



**TOGETHER**  
*for a sustainable future*

## OCCASION

This publication has been made available to the public on the occasion of the 50<sup>th</sup> anniversary of the United Nations Industrial Development Organisation.



**TOGETHER**  
*for a sustainable future*

## DISCLAIMER

This document has been produced without formal United Nations editing. The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. Designations such as “developed”, “industrialized” and “developing” are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. Mention of firm names or commercial products does not constitute an endorsement by UNIDO.

## FAIR USE POLICY

Any part of this publication may be quoted and referenced for educational and research purposes without additional permission from UNIDO. However, those who make use of quoting and referencing this publication are requested to follow the Fair Use Policy of giving due credit to UNIDO.

## CONTACT

Please contact [publications@unido.org](mailto:publications@unido.org) for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at [www.unido.org](http://www.unido.org)

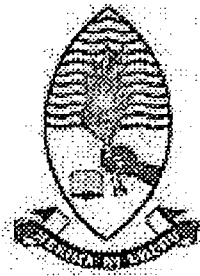
22298



# BeGIN Project Final Report

System support services to establish a national governance network

Tanzania



UNIVERSITY OF DAR ES SALAAM  
COMPUTING CENTRE

## 1. Project Detail

Name	BeGIN (Better Governance through Information and Networking)
Duration	June 1, 1999 - November 30, 1999
Country	Tanzania
Sponsor	UNIDO
Subcontractor	University of Dar es Salaam, Computing Centre
Participating Institutions	Planning Commission National Bureau of Statistics National Environment Management Council Ministry of Industry and Commerce Business Registration Licensing Agency Tanzania Investment Centre
Project Manager	University of Dar es Salaam, Computing Centre

## 2. Project Results Over Reporting Period

The BeGIN project which is part of Component 1: Implementation of the Sustainable Industrial Development Policy of the " Integrated Industrial Development Programme for Capacity Building to enhance Industrial Competitiveness and Sustainability in Tanzania, has been initiated and sponsored by UNIDO and the project came to effect June 1, 1999. The project has been running for the past six month and the first phase of the project has been completed as was stated in the project document on November 30, 1999.

The main objective of the project is to establish a governance support information network. The University of Dar es Salaam Computing Centre is contracted to establish this network in close co-operation with UNIDO and the above mentioned Government Bodies as the project development team.

Since the beginning of the project two progress reports have been submitted by the Computing Centre, describing the status of the project along the project period. This draft final report will incorporate the overall progress of the BeGIN project, the tasks performed and the hurdles met as well as recommendations on how to sustain the momentum of the project by moving forward in to the second phase.

## 3. Overview

Since the beginning of the project the following tasks have been undertaken

### **3.1 Development Team**

As a means of communication and task division a project team development team was created. The team comprises of two or more participants from each of the government

institutions, UNIDO as well as the University of Dar es Salaam Computing Centre. A weekly meeting was setup to inform each other and discuss on:

- the information required
- on practical problems faced by the institutions in collecting or making data available,
- on the progress of the project
- division of tasks and responsibilities

Above and beyond this the weekly meetings provided the opportunity to give more insight to the project development team on the importance of the project so that they will in turn be able to inform their colleagues on the merits of such a governance.

### ***3.2 Setting up of a Server***

The Planning Commission was chosen to be the host of the project, since it has a proper computer room, a wireless link to the Internet and is the government institution under state house responsible of overseeing overall national plan. A server is therefore setup at the Planning Commission. Development tools have been installed and weekly schedule for the UDSM development team has been set and circulated.

### ***3.3 Creation of Web Site***

A website shell has been designed for the project as a whole and for each project developing Institutes. The website contains information on the project, its progress, information on the project team, minutes of the weekly team members meeting as well as background information for each institution (Mandate, Organizational Chart, activities, procedures, e-archive etc).

### ***3.4 Databases***

Database have been identified and incorporated in the project website. The main concept which is underlying the creation of the BeGIN project is to create a knowledge base where data can be made accessible facilitating the decision making process. A number of databases have been published on the project site with a proper level of security allowing authorized persons to access/read, edit, update and insert data respectively.

### ***3.5 Training***

Building the capacity of the project participant institutions' staff is of crucial importance in insuring the understanding and the sustainability of the project. Therefore to this end a number of training courses have been implemented for the staff of the institutions. The training have been received very well by all participants.

## 4. Status of the Project in Detail

In this section the status of the project will be examined in detail following the 11 points laid down in the project document in contracting the services of the University of Dar es Salaam Computing Centre

### 4.1. *Design the architecture of the BeGIN Intranet.*

The architecture of the BeGIN Intranet was designed in close cooperation with the UNIDO consultants. In the design, the BeGIN Intranet is physically integrated in the Public Internet but is protected by user name and password.

In order to allow a link to the Internet at a reasonable speed the Planning Commission was chosen as the place the physical devices such as the server will be kept. This is due to the operational LAN and 2 Mbit/s wireless link that Planning Commission has via the University of Dar es Salaam to the Internet.

The rest of the Project development institutions connect to the BeGIN Intranet using mainly dial up connection. The assumption at the outset of the project was that each of the participant institutions will acquire or already have at least a dial up connection. While sufficient for the present time the dial up link might present a bottleneck in the future. It was therefore recommended from the onset to encourage the institutions to look into the possibilities of using wireless connection.

In the Initial phase of the project, two temporary servers have been set up in order to get on with the project development. One server was set up at the University of Dar es Salaam and later another server was set up at the Planning Commission. The delay was due to late equipment deliver. At a later stage the server at the Planning Commission was upgraded according to the following specifications.

1. Compaq Proliant 800 6/500  
Compaq item number 108164
2. 448 MB memory to make a total of 512 MB  
Compaq item numbers 313616-B21, 313615-B21, 313614-B21
3. 3 x 9.1 GB Ultra2 hard disks  
Compaq item numbers 336369
4. 4/8 GB tape drive (DAT)  
Compaq item number 295353
5. Colour monitor  
Compaq item number 308006

The standard specs of the server include:

Intel Pentium® III 500-MHz processor (dual processor capability)  
Integrated 512-KB Level 2 ECC cache

100-MHz GTL+ Bus Design  
64-MB 100-MHz registered SDRAM DIMM memory standard,  
upgradeable to  
maximum 1GB  
Two PCI and four shared PCI/ISA slots (six total available slots)  
Compaq 10/100 TX UTP Controller (embedded) on the PCI local bus  
Integrated Dual-Channel Wide-Ultra SCSI-3 controller  
High Speed IDE CD-ROM Drive

#### ***4.2. To assist in checking the equipment delivery***

Even though it took sometime to receive all the ordered equipment, in time all the expected equipment and software has been delivered. All the equipment confirms with the original specifications.

The following software and equipment have been delivered and made operational.

- Server compaq Proliant 800/500
- Flatbed Scanner 1200dpi
- Sheet feeder for the scanner
- OCR software
- Microsoft Visual Studio 6.0
- Microsoft office 97
- Microsoft BackOffice
- The parts for the final upgrade for the server has been verified as specified by UDSM (mentioned in the previous section)

#### ***4.3. Install, configure and make operational the items purchased.***

The temporary server has been installed, configured and made operational. The upgrade was done immediately after the final components were delivered. It has been integrated into the existing Local Area Network of the Planning Commission. A web server, email, ftp and all the elements of an Intranet have been set up. All the required development tools Microsoft BackOffice, Microsoft Visual Studio, Microsoft FrontPage 2000 as well as Microsoft Office 97 has been installed and is running smoothly.

The scanner and the OCR software has also been installed and made operational.

#### ***4.4. To set up the application development team***

A project development team has been set up on the onset of the project. This team was created to be involved the various Government Institutions in the design and development of the Governance Intranet. The team comprises of two participants from each government Institution as well as from UNIDO and the University of Dar es Salaam.

Weekly meetings have been set up to discuss progress, to collect information and to involve all participants in the development process. The meetings had helped to keep the momentum of the project.

#### ***4.5. To provide on-the job training to the technical counterparts***

Various training programmes have been implemented in the course of the project. The objective was to create awareness in area of information and technology which are available and can be useful as well as to insure that the government bodies who will be taking over the responsibility of updating and maintaining the information and data have the technical capability to do so. The programme also introduced the objectives and benefits of the BeGIN project as part of integrated Project.

The participants of the training were divided into different groups depending on role to be played by those staffs during and/or after the implementation of the BeGIN Project.

- ◆ Development team
- ◆ Executives/top management
- ◆ Other staffs at the institutions

Since the project team members were responsible to create awareness in their respective institutions as well as assisting in process of project development such as publishing, the first training was prepared and given to them. The contents of the training were as follows.

#### Training of the Project Development Team

- ◆ Introduction to Computer and Windows 95/98
- ◆ Introduction to email/internet
- ◆ Overview of Intranet ( BeGIN Intranet as a case study)
- ◆ Using Search engine
- ◆ Access to online databases ( BeGIN Intranet as a case study)
- ◆ Publishing on Internet ( BeGIN Intranet as a case study)

In order for the project to succeed, it was necessary to create awareness at a higher level in these institutions. Decision-makers need to be convinced of the importance and the benefits of Governance through information and Network as well as the possibilities and the technology available. To this end an awareness seminar has been prepared and conducted by UDSM in cooperation with UNIDO to Executives of the BeGIN project participating Institutions.

The contents of the awareness seminar for Executives were as follows:-

- Overview of the UNIDO integrated project, Integrated Industrial Development Programme for capacity building to enhance Industrial competitiveness and sustainability in Tanzania
- Details of the BeGIN Project (objectives and benefits).
- Responsibility/Terms of Reference of participating Institutions
- Overview of Internet/email
- Overview of Intranet
- Demonstration of online Databases(BeGIN Intranet databases as a case study)
- Overview of e-commerce

The next level of training was designed to give the members of staff of the participating institutions basic computer knowledge, overview of software for site accessibility and overview of BeGIN Project objectives and benefits. This was intended to create awareness, interest and active involvement from the employees of the government institutions. The training was given in two different groups, as the number of participants was high.

The contents of the BeGIN Project Participating Institutions Staff were as follows:-

- ◆ Introduction/Overview of the BeGIN Project
- ◆ Introduction to Computer and Windows 95/98
- ◆ Introduction to email/internet

- ◆ Overview of Intranet ( BeGIN Intranet as a case study)
- ◆ Using Search engine
- ◆ Access to online databases ( BeGIN Intranet as a case study)

Since a project team member from Planning Commission will be taking over the task of administering the project server, he followed a course in Windows NT Server installation, Administration and configuration.

An on the job training has also been taking place on scanning, formatting and publishing of documents to the institutional development team especially planning commission, the server hosting institution.

#### ***4.6. To help identify specific databases of the BeGIN Intranet participating institutions and ministries.***

A lot of effort has been put in visiting the participating institutions to help in identifying databases or data to create the databases. There have been some difficulties in obtaining this data/database due to bureaucracy and the lack of existing electronic databases. Through training and frequent visits it has been tried to increase awareness within the participating Institutions.

The following databases have been identified

##### ***Business Registration Licensing Agency***

A simple database for Registered Business Companies and their activities have been identified.

##### ***National Bureau of statistics***

Volume index and producer price index databases has been identified. The volume index databases contains the quantitative statistics of products while Producer price index contains prices trends statistics mainly from manufacturing industries.

Also in exploration it was found that currently they are developing Tanzania socio-economic database. The dialog was established for the future integration of this database to the Intranet.

##### ***Tanzania Investment Centre***

The Investment opportunity database was identified to be possible databases to be developed. The objective being dissemination of investment opportunities to investors in and out of the country through the site. This could simplify the process, which currently is done during special occasion like visit of president to foreign countries etc using manuals/quarterly report. Another identified database is for certified companies and their general information including category, which could facilitate in information deliver.

Also in exploration it was found that UNIDO has a database (DIP) which serves for such information world-wide. This could be another possible integration though at the level of linking sites.



***National Environment Management Council***

The databases for NGO(Non Government Organisation) and Community based Organisation(CBO) have been identified.

***Ministry of Industries and commerce***

The database for raw material information based on attainable capacity has been identified.

**4.7. To develop and/or migrate specific databases of the BeGIN Intranet participating institutions and ministries.**

During the project period the following databases have been designed and incorporated into the system

***Business Registration Licensing Agency***

- Database for Registered business Companies

***National Bureau of statistics***

- Volume index and producer price index databases

***Tanzania Investment Centre***

- Investment opportunities database

***National Environment Management Council***

- NGO(Non Government Organisation) and Community based Organisation(CBO) database

***Ministry of Industries and commerce***

- Raw material information based on attainable capacity database.

**4.8. To prepare the required interfaces with databases in a dynamic manner.**

Dynamic Interfaces which are easy to use and navigate have been created for each of the above mentioned databases. In order to insure data security the interface has been created to allow only authorised users to update and change data in the different databases. Since it is the responsibility of each institution to maintain and update its own database, they have a decision on who has authorisation to access their data, update/change, delete, add new data etc. Most of the information in those databases is public though in some cases it might be limited to government bodies or just an institution concerned.

**4.9. To participate in developing the general and the individual homepages of the BeGIN members.**

The BeGIN project web site has been designed and is operational. A homepage has been developed for each participating institution. Various information for each institution

has been incorporated in the respective web sites. Organisational structure, staff list, activities, procedures, contact address and archive files have also been included in the framework. The appropriate information from each institution has been published. Acquiring the information necessary to complete the homepages has proved to be relatively difficult especially at the beginning of the project.

In the general homepage details of the project such as the Project development team pictures and their details and new events has been published. The weekly team members meeting minutes are published as soon as they get approved.

Other project documents published is as follows:

***Planning Commission***

- Vision and Mission
- Organizational Structure
- Function and Organizational Structure
- Tanzanian Development Vision 2025
- Speech by the Ministry of State
- Highlights of National Development Vision 2025

***Business Registration Licensing Agency***

- Mandate
- Organizational Structure
- Activities
- Staff List
- Company Registration Procedures
- Sensitization programme on the protection of rights of performer of audiovisual

***National Bureau of Statistics***

- NBS Brochure
- General Information
- Organizational Structure
- Heads of Department Staff Diagram

***National Environment Management Council***

- Mandate
- Organizational Structure
- Staff List
- Environmental Impact Assessment Registration Form
- 15 Editorials published in e Archive

***Tanzania Investment Centre***

- Mandate
- Senior staff list
- General information and procedures to obtain Certificate of Incentives
- List of business projects certified.
- Investor's Guide to Tanzania

*Ministry of Industry and Commerce*

- Vision and Mission of the Ministry
- Roles and Functions
- Organizational Structure

**4.10. To prepare documentation and user manuals.**

The user manual will be undertaken in the next phase of the project as it should be prepared on completion of the overall project.

**4.11. To provide on the job training and awareness training to the users.**

In order for the project to succeed, awareness must be created at a higher level. Decision makers need to be convinced of the importance and the benefits of a Governance Network as well as the possibilities and the technology available. To this end an awareness seminar has been prepared and conducted by UDSM in cooperation with UNIDO to Executives of the BeGIN project participating Institutions.

The contents of the Awareness Seminar for Executives were as follows:-

- Overview of the UNIDO project, Integrated Industrial Development Programme for capacity building to enhance Industrial competitiveness and sustainability in Tanzania
- Details of the BeGIN Project(objectives and benefits).
- Responsibility/Terms of Reference of participating Institutions
- Overview of Internet/email
- Overview of Intranet
- Demonstration of online Databases(BeGIN Intranet databases as a case study)
- Overview of e-commerce

The next level of training was designed to give the members of staff of the different institutions basic computer knowledge. This was intended to create awareness, interest and active involvement from the employees of the government institutions. The training was given in two different groups, as the number of participants was high.

The contents of the training for BeGIN Project Participating Institutions' staff were as follows:-

- ◆ Introduction to Computer and Windows 95/98
- ◆ Introduction to email/internet
- ◆ Overview of Intranet ( BeGIN Intranet as a case study)
- ◆ Using Search engine
- ◆ Access to online databases ( BeGIN Intranet as a case study)

Since a project team member from Planning Commission will be taking over the task of administering the project server, he followed an extensive course in Windows NT Server installation, Administration and configuration.

Beyond the formal training an on the job training has also been taking place on scanning, formatting and publishing of documents with the person who will be taking over this tasks.

## 5. Conclusion

The project has proceeded smoothly and is believed to have met the objectives set out for it. This initial phase or phase I of the BeGIN project has created awareness of the importance of availability, accessibility and sharing of information for decision making. It has started the process of bringing together different government bodies to work as a team to identify, make available and share relevant information.

Even though the process has started the main hurdle met by the development team is the provision of data and relevant documents to be incorporated in the project site. There were some difficulties in obtaining data/databases due to bureaucracy and lack of existing electronic databases.

Access to a computer and fast link to the internet by the project partner institutions determined the scope of their involvement. Those with a dial-up link and very limited access to computer were limited by it and could review and give less feedback than others.

The various training courses, which were given during the project period, were received very well by the participants. The seminar and training gave the opportunity to explain the principles and the idea behind the BeGIN project.

The decision to put the server at the Planning Commission has on the one hand created a feeling of ownership of the project but on the other hand it has presented a risk in it being not secure. At the moment all formatting, publishing and scanning is done on the server. This will in the long run present a problem.

On the whole, the project has created awareness and has started a process showing the possibility of information sharing, the ease with which it can be done and practically it has made it possible for information about each institute to be available to the public and databases to be available to whomever the individual institutions deemed to authorize.

## 6. Recommendations

The following are recommendations for the sustainability of the BeGIN project and how to proceed to the next phase.

- The server at Planning Commission should be put in a more secure place to guarantee the full time accessibility and data security.
- The next phase of BeGIN should get under way as soon as possible not to lose the momentum of the project.
- The participating institution should use the developed database in their daily institution operations. This will facilitate the update on time and avoid duplication of the work.
- The effort must be made by institutions to fill data in the created databases. This will allow people to find not only updated information but also valuable.
- Considering the objectives for BeGIN phase II, the databases in these institutions they should be operational with bulky information on them.