Associate Director (Administration) to follow up		
	7.2 Computerise the Institute's	Not yet done	Inadequate skills	More in-depth training in	Associate Directo		

	accounting and stores systems		Computerised accounting software not yet acquired	computerised needed Procure accounting software	(Administration) to follow up
	7.3 Explore opportunities for joint research and community service delivery with both national and international stakeholders	Several projects in place	None	Advertise IRA to Stakeholders Identify more stakeholders for the different themes and integrate with them	Ongoing
	7.4 Develop postgraduate and demand driven training programmes with national and international partners	Implemented: MSc NARAM established (2005); Communicating research findings to stakeholders training undertaken annually; EIA training programmes undertaken	None	Increase number of postgraduate and demand driven training programmes. Institutionalise training programmes	Ongoing
	7.5 Enhance marketing of IRA's institutional strength and programmes	Market survey and needs assessment conducted for the MSc. NARAM	None	Further advertise IRA to Stakeholders Undertake regular market survey	Ongoing
8.	GENDER EQUITY IN PLACE				
	8.1 Enhance and foster gender mainstreaming in IRA activities	UDSM Policy on gender is being followed	Inadequate turn- up of women relevant for IRA's various positions.	Encourage women to apply for IRA positions	Ongoing process
	8.2 Maintain gender balance in staff recruitment	New recruitments are more gender balanced.	Inadequate turn- up of women relevant for IRA's positions.	Encourage women to apply for IRA positions	Ongoing process