



Economic Impact of Local Manufacturing of Bednets A Survey



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Background to the survey: the Sumitomo Chemical – A to Z Textiles Partnership

In 2003 A to Z Textile Mills, based in Arusha, Tanzania, began a pilot project with Sumitomo Chemical to produce ‘Olyset Net’, Sumitomo’s long-lasting, insecticide-treated bednet. Until then, Olyset production had been based exclusively in East Asia, but Sumitomo wanted to establish a major manufacturing base in sub-Saharan Africa so that Olyset could be distributed more quickly to end-users. The company – as part of its commitment to corporate social responsibility – also wanted to make a lasting contribution to economic development in Africa by creating large-scale employment opportunities.

The establishment of this collaboration between a multinational and African industry – a genuine 50-50 partnership – was assisted by the Acumen Fund, the non-profit social investment fund organisation, the United Nations Children’s Fund (UNICEF), and Population Services International (PSI). An agreement was reached under which Sumitomo transferred to A to Z Textiles, on a royalty free basis, the technology for making Olyset, with the Acumen Fund providing a loan to A to Z Textiles for purchasing machinery to make the nets. Sumitomo undertook to provide training for Tanzanian technicians and to establish quality control measures to ensure the Olyset Nets manufactured in Arusha met WHO standards.

The partnership focused initially on production in A to Z’s original Arusha town factory site. However, in February 2008, the JV opened a new, purpose-built factory at Kisongo, to the north of Arusha. Africa-based Olyset production now accounts for 50% of global production, with the two Tanzania plants producing approximately 30 million nets per annum. The JV currently employs around 7,000 people, most of whom are women. The latter’s wages are estimated to support approximately 25,000 dependents.

This survey – conducted independently by SOAS (the School of Oriental and African Studies, University of London) – is an investigation of the impact of the JV on the local community. The survey addresses the effect of the JV on the welfare of its employees and the local economy.

Research methodology

In order to test the impact of employment by A to Z Textiles on its workers, research was conducted through a fieldtrip to the factory site, and an employee survey designed by the report author, and undertaken by Synovate Tanzania. The research was conducted in Kiswahili, the national language of Tanzania, and Synovate Tanzania translated the questions and responses. The survey questioned a sample of the workforce, chosen to represent different levels across the factory, but with individuals at those levels chosen by random.

During the fieldwork, in-depth interviews were carried out with a number of managers (again, representing different levels), and with two members of senior management. Interviews were carried out at Kisongo between 14th and 16th September. All participants have been kept anonymous.

Separate surveys were also carried out amongst 40 local businesses in the area around the Kisongo factory, and in Arusha Town, to test whether the factory was creating ancillary employment and business opportunities linked to the presence of the factory. These surveys were designed to uncover perceptions of how important the presence of the factory and its employees were for generating and supporting business, and the economic and social benefits for small-business owners in the region. Findings from the survey were compared with responses from the in-depth interviews with factory management, and with local officials with insight into the impact of the factory’s presence in the local Kisongo and wider Arusha Region area.

EXECUTIVE SUMMARY

Impact on Employees

A to Z Textiles takes employee welfare and care seriously, and are addressing key issues such as providing sustainable employment, with training in key skills and opportunities for advancement; meeting the broader needs of employees through provision of health care, food and housing supports; paying a wage that is higher than the national minimum; respecting workers rights, and working with trade unions to ensure effective representation; and protecting and supporting family life. These elements reflect core principles in the ILO Decent Work Agenda.

71 % of the employee sample stated that their salary was helping their children go to school in fact 75 % of the employees interviewed claimed that their job allowed them to support family and relations. All of the employee sample believed their wages were sufficiently high to allow them to support the needs of their relatives.

Impact on Immediate Vicinity (Kisongo)

The evidence suggests that the development of the Kisongo factory site has had a positive impact on existing businesses, and in stimulating new income-generating activity in the area. Much of this new activity remains highly dependent on the presence of the factory and the large number of employees who reside in the area. The increased economic activity has benefited the households of small-scale business-owners, allowing for the purchase of material goods, but perhaps more importantly, enabling families to save, to find money for emergencies and unexpected events, and to better their lives and future prospects. More children are able to go to school as a result of the increased incomes from small businesses in the area.

The research also demonstrated the importance of each wage that is paid for a larger network of individuals, with most people supporting other family members with their salary. Providing education for children was identified as a particular benefit from paid employment.

Impact on Arusha Region

A majority (70%) believed that the factory had brought greater prosperity to people living in Arusha as a whole, not just the workers. Whilst impacts on specific small businesses in Arusha town arising from the presence of the factory are harder to detect, a majority (70%) believed the factory had brought greater prosperity.

The factory is helping to secure local area farmers' livelihoods through purchasing large quantities of food commodities for the factory canteens.

The Tanzania Union (TUICO) representative believed that A to Z was having a significant and positive impact on Arusha town and the broader region. With around 40,000 factory workers in Arusha, A to Z represented 20% of manufacturing jobs in the local area.

85% believed that it was good that the factory was based in the local area. Explaining why it was positive to have the factory, half of the respondents believed the factory provided employment to locals. The employment figures confirm this, it is estimated by A to Z that the Arusha Region (comprising the town and the area around Mt. Kilimanjaro) provides over half of the 7000 employees at the factory.

Local Maasai Community Impact

In addition to the economic impact of the Kisongo factory in the immediate area, there have also been a number of social / developmental impacts that have benefited the local Maasai community. Overall the local population are happy with the presence of the factory, according to the Village Chairman.

There were no prior claims by local inhabitants on the land used to build the factory, and there have been no tensions over the use of the land for the A to Z factory.

The local community has benefited from increased infrastructure, including roads, water, electricity and bus service.

A to Z has sought to target assistance to the local Maasai pastoralists in order to support their livelihoods.

Regional/National Impact

It is difficult to identify strong impacts on the regional and national economy from A to Z. As one of Tanzania's largest employers, it is clear that it must make a significant contribution. However, at the local (especially around Kisongo) level, the impact of the factory is clear.

Procurement Policy Issues

A to Z's commitment to creating sustainable employment, and the economic and social benefits that arise from its business, are clearly at risk from procurement policies that do not give priority to sourcing locally-manufactured goods. A to Z cannot compete on price with manufacturers based in parts of the world with lower manufacturing costs. This disadvantage is often exacerbated further by the prevailing tendency of some major donors and their contracted procurement agents to rely disproportionately on FOB (Free on Board) incoterms rather than DDU or DDP (Delivered) incoterms for tender price quotes. An even proportion of DDU or DDP incoterms for tenders would provide a more 'level playing field' for A to Z Textiles and indeed allow them scope to compete more directly on price and potentially allow donors to make savings due to their proximity to the market. However, donor procurement policies in this respect fail to take into account broader development goals and as such policies tend to concentrate on cheapest FOB price and .quickest delivery.

Procurement policies thus represent a potential (and actual) obstacle in reaching poverty reduction and fostering development.

The key challenge for A to Z is how to sustain levels of employment whilst operating in a deeply unstable environment. What would happen to the large number of people, especially the young women, employed at the factory if the business has to contract substantially? There are insufficient opportunities for employment in Tanzania's still relatively small manufacturing sector. Beyond the immediate impact on A to Z employees, the wider economic and social contribution of A to Z to the Tanzanian economy is also at risk.

IMPACT ON EMPLOYEES

“How many people know how many hands it takes to make one net. There are six processes, each employs three people. That means 18 people make one net”¹

Methodology of the research

In order to test the impact of employment at A to Z Textiles on its workers, research was carried out in the form of a fieldtrip to the factory site, and an employee survey designed by the report author, and undertaken by Synovate Tanzania. The survey was undertaken in Kiswahili, the national language of Tanzania, and Synovate Tanzania translated the questions and responses. The survey questioned a sample of the workforce, chosen to represent different levels across the factory, but with individuals at those levels chosen by random.

During the fieldwork, in-depth interviews were carried out with a number of managers (again, representing different levels), and with two members of senior management. Interviews were carried out at Kisongo between 14th and 16th September. All participants have been kept anonymous.

Informant Identification	Position
Respondent A	Personal Assistant to the CEO
Respondent B	Factory Manager
Respondent C	Production Manager
Respondent D	Quality Assurance Manager
Respondent E	Deputy Manager
Respondent F	Production Manager
Respondent G	Tanzania Union of Industrial and Commercial Workers Assistant Regional Secretary
Respondent H	Village Chairman, Kisongo area
Respondent I	Production Director
Respondent J	Export Manager

Employment and Decent Work²

The most obvious economic benefit of the A to Z factories in Arusha Town and at Kisongo is for the 7,000 or so employees that work at both sites. Tanzania’s unemployment rate, as measured by the Tanzanian National Bureau of Statistics in 2006, was 11.7%.³ However, this overall rate hides important divides between men and women, and between urban and rural areas.

Unemployment rate (%)	11.7
Male unemployment	10.7
Female unemployment	12.6
Urban unemployment	22.6
Rural unemployment	7.5

[Source: International Labour Office (2010), ‘Decent Work Country Profile: Tanzania (Mainland), (ILO, Dar es Salaam & Geneva), p.2]

Of those Tanzanians who are employed, a very significant number are in work that is informal, unregulated (and therefore unprotected). The International Labour Organisation (ILO) estimates that around 90% of Tanzanian workers are based in ‘vulnerable and informal employment’.⁴ An ILO report on employment in Tanzania noted:

The situation of the youth population, particularly those in urban areas, is critical in terms of unemployment. Lack of sufficient employment opportunities for young women, who have increasingly participated in the labour market, further complicates the situation. The effects of the current global crisis, though not yet showing in the statistics, could create additional challenges, in particular with respect to the tourism industry and export-oriented sectors.⁵

The profile of A to Z employees, predominantly young women, suggests that it is making a substantial contribution, as a single employer, towards meeting the employment needs of the most vulnerable groups identified by the ILO, namely the young and women.

Regular, formal wage-labour is recognised as a major route out of poverty and vulnerability. Outlining the case for business in addressing poverty, the World Business Council for Sustainable Development (WBCSD) wrote in its 2006 report, *From Challenge to Opportunity: The Role of Business in Tomorrow's Society*:

Most companies benefit society simply by doing business. We meet customer's needs for goods and services. We create jobs. We pay wages and salaries. We provide for employees and families through pensions and health plans. We innovate to create products that contribute to human progress. We pay taxes that fund public services and infrastructure.⁶

Whilst this perspective is perhaps unduly positivistic in its assumption that 'most' companies contribute to development at national and individual levels, there is little doubt within the development studies literature that business is central to poverty reduction. 'Business plays an increasingly important role in development', write Peter Newell and Jędrzej George Frynas, echoing the views of the WBCSD:

As providers of goods and services, as employers, as investors, and increasingly as shapers of developing countries' policies, there is no doubt that the private sector is central to efforts to tackle poverty.⁷

However, central to the ability of business to make a positive contribution is the way in which that business is run. Whether, in other words, it is making a positive contribution to the lives of its workers and the community in which it is based.

The ILO, recognising the importance of paid work for individual well-being and for social and economic progress, has over the past few years developed the concept of 'decent work':

Work is central to people's well-being. In addition to providing income, work can pave the way for broader social and economic advancement, strengthening individuals, their families and communities. Such progress, however, hinges on work that is decent. Decent work sums up the aspirations of people in their working lives.⁸

Central to the Decent Work Agenda, from the perspective of employers, are places of employment that develop skills and provide sustainable livelihoods; that respect the rights of workers; including independent worker's organisations and representation; providing safe work places; give sufficient time to employees away from work, and enable access to health and other welfare services.⁹

Whilst this research was not to examine the extent to which employment at A to Z Textiles coheres with the ILO's concept of decent work, the lens is a useful one in examining the Kisongo site as a place in which to work and live, and for understanding the contribution employment at the factory is making to the lives of its employees.

Sustainable livelihoods and skills development

Training is provided to all workers.¹⁰ Most of those who are employed do not have prior skills or training in textiles. They are trained whilst they are working, with most able to acquire the necessary skills within three months.¹¹ Beyond specific training for the task for which employees have been appointed, the company sees education and skills development as important, and have invested in providing training for its workers across a range of areas, including work education, technical and IT skills, environmental and health and safety training, management skills and language classes.¹² Broader life-skills, such as how to spend money sensibly, to save, etc, are also taught.¹³ One respondent noted that on-the-job training allowed people to be promoted from within the company. He added that it takes people who begin at the bottom level, and gives them a chance.¹⁴

One of the directors of A to Z Textiles, interviewed for this research, highlighted the importance of training both to the company, but also more widely for Tanzania. Lacking in semi-skilled workers, A to Z Textiles, he argued, is building a pool of such workers: 'it benefits them and benefits the government'. It will allow employees to start their own textile businesses if they choose to leave.¹⁵

The company also works with the in providing training and skills development. TUICO representatives come to the Kisongo site three days a week to run training sessions on workers laws and rights, and to provide information about what benefits workers are entitled to.¹⁶

Progression within the company is possible, and when looking to fill new positions, the company seeks to first promote from within.¹⁷ The management interviews demonstrated the possibilities for rising within the company, with almost all those interviewed progressing relatively rapidly.

Promotion within A to Z Textiles: Respondent C's story

Respondent C is currently Production Manager, in charge of around 500 people. He has completed secondary school education, and joined A to Z Textiles in January 2005 after working as an untrained teacher in Arusha. He was first appointed as a quality controller, before being promoted within three months to Quality Controller in charge of Olyset. After another 12 months, he was promoted to Quality Assistant Manager, before moving to Section Manager in the Extrusion Department after six months. In January 2009 he was appointed Assistant Production Manager, and within the year was promoted again to Production Manager.

Social supports outside wages

A to Z Textiles provides housing (in a compound within the Kisongo site) for its employees, as well as water and electricity to those houses. There are properties for individuals, as well as family housing for those who have more people in the household. The houses are basic, but clean and solid, concrete buildings, with communal areas in a 'courtyard' to the front. The accommodation is provided free of charge to those who need it.¹⁸ Food is also provided for employees, and all are given free meals whilst they are on their shift.¹⁹

The company assist with health care. They have two health centres, a dispensary at the Kisongo site, and a hospital based at the Arusha factory site.²⁰ They also bring in doctors and other medical professionals when required.²¹ In relation to HIV and AIDS prevention, the company provide free condoms, including in the compound areas where workers live. Whilst A to Z Textiles does not provide financial support for anti-retroviral treatment for infected workers, it does organise tests for employees. HIV and AIDS infected workers cannot be sacked under Tanzanian legislation, and infected workers who cannot cope with their job are moved to lighter duties. Employees would still receive their salary even if they were off being treated, and their salary would not be reduced even if they were moved to different duties as a result of their HIV status.²²

The company can provide small interest-free loans, including for education of children. Applications are seen by a committee who decide what amount can be loaned. One respondent used such a loan for the purchase of a car.²³

Salary levels

Tanzania's minimum wage levels are set differently across eight employment sectors, ranging from 65,000/- (in the hotel and tourism sector) to 350,000/- (in the mining and aviation sectors). The minimum salary for an employee in the manufacturing sector is 80,000/- per month.²⁴ The basic minimum salary for A to Z Textiles employees is 120,000/- per month (150% of the national minimum wage). It is possible to earn around 40,000/- per month in addition with overtime. According to the TUICO Assistant Regional Secretary, A to Z's salary levels are higher than other manufacturers (including textile manufacturers) in Arusha, and the higher salaries were identified as a key factor in making A to Z Textiles a 'good employer'.

Worker representation and rights

All respondents who commented on relations between managers and the workforce believed they were positive, as were relations with the trade unions. It was felt that the company listened to its workforce, and helped to resolve any problems. There are weekly meetings between workers and managers.²⁵

Trade unions are free to organise amongst the workers,²⁶ and the regional TUICO representatives come to the factory regularly to meet employees and management, to raise issues of concern, and to provide training sessions. The TUICO Assistant Regional Secretary believed that A to Z was a good employer, with good management that treats its employees well. In particular, he noted the generally harmonious relations within the factory; the higher salary level in relation to other manufacturers; good working conditions in which health and safety issues are taken very seriously; and few complaints from workers.

Family life

Employees are given 28 days paid leave per annum, and in addition can take four days emergency leave. If necessary, they can also negotiate longer periods of unpaid leave.²⁷ Respondent B is from Kerala, India. He feels that if he needs to return home in an emergency, at short notice, the company would be understanding.²⁸

It would be wrong and unrealistic to suggest that there are no tensions between workers and management, or that all employees are entirely satisfied with their employment (see analysis of employee survey below). However, it appears clear that A to Z Textiles takes employee welfare and care seriously, and the senior management believe they are addressing key issues such as providing sustainable employment, with training in key skills and opportunities for advancement; meeting the broader needs of employees through provision of health care, food and housing supports; paying a wage that is higher than the national minimum; respecting workers rights, and working with trade unions to ensure effective representation; and protecting and supporting family life. These elements would seem to reflect core principles in the ILO Decent Work Agenda.

Employee Perceptions of Working for A to Z/Olyset²⁹

In order to test the economic impact of employment with A to Z Textiles on the workers, a random sample of 65 employees was selected for an in-depth interview. Questions were designed to demonstrate the impact working for A to Z Textiles had on the employees, and their levels of satisfaction with their employment. The employees represented a cross-section of factory workers, drawn from different levels from within A to Z Textiles.

Job	No. in sample	Job	No. in sample	Job	No. in sample
Department Manager	2	Extruder Blending	1	Quality checker (clothes)	1
Operator	14	Line Quality Control	2	Rashel (operator)	3
Supervisor	14	VHI Luy Manager	2	Woping	1
Checker	1	Packing	2	Separator	1
Mechanics	7	Production Manager	1	Folding the nets	1
Setter	1	Tying the bundles / weighing	2	Clerk	1
Team Leader	1	Bag cutters (nets)	3	Preparing the net material	1
Manager	1	Seamstress	2	TOTAL	65

Over two-thirds (69%) of the interviewees had worked at the factory for less than four years, with 37% of these having been employed by A to Z Textiles for less than two years. Most of those had come to work at the factory from self-employment, with a significant number having joined after completing education. Just over a fifth had been wage labourers elsewhere.

Previous 'occupation'	Number (%)
Self-employed	26 (40%)
Education	15 (23%)
Employee of another organisation	7 (11%)
Casual work	7 (11%)
Farming	7 (11%)

Over half employees had come from Arusha or neighbouring Kilimanjaro regions (15 employees for each, or 32%). Other employees came from a number of different regions, some a considerable distance from Arusha: Dar es Salaam (2 of the sample) is around 400 miles by road, and Ruvuma (1 person) around 600 miles. This is in line with company policy of seeking, initially, to employ as locally as possible (Arusha and Kilimanjaro regions), before recruiting further afield. Many of the employees are found during recruitment trips to regions across Tanzania. Some have come to Arusha for unconnected reasons, and then find employment at the factory. Respondent C, for example, comes from Musoma. Having completed his secondary education, he came to live with his sister in Arusha. He worked initially as an untrained teacher, before seeing an advert in a local newspaper for job opportunities at A to Z, and joined the company as a Quality Controller.³⁰

Many of the workers in the factory are highly mobile, having travelled considerable distances to work and live in Arusha. One of the sample of employees had come from India, and interviews with management level staff confirmed the international character of the workforce at A to Z. Many of these workers have personal histories of long-distance migration for work. Interviews with factory management confirmed a number of people who had worked in a range of countries before coming to A to Z Textiles. Respondent B, a Factory Manager at Kisongo, for example, is from Kerala, India. However, before working for A to Z, he had been based in Kathmandu, Nepal in textile manufacturing.³¹ His brother was also working at A to Z on a night-shift. A Production Manager interviewed as part of the factory management interviews had also migrated for work. Also originally from Kerala, he had worked in Sri Lanka and Nepal in the textile industry. He also had extended family working at the factory, but unlike Respondent B had brought his wife and child to Tanzania.³² It is not unusual to have family members working at the factory: 22% of the sample interviewees had another member of their family working at the factory.

Most of the sample had completed their primary education (49 of the respondents, 75%). 11 employees had completed O-levels; one had finished A-levels; three had attended a technical college; and one had a university degree. Most employees, therefore, were not semi- or skilled workers prior to arriving at A to Z, but acquired their skills whilst on the job, reflecting the importance of training.

As noted above, the minimum wage paid by A to Z is 150% that of the national minimal wage level for workers in the manufacturing sector. Fourteen people responded to the question about salary levels in comparison to former wage levels. Seven agreed that their current wage was higher; 6 that it was lower; and 1 suggested the wage was the same level. Nine of the sample (14%) were earning money from other livelihoods alongside their wage. However, the majority (86%) reported relying on their salary alone. However, all 65 asked about whether they preferred their work at A to Z Textiles to their previous occupation or activity agreed that they did.

Questioned as to the level of their wages, 36% did not agree that wages were good at A to Z compared to other companies (11% strongly disagreeing), matched by the number who believed that they were (with 5% agreeing strongly). The rest had no opinion on the question. Of the 46 respondents who expanded on this question, only 15% reported being satisfied with the salary they received. Against that, only 4% said that the salary was low. 69% of the sample believed that their wage was insufficient for purchasing anything other than the essentials. A quarter of those who elaborated further stated that their salary was not sufficient to buy expensive items, and 22% said salaries were too low.

However, whilst the responses might indicate dissatisfaction with wage levels, answers to other questions revealed a more complex picture. Whilst we might expect relatively low expressions of satisfaction over wage levels when asked directly, questions designed to explore ability to save, numbers of people supported by each wage, and ownership of certain key items, the sample indicated salary levels that led to a majority being able to save money, being able to support children through school as well as meeting the needs of relations. Nevertheless, insecurity over unplanned bills (such as hospitals) remained a concern for many.

Most people were able to save money from their salary: 49 people (75%) of the sample were able to acquire savings, and of those who were able to build up savings, 44 (88%) saved on a monthly basis, and only 5 (10%) saved on an irregular basis, when they were able to. Whilst a majority of those questioned reported being able to save money (and most of those saving on a regular basis), 60% of respondents felt they did not have sufficient savings to meet unexpected or unplanned events or emergencies. Despite this response, only 28% of the survey believed they did not have enough money to cover hospital bills or school fees. When asked whether their job allowed them to plan for the future, a majority (64%) agreed, with only 20% disagreeing. Asked to elaborate on their answer to this question, 22% stated that their wage was not sufficient to meet all their needs. 20% reported that their salary could meet their needs.

When asked about ownership of certain material indicators, ownership rates of radios, televisions and mobile phones was well above the Tanzanian average:

Item	Ownership (%)
Bicycle	14
Radio	80
Television	32
Mobile phone	89

Most also did not have a bank account: 68% of the survey did not have an account. Despite this, 55% of people had been able to apply for credit on the basis of their income.

The 2002 Tanzania census showed an average of 4.9 people per household.³³ Numbers were smaller for the employee sample. Mean household size for all sampled was 2.8. Twenty (31%) people lived solely; 12 (18%) with one other person; 16 (25%) lived in households of three people; and 7 (11%) with four. It is likely that this profile reflects the age, sex and geographic origins of the majority of employees at the factory. The majority of the workforce is female, and many of these are young. Given that a large number have also come from a significant distance to work at the factory, it would be unlikely that many workers would live in large households. However, more than those reporting living in single households (31%), reported being the sole wage earner in the household: 42 (65%). Seventeen people (26%) reported a double income (perhaps reflecting the recruitment of multiple family members by A to Z Textiles).

Whilst mean household size for employees sampled was 2.8, the mean number supported by each wage amongst the respondents was 3.75 people.

Number of other people supported with the wage	Number of employees (%)
0	2 (3%)
1	10 (15%)
2	17 (26%)
3	12 (18%)
4	14 (22%)
5	4 (6%)
6 – 10	5 (10%)

This confirms the importance for wider families in relying upon wage earners for support. Three-quarters of the survey believed their relations looked to them to be supported. Most were indeed helping their family and wider relations. A large majority of the sample (71%) were helping to pay children go to school. 75% of the survey agreed that their job allowed them to support their family and relations. All of these believed their wages were sufficiently high to allow them to meet the claims made upon them by relations.

Supporting family through work: Respondent B's story

Respondent B is a Factory Manager at Kisongo. He comes from Kerala, and was working in Nepal prior to starting at A TO Z Textiles in 2005. He was initially hired as a section manager, in charge of a few machines, but within six months was promoted to factory manager in charge of around 700 people. He comes from a poor background. His family in Kerala remain poor, and his father is ill. Respondent B sends money back to his family, and is supporting five people with his wage: his mother, his wife and two children, and his grandmother. His salary allows his two children to go to school, and he has been told that if his eldest child wishes to pursue further studies, the company will support him. There is also the possibility of employment for his son.

In response to a question as to whether their job gave them a sense of security, just over half agreed that it did. 19% disagreed, but 31% did not have a view either way. 45 of the sample elaborated on their reasons: 8 (18%) believed the job gave them no security. However, 13 people (29%) saw a key benefit of their job as assistance with health insurance. When asked what they hoped to be doing in three years time, 35% of respondents replied that they would like to be self-employed. Owning property and furthering education were also significant responses (18% and 17% respectively). Only 3 respondents stated that they hoped to progress within A to Z Textiles (to 'be the best employee'). In response to the question about aspirations three years on, only 3 people expected to have 'a good life'. A large majority of the sample (81) believed their children would lead a better life than them, demonstrating confidence in the future. Fifty-nine of the sample elaborated on this: 24 (41%) were saving for the benefit of their children; and 26 (44%) were using their wages to provide the best education they could for their children. 57% of the sample believed the region as a whole was getting richer. Increased employment opportunities, and an increase in the number of small factories in the region, were identified as reasons for this by those who expanded on their reasons (24% and 22% respectively).

Conclusions

A to Z Textiles has a reputation in Tanzania, certainly amongst worker representative organisations, for being a good employer. It pays a wage that is substantially higher than the national minimal wage, as well as providing free accommodation for individuals and families, and free meals for those working on their shift. It appears to take education and training of its workers very seriously, which not only enables it to promote rapidly from within when opportunities arise, but to enable individuals to gain skills that they can take with them when they choose to leave the company. The provision of health care demonstrates the company's commitment to enabling access to vital welfare needs.

Whilst the employee survey was not uniformly positive in perceptions of wages (in particular), the employee survey suggested many employees believed they did not earn enough to meet unexpected or unplanned events. However, cutting across this response were comments and answers to other questions that suggested many, in fact, were able to put money aside. The responses show that a significant number of employees are able to save money from their salary, and most of those who could did so on a regular basis. In response to questions about acquisition of key material goods, it appears that consumption of indicators such as televisions and mobile phones in particular is well above the Tanzanian average.

The research also demonstrated the importance of each wage that is paid for a larger network of individuals, with most people supporting other family members with their salary. Providing education for children was identified as a particular benefit from paid employment.

The research suggests that employment at A to Z is having a positive effect on its employees. This is largely related to regular wages in a sustainable job. Workers may not feel that they are being adequately recompensed for their labour. However, the evidence suggests that they are, in fact, in a relatively privileged position compared both to the majority of Tanzanians, but also to other employees in the manufacturing sector. Perhaps more importantly, the data suggests that most employees felt a sense of security through their employment. Even if they wished for higher wage levels, and in response to some questions stated that they had insufficient income for their needs, the analysis of cumulative responses exploring these areas suggests a stronger sense of security and ability to plan for the future.

THE WIDER LOCAL, REGIONAL AND NATIONAL IMPACT OF A TO Z/OLYSET

“If you can buy from Tanzanian factories, you can help Tanzanian business generally. This helps development”
TUICO Assistant Regional Secretary

Introduction

Businesses do not operate in a vacuum, isolated from the physical area in which they inhabit, and the local communities who reside nearby. The main economic impact of the factory in Tanzania (and especially in the local regions of Arusha and Kilimanjaro, as already seen) is the employment and income it generates for its employees, the support those employees are consequently able to provide for their families, and the income generated for the state from taxes, import tariffs, etc. However, businesses also have an impact in generating other businesses that rely on trade with the factory and factory employees.

As noted by Mbwambo and Kuzila’s analysis of Tanzania’s textile sector in the mid-2000s:

There is a general consensus that to increase Tanzania’s growth performance following a move to a market economy, it is necessary to raise the private investment response in manufacturing and enable efficient business operations. ... Being labour intensive and because of the internal linkages to the rural sector, both the textiles and leather industries are expected to contribute significantly to employment creation as well as income generation, hence playing significant roles in poverty alleviation.³⁴

Maintaining the capacity of the factory is important, as a result, not just for the interests of the workforce and the company directors, but also for the wider economy which benefits from the taxes and duties paid by the company, the employment opportunities it provides for young women especially, as well as the social good that is achieved by manufacturing LLINs to combat a major killer in the country and in sub-Saharan Africa more widely. In creating a large pool of semi-skilled and skilled workers, A to Z is contributing to the up-skilling of the Tanzanian workforce, and enabling its still small manufacturing sector to expand.

Two surveys were carried out of local businesses in the area around the Kisongo factory, and in Arusha Town, to test whether the factory was creating ancillary employment and business opportunities linked to the presence of the factory. Twenty small-business owners in Kisongo, and twenty in Arusha town were surveyed to help understand the wider economic impact of A to Z. The survey was designed to uncover perceptions of how important the presence of the factory and its employees were for generating and supporting business, and the economic and social benefits for small-business owners in the region. Findings from the survey were compared with responses from the in-depth interviews with factory management, and with local officials who have an insight into the impact of the factory’s presence in the local Kisongo and wider Arusha Region area.

Impact on generating business in Kisongo

The establishment of the Kisongo factory has had a significant economic impact in the immediate area, supporting the creation of new businesses, and the expansion of existing ones. Many of the businesses in the Kisongo area rely heavily on the income of factory employees. Owners of these small businesses are also supporting other family members through the income generated, including supporting the costs of educating children.

Immediately outside the main gates to the Kisongo factory, a small market with a variety of small-businesses has grown (bars, clothes sellers, fruit and vegetable sellers, and so on). Other businesses line the road that leads from the main road to the factory site. New houses have been built around the factory site.³⁵ There are a number of hotels, and a branch of a private primary school based in Arusha town. Most of the buildings and businesses were built up as the factory site was developed, and the construction of the road and other basic infrastructure by the government. From observation alone, it is clear that the presence of the factory is having a significant impact, turning a relatively empty area, save for the presence of a few homes belonging to the local community, next to Arusha airport into what is becoming a local, albeit still small, hub for small and large-scale business. The Kisongo factory site has been designated an Export Processing Zone (EPZ) by the government, as part of its national economic strategy for boosting Tanzania's manufacturing sector. As a marker of the economic development that is occurring around the Kisongo area, land prices have increased between five- and seven-fold. In 2004, land prices were around 3 million shillings per acre. By 2010, prices ranged between 15 and 20 million shillings per acre.

The Village Chairman of a village based near the factory believed A to Z was having a substantial economic impact on the surrounding area, benefiting local inhabitants. He noted the large number of businesses surrounding the factory, including shops, small roadside markets selling fruit and vegetables, and clothes selling. These businesses were doing well, he suggested, due to the large number of factory employees based in the area.³⁶ An interview with a Production Manager at the factory similarly highlighted the growth of businesses around the factory site, and signs of economic growth in the area. The interviewee noted the existence of the market that has developed outside the main gates, as well as shops that have been built behind the workers compound. He also suggested local residents had built houses which they were renting to factory employees who wanted to live outside the compound.³⁷

Interviews were conducted with twenty small-business owners around the Kisongo factory site to ascertain the economic impact of the factory in the immediate vicinity. The types of business are typical of the small-scale enterprises that have emerged in the area over the past few years, responding to the needs of the large numbers of people who are now residing in Kisongo.

Business type	Number questioned
General shop	6
Selling clothes / shoes	4
Selling fruit & vegetables	2
Hawker (selling second hand clothes)	2
Selling drinks & cereals*	1
Hotel	1
Food vendor	1
Café	1
Pool table	1
TOTAL	20

* 'Cereals' here refers to basic staples such as maize porridge, wheat, etc.

The establishment of the majority of these businesses appears to be directly linked to the construction and subsequent expansion of the A to Z Textiles factory site at Kisongo. Thirteen (65%) of the businesses questioned had been set up within the last twelve months. Five had been working in the area for between one and two years. A bar and a hawker had been working at Kisongo for more than two years. Whilst some business owners appear to have been running similar businesses before the factory-site opened, 12 (60%) had started their business after it had been constructed.

The interviews demonstrated the importance of the factory for the livelihoods of local small-business owners in the vicinity of the factory. Most of the owners believed that the factory had made a significant difference to their business: 14 (70%) of the sample. Further questions designed to draw out the importance of the factory for local livelihoods confirmed its importance to small-business owners.

Question / statement	Total agree* (% of respondents)	Strongly Agree	Agree	Neutral	Disagree[†]
The factory is important to my livelihood	18 (90%)	3	15	2	-
I rely on employees for most of my business	13 (65%)	4	9	3	4
The factory provides too much for their workers: they do not need to use my business	4 (20%)	-	4	11	5
My business relies heavily on the presence of the factory	14 (70%)	1	13	1	5

* Number combines 'agree' and 'strongly agree' responses.

[†] Includes 'disagree' and 'strongly disagree' responses

As noted in the previous section, the factory provides a significant degree of support for its employees outside the salary, perhaps most significantly for the local businesses, free meals whilst working, and uniforms. However, the level of material support does not appear to be a significant threat to the local stores, markets, etc. Only four respondents believed the factory provided too much for their employees. The data suggests that, whilst there may be some concerns over competition from the factory, generally it was not perceived as an obstacle to securing a livelihood. Indeed, responses to the other questions demonstrate the importance of the presence of the factory for the establishment and continuation of the businesses in the Kisongo area.

Factory workers were seen as generally reliable customers. One-third of those who answered stated that factory workers came to them for their needs. Only one business (a shop) said that customers from the factory did not pay their debts on time. Over two-thirds of local businesses reported they received most of their income from customers from the factory (14 of those questioned, 68%). One business (a shop) reported that it existed solely because of the presence of the factory. Factory employees were the main customers for 11 businesses, with only two reporting significant use from members of the local community not linked to the factory (a bar and a clothes seller).

The level of business undertaken with factory employees is reflected in the reported weekly and monthly factory-related trade (FRT) by the business-owners. Unsurprisingly, businesses catering to basic needs (shops and sellers of drinks and cereals), as well as bars, appear to have substantial FRT incomes. FRT income for market traders, food vendors, clothes (new and second hand), the café and pool table businesses are lower, but it is not reported what overall income is including non-factory sources.

Weekly and monthly reported factory-related trade (FRT), Tsh.:

	Bar	Selling drinks & cereals	Selling fruit & vegetables	Hotel	Shop
Mean weekly FRT		140,000/-	25,000/-	160,000/-	58,750/-
Mean monthly FRT	150,000/-				200,000/-

	Food vendor	Clothes / shoes seller	Café	Pool table	Second hand clothes seller
Mean weekly FRT		55,000/-	15,000/-	25,000/-	15,000/-
Mean monthly FRT	50,000/-	35,000/-			

The income from these small businesses allows people to save money, to cover expenses that might arise from illness or other unexpected emergencies, as well as providing support for household members. There was an average mean of 4.1 people living in the households of business-owners. Each household had an average mean of 1.6 people bringing an income into that household, demonstrating the importance of the businesses for the household as a whole. The average mean number of people supported by the income of the business-owner was 4.3 (the mean for second hand clothes sellers was 8, and the owner of the pool table was supporting 6 people with the salary derived from the business).

	Yes (%)	No (%)
Financially supporting children attending school	50	50
Able to save money from their income	70	30
Sufficient money to meet unexpected / unplanned events*	65	35

* e.g. hospital visits, health expenses, funeral costs

Incomes derived from the small-businesses in the Kisongo area have allowed the ownership of key material indicators. Surveys in the mid-2000s suggested radio ownership was around 62.5% for urban areas, and 29.8% for rural areas³⁸. Television ownership is estimated at around 6%.³⁹ Figures for mobile phone ownership are unreliable. There are an estimated 13 million fixed and mobile phone subscribers in Tanzania,⁴⁰ and some have suggested mobile phone ownership is at around 50% of the population.⁴¹ However, this may include people with multiple phones. The business-owners interviewed reported higher than average ownership of such items, including mobile phones:

Item	% reporting ownership
Bicycle	35
Radio	90
Television	45
Mobile phone	75

Looking to the future, the majority of business-owners believed their children would lead a better life than them (55%), with only 10% not believing this. Of those providing reasons for their belief, 62% suggested they had provided a strong foundation for their family's future. Only one respondent believed jobs were difficult to find.

The situation is not uniformly positive however, reflecting difficulties faced by small-businesses in Tanzania (and in developing countries more widely). Whilst less than half of respondents agreed that their business was 'strong' (8 respondents, 40% of the sample), only 6 believed it was not strong (30%). The remainder were neutral on the question. One particular issue was the lack of capital enabling businesses to expand, or the creation of new businesses. Two respondents specifically noted their lack of capital, whilst one other highlighted how the need to extend credit to customers reduced the capital left from profits. Just under a third reported low capital as the reason they could not do something different. Most of the business-owners interviewed would have liked to do something different, but felt unable to do so.

Most seem to have welcomed the construction of the Kisongo factory site and the development of the immediate area. However, there was a degree of scepticism over employment opportunities offered by the factory. Only one of the local business sample interviewed believed that the factory was providing employment opportunities within A to Z itself for the local community (even though they overall acknowledge the importance of the factory in supporting local businesses).

This perception was echoed in the interview with the local Village Chairman, who highlighted the casual nature of much employment of local Kisongo residents by the factory. He reported local villagers were able to secure work for three to four days, but are then told there is no more work available.⁴²

There was also a suggestion that the presence of the factory was causing some social problems. Five of the twenty respondents stated that there were problems in Kisongo due to the factory, although did not elaborate on the nature of those problems. One possible cause, noted by the Village Chairman, may be the large numbers of 'strangers' (i.e. non-locals) who come to the factory seeking work, often staying for several days in the area in the hope that employment opportunities become available. A Factory Manager interviewed as part of the management-level interviews also noted this, suggesting there was often a queue of people outside the factory gates, many waiting three to four days, or even up to two weeks to secure employment.⁴³ The presence of a large number of unemployed people from outside the immediate area might be seen as a potential disturbance or inconvenience to the local community, although no respondent mentioned increased crime as a result of the large numbers of people now residing (permanently and temporarily) in the Kisongo area. Moreover, fifteen of the business-owner respondents did not mention any factory-related problems, suggesting any issues are likely to be small-scale and isolated incidents.

In general, the evidence suggests that the development of the Kisongo factory site has had a positive impact on existing businesses, and in stimulating new income-generating activity in the area. Much of this new activity remains highly dependent on the presence of the factory and the large number of employees who reside in the area. The increased economic activity has benefited the households of small-scale business-owners, allowing for the purchase of material goods, but perhaps more importantly, enabling families to save, to find money for emergencies and unexpected events, and to better their lives and future prospects. The Village Chairman also suggested that more children were able to go to school as a result of the increased incomes from small businesses in the area.

Social impact on the local community

In addition to the economic impact of the Kisongo factory in the immediate area, there have also been a number of social / developmental impacts that have benefited the local community. Most of those living in the area are Maasai, traditionally a pastoralist society who led a nomadic, or semi-nomadic existence, moving frequently with their herds to new pasture ground. Many Maasai are now settled in permanent villages, and many seek employment in wage-labour rather than focus on cattle-herding as their main livelihood.

There are three villages in the immediate area, each with around 10,000 inhabitants. Cattle herding remains important, and there are large numbers of cattle as well as smaller livestock (especially goats) in the Kisongo area. The area is relatively dry, with limited access to reliable water supplies.

The land upon which the factory was built was previously owned by a Canadian. There were therefore no prior claims by local inhabitants on the land, and there have been no tensions over the use of the land for the A to Z factory.

Before the construction of the factory at Kisongo, there was no road leading into the bush from the main road, no water or electricity supplies. The government agreed to pay for the road, and facilitated (with A to Z paying for) the provision of electricity and water supplies to the factory. These have also benefited the local inhabitants. The construction of the road, and the increased economic activity in the area, have expanded the private bus (known as daladalas) network from Arusha out to Kisongo.

The factory management have made efforts to ensure local communities can benefit from the improved local infrastructure. Even before regular supplies were established, Mr Shah, the head of A to Z Textiles, brought in water tankers for local villagers and herders to use. Local villagers are able to use water free of charge.⁴⁴ Around 50,000 litres of water are provided for local use.⁴⁵ There are ongoing discussions between village leaders, an NGO which has agreed to provide funding, and A to Z over the extension of water pipes (which will require a pump) to the villages. A trench has already been dug by villagers.⁴⁶

A to Z has sought to target assistance to the local Maasai pastoralists in order to support their livelihoods. During the construction phase, the factory paid for and supplied grass for the cattle of local herders to feed on.⁴⁷ They continue to buy cattle food at times of particular stress, as well as sometimes providing water for cattle during the dry season.⁴⁸ A to Z Textiles has also paid for a vaccination campaign for local cattle in Kisongo, Monduli and a few other areas inhabited by Maasai pastoralists.⁴⁹

The factory has a policy of hiring local inhabitants for work when it is available.⁵⁰ However, much of this work is of a casual nature. There is a perception amongst some respondents that the local Maasai residents did not want to be employed by the factory, preferring to maintain their semi-nomadic lives.⁵¹ However, as noted elsewhere in the report, this perception has been challenged to some extent by the local Village Chairman, who highlighted the casual nature of employment opportunities for locals.⁵²

A to Z Textiles provides support to local government health officials in accessing communities in the Kisongo area, for example by providing transport. There are also plans to expand the company health facilities to the local school, and possibly to build a clinic in one of the local villages.⁵³ The Village Chairman noted that malaria has fallen in the local villages following the donation of Olyset nets to the local population.

Overall the local population are happy with the presence of the factory, according to the Village Chairman, although they hoped for extension of water supplies and electricity directly to the villages.

Impact on Arusha Town

In several of the interviews with A to Z management and senior management, the economic benefit to businesses in Arusha town as a result of the large number of factory employees was noted. Several stated that many would go to Arusha to make purchases of items not immediately available in the local Kisongo businesses. There are also a large number of employees who work at the Kisongo site, and who choose to live and rent property in Arusha town.⁵⁴ Private buses have also expanded their routes to include the Kisongo factory site, which has become in effect the outer western limit of the Arusha-town bus network. Notoriously profit-driven (albeit working for marginal profits from as large a number of people as possible), daladala operators are in effect recognising the new wealth that is emerging in this area, and linking it back to Arusha town through improved transport links.

In order to test whether direct economic benefits accruing from the expansion of A to Z Textiles to the Kisongo site were felt in Arusha town, twenty small businesses-owners were interviewed.

* Kiosks are small shops selling a range of goods, including mobile phone top ups, small food items, drinks, newspapers. Some may be based in more permanent, if rudimentary, structures, whilst others may look more like a rough and ready shack.

† Carpenters are an important trade, making furniture, doors and other household goods and materials. They would also undertake repairs.

Fifteen of the sample businesses (75%) had not been in operation before the construction of the factory at Kisongo. Nine (45%) had been in business for more than two years, including two of the three restaurants, all three bars, and three of the shops; five had been in operation for between one and two years; and six for under a year.

The overwhelming majority (18) believed the Kisongo factory had had no impact to their life. On the question of whether the factory had brought an increase in business to Arusha town-based shops, 10 had no opinion, and only 6 agreed (one strongly). There was no consistent view as to why business had not substantially agreed: responses ranged from a suggestion that prices were still too high for factory employees (two responses), to the lack of quality goods in Arusha (one response). Amongst those businesses who believed business had benefited from the influx of employees to Kisongo, two of the seven shops reported that most of their customers were from the factory. Three respondents suggested factory employees came to Arusha to acquire goods not available at Kisongo. Whilst only three of those questioned believed factory employees tended to spend their money elsewhere (i.e. outside Arusha town), only five thought most spent their wages in the town. Explaining why employees might not be able to spend more in Arusha town, two believed employees had too little time outside work to be able to come to Arusha town-based shops. One response stated that the employers (presumably the directors of A to Z) were not locals to Arusha, although this was not expanded on as to why this might be a factor (nor is it, in fact, true, and might perhaps speak to continued tensions between Tanzanians and ‘Asian-Tanzanians’ in the country).

Estimated FRT suggests some businesses believe they have a substantial amount of business with factory employees.

	Shop	Restaurant	Bar	Kiosk	Carpenter	Stationary
Mean weekly FRT	1,318,571/-	40,000/-		50,000	5,000,000/-	10,000
Mean monthly FRT	716,667/-		325,025			

Mean FRT for shops and carpenters in particular was significant, although these estimates rest on assumptions by business-owners that they know where their customers work.

The majority of the sample (15) had not noticed any problems in Arusha as a result of the presence of the new factory, and 15 of the business-owners interviewed believed Arusha had improved since its opening. A large majority, 85% believed that it was good that the factory was based in the local area, with 40% agreeing strongly. Explaining why it was positive to have the factory, half of the respondents believed the factory provided employment to local people (four noted the positive impact for youth employment in particular). Two respondents believed the factory contributed to broader development. However, only two business-owners believed the wages paid by the factory had contributed to pressures on other employers to raise their wage levels. Seven disagreed that this had occurred, with most (11) unsure.

The perception that the factory has had a limited impact on businesses in Arusha suggests that the direct economic gains impact is felt more at the Kisongo, and the regional and national level (where taxes are collected) than at the level of local (Arusha town) businesses. However, it is important to note that most of the sample had not been operating their business prior to the construction of the Kisongo factory, and the expansion of employees to 8,000. Moreover, within the context of a town of some 500,000 official inhabitants (with actual numbers likely to be significantly higher), large as the employee numbers are at A to Z, their impact is not likely to be easily discernable from the perspective of a small business.

However, a majority (70%) believed that the factory had brought greater prosperity to people living in Arusha as a whole, not just the workers (2 believing this strongly). This suggests that perceptions of the main contribution of the factory focus on broader impacts at regional and national levels, rather than impacts on specific small businesses where economic gains are harder to detect. This was reinforced by comments following on from the question. Key reasons for seeing the factory in a positive light were: it created job opportunities (21%); it increased availability of items such as bed nets (26%)⁵⁵; it increased the prosperity of Tanzania as a whole (16%).

Two respondents suggested incomes were increased for farmers as a result. This perception might be related to the local sourcing of food by the Kisongo factory for the worker canteens. Respondent A, as part of the factory management interviews, suggested the factory was helping to secure local (regional) farmers' livelihoods through purchasing large quantities of food commodities.⁵⁶

The TUICO representative believed that A to Z was having a significant and positive impact on Arusha town and the broader region, arguing that the factory's main contribution was in employing people, and encouraging through the incomes of a large number of employees new businesses to open. With around 40,000 factory workers in Arusha, A to Z represented 20% of manufacturing jobs in the local area.

Beyond Arusha Region

The main economic impact of the factory at a national level comes consists of three key elements: the tax that the company pays; the employment of a substantial number of people in the two factory sites; and the tariffs and duties on materials and equipment required for production of the bed nets.

One limitation on A to Z making a deeper economic impact is the relatively limited procurement from within Tanzania. This reflects the lack of manufacturing capacity within Tanzania, with no local suppliers capable of supplying the material and equipment used.⁵⁷ The bags for the nets, for example, are imported from Vietnam for reasons of both cost but also quality (the bags need to meet regulatory standards). However, importing materials brings with it high import costs, and if local suppliers capable of meeting quality and price levels were available, the senior management would ideally source as locally as it could. This would not only reduce import duty costs, but reduce delays.⁵⁸

The senior management of the company express their commitment to Tanzania, and to making a positive contribution to society. According to Respondent I (one of the company Directors), ‘this is our home, our livelihood’. Underpinning A to Z’s business is a commitment to good business practice, as well as a notion of social obligation to both employees and to Tanzania more widely: ‘we are committed to Tanzania ... we are committed to reducing poverty’.⁵⁹ A to Z Textiles have supported the Usa River Project, with inputs for malaria prevention.⁶⁰ They have provided Olyset bed nets and food to local orphanages, as well as making donations to the national football team.⁶¹

The Kisongo factory site has been designated an Export Processing Zone (EPZ) by the government, as part of its national economic strategy for boosting Tanzania’s manufacturing sector. A to Z is intended to act as magnet for other manufacturing industries which will be set up in the area. The factory is a vital part in this strategy, and its success or failure likely to impact on the degree to which Kisongo develops as an EPZ (with ramifications for the overall national strategy).

Conclusions

It is more difficult, in the context of a limited report, to identify strong impacts on the local (Arusha Region) and national economy from A to Z. As one of Tanzania’s largest employers, it is clear that it must make a significant contribution. However, at the local (especially around Kisongo) level, the impact of the factory is clearer to detect. There has been a substantial growth of small businesses in an area that was previously relatively undeveloped. Factory employees are the main customers for these businesses, enabling them to survive, and for the benefits of incomes from these livelihoods to be spread out further. There is little indication that a limit has been met on the number of businesses that can be supported by the presence of A to Z in Kisongo (and if plans to develop the area as an Export Processing Zone, encouraging the presence of other manufacturers, are met, the potential will be substantially increased).

The factory has also made an impact on the local community through better transport links (the construction of the road, and the extension of the local bus network to the area); improving the general infrastructure (bringing water and electric supplies to the area, which are currently being extended to the local villages); and social supports for local herders (assistance with vaccination campaigns, provision of feed for cattle, and of water at times of water shortage). The impact of the factory in Kisongo has not been unproblematic, especially with the influx of a large number of people into an area previously relatively homogenous in its ethnic and social make-up. However, there were few serious problems reported.

It is harder to demonstrate a significant impact in Arusha town from the survey of the small-business owners. However, in general the presence and expansion of the factory was seen as a positive development for the town and surrounding area.

There are inevitable limitations to the two surveys. Not least because it relies primarily on perceptions of impact, rather than hard economic data (which would have been very difficult to come by). This is a particular problem for the Arusha town survey, where it is difficult for businesses to know exactly where their customers come from, and therefore make assessments as to how significant the presence of A to Z employees is for the local economy. Nevertheless, the research suggests that the A to Z / Olyset partnership has made a positive impact in the area, as in Tanzania more widely.

FOUNDATIONS OF SAND: OLYSET NETS, ROLLING OUT BED NETS AND PROCUREMENT POLICIES

“Donors are looking at the price. If the price is going to be cheap they are going to get the nets. The goal is, this is what we want. This is the programme, how many nets have been delivered, how much money has been given, have we reached our target? But this is an African company, an African manufactured net. The problem is here in Africa ... I think the priority should be given here.”

Director of A to Z Textiles

Relying on donor money is “killing your own business”

Director of A to Z Textiles

Rolling out ITNs (including LLINs) relies on donor funding and spending decisions by national governments. As a result, security of manufacturers rests largely on procurement policies and the way they are implemented. Whilst there is a general understanding that procurement policies can be a useful tool in broad development objectives, especially in building up local manufacturing capacities, there is a fear that donors are more driven by questions of cost and narrowly-defined efficiency.

A to Z Textiles, the Olyset partnership, and the 7,000 employees working across the two factory sites in Arusha, are thus reliant on their future security on decisions made by donors as to how to run their tendering processes, and the importance donors give to supporting African manufacturing capacity alongside efforts to roll back malaria.

Donor procurement policies are driven by the desire to secure the greatest impact for the lowest cost. As a result, they are primarily driven by a concern to ensure accountability and transparency in the procurement process, and the need to demonstrate efficiency in delivery of services and goods for the lowest possible cost. However, there are concerns that the narrowness with which the objectives of accountability, transparency, and efficiency are defined, is undermining broader developmental aims, especially the ability of national governments to build up domestic manufacturing or service capacity.

A Christian Aid report on donor procurement policies (2008), noted that development country opportunities for using procurement processes as ‘a policy tool for development’ were restricted. Moreover, procurement policy ‘can also have significant consequences for local firms that rely on government contracts’.⁶² The report noted that local industry can suffer from the focus on efficiency:

The main goal is to secure greater efficiency, narrowly defined as value for money. Procurement can be an important policy tool that governments can harness for economic development. However, the space to do so is limited, not only by trade agreements, but also through reforms driven by aid donors. Our analysis shows that this current bias can have negative consequences for local industry and argues that the goal of donors should be to support developing-country governments to consider procurement efficiency by maximum development impact.⁶³

Fully-open procurement processes raise the governance profile of the national government, increasing the likelihood that it will receive increased aid support for complying with international ‘best practice’. Donors demand open processes in which all qualified suppliers should be considered. According to Christian Aid, ‘the indicators reward policies that do not require foreign firms to associate with local firms or establish subsidiaries’.⁶⁴

Donors, including the World Bank, do recognise the use of local preference in procurement processes as a development tool. However, in practice, they tend to focus on efficiency (narrowly defined as the lowest cost possible) and liberal processes open to all qualified suppliers. According to published World Bank procurement guidelines:

Open competition is the basis for efficient public procurement. Borrowers shall select the most appropriate method for the specific procurement. In most cases, International Competitive Bidding (ICB), properly administered, and with the allowance for preferences for domestically manufactured goods and, where appropriate, for domestic contractors for works under prescribed conditions is the most appropriate method. In most cases, therefore, the Bank requires its Borrowers to obtain goods, works and services through ICB open to eligible suppliers and contractors.⁶⁵

World Bank guidelines suggest ‘a margin of preference of 7.5 percent’ can be given to domestic contractors through ICB processes.⁶⁶ However, in practice, the World Bank has put pressure on national governments to follow open procurement processes as much as possible. Sierra Leone’s 2008 budget support agreement, negotiated with donors, included a World Bank condition that procurement processes should be open to international bidding.⁶⁷ Attempts by the government in Ghana to restrict smaller processes to domestic firms were criticised by the World Bank who stated this ‘undermines the principle of transparency and equal opportunity and may be a cause of abuse’.⁶⁸

Similarly, the WHO model for procurement of pharmaceutical and health sector goods stresses the importance of judging bids on the basis of ‘lowest possible cost’: ‘following a bid the award should be made to the supplier making the lowest offer responding fully to the bid’.⁶⁹

Procurement policies of selected donors engaged in rolling out ITN programmes

Global Fund⁷⁰:

In common with most donors, the Global Fund highlights ‘the lowest possible prices in accordance with national and international laws’⁷¹ as the guiding principle of its procurement policies: ‘[T]he Principal Recipient is required to conduct competitive and transparent purchasing in order to obtain quality assured, effective products at the lowest possible price in a timely manner.’⁷²

Agencies procuring ITNs with Global Fund support must report back with information about the price paid as well as on the quality of the good purchased: ‘The system provides Principal Recipients, the Global Fund and other interested parties with the opportunity to compare prices and conditions achieved across grants, countries and regions. In addition it forms a basis for stakeholders to develop long-term demand forecasts’.⁷³

Roll Back Malaria Partnership:

The Global Malaria Action Plan does not address the issue of linking in capacity to produce and distribute LLINs with broader development / anti-poverty agendas. Whilst it does recognise the private sector ‘can play an effective role in the procurement and distribution of malaria interventions’, it does not acknowledge the importance of supporting the building of local capacity in most-affected countries.⁷⁴ It does, however, note that the RBM Partnership will ‘work closely with malaria intervention manufacturers in malaria-endemic countries and producers to help them meet international standards’⁷⁵ However, it also sees a need not to distort markets (which whilst not spelt out explicitly would suggest that costing remains a key priority). Nor, in the case of A to Z which has already met international standards, does it offer a solution.

PSI:

PSI is one of the leading procurement agents for ITNs. It is the procurement agent for the Global Fund's Voluntary Pooled Procurement (VPP) mechanism, which aims to purchase 60 million LLINs by the end of 2010.⁷⁶

Whilst PSI is committed to 'strengthening institutional development in the countries where it works' by establishing local affiliates, the organisation does not have a similar policy in regards to building capacity for production of health sector goods. PSI follows Global Fund procurement guidelines in the purchase of ITNs, and it notes: 'The Global Fund has recognized PSI for its compliance with the Global Fund Cost Reporting Mechanism'.⁷⁷

UNICEF:

UNICEF's procurement policies are driven by four key objectives: supporting UNICEF's mandate; ensuring 'fairness, integrity and transparency, through competition'; 'economy and effectiveness'; and 'best value for money'. Although the UN agency 'invites an appropriate geographical range of suppliers to tender', it uses competitive bidding for all procurement.⁷⁸

UNICEF operates its policies under the United Nations 'Common Guidelines for Procurement by Organizations in the UN System'. Under these: 'equal opportunity to participate [is] given to potential suppliers from all member countries'.⁷⁹

National donors:

Whilst much of the funding for the procurement of ITNs ultimately is provided by official donors (such as DFID, USAID, etc), most work through partner organisations or with national governments of malaria-affected areas. As a result, procurement policies reflect the priorities and guidelines of the procuring agency (UNICEF, PSI, Global Fund, etc). For example, under an agreement between USAID and UNICEF, UNICEF acts as the procurement agent for malaria sector goods in countries supported by both US-PMI and USAID. USAID funds are spent under UNICEF's procurement guidelines, which call for open and competitive bidding processes.⁸⁰

Nevertheless, most donors share the focus on open competition, best quality for lowest price model. Britain's DFID, for example, which has financed the delivery of almost 17 million ITNs⁸¹ applies a 'commercial understanding to all funding decisions ... both for our own direct procurement of goods and services and for indirect procurement by third parties using DFID funds (governments, donors, multilaterals and civil society organisations...)'.⁸²

Procurement policies thus represent a potential (and actual) obstacle in reaching poverty reduction and fostering development. As Christian Aid argue: 'A broader definition of efficiency that considers development gains alongside cost and quality would ensure that procurement plays more of a role for poverty reduction'.⁸³ The failure to take into account broader development goals when considering the full costs of procuring ITNs has led many donors to look to the cheapest price. This puts manufacturers such as A to Z Textiles at a disadvantage when competing with producers based, especially, in South-East Asia, who have significantly lower production costs. However, whilst the gain for the donor in securing the cheapest supply is obvious, the long-term costs to the regions who are unable to compete undermine poverty reduction goals.

This matters, not just for building up manufacturing capacity in developing countries, especially in Africa, which can help promote economic development, generate employment, and contribute to the skilling-up of the work sector. It can also have an impact on malaria. If, as evidence suggests, use of ITNs, access to anti-malarial drugs, and likelihood of dying from the disease is linked to poverty, procurement of African-manufactured ITNs are part of efforts to reduce poverty, and hence vulnerability to the disease.

A to Z Textiles is an African company, manufacturing nets in Africa (and providing large-scale employment through this work) for a problem that is most severely felt in sub-Saharan Africa. However, its commitment to creating sustainable employment, and the economic and social benefits that arise from its business, are clearly at risk from procurement policies that do not give priority to sourcing locally-manufactured goods. A to Z cannot compete on price with manufacturers based in parts of the world with lower manufacturing costs. This is especially the case for pricing structures that rely on FOB, rather than DDU pricing.⁸⁴ For distribution of ITNs in sub-Saharan Africa, A to Z Textiles would be able to compete more directly on price if donor policies did not rely on FOB.

Arguably, the target for universal coverage with ITNs has made businesses such as A to Z Textiles more vulnerable. The need to rapidly roll out coverage has put pressure on donors to source the largest number possible number of nets, pushing for the cheapest price.

The key challenge for A to Z is how to sustain levels of employment whilst operating in a deeply unstable environment. As Respondent A noted, without new business, it will be difficult to maintain current employment levels. Whilst it is committed to manufacturing of LLINs, the unreliability of the donor-dominated market means that it has to consider alternatives as the main source of its business. As one respondent notes, what would happen to the large number of people, especially the young women, employed at the factory if the business has to contract substantially? There are insufficient opportunities for employment in Tanzania's still relatively small manufacturing sector.

Beyond the immediate impact on A to Z employees, the wider economic and social contribution of A to Z to the Tanzanian economy is also at risk.

BACKGROUND: ROLLING BACK MALARIA

“You know malaria is the biggest killer. The main objective is to reduce this mortality ... This [business] is helping mankind”

Personal Assistant to the CEO, A to Z Textiles

The Roll Back Malaria Campaign

Malaria is a parasite, transmitted to humans through the bite of an infected mosquito, and is responsible for the deaths of at least one million people each year, most of them children living in Africa. Malaria is responsible for 20% of childhood deaths in Africa, and it is estimated that a child dies from the disease in the continent every 45 seconds – or 1,920 children every day. In 2008, the latest period for which there are reliable statistics, there were around 247 million cases of malaria.⁸⁵

The *Anopheles* mosquito, of which there are around 20 different species, is responsible for the transmission of the malaria parasite. There are four different types of parasite: *Plasmodium falciparum*, *P. vivax*, *P. malariae* and *P. ovale*: the first two are the most common forms, and *P. falciparum* is the most deadly, causing severe illness and possible death if not treated within 24 hours of infection. Children are at the most risk having not built up immunity to the parasite. Moreover, in Africa, inadequate and often remote health services, and poorly funded and equipped laboratories, lead to delays in diagnosis and hence treatment which can have a critical effect on the likelihood of death resulting from infection.⁸⁶

In addition to the large number of deaths caused by malaria, the nature of the symptoms of the disease, and frequent relapses suffered by those who have been infected, has a debilitating effect on the quality of life of the individual, as well as on broader productivity for those who cannot work whilst suffering from fevers and other symptoms associated with the disease. The WHO use a model to calculate the ‘sum of years of potential life lost due to premature mortality and the years of productive life lost due to disability’, in a formula known as DALY (Disability Adjusted Life Years). One DALY is equivalent to the loss of one full year of health. According to the 2004 WHO Burden of Disease Report, malaria in Africa caused a total DALYs of 30,928 (the third most significant loss after HIV and AIDS, DALYs of 46,653, and diarrhoeal infections, DALYs of 32, 203. This compares to a total DALYs for Europe from all infectious and parasitic disease of 6,041.⁸⁷ It has been estimated that Africa loses around \$12 billion each year directly from losses associated with the disease, in addition to the indirect costs resulting from the impact on economic production and growth.⁸⁸

Between the 1950s and the 1970s, the World Health Organisation (WHO) led the Global Malaria Eradication programme. Launched in 1955, it was based notably on the use of DDT (a powerful, but controversial insecticide) as the key prevention strategy, aimed at eliminating mosquitoes from malaria-endemic regions. Whilst achieving some successes in reducing malaria (in India and Sri Lanka, for example), it did not include (then colonial) Africa in its strategy (claiming structural and expertise deficits). The banning of DDT by many countries, following concerns over its impact on animal mortality and potential for harm to humans, and reluctance to commit new funds, led to the collapse of the programme in the early 1970s, and the relative neglect of malaria as a focus of international concern until the late 1990s.

The Millennium Development Goals (MDG) process, a set of ambitious development ‘targets’ to be met by 2015, reflected (and reinforced) a renewed interest in malaria, especially in Africa. Goal 6, to combat HIV/AIDS, malaria and other diseases included a range of specific targets aimed at halving malarial infections by 2015: increasing the proportion of children under 5 who sleep under insecticide-treated bed nets; increasing the proportion of children under 5 with fever who are treated with appropriate drugs; and working to reduce both the incidence and especially mortality associated with malaria.⁸⁹ Prevention and reducing the incidence of malaria is also relevant to MDG 4 (reduce child mortality): malaria is responsible for 20% of child deaths in Africa, and infection of pregnant women with malaria is linked to premature birth and infant mortality. It is also linked to MDG 5 (improve maternal health): pregnant women are more likely to be infected with the disease, and suffer more serious complications arising from infection.

In 2008, the Global Malaria Action Plan was launched with five key targets:

1. To achieve universal coverage⁹⁰ in prevention strategies by 2010
2. To reduce global malaria infections from levels in 2000 by 50% in 2010, and 75% in 2015
3. To half deaths from malaria from 2000 levels by 2010, and prevent almost all deaths by 2015
4. To eliminate malaria in up to 10 countries by 2015
5. To eradicate malaria globally in the long-term⁹¹

Funding for malaria control has increased substantially over the past seven years. In 2003, funding for malaria-endemic countries was around \$100 million dollars.⁹² In 2009, around \$1.7 billion dollars was spent on malaria control.⁹³ Africa accounts for around 85% of spending. The bulk of the funding has been channelled through the Global Fund to Fight AIDS Tuberculosis and Malaria (Global Fund), with donors also running bilateral funding programmes.⁹⁴ The Global Fund has accounted for around 70% of all funding for malaria between 2003 and 2009. The United States Agency for International Development (USAID) and the United States President’s Malaria Initiative (US-PMI) account for 15% of this funding, with the World Bank and other donors contributing 8% and 7% respectively.⁹⁵ Many donors, in addition to supporting the Global Fund, also run their own bilateral programmes. In August 2010, the British Department for International Development (DFID) announced it would increase its financial support for combating the disease in Africa, with a particular focus on those areas with the highest burden of malaria-related mortality. It committed itself to supporting the rolling out of bed nets to those in need, increasing provision of effective anti-malarial drugs, improve diagnosis of malarial infection, and target effective interventions to those most vulnerable.⁹⁶ However, despite increased pledges of support for malaria control programmes, investment in 2010 was significantly below the estimated \$6 billion needed.⁹⁷

A key part of the roll back malaria campaign over the past decade has been the focus on prevention. Whilst research into vaccines, more effective anti-malarial drugs (to counter the growing problem of malaria’s resistance to current drug therapies), and efforts to eradicate mosquitoes in malaria-endemic areas are part of the global effort to control and eliminate the disease, prevention remains the most significant means of reducing infections, and through that mortality from malaria. As the World Health Organisation states:

it is the only intervention that can reduce malaria transmission from very high levels to close to zero. In high transmission areas, it can reduce child mortality rates and the prevalence of severe anaemia. For individuals person protection against mosquito bites represents the first line of defence for malaria prevention.⁹⁸

Insecticide treated bed nets (ITNs) remain one of the most important tools in malaria prevention, and are a central element of international efforts to reduce the mortality and morbidity of the disease. However, studies in 18 African countries between 2006-07 showed that only 34% of households owned, and just 23% of children under the age of 5 (those most at risk of dying from malaria) slept underneath, an insecticide-treated net.

The development of long-lasting insecticide-treated bed nets (LLIN) has been a major innovation in bed net technology. By impregnating the net fibres with insecticide, LLIN technology ‘has dramatically increased protection against malaria’.⁹⁹ LLINs are stronger than older forms of insecticide-treated nets, and do not require annual (or more frequent) application with insecticides, that was usually the responsibility of the owner of the net.

As part of the target of achieving universal coverage in prevention, around 730 million LLINs are required globally, with about 350 million of those needed in Africa. In 2008, between 50 and 100 million nets were in use across Africa, requiring the provision of around 250-300 million nets in 2009 and 2010.¹⁰⁰ The commitment to provision of LLINs goes beyond the initial distribution. Extending prevention methods to universal coverage would reduce malaria infections, but would not in itself eliminate malaria-bearing mosquitoes. Initial distributions will therefore have to be backed up by longer-term programmes to ensure nets are regularly replaced in order to maintain effectiveness.

UNICEF is the largest funder of insecticide-treated bed net distribution programmes, having procured more than 141 million bed nets between 2000 and 2009.¹⁰¹ Population Services International was one of the first organisations to design programmes for distributing insecticide-treated bed nets in malaria-endemic countries. Following the success of its programme in Central African Republic, launched in 1994, it expanded it across Africa and Southeast Asia. It has delivered over 60 million insecticide-treated bed nets in over 32 countries. In 2007, for example, it worked with the Ministry of Health in Mali to deliver 2 million nets through a mass distribution campaign. In Kenya, it has delivered free bed nets to pregnant women and children through ante-natal clinics, in addition to providing highly-subsidized nets through private shops.

Two-thirds of the way towards the deadline for achieving the MDGs, substantial progress has been made in distributing bed nets to vulnerable communities. Since 2004, global production of insecticide-treated nets has increased from around 30 million nets per year, to 150 million in 2009. Between 2007 and 2009, around 200 million nets were distributed in Africa, giving coverage to more than 50% of the at-risk population.¹⁰²

Insecticide-treated bed net usage amongst children under 5, selected countries

Country	Proportion of children sleeping under insecticide-treated bed nets, 2000	Proportion of children sleeping under insecticide-treated bed nets, 2008/9
Rwanda	4	56
Gambia	15	49
Kenya	3	46
Madagascar	0	46
Zambia	1	41
Ethiopia	2	33
Senegal	2	29
Ghana	4	28
Tanzania	2	26
Cameroon	1	13
Uganda	0	10
Democratic Republic of Congo	1	6

[Taken from United Nations (2010), *The Millennium Development Goals Report 2010* (New York: United Nations), p.47]

Efforts to achieve universal coverage in the provision of ITNs is likely to be almost achieved by the end of 2010, with the targets met in most African countries during 2011. Most African countries which have areas of endemic malaria have national plans for achieving the universal coverage targets by the deadline.¹⁰³

However, whilst efforts to reach the target of providing bed nets to half of those who are vulnerable is likely to be met, there are challenges in reaching those most in need. In particular, whilst bed nets are distributed free to the poorest households in Africa, children in poorer households are still less likely to sleep under an ITN. Use in Africa by children under 5 of ITNs in the top 2 richest quintiles was 23% (richest) and 19% (second richest), usage in the bottom two quintiles was 16% (second lowest) and 14% (lowest).¹⁰⁴ Addressing poverty more generally is therefore likely to be an important consideration in seeking to implement effective malaria control in Africa.

There are a number of manufacturers of LLINs whose technologies have been approved by the WHO. The main suppliers and brands of LLINs are:

- BASF (Interceptor®)
- Bestnet Europe (Netprotector®)
- Clarke Mosquito (DuraNet®)
- Sumitomo Chemical (Olyset®)
- Tana Netting (DawaPlus®)
- Vestergaard (Permanet®)

Of the brands, Interceptor, DawaPlus and Permanet are polyester-based. Netprotect, DuraNet and Olyset are all manufactured from polyethylene.¹⁰⁵ Olyset is the only brand of LLIN to be manufactured in Africa.

Olyset

Olyset is manufactured by Sumitomo Chemical, a large Japanese chemical company, and local manufacturing partners in Africa. Sumitomo invented the technology behind the Olyset long-lasting net used to prevent malaria transmission in 1978. The net, which is made from fibres pre-treated with the insecticide permethrin, does not require regular re-treatment, and its insecticidal properties are guaranteed to provide protection for five years. The net was approved by the WHO for use against malaria in October 2001.

The Olyset bednet was designed by Sumitomo Chemical to create a long-lasting insecticidal net (LLIN) that did not require individuals using a net to regularly treat their bednet with insecticides, in order to ensure it worked effectively. A chemical insecticide, permethrin, is impregnated inside the actual fibres of the material from which the net is made, thereby obviating the need for regular treatment by the owner. The fibres are strong, and resistant to tearing during normal use. As a result, the Olyset bednet is guaranteed to last for five years.¹⁰⁶ It was the first LLIN to be submitted to the World Health Organisation Pesticide Evaluation Scheme (WHOPES), the first to receive a full recommendation,¹⁰⁷ and still one of only three LLIN's to have full WHO recommendation.¹⁰⁸ In 'coated' nets, the insecticide is applied to the surface of the net. As the insecticide is depleted through regular use and repeated washing, the concentration is gradually diminished. Coated polyester LLINs have a life-span of around three years. Treated polyester nets require regular re-treatment with insecticide by the user, usually every six months. The Olyset Net manufacturing process impregnates the insecticide into the fibres (the permethrin is blended with the polyethylene to create a master batch, from which the fibres used to make the actual net are extruded). This ensures a regular and continual supply of permethrin, guaranteed over a five year period. As the top layer is removed through usage and washing, more insecticide migrates to the top surface ensuring a steady, controlled and long-lasting supply of the insecticide, vital to keep the net effective.¹⁰⁹

According to the WHO evaluation of the Olyset net, “Olyset Nets are as effective as nets conventionally treated with permethrin in killing vector mosquitoes, reducing blood feeding, as well as having an excito-repellent effect.”¹¹⁰ In addition to its success in acting as a defence against the mosquito-bites that can cause malaria, the Olyset Nets “also have significantly longer residual efficacy.”¹¹¹ Trials in West Africa demonstrated that after four years of continuous use, the Olyset Nets were still providing a high level of protection. In particular, despite a growth of pyrethroid (the natural chemical from which permethrin is derived) resistance, attacks had been reduced by around half. Importantly, the WHO tests demonstrated that washing the net did not lead to a reduced efficacy.¹¹² The WHO recommended, as a result of its review that: ‘Considering safety, efficacy and evidence of long lasting effect, Olyset Nets are recommended for prevention of malaria’. Moreover, it concluded that ‘the concept of long-lasting nets should be promoted.’ The WHO recommends the use of Olyset nets for three years before replacement.

Further studies of the investigation of the Olyset Net have confirmed its effectiveness and its durability. A study of two Tanzanian villages seven years after Olyset Nets had been distributed to the village population revealed that 97% of those who had received an Olyset Net still possessed it, suggesting significant ‘durability and ... value to the population’. Usage seven years after distribution was reported to be 95%. Moreover, testing demonstrated the nets had out-performed their stated longevity, with insecticide levels still high enough to continue to work effectively.¹¹³ The use of Olyset Nets as a means of controlling the spread of other diseases transmitted by biting insects has also been noted. An investigation into the use of Olyset Nets against sandflies responsible for the transmission of cutaneous leishmaniasis in Iran concluded that: ‘the use of Olyset ITNs [insecticide-treated net] can provide significant personal protection from the bites of sandflies and subsequently reduce the risk of CL infection’. The study suggested it had an efficacy rate of 98%, and helped in reducing overall sandfly numbers: ‘Use of Olyset ITNs would provide an invaluable control measure against these [sandfly] vectors ... and may have good results with regard to the interruption of transmission of CL.’¹¹⁴

A to Z Textiles

A to Z Textiles began life in 1966 with three machines, making ladies- and children’s-wear. In the late 1970s, the factory, in Arusha town, began manufacturing the fabric used in making (untreated) polyester bed nets. However, it did not manufacture the nets themselves, instead selling on the rolls of netting to other manufacturers. From the mid-1980s, trade liberalisation threatened the continued existence of the factory. The influx of second hand clothes into Tanzania undermined sales of new, Tanzanian-made and more expensive clothing. At the same time, China began to emerge as a major textile exporter, entering markets in which A to Z had previously had an important market share such as Bangladesh. In the late 1970s, there were around 20 medium-sized textile companies manufacturing garments for the domestic and export markets.¹¹⁵ By 1994, as a result of liberalised markets and competition from imports of second hand clothing, only 11 remained, making some 15,000 people unemployed.¹¹⁶

By the late 1990s and early 2000s, Tanzania’s textile industry began to recover, and in 2000 was one of the fastest growing parts of the manufacturing sector.¹¹⁷ A to Z diversified into stitching polyester bed nets themselves in 1998, and by 2002 was the biggest manufacturer of such nets in sub-Saharan Africa. In 2000, A to Z employed around 1,000 people, making it the joint-third biggest textile manufacturer in the country.¹¹⁸

The old factory in Arusha still makes clothing, especially t-shirts and polo shirts, and the company still has a plastics division. The business remains within the family of the founder.

The Olyset-A to Z partnership

In 2003, A to Z Textiles began a pilot project with Sumitomo, manufacturing pre-impregnated LLINs using Olyset technology. A to Z's experience with textiles and plastics made it an attractive partner to Sumitomo, introduced to A to Z through UNICEF, WHO and the Acumen Fund.

The establishment of the joint-venture in 2005 between Olyset (Sumitomo Chemicals) and A to Z textiles was facilitated by the non-profit social investment fund organisation, Acumen Fund, the United Nations Children's Fund (UNICEF), and Population Services International (PSI). An agreement was reached under which Sumitomo Chemicals transferred the technology for the manufacture of the Olyset Net, royalty-free, to A to Z Textiles.¹¹⁹ The Acumen Fund provided a loan to A to Z Textiles for the purchase of the machinery used to make the nets. Sumitomo Chemicals, in addition to providing the technology on a royalty-free basis undertook to provide training for Tanzanian technicians and to establish quality control measures to ensure the Olyset Nets manufactured in Arusha met WHO standards. The resin used in the manufacture of the nets was to be supplied by ExxonMobil.¹²⁰

The joint-venture initially focused on production in the old Arusha town factory site. However, on 8th February 2008, the new Olyset factory opened at Kisongo, just outside of the northern town of Arusha. The factory was established as a joint venture between Sumitomo Chemical and A to Z Textiles.

Following the initial pilot project in 2003, A to Z Textiles has massively increased its capacity for manufacturing LLINs. In 2004, A to Z Textiles manufactured around 300,000 Olyset Nets under the joint-partnership. By 2005, it was manufacturing 3 million nets,¹²¹ and in 2009 around 30 million nets.

SOURCES

¹ Informant I

² This section largely draws on findings from the in-depth interviews, carried out between 14th-16th September, 2010.

³ Under international standard definitions of unemployment (without work but available for and seeking work), overall unemployment is estimated at 4.3 – 4.7 percent. This is almost certainly a significant underestimate. International Labour Office (2010), 'Decent Work Country Profile: Tanzania (Mainland), (ILO, Dar es Salaam & Geneva), p.2. World Bank Development Indicators, <http://data.worldbank.org/country/tanzania>. Accessed 8th December 2010.

⁴ International Labour Office (2010), 'Decent Work Country Profile: Tanzania (Mainland), (ILO, Dar es Salaam & Geneva), p.vii.

⁵ International Labour Office (2010), 'Decent Work Country Profile: Tanzania (Mainland), (ILO, Dar es Salaam & Geneva), p.vii.

⁶ World Business Council for Sustainable Development (2006), wrote in its 2006 report, From Challenge to Opportunity: The Role of Business in Tomorrow's Society. P.8.

⁷ Peter Newell & Jędrzej George Frynas (2007), 'Beyond CSR? Business, poverty and social justice: an introduction', Third World Quarterly 28, 4, p.672.

⁸ ILO, 'Decent Work Agenda', <http://www.ilo.org/global/about-the-ilo/decent-work-agenda/lang--en/index.htm>. Accessed 16th December 2010.

⁹ Taken from ILO, 'Decent Work Agenda', <http://www.ilo.org/global/about-the-ilo/decent-work-agenda/lang--en/index.htm>. Accessed 16th December 2010.

¹⁰ Informant F

¹¹ Informant B

¹² Informant A, B, C

¹³ Informant A

¹⁴ Informant B

¹⁵ Informant I.

¹⁶ TUICO Assistant Regional Secretary.

¹⁷ Informant A

¹⁸ Informant A, C, D, F

¹⁹ Informant A, B, C, D, F

²⁰ Informant C

²¹ Informant B

²² Informant A, C

²³ Informant C

²⁴ Tanzania Government Gazette, 'The Regulation of Wages and Terms of Employment Order 2010' (Government Notice 172 of 2010).

²⁵ Informant B, C, D (in Informant D's section, meetings or discussions between management and workers were reported as taking place every day).

²⁶ Informant A

²⁷ Informant B, E

²⁸ Informant B

²⁹ This section is largely based on the employee survey, although it does draw on data from the in-depth interviews, where appropriate or to illustrate particular findings.

³⁰ Informant C.

³¹ Informant B.

³² Informant F.

³³ Tanzania National Bureau of Statistics. <http://www.nbs.go.tz/>. Accessed 16th December 2010.

³⁴ Andrew Mbwambo & Joseph A Kuzilwa (2004), 'Clothing and Footwear in Tanzanian Industrialisation: Issues and Options', in C Rogerson and D McCormick (eds), Clothing and Footwear in African Industrialisation (Africa Institute of South Africa), p.389.

³⁵ According to Informant A, all the houses in the immediate area were built after the factory had been established, in response to the new opportunities that had arisen. Management Interview No. 1, 15th September 2010.

³⁶ Informant H, a local Village Chairman, 16th September 2010. Village N has around 10,000 residents. There are three villages in the immediate local area.

³⁷ Informant C, 15th September 2010.

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- ³⁸ Leonard E G Mboera, Susan F Rumisha, Kesheni P Senkoro, Benjamin K Mayala, Elizabeth H Shayo & W N Kisinza (2007). 'Knowledge and Health Information Communication in Tanzania', *East African Journal of Public Health* 4, 1, pp.33-39.
- ³⁹ World Bank Development Indicators, 'households with a television'. The latest data is from 2005. <http://data.worldbank.org/indicator>. Accessed 2nd December 2010.
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- ⁴¹ Katherine Lewis (2010). 'Tanzania: mobile money bridges distances in East Africa'. AllAfrica.com. www.allafrica.com. Accessed 2nd December 2010.
- ⁴² Informant H, 16th September 2010.
- ⁴³ Informant B, 15th September 2010.
- ⁴⁴ Informant A, D, E.
- ⁴⁵ Informant B.
- ⁴⁶ Informant H.
- ⁴⁷ Informant A.
- ⁴⁸ Informant J.
- ⁴⁹ Informant A.
- ⁵⁰ Informant B.
- ⁵¹ Informant D.
- ⁵² Informant H.
- ⁵³ Informant C.
- ⁵⁴ Informant A, C.
- ⁵⁵ Interestingly, whilst 5 of the respondents highlighted the increased availability of bed nets, only two mentioned the impact on malaria prevention specifically.
- ⁵⁶ Informant A.
- ⁵⁷ Informant A.
- ⁵⁸ Informant A, C, D, F.
- ⁵⁹ Informant I.
- ⁶⁰ Informant J.
- ⁶¹ Informant A.
- ⁶² Olivia McDonald (2008), *Buying Power: Aid, Governance and Public Procurement* (Christian Aid), p.3.
- ⁶³ Olivia McDonald (2008), *Buying Power: Aid, Governance and Public Procurement* (Christian Aid), p.14.
- ⁶⁴ Olivia McDonald (2008), *Buying Power: Aid, Governance and Public Procurement* (Christian Aid), p.14.
- ⁶⁵ World Bank, *Guidelines Procurement Under IBRD Loans and IDA Credits* (May 2004, revised October 2006 and May 2010), p.8.
- ⁶⁶ World Bank, *Guidelines Procurement Under IBRD Loans and IDA Credits* (May 2004, revised October 2006 and May 2010), p.41.
- ⁶⁷ Olivia McDonald (2008), *Buying Power: Aid, Governance and Public Procurement* (Christian Aid), p.14.
- ⁶⁸ Olivia McDonald (2008), *Buying Power: Aid, Governance and Public Procurement* (Christian Aid), p.15.
- ⁶⁹ WHO, UNICEF, UNDP, UNFPA, WB, *A Model Quality Assurance System for Procurement Agencies* (WHO, 2007), p.41 & 46.
- ⁷⁰ Global Fund, *Guide to the Global Fund's Policies on Procurement and Supply Management* (November 2009).
- ⁷¹ Global Fund, *Guide to the Global Fund's Policies on Procurement and Supply Management* (November 2009), p.5.
- ⁷² Global Fund, *Guide to the Global Fund's Policies on Procurement and Supply Management* (November 2009), p.7.
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- ⁷⁹ United Nations (2006), 'United Nations System General Business Guide for Potential Suppliers of Goods and Services with Common Guidelines for Procurement by Organizations in the UN System'. (UN), p.5. http://www.ungm.org/Publications/Documents/gbg_master.pdf. Accessed 16th November.
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- ⁸² DFID (2008), 'Procurement Can Make it Happen: A DFID commercial strategy', p.2
- ⁸³ Olivia McDonald (2008), *Buying Power: Aid, Governance and Public Procurement* (Christian Aid), p.4.
- ⁸⁴ Under Free (or Freight) on Board (FOB) pricing policies, the manufacturer takes responsibility for the goods until they are loaded onto shipping, after which the buyer takes full financial responsibility. Under Delivered Duty Unpaid (DDU) pricing, the manufacturer (seller) takes full responsibility for delivering to the destination.
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- ⁸⁹ UNDP, 'Millennium Development Goals. Goal 6: Combat HIV/AIDS, malaria and other diseases'. www.undp.org/mdg. Accessed 11th November 2010.
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