

INDUSTRY-UNIVERSITY CLUSTER: THE UGANDA GATSBY TRUST EXPERIENCE

by

Eng. Dr. Joseph K Byaruhanga Uganda Gatsby Trust, Makerere University, Uganda

ABSTRACT

This paper gives an insight on to how Uganda Gatsby Trust (UGT) has gone about establishing and implementing cooperation with small scale manufacturing (technology-driven) enterprises in Uganda.

The paper describes how UGT utilizes University resources to assist small- scale enterprises to improve on their levels of technology and thereby enable them to grow. It illustrates the benefits derived by the University from the cooperation in form of publicity, industrial attachments for her students and entrepreneurial skills being learnt by both the students and staff of the Faculty.

Also highlighted is the necessity for an institutional framework to be established to foster continuous interaction between the University and small-scale enterprises and the public sector. In UGT's case, the institutional framework is called GATSBY ENTERPRISE CLUB. The paper asserts that for the collaboration to be embraced especially by the small-scale enterprises (SSEs) which are always fearful of exploitation, there must be tangible benefits for them. On the other hand, the UGT does not want impose her services on SSEs, so she has insisted on delivering demand- driven services and some payments for them.

On the, third dimension, Governments (Local and Central) have been very supportive of UGT's work because the Trust is assisting in SME development in Uganda.

The paper shows evidence of the necessity to build mechanisms, which will lead to sustainability of UGT and the Gatsby Clubs so that the cooperation and the ensuing benefits of exchange of knowledge and technology transfer can continue. The paper finally gives the achievements of the collaboration between UGT and small enterprises in form of the, outreach achieved by December 2003, which is quite significant; and affecting the lives of the entrepreneurs in the towns where Gatsby Clubs are found.

MISSION STATEMENT OF UGT

Uganda Gatsby Trust (UGT) was launched by the Faculty of Technology, Makerere University to act as an institutional framework through which linkages with the Small Scale Enterprises (SSE) sector could be established and maintained. UGT therefore has the following mission.

"To assist in developing the technological base of the small enterprise sector in Uganda and enabling the growth of such enterprises".

UGT started in 1994 with seed funding from the Gatsby Charitable Foundation (GCF) of U.K. It has engaged in income generation and seeking other donors so as to diversify funding sources and ensure sustainability.

FOCUS ON THE SSE SECTOR

UGT specifically focused on working with the SSE sector because it is very crucial for economic development and poverty alleviation. In Uganda's case SSEs:

- Contribute over 20% of the GDP second to agriculture.
- Employs over 20% of the workforce
- Produces about 80% of the manufactured output. (Uganda Bureau of Statistics, 1991)

UGT initially focused on small-scale enterprises with the following characteristics. ^ Involved in transformation of materials and value addition through application of technology. ^ Must be on going businesses; not start-ups. ^ Should be creating jobs

UGT works with enterprises in the following sub sectors:

- (a) carpentry and joinery metal
- (b) metal fabrication
- (c) tailoring, knitting, tie and dye
- (d) grain milling
- (e) restaurants
- (f) hair styling

- (g) bakery
- (h) feed mill making
- (i) garages
- (j) technical services
- (k) foundry
- (l) solar drying etc.

SPECIFIC OBJECTIVES

UGT has the following specific objectives:

To develop a network of micro-enterprises linked to the Faculty of Technology, Makerere University, in order to increase the quality and value of their output.

- > To introduce students to the opportunities and potential of the small-scale sector and to assist them develop technologies appropriate to it.
- > To assist small scale enterprises overcome their problems through extension service.
- > To enable SSEs to access credit for their growth.

CONSTRAINTS OF THE SSE SECTOR

At the start, UGT carried out a needs assessment and found that the major problems faced by the enterprises were many and varied. These included: (UGT Baseline, 1995)

- ^ Poor managerial skills ^ Lack of working capital
- ^ Lack of up-to-date machinery and equipment ^ Lack of technical skills ^ Inadequate working spaces ^ Frequent power cuts, etc.

These varied from sector to sector and have been confirmed by UNIDO under the Uganda Integrated Programme (Byaruhanga, 1999)

UGT therefore designed her interventions to solve as many of these problems as possible.

UGT desires to offer services to SSEs in a way that:

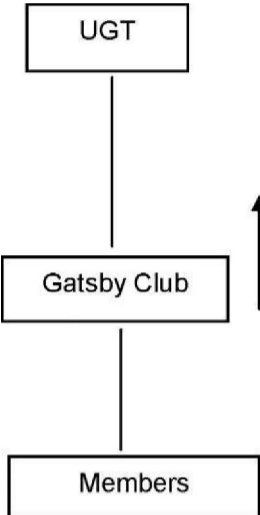
- They were demand-driven
- There was payments of services by the recipients
- They led to improvement in performance
- A clear path to sustainability could be developed
- They led to a continuous interaction between UGT and the clients and among themselves.

This led to the Gatsby Enterprise Club Idea. A Gatsby club comprises of members who are usually entrepreneurs in the small manufacturing sector. The members pay a joining fee of Shs 100,000/= (US\$ 50) and an annual subscription of Shs 50,000/= (US\$ 25). This ensures that only serious enterprises join Gatsby Clubs.

The Clubs provide an institutional framework through which services are provided to paid-up members. In return the members make their payments through the club.

Services

Membership Fees



The Clubs have been registered as Community Based Organizations (CBOs) so they are different legal entities from UGT.

Services

UGT offers the following package services to paid-up Gatsby Club members so as to assist them solve their problems and grow. The services are provided by the Faculty staff.

- 1) Training courses/ workshops
- 2) Business plans
- 3) Visitation of UGT Staff
- 4) Club Savings and Credit Scheme
- 5) Student Attachment
- 6) Local Showroom
- 7) Participate in student projects
- 8) Research and Development (technology transfer)
- 9) UGT Revolving Fund
- 10) Access to UGT Showroom in Kampala
- 11) Sponsorship to National and Regional Trade Fair; etc.

Management of Clubs

The club is managed by an executive elected from among members. This establishes ownership of the club and ensures full participation in its affairs by members. The executive comprises of:

- (i) Chairman
- (ii) Vice Chairman

- (iii) Secretary
- (iv) Treasurer
- (v) Committee Members.

The executive is responsible for liaising with UGT Headquarters about service delivery to the members. The club may have some committees such as:

- Loans Committee
- Development Committee.

These assist the executive to implement various activities.

As the membership grew, there arised a need for contact office. A full time administrator mans such an office comprised of busy business people. The administrator's main duties include:

- Receiving visitors and handing out promotional materials about the club and UGT.
 - Delivering messages to members.
- Assisting members fill in application forms, business plan outline forms etc.
- Running the office affairs including bookkeeping, receipt and banking of funds, drafting minutes and reports for the Executive.

Club Offices/ Showroom

Sometimes the office is combined with a Showroom. In such a case the club employs a showroom attendant to market members' products. The members are charged 5% sales commission to sustain the club operations.

TECHNOLOGY DEVELOPMENT AND TRANSFER

The technology to be developed begins as an idea from industry= usually the technology is needed for solving of a problem. The idea is investigated usually as a student project or by the innovations department leading to a prototype. The prototype is tested both in the workshop and the field at the client's work place with UGT staff carrying out close monitoring.

To make the technology transfer demand-driven, the client has to make a contribution to the development effort. This way, the following technologies have been developed and transferred to SSEs.

- (a) Timber dryer/ multi-purpose dryer which uses solar energy or saw dust as fuel.
- (b) Solar water heater
- (c) Charcoal briquette cooking machine
- (d) Sun dried interlocking bricks for low cost housing
- (e) Economic baking oven etc.

Other forms of technology transfer involving offer of technical assistance e.g.

- Advice on choice of machinery and technology to enable a tailor make high quality suits. Her market includes Bank of Uganda, Uganda Breweries, and International Schools.
- Advice to a maize miller on how to set up a locally fabricated maize drying plant which uses agricultural wastes as fuel. The maize is for export.
- Advice to a foundry on how to change from use of a diesel engine to a blower run by a single phase motor.

These seemingly simple advices make a great difference in quality of product, market opportunities and ultimately the profitability of the enterprise.

OTHER COLLABORATIONS

UGT has developed relationships with local Associations working with SSEs. This introduces synergy and collaboration between UGT and the associations for the benefit of SSEs in the area. Such collaboration has been established with:

- Uganda Small Scale Industries Association
- Masindi Small Scale Industries Association
- Northern Uganda Manufacturers Association.

UGT also has collaboration with the Ministry of Tourism, Trade and Industry, various donors and NGOs.

PROGRESS MADE AS OF DECEMBER 2003

| Year | Achieved by 2000 | Achieved by 2003 |
|--|------------------|------------------|
| No. of Gatsby Clubs | 11 | 18 |
| No. of Club Members | 500 | 1,200 |
| Enterprises Assisted To Grow | 250 | 600 |
| Small Industrial Park | 0 | 2 |
| Course/Seminar Participants (Cumulative) | 3,000 | 15,000 |
| Members Sponsored to Trade Fairs | 200 | 400 |
| Members Receiving Extension Services | 700 | 1,200 |
| Mentorship Visits | 100 | 6,000 |
| Student Project Sponsored | 130 | 200 |
| Appropriate Technologies Developed | 4 | 8 |
| Training Manuals Development | 1 | 3 |
| Loan Portfolio | Shs.300 million | Shs.600 million |
| Newsletters Produced | 1 volume | 8 |

Note: 1US\$ 1,900 Uganda shillings

Number of Clubs

The Gatsby club idea has evolved into a reality such that we now have 18 clubs countrywide.

The encouraging trend is that the newer clubs such as that of Arua, Hoima and Kasese, have been established after demand (request) by prospective entrepreneurs.

Membership

The membership of UGT now stands at over 1,200 SMEs in the 18 Clubs. The most satisfying result of the analysis was that there was about 50% female participation in member enterprises.

Industrial Parks

In 2000, UGT was requested by Club members to assist them alleviate the problem of workspace because the rents were very high and were continuously being evicted leading to interruptions in their businesses. This led to initiation of a programme of establishing industrial parks for Club members.

The idea was that a park would be constructed -according to a design by members and they would enter and pay them off along a hire-purchase arrangement. So far:

- ^ The Jinja Business Park, which is nearing completion, has 20 business units each with an area of 20 sq. m. and one anchor tenant's warehouse with an area of 750 sq. m.

- ^ Land (5 Ha) has been acquired for the planned Mbarara Club's industrial estate expected to house over 50 members' enterprises. Construction should start during 2004.

Both industrial parks are well located near infrastructure (roads, power and water).

The parks will act as real innovative clusters and the benefits to be derived will be more than provision of workspace. Other benefits will include:

- > Stability of business because of security of tenure
- > Sharing of common services
- > Increased collaboration, networking and exchange of knowledge and skills
- > Increased access to financial services because the business unit can act as collateral.

Sustainability

UGT started out with the idea of sustainability of her service delivery well in site. This message was emphasized to the Executives of all the Gatsby Clubs. Therefore, no effort has been spared at income generation and prudent utilization of resources at hand.

UGT income streams come from:

- (a) Membership fees and subscription
- (b) Interest on loans
- (c) Garage services
- (d) Foundry products
- (e) Sales of appropriate technology
- (f) Secretarial services
- (g) Showroom cost sharing
- (h) Consultancy
- (i) Matching grant schemes.

Club incomes come from:

- > Membership fees
- > Interest on club saving and credit scheme
- > Secretarial fees
- > Commissions paid by members etc.

WAY FORWARD

UGT's services have grown and are reaching some 30 out of the 56 districts of Uganda although there are only 16 Gatsby Clubs. UGT therefore plans to increase the number of clubs by at least two (2) every year. This will bring the services closer to the people.

UGT plans to continue pursuing its plan of establishing industrial/ business parks for various clubs. This project has three aims; viz.:

- Ensuring that members have access to a well-designed and serviced workspace (see copy of plan for Jinja Business Park).
- Ensuring that members eventually get a title to the workspace, which can then act as collateral for loans from banks and other financial institutions.
- Ensuring sustainability of the club through income from support services to members in the industrial estate.

With apparent cooperation between members of subsectors in each club, UGT is going to start another project aimed at harnessing the economics of scale which could be achieved when four or five SMEs combine to operate a materials supply shop or business for their subsector.

An example could be the grouping of say four to five carpenters to run a timber yard from which each can purchase dry timber with the surplus being sold to other carpenters. Such a venture will deepen the operations of SMEs and ensure their sustainability and growth.

CONCLUSION

UGT has to date performed even better than anticipated at the start. The range of services has increased, outreach has spread to 30 districts of Uganda and the mission is being fulfilled.

The Board of Trustees are however against complacency and have as such encouraged management to pursue an ambitious expansion plan so that more entrepreneurs can access the services and grow. The clubs, who are the major partners of UGT, have also been encouraged to intensify the recruitment drive so that they can have a vibrant membership.

REFERENCES

1. Uganda Bureau of Statistics Data, 1991
2. Dr. J.K. Byaruhanga and Dr. M.K. Musaazi (1999), "Improvement of Profitability in Small scale Enterprises" Uganda Gatsby Trust.
3. Dr. J. K. Byaruhanga (1999), Report on Sub-sector workshops carried out under the Micro and Small Enterprise Component of UNIDO sponsored Programme, 10 October 1999.
4. UGT's Strategic Plans for 2000 - 2003 and 2003 -2006.
5. UGT Database of Gatsby Club members, 1994, 1998, 2001.
6. Intermediate Technology Development Group; Small Enterprise Development Journals.
7. Eng. Dr. T.K. Byaruhanga (2002), Knowledge Transfer through Gatsby Enterprise Club Networks, Paper presented at the "University-based Technology Transfer Workshop" held at Jinja, Uganda, February 2002.

Bio-sketch of the Author

Engineering Dr. Joseph K. Byaruhanga holds B.Sc. (Eng.) from Makerere University and Ph.D. from UNSW - Australia.

He is a Senior Lecturer at the Faculty of Technology (FoT), Makerere University. He teaches Maintenance Engineering and Materials Engineering since 1994

He is also Manager of Uganda Gatsby Trust, which promotes cooperation between FoT, Makerere and Small scale enterprises in Uganda