Status Report of Cluster Initiatives in Tanzania

Flower E. Msuya

Institute of Marine Sciences, P.O. Box 668, Zanzibar, Tanzania

Tel: +255 786 629374, +255 762 022356

Email: flowereze@yahoo.com

Report submitted to the Pan African Competitiveness Forum, Tanzania Chapter, March 2011
FOREWORD
Tanzania is endowed with plenty of natural resources such as land, rivers, lakes (3 biggest African lakes are located in Tanzania), forests, and minerals which if well utilised can be a reliable and potential source of economic growth. As one of the developing countries that need to make marked efforts to increase the economy of the people and the country at large, the Tanzania can utilise these endowments for economic growth. Usually a country’s economy can grow in two ways; industrial revolution or strengthening the informal sector. Being a developing country placed as one of the poorest countries in the world, industrial revolution could take long and probably difficult to implement in the near future. But, strengthening the informal sector is faster and implementable even with the current economic situation of the country. With plenty of natural endowments and a population of above 30 million which is growing at a rate of 2.7%, Tanzania can take the advantage of its natural resources and population (large labour force) to enhance its economy. We observe countries like China and India growing to world economic giants through the strengthening of their (small scale) informal sector. China has a population of 1.33 billion people and India 1.2 billion people and the two countries used their large populations to build their economies. It is through their informal sector, employing their large populations and natural resources that they were able to change their position in the world economic ranking. Equally endowed, with minerals such as gold, tanzanite, diamond, and uranium, Tanzania is able to develop into an economic giant if there is proper planning in the utilisation of the natural resources and its population.

On such “plans” is innovation of the informal sector through programmes such as the Innovation Systems and Innovative Clusters-Pan African Competitiveness Forum (ISCP-PACF) Programmes. This programme not only uses the natural resources but also Tanzania’s large population embedded in the informal sector. Apart from such utilisation, ISCP-PACF utilises researchers and research results and put them into practice, applying the results in collaboration with communities in Tanzania. ISCP-PACF started in 2003 during a workshop in Gothenburg, Sweden, when Heads of Engineering departments of three universities in Eastern Africa, i.e. University of Dar es Salaam in Tanzania, Makerere University in Uganda, and University of Eduardo Mondlane in Mozambique were invited to the workshop. For Tanzania, this workshop was followed by another one held in Bagamoyo in 2004, then in Dar es Salaam in 2005. After the workshop, the first training of cluster facilitators was conducted in Dar es Salaam immediately followed by the implementation of the first low hanging fruit activities by early 2006. In this training, 8 pilot cluster initiatives were formed. Following the success of the first batch of facilitators, the second batch was trained in 2006 when 11 new cluster initiatives were started. He third batch of training was done in 2008 and 19 new cluster initiatives were identified. These are yet to be started.

Thus, ISCP-PACF has enabled the start of 19 Cluster Initiatives that are operating in different locations and sectors of the economy, bringing in innovation and value addition in sectors such
as agribusiness (food processing, seaweed farming), metal works, mining, and tourism. Started in 2003 as a concept, ISCP-PACF has gone into a process of creating innovative minds and innovative products that are slowly coming up as a pronounced economic endeavour. With time and more efforts, ISCP-PACF is able to change Tanzania’s economy, employing its large population with economic achievements that can change the economic position of Tanzania in the world economic map. Through mainstreaming the ISCP-PACF programme into government policies and regulations, much more can be done.

Burton L.M. Mwamila,
Chairman, National Steering Committee, Pan African Competitiveness Forum, Tanzania Chapter
ABBREVIATIONS
ISCP = Innovation Systems and Clusters Programme
PACF = Pan African Competitiveness Forum
CoET = College of Engineering and Technology
UDSM = University of Dar es Salaam
CI = Cluster Initiative
ZaSCI = Zanzibar Seaweed Cluster Initiative
MECI = Morogoro Engineering Cluster Initiative
ERMC = Eastern Region Mushroom Cluster Initiative
AVSEC = Arusha Vegetable Seeds Cluster Initiative
IMS = Institute of Marine Sciences
COSTECH = (Tanzania) Commission for Science and Technology
SIDO = Small Industries Development Organisation
SCF = SMEs Competitiveness Facility
MACEMP = Marine and Coastal Environment Management Project
SUA = Sokoine University of Agriculture
TCCIA = Tanzania Chamber of Commerce, Industries and Agriculture
SACCOS = Savings and Credits Cooperative Society
VETA = Vocational Education Training Authority
BDG = Business Development Gateway
PADEP = Participatory Agricultural Development and Empowerment
TFDA = Tanzania Food and Drugs Authority
TBS = Tanzania Bureau of Standards
TABLE OF CONTENTS

1 INTRODUCTION ............................................................................................................. 1

2 THE CLUSTER INITIATIVES............................................................................................ 2

2.1 MOROGORO ENGINEERING ....................................................................................... 2

   Large Scale Firms .......................................................................................................... 3

   2.1.1 Intermech Engineering Ltd .................................................................................. 3

   2.1.2 Kalis Engineering ............................................................................................... 4

   2.1.3 BSK Engineering ............................................................................................... 4

   2.1.4 Developing Mechanised Agriculture Company (DEMACO) Ltd ...................... 5

   Small scale firms ............................................................................................................. 6

   2.1.5 Gama Metal Works ......................................................................................... 6

   2.1.6 Lekat Wood Works ......................................................................................... 7

   2.1.7 Sokola Workshop and General Supplies ......................................................... 7

   2.1.8 EB METTA Engineering Garage .................................................................... 9

   2.1.9 Salvatory Welding and Design ....................................................................... 9

   2.1.10 Shemhuza Workshop ................................................................................... 10

   2.1.11 Suppliers-Matocha Enterprises ................................................................. 10

   2.1.12 Oak Workshop and General Suppliers ..................................................... 11

   2.1.13 Vijana Workshop ........................................................................................ 11

   2.1.14 C + F Workshop ......................................................................................... 12

   2.1.15 Mbugi Workshop ....................................................................................... 12

   2.1.16 Dula Workshop ......................................................................................... 12

   2.1.17 CHAMSEMO .............................................................................................. 13

   2.1.18 Oak Shop ..................................................................................................... 14

   2.1.19 Kaka Workshop ........................................................................................ 14
2.1.20 Other road side workers and sellers ................................................................. 15

2.2 ZANZIBAR SEAWEED ............................................................................................ 16

2.2.1 Bweleo farmers and processors ................................................................. 19

2.2.2 Kidoti farmers and processors ........................................................................ 20

2.2.3 Paje farmers and processors ............................................................................ 21

2.2.4 Chwaka seaweed farmers .................................................................................. 22

2.2.5 Kisakasaka seaweed farmers ............................................................................ 23

2.3 EASTERN MUSHROOM ....................................................................................... 24

Kinondoni farms ........................................................................................................ 24

2.3.1 Domina’s farm .................................................................................................. 24

2.3.2 Sekela Mwakolo farm ...................................................................................... 25

2.3.3 Mama Mwajuma’s farm ................................................................................... 25

2.3.4 Kimara farms .................................................................................................... 26

2.4 BAGAMOYO CULTURAL HERITAGE TOURISM .................................................. 27

2.4.1 Institute of Arts and Culture, Bagamoyo (TaSUBa) ........................................ 27

2.4.2 Old Boma .......................................................................................................... 28

2.4.3 Bagamoyo District court ................................................................................... 29

2.4.4 Natural Resources offices ................................................................................ 29

2.4.5 Bagamoyo Old Market ..................................................................................... 29

2.4.6 Carving makers and sellers .............................................................................. 30

2.4.7 Ujamaa group .................................................................................................... 30

2.4.8 Old post office .................................................................................................. 31

2.4.9 Fish market ....................................................................................................... 31

2.4.10 The Beach ........................................................................................................ 32

2.4.11 Nasser Virji building ...................................................................................... 33
2.4.12 Mwambao Primary School .......................................................... 34
2.4.13 Muhimbili College ........................................................................ 35
2.4.14 Bagamoyo Catholic Museum ......................................................... 35
2.4.15 Ancient Ost Afrika Ltd .................................................................. 36
2.4.16 Top Life Bar .................................................................................. 37

2.5 MOROGORO FRUIT AND VEGETABLE PROCESSING ......................... 38
2.5.1 Mushroom Development Enterprises (MUDE) ................................... 38
2.5.2 Mkwajuni Youth Economic Group .................................................... 40
2.5.3 Rahaleo Group Food Products .......................................................... 41
2.5.4 Macky Foods .................................................................................. 42
2.5.5 Sadani Group Food Products ............................................................ 42
2.5.6 Sech Foods ..................................................................................... 42
2.5.7 Morogoro Breweries ....................................................................... 42
2.5.8 Nyampamba Food Products .............................................................. 44
2.5.9 Ben’s winery .................................................................................... 45
2.5.10 Mbamba Foods Products ................................................................. 47
2.5.11 Eager Food Products ..................................................................... 48

2.6 ARUSHA VEGETABLE SEED .............................................................. 49
2.6.1 Tanzania Seed Traders Association (TASTA) ..................................... 49
2.6.2 Centre for Agricultural Mechanisation and Rural Technology (CARMATECH) ................................................................. 49
2.6.3 Tanzania Engineering and Manufacturing Design Organisation (TEMDO) ................................................................. 50
2.6.4 Red Gold ......................................................................................... 52
2.6.5 HORTI Tengeru .............................................................................. 54
2.6.6 Alfa Seed ....................................................................................... 55
2.6.7 Arusha Vegetable Research Development Centre (AVRDC) .................. 56
2.7 NEUTRACEUTICALS .................................................................................................................. 58

2.7.1 Stayfit Foods ......................................................................................................................... 58
2.7.2 Fort Processing and Supplies ............................................................................................... 59

2.8 KOROGWE SMALL SCALE SISAL FARMING .................................................................... 60

Sisal farmers .................................................................................................................................. 60
2.8.1 Sisal nursery at Makuyuni .................................................................................................. 60
2.8.2 Mustafa Kilua’s farm ............................................................................................................. 61
2.8.3 Small scale farmers .............................................................................................................. 62

Sisal processors .............................................................................................................................. 62
2.8.4 Maganga factory ................................................................................................................... 62
2.8.5 Katani Ltd ............................................................................................................................ 64
2.8.6 Tanzania Sisal Board ........................................................................................................... 65
2.8.7 Sisal users ............................................................................................................................. 65

2.9 CASSAVA PROCESSING- KIBAHA ................................................................................. 66

Farmers .......................................................................................................................................... 66
2.9.1 Boko farmers and processors ............................................................................................. 66
2.9.2 Shenyagwa farm in Visiga ................................................................................................... 68
2.9.3 Msongola farmers and processors ....................................................................................... 70
2.9.4 Zogowale farming and processing group ............................................................................ 71

Sellers ............................................................................................................................................ 72
2.9.5 Mazupe Products ................................................................................................................. 72

2.10 MOROGORO RICE PROCESSING ..................................................................................... 73

Rice farmers .................................................................................................................................... 73
2.10.1 Mvomero farmers ............................................................................................................... 73

Rice processors and sellers ........................................................................................................... 75
2.10.2 Bega kwa Bega rice processors .................................................................................. 75
2.11 TANGA CULTURAL HERITAGE TOURISM ................................................................ 77
2.11.1 Tanga Youths Development Association-TAYODEA .................................................. 77
2.11.2 Tanga Women Artists Network (TWAN) .................................................................. 79
   2.11.2.1 Aisha Kiosk ........................................................................................................... 80
   2.11.2.2 Prime Rose Enterprises ......................................................................................... 80
   2.11.2.3 Mbuyu Batik .......................................................................................................... 81
   2.11.2.4 Rahagani Women Group ....................................................................................... 81
   2.11.2.5 Tujitambue Group .................................................................................................. 81
   2.11.2.6 Ukili Art Designers .................................................................................................. 82
   2.11.2.7 Maroda Enterprises ................................................................................................ 82
   2.11.2.7 Tongwe Art Group .................................................................................................. 82
   2.11.2.9 Vivid Sign Writers .................................................................................................. 82
   2.11.2.10 Ndianaao Design .................................................................................................. 83
   2.11.2.11 Nsare Aloe Vera Farm Ltd. .................................................................................... 83
   2.11.2.12 Kokoliko Fashions ............................................................................................... 83
   2.11.2.13 Endelevu Art and Culture Group ........................................................................... 84
2.11.3 Kimweri and Family ..................................................................................................... 85
2.11.4 Carving producers and sellers ..................................................................................... 85
2.11.5 Coconut Arts Craft Group ............................................................................................ 86
2.11.6 Dolphin Hotel .............................................................................................................. 88
2.11.7 Patwas Restaurant ....................................................................................................... 88
2.11.8 Other active hotels ...................................................................................................... 88
2.11.9 Urithi Tanga Museum building .................................................................................... 89
2.11.10 Mwananchi Newspaper ............................................................................................. 89
2.12 KILINDI SMALL SCALE GEMSTONE ......................................................................... 91
2.12.1 Ng’ombeni miners ...................................................................................................... 91
2.13 DODOMA OIL SEED .......................................................... 95
  2.13.1 Sunflower farmers ......................................................... 97

Oil seed processors ............................................................... 98

  2.13.4 Nzige Oil Mills ......................................................... 98

Sellers of oil ................................................................. 100

  2.13.5 Mr. Abdalla Liula shop .................................................. 100

2.14 EDUCATIONAL SERVICES-DAR ES SALAAM ......................... 101
  2.14.1 Garetrace Education Centre ......................................... 101
  2.14.2 Edde Yane day care centre ........................................... 102
  2.14.3 Mwenge Express Furniture ........................................... 103

2.15 TEXTILE HANDCRAFT -DAR ES SALAAM................................. 105
  2.15.1 Marvellous Flotea Company Ltd ...................................... 105

2.16 BUILDING CONSTRUCTION ............................................... 107

2.17 BIOFUELS - DAR ES SALAAM AND MOROGORO ..................... 109

2.18 ICT DAR ES SALAAM ..................................................... 110

2.19 DAR ES SALAAM WOOD CARVING .................................... 110

3 CONCLUDING REMARKS ..................................................... 110

4 REFERENCES ........................................................................... 110

5 ACKNOWLEDGEMENTS .......................................................... 111

6 ANNEX ..................................................................................... 117

  6.1 Annex i The cluster visit schedule ....................................... 117
1 INTRODUCTION

Cluster Initiatives (CIs) in Tanzania were started under the Innovation Systems and Clusters Programme (ISCP-Tz) now called the Pan African Competitiveness Forum (PACF) Tanzania Chapter. The idea originated from 10 people from East Africa attending the TCI conference on competitiveness held in Gothenburg, Sweden in 2003, an idea that was followed up in a workshop in Bagamoyo, Tanzania in 2004. The first CI plans were prepared and submitted by Cluster Facilitators (CF) from 8 pilot CIs during a Cluster Facilitator Training Workshop held in Dar es Salaam, Tanzania in 2005. Thus, the first 8 pilot CIs started their activities in 2006. Following the start of the pilot CIs, a second batch of CF was trained in 2006 when 11 new CIs were started. Details of the start and implementation of the ISCP-Tz are found in Mwamila et al. (2004) and Mwamila and Temu (2005). A third batch of CFs was trained in 2008 in Dar es Salaam, Tanzania, and 13 new CIs were identified. Unfortunately these CIs could not take off because of some logistical problems. This report covers the status of the 19 CIs, i.e. the pilot and second batch CIs, as per November 2010. The ISCP-Tz was coordinated by the College of Engineering and Technology (CoET) of the University of Dar es Salaam (UDSM) and funded by Sida. Currently the project (PACF) is coordinated by Tanzania Commission for Science and Technology (COSTECH).

The report is a collection of activities of cluster initiatives on ground showing the actual situation of each of the 19 CIs. As mentioned above, there were the first 8 pilot CIs which most of them are performing well and then there were the 11 second batch CIs some of which are also performing well. These differences stand out in the report as the CIs are visited and the actual situation assessed. CIs in the report are arranged by starting with the first 8 and then the second batch CIs. The report starts with which are the CIs, which are their firms/groups, who they collaborate with, and the activities so far conducted and planned. The report also shows the challenges and difficulties faced by the CIs as found and explained by CIs leaders and members during the visit. Conclusions are given at the end of the report.

Data in this report were collected by physical visits to the CI locations and assessing the current situation. The visits were made to Dar es Salaam based CIs, Kibaha, Morogoro, Tanga, Dodoma, Bagamoyo and Arusha during 24th November 2010 – 28th January 2011. The dates of the areas of the visits are shown in Annex i.
2 THE CLUSTER INITIATIVES

2.1 MOROGORO ENGINEERING

The Morogoro Engineering Cluster Initiative (MECI) is located in Morogoro Region. It is a large CI with a number of large scale and small scale firms. MECI started with 9 Engineering Workshops, 20 tinsmiths groups, and 189 employees in 2005 and now it has 60 registered companies, 38 woodworking enterprises, and 450 employees. In addition to achievements made by its firms, MECI received a certificate of recognition for successfully training and supporting a CI member who had contracts to supply fuel efficient stoves (see section 2.1.2.3) to GTZ (Fig. 1). Its main firms are:

- Large companies
- Small companies
- Road side companies
- Sellers
- User of machines
- Suppliers of “raw materials”

Fig. 1 The certificate of recognition offered by GTZ proudly held by the CI Facilitator, Eng. Chisawillo
Large Scale Firms

Large firms under MECI are Intermech Engineering Ltd, Kalis Engineering, BSK Engineering, Demaco Co. Ltd and so on. While most of the firms are specialised in the type of machines that they make, some make mixed types of machines.

2.1.1 Intermech Engineering Ltd

Intermech is specialised in Post harvest processing machines including seed cleaners, oil and starch extractors, cassava processing machines, etc. Intermech operates by fulfilling the demands of the farmers and processors of agricultural products. One such demand from farmers was for making a machine that is used for planting seeds (Fig. 2). There were also orders from other countries such as Malawi who wanted a cassava processing machine (e.g. Fig. 3). The firm also received a request from Tanzania Fisheries Research Institute to make a fish meal producing machine which was just being tested during the time of the visit.

Fig. 2 Seed planter and weeding machine made by Intermech Engineering Ltd in Morogoro

Fig. 3 Heavy duty Cassava Press made by Intermech Engineering in Morogoro
Fig. 4 Premises and some products of Intermech Engineering in Morogoro

2.1.2 Kalis Engineering
This firm makes pumps for use in water wells. It also constructs different kinds of water wells including boreholes. At the time of the visit, all the workers were on leave and the factory was closed (Fig. 5).

Fig. 5 Premises and some products of Kalis Engineering in Morogoro

2.1.3 BSK Engineering
BSK Engineering specialises in making machines for drying crops such as pyrethrum, tea, tobacco and so on. It also produces interlock machines for making interlock bricks used for veranda (tiles, brick floors etc, Fig. 6). Smoke chimneys, pipes, and kenches for warehouses are also produced by the firm. BSK recently got an order from the Tanzania Pyrethrum Company to make a pyrethrum drying machine (Fig. 6).
2.1.4 Developing Mechanised Agriculture Company (DEMACO) Ltd

DEMACO specialises in assembling tractors, trailers for carrying goods, and tillers for ploughing land, weeding etc (Fig. 7). The firm assembles tractors and supply to farmers and also makes plates for cars. The firm is composed of three companies: DEMACO Ltd, DEMACO Engineering Enterprises, and Tractors Ltd., all housed in the same premises. When the company was visited, there were seven workers working for Demaco Engineering and 3-4 workers employed by Demaco Ltd.

The three companies help the farmers to get loans from the banks such as Tanzania Investment Bank, Cooperative and Rural Develop Bank through The Agricultural Inputs Trust Fund (Mfuko wa Pembejeo) which carters for the agriculture sector.
Small scale firms

There are many small-scale firms under MECI varying from those who have some temporary premises that are not in good working conditions to those who work at the road side premises that are not formally recognised. The firms make smaller machines than the large-scale firms and their products are a variety of mixed items.

2.1.5 Gama Metal Works

Gama Metal Works makes items such as door and window grills using tools that are produced by other members of MECI and especially Intermech Engineering whose premises are close to those of Gama Wood Works. However, the firm shares a premise with a tannery business group (Fig. 8) and the tannery group has been pushing the firm away when they get more work and thus need more space. At the time of the visit, the firm was working close to the exit of the premise and the owner stated that they will soon be pushed out.
2.1.6 Lekat Wood Works

Lekat Wood Works is another firm that uses tools made by other members of MECI. The firm makes different items such as doors, windows, as well as metal based products including door grills (Fig. 9).

![Fig. 9 Premises and some products of Lekat Wood Works](image)

2.1.7 Sokola Workshop and General Supplies

Sokola firm also uses tools made by fellow MECI members. They specialise in making ceramic for stoves (Fig. 10). Previously the firm was making ceramic stoves but after joining the CI the firm members realised that it would pay more to make the ceramic and sell to other CI members who make the ceramic stoves. This is an example of a successful specific specialisation when a firm joins a cluster initiative. Apart from the ceramic itself, the firm also makes rocket stoves, Kuute stoves and Jiko bora (Fig. 10), all aiming at letting the end users use less charcoal for the sake of environmental protection. It was mentioned that the Small Industries Development Organisation (SIDO) had promised to give the firm (and other firms) premises but they have not heard from SIDO yet.

The firm has a small premise where the members are working but they have purchased a land at Kihonda Minazi Mirefu area where they plan to build a bigger premise (Fig. 11). The land was purchased six months ago and in this new premise the firm members plan to make ceramic pottery apart from what they are producing now. The firm members also plan to construct a fishpond at a later stage by using part of its land where there is a depression where a river was in the past. Sokola Firm is proud to be a member of MECI where the owner stated that he was able to purchase ceramic machines worth 2 million Tsh. (~1,500 USD) and he has been receiving orders from abroad. He has currently made a contract with The Southern African Development Community (SADDC) through the Programme in Basic Energy and Conservation (ProBec). He stated that this was not possible before he joined MECI. The owner, Mr. Sokola, also received a certificate of recognition from GTZ (Fig. 11) for surpassing a contract to supply 10,000 fuel efficient stoves by supplying 38,000 stoves.
Fig. 10 Premises and some products of Sokola Workshop and Supplies

Fig. 11 A land purchased by Sokola Workshop and Supplies for construction of a new premise at Kihonda Minazi Mirefu and a certificate of recognition for good performance held by the firm owner, Mr. Sokola
2.1.8 EB METTA Engineering Garage

EB Metta is a firm that also uses tools made by MECI members. In this garage items like crank shafts for cars, gear and others are made (Fig.12). The firm also offers garage services for large and small vehicles (Fig. 13).

![Fig. 12 Premises and some products of EB METTA Engineering and Garage](image1)

2.1.9 Salvatory Welding and Design

This firm is one of the Road-Side firms under MECI. Their premises are purely on road side with no proper shelter and premises. Salvatory Welding and Design (Fig. 14) located at Modecco in Mazimbu makes items such as metal gates, metal table and chairs for schools, garden games (*mabembe*) for schools, windows, doors, wedding chairs, kenches, and balconies for houses. The firm also offers services for re-charging car batteries.

![Fig. 14 Premises of Salvatory Welding and Design](image2)
2.1.10 Shemshuza Workshop
Shemshuza workshop is housed at a balcony of a building (Fig. 15) which is a better premise than the road side. The firm makes items such as door and window grills, gates, chairs, and spare parts for cars. The firm consists of four groups of three to four people whose specialisations are as follows:
Group 1: spare parts for cars
Group 2: spare parts for cars
Group 3: grills, machines for producing bricks
Group 4: chairs, gates etc.

All these groups use personal initial and running capital for their work.

Fig. 15 Premises products made by Shemshuza Workshop

2.1.11 Suppliers-Matocha Enterprises
Matocha enterprises is a small shop that sells tools to Shemshuza workshop and other customers. The firm also makes tractor pins (Fig. 16)

Fig. 16 Premises of Matocha Enterprises. Note the tractor pins in the photo on the right
2.1.12 Oak Workshop and General Suppliers
The firm which conducts its activities at a road side premise makes mainly stoves, metal suitcases (trunks) commonly called “tranka” for students who study in boarding schools, and chicken feeders (Fig. 17).

Fig. 17 Premises products made by Oak Workshop and General Supplies

2.1.13 Vijana Workshop
This firm “Vijana” which translates as “Youths” (also a road side firm) makes stoves but also buys and sells stoves from other makers. Next to the name Vijana on the poster is a statement “Ukitaka Furaha Ondo Chuki” which translates as “If you want happiness, you should get rid of hatred” (Fig. 18) probably enticing youths and other people to conduct happy businesses.

Fig. 18 Premises products made by Vijana Workshop
2.1.14 C + F Workshop
The firm whose actual name is Chawia + Fadhili is another road side firm consisting of six members. It makes and sells stoves as well as trankas for boarding school children (Fig. 19).

Fig. 19 Premises of and products made by C + F Workshop

2.1.15 Mbugi Workshop
Mbugi Workshop is another firm that works at a road side premise. It shares its premise with C + F Workshop. Two of its members were trained at the Vocational Education Training Authority (VETA) under the MECI. 90% of its products are metal items such as stoves, pots, trankas, car shows e.g. front show, kitchen machines for making cakes and bread, grills for doors and windows and so on (Fig. 20). Their main market is the road side market.

Fig. 20 Premises of and products made by Mbugi Workshop

2.1.16 Dula Workshop
The firm has 5 members. It started in 1994 by Dula who was then a student and did volunteer work before starting his own workshop. The firm specialises in making water pumps but also makes grills for doors, windows, and so on (Fig. 21). The firm got aid from USA and other organisations to erect a poster at their road side premise (Fig. 21). Mr. Abdalla (Dula) Shaaban
Chunga mentioned that the firm’s main challenge is low capital which is difficult to get because bank loans need an immovable asset which the firm does not have. He requested that if there are any chances of getting money to increase their capital they will appreciate to be informed.

![Fig. 21 Premises of and products made by Dula Workshop](image)

2.1.17 CHAMSEMO

This is an abbreviation of the words Chama cha Mafundi Mchundo na Seremala Morogoro (Fig. 22), translated as the association of plumbers and carpenters, with 25 members. The Secretary of the firm Mr. Salehe Balazi explained that before joining MECI they were using tools of poor quality but now they get better machines from the cluster initiative such as hammers, clamps, vices, press machines, and machines for making wood tablets (*mbao*). The firm members explained that their main challenges are premise, training in artisanship & business and low capital.

![Fig. 22 Premises of and products made by CHAMSEMO](image)
2.1.18 Oak Shop
This is a road side shop that sells products made by MECI members including ceramics, stoves, and chicken feeders (Fig. 23).

![Fig. 23 Premises of and products sold Oak Shop](image)

2.1.19 Kaka Workshop
The firm has two members. One member Mr. Salum Idd Salum is a graduate of VETA. The main items produced by the firm using steel instead of iron are *trankas*, chicken feeders & drinkers, watering cans, measuring cans, and plates for weighing machines (Fig. 24). Their items are stamped with the government stamp to certify their high quality steel products. The firm’s main challenges are 1. Raw materials such as iron sheets, lead, and livity (*ribiti*) which they buy from Dar es Salaam; 2. The government stamp is expensive relative to their products for example one stamp is 500 or 700 Tsh. while one item is sold at 1,500 Tsh.; 3. Market—currently they sell at their premise; 4. Customers always ask for lower prices and the firm ends up selling at a lower profit.

![Fig. 24 Premises of and products made by Kaka Workshop](image)
2.1.20 Other road side workers and sellers

There are a number of other road side workers and sellers who are members of MECI. Some of them are shown in Fig. 25.

Fig. 25 Other road side workers and sellers under the Morogoro Engineering Cluster Initiative
2.2 ZANZIBAR SEAWEED

The Zanzibar Seaweed Cluster Initiative (ZaSCI) is one of the first 8 pilot CIs and is located in Zanzibar. It started its activities in 2006 with one firm of 20 members located in one village in Zanzibar and now it works with 15 firms located in 11 villages in Zanzibar and one on the mainland with about 3,000 members. Members of the CI include seaweed farmers, processors who make value-added products, buyers & exporters of seaweed, research institutions, and government departments responsible for the seaweed industry. The research institutions working with the CI are Institute of Marine Sciences (IMS) of the University of Dar es Salaam (UDSM) and the Kizimani Agricultural Research Institute both based in Zanzibar. The government departments working with the CI are Departments of Fisheries, Agriculture, and Trade while the Zanzibar Chamber of Commerce and Zanzibar Investment Promotion Authority are part of the private sector. The main activities of the CI are to produce high quality seaweed and seaweed value-added products. Some of the products of the CI are wet seaweed and dry seaweed (Fig. 26) which are common to all groups, seaweed powder (Fig. 26), seaweed soaps, seaweed body creams, seaweed oils, and seaweed food products.

Marked achievements of the CI are to produce seaweed value-added products produced by the farmers for the time in Tanzanian history. The CI has also implemented an innovated method of farming the higher priced seaweed which otherwise the farmers were failing to produce by using a method that has been used for many years but which could no longer be used to produced the higher priced seaweed.

The CI also has common resources which are two shops in which members sell seaweed farming materials & value-added products, a building used for meetings, displays etc, and a Seaweed Centre which caters for various activities. One shop is located in Bweleo, South West Zanzibar (Fig. 27a). It was acquired with funding from the Participatory Agricultural Development and Empowerment (PADEP). Another shop (Fig. 27a) is located in Kidoti, North West Zanzibar. This shop was acquired from the efforts of the firm to obtain the premise and the opening of the shop was funded by ISCP. The third common resource, the building for meetings in located in Bweleo. Funding for the construction of the building was obtained from the Marine and Coastal Environment Management Project (MACEMP). Currently the building is used for meetings, gatherings, and for displaying seaweed value-added products when there are visitors. The building which is yet to be completed is earmarked for use in drying seaweed indoors during rainy seasons, storage of seaweed, an office, and toilets. The Seaweed Centre (Fig. 27b) located in Paje, East Coast of Zanzibar is yet to be completed. It is a result of collaboration with Chalmers School of Entrepreneurship of Sweden which is funding the activity with help from different sources in Sweden and Denmark. It has facilities for drying seaweed, soap factory, kitchen for cooking seaweed food, a shop for selling seaweed value-added products, and a roof top meeting and dining facility. The CI plans to have Seaweed Tourism at the Centre where visitors will be taken through the process of farming seaweed (the Centre is located about 200m from the sea), through drying, to processing of seaweed and marketing of seaweed products.

Collaborative trainings in seaweed innovative farming and value addition have been done with the Ministry of Tourism, Trade and Investment (WUBU) in Zanzibar when the seaweed cluster facilitator and members were consulted to train government officials as well as seaweed farmers in other villages in Zanzibar and Pemba. The trainings were funded by UNIDO through WUBU.
The trainings have resulted in the start of innovative farming in five villages in Pemba where CI is collaborating with one seaweed exporting company-Birr Sea Weed Co. Ltd. Likewise, villagers in villages such as Jambiani, Matemwe etc have started to produce seaweed value added products and shown interest in joining the CI.

Inter-trainings have also been done when one group or firm trains another. Examples are e.g. Kidoti group members training other CI members from Bweleo and Chwaka on innovative farming. Likewise, Bweleo group members have trained Chwaka members on production of clean seaweed through training on construction of drying racks while the Paje group learnt on production of value added products from the Kidoti group. On collaboration with the mainland, seaweed farmers from Pemba and Songosongo were trained on how to make seaweed value added products by the Kidoti group members. Seaweed Cluster also receives students from Sweden and other parts of the world who come to learn about seaweed farming and value addition.

Other achievements are that some members of the CI participated in Business Development Gateway (BDG) competition and 12 of them (2 in Zanzibar, 9 in Pemba, and 1 in Bagamoyo) got grants at different times and different amounts ranging from 1,000,000 to 5,000,000 Tsh.

Fig. 26 A seaweed farm, dry seaweed, and seaweed powder
Fig. 27a Common facilities of Seaweed Cluster Initiative in Zanzibar: Kidoti shop and Bweleo shops

Fig. 27b Common facilities of Seaweed Cluster Initiative in Zanzibar, Kidoti shop, Bweleo shop, and Paje Seaweed Centre
Challenges faced by the CI according to members are

- Lack of/not enough markets for dry seaweed and value-added products. The existing markers are not enough for the already produced products and other products which will be produced in the future.

- Problems with using the deep-water seaweed farming method. Most of the areas where CI members want to farm seaweed are exposed and the seaweed breaks because of the strong winds.

- Lack of boats to reach the deep water sites. The deep water sites are between 1.3 and 3m deep and farmers have to use boats to reach the sites. There are only few boats for the purpose.

- Lack of knowledge on how to increase the shelf life of food based value added products. Foods that are produced by the CI are a recent product and the members need to learn how to increase the shelf life of these products.

- Low capital of members/firms e.g. participation in exhibitions. The CI has reached a stage where members would like to participate in different exhibitions and gatherings or organise shows to display their products. However, they lack funds to conduct such activities.

- Increasing demand of membership. Because of the successful seaweed CI, people from other areas are asking to be members of the CI. Because of the fact that the CI already works with almost all areas in Zanzibar, it is difficult to stretch to areas far away from Zanzibar such as northern or southern Tanzania.

2.2.1 Bweleo farmers and processors

The firm is located in south west Zanzibar. Apart from the large group (Subira ufunguo wa peponi) of farmers who are about 250, the firm has three sub-firms; one (Deep water farmers) is involved in farming seaweed in deep waters and two others (Bado tupo Bweleo and Jitegemee group) farm seaweed in shallow waters and produce value-added products. Before joining the CI the firm members were farming seaweed using the traditional shallow water (off-bottom) method since 1990. They were then farming the high priced (Cottonii) seaweed. With time, the high priced seaweed could no longer grow and thus the members resorted to the low priced Spinsum. After joining the CI, firm members were trained and implemented the new method and started farming the higher priced seaweed. Unfortunately the sea is rough in their area and they are still relying on the CI to help in solving the problem through research. Currently, the use of the method is seasonal and quite limited.

In addition to farming seaweed, the firm members were trained on production of seaweed value-added products. They are producing seaweed soap mixed with lime (citrus) and sandal wood. They also produce body Vaseline and massage oil made with coconut oil (Fig. 28). One of the common resources of the CI, a shop, is located in Bweleo as was explained above. In addition to the shop, the firm owns the building acquired with funding from MACEMP which is used for
meetings and display of products when there are visitors as was stated above. According to the firm members, MACEMP does not seem to be able to complete the construction and the members are requesting for help to complete the construction of the building so that they can use it for the other earmarked activities as well.

![Fig. 28 Premises and products of Bweleo groups in Zanzibar](image)

### 2.2.2 Kidoti farmers and processors

In Kidoti the CI firms combine a large group of 550 seaweed farmers. Within these farmers there are two sub-firms (*Tusife Moyo Women Group* and *Tusonge mbele*) both involved in farming seaweed and adding value. Members of these sub-firms tried to farm seaweed in the deep waters and succeeded for some time but then the strong winds have affected the farming. Just like Bweleo the members rely on the CI to assist in combating this problem. Seaweed value added products made by the firms are dry seaweed (both groups), seaweed powder, seaweed soap-seaweed only, seaweed with cinnamon, seaweed with lemon grass, & seaweed body cream-Vaseline (*Tusife Moyo* group), and seaweed soap with neem tree extract, turmeric, and moringa tree extract (*Tusonge mbele* group, Fig. 29).

The Tusife Moyo group owns seaweed soap production machines that were acquired through funding from SMEs Competitiveness Facility (SCF) and made by CoET-UDSM in 2008. Other funding which included training on soap production came from ISCP, COSTECH, and IMS. The
machines are housed in a premise acquired through the efforts of the women but which is small and does not have electricity. Some of the machines are run with Diesel engines whereas others are manual. However, all the machines are made with provisions for using electricity when it is available. The firm members are requesting for help in acquiring electricity. Wiring is already in place and it was done by funding from ISCP. In this premise, there is the common facility, the shop, as was explained above.

Fig. 29 Premises and seaweed soaps made by Kidoti groups in Zanzibar

2.2.3 Paje farmers and processors

The Paje firm has about 300 farmers who farm seaweed in the shallow intertidal areas by using the off-bottom method. Within the larger group there is a group (Furahia Wanawake Group) whose 35 members are women and who process seaweed to produce value-added products. Products produced by the group are seaweed soaps (seaweed only, seaweed with lime, seaweed with clove, and seaweed with eucalyptus). Soaps are packaged in traditional packaging materials made of banana and coconut husks (see Fig. 30). Having the Seaweed Centre as a common resource in their village, it is easier for the group to produce and market their products. However, the production of seaweed value-added products started before the construction of the Centre. The group works closely with the Chalmers School of Entrepreneurship of Sweden.
2.2.4 Chwaka seaweed farmers

Chwaka firm is located on the east coast of Zanzibar. There are 482 seaweed farmers who farm the seaweed by using the shallow water off-bottom method. Members of this firm tried to farm seaweed in deeper waters after joining the CI but they are experiencing interference from fishermen and also there is fresh water intrusion in some selected areas. During some of their meetings (see e.g. Fig. 31) members have discussed on how to deal with these problems. One tactic that they have implemented is to talk to the village leadership which has promised to intervene on the problem of fishermen. The problem of fresh water intrusion is tackled by looking for other suitable areas that are free from freshwater intrusion. Members of this firm are also looking for better farming areas that can be free from fishermen and other passers-by. They also face a problem of strong winds when they try to move the farms to areas far from interference and are asking for help in researching on possible ways of containing the seaweed in some kind of cages to protect it from breakage caused by strong winds.

Apart from farming and selling seaweed, some firm members are preparing to export seaweed themselves rather than relying on the current middlemen exporters. Having acquired a market abroad, they applied for an export licence since 2009 but they have not been successful. They are now trying to reapply with the hope that the new leadership at the ministry (following the 2010 elections) will help them get the licence. The members made an agreement with a business man and were able to acquire 40million Tsh. for the purpose.
2.2.5 Kisakasaka seaweed farmers

Kisakasaka firm is located on the south west coast of Zanzibar. It has 60 members who farm seaweed in the shallow areas using the off-bottom method. The firm joined the CI in 2006 and members were trained on farming seaweed in deeper waters. After the training seaweed was planted in the deep water and was thriving very well. Unfortunately the area where seaweed is farmed is very far from the village and members did not have boats to go to the deep waters. Some members stopped the farming and the firm is still looking for ways of making the travelling easier. Members have been holding meetings to discuss this issue (Fig. 32) but have not reached a conclusion. At the time of the visit the members explained that they were happy when they saw the seaweed growing at a higher rate than in the shallow waters but it is difficult to carry the wet seaweed from such far areas and also to walk to the farming site. They requested for help in carrying the seaweed e.g. by acquiring ox carts and help in reaching the deep water areas by boats.

---

Fig. 31 A training session at Chwaka in Zanzibar. Source: Cluster data files.

Fig. 32 A training session in innovative seaweed farming at Kisakasaka in Zanzibar. Source: Cluster data files.
2.3 EASTERN MUSHROOM

The Eastern Region Mushroom Cluster Initiative (ERMCI) links three Regions of Dar es Salaam, Pwani and Morogoro. It undertook 3 training courses to different cluster firms and members. The CI has managed to overcome the challenge of using poor quality seed by providing good seed to farmers who were using poor quality seeds, getting low returns. This has been achieved through the acquisition of a facility for producing quality seed (Fig. 33). The CI was provided with a premise from SIDO but now it has been taken away. The seed production facility which was housed in the premise is now housed at the CI Facilitator’s home.

The CI has farms in Kinondoni, Kimara, Mkuranga, and so on. During the visit, three firms in Kinondoni makaburini in Dar es Salaam Region were visited.

![Fig. 33 Mushroom seed production facility for the Eastern Mushroom Cluster Initiative](image)

Kinondoni farms

There are three farms in Kinondoni where a lady by the name Domina Fredrick Ezra is helping women who are widows to farm mushrooms. She mobilised the women to work together so that they can get cash and also food for themselves and their families.

2.3.1 Domina’s farm

In the first farm the lady, Domina Fredrick Ezra, who is also the land lady of the premise has offered a space outside her house to the widows for the purpose (Fig. 34). The farm is operated by a young man who is the manager, and who lives in the premise. The farm produces 3kg of fresh mushrooms per day. He sometimes buys mushrooms from other sources at 4,000 and sells at 8,000 Tsh. per kilogram. Mushrooms are sold at the premises and in supermarkets.

![Fig. 34 The first farm at Kinondoni Makaburini in Dar es Salaam.](image)
2.3.2 Sekela Mwakolo farm
The second farm is owned by Sekela Mwakolo (Fig. 35). The farm produces 3 – 4 kg of fresh mushrooms per day but can reach 8 kg per day which is the aim of the farmer.

Fig. 35 Sekela Mwakolo’s farm at Kinondoni Makaburini in Dar es Salaam.

2.3.3 Mama Mwajuma’s farm
The third farm belongs to a lady who is helped by Ms Domina Ezra Fredrick. She works with a friend by the name Hamisa Abeid also known as Mama Mwajuma (Fig. 36). Domina told us during the visit that she is a community officer, a church leader and she also worked as a Councillor in the past. Inspired by the former First Lady of the first President of Tanzania, mama Maria Nyerere, she gathered the widows from nearby areas and started to help them. Domina and Hamisa started the farming by using sawdust as the substrate but did not get good results. They then purchased cotton husks from Kagera Region and obtained good results. Apart from Hamisa, Domina has employed an orphan young man and a mentally ill young man. Her farm produces 3 – 4 kg of fresh mushrooms per day and sells at the premise and in supermarkets.
2.3.4 Kimara farms

During the visit, another farmer Mr. Mazamba, who was in Kinondoni, explained that he has a farm in Kimara area where he farms indigenous mushrooms. He received training from the ERMCI. Currently he plants 140 – 200 bags (packs) of mushrooms in his dark room. He produces 8 – 10 kg fresh mushrooms per day and sells at 8,000 Tsh. per kilogram. He sells the mushrooms in tourist hotels such as Peacock Hotel. Usually the hotel people call and place orders for the mushrooms. Mr. Mazamba secured the hotel market through the Tourist Board. He explained that he visited the Tourist Board office and demanded that they tell him where to sell his mushrooms because they work with tourism. When he does not have mushrooms in his farms, he buys from fellow farmers at 4,000 Tsh. per kg and sells at 8,000 Tsh. per kg. Mr. Mazamba explained that there are many farmers in Mkuranga area and all of them were trained through the ERMCI.

Challenges
- Premises
- Markets
2.4 BAGAMOYO CULTURAL HERITAGE TOURISM

The Bagamoyo Cultural Heritage Tourism CI is located in Bagamoyo, Tanzania. Most of its firms and members are located within the Bagamoyo municipality. It has an office in a building (Fig. 37) that belonged to one CI member but it was later taken back by the owner who thought that the CI will pay him a monthly rent. Members of the CI include tour operators, painters, wood carving artists, historical buildings, historical sites, and the academia such as the Bagamoyo Institute of Arts and Culture (Taasisi ya Sanaa na Utamaduni Bagamoyo (TaSUBa)).

![Fig. 37 An office initially given to the Bagamoyo Cultural Heritage Tourism CI but later taken back by the owner](image)

The visit to the CI started at the office of TaSUBa (Fig. 38) formally called Bagamoyo College of Arts (BCA).

2.4.1 Institute of Arts and Culture, Bagamoyo (TaSUBa)

The Institute of Arts and Culture (Fig. 38) is part of the academia working with the CI. Its main activities are to train in different aspects of arts and culture and to create awareness on the same. Training is done to artists on issues like performing art and how to display products to attract the cultural and artistic market. Awareness part of the training includes research on what is available for tourism and how much the people of Bagamoyo know about tourism and culture. The institute works with nine firms located mainly in Kaole, Bagamoyo town, and Magomeni. Members of these firms make different artistic products and discuss with the institute on how to go about marketing them. Discussions on problems faced and possible solutions are part of the work that the institute does with people in these areas. Other groups with which the institute works are sellers of food commonly known as mama lishe. Their interaction involves ways of improving the hygiene of the foods and working environments. Included in the training are traditional healers. The institute helps to link business people with government institutions such as TRA and BRELAl that are responsible in certifying products before they are sold. Apart from such trainings, the institute is planning to involve the transport sector where they work with the authority responsible for road (traffic) rules and regulations to create more awareness to users of small vessels such as motor bikes.
2.4.2 Old Boma

The Old Boma (Fig. 39) is an old building in Bagamoyo in which there are government offices mainly for education and forestry. It is being renovated while keeping its original structure so as to keep the history. The renovation work is carried out by the UDSM Bureau of Industrial Cooperation (BICO) and Zanzibar Stone Town Authority.
2.4.3 Bagamoyo District court
This is one of the oldest buildings in Bagamoyo used as the district court. It has been renovated but the original structure has been kept for historical purposes.

2.4.4 Natural Resources offices
The offices of natural resources are housed in one of the old buildings in Bagamoyo. The building is currently being renovated with reconstructions and new painting (Fig. 40).

![Fig. 40 Offices of natural resources in Bagamoyo at an old building under reconstruction](image)

2.4.5 Bagamoyo Old Market
Old market (Fig. 41) is in-deed a very old market that has been in operation since the colonial period. It houses sellers of different foods such as fish, vegetables, cereals, and so on. Apart from food sellers the market houses artists under the CI who does painting, carving and sellers of such items.

![Fig. 41 The historical old market in Bagamoyo](image)
2.4.6 Carving makers and sellers
The makers and sellers of wood carvings include Mr. Isdori Emanuel’s group that has three members. The firm makes the carvings at the premise—the old market—and sells within the premise (Fig. 42). Members get wood from vendors of firewood who also bring larger poles to sell to the carving makers. The main buyers of the firm’s products at their premise are tourists. The main challenges according to the members are low capital, unavailability of raw materials (because of the government law against cutting trees), and the fact that the tourism market relies on seasonal arrival of tourists. Some of the buyers are volunteers who come to train different groups and medical doctors. Isdori’s group is part of a larger group of artists in Bagamoyo.

Fig. 42 Premises and some products of Mr. Isdori Group in Bagamoyo

2.4.7 Ujamaa group
Ujamaa group has 19 members who are involved in wood carving, pottery, embroidery e.g. making hats (kofia), and batik. To make the carvings, group members buy trees from the natural resources office in Bagamoyo. Cutting of the trees is made by the group members themselves. Sometimes they buy wood from other people. Their products are sold to visitors from both within and outside Bagamoyo. The main challenges that the group face are the market which is not reliable because of seasonality of the tourists—this sometimes makes the profit to be less than the costs; Raw materials are also a problem; Group members do not have entrepreneurship skills; and the capital is low. The other challenge which is quite of a big problem is the premise. At the premise that the group operates (Fig. 43) and which was given to the group by the district council Halmashauri there are no toilets, water, and electricity. The group has started the process of installation of electricity by putting wiring by using their own electrician from the group but this was not acceptable by Tanzania National Electricity Supply Company (TANESCO) and they have been told to dismantle the wiring. For the group, installing electricity by using TANESCO electricians is expensive. With the installation of the electricity which they are eager to get, the group members would be able to work at night also so as to expand their work and attract more customers. Apart from having a big problem with the premise, sellers of food in the area have asked them to leave the premise. This, however, was clarified by the CI Facilitator who mentioned that Halmashauri is preparing a new premise for the food sellers.

The group members stated that they need training in entrepreneurship skills and English language. They stated that whenever they want to be employed, the employees will always ask
for certificates from a college of arts. Sometimes the certificates alone are not enough—secondary school certificates are also required. However, the members explained that for now they need the training for the work that they are doing in their group.

Fig. 43 Premises and some products of Ujamaa Group in Bagamoyo

2.4.8 Old post office
This is a building that was constructed in 1896 and operated as a post office. Recently, an entrepreneur has come in to renovate the building and start hotel services with the name Millennium Hotel. Next to the historical building, the hotelier has erected a new building (Fig. 44) which will serve as an annex of the same hotel.

Fig. 44 An old post office building in Bagamoyo that has been turned into a hotel and a new building recently constructed for the hotel annex

2.4.9 Fish market
This is a market where fish vendors sell and purchase fish, processes the fish, and sell at the premises or take to other markets (Fig. 45). According to the CI Facilitator and some Bagamoyo residents, the market is very dirty and is not a site that would otherwise attract tourists.
2.4.10 The Beach

Currently there is no beach which people could use for swimming. The beach area is dirty (Fig. 46) caused by fishermen who land at the beach, process the fish and leave the fish offal and other dirty at the beach. This beach is connected to the fish market explained above which is also another cause of the dirty beach. According to the CI Facilitator the municipal cleaning cars do not reach the beach-no one takes the dirty away from the beach. He explained that the fishermen, fish processors, and fish sellers at this market need training in the importance of having a clean beach that can be part of tourist attractions, i.e. Beach Tourism. The Facilitator insisted that the CI is ready to work with the municipal council, the Halmashauri, and other authorities in the area to conduct awareness training on the link between a clean beach and tourism, and together create this tourist attraction.

During the discussion at the beach, we met an official of the new Tanzania Harbours Authority (THA) office which has a building at the beach (Fig. 47). The office had been in place for one year by the time of the visit in December 2010. According to the official, the THA office had written a letter to the Bagamoyo District Commissioner to ask for the fish vendors to be removed from the area and be given an alternative area but this has not taken place.

Discussions revealed that the beach area was surveyed in 1895 and found to be good as a conservation area and buffer zone. It is also an old historical port. There was a plan by Halmashauri and other authorities to re-create the beauty of the beach and its historical resources by renovating the structures without changing the original architecture. The fish kiosks (vibanda) are not part of the plan (during the time of such a plan in the late 1800s the area that contains the vibanda was a forest) and should in-deed be given an area far from the beach. Such plans and the work of THA have fuelled the aim of the CI to create awareness on the beach tourism, and THA is ready to work with the CI to facilitate the establishment of the Beach Tourism.
2.4.11 Nasser Virji building

The Nasser Virji building (Fig. 48) was built during the 1880s. It has now been acquired by the National College of Tourism which wants to convert it to a college that will conduct different courses in tourism leading to certificates, diplomas and so on.
2.4.12 Mwambao Primary School

Mwambao Primary School (Fig. 49) was built in 1896. It was the first school to enrol students of mixed colours i.e. Africans and whites. It was built by an Indian called Sewahaji, contracted by a society called German Bagamoyo Friendship Society.
2.4.13 Muhimbili College
This is a building that was formally the Bagamoyo Fishing Corporation (BAFICO). It has been renovated and is used as a campus of the Muhimbili University of Health and Allied Sciences (MUHAS, Fig. 50).

![Fig. 50 The former BAFICO building renovated and used as a campus of Muhimbili University](image)

2.4.14 Bagamoyo Catholic Museum
The Catholic Museum in Bagamoyo (Fig. 51) is said to be a place where Dr. Livingstone’s body was kept before it was transported to Europe. The museum has three historical rooms that display the slave trade, culture and traditions; history of missionaries in Tanzania; and Bagamoyo during colonial period (Fig. 51). The main challenge of running the museum is that the church displays witchcraft items (Fig. 51) to a great extent that gives an image of Africans as people who practice much witchcraft. To the tour operators and other workers of the museum this is not a good image and they would want the displays removed.
Fig. 51 The Bagamoyo Catholic Museum displaying slave trade period (bottom left) and witch craft (bottom right photo)

2.4.15 Ancient Ost Afrika Ltd
This is a tour guiding company with 13 members, two of who are share holders. It has its office in Bagamoyo town (Fig. 52) and it was initially a sole proprietor in partnership with other companies. In December 2009 Ancient Ost Afrika was officially registered as a limited company with advice from BRELA. For its business, the firm receives 3 – 4 minibuses full of tourists per week which is about 100 people during the high tourist seasons. During the low seasons the firm can receive only one minibus or even nothing per week. Members stated that there is high trust between the members of the firm. One of the success stories of the firm is that it operates in collaboration with three tour operators based in Dar es Salaam, Moshi, and Arusha which give them part of tourist packages. These are Omong’we Travellers and Tours-Dar es Salaam; Discovery Tanzania Heritage-Moshi; and Zoya Safaris in Arusha. They also work with Saadani National Park. The firm also managed to get funding from the Tanzania Private Sector Foundation (TPSF) competitive Matching Grant of 2,100,000 Tsh. to produce brochures.

Challenges faced by the firm include lack of proper English and Kiswahili speakers; most members speak the languages but not to the standard that is good for the business. They also do not speak other languages such as German while many tourists from Germany visit the firm. Secondly, there is no fixed rate for tour guiding; visitors could come together but pay different fee rates depending on who will facilitate their tour. The third challenge is that in Bagamoyo there are no tour packages because of the less money obtained from tourism compared with other areas; the town in small in size.
2.4.16 Top Life Bar

This is a restaurant with a pub and it belongs to CMH Supplies Company. Top Life Bar (Fig. 53) works with tour operators by providing food and accommodation to tourists and other visitors who are received by the tour operators. It has eight workers serving guests at the restaurant and two in its two kitchens (barbeque and food kitchen). Food items are purchased in Bagamoyo and Dar es Salaam. Apart from purchasing food items, the owner of the firm is also a farmer and he cultivates maize and rice in Lugoba area near Bagamoyo.

The owner of the firm and some members of this firm have been participating in different trainings conducted to operators of guest houses, restaurants and so on by different organisations.

Main challenges as explained by members are lack of training to most of the workers; difficulties in getting bank loans; and unavailability of materials such as food supply (bananas, potatoes etc) where one needs to travel to Dar es Salaam to purchase them. The owner has a problem with an area where he has built a warehouse; he is told to dismantle the warehouse because the area where it is erected is part of old town heritage. He was told that for the building to be in the area, he must not alter the original structure. He was told that he had altered the structure of the building something that he denies.
2.5 MOROGORO FRUIT AND VEGETABLE PROCESSING
The Morogoro Fruit and Vegetable Processing CI has members and firms including producers of vegetables, producers of fruits, processors of vegetables, processors of fruits, and sellers of vegetable and fruit products. It has 16 firms.

Firm members participated in the BDG programme and won grants (Tsh.) as follows:
   i. Mama Mfui of Macky Food Products 4,800,000
   ii. Rahaleo Group (lead by the firm’s secretary) 28,000,000
   iii. Monica Sechalo of Sech Food Products 4,800,000
   iv. Yuvensia Mapunda of Nyampamba Food Products 2,400,000
   v. Ramadhani Fufumbe of Kumtam ABC 3,600,000
   vi. Prof. Tiisekwa (the CI Facilitator) +one other person -10,000,000 from BBB programme
   vii. Gaudensia Mchotika of Eager Food Products 3,000,000

2.5.1 Mushroom Development Enterprises (MUDE)
The firm, MUDE, is located at the Sokoine University of Agriculture (SUA) premises also known as Kwa Diwani and has four members. MUDE members purchase soy and soy flour from farmers in Mikese. They also buy sorghum and finger millet from farmers in different areas in Morogoro. The firm members also farm mushrooms (Fig. 54). The firm’s main products are fresh and dried mushrooms, soy flour, and soft drinks (togwa) made from sorghum and finger millet (Fig. 55).

The firm members listed their challenges as: 1. There is more demand than supply-no premise large enough to reach the demand; 2. Small premise; 3. No enough devices for drying the raw materials-now they are using a solar drier at the Food Science Department of SUA and sometimes it is not available. The firm got machines (Fig. 56) through a loan from the Incubator project but they are yet to be installed because of lack of premises. Production of the togwa was made possible under the incubator project. The firm has invented an innovative idea where they seal the plastic containers full of togwa with pressing iron; in the past they had to go the CI Facilitator’s premises at SUA who owned a sealing machine. The members import the plastic containers and tops from Nairobi but are planning to explore the possibility of buying from Azania Company in Tanzania. The price of Togwa is 300 Tsh. per piece, a promotion price for now. When the drink is sold in Dar es Salaam the price is 500 Tsh. The firm members participated in an exhibition in Uganda where their togwa was rated as of a higher quality than similar drinks at the exhibition.
Fig. 54 Mushroom farm owned by Mushroom Development Enterprises of Morogoro

Fig. 55 Premises of and products made by Mushroom Development Enterprises in Morogoro

Fig. 56 Food processing machines owned by Mushroom Development Enterprises of Morogoro
2.5.2 Mkwajuni Youth Economic Group

The firm’s main work is to produce vegetables. They own a farm where they farm the vegetables (Fig. 57) given to them by the Morogoro Municipal Council in 1987 as one of the Municipal’s youth projects. Their farming area was officially opened during the Mwenge (Uhuru Torch) celebrations in 1993. The firm has 20 members with a complete leadership of six members i.e. Chair person, Secretary, Treasurer and their assistants. The vegetables produced by the firm are green Amaranthus (mchicha), Chinese cabbage, parsley (figili), the leafy vegetable (Solanum-mnnavu), and pumpkin leaves. Each member owns a plot in the farm area and pays 5,000 Tsh. per line per month. Therefore the amount of money contributed depends on the number of lines (see Fig. 57) a member owns.

Currently they sell fresh vegetables but they plan to process in the future; they are already trained. Their main markets are within the municipality, Mawenzi market, and sometimes people from Dar es Salaam come to buy from the farms. The vegetables are usually bound in small lots and transported to the market by bicycles or motor bikes commonly called Boda Boda.

The main challenges pointed out by the firms are that there is more production than markets-they mentioned that even if a customer wants to get three tonnes every week the firm can supply. To increase the market, the firm is currently constructing an exhibition premise at the Nane Nane exhibition grounds in Morogoro.

The firm members recommended that for the development of the vegetable processing option, the users of the vegetables need to be trained on using dried vegetables because most of them do not know or are not used to consuming dry vegetables.
2.5.3 Rahaleo Group Food Products

The Rahaleo firm has four permanent members, three men and one woman, and about six part-time workers. They produce nutritious flour (*lishe*), soy flour, soy drink, and Rosella powder. They also sell dry Rosella flowers. They buy Rosella from Dodoma. The firm is considering a new line of production—the baobab powder. The raw materials for producing the powder are

Fig. 57 The farm area and lines of planted vegetables of Mkwajuni Youth Group in Morogoro
available in Dodoma and the firm members plan to purchase from there. The powder is said, according to the firm members, to be good against Aids.

The firm members stated their main challenges as poor/low quality packaging materials. The current packaging design gets wet they get rain water/rained upon. Members of the group were met at the Ben’s winery (see below), their premise was not visited.

2.5.4 Macky Foods
Macky Foods located in Mbuyuni area has six members three of who are women. It makes peanut butter, cinnamon powder, honey, Rosella juice, Rosella dry flowers, pineapple jam, and mixed fruit jam. Just like Rahaleo, members of the group were met at the Ben’s winery (see below), their premise was not visited.

2.5.5 Sadani Group Food Products
The firm is located in Mwembesongo area and is composed of five members three of who are women. The firm dries using solar drier. Vegetables that are processed and marketed by the firm are pea leaves (*majani ya kunde*), mchicha, chinese cabbage, cassava leaves, *mlenda*, tomatoes, and Rosella flowers. The firm also produces and sells soy powder, *lishe* flour, and soy drink. Just like Rahaleo and Macky groups, members of the group were met at the Ben’s winery (see below), their premise was not visited.

2.5.6 Sech Foods
Sech Foods is a firm with six members six of who are women. The firm makes pickled products including *mbilimbi* and mango pickles, honey, garlic paste, *lishe* flour, soy drink, cinnamon powder (purchased from Zanzibar), and sorghum flour. Just like Rahaleo, Macky, and Sadani, members of the group were met at the Ben’s winery (see below), their premise was not visited.

2.5.7 Morogoro Breweries
The firm has five members. It makes Abantu beer using bananas that they purchase from farmers within Morogoro and a variety of juices which are mostly seasonal depending on the fruit that is on season e.g. mangoes. Fermentation, filling in the bottles, labelling, and finishing are done at their small premise at Mr. Tibikunda’s home (a firm member) where they have a small compartment (Fig. 58). The machine for fixing the tops on the bottles (Fig. 59) was imported from UK but the firm plans to contact SIDO where they can purchase a local type. Laboratory testing of their products is done at SUA to make sure that the products are bacteria-free. SUA also promised to help them by looking for markets. To certify their products, the firm has already started the process of acquiring certification from the Tanzania Food and Drugs Authority (TFDA). In addition, the Tanzania Bureau of Standards also visited the firm and started the process of standardisation of their products. The main markets for their products are bars (pubs) and shops within the Morogoro Municipality.

The firm has a main challenge of containers for packaging its products including bottles. The members currently use bottles from Pepsi, Coca Cola, and Tanzania Breweries. Some of the products “borrowed” from such sources are boxes from Tanzania Breweries and bottles from
Serengeti Beer (Fig. 59). This is a limitation to the sales since the firm cannot sell the products in markets other than Morogoro because of the container owners’ copy right. The members explained that it is expensive to get a mould of their own bottle design; it costs 25 million Tsh. to own such a mould. They also make beer labels at a cost of more than 400,000 Tsh. per batch. They do not have labels for juices; they sell locally without any labels. The labels are fitted into the bottles manually (Fig. 59). Other challenges are premises, low capital, and availability of materials.

As a help from international organisations, the firm worked European Union in a project that helped to be trained in protocols of food processing. The firm got a certificate for the participation.

The needs of the firm are a professional marketing officer and field workers such as Food Science Officer.

\[\text{Fig. 58 Premise, and products made by Morogoro Breweries in Morogoro}\]

\[\text{Fig. 59 Products of Morogoro Breweries in Morogoro. Note the plastic boxes from Coca Cola and Tanzania Breweries}\]
2.5.8 Nyampamba Food Products

This is a family group which has members from outside the family as well. It has eight members. Products produced by the firm are *lishe* flour, *chachandu* (chutney), jam, cassava flour, and sorghum flour. Labels are fixed into the products manually (Fig. 60) and this requires two packaging packets—the food processing ethics forbid putting labels on the food packets. Sealing of the plastic packets is done using a small portable sealing machine (Fig. 61). The raw materials are purchased from Morogoro market. The markets for the products are Morogoro municipal and at the firm premise.

The main challenges facing the firm are raw materials—these are seasonal and when out of season the prices are high causing the firm to get low profit; packaging materials; labels—the members have labels for some of the products only and these are fixed into the products manually—the minimum price for a label is 5,000 Tsh. each; Premise—currently the firm works at the home of Euvensia Mapunda. Considering the health ethics, the health officers asked the firm to acquire a more clean-isolated premise and the firm has currently constructed such a premise as a single isolated unit (Fig. 62) where food packaging is done—the premise is still being modified. Lack of proper and sufficient drying facilities for grains and lack of machines for grating cassava are some of the challenges faced by the firm—currently the firm has to borrow a grating machine from SUA.

![Fig. 60 Premises of Nyampamba Food Products in Morogoro](image-url)
2.5.9 Ben’s winery

The firm located in Kihonda Mbuyuni has seven members plus more than 13 temporary workers. It produces wine from banana and rosella (Fig. 63) and also a soft drink (togwa, Fig. 64). The raw materials are purchased from farmers in Kinole area and also from a seller from Dodoma. The raw materials are received through a window outside the building, chopped, and taken to the kitchen where they are boiled, sugar is added, and then taken into the building for fermentation. Fermentation is done in plastic jars (Fig. 64). The fermentation room contains 12 jars and the
fermentation process is started when all the jars are full. Two types of fermentation are done: three months known as fast fermentation and six months fermentation to get better wine. Filling and labelling are done by using machines (Fig. 64). Bottles are received (on Saturdays) and placed in water mixed with potash and liquid soap and kept for 12 days to sterilise.

There are display and storage rooms where the products are displayed or stored. Other CI members also display their products in this room (Fig. 65). The firm also has a laboratory where analyses for quality control, display, and training of CI members are done (Fig. 65).

The premise is a common facility for CI members. The members can come in and process and display their products and hold meetings, training, and so on at the premise.
Fig. 65 Laboratory, display room, and machine for fixing the tops on bottles at the Ben’s winery in Morogoro

2.5.10 Mbamba Foods Products

The firm is located in Kigurunyembe Migombani-Chuo cha Ualimu and has six members. Products made by the firm are maize flour mixed with nutritious ingredients (*lishe*), sorghum flour, pickles, garlic paste, ginger paste, Rosella flowers and juice, soft drink (*togwa*), dry vegetables, and dry fruits. The firm started the process of certifying its products through Tanzania Bureau of Standards (TBS) and TFDA but the process is not completed yet (it is a long process) and it is also expensive to pay for the certification.

The main challenges of Mbamba Foods are lack of packaging materials and the fact that the labels used by this firm and some others are similar because they all get them from SIDO. The labels are also expensive. This firm is, however, planning to design its own labels. Other challenges are low capital, and markets.

The firms need include training in production skills, market acquisition, and how to attract customers. This is also considering the competition that is coming up through the East African markets. Another challenge is the premise; the firm members are currently forced to come to the common facility at Ben’s winery to process its products. The premise is said to belong to one CI member and the other members are required to pay a fee for usage. The last challenge is the difficulties of getting loans (long process and conditions for loans) and the high interest rates. Similar to 2.5.3 – 2.5.6, the premise of this group was not visited.
2.5.11 Eager Food Products
The firm has 4 members and is located at Mwembesongo area in Morogoro Municipality. The firm is said to be the youngest firm in CI i.e. the latest to join the CI. It produces cooking fat (ghee), oil, juice, and rosella wine. Most members of this group are officials of the Food Science Department at SUA and also members at UDSM. It has a subgroup called Simamo group lead by Mr. Silvester Mosha. The premise of this group was not visited. Similar to Eager Foods, the premise of this group was not visited.
2.6 ARUSHA VEGETABLE SEED

Arusha Vegetable Seeds CI (AVSEC) is located in Arusha. Its members are mainly farmers of vegetables, extractors of seeds (processors), designers and makers of seed extracting machines, R & D Institutions, and responsible government sectors. The members work together to ensure availability of seeds and seed processing machines. It was reported that 80% of certified-good-quality seeds are imported. The aim of the CI among others is to provide farmers with certified seeds. A meeting with CI leaders was held at the offices of the Tanzania Seed Traders Association (TASTA).

2.6.1 Tanzania Seed Traders Association (TASTA)

The offices of TASTA (Fig. 66) act as the offices of the CI and most of their administrative meetings are held there. In the offices there were displays of seeds from various companies (Fig. 66). Members of the CI mentioned that the importance of having quality seeds has been enhanced by the government’s insertion of a clause in its policy that states that there should be seed certification before the seeds are used by farmers in Tanzania. One of the objectives of the CI being to provide farmers with certified seeds and this government initiative is an added advantage to the CI.

Fig. 66 Offices of Tanzania Seed Traders Association displaying various types of seeds from different companies

2.6.2 Centre for Agricultural Mechanisation and Rural Technology (CARMATECH)

CARMATEC is a CI firm located in Arusha city outskirts and specialises in agricultural research and production of agricultural machines. It works with the CI in conducting research and producing machines for processing tomatoes for the extraction of tomato seeds. The firm designed a seed extractor which is now being re-designed to suite more the needs of the farmers. At first the machine panels were made of stainless steel (Fig. 67) but this was thought to be too expensive to the farmers and the farmers asked for a modified designed. CARMATEC then replaced the stainless steels panels with painted panes (Fig. 67) to fulfil the demands of the
farmers. This lowered the price of the machine from 3 to 2 million Tsh. In addition, with painted panels one panel makes 2 cylinders which are fitted in the same machine while with the stainless steel one panel makes only one cylinder which is fitted in one machine. More work can be done in the same amount of time when using two cylinders than with one cylinder. To help the farmers get and use the machine effectively, CARMATEC offers three ways: the machines can be acquire through loans; the machines are portable and can, therefore, be used in the field (with diesel engines-some farmers can take the machines in the field and extract other farmers seeds on a fee); and two options have been made on the same machines-tomato extractors fitted with tomato seed separators.

Fig. 67 New premises of CARMATEC (upper photo), a seed extractor made of stainless (left photo) and painted panes (right photo) re-designed to fulfil the demands of farmers/seed extractors

2.6.3 Tanzania Engineering and Manufacturing Design Organisation (TEMDO)
TEMDO is another designer organisation that designs and manufactures agricultural machines. Some of the machines produced by CARMATEC were initially designed by TEMDO. The firm runs a Technology Business Incubator programme where different businesses are incubated for three years and then they are “hatched” or released.
The firm makes machines for extraction and separation of different seeds including jatropha and sunflower seeds. The pulp from the seeds is used to make briquettes. Some of the machines made by TEMDO are for making pastes from a variety of seeds, separating seeds and oil, separating the seeds to make oil that is collected in special taps, and for making briquettes. The firm also makes machines for shelling groundnuts and wind mills. The premise and some of these machines are shown in Fig. 68a,b.
2.6.4 Red Gold

Red Gold (Fig. 69) is a fruit and seed processing plant that also located in Arusha. It makes mostly tomato sauce, tomato paste, and chilli sauce. The firm purchases its raw materials mostly from farmers but also from Alfa Seed (another AVSC CI member-see below) from which 1 million tonnes are supplied by Alfa Seed to Red Gold. The firm works with some members of the CI such as Alfa Seed who bring seeds for analyses to determine if they are good for processing. The firm processes 25 tonnes of vegetable and fruits per day, working from 6 am to 6 pm, sometimes working in two shifts. About 150 people, 60 of who are permanent employees work at the plant. All the machines used for processing fruits and vegetables at Red Gold, including the processing plant (unit) itself, are imported from India (Fig. 69). The firm usually has 2 – 3 trained supervisors. The training is done at the premises, i.e. on job training. Some of the machines used here include the steriliser that is used to sterilise the fruits/vegetables before processing. Fruits, vegetables, and seeds are tested in the laboratories (Fig. 69) to check for physical and chemical analyses including acidity, sugar content, and soluble salt. Raw materials (fruits and vegetables) are seasonal but these are purchased in bulk during the seasons, stored, and used when the season is off and thus the processing work is done throughout the year. By the time of the visit, only mangoes were being processed for juice (Fig. 69). Packaging materials such as bottles are purchased from Arusha Base Pack, a firm that produces plastic bottles according to customers’ needs and specifications.
Fig. 69 Premises, facilities, and products made by Red Gold in Arusha
2.6.5 HORTI Tengeru

HORTI Tengeru is a firm that does research in horticulture. The firm started as a training institution in 1980 and was later in 1996 re-allocated as part of the livestock department. However, now the firm has been given back the train in horticulture status. It is given the mandate to work with vegetables to ensure the provision of certified, high quality vegetable seeds, working with the Arusha Vegetable Research Development Centre (AVRDC-see below). Varieties of vegetable seeds that have been researched on and produced by the firm are such as Money maker, Tengeru, Tanya, Meru, and Kiboko. *Kiboko was to be named Shengena but during the time there was Shengena bus that was having road accidents frequently, killing people and thus the name Shengena was not favoured and instead the seed was named Kiboko.* During the 1997 Tengeru was then the best seed but now the best seed in Tanya. Advantages of Tanya include that it is resistant to Late Blight disease, farmers prefer it because it is said to give better paste in food, and can be stored for longer than the others. Two other lines of seed varieties are planned for and indigenous varieties will be included later. The firm is also planning to make a variety of the indigenous green vegetable *mnavu* that is not bitter as the local variety. HORTI Tengeru uses its units such as the Tengeru Vegetable Seed (ASA, Fig. 70a,b).

Fig. 70a Premises and facilities of HORTI Tengeru and ASA
2.6.6 Alfa Seed

Alfa Seed is a firm that works with farmers from Karangai and Maweni areas. Housed at the ASA premises, the firm works mainly in packaging of vegetable seeds in packets imported from India (Fig. 71) and tins made in Tanzania. It has six workers. By working under the CI the firm facilitates farmers to get quality seeds and farming implements as well as getting loans. The firm usually takes the vegetables to Red Gold for extraction and separation and then they bring the seeds to their premises for packaging. At the premises the seeds are sieved (Fig. 71) and appropriate preservative chemicals are added before packaging. Markets for the seeds are in various areas including Mwanza, Dar es Salaam, Mbeya, and Arusha.
2.6.7 Arusha Vegetable Research Development Centre (AVRDC)

Arusha Vegetable Research Development Centre (AVRDC, Fig. 72a) located in Arusha is a research centre whose headquarter is in Taiwan. It was started in 1971 as a research institute funded by Asian Development Bank. It is associated with many Asian countries and USA. Most of the staff members of AVRDC are employees of the Ministry of Agriculture in Tanzania. The firm works to research on and produce better seed varieties that are more resilient, promote varieties for environmental sensitivity, linking producers & markets, and training farmers, traders and so on. Their research areas include regeneration and seed multiplication. The firm has already produced more than 200 types of the green vegetable *mhicha*. The firm has the following facilities: 1. Pre-breeding and storage room; 2. Laboratories for biotechnology (three new ones are tissue culture, pathology, and seed health); 3. Green houses; and 4. Experimental fields. The experimental fields cover 8 ha. The experimental fields have been used for long and they are currently a lot of diseases have been diagnosed. To combat the disease problem, the centre is using better farming practices such as rice farrowing (Fig. 72b); after three farrows the disease is usually eliminated. Currently the centre is also using drip irrigation (Fig. 72b). Other facilities owned by the centre are pre-processing facility where seeds/vegetables are stored before being processed when needed and an auditorium that will be officially opened on 31st March 2011. The Centre owns a seed drier that was designed and manufactured in Arusha (Fig. 72b). It is said to be the first of its kind in Tanzania and costs 300,000 – 400,000 Tsh. The centre arranges farmers’ activities in the centre such as participatory evaluation and seed selection where farmers assemble at the centre to set up seed criteria required for better products. There are also special occasions named “demonstration day” and “field day” which bring together up to 300 farmers to visit the centre.

Fig. 72a Premises and some facilities of Arusha Vegetable Research Development Centre
Fig. 72b Facilities, and products of Arusha Vegetable Research Development Centre
2.7 NEUTRACEUTICALS

The Neutraceuticals CI is based in Dar es Salaam. It has groups that make products using Moringa leaves, Aloe Vera leaves, Soy beans, and Rosella. The CI has groups/firms that make products out of the nutritious plants and those that sell the products. In most cases the producers of the products are also sellers. Products made by the CI include soybean flour, rosella, and Moringa powders, soy milk, Aloe Vera drink, and Aloe Vera soap. Currently the CI sells nutritious flour to 2 schools in Dar es Salaam and aims at selling to 20 schools. The Neutraceuticals CI has done research to remove toxic substance from Aloe Vera. The CI is housed by SIDO.

Challenges facing the CI are:

- Premises
- Markets
- Raw materials

2.7.1 Stayfit Foods

Stayfit firm is located in Sinza area. It consists of three members all working with soy flour and soy milk. Products that are made by the firm are soy bean and Moringa flour called “Stayfit porridge flour” and Aloe Vera drink called “Stayfit drink” (Fig. 73). The leader of the firm pointed out that other firms also produce say powder but have different markets. She explained that one can find nutritious flour in the markets but not the one that contains Moringa. The CI Facilitator explained that Moringa is called “miracle plant” and that it contains four times more vitamins A than the green vegetable mchicha and carrot. It also contains seven times more phosphorus than banana. Other vitamins are vitamins B, C, and E. Stayfit owns a machine for processing of these products. Other members of the CI use the machine at a minimum fee. The markets for the products are at the premises (the shop-Fig. 73) but also collectively with other CI members (one firm sells the products of the other and vice versa. The firm leader and seller of products in the shop also stated that the premise provided by SIDO gives her a chance to use the premise to process her products.

Fig. 73 Stayfit Foods in Sinza showing a shop where the products are sold
2.7.2 Fort Processing and Supplies

The firm is located in Mbezi. It makes soy drink powder (Fig. 74). A member of the firm explained that they buy soy from farmers and markets and mill it in commercial milling machines. Fort Processing and Supplies’ members also buy the self-sealing packets for packaging their products. Usually the products are made according to customers’ orders. The firm also makes Aloe Vera Soap. To make the soap the firm members use palm oil. The soaps are packed in six or seven pieces packets (Fig. 74) and sold at about 5,000 Tsh. Wholesale, i.e. 50 – 100 pieces, sell at 4,500 Tsh. One piece of soap is sold at 1,000 Tsh. Markets for the products are in Bagamoyo, Manzese, Kibaha, and Mlandizi.

Fig. 74 Fort Processing & Supplies showing the premises and some products
2.8 KOROGWE SMALL SCALE SISAL FARMING

The stakeholders of the Sisal CI managed to hold the first meeting of all stakeholders and discussed the start of the CI but the actual start of the CI did not take place. But the CI has high potential with prospective members including sisal farmers, processors and users.

Sisal farmers

2.8.1 Sisal nursery at Makuyuni

The nursery is located in Makuyuni area near Mombo, about 120 km from Tanga town on the way to Arusha and is owned by Mwelya farmers. The nursery is operated by a group of 15 people eight of who are women. The group has a complete leadership and during the visit the chairperson, secretary, and three members of the committee one of who is the farmers’ secretary and representative of the farmers to the committee were interviewed. The nursery was started in 1999 as one of the community projects (miradi ya jamii) following a campaign to engage in farming sisal from the village government in 1997. They sent a proposal to the village for approval. The village approved the proposal and sent it to Dodoma for final discussion and approval in 2007; the response was received in 2010. The group received the land and sisal seed from the Katani Limited company (see below) meaning that they were to work under the company. Later on they were visited by the CI facilitator who encouraged them to start their own farms, produce, and process their own sisal. They, thus, started a nursery (Fig. 75) planting the local variety of the sisal as was advised by the facilitator in September 2010. Two nurseries of 2 acres each are owned by the group. The group leaders explained that they use seeds that are obtained from the trees; when the trees are shaken the seeds fall down (mbegu za kutingisha) as opposed to seeds that grow from the ground (Fig. 75).

The group leaders explained that they started to weed the nursery but were told by the government extension officers to stop and wait to be provided with a chemical that kills weeds which is considered better than the weeding; this was because the land was very dry as it had not rained since the sisal was planted. In Makuyuni area there are 89 farmers (including the 15 group members) who will receive seed from the two nurseries. Apart from the 89 people the members explained that many people in Makuyuni and Mombo areas have become interested in farming sisal after being emancipated by the village government and seeing the nursery.

Earmarked markets for the sisal to be farmed are Katani Ltd and Gomba Agricultural (GAI) Ltd. These are sisal processing companies. They produce mainly the sisal fibre.

The main challenges of the group are three. The first is that they till the land by hand. Land needs to be softened and tree tramps removed but this is not possible if the tilling is done by hand; the group does not have funds to hire tractors. Another challenge is that there is no transport to take the seeds from the nursery to the farms. The third challenge is that the group would like to process the sisal but has no means such as decorticating machines for producing fibres. Such machines that are good for them are those that can process 30m of sisal per day. Smaller machines that need manual feeding of the sisal and that can process 3m per day can also be used. The group members aim at using more out of the sisal since only 2% is used to produce fibre. They are also not happy about selling the raw sisal when they can sell the fibre. The members explained that if they got machines they could start by using the sisal that is freely
taken from the abandoned farms (Fig. 75). These farms belong to large companies such as Katani Ltd and GAI but are not looked after because of the fall in the price of sisal.

Fig. 75 The sisal nursery at Makuyuni, sisal seeds, and an abandoned sisal farm in Mombo

2.8.2 Mustafa Kilua’s farm

Kilua’s farm (Fig. 76) is located in Makuyuni. The farm is divided into 10 – 15 ha farms. It produces sisal that is sold to Katani Ltd, GAI Ltd, and other companies and users. There is also a similar farm owned by Habiba Mohammed which is also 10-15 ha.

Fig. 76 Kilua’s farm in Mombo
2.8.3 Small scale farmers
Apart from the 89 farmers in Makuyuni area, there are 285 other farmers located in different areas in Makuyuni and Mombo. They farm sisal and sell to Katani Ltd. The farm area in Mombo and Makuyuni that can actually be farmed (with good soil fertility) is about 1,600 ha and the total farming land can reach 2,000 ha. Other farms between Korogwe and Tanga are such as the farm of Hamisi Kindoroko (Fig. 77) who also sells to Katani Ltd. Others are Amboni farms (containing also Mwelya farms) that also make ropes, Kabaranga estate in Kicheba-Muheza, and Mjesani Estate in Mkinga.

![Fig. 77 Hamisi Kindoroko’s farm in Korogwe](image)

2.8.4 Maganga factory
This is a sisal processing factory that uses a corona machine (Fig. 79) to produce fibre. It has 19 workers. The workers in the factory explained that they get sisal from GAI Ltd but which means that they cut sisal from bushes where the farm is not taken care of; the sisal is free of charge. Sisal is placed in 1m heaps that are placed on road sides (Fig. 80) and later loaded into tractors or lorries and transported to the factory. The factory processes 30 – 35m per day. After processing
the fibre is greenish in colour, when it is dried for two to three days it changes the colour to whitish (Fig. 81). The fibre is sold to Tancot, a government company that makes mainly sisal ropes. The by product is kept in piles near the factory and is abandoned thus. This by product could be used to make biogas or as fertiliser. Women are employed mostly to carry the sisal and sisal product out of the factory to designated areas (Fig. 82).

Fig. 79 The Corona machine owned by Mr. Maganga in Mombo, a pile of sisal by-product, and a worker in the factory passing in front of the machine.

Fig. 80 Heaps of sisal placed on road sides ready for transport to the factory
Fig. 81 Sisal threads processed at Maganga’s Factory in Mombo

Fig. 82 Women carrying sisal fibres and waste product to designated areas

2.8.5 Katani Ltd
Katani Ltd (Fig. 83) is a private company that processes sisal in Tanga Region. At the Katani Ltd it was learnt the company has organised sisal farmers into cooperative unions for possible help from the company and the government at large. They have also helped the people to form a Savings and Credits Cooperative Society (SACCOS), a common small credit system in Tanzania, such as Mkonge Umoja SACCOS in Korogwe, formed by four groups. According to the Director of Planning at Katani Ltd when funds for the purpose are received, there are channelled through the SACCOS groups. Katani Ltd being a government company has a
committee for review of prices of sisal by discussing with farmers and implementing according to the agreements. They also act as overall supervisors of the farming in general. They mentioned potential farmers who can join the CI as those from Hale, Magoma, Magunga, Mwelya and Ngombezi with 1,300 members. These are groups that were helped by Katani Ltd to plant sisal and some of them have started to sell the product.

Katani Ltd apart from using the fibre from sisal processors, it also processes sisal to make fibre. The fibre is used to make carpets whereas the by-product of the processing is used to produce electricity at the Hale power station. The company has also started to produce biogas and liquid fertiliser from the waste product of fibre production.

![Fig. 83 Premise of Katani Ltd in Tanga](image)

### 2.8.6 Tanzania Sisal Board

The Tanzania Sisal Board also housed at the Katani Ltd building has a number of planned activities that could be useful to the CI when it kicks off. According to the Director of Human Resources, the Board in collaboration with Katani Ltd is planning to make maximum utilisation of the sisal by producing sugar-based products such as inulin, fructose, and glucose, and also citric acid & fertiliser which is already being produced. The Director mentioned other users of the fibre and who are potential CI as women who make table mats, baskets, and other handicrafts.

### 2.8.7 Sisal users

Users of the sisal are such as makers of floor carpets, table mats, baskets, and makers of ropes located mainly in Tanga municipality.
2.9 CASSAVA PROCESSING- KIBAHA

The CI is involved in farming and processing cassava. Its firms include:
- Large-scale and small-scale farmers
- Large-scale and small-scale processors
- Sellers of the cassava and cassava products
- Buyers of the cassava and cassava products, and
- Other collaborating partners such as research institutions, government projects and so on.

The CI firms are as follows:
- Boko farmers and processors
- Visiga farmers
- Msongola farmers and processors
- Zogowale farmers and processors
- Collaborators including Sokoine University of Agriculture (SUA), SIDO, Food & Nutrition centre, etc

Farmers

Examples of Large-scale farmers and processors

2.9.1 Boko farmers and processors

In Boko there are large-scale farmers like Mr. Nuru Mohammed’s (Fig. 84) farm which was started 6 years ago aiming at farming cassava and later processing. The farmer received better cassava seed 2 yrs ago from the CI. He has 1,000 acres in an area called Kipangego. He aims at working with 20 fellow farmers from each of the five villages of Ugosoga Ward. The aim is to give each farmer 2 acres of land from his 200 acres of farm. The farmers will be required to work hard, get the skills and produce enough cassava to be used as seed (and capital) for their own farms which they will obtain through their own efforts (e.g. request and get from the village leadership). After one year another group of farmers will use the land and so on. Mr. Nuru also makes agreements with the farmers that he will plough the land and the farmers will sell the cassava to him for processing after he had deducted the costs of farming. His plans are that at a later stage he and the farmers will together form a SACCOS.

Cassava production volumes and processed products

One tree from Mr. Nuru’s farm gives 14-22kg of cassava (Fig. 85). He mentioned that production from one tree can be lower but not below 7kg. He produces 49 tonnes of cassava per year. Other products are cassava chips and cassava flour (Fig. 85). Cassava chips are made by using a hand processing machine (Fig. 86) while cassava flour is made in commercial milling machines. He has invented a plough for removing tree tramps from the land that is to be ploughed (Fig. 86). He is planning to complete the plough and use it in his farms. He also owns a manual processing machine for making cassava chips and he goes to commercial milling points to make cassava flour. His processed products include:
- Cassava chips for human food
- Cassava chips for animal feed
• Cassava flour
The main challenge faced by the Boko farmers is the absence of rainfall this year (2010). Farmers are frustrated because their cassava has dried up and there is little product to sell or process.

![Fig. 84 Premises of Mr. Nuru Mohammed, a large-scale farmer and processor in Boko](image1)

![Fig. 85 Products made by Mr. Nuru Mohammed, a large-scale farmer and processor in Boko](image2)
2.9.2 Shenyagwa farm in Visiga

The farmer has more than 100 acres of farms and has made a number of smaller farms with names and roads demarcating the boundaries of the farms. The aim is to help other farmers by leasing land. He has used part of his farm to lease to the farmers but the rain was less this year and 25 acres of his own farm dried up (see Fig. 87). The farm is used as one of the cassava multiplication farms under the government project on Integrated Cassava Project (ICP) of the International Institute of Tropical Agriculture (IITA, Fig. 88), which is a collaborative project with USAID. The aim of IITA is in improving cassava production in Africa. On the visit day the farmer had other visitors and thus his grandson took the liberty of showing us around the farms and surroundings.

The farmer is aiming at starting to process cassava. He received a cassava processing machine from the Incubator Project of UDSM. He is currently constructing a premise for installing the machine (Fig. 89).
Fig. 87 Cassava (25 acres) that dried up because of lack of rain at Shenyagwa farm in Visiga

Fig. 88 Cassava farm and premises of Shenyagwa farm in Visiga

Fig. 89 A premise being constructed to house the cassava processing machines and the processing machines at the premises of Shenyagwa farm in Visiga
Examples of small-scale farmers and processors

2.9.3 Msongola farmers and processors

The Msongola farmers and processors firm has 3 groups with 2.5 ac of farms each. There are 14-25 members in each group working with cassava farming and processing of the cassava to produce cassava flour, chips, and food items.

Products produced by the groups in Msongola are cassava flour, foods such as bans, pan cakes (chapati which can be mixed with cassava leaves), and kebab. These products are sold to school children, neighbours, and in far markets such as Mlandizi.

The group received 2 small manual machines for processing cassava to produce chips mainly for human consumption (Fig. 90). They also received a bigger processing machine from the CoET-UDSM incubator project which they intend to install when they get a premise. They have a plot in which they have started to build a premise for the machine (Fig. 91).

The main challenge of the Msongola firm is the premise that they have started to construct but which they do not have enough resources. They are contributing some money as members but it is not enough and it will take time before they can have such a premise if they have to rely on the contributions.

Another challenge is drought. There has been little or no rain at all and the planted cassava seeds have dried up. Firm members hope that next year there will be enough rainfall so that they can get enough cassava to sell and process.

Fig. 90 Group members of the Msongola farmers and small manually operated cassava processing machine in Msongola, Kibaha
2.9.4 Zogowale farming and processing group

The Zogowale firm has 19 members. It got 6 small manually operated machines from SUA which was working with the group. Later on SUA stopped working with the farmers but brought in a buyer who was to make a contract with the farmers/processors. However, the conditions of the contract were not feasible to the firm and thus they stopped.

The firm members underwent training and were also provided with processing materials from the CoET-UDSM incubator project. The firm also owns a premise (Fig. 92) where members work together in making the products. By the time of the visit, however, the premise was closed and it was explained that there was no raw material because of the drought. Some of the machines and materials found in the processing premise are shown in Fig. 92. Main products produced by the firm are cassava chips, bans, cakes, biscuits, and spaghetti. These are sold in schools and nearby areas.

Just like the rest of the cassava farmers and processors, the group was affected by drought and their cassava dried up.

Another challenge is that they do not have reliable markets considering that they could not work with the buyer who was brought by SUA.
Fig. 92 A cassava processing factory and processing machines owned by Zogowale farmers and processors at Zogowale, Kibaha

Sellers

2.9.5 Mazupe Products

Mazupe products group members are both sellers of cassava products and also processors. Firm members attend different trade shows such as Sabasaba and international forums such as the UN day when some of the products are displayed and marketed (Fig. 93).

Fig. 93 A member of Mazupe Products of Cassava CI displaying cassava products at an exhibition in Dar es Salaam

General challenges of the Cassava producers and processors are mainly:

- Premises
- Raw materials
- Processing machines
- Capital and
- Markets
2.10 MOROGORO RICE PROCESSING

The firm consists of farmers who live in Morogoro municipality but who farm rice in Mvomero, rice processors, and rice sellers. There are two types of rice farming; the rain-fed and irrigated farming. The irrigated farming is done at the Wami-Dakawa farming area. The area was a government project- the Wami-Dakawa rice farming project and when the project ended the area was divided into small plots for farmers in the area. The rain-fed farming is done at the Wami-Dakawa rice farming area. Farmers have varying sizes of farms ranging from 3 to 200 acres each depending on one’s wealth or strength. Rice processing is done mostly in Morogoro town. The CI produced a book on how to farm rice as a business and a report on training under the cluster initiative (Fig. 94).

![Fig. 94 A guide on how to farm rice as a business in Morogoro (left) and a report on training under the Morogoro Rice Processing CI (right photo).](image)

Rice farmers

2.10.1 Mvomero farmers

The farmers use the Wami-Lumanda farming area called “bonde la Wami-Dakawa”. By the time of the visit it was off season and thus the farms were not ploughed (Fig. 95). The actual farming is during December – January when it starts raining and harvesting is done in June. Irrigation is also used in the area by pumping water from the rivers (e.g. river Mkata), thus, if there are no rains even the irrigated farms do not operate. Some of the farmers had started to plough the land using tractors (Fig. 95) anticipating the coming rains in December – January but they explained that the land was still too hard to plough. There are large scale farmers in this bonde who own 70 – 80 acres each although some have up to 200 acres. The large-scale farmers include Mr. Mloo, Mr. Kianga, Mr. Msuya and Mr. Mchagara whereas small scale farmers include Ms Kibiriki who owns 12 acres. Some farmers have houses built in the area (Fig. 96). The houses are used for day to day activities during the farming seasons.
Fig. 95 Part of the Wami-Lumanda rice farming area in Morogoro

Fig. 96 Houses built by some farmers of Wami-Lumanda rice farming area in Morogoro
2.10.2 Bega kwa Bega rice processors

The Bega kwa Bega group is located in SIDO area and has 20 members. Firm members purchase rice from farmers, process it by removing the husks, and sell to different customers. After removing the husks the rice is kept in plastic bags of 25 or 50 kg (Fig. 97) before it is sold. They have a storage room that they use as a common facility; individual processors store rice in this store room (Fig. 97) before processing it. In this firm there are four “shops” each with a different owner. Each shop has one processing machine (Fig. 98). The firm has a SACCOS called Bega kwa Bega SCACCOS (see Fig. 98) from which they can get small credits to run their businesses. According to the firm members, there are many rice processors in Morogoro. Their main market is at the premise where passers-by, be it people in vehicles or on foot see the rice and come to buy. The firm does its works near the road and the rice is spread to dry quite close to the road (Fig. 99). Although this is a strategic position because of the type of customers that the firm sells to, it is also possible that fumes from the vehicles that pass through the main road reach the rice. This is not healthy and there is need to look at ways of getting a more closed, pollution-free premise.

The challenges faced by the firm include that earlier on the firm was also receiving rice from Ifakara but the processors in Ifakara have decided to process the rice there at Ifakara, Therefore, the rice that was being brought to Morogoro municipality for processing is no longer coming in and, thus, the CI has less rice to process. Ifakara is too far from Morogoro municipality to be included as a firm in the CI. The same goes for Dakawa which was a possible supplier but the Dakawa project, a government rice production project, requires the farmers to sell rice to cooperatives in Dakawa.

The processing is done at road side premises; there are no proper premises for processing. The CI had started negotiations with the Morogoro Municipal Director who promised to make available a premise but he was transferred to Dar es Salaam before effecting the promise. At the time of the visit the firm was waiting for the after-election atmosphere to cool down and then start the negotiations afresh with the new director. Another challenge was that there are fewer processing machines compared with the number of processors.

![Fig. 97 Rice kept in a store room for processing and processed rice packaged in 25 and 50 kg plastic bags in SIDO area in Morogoro](image-url)
Fig. 98 A rice processing machine and the Bega kwa bega SACCOS in SIDO area in Morogoro

Fig. 99 The road side premises of a member group of the Morogoro Rice Processing CI located at SIDO area in Morogoro
2.11 TANGA CULTURAL HERITAGE TOURISM

The CI has an office that is in the Tanzania Chamber of Commerce, Industries and Agriculture (TCCIA) building in Tanga (Fig. 100). The office used to be an internet café for TCCIA and was later given to the CI by the TCCIA free of charge. Members explained that the chairperson of the CI is also the chairperson of TCCIA in Tanga and he has been very helpful. To run the office, the CI was given 7 – 8 initial months to use the office without any payment and later on the CI will pay only for rehabilitation whereas the electricity, rent, water and so on will be paid by TCCIA. Apart from having an office, the CI has an internet café where there is some income from the users of the internet. There is also a TV that belongs to the CI which is used to show some of the CI’s attractions. Currently the office is run by a tour guide who uses part of what is earned by the CI (e.g. from internet café) as his monthly salary. The CI has an agreement with TCCIA that the officer will be paid by TCCIA at a later stage (as help to the CI) until the time when the CI is ready to employ. There is also a visitor register and the number of registered visitors to the CI from 2008 to the time of the visit was 69. The visitors came from Sweden, UDSM, Denmark, Holland, UK, Canada, Uganda, Arusha, France, Nigeria, USA, Italy, Spain, and SUA among others. Members of the CI include tour operators, artists such as painters, makers of carvings, designers of clothes, taxi drivers, hotels, and so on.

![Fig. 100 TCCIA and Tanga Cultural Tourism office in Tanga](image)

2.11.1 Tanga Youths Development Association-TAYODEA

TAYODEA is an association that helps youths to employ themselves. It started in the year 2000 and officially registered in May of the same year. It owns a tourist information centre (Fig. 101) with a secretary who receives visitors. It also has tour operators. The association operates mainly in Tanga and Lushoto districts. In Tanga the association has three sections: community services; economy; and finance & management. Issues like agriculture, animal husbandry, trade, tourism, environmental aspects, HIV & drug abuse, and gender are operated by the different sections. Apart from using the current attractions the association is also working to discover new attractions.

The firm has trained more than 20 tour guides in hotel management and tour guiding. Some of them were assimilated within Tanga e.g. in Mkonge hotel and about 14 are employed in Lushoto. Some were employed in Arusha. When trained under TAYODEA, there is no agreement that the
association should employ them but rather the association gets 30% of the earning when one is employed or is conducting a personal business. TAYODEA aims at making each one who is a tour guide obtain an identification card. Other groups working with TAYODEA are Iliya Company and TATONA (see below).

The members explained that tourism is on rise in Tanga and that new attractions that they are planning to start working on are such as Kimweri chieftainship site in Vuga and a place where people (convicts) were hanged till death during colonial period called Kiunguni. Working with FEMA the association has recently discovered a new attraction-a mountain in Kilindi that looks like a mother carrying a child at her back. Apart from the appearance of the mountain itself, there are small animals that are indigenous to the area. The government has not used the attraction effectively and the association is planning to start using it.

TAYODEA has received a number of awards as follows: In 2008/2009 it got an award for the best community association by the Tanzanian Foundation for Civil Society. Four trophies were received; overall performance, good management practices, counselling & defence, and best association in northern region. The trophies were given presented at the Ubungo Plaza Hotel. In 2009/2010 the association got two trophies for counselling and overall performance presented in Zanzibar.

The association has branches in Kilindi, Handeni, Mkinga, and Lushoto. It is building a school in Kirare area in Tanga where youths are volunteering in the construction of the school buildings. The association has also started a “youth’s cabinet” in every ward where they have two cabinet members (a boy and a girl). This has already been done in three wards and the same will be done in the remaining two wards.

The main challenge faced according to the members is that there are many so called “fly-catchers” or “papasi” in Kiswahili who guide tours without following proper guiding regulations. The bad guiding is likely to spoil the reputation of Tanga’s tour guiding and the members have called on government collaboration in getting rid of these informal tour operators.

Fig. 101 Premise of TAYODEA in Tanga
2.11.2 Tanga Women Artists Network (TWAN)

Information on this group was given briefly at the TCCIA office and then the groups (not all of them) were visited at their premises. Groups that were represented were Aisha Kiosk, Prime Rose Enterprises, Mbuyu Batik, Rahagani Women Group, Tujitambue Group, Ukili Art Designers, Maroda Enterprises, Tongwe Art Group, Vivid Sign Writers, Ndianao Design, Endelevu Art Group, and Kimweri and Family Group. Some of these groups were visited while others were not because of limited time.

The meeting started by the members explaining that TWAN started two years ago and it is currently housed in the TCCIA office (Fig. 102). The move was a motivation from TCCIA itself. TWAN became a member of TCCIA so as to have a legal base or to be officially recognised. The entry fee came from contributions from members. The network has 13 groups with more than 40 members and the number is increasing with time. It has a complete leadership that is said to be very active and that each member is ready to participate in events rather than waiting for the leaders to do so. The group had a chance of sending five girls to USA in two groups (three and two) at different dates joining other members from Bagamoyo, Zanzibar, and Arusha through TCCIA. When the members were in the USA they learnt that the network is not competitive in marketing aspects specifically because of poor finishing in their products. They also learnt that they need a gallery where they can display their products. They also learnt about the importance of specialisation where each group can make a different part of the same design or product. However, they mentioned that to do this there has to be a common working premise so that the different parts are made the same way rather than each group working in a different premise. “If we use one premise, other members will learnt about new products from the others”, one member explained.

The members explained that they need modern tools including machines that can be used to design and make different products. To insist on this, members pointed out that at one time they received a large order but they could not fulfil it because of the fact that they make everything by hand.

TWAN has different groups owned or run by different people in the network and that are doing different art-related activities. A variety of products ranging from clothes (batik) to baskets and tablemats are produced (Fig. 102). They come together for meetings, discussions, and during exhibitions in the country or world HIV Aids day and so on.

Challenges facing TWAN are lack of working premise. They only have the common facility at TCCIA which is mainly used as a showroom. They also mentioned that because they started recently, their capital is still low whereas they also need money for registration and writing up of a constitution. The network is also lacking modern tools for their works. A request put forward by the group is that of being helped to get a premise where they can do their work together.
2.11.2.1 Aisha Kiosk
The group makes batik clothes but also does photography and makes video programmes. It has four members. The main challenge faced by the group is markets. Members explained that they have products but they do not have markets. This group was not visited.

2.11.2.2 Prime Rose Enterprises
A visit to the group showed that the name of the group according to the owner is chosen purposely to attract customers. She stated that this came out of a training programme where they were told to choose attractive names for their businesses to attract customers. The group has a premise at the (former) Sabasaba grounds but they do not have electricity at the premise and thus they are forced to work at home. Prime Rose makes products out of sisal (Fig. 103) which are marketed mainly by looking for orders from different customers most of who are from outside Tanga including: Serengeti Serena Hotel, Sea Cliff Hotel, Shoppers Plaza, Mlimani City, Super Save and Mwembe chai area in Dar es Salaam. Small orders are about 40 pieces of the products whereas large orders require 60 – 80 pieces. These clients were obtained by visiting the areas to show the group products.

Fig. 102 Products as displayed by TWAN members at the TCCIA display room
2.11.2.3 Mbuyu Batik
The group has 6 members and makes batik clothes. Their main challenge is lack of working tools for their work. This group was not visited.

2.11.2.4 Rahagani Women Group
The group has 10 members and deals with pottery, selling clothing materials, bed sheets, and pillow covers. Their main challenge is lack of working tools. This group was not visited.

2.11.2.5 Tujitambue Group
The group has six members. The group members farm rosella and vegetables and also process spices. It also does embroidery and makes earrings and necklaces. The group faces the challenge of a permanent premise. Group members explained that Export Processing Zones Authority (EPZA) has taken some of the areas that could have been used to construct such premises. The group also lacks a premise for processing of their products stating that they move from one premise to another e.g. from Tangamano area to Mwakibila area. They requested for help in acquiring a permanent premise and also training in marketing and market access so as to be competitive in marketing. This group was not visited.
2.11.2.6 Ukili Art Designers
Ukili Art Designers group has eight members and make wallets, handbags, and key holders using the traditional raffia (ukili) leaves. Their main challenge is low capital. This group was not visited.

2.11.2.7 Maroda Enterprises
The group consists of six members who design different fashions. They make batik clothes, ordinary clothes, handbags, and floor mats. Main challenges facing the group are lack of a premise and low capital. Members explained that for women one can even reach a situation when she uses her capital because of lack of funds to increase the capital. This group was not visited.

2.11.2.7 Tongwe Art Group
The group has eight members. It specialises in painting using colours extracted from banana leaves. The main challenge facing the group is lack of premises where they can conduct their activities. They requested for a gallery where they can display their products. This group was not visited.

2.11.2.9 Vivid Sign Writers
The group paints pictures of different designs. Its main challenges are a premise to put their materials & tools and market. The current premise is a small room at the back of a house (Fig. 104). The group members expressed that they need a gallery to display their products.

![Fig. 104 Premise of, and products made by Vivid Sign Writers]
2.11.2.10 Ndianao Design
The group has three members. It makes batik and also carters for tailoring services. The main challenges of the group are premise and inadequate tools. This group was not visited.

2.11.2.11 Nsare Aloe Vera Farm Ltd
The firm makes Aloe Vera products as indicated by its name but it also makes and sales batik clothes, baskets made of batik clothing, and so on (Fig. 108). Their main challenges are markets and working premises; they work in the small one room shop shown on the figure.

![Fig. 108 Premise of, and products made by Nsare Aloe Vera Farm Ltd](image)

2.11.2.12 Kokoliko Fashions
The group is housed at the Sofia Record and Video productions (Fig. 109) which is part of the group. The group, thus, apart from designing, making, and selling different designs of clothes (Fig. 109), they also produce video programmes (documentaries). The clothes made are sometimes decorated with sisal straps (Fig. 109) and thus there is a possible collaboration between the Tourism Heritage and Sisal Cluster Initiatives. The group participated in a Voda com workshop (by invitation) and they were able to display and sell their products. By participating in the workshop the group has been promised some projects with funding from Voda com next year (2011). Group members explained that they are very thankful to the CI for giving advice about their businesses. The main challenge of the group is market; the firm’s products are meant for tourists but the tourist market is still low in Tanga.
2.11.2.13 Endelevu Art and Culture Group

The firm specialises in products made by using raffia leaves and sisal fibre. Some of their products are mainly baskets, mats, wall decorations and so on (Fig. 110).

Fig. 109 Premise of, and products made by Kokoliko Fashions

Fig. 110 Premise of, and products made by Endelevu Art and Culture Group
2.11.3 Kimweri and Family

Kimweri is a family group that deals with traditional medicine extracted from local trees. Medicines are prepared by pounding in a wooden mortar (kinu). The business is owned by Mr. Athumani Ali Kusaga who is known as Kimweri and his family. They conduct their activities at home (Fig. 105). The owner explained that when he finished primary school and could not continue to secondary school because of poor grades his parents showed him the traditional medicines. He personally experienced the effectiveness of the medicines because he managed to stop himself in getting malaria since 1998. His members of the family do not use any “modern” medicine. Medicines made by the group are those for malaria, toothache, stomach ache, ulcers, and so on. He gave an example of collaborating institution called Kisaga Super Power in Amani area which makes Amanikwin, a medicine to cure malaria. He also works with students e.g. currently there is a lady from Honolulu (USA) who is studying for her PhD in traditional indigenous trees and medicines.

![Fig. 105 Premise of, and products made by Kimweri and Family](image)

2.11.4 Carving producers and sellers

The sellers of the carvings were initially working under a tree at a road side, a premise that was very famous to the locals as well as foreigners including tourists. At the time, it was known in the whole of Tanga municipality that anyone in need of carvings has to go to this place. Unfortunately the group was told to evacuate the area so as to keep the “city” clean (It should be noted here that when Tanga was a municipal the artists were working without being bothered but after the government announcement that Tanga will be converted to a city the artists were told to move from the area). They were then told to construct small stands (kiosks) at an open area but
the kiosks that they constructed were said to be of low standards (Fig. 106) that do no match with the newly developed city idea. It is expensive for the group to construct high standard kiosks. The group is currently marketing its products at the main market (Fig. 106). According to the CI Facilitator the group has, however, been promised another premise; the CI is currently backing up the group by discussing with the city director.

Fig. 106 Former premise (top left), a low quality kiosk (top right), and some products of the carving sellers group displayed at the main market

2.11.5 Coconut Arts Craft Group

This is a group with 10 members specialised in making different products by using waste products of coconut mainly the shell. Located at the former Sabasaba grounds, the group makes wine glasses, mobile phone holders, necklaces, desk accessories including pen holders and so on (Fig. 107). Raw materials such as coconut and coconut shells are purchased from the market and these are not a problem thus the group has no problem with the supply of raw materials. Products made by the group are sold at the premises and on special orders from hotels and other users. During the visit there was an order for wine glasses from Tanga Beach Resort; the market was obtained after the group leader had visited the hotel to show the group’s products. The group plans to also use coconut leaf midribs and husks in the future. The group leader mentioned that he visited an abattoir and felt sad to see the trunks from cows being thrown away. He then made a decision to use the trunks to produce different products in the future and he brought samples back to their working premises to see how they can use them.

The group also conducts informal vocational training to youths who finish primary school and cannot continue to secondary schools or school dropouts and street youths. The aim of the group
to the youth is to help them learn skills that they can use to produce products (by using traditional plants) rather than engaging in illegal and dangerous behaviours.

The group leader (Fig. 107) had a chance through the Mikocheni Agricultural Research to visit Sri Lanka with another person from Ghana. The course conducted in Sri Lanka was based on what he calls “the slogan of Sri Lanka” which is poverty reduction through the use of coconuts. From this course he got a machine for his work. However, he stated that although the training was very useful to him, the speed of poverty reduction as an outcome of the training has been very slow because of the attitude of neglecting the artists on the part of the government. He stated that “Tanzania has forgotten and actually ignores this kind of art works”.

The group members explained that what they need is training on different aspects of their work, more so than requiring help on increasing the capital. But he also mentioned that when making their products they throw away the coconut itself because they cannot use it and that it would be good if they can be helped to acquire a machine for production of coconut oil.

The main challenge faced by the group is that they do not have electricity at their premise. This forces them to carry their machines to a neighbouring premise when they need to use electricity. The group members stated that they filled in the forms for electricity and submitted to Tanzania Electricity Supply Company (TANESCO) but they have not received a response. At one time the group had orphans who were being trained at the premises and was promised help from the US Embassy but the help did not come (One of the activities agreed under the US Embassy help was to collect funds for promoting the work and the premises). Worse enough, the computer was stolen and the database was lost. Currently the group members stated that the members are working at very difficult conditions because much of their work needs electricity.

Fig. 107 Premise of, and products made by Coconut Arts Craft Group
2.11.6 Dolphin Hotel

One of the large hotels who are members of the CI is the Dolphin Hotel (Fig. 111). The owner of the hotel who is a lady started the hotel business in 1999 when she built one hotel. In 2005 she built the Dolphin Hotel. The hotel caters for local as well as foreign visitors.

![Dolphin Hotel](image1)

**Fig. 111** Dolphin Hotel, one of the large hotel members of the Tanga Cultural Heritage Tourism Cluster Initiative

2.11.7 Patwas Restaurant

Patwas (Fig. 112) is a traditional restaurant that is also an attraction to tourists. It is one of the oldest restaurants in Tanga and it serves traditional food as well as other types of food.

![Patwas Restaurant](image2)

**Fig. 112** Patwas Restaurant, one of the oldest restaurants in Tanga

2.11.8 Other active hotels

The CI has other active hotel members which are Panori Hotel, a very prominent member and another female owned Hotel called Hoteli ya Mama.
2.11.9 Urithi Tanga Museum building
Urithi Tanga (Fig. 113) is a building that belongs to the Urithi, a government museum. The CI wants the building for its activities including transforming it to a gallery for its members to display their products, as an exhibition ground, and also a place to run a traditional restaurant that will make traditional food. The CI is currently negotiating with the government to acquire the building. When acquired, Urithi museum activities will be part of the CI.

Fig. 113 Urithi Tanga museum building

2.11.10 Mwananchi Newspaper
Mwananchi, a daily newspaper is the media-based member of the CI which has an office (Fig. 114) at the Bandari House. The newspaper deals with reporting issues that directly or otherwise affect tourism in Tanga and thus the CI. An example of such an issue is the fact that Amboni caves are being threatened by the blasting of rocks to make cement, an activity that is conducted by a new cement company, Rhino. The company’s area also extends to a reserve site which is against the laws of nature reserve; the area was sold to the company. The matter was reported to the ministry as well as the regional authorities and according to information obtained by the newspaper staff at the regional office in September 2010, the issue is being tackled by both parties. Other activities related to the CI and that involve the news people are such as attending seminars, trainings in Tanga and outside, visits to CI firms, and receiving visitors who want to visit Amboni Caves and accompanying other CI members to the caves. Other media based CI members are Television and Radio. The representative of the media in the CI is the Mwananchi newspaper.
Fig. 114 Mwananchi newspaper office in Tanga
2.12 KILINDI SMALL SCALE GEMSTONE

The gemstone CI incorporates mainly small-scale miners located in Tanga and Mombo areas. Apart from Ng’ombeni area where the visit was undertaken, there are mines in Mombo (Mwenga, Mlembule, Kwaisewa, and Marange); Lushoto (Mlalo, Mlola, Mgwashi, Makanya, and Mnazi); Kilindi (Negero, Vadigwa, Kwediboma and Togoleani); and Simanjiro (Mererani, Loborosoit, Lelelai, Lemungu, and Kitwai). The mines in Kilindi have started to operate whereas those in the others are potential mines. By the effort of the facilitator, the CI members are members of the Tanzania Women Miners Association (TAWOMA).

2.12.1 Ng’ombeni miners

The firm has 95 small scale miners (Fig. 115) in Ng’ombeni, Daluni area. Gemstones mined by the firm according to members include amasist, yellow opal, copper ore, quasi crista, ruby, red garnet, green tourmaline, crystal face, conal pin, ruby rosite, agate, jasper, qalena, sapphire rocks, road light, and spactote (Fig. 116). All the miners have identity cards showing that they are members of the Gemstone CI (Fig. 117). In Ng’ombeni there are mines in Ng’ombeni, Nguuni, and Kalalani (Fig. 118). Their mining plots are legal; the minors have title deeds. The members were thankful to the CI for motivating them to take plots. Usually miners have camping sites (Fig. 119) where they stay during the time of the mining.

The CI is looking at possibilities of doing a community service by building a school in Mombo. It is planning to acquire 10 acres to build the school and 1 – 2 acres to build a hostel for the students and guests.

Main challenges facing the CI members were stated as 1; having inferior mining tools such as hoes, pick axes and so on that they use to break rocks in the mines (Fig. 119). These tools make the work more difficult, for example, a work supposed to take one month can take up to one year and the stones obtained are sometimes broken. In addition, the miners take much time in digging so that the amount of food they use surpasses the money that they will get for selling the gemstones; 2. low knowledge – the work is done out of experience that is passed down through generations; 3. market – currently the members sell to brokers who give them less money than would be expected; 4. no knowledge of value addition – members would like to be trained to add value to the gemstones such as how to properly cut a gemstone from the rock and finishing so as to produce high market value items. They also mentioned the need of machines which they can use to add value to the gemstones. They gave an example of a necklace made of garnet that sells at Tsh. 200,000 which is a much higher price than that of a garnet stone; 5. lack of knowledge in identifying the gemstones. One of the main challenges of the Facilitators is to reach the CI members considering the nature of the activities. To reach the mines one needs motor bikes (see Fig. 118).
Fig. 115 A meeting with small-scale miners at Ng’ombeni, Tanga

Fig. 116 Premise of, and gemstones mined by Ng’ombeni miners
Fig. 117 Identity cards of Small scale Gemstone CI in Tanga

Fig. 118 Ng’ombeni mines and transport means
Fig. 119 A mine, camping site, and rock pebbles with gemstones at a mining site in Ng’ombeni, Tanga
2.13 DODOMA OIL SEED

The Dodoma Oils Seed CI is based in Dodoma Region. The CI is currently working with sunflower oil seed but plans to include other seeds such as ground nuts, maize, and alfalfa in the future. The CI’s activities are done mainly in Dodoma municipality where there are processors and Mpwapwa District where the sunflower is farmed. The visit to the CI was based in Mpwapwa town (Fig. 120) where there was a short welcome meeting followed by discussions and interview of a farmer at the TCCIA district office (Fig. 120). Mpwapwa has 16 wards and in each ward there are farmers of sunflower. Farming is done once a year during the rainy season starting in January. Unfortunately, the rainy season is becoming shorter owing to climate change; the rainy season now is only a maximum of three months. Currently there are plans by the local government to start water projects that will use wind mills to effect irrigation of farms. Production is low because, among other things, farmers use low quality seeds that they produce themselves. The CI’s aim is also to help the farmers produce better quality seeds through farming practices such as the use of organic fertilisers (mainly cow manure). Farmers are currently using certified seeds that are supplied from Morogoro through Tanzania Seed Company (TanSeed and Asa) which they have to buy. No certified seeds are available in Dodoma.

Dodoma Oils Seed CI is strongly supported by the TCCIA at the Regional and District levels (Fig. 120). The facilitator and leaders of the CI explained that they also have a strong support of the district authority (Halmashaauri) and have, thus, kept on with their activities. Through the Halmashaauri farmers were provided with hoes, oxy-driven ploughs, and power tillers for ploughing the land and harvesting the crop. The areas and numbers of such incentives given to the farmers are as shown in Table 1.

Table 1. Areas, numbers and types of hoes, oxy-driven ploughs, and power tillers provided to sunflower farmers through the Mpwapwa District Authority

<table>
<thead>
<tr>
<th>Ward</th>
<th>Villages/Area/Group</th>
<th>Type of Incentive</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Berege</td>
<td>Berege</td>
<td>Oxy ploughs</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Chitemo</td>
<td>Oxy ploughs</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Mzase</td>
<td>Oxy ploughs</td>
<td>5</td>
</tr>
<tr>
<td>Mima</td>
<td>Mima</td>
<td>Oxy ploughs</td>
<td>10</td>
</tr>
<tr>
<td>Sazawa</td>
<td></td>
<td>Oxy ploughs</td>
<td>10</td>
</tr>
<tr>
<td>Igojione</td>
<td></td>
<td>Oxy ploughs</td>
<td>10</td>
</tr>
<tr>
<td>Chamanda</td>
<td></td>
<td>Oxy ploughs</td>
<td>10</td>
</tr>
<tr>
<td>Mtundizi</td>
<td></td>
<td>Oxy ploughs</td>
<td>10</td>
</tr>
<tr>
<td>Kibakwe</td>
<td></td>
<td>Oxy ploughs</td>
<td>10</td>
</tr>
</tbody>
</table>
Currently the CI has a volunteer acquired through the Volunteer Services Overseas (VSO) who is helping with development of plans for better farming and processing of the sunflower for a two-year contract; he has already stayed for one year. According to the volunteer, 32 farmers have been trained in better crop husbandry practices. He explained that there is a Christian organisation, Citizens' Network for Foreign Affairs (CNFA), which is planning to start a banking system which will deal with farming known as Benki Mazao (A search in the internet revealed that CNFA has a programme called Farmer-to-Farmer in East Africa). To start the process, a proposal is being written in order to get financial support (ruzuku). Four wards have received receipts that will enable their farmers to get ruzuku and also lower interests in the bank loans for higher production of high quality seeds. With such kind of loans CNFA will buy crops from farmers and sell seed & farming implements to the farmers. A seminar for sunflower (and other crops) processing has been conducted in Mpwapwa for farmers and processors and a work plan for the farmers is ready. The seminar included farmers’ representatives from the six wards of Mpwapwa. The volunteer stated that the aim of the CI, TCCIA, and CNFA is to help the farmers produce their own better quality seeds as well as process the seed to produce oil.

Apart from the collaboration with TCCIA and Halmashauri, the CI also works with the local government where they get extension officers to work with farmers. In addition, the chairperson of the CI is a community development officer (Afisa Maendeleo ya Jamii). The CI also collaborates with academia institutions including VETA in Dodoma and Mpwapwa Research Institute.

The general challenges faced by the members of the Dodoma Oil Seed CI are that there is short supply of seeds because production is not maximised. The second challenge is the TFDA/TBS process and requirements that are not easy to be met by the farmers. The CI Facilitator and
leaders are still asking themselves how they can help the farmers to obtain such certifications. Only one farmer has so far managed to get the bar codes through TBS.

![Fig. 120 Mwapwa town, TCCIA office in Mwapwa, and TCCIA officers at district and regional levels (bottom right)](image)

### 2.13.1 Sunflower farmers

A representative of the farmers was interviewed on all aspects related to farming sunflower and participating in the CI. Mr. Alex Simon Chiwanga explained that he owns 10 acres now to farm sunflower from 5 acres of last year. His farm is in Lukole in Kibakwe and Kingiti. To plough the land he has to follow a timetable that depends on availability of the cows (*mzunguko wa ng'ombe*) that can pull the oxy-driven ploughs. The cost of ploughing is 10,000 Tsh. per acre. One acre can produce 1 – 2 sacks of 65 - 70kg when there is low production and 4 -5 when there is high production. With better quality seeds one can get 7 – 10 sacks. His costs can be summarised as shown in table 2.
Mr. Chiwanga sells some of the seed within Mpwapwa but he is also a processor. Thus, after harvesting he extracts the oil which he sells but he also sells the coconut husks (mashudu). To extract the oil he has to take the seed to owners of processing machines. He currently extracts about 10 gallons of 20L each but he explained that with good farming practices five acres can produce more than 10 gallons. The main buyers of the oil are shop owners in Mpwapwa town, Kibakwe, and so on, and the main buyers of the husks are animal (mainly cattle) keepers. The price of 1L of oil is 1,700 – 1,800 Tsh. and that of husks is about 5,000 for six tins.

**Oil seed processors**

There has been an increase in the number of processors of oil seed. Whereas before the start of the CI there were 11 processing plants now there are 21, mainly SMEs. Most processors buy seeds from the farmers but some of them are also farmers. They sell the oil within Dodoma but some also sell in Iringa, Dar es Salaam, and Morogoro.

### 2.13.4 Nzige Oil Mills

Nzige Oil Mills processing plant extracts oil for people at a fee. The fee is 60 Tsh. per kg. People bring the seeds to this plant and wait in queues (Fig. 121) for their turn to get the service just like is done with milling maize to get the flour. The mill has two machines and it can process 8
tonnes of sunflower per day although the capacity may vary depending on number of people and sunflower production in the district. The machines (Fig. 122) have equal capacities, processing 4 tonnes each. Apart from extracting the oil, there is also a filtering machine in the mill where anyone who needs to filter his/her oil can get the service. However, the filtering does not produce double refined oil. The price of filtering the oil is 400 Tsh. per 20L gallon. The number of people who bring the seed for extraction has gone down recently because of low production of sunflower caused by changes in weather. The number stands at 10 people per day and sometimes not even 2 tonnes can be extracted. On the time of our visit there was no electricity during the daytime and people had left their seed in the queue (see Fig. 121) hoping that the service will be possible later.

The challenges faced by the mill were stated as: 1) high prices of spare parts for the machines, considering that they are imported especially from China. One spare called “warm” sells at 55,000 Tsh., it is used for one month only, and for the two machines one needs 6 such spare parts. The owner challenged the government to make available such spare parts through industries such as Mang’ula machine tools and Kilimanjaro machine tools; 2) lack of training in oil seed processing to produce high quality oil; 3) lack of knowledge in book keeping; machines are old models that are not efficient enough for the work-he needs a loan to buy new machines; 4) low processing technology; 5) lack of oil seed to process—whereas the machines would processing eight tonnes, it is now processing two tonnes only; 6) tax rates are too high.

Fig. 121 Premise of Nzige Oil Mills and a queue of clients’ sunflower seed sacks waiting for oil extraction service. The bottom right photo shows sunflower seeds and a seed cake
Sellers of oil

2.13.5 Mr. Abdalla Liula shop

Mr. Liula’s shop (Fig. 123) is located in Mpwapwa town. The owner of the shop buys oil from the farmers and sells at the premises. His sales are usually 5 gallons of 20 litres per day, at a price of 55,000 Tsh. per gallon. He usually purchases the oil in buckets and does the packaging into gallons at his shop. The main challenge of the seller is lack of packaging materials (see Fig. 123 where the oil is placed in recycle mineral drinking water bottles). With this kind of materials, a business person cannot sell outside their township because of copy rights of owners of the containers. Apart from Mr. Liula, it is said that there are more than 20 oil sellers in Mpwapwa town.

Fig. 123 Premise of, and products sold by Abdalla Liula Shop and sunflower oil packed in recycled mineral water bottles
2.14 EDUCATIONAL SERVICES-DAR ES SALAAM

Educational Services CI aims at providing services for schools starting from nursery schools to secondary and high schools. At the start of the CI it was difficult to get the members as each that was approached wanted to know what was there for them before joining the CI. To iron out these ideas the CI held 2 – 3 meetings with potential members. Following the initial meetings the CI conducted a needs assessment meeting to address collective needs rather than individual needs. The CI also identified their low hanging fruit activities. Members of the CI include those that offer services to secondary school students, day care centres, and furniture makers. Others are makers of equipment and apparatus, book sellers, offers of primary school services, and sellers of school items such as stationers. Secondary schools, according to members of the CI, have been difficult to get as members but the CI is making efforts to convince them.

2.14.1 Garetrace Education Centre

Garetrace centre (Fig. 124) is located at Tabata Liwiti. It is an education centre, kituo cha elimu in Kiswahili, for secondary school level students. Services offered to students at the centre are qualifying test, pre-form one studies, tuition, laboratory work, and library services. At its premise, the centre owns physics, chemistry, and biology laboratories, class rooms (Fig. 125), as well as chemicals/materials preparation rooms and an aquarium which is under construction (Fig. 126). At the time of the visit, students were found in classes preparing for form one exams.

![Fig. 124 Premises and classes of Garetrace education centre](image-url)
2.14.2 Edde Yane day care centre

The Edde Yane centre cares for small children as well as those up to six years old. It is equipped with children play and class facilities as well as school mini buses (Fig. 127). Children from 3 years up to 6 years study in this centre. A baby care class takes 3 year old children who are mainly kept there when parents are working. The kindergarten classes are in three categories: 3-4 years, 4-5 years, and 5-6 years. The children are placed in different classes according to the categories. To link the centre with other CI members, the desks used by the children are made by a CI member (see section 1.14.3 below).
2.14.3 Mwenge Express Furniture
The firm started in 2000 in another location. Currently it has 30 members with full leadership. School furniture made by the firm include beds, tables, desks, and benches (Fig. 128). Challenges faced by the firm are: 1. Premises-the firm has always worked at the road side (Fig. 128) and sometimes they are chased away by the city council. In addition, when it rains the furniture get wet and sometimes the items are destroyed by the wet conditions. 2. The price of
wood is high making the profit margin very small. The wood is purchased from Buguruni (also located in Dar es Salaam) and transported to the premise.

Fig. 128 Road side premises and school furniture made by Mwenge Express Furniture
2.15 TEXTILE HANDCRAFT - DAR ES SALAAM

The Textile handcraft CI based in Dar es Salaam started with 25 groups. It now has 102 registered members with more than 600 direct employees. The CI conducted Training Needs Assessment (TNA) for its 102 members and collected the same number of filled-in forms. Following the TNA, 103 groups were trained. The training was conducted using funds from various sources. After the training, 5 workshops were conducted.

The CI conducts Facilitators’ meetings every 2 months and 6 meetings with all the firms/members have been conducted. The Textile Handcraft CI has groups of designers, batik makers, tailors, and printers.

2.15.1 Marvellous Flotea Company Ltd

Marvellous Flotea is located in Mwenge, Dar es Salaam. Some of its facilities and products are shown in Fig. 129a,b. The main challenge of Marvellous Flotea is lack of designers. No other members of the CI were found on ground and who could be visited despite repeated efforts to get some.

Fig. 129a Premises, facilities, and products at the Marvellous Flotea in Dar es Salaam
Fig. 129 Facilities, and products at the Marvellous Flotea in Dar es Salaam
2.16 BUILDING CONSTRUCTION

The information given here for the Building Construction Cluster Initiative is based on a report obtained from the CI office in Dar es Salaam. The CI is located in Dar es Salaam and was officially started on 1st May 2008. The CI is one of the 11 second batch CIs and has managed to do situational analysis to identify the potential members of the CI. Those identified are Core stakeholders which are mostly Building Contractors, Engineers, Architects, Quantity Surveyors, Estates and Facility Managers, Suppliers (major construction items), Supplier and Equipment plant hire companies, and Informal Construction Workers. Consumers of Building Services such as Property Developers (Public), Property Developers (Private), and Clients were also identified. The third category of members are the Support Stakeholders which include trade and professional associations, financial institutions, government, regulatory bodies, academia, and research & development institutions.

Apart from these members, the CI also identified the following professional bodies: Trade and Professional Association, Architects Association of Tanzania (AAT), Association of Engineers Tanzania (ACET), Tanzania Institute of Quantity Surveyors (TIQS), Contractors Association of Tanzania (CATA), and Association of Informal Construction Workers. Regulatory bodies include Contractors Registration Board (CRB), Engineers Registration Board (ERB), and Architects and Quantity Surveyors Board. The Academia is mainly CoET-UDSM, Dar Es Salaam Institute of Technology (DIT), and VETA while Research and Development Institutes include National Housing & Building Research Agency and Tanzania Bureau of Standards.

Thus, as per December 2010, the CI had 1,336 potential members channelled as follows: 1) Building and Building Services Contractors- 1,144; 2) Consulting Engineers- 105; 3) Architects- 60; 4) Quantity Surveyors- 26; and 5) Equipment Suppliers- 1. According to the Facilitator, the number will increase significantly when other potential cluster members especially from the informal sector are contacted.

Formation of the leadership team of CI shows that since CI is potentially large and requires involvement of cluster members, formation of the leadership team has been a challenge. However the CI has been able to choose a Secretary and the facilitator acts as the Chairperson. The facilitators of the CI held one meeting on 22 August 2008 with support stakeholders which was attended by high level officials from seven institutions including the ERB, ACET, Architects and Quantity Surveyors Registration Board (AQRB), Institution of Engineers Tanzania (IET), Tanzania Institute of Quantity Surveyors (TIQS), CRB, and CATA. The outcome of the meeting was that the cluster initiative was well received and the institutions promised to support the initiative. It was resolved that areas of support from each institution be identified and documented to enable them to participate effectively.

The CI has also identified its initial “low hanging fruit” activities (Resource sharing among cluster members especially contractors and Joint venture tendering for works) and is awaiting to conduct them when funds are received.

Apart from these activities, two members of the CI have been trained in Business Management Skills under the ISCP. The CI has also (in collaboration with ISCP-TZ) organised a benchmarking tour for the Uganda Clusters Programme Members. The tour was beneficial in that
it enabled the Cluster members to share experiences and learn from each other the best practices in developing and managing the cluster development process and helped them improve their business.

The main challenges of the CI are: 1. inability of potential cluster members to appreciate the benefits that the initiative will deliver; 2. breaking the red tape in some of the public institutions expected to support the cluster; and mobilisation of informal construction workers who are a major component in the Building Industry (this however is being worked at with the assistance of the National Construction Council).
2.17 BIOFUELS - DAR ES SALAAM AND MOROGORO

The CI started with an idea of bringing together large companies working with biofuel, small-scale producers of biofuel, farmers of biofuel producing crops, and users of the biofuel. According to the Facilitator, the large companies did not show interest and small-scale producers had no funds to keep producing biofuel. He mentioned a small-scale producer company called Mafuta Sasa which was also mentioned by Msuya and Chisawillo (2009a, b) as the only producer. According to Msuya and Chisawillo (2009) Mafuta Sasa owns a small distillation plant where discarded oil from hotels is distilled to make diesel (Fig. 130). However, according to the Facilitator, the company was funded by a USA based initiative which no longer supports the company and thus, the company has no funds now. He explained that he had contacted the Tanzania Traditional Energy Development Organization (TaTEDO) for support but after sometime TaTEDO pulled out because of lack of funds. He also contacted one entrepreneur who was interested in making briquettes from worn out coconut tree trunks. The entrepreneur was provided with US$ 1,000 but after some time he disappeared with the funds. The Facilitator stated that there were no actors on ground (the core of CI) and activities to start the CI.

The CI, however, has potential members and firms such as farmers of Jatropha plant used for production of fuel along the coast near Dar es Salaam, Mlandizi-Vikindu, and Morogoro. Some farmers produce vanilla. Other potential plants that are better than Jatropha are also available.

![Image of Mafuta Sasa distillation plant](source)

Fig. 130 The diesel distillation plant owned by Mafuta Sasa Company in Dar es Salaam.

Source: Msuya and Chisawillo 2009b.
2.18 ICT DAR ES SALAAM
No information was obtained. The CI facilitator did not arrange for the visit and they did not send their report.

2.19 DAR ES SALAAM WOOD CARVING
No information was obtained. The CI facilitator could not be contacted, did not arrange for the visit, and they did not send their report.

3 CONCLUDING REMARKS
It is concluded that out of the eight initial cluster initiative started in late 2005, seven of them are doing well whereas one needs a new boost. The seven CIs need funding to continue with their innovative activities and become more competitive. The one CI has a high potential with members at ground who are waiting to start working together as a cluster initiative.

For the cluster initiatives of the second batch that was started in 2008, some of them are carrying on with their planned activities while others require financial support to continue with their activities. However, after the start up using the little funding from ISCP most of the cluster firms have carried on with their planned activities using their own resources although at low pace caused by lack of enough funds.

4 REFERENCES
5 ACKNOWLEDGEMENTS

I would like to thank all the people who helped me in one way or another including facilitators and members of the cluster initiatives that were visited. Different officials from government and private sectors are thanked for their cooperation. Majority of the people interviewed are listed in the table below. However, those whose names were not noted during the visit (e.g. participants in group meetings) are thanked as well for their cooperation.

<table>
<thead>
<tr>
<th>S/No.</th>
<th>Name/Group</th>
<th>Affiliation/Cluster Initiative</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Leonard Rweyemamu</td>
<td>Neutraceuticals</td>
</tr>
<tr>
<td>2</td>
<td>Heavenlight</td>
<td>Stayfit Foods/Neutraceuticals</td>
</tr>
<tr>
<td>3</td>
<td>Subilaga Kaloa</td>
<td>Fort Processing/Neutraceuticals</td>
</tr>
<tr>
<td>4</td>
<td>Samuel Asman</td>
<td>Mushroom</td>
</tr>
<tr>
<td>5</td>
<td>Sekela Mwakolo</td>
<td>Mushroom</td>
</tr>
<tr>
<td>6</td>
<td>Mr. Mazambwa</td>
<td>Mushroom</td>
</tr>
<tr>
<td>7</td>
<td>Domina Ezra Fredrick</td>
<td>Mushroom</td>
</tr>
<tr>
<td>8</td>
<td>Hamisa Abeid</td>
<td>Mushroom</td>
</tr>
<tr>
<td>9</td>
<td>Flotea Masawe</td>
<td>Marvellous Flotea/Textile</td>
</tr>
<tr>
<td>10</td>
<td>Ranson Lema</td>
<td>Textile</td>
</tr>
<tr>
<td>11</td>
<td>Rose Makoyola</td>
<td>Textile</td>
</tr>
<tr>
<td>12</td>
<td>Doreen Jacob</td>
<td>Marvellous Flotea</td>
</tr>
<tr>
<td>13</td>
<td>Mwanausi Mwalim</td>
<td>Bwelelo/Seaweed</td>
</tr>
<tr>
<td>14</td>
<td>Fatma Ramadhani</td>
<td>Bwelelo/Seaweed</td>
</tr>
<tr>
<td>15</td>
<td>Toum Budda</td>
<td>Tusonge Mbele, Kidoti/Seaweed</td>
</tr>
<tr>
<td>16</td>
<td>Mashavu Aziz</td>
<td>Bwelelo/Seaweed</td>
</tr>
<tr>
<td>17</td>
<td>Amina Khamis</td>
<td>Bwelelo/Seaweed</td>
</tr>
<tr>
<td>18</td>
<td>Bakari Machano</td>
<td>Kidoti/Seaweed</td>
</tr>
<tr>
<td>19</td>
<td>Hakim Machano</td>
<td>Chwaka/Seaweed</td>
</tr>
<tr>
<td>20</td>
<td>Ali Mrisho</td>
<td>Chwaka/Seaweed</td>
</tr>
<tr>
<td>21</td>
<td>Salama Khamis</td>
<td>Bwelelo/Seaweed</td>
</tr>
<tr>
<td></td>
<td>Name</td>
<td>Occupation/Activity</td>
</tr>
<tr>
<td>---</td>
<td>-----------------------------</td>
<td>--------------------------------------------</td>
</tr>
<tr>
<td>22</td>
<td>Mwanahija Juma</td>
<td>Bweleo/Seaweed</td>
</tr>
<tr>
<td>23</td>
<td>Mwanaisha Makame</td>
<td>Furahia Wanawake, Paje/Seaweed</td>
</tr>
<tr>
<td>24</td>
<td>Patima Haji</td>
<td>Furahia Wanawake, Paje/Seaweed</td>
</tr>
<tr>
<td>25</td>
<td>Safia Ali Jecha</td>
<td>Nyamanzi/Seaweed</td>
</tr>
<tr>
<td>26</td>
<td>Zainabu Mharami</td>
<td>Nyamanzi/Seaweed</td>
</tr>
<tr>
<td>27</td>
<td>Fatuma Ramadhani Pandu</td>
<td>Bweleo/Seaweed</td>
</tr>
<tr>
<td>28</td>
<td>Juma Vuai</td>
<td>Kisakasaka/Seaweed</td>
</tr>
<tr>
<td>29</td>
<td>Harusi Hamad</td>
<td>Tusife Moyo, Kidoti/Seaweed</td>
</tr>
<tr>
<td>30</td>
<td>Juma Zaidi</td>
<td>Bweleo/Seaweed</td>
</tr>
<tr>
<td>31</td>
<td>Mwatum Juma</td>
<td>Bweleo/Seaweed</td>
</tr>
<tr>
<td>32</td>
<td>Mwajuma Mwinyi</td>
<td>Bweleo/Seaweed</td>
</tr>
<tr>
<td>33</td>
<td>Mwanabasi Juma</td>
<td>Bweleo/Seaweed</td>
</tr>
<tr>
<td>34</td>
<td>Safia Hashim</td>
<td>Bweleo/Seaweed</td>
</tr>
<tr>
<td>35</td>
<td>Rehema Ali</td>
<td>Tusife Moyo, Kidoti/Seaweed</td>
</tr>
<tr>
<td>36</td>
<td>Kheri Mussa</td>
<td>Bweleo/Seaweed</td>
</tr>
<tr>
<td>37</td>
<td>Rajab Ali</td>
<td>Min. of Agriculture/Seaweed</td>
</tr>
<tr>
<td>38</td>
<td>Oscar Kibazohi</td>
<td>Biofuel</td>
</tr>
<tr>
<td>39</td>
<td>Ezekiel Mwaikono</td>
<td>Cassava</td>
</tr>
<tr>
<td>40</td>
<td>Nuru Mohammed</td>
<td>Boko/Cassava</td>
</tr>
<tr>
<td>41</td>
<td>Michael Mwamkai</td>
<td>Visiga/Cassava</td>
</tr>
<tr>
<td>42</td>
<td>Mfwangavo group</td>
<td>Msongola/Cassava</td>
</tr>
<tr>
<td>43</td>
<td>Tupendane group</td>
<td>Msongola/Cassava</td>
</tr>
<tr>
<td>44</td>
<td>Tujiendeleze group</td>
<td>Msongola/Cassava</td>
</tr>
<tr>
<td>45</td>
<td>Sofia</td>
<td>Juhudi group/Cassava</td>
</tr>
<tr>
<td>46</td>
<td>Anthony</td>
<td>Juhudi group/Cassava</td>
</tr>
<tr>
<td>47</td>
<td>Hamida Makaranga</td>
<td>Mazupe Products/Cassava</td>
</tr>
<tr>
<td></td>
<td>Name</td>
<td>Company/Group</td>
</tr>
<tr>
<td>---</td>
<td>--------------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>48</td>
<td>Charles Mabagara</td>
<td>Rice Processing</td>
</tr>
<tr>
<td>49</td>
<td>Seif Omari</td>
<td>Bega kwa bega/Rice Processing</td>
</tr>
<tr>
<td>50</td>
<td>Mrs Kibiriti</td>
<td>Rice Processing</td>
</tr>
<tr>
<td>51</td>
<td>Eng. Peter Chisawillo</td>
<td>Intermech Engineering/Morogoro Engineering</td>
</tr>
<tr>
<td>52</td>
<td>Mr. Sokola</td>
<td>Sokola Workshop/Morogoro Engineering</td>
</tr>
<tr>
<td>53</td>
<td>Mr. Kaya Kazema</td>
<td>Demaco/Morogoro Engineering</td>
</tr>
<tr>
<td>54</td>
<td>Rajab Shemshuza</td>
<td>Shemshuza workshop/Morogoro Engineering</td>
</tr>
<tr>
<td>55</td>
<td>Hilary Shirima</td>
<td>Shemshuza workshop/Morogoro Engineering</td>
</tr>
<tr>
<td>56</td>
<td>Salvatory Shayo</td>
<td>Matocha Enterprises/Morogoro Engineering</td>
</tr>
<tr>
<td>57</td>
<td>Chawia</td>
<td>C+F Workshop/Morogoro Engineering</td>
</tr>
<tr>
<td>58</td>
<td>Fadhili</td>
<td>C+F Workshop/Morogoro Engineering</td>
</tr>
<tr>
<td>59</td>
<td>Abdalla Shaban Chunga</td>
<td>Dula Workshop/Morogoro Engineering</td>
</tr>
<tr>
<td>60</td>
<td>Salehe Bozi</td>
<td>CHAMSEMO/Morogoro Engineering</td>
</tr>
<tr>
<td>61</td>
<td>Salum Idd Salum</td>
<td>Kaka Workshop/Morogoro Engineering</td>
</tr>
<tr>
<td>62</td>
<td>Prof. B. Tiisekwa</td>
<td>Morogoro Fruit</td>
</tr>
<tr>
<td>63</td>
<td>Warda Waziri</td>
<td>MUDE/Morogoro Fruit</td>
</tr>
<tr>
<td>64</td>
<td>Ramadhani Sigareti</td>
<td>Mkwajuni Youth Group/Morogoro Fruit</td>
</tr>
<tr>
<td>65</td>
<td>Hamad Hassan</td>
<td>Mkwajuni Youth Group/Morogoro Fruit</td>
</tr>
<tr>
<td>66</td>
<td>Dotto Tililo</td>
<td>Rahaleo Group/Morogoro Fruit</td>
</tr>
<tr>
<td>67</td>
<td>Richard Tibikunda</td>
<td>Morogoro Breweries/Morogoro Fruit</td>
</tr>
<tr>
<td>68</td>
<td>Ms. Subira</td>
<td>Morogoro Breweries/Morogoro Fruit</td>
</tr>
<tr>
<td>69</td>
<td>Euvensia G. Mapunda</td>
<td>Nyampamba Food/Morogoro Fruit</td>
</tr>
<tr>
<td>70</td>
<td>Daniel Matemu</td>
<td>Ben’s winery/Morogoro Fruit</td>
</tr>
<tr>
<td>71</td>
<td>Salma Said Ilyas</td>
<td>Mbamba Foods/Morogoro Fruit</td>
</tr>
<tr>
<td>72</td>
<td>Esther Muffui</td>
<td>Macky Foods/Morogoro Fruit</td>
</tr>
<tr>
<td>73</td>
<td>Dr. Enock Masanja</td>
<td>Sisal</td>
</tr>
<tr>
<td>No.</td>
<td>Name</td>
<td>Organization</td>
</tr>
<tr>
<td>-----</td>
<td>-------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>74</td>
<td>Fredrick Malika</td>
<td>Sisal</td>
</tr>
<tr>
<td>75</td>
<td>Francis Nkuba</td>
<td>Katani Ltd/ Sisal</td>
</tr>
<tr>
<td>76</td>
<td>Ernest Mbezi</td>
<td>Makuyuni sisal nursery/ Sisal</td>
</tr>
<tr>
<td>77</td>
<td>Edward Ngoda</td>
<td>Makuyuni sisal nursery/ Sisal</td>
</tr>
<tr>
<td>78</td>
<td>Abeid Nassor Kaniki</td>
<td>Makuyuni sisal nursery/ Sisal</td>
</tr>
<tr>
<td>79</td>
<td>Muhisin Said Kasherente</td>
<td>Makuyuni sisal nursery/ Sisal</td>
</tr>
<tr>
<td>80</td>
<td>Stephano Martin Shesha</td>
<td>Makuyuni sisal nursery/ Sisal</td>
</tr>
<tr>
<td>81</td>
<td>Mr. Baraka</td>
<td>Maganga Factory/ Sisal</td>
</tr>
<tr>
<td>82</td>
<td>Hamisi Mapinda</td>
<td>Tanzania Sisal Board, Tanga/ Sisal</td>
</tr>
<tr>
<td>83</td>
<td>Charles Hoza</td>
<td>Tanga tourism</td>
</tr>
<tr>
<td>84</td>
<td>Paul Bwoki</td>
<td>Tanga tourism</td>
</tr>
<tr>
<td>85</td>
<td>Sadiki Shembilu</td>
<td>TAYODEA/Tanga tourism</td>
</tr>
<tr>
<td>86</td>
<td>Mzee Tarimo</td>
<td>Tanga tourism</td>
</tr>
<tr>
<td>87</td>
<td>Ashura</td>
<td>TAYODEA/Tanga tourism</td>
</tr>
<tr>
<td>88</td>
<td>Aisha Kisoki</td>
<td>Kokoliko Fashion/Tanga tourism</td>
</tr>
<tr>
<td>89</td>
<td>Esther Kilua</td>
<td>Prime Rose/Tanga tourism</td>
</tr>
<tr>
<td>90</td>
<td>Kulthum Selemani</td>
<td>Mbuyuni Batik/Tanga tourism</td>
</tr>
<tr>
<td>91</td>
<td>Rukia Ali</td>
<td>Rahagani Women Group/Tanga tourism</td>
</tr>
<tr>
<td>92</td>
<td>Hafifa Kijazi</td>
<td>Rahagani Women Group/Tanga tourism</td>
</tr>
<tr>
<td>93</td>
<td>Fidea M. Sarakikya</td>
<td>Tujitambue Group/Tanga tourism</td>
</tr>
<tr>
<td>94</td>
<td>Mwega Mabelo</td>
<td>Ukili Art Group/Tanga tourism</td>
</tr>
<tr>
<td>95</td>
<td>Selina Hilali Komba</td>
<td>Maroda Enterprises/Tanga tourism</td>
</tr>
<tr>
<td>96</td>
<td>Evelyn</td>
<td>Tongwe Art Group/Tanga tourism</td>
</tr>
<tr>
<td>97</td>
<td>Fatuma Khatib Hassan</td>
<td>TWAN Group/Tanga tourism</td>
</tr>
<tr>
<td>98</td>
<td>Athumani Ali Kisaga</td>
<td>Kimweri Group/Tanga tourism</td>
</tr>
<tr>
<td>99</td>
<td>Hadija Fussi</td>
<td>Sunna Food Processing/Tanga tourism</td>
</tr>
<tr>
<td></td>
<td>Name</td>
<td>Company/Group</td>
</tr>
<tr>
<td>---</td>
<td>-------------------------------</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td>100</td>
<td>Fabiola Yakobo</td>
<td>Ndianao Design/Tanga tourism</td>
</tr>
<tr>
<td>101</td>
<td>Oswin Hosea Bondai</td>
<td>Coconut Art craft Group/Tanga tourism</td>
</tr>
<tr>
<td>102</td>
<td>Anna Ismail Njogoro</td>
<td>Dolphin Hotel/Tanga tourism</td>
</tr>
<tr>
<td>103</td>
<td>Fatuma</td>
<td>Vivid Sign writer/Tanga tourism</td>
</tr>
<tr>
<td>104</td>
<td>Maryam Athman Makoko</td>
<td>Endelevu Art Group/Tanga tourism</td>
</tr>
<tr>
<td>105</td>
<td>Leila Goronga Jumbe</td>
<td>Gemstone</td>
</tr>
<tr>
<td>106</td>
<td>Abdallah Kalage</td>
<td>Gemstone</td>
</tr>
<tr>
<td>107</td>
<td>Hamza Mdoe</td>
<td>Gemstone</td>
</tr>
<tr>
<td>108</td>
<td>Julius Mshakandoto</td>
<td>Gemstone</td>
</tr>
<tr>
<td>109</td>
<td>Hassan Omar</td>
<td>Gemstone</td>
</tr>
<tr>
<td>110</td>
<td>Rashid Mohammed</td>
<td>Gemstone</td>
</tr>
<tr>
<td>111</td>
<td>Laurent Kambona</td>
<td>Gemstone</td>
</tr>
<tr>
<td>112</td>
<td>Major</td>
<td>Gemstone</td>
</tr>
<tr>
<td>113</td>
<td>Fred Azaria</td>
<td>Oil Seed</td>
</tr>
<tr>
<td>114</td>
<td>Faustine Mwakalinga</td>
<td>TCCIA/Oil Seed</td>
</tr>
<tr>
<td>115</td>
<td>Nason Mwedimage</td>
<td>Oil Seed</td>
</tr>
<tr>
<td>116</td>
<td>Esmindo Cuda</td>
<td>Oil Seed</td>
</tr>
<tr>
<td>117</td>
<td>Alex Simon Chiwanga</td>
<td>Oil Seed</td>
</tr>
<tr>
<td>118</td>
<td>Liula Abdallah</td>
<td>Oil Seed</td>
</tr>
<tr>
<td>119</td>
<td>Ezekiel Daniel Nzige</td>
<td>Oil Seed</td>
</tr>
<tr>
<td>120</td>
<td>Allen Mosha</td>
<td>TCCIA/Oil Seed</td>
</tr>
<tr>
<td>121</td>
<td>Aloyce Malekela</td>
<td>Bagamoyo tourism</td>
</tr>
<tr>
<td>122</td>
<td>Alan Lugome</td>
<td>Bagamoyo tourism</td>
</tr>
<tr>
<td>123</td>
<td>Isdori Emanuel</td>
<td>Bagamoyo tourism</td>
</tr>
<tr>
<td>124</td>
<td>Emanuel Daniel</td>
<td>Ujamaa Group/ Bagamoyo tourism</td>
</tr>
<tr>
<td>125</td>
<td>Ali S. Seif</td>
<td>Tanzania Ports Authority, Bagamoyo</td>
</tr>
<tr>
<td>Page</td>
<td>Name</td>
<td>Company/Position</td>
</tr>
<tr>
<td>------</td>
<td>--------------------------</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td>126</td>
<td>Pengo Michael</td>
<td>Catholic Museum/Bagamoyo tourism</td>
</tr>
<tr>
<td>127</td>
<td>Cosmas Morris Honero</td>
<td>Top Life Bar/Bagamoyo tourism</td>
</tr>
<tr>
<td>128</td>
<td>Davis Baitani</td>
<td>Building Construction</td>
</tr>
<tr>
<td>129</td>
<td>Edward Mhamilawa</td>
<td>Educational Services</td>
</tr>
<tr>
<td>130</td>
<td>Desderia K. Mhamilawa</td>
<td>Edeyane Day Care/Educational Services</td>
</tr>
<tr>
<td>131</td>
<td>Gervas Kamungisha</td>
<td>Mwenge Express Furniture/Educational Services</td>
</tr>
<tr>
<td>132</td>
<td>Prof. Hussein Mongi</td>
<td>Arusha Vegetable</td>
</tr>
<tr>
<td>133</td>
<td>Eng. Ntelle</td>
<td>CARMATEC/Arusha Vegetable Seed</td>
</tr>
<tr>
<td>134</td>
<td>Richard Mmari</td>
<td>TEMDO/Arusha Vegetable Seed</td>
</tr>
<tr>
<td>135</td>
<td>Silvest N. Samali</td>
<td>HORTI Tengeru/Arusha Vegetable Seed</td>
</tr>
<tr>
<td>136</td>
<td>Dr. Abdou Tenkouano</td>
<td>AVRDC/Arusha Vegetable Seed</td>
</tr>
<tr>
<td>137</td>
<td>Takemore Chogomoka</td>
<td>AVRDC/Arusha Vegetable Seed</td>
</tr>
<tr>
<td>138</td>
<td>Chris Ojiewo</td>
<td>AVRDC/Arusha Vegetable Seed</td>
</tr>
<tr>
<td>139</td>
<td>Ravikant Bhalerao</td>
<td>Red Gold/Arusha Vegetable Seed</td>
</tr>
<tr>
<td>140</td>
<td>Maryam Mongi</td>
<td>Alpha Seed/Arusha Vegetable Seed</td>
</tr>
</tbody>
</table>
### 6.1 Annex i The cluster visit schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Place</th>
<th>Cluster Initiative</th>
</tr>
</thead>
<tbody>
<tr>
<td>28/11-7/12</td>
<td>PHONE CALLS</td>
<td></td>
</tr>
<tr>
<td>24 - 25 Nov</td>
<td>Dar</td>
<td>Neutraceuticals, Mushrooms, Textile</td>
</tr>
<tr>
<td>26-27 Nov</td>
<td>Zanzibar</td>
<td>Seaweed</td>
</tr>
<tr>
<td>8 - 9 Dec-10</td>
<td>Kibaha</td>
<td>Cassava</td>
</tr>
<tr>
<td>11-14 Dec</td>
<td>Morogoro</td>
<td>Rice, Engineering, Fruits</td>
</tr>
<tr>
<td>15-18 Dec</td>
<td>Tanga</td>
<td>Sisal, Cultural, Gemstone</td>
</tr>
<tr>
<td>19-20 Dec</td>
<td>Dodoma</td>
<td>Oil seed</td>
</tr>
<tr>
<td>21-22 Dec</td>
<td>Bagamoyo</td>
<td>Cultural</td>
</tr>
<tr>
<td>11-12 Jan -11</td>
<td>Dar</td>
<td>Building construction, Educational services</td>
</tr>
<tr>
<td>27-29 Jan</td>
<td>Arusha</td>
<td>Arusha seed</td>
</tr>
</tbody>
</table>