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MKINGA DISTRICT COUNCIL



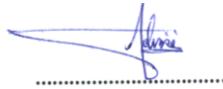
MKINGA DISTRICT ICT- FIVE YEARS STRATEGIC PLAN

PREFACE

The ICT Five Years Strategic Plan (SP) for the year 2011/12 to 2015/16 is a reflection of the ICT priorities of the Mkinga District Council in the next five years. It has been informed by Vision 2025, National Strategy for Growth and Reduction of Poverty II, Tanzania Development Vision by the year 2025, the Medium Term Expenditure Framework (MTEF), which is a combination of previous, plans.

The focus of this ICT Strategic Plan is on improving the quality of, and access to ICT services provided through or facilitated by the Mkinga District Council.

In brief the Strategic Plan for the year 2011/12 – 2015/16 has been designed to consolidate and ignite an impetus of excellence in the provision of public services in the council. It is my hope that the government, stakeholders and the people of Mkinga will render their support to ensure the aspirations of the plan are realized.



Hon. Mr Andrew Ngoda
COUNCIL CHAIRMAN
MKINGA

NOVEMBER, 2012

ACKNOWLEDGEMENTS

On behalf of the Mkinga District Council and its Management, I wish to thank all those who have contributed in one way or another in making it possible to successfully complete preparation of this Council's ICT Five-Year Strategic Plan. This is an important tool that will assist the Council implement its activities effectively and efficiently.

Many thanks are directed to the heads of department and all members of the council. Their continuous commitment, advice and support made it possible for this assignment to begin and be completed expeditiously.

The valuable contribution and commitment by all those who participated cannot be over-emphasized. It is through such knowledge and assessment of the internal and external factors that the key challenges to ICT sector and solutions to address the challenges were formulated.

Finally, I wish to express my gratitude to District ICT Officer, Mr. Hassan William Njwaba, who facilitated the preparation of this Strategic Plan. The facilitator adopted an approach which has substantially contributed to building the capacity of the council in the preparation of Five Years ICT Strategic Plans. As a Council, we hope this is a beginning a long term institutional collaboration.


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Mr. P.S.M. Ngaponda
EXECUTIVE DIRECTOR
MKINGA

SEPTEMBER, 2012

EXECUTIVE SUMMARY

Mkinga District Council (MDC) ICT Strategic Plan covers the five-year period of 2011/12 – 2015/16. The plan describes our Mission, Vision, Objectives, Key results and Key Performance Indicators. The Strategic Plan begins with a situation analysis which is meant to provide the reality of MDC operating environment, which will impact on the plan and providing strategic options and choices. It has been informed by Vision 2025, National Strategy for Growth and Reduction of Poverty II, Tanzania Development Vision by the year 2025, the Medium Term Expenditure Framework (MTEF), which is a combination of previous, plans i.e. the Rolling Plan and Forward Budget and Performance Budget, the legislation, as amended to support the on-going Local Government Reforms, Millennium Goals and Sectoral Policies, and. It is further informed by the Act of the parliament, Act No. 6 of 1999, which aims at devolving political, legal, administrative and financial power to LGAs making them more responsible and accountable to the people and the Local Government (LGA) Acts No. 7 8, 9 and 10 of 1982 (Amended). It is these amended Acts that reinforce the preparation and implementation of this strategic plan.

The Vision, Mission, Key result areas and Strategic Objectives of MDC were derived from a Stakeholders' workshop; and council self assessment and performance review (situation analysis). Lists of critical issues that need interventions were identified. To address critical issues, the following sets of goals were developed:-

CHAPTER ONE

1.0 Structure

This part outlines the components of the MDC's ICT Vision and conceptualizes the Vision along the two principal dimensions of Information Economy and Information Society, in the process giving targets to be achieved for each of them. It also describes the approach taken towards evolving the strategy for the NICTSP and the Strategic Model of SCALE adopted for the same. Concisely it also covers the assessment of the current state, a brief overview of the recommendations made and how they fit into SCALE model.

The part concludes with a summary of the set of strategies recommended for the DICTCC.

1.	MDC ICT Vision	
2.	Realizing the Vision	
3.	Strategic Approach	
4.	Strategic Framework Model	
5.	Strategic Thrust Areas	
5.1	<ul style="list-style-type: none"> a) Set accessible, universal, affordable, reliable, modern and high quality levels of ICT facilities and services to successes support b) SUPPORT the use of ICT to enhance education and skills development 	
5.2	<ul style="list-style-type: none"> a) CATALYZE environment for the promotion of Agriculture, Fishing, Tourism, SMEs and Investment and the development of a vibrant and sustainable economy. b) CATALYZE disease control and health care programmes 	
5.3	<ul style="list-style-type: none"> a) ACCELERATE the Government services available electronically and Access to relevant, localized and understandable information for all citizens. b) ACCELERATE the community with universal access to ICT in order to improve their productivity and to broaden their opportunities for knowledge sharing and generating local content 	
5.4	Set legal and regulatory environment that ensures/LEADS the growth and development of the Information and Communications Technology sector	
5.5	EMERGY as National Point of Reference and Better Livelihood.	

1. MDC ICT Vision

The Mkinga District Council wants to see a well educated community with better livelihood through the use of ICT. MDC has had promising success in ICT sector enabled predominantly by advantages of an available workforce, zone positioning and presence of reliable telecommunication infrastructure.

Facets that have drawn the MDC's attention include the following.

- A firm beginning has been made in the uptake of ICT in sectors of economic activity, including in banking and financial services, where it is comparable to global standards.
- There exists a significant degree of ICT penetration in society, both in terms of personal computers and the Internet.
- Quality skills are being imparted in the educational institutions around the nation with courses exclusively for ICTs seeing, of late, an increasing enrolment into them; these are early signs of an ICT workforce buildup.
- There is also a growing ICT domestic sector that has to a large extent been able to meet own requirements of ICT applications, including in the sphere of eGovernment.
- The socio-political environment is stable and makes for a secure business investment.
- The overall socio-economic goals

The Government takes due cognizance of these and wants to take ICT to the next level where ICT truly becomes driving force of socio- economy.

2. Realizing the Vision

Holistic measures are required rather than isolated initiatives dictated by narrow considerations of, say, generating a targeted number of ICT manpower, for following reasons.

- The Council’s mandate is to bring about the attainment of larger socio-economic development goals and ICT is identified as a means for that, though a very key one. Limiting the interventions to some areas while ignoring others would amount to underutilization of ICT’s potential and an under-achievement of socio-economic development itself.
- There is a considerable amount of interplay between different socio-economic spheres of activity contributing to an overall development of the district. Effecting interventions in some areas to the exclusion of others would not adequately account for these interdisciplinary dependencies and may result in a sub-optimal buy-in from stakeholders in the process. This could jeopardize the realization of the Vision.

For the Vision to be realized, it is important that interventions are done towards building up an Information Economy and the creation of an Information Society.

Information Economy measures must be such as to ensure that

- The business community leverages ICT for higher levels of efficiencies and effectiveness.
- There results adequate levels of ICT uptake in different sectors of economic activity leading to a vibrant ICT domestic
- The Council facilitates the above by pronouncing appropriate policies, setting up appropriate legal infrastructure, adopting ICT in its own house for higher levels of citizen convenience and improvements in efficiency and effectiveness, facilitating installation of a commensurate technology infrastructure, and generally encouraging ICT uptake

In quantity terms, following targets are associated with the ICT-linked economy by 2015.

Attribute	Target by 2015
Increase in ICT on Agriculture and Pastoralism	50% of farmers, pastoralist and fisheries are sensitized on the use ICT.
Adapt and use of ICT on business	60% of SMEs are sensitized on the use ICT

Information Society measures need to ensure that

- There emerges gradually a widespread societal perception of ICT, not just as an important tool with which to better their lives but also as a reliable career choice for higher levels of individual fulfillment and collective prosperity.
- Society realizes that in today’s knowledge world increasingly getting shaped by the twin forces of globalization and technological advancement, education is key to development and lifelong learning a basic pre-requisite for success.
- That society increasingly takes to ICT as a way of life in its day-to-day affairs, including participating in online networks and transactions.
- That ICT becomes a ubiquitous and affordable tool for everyone regardless of age, location, gender, financial strength or any other socio-economic disability.

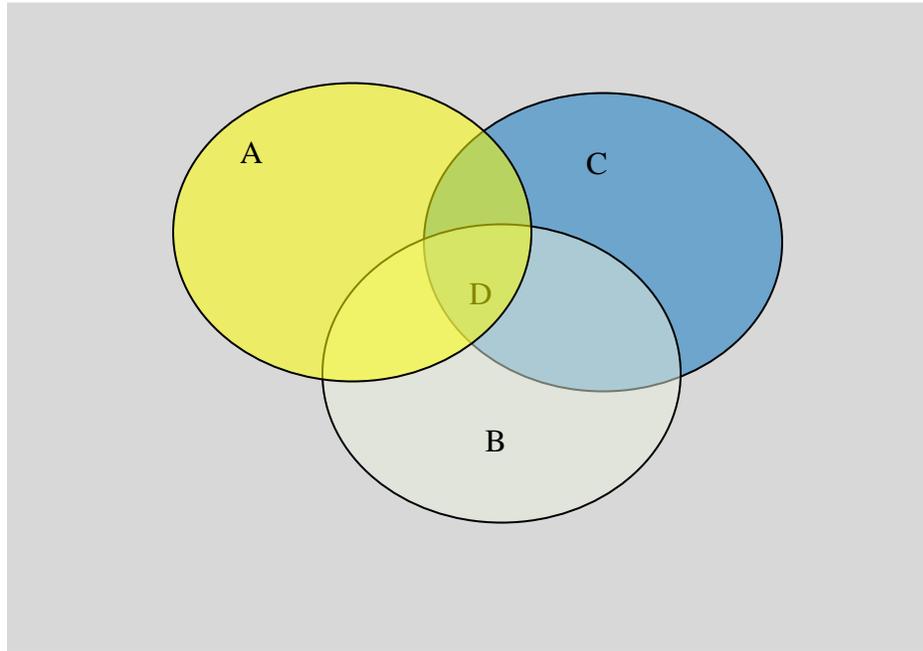
In quantity terms, Table brings out the targets associated with the information society to be achieved by 2015.

Activities	Targets by 2015
Inoculation of a “Technology Temper”	50% of citizen use online applications.
Increase the adaptation and use of ICT	Pc penetration increase by 300 and 60% Mobile Device with internet service increase
Knowledge Networking among the Citizens	100% of Network coverage around the district
Increase in Acceptance of ICT as preferred career of choice	All primary and 50% Secondary schools offers ICT subject

3. Strategic Approach

Figure 1 summarizes graphically the approach that has been adopted towards formulating strategies to realize the MDC ICT Vision. The approach for evolving the strategy took the following stages.

Figure 1



Stage 1: Assessment

A. The current state was assessed in 9 Building Blocks of ICT belonging to (a) the ICT Sector, (b) Domains where ICT is exploited, and (c) components that were a part of the Enabling Environment, technical, institutional or legal. The nine Building Blocks are as follows.

A. ICT Sector

B. Domains of ICT Exploitation, including

- ICT for Social Development,
- ICT for Sectoral Exploitation, and
- eGovernance.

C. The Enabling Environment, constituted by

- ICT Manpower Planning and Development,
- ICT Policy, Legal and Institutional Framework,

- Information Security,
- Emerging Technologies, Applications and Standards, and
- Infrastructure and Electronic Communications.

Every Building Block was further associated with conceptual domains of activity or “themes” within which interventions would be made. In arriving at the above themes recourse was taken to

- a) the understanding of the current state as revealed by the respective Working Group assigned (Figure1, Region “A”),
- b) experience and expertise available with the consultants through undertaking assignments of similar nature (Region “B”), and
- c) Experiences and lessons available from other district/ Institutions though not with consultants’ participation. Recommendations essentially lie at the confluence of the three regions, Region “D” in Figure 1.

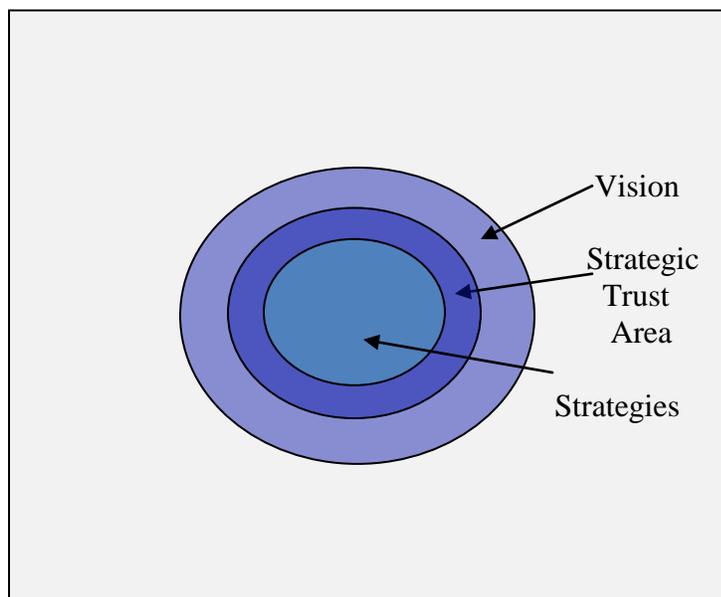
B. Realization of the MDC ICT Vision was conceptualized in terms of measures required to build up both an Information Society and an Information Economy, as explained in the section on Vision.

The interventions listed in “A” above were further tempered by what MDC ICT Vision would require.

Stage 2: Identifying the Thrust Areas

From the slew of broad intervention areas that emerged, 7 Strategic Thrust Areas were identified. Each of these strategic thrusts was identified with a goal that had to be attained if the thrusts were to be effectively imparted. Further, each of these thrusts was associated with strategies that would help achieve the goal associated with the thrusts.

Figure 2:



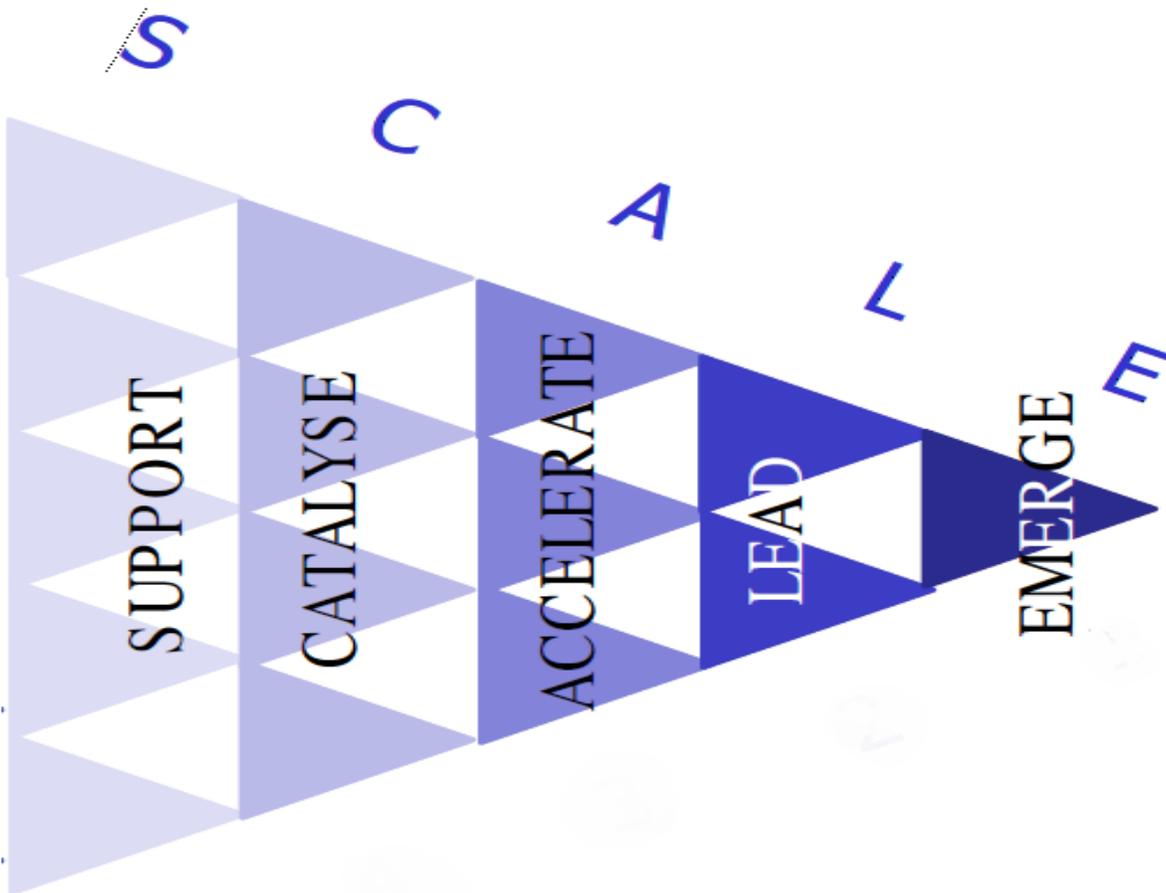
Stage 3: Programmes

Programmes have been identified as the vehicles with which to implement the strategies referred in Stage 2, and have a one-to-one relationship with them. A programme is a group of projects. Most projects are one-time activity that are implemented in a definite time-frame and result in an identified set of outputs; some of the projects, though, are also recurring in nature, being taken up every year along similar dimensions and resulting in similar set of results.

Stage 4: Prioritizing and resourcing the interventions

Since all strategies are of equal importance, their associated programmes too enjoy equal priority, however, projects within a programme need to be prioritized. Priority accorded to a project is determined by the twin factors of criticality (essentially how integrally linked the project is with attaining the strategic objectives associated with the programme) and feasibility (the extent of ease with which a project could be implemented).

4. Strategic Framework Model



5. Strategic Thrust Areas

5.1 SUPPORT

a) Set accessible, universal, affordable, reliable, modern and high quality levels of ICT facilities and services to successes support

ICT infrastructure forms the essential bedrock on which initiatives under the MDC would succeed. Establishment and sharing of a functioning electronic communications infrastructure, proper service management principles governing operations of this infrastructure and necessary policy and regulatory support must make for a regime that is equitable, transparent, progressive and customer-centric in orientation. This becomes particularly true in the case of resources that are finite and scarce, for example spectrum and numbered resources, and for infrastructure investment that has already been made.

It is important, too, at the same time that emerging technologies are identified, adapted, adopted and harnessed through standards and regulatory frameworks that help internalize them smoothly into the existing systems without upsetting existing synergies. A key recommendation in this regard is the rollout of technology test beds for trying out emerging technologies before they are deployed in the real world.

GOAL: Set accessible, universal, affordable, reliable, modern and high quality levels of ICT facilities and services to successes support

STRATEGIES:

Strategy S1	Set reliable and efficient ICT infrastructure which shall have sufficient capacity and network speeds, provide improved connectivity, be cost-effective and adaptive to the needs.
Strategy S2	Procure ICT facilities and services for District government offices and schools.
Strategy S3	Encourage the private sector to continue their role as an integral part of the development of ICT infrastructure
Strategy S4	Encourage sharing and co-locating of infrastructure and facilities.
Strategy S5	Continue adopting new Technologies from various sources for the benefits of District.

b) SUPPORT the use of ICT to enhance education and skills development

ICT is a knowledge-intensive sector and hence is one which is driven essentially by skilled manpower. Both measures count here, quantity and quality. If interventions at the basic level make for immediate results in terms of making available outputs that are compatible with sector requirements, what is necessary, and is perhaps more fundamental, is that measures must be initiated at the foundational levels of education itself. A thriving ICT sector whose manpower requirements are substantially met from within the district requires more than twice the number of students coming up the secondary education ladder in streams related to ICT than is the current trend.

Reducing the high levels of school dropouts would require students to see education as a necessity not just for employment but to handle life itself. They must imbibe in themselves a spirit of lifelong learning, which discards all perceptions of education being a once-and-for-all effort. Parental involvement in this process as a key participant will also go a long way towards influencing the academic trajectory of children. Education must be such as to inculcate in students an acumen of tackling the untoward and staying prepared for challenges in an increasingly professional and knowledge-driven world. ICT must be used as a key enabler in this endeavour, and education must make the transition from “Education about ICTs” to “Education through ICTs” in a larger effort to make education more creative and less pedagogical and subject to rote. ICT would be a key enabler to effect this transformation.

GOAL: SUPPORT the use of ICT to enhance education and skills development

STRATEGIES:

Strategy S6	Education through the use of ICT
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5.2 CATALYZE

a) Catalyze environment for the promotion of Agriculture, Fishing, Tourism, SMEs and Investment and the development of a vibrant and sustainable economy.

Significant levels of ICT uptake already exist in sectors like banking and mobile money. However, in other critical sectors of economic importance and/or social relevance, there is room where ICTs need to be used as a catalyst to bring about better sector management and sector development, and to facilitate collaborative working not just between stakeholders within a sector but also across sectors. Besides making for growth in the sectors themselves, this would trigger increased ICT activity in the domestic sector and irrevocably establish its relevance for MDC.

The following critical sectors are identified for MDC.

Agriculture

Agriculture sector employ more than 80% of total population of Mkinga District while only 20% of total population they engaged in minor activities such as livestock keeping, fishing and minor agribusiness. The District has total square km 2,948 (294,800Ha). About 85% of total land is suitable for crop cultivation and livestock keeping which is equivalent to 250,580 hectore. ICT adoption in the sector is also distinguished by inadequate utilization of the Internet as a sector development and a sector management platform.

Interventions in the agriculture sector, along with the necessary business process reengineering, an integrated portal and efficient use of geo-database as a visualizing, analytical and decision-making tool, must also include coming out with appropriate institutional mechanisms with which to implement and monitor the implementation of solutions in the sector, ensuring smooth functioning of infrastructure on which to run ICT solutions, undertaking capacity building measures and awareness initiatives towards promoting ICT uptake. Recommendations, therefore, include a comprehensive eAgriculture plan for the sector that would lay out the initiatives required to be taken and associate them with entities entrusted to take them up.

An all-encompassing portal for the sector as an information repository and a collaborative platform, including discussion forums and advisory and advocacy networks, needs to come up as also, in the long-term its evolution into the MDC Agriculture Resource Information System (MAGRIS), an extensive and structured repository of an agro-climatic data that could be used for planning by the stakeholders from the farmer to the topmost officials of the sector.

Small and Medium Enterprises (SMEs)

SMEs representing about 7.2 of the workforce with less impact in District Revenue, though, in MD are crippled by problems related mostly to size and isolation: if isolation prevents them from taking advantages of benefits that could accrue out of networking, their small size handicaps them in terms of the financial bandwidth they have towards making investments into areas where gains are not immediate.

ICTs are seen as a key enabler in making SMEs utilize gains of efficiency and effectiveness in their internal working and as a facilitator towards helping them cluster and network with other participants in the sector to achieve better integration in their offerings to the market and attaining economies of scale through a shared investment into infrastructure. However, faced with an inward looking mindset, interventions, besides those related to technology, must necessarily involve taking up appropriate capacity building and awareness initiatives towards adopting and using ICTs in a more comprehensive way.

Tourism

Tourism is a key defining characteristic for MD in the international arena. Drawing on a wide range of skills and involving players from both public and the private sectors, tourism, though, is a heterogeneous and fragmented industry that can benefit immensely from collaboration enabled by ICT which would result not just in offering value-added services to the tourist but would also result in benefits percolating more equitably to stakeholders. ICT intervention efforts must, therefore, lead to enhanced tourist convenience and to a more equitable sharing of industry proceeds.

However, ICT penetration rates including that of the Internet are low and restricted to larger operators. The concept of an all encompassing portal offering end-to-end multichannel ICT-enabled service to the tourist and single-point reference for tourism in MDs has still to be realized. Similarly, multi-channel location-based services do not exist. Interventions in the sector must necessarily lead to not just offering value-added services conveniently obtained through a single point of reference by the tourist, before, during and after her trip to Mkinga District, but must lead to a more geographically and economically diverse tourist profile, facilitating overall tourism growth.

Presenting a value-for-money proposition to the tourist would also imply that all stakeholders, big and small, are brought on board, in an overall effort to make tourism a growing, vibrant and inclusive sector of economic activity. Cost-effective mechanisms of participation and partaking of the benefits of ICT must be conceived to facilitate this. The recommendation is for a comprehensive eTourism initiative including that of a portal representative of tourism in MD, applications and data

hosting on a shared infrastructure to give opportunity to the SMEs and end-to-end integrated service provision to the tourist.

The recommendation is for an integrated eTourism initiative that helps the tourist plan her trip through a multi-dimensional decision-making tool on the portal that takes into account budgetary restrictions, location requirements, need for amenities like rented car, a local mobile phone during her stay in Mkinga, interfacing arrangements with tour operators and other associated amenities. Options would need to be explored for enhancing tourist convenience through a single-window interaction for the tourist supported by agreements with other operators, as also of providing convenient service over ICT devices like a mobile phone. Inclusiveness of the eTourism platform would ensure that all operators of the tourism sector, particularly the SMME segment get a digital window to the world.

Following the discussion above, Figure brings out the GOAL associated with the Strategic Thrust Area of “CATALYSE”, and the four associated STRATEGIES to help attain this goal

GOAL: Catalyze environment for the promotion of Agriculture, Fishing, Tourism, SMEs and Investment and the development of a vibrant and sustainable economy.

STRATEGIES

Strategy C1	Encourage Construction and Introduce ICT in Agricultural and Fisheries information canterers.
Strategy C2	Establish and maintain the farmers, fishermen, livestock keepers and cooperative society information database.
Strategy C3	Encourage the Private Agricultural Companies and Cooperation’s (SACCOS and VICOBA) on the use of ICT.
Strategy C4	Support to spread the crops price and market information and provision of consultancy to the farmers and fishermen through the use of ICT.
Strategy C5	Total introduce and encourage SMEs on the use of ICT in commerce (e-Commerce) and eTourism
Strategy C6	Strengthen SMEs though ICT enablement by conducting awareness building seminars, business planning workshops, financing, implementation assistance, and SME help desk.
Strategy C7	Establish Integrated SMEs Database and Business License Management System

b) CATALYZE disease control and health care programmes

Health

Health status of Mkinga community is not satisfactory because most of the people get sick and weak most of the time. Vulnerable groups are old people, women and children. This is due to poor living status of the community because of low income and poor production especially food products. Medical staffs are estimated to 126 in all carder.

However, ICTs have a long way to go for it to be optimally utilized for the collective benefit of health workers and patients. Uptake of ICT in the sector has been disparate and not the result of any integrated plan for the sector as a whole. Largely restricted to the use of mailing and information systems in isolated departments, the health sector has a lot to gain through ICTs in terms of ushering internal efficiency and effectiveness and generally enabling collaborative working among its stakeholders. Interventions in the health sector must necessarily lead to addressing the multifaceted problems faced by stakeholders in the sector through a more holistic exploitation of both information and communication technologies available towards bringing about better provision of healthcare, remote or otherwise, better information sharing among its participants and better analytical and decision-making capabilities by policy planners in the sector.

Accordingly, recommendations include arriving at a comprehensive eHealth plan for the sector that would lay out the initiatives required to be taken and associate them with entities entrusted to take them up. In particular, telemedicine possibilities need to be explored not just for extending healthcare to outlying areas of the district but also as a means with which expertise could be shared with other district of the region.

Similarly, recommendations also include identification and deployment of systems that would free doctors from repetitive work associated with ICT and afford them more time on their core competencies.

GOAL: CATALYZE disease control and health care programmes

STRATEGIES

Strategy C8	Implement of the Electronic or Computerized Patient Management System that will enable Clinicians to Deliver Excellent Patient Care.
Strategy C9	Improve Access to Health Services and Information through ICT

5.3 ACCELERATE

a) ACCELERATE the Government services available electronically and Access to relevant, localized and understandable information for all citizens.

Substantial investments and achievements have happened in the sphere of eGovernance in Mkinga District, including the setting up and operationalizing of the Government Online portal and launching of a few eServices on it. Interventions, now, are required in the twin areas of

(a) enhancement of the existing initiatives in order to bring about higher levels of internal efficiencies and effectiveness within the MDC and facilitating citizen convenience in their dealings with the government, and

(b) Taking up additional interventions on council to address those areas where gaps have been identified to exist.

Initiatives taken so far towards electronic governance are largely limited to particular departments with a minimal amount of cross-departmental working behind the systems. Services need to undergo a transition from a single-service, single-stage to a multi-service, multi-stage delivery framework to make governance an efficient, citizen-friendly, transparent and participative process. A successful transition to this to be undertaken in an accelerated way would require interventions in the three principal dimensions of people, process and technology in a framework that encourages and requires collaborative working. More importantly, there would also be required a central plan within which all departments must work, according priorities not just between departments but also to services that need to be launched within the individual departments.

Recommendations made include the setting up of an eGovernance Cell to plan, monitor, advise and closely coordinate the eGovernance initiatives being taken up in Mkinga District, on the basis of plans collaboratively prepared and agreed upon by departments.

GOAL: ACCELERATE the Government services available electronically and Access to relevant, localized and understandable information for all citizens

STRATEGIES:

Strategy A1	Encourage the use of ICT by deploying ICT systems to improve efficiency, reduce wastage of resources, enhance planning and raise the quality of services (E-Government).
Strategy A2	Establishment of District land bank database and enhance the use of Geographical Information Systems (GIS).
Strategy A3	Establish Electronic Local Revenue Collection System that will control the revenue collected by different renderer and other sources

b) ACCELERATE the community with universal access to ICT in order to improve their productivity and to broaden their opportunities for knowledge sharing and generating local content

Measures to facilitate uptake of ICT in society have been largely those relating to the remove VAT tax in PC, The aim of the government is to lower the price of PC so that the penetration of PC is citizens will increase. Although these have pushed up the PC penetration rates, the Internet penetration rates have not gone beyond a point.

Interventions, then, need to take place in the multiple areas of (a) SMEs investing in Computer services including Internet Café and retailing ICT Equipment (b) Encourage the use mobile phone with internet capability (c) triggering local content generation even as communities get prepared to use ICT through a continuation of computer learning programmes and (d) letting initiatives be run by communities themselves, though following some centrally-determined guidelines.

GOAL: ACCELERATE the community with universal access to ICT in order to improve their productivity and to broaden their opportunities for knowledge sharing and generating local content

STRATEGIES

Strategy A4	Encourage the wider use of Swahili in developing local content in order to promote local culture and attract local end users
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Set legal and regulatory environment that ensures the growth and development of the Information and Communications Technology sector

The policy, legal and the regulatory structure makes up the foundation required to ensure that initiatives continue to enjoy consistent and undiminished support throughout the currency of the plan. A policy superstructure would convey not just political conviction and commitment for the initiatives but also, to a fair measure, guarantee continuity across political tenures. Comprehensive District ICT Policy encompassing different domains of involvement would be a necessary first step to impart direction as well as serve as a guiding document for stakeholders.

For the identified activities to take place smoothly, it is also necessary that the legal framework is harmonized with requirements of the information economy and national and International norms, and is braced up into one in which participants have trust and confidence. While on the one hand it is necessary that legal or regulatory interventions do not stifle creativity or impede the free flow of information, it is also imperative that adequate checks and balances exist for systems to be restored whenever breaches occur.

The ICT regulator not only needs to be effective, it must also be, and must be seen as, independent. Legal provisions and regulatory practices need to be seen in this light. Add to it the complexities thrown in by the challenges

for a regulatory regime that is equitable, transparent, progressive and customer-centric. Recommendations, therefore, have been made towards enhancing technical and institutional capabilities of the regulator.

GOAL: Set legal and regulatory environment that ensures the growth and development of the Information and Communications Technology sector

STRATEGIES:

Strategy L1	Maintain a consistent policy, legal and regulatory framework that is aligned with the needs of the ICT sector.
Strategy L2	Establish a culture of information security in businesses, government and society through sustained proactive interventions of awareness and capacity building and reactive emergency response systems.

5.5 **Emerge**

Emerge as point of reference with Better Livelihood.

Known opportunities, even if not always the best are better than unknown possibilities. The better planning will lead to the better use of available opportunities. Our plans should base on building manpower from grass root, in modern economy the human resources has more priority than other resources.

The Better livelihood of our people can't be distinguished from the ICT, All school shall offer ICT lessons in order to produce ICT experts. The ICT experts will penetrate in all sectors of economy and improve the productivity through the use of ICT.

GOAL:

Set ICT standard standards and guidelines to ensure ongoing development takes place

STRATEGIES:

Strategy E1	Emerging as point of reference with Better Livelihood
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CHAPTER TWO

As discussed above, programmes, constituted by projects, are the main vehicles to implement the 23 strategies earlier detailed. Programmes are associated with the “Strategic Objectives” that are to be met through their implementation.

In this section, 19 programmes, corresponding to their respective strategies are detailed. The description of the programmes is on the following lines.

- Context of the Programme, including recommendations made in the “Analysis” phase, which they address;
- Projects that make up the programme;
- Priority associated with the projects which determines the order in which they would be taken up;
- “Owner” department entrusted to implement the projects; and
- Main milestones and indicators that define the projects and help monitor their implementation.

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7.1 SUPPORTIVE PROJECT AND OUTCOME

Project No	PROJECT	ACTIVITY	OUTCOME
S1P1	PROGRAMME 11: Harnessing reliable and efficient ICT infrastructure		
	Maintain the demand of ICT infrastructure	Determine the total demand/problem of ICT infrastructure in the district	Available of Accessible and Universal infrastructures
		Determine the possible solution	
		Seek for solution/Procure the facilities/ services	
S1P2	Provide reliable, accessible Network connectivity in council offices	Construct LAN around the council office	Accessible and Universal infrastructures
		Maintain LAN infrastructure	
		Restructure Council's LAN	
PROGRAMME S2: Encourage the private sector on development of ICT infrastructure			
S2P1	Maintain network coverage around the district	Determine the remote areas	Network coverage availability in MD
		Determine the network demand	
		Negotiate with network providers	
PROGRAMME S3: Sharing and co-locating of infrastructure and facilities.			
S3P1	Promote sharing and co-locating of infrastructure and facilities	Determine the capacity and use of ICT infrastructure/facilities	Effective and Efficiency use of Infrastructure
		Prepare and configure the infrastructure for sharing	
		Maintain the infrastructure/facilities	
PROGRAMME S4: Procurement ICT facilities and services for District			
S4P1	Procure ICT facilities and Services for Council	Determine the end user requirement	Standard facilities and services
		Prepare the specifications for ICT facilities/services	
		Inspect the quality and need of facilities/services	
		Install and configure the facilities/services	
		Maintain facilities/services	
PROGRAMME S5: Technologies Adaption from various sources			
S5P1	Adopt technology from various sources (Ministries or Institutions)	Prepare conducive environment for adaptation of Technology	Affordable technology
		Adopt and maintain the Technology	

PROGRAMME P6: Education through ICT			
S6P1	Contract schools ICT's laboratories	Determine the need of the laboratories	Increase performance in Science subjects
		Determine the Technologies	
		Install and configure facilities/services	
		Maintain the laboratories	
S6P2	Link ICT facilities with Internet	Determine the needs of internet	Improvement of education level
		Determine the solution	
		Install and configure the Internet service	
		Maintain the Internet service	
S6P3	Support Use of Multimedia for studying	Improve the multimedia skills to the teacher	Improvement of education level
		Facilitate schools with multimedia devices	
S6P4	Develop ICT work force	Conduct ICT capacity building	Confidence on the use of ICT
		Retain ICT professionals	
		Conduct ICT activities relating to lifelong learning	

Programme Council Framework

The Department will be monitoring the progress of the programme closely.

Projects, Ownership and Priorities

Project Code	PROJECTS	OWNER	HIGH	MEDIUM	LOW
S1P1	Maintain the needs of ICT infrastructure	PL-ICT		√	
S1P2	Provide reliable, accessible Network connectivity in council offices	PL-ICT		√	
S2P1	Maintain network coverage around the district	PL-ICT	√		
S3P1	Promote sharing and co-locating of infrastructure and facilities	PL-ICT		√	
S4P1	Procure ICT facilities and Services for Council	ALL DERTS		√	
S5P1	Adapt technology from various sources (Ministries or Institutions)	ALL DERTS			√
S6P1	Contract schools ICT's laboratories	ED-DERTS	√		
S6P2	Link ICT facilities with Internet	ED-DERTS			√
S6P3	Support Use of Multimedia for studying	ED-DERTS		√	
S6P4	Develop ICT work force	ED-DERTS	√		

7.1 CATALYZING PROJECT AND OUTCOME

Project No	PROJECT	ACTIVITY	OUTCOME
PROGRAMME C1: Promoting Integrated Adaptation of ICT in Agriculture, Tourism, Commerce and Trade through ICT.			
P1C1	Introduce ICT in Resource centers	Determine the total demand of ICT infrastructure in the resource centers	Timely availability of stockholders necessary information
		Determine the possible solution	
		Seek for solution/Procure the facilities/ services	
		Install and configure ICT facilities/services	
		Maintain the infrastructures	
PROGRAMME C2: Enabling SMEs through ICT			
P1C2	Enable SMEs through ICT	Conduct awareness building seminars	Improvement of Investment in all sector
		Conduct business planning workshops, financing, implementation assistance and ICT help desk	
		Advertise their product through website	
PROGRAMME C3: Integrating SMEs Database and Business License Management System			
P1C3	Maintain the SME details and Business license information.	Collect SME details	Increase in Revenue
		Design Access database.	
		Record levy and license information	
		Update the SME information	
PROGRAMME C4 : Electrolyze or Computerized Health sector			
P1C4	Implement Integrated Health Management Systems	Construct Local Area network and procure ICT facilities/services	Quality Health service
		Prepare Request for Proposal for the development and implementation of the eHealth solutions	
		Install the eHealth solution	
		Conduct capacity building for Health stuffs	
		Maintain the system	

P2C4	Implement computerized devices	Determine the problem	Improved Quality Health service
		Procure electronics/computerize solution	
		Maintain electronics/computerized systems	
PROGRAMME C5: Improve Access to Health Services and Information through ICT			
P1C5	Catalyze the accessibility of Health and Information through ICT	Analyze the problem	Quality Health service
		Procure and install telemedicine and medical system.	
		Maintain telemedicine/medical system	
		Produce multimedia medical procedures	
		Upload medical contents	

Programme Council Framework

The Department will be monitoring the progress of the programme closely.

Projects, Ownership and Priorities

Project Code	PROJECTS	OWNER	HIGH	MEDIUM	LOW
P1C1	Introduce ICT in Resource centers	AG&LIV		√	
P1C2	Enable SMEs through ICT	TRADE			√
P1C3	Maintain the SME details and Business license information.	TRADE	√		
P1C4	Implement Integrated Health Management Systems	HEALTH		√	
P2C4	Implement computerized devices	HEALTH		√	
P1C5	Catalyze the accessibility of Health and Information through ICT	HEALTH	√		

7.3 ACCELARATING PROJECT AND OUTCOME

Project No	PROJECT	ACTIVITY	OUTCOME
PROGRAMME A1: Accelerate Government Services through ICT			
P1A1	Improve the use of ICT by deploying ICT systems	Determine the problems of end user	Timely availability of government services
		Find the possible solution	
		Seek for solution/Procure the facilities/ services	
		Install and configure ICT facilities/services	
		Maintain the infrastructures	
P2A1	Improve accessibility of Council's Information	Establish council website	Timely availability of understandable information to all citizens
		Localize council information	
		Publish the council's information	
		Maintain the council's website	
PROGRAMME A2: Geographical Information Systems (GIS) Programme.			
P1C2	Promote Geographical Information Systems (GIS) Programme.	Conduct land use	Increase in production
		Procure GIS systems	
		Construct land database	
		Update land records	
PROGRAMME A3: Strengthen Revenue Collection through ICT			
P1C3	Improve the Revenue Collection	Collect SME details	Increase in revenue
		Design Access database.	
		Record levy and license information	
		Update the SME information	
PROGRAMME A4 : Culture promotion through ICT			
C4P1	Promote culture through ICT	Publish Swahili content	Our culture maintained
		Publish the local content	
		Discourage inappropriate use of ICT	

Programme Council Framework

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Projects, Ownership and Priorities

Project Code	PROJECTS	OWNER	HIGH	MEDIUM	LOW
P1A1	Improve the use of ICT by deploying ICT systems	ALL DERT	√		
P2A1	Improve accessibility of Council's Information	ALL DERT	√		
P1C2	Promote Geographical Information Systems (GIS) Programme.	LAND		√	
P1C3	Improve the Revenue Collection	FINC	√		
C4P1	Promote culture through ICT	CULT			√

7.4 LEADING PROJECT AND OUTCOME

Project No	PROJECT	ACTIVITY	OUTCOME
PROGRAMME L1: Reviewing policy, legal and regulatory framework change			
P1L1	Effecting appropriate changes for technical and institutional capabilities in the emerging “converged” environment	Exercise on changes required in legislation for ICT	Consolidated Restructuring Report on ICT Regulation in District
		Arrange for a regulatory and competency review of ICTA's technical and institutional capabilities	
		Competency review of the DICTCC	
		Exercise to recommend effective ways to create a converged environment or to recommend effective ways	
PROGRAMME L2: Information Security management culture and Emergence Response Systems			
P1L2	Information Infrastructure protection and performance Information Risk	Exercise better use of PC	Confidence on use of ICT
		Develop the criteria to facilitate the identification of Critical Information Infrastructure and systems	
		Develop the security model and tools	
		Identify risks and vulnerable	

Programme Council Framework

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Projects, Ownership and Priorities

Project Code	PROJECTS	OWNER	HIGH	MEDIUM	LOW
P1L1	Effecting appropriate changes for technical and institutional capabilities in the emerging “converged” environment	PL-ICT		√	
P1L2	Information Infrastructure protection and performance Information Risk	PN-ICT	√		

7.5 EMERGING PROJECT AND OUTCOME

Project No	PROJECT	ACTIVITY	OUTCOME
PROGRAMME L1: Emerging as point of reference with Better Livelihood			
E1L1	Council planning arrangement	Conduct ICT benchmarking	High standard and performance
		Review ICT Policy, Legal Procedures and Regulations	
		Review ICT plans	
		Review performance of other sectors	

Programme Council Framework

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Projects, Ownership and Priorities

Project Code	PROJECTS	OWNER	HIGH	MEDIUM	LOW
E1L1	Council planning arrangement	PLN-ICT	√		