



DESMOND TUTU CENTRE 4
Leadership · Lifeskills · Listening · Livelihoods



GREEN **Livelihoods**

2014-2015 Calendar

HOW TO GET INVOLVED

Co-founders

To date, these include the ABSA Foundation, the German Development Service (GIZ), Darbytech, the Energy and Water SETA, the Services SETA, Eskom, and the Vodacom Foundation.

More resource organizations are needed particularly coaching, mentoring and incubation of the Diversified Green Coops at community level.

Training Providers

C4L works in conjunction with the Ehlanzeni FET College, which provides accredited training. Some of this is outsourced to various other training providers.

Practicums and/or aftercare also involve “host employers”. C4L is the “lead employer”.

Learners

Young women and men from across Mpumalanga are invited to get involved. C4L’s objectives are to have one young woman and one young man (= 2) in each and every Ward of each and every Local Municipality working in one of the Green Occupations by the end of 2015.

HOW IT WORKS

Learners are identified by various contacts including the distribution of this Calendar.

National Youth Development Agency (NYDA) is constantly in the loop. It has been very supportive of this initiative since it was launched in 2010.

Registration is handled by C4L

Desmond Tutu Centre for Leadership

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Entrepreneurship - first things first

Different unit standards and courses are available. Individuals are matched to resources, but always with an eye to having a broad bandwidth of skills in each Coop (thus in each local municipality).

Green occupations

Based on a structured survey of their own community, learners each then develop their own Business Plan – from the real business opportunities that emerge from research. Admission to technical training hinges on these initial steps. Once again, individual preferences are balanced with assuring that each Coop has a broad bandwidth of skills.

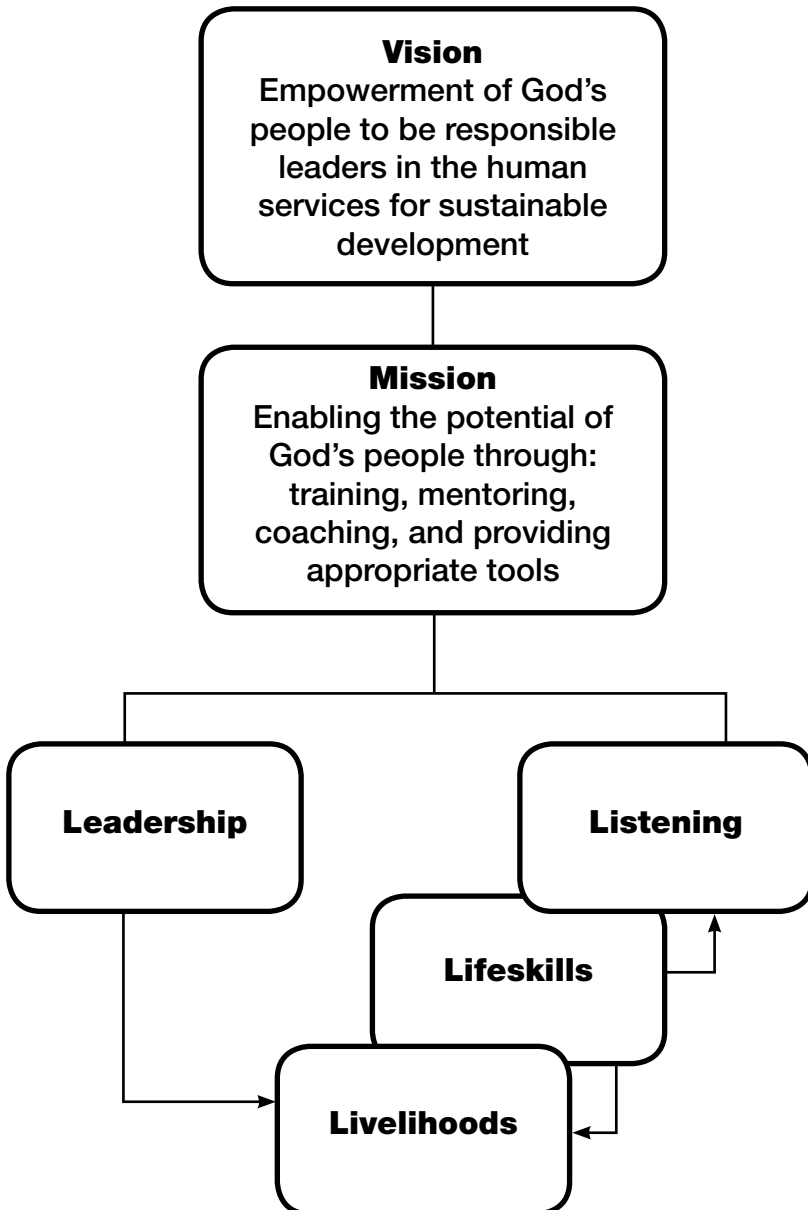


DESMOND TUTU CENTRE **FOR LEADERSHIP (C4L)**

C4L is a voluntary association that was originally formed in 1992. In 1999, it began to focus on adult education. After the NPO Act was promulgated, C4L registered as a nonprofit organization (#006-856-NPO). In 2003 C4L adopted a strategic focus on youth and the same year became a Public Benefit Organization (PBO #930000088). In 2006 the trading name *Desmond Tutu Centre for Leadership* was adopted, with the consent of the archbishop emeritus. In 2011, C4L became an accredited service provider with the MICT SETA.

C4L exists to provide leadership training to young adults working in the human services. That is its *core business* – and thus the first division in its organization structure. For 7 years, C4L has been intentionally trying to lower the average age of its learners in order to maximize the effect that it can have in the long run. This brought about the formation of a Youth Corps in the Lowveld – youth who are activists and committed to community service.

In 2010 C4L launched its *Livelihood Security Unit*. This is a social enterprise in itself that encourages and enables youth to form social enterprises themselves at community level. The foundation is entrepreneurship (MicroMBA and Business Plans). The walls are technical training (in the “green occupations”). The roof is Coop formation – to incubate formal-sector entities that operate at community level.



GREEN LIVELIHOODS

Social benefits

Reducing unemployment for rural youth in Mpumalanga. This is a unique opportunity for trained youth to be able to earn an income from renewable energy or “green occupations” in their respective areas.

Water loss reduction - Those trained can not only maintain and service different homes in their communities but also serve the municipalities in detecting and repairing leaks in the water reticulation systems

Economic growth – The Informal Sector and Small Business are where most new jobs are created. Factories and commercial farms tend to mechanize. These trained emerging entrepreneurs will have the skills to start up or improve their existing business with the acquired business skills – within the framework of a Coop

Improvement of living conditions through the migration to renewable energy, reducing electricity consumption (and cost), recycling waste, conserving soil, and even cleaning the air that we breathe.

Lower carbon footprint by carbon-catching and roll out of SWHs (each 1500-litre SWH replacing an electrical geyser reduces carbon emissions of 1.6 tons per year thereafter)

TEAM COMPOSITION

FUNCTION	NAME	SCOPE
Programme Manager	Debo Adekunle	Manages the day-to-day running of LSU courses and mentoring
Programme Manager	Debo Adekunle	Liaison with SETAs, ABSA, GIZ, Eskom, trainers, learners etc
Entrepreneurship	Stanley Matsebula	Stanley, Nakiwe and Debo have completed the train the trainer course in MicroMBA
Coop Incubation	Debo Adekunle	Debo has legal training that positions him well to advise and incubate emerging Youth Coops
Social Innovation	Chuck Stephens	Chuck has accrued skills and experience on both sides - enterprise and technical

Climate Change is a slow-onset disaster. Disaster Management has been one of C4L's core competencies since its inception. It has engaged in response to three major disasters during its short history – the Mozambique Floods (2000-2002), the AIDS pandemic (2003 – 2010) and now, Global Warming, since 2011.

Executive Director – Chuck Stephens

During his career he worked on various water supply projects – including operating a well-drilling rig. He himself can be described as a “social entrepreneur” who has worked in both realms – social and enterprise. Social innovation is always on his mind – looking for new and relevant ways for people to make their social contribution.

Programme Manager - Debo Adekunle

Debo was selected by a panel that included the two donors who funded the LSU's start-up. He himself has a strategic interest in youth work. He is well prepared as an entrepreneurship trainer and is committed as well to Coop formation recognizing the limitations of the Informal sector. He guided the LSU through its pilot stage, but will now focus on the business side, while the Executive Director scopes and explores relevant opportunities for youth in the “green occupations”.

Administrator - Nakiwe Matsebula

A project such as this needs an “anchor person”. Nakiwe graduated recently as an Economist and speaks siSwati as her first language. She is also part of C4L's academic team – an entrepreneurship trainer. Her presence is evidence that C4L is not just targeting youth, but also “youth- led”.

Products

The LSU offers a “combo” of entrepreneurship training and technical training. It starts by giving entry-level business training to youth. Then s/he takes that back home to devise a Business Plan based on verifiable opportunities. More advanced training is also available - by Coop, not for every individual.

PRODUCT	NICHE	SETAS	CAREER PATH
ENTERPRISE			
Entrepreneurship	Unit standard # 263356	Services SETA	Micro entrepreneurs
Entry level	Micro MBA #14444	Services SETA	Micro entrepreneurs
Business management	Unit standard #114592	Services SETA	Entrepreneurs
Business plans	Unit standard #114592	Services SETA	Entrepreneurs
Finance, economics & accounting	One-year course	Ehlanzeni FET College	Managers
Cooperative governance	Solidarity groups to engage formal sector opportunities	DTI Registration & DEDET support	Cooperators

Entrepreneurship, MicroMBA and Business Management are seen as launching pads. Based on these Unit Standards, youth do a market survey in their own community looking for real business opportunities.

Based on the location-specific Business Plan that emerges, s/he chooses a technical path. When one begins a journey, there is always a destination. That brings to mind code numbers from the *Organizing Framework for Occupations*:

PRODUCT	NICHE	SETAS	CAREER PATH
TECHNICAL			
Water supply	Rain water harvesting Leakage repairs	EW SETA	Plumber 642601
Basic plumbing	Installation Maintenance	MERSETA	Plumber 642601
Re-cycling	Recycling (solid waste) Recycling (organic waste)	EW SETA AgriSETA	Refuse sorter 861201
Carbon forestry	Tree planting Spekboom hedges along highways	EW SETA AgriSETA	Forestry technician 314301
Erosion control	Vetiver grass to control dongas	EW SETA AgriSETA	Landscape Architect 216201
Solar water heater installing	Installing devices on homes (ESCOs)	CETA	Solar installer 642602
Solar PV installing	Installing panels, lights & chargers	CETA	Solar installer 642602

C4L promotes formation of Green Coops as a single point of contact for the youth involved. This ramps up self-employment into the Formal Sector of the economy.

Diversified Green Coops

The preferred kind of Coop is more of a solidarity group, operating at the local level. Each Local Municipality should have one, although members may serve in their own vicinity “sub-site” at a Ward level depot. In this case, several functions are involved:

- Recycling
- Soil and water conservation
- Carbon trading
- Solar & biogas
- Water supply & plumbing

Specialized Coops

One kind of Coop connects youth that all share one kind of skill and ambition. In APOLICO’s case, this is installing solar water heaters... This can happen over a large area, such as one whole district municipality.

ENERGY AUDITORS

This new career path is emerging under the auspices of ESKOM. Youth are trained to audit energy use in offices, to help reduce electricity consumption. C4L has been appointed as the training hub in Mpumalanga province.



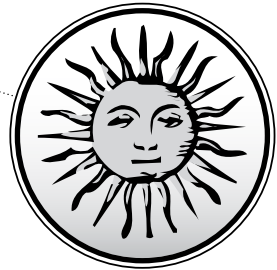
Enterprise



Water



Earth



Fire



Beyond

Air





ENTERPRISE

Entrepreneurship

Unit standard #263356

Level 4

5 credits

Demonstrate understanding of entrepreneurial profile

ACCREDITED FET FACILITATOR AND ASSESSOR

- VPK

Not all 1000 learners can be offered full qualifications, so to spread the wealth, the majority will receive one Unit Standard such as this.



MicroMBA

Unit Standard #14444

Wholesale & Retail SETA

Entry Level

7 credits

Basic business skills for emerging entrepreneur

Created in South Africa by South Africans (Trident Institute in Capetown) for South African micro-entrepreneurs.

ACCREDITED C4L TRAINERS

- Stanley Matsebula
- Nakiwe Matsebula
- Debo Adekunle

Visit www.micro-mba.com

Building the community by empowering the individual



Business Management 263434

Unit standard # 263434 (Services SETA)

Level 4

6 credits

Plan and manage production and operations in a new venture

ACCREDITED FET FACILITATOR AND ASSESSOR

- VPK

Not all 1000 learners can be offered full qualifications, so to spread the wealth, the majority will receive one Unit Standard such as this.



Business Plans

Unit standard # 114592 (Services SETA)

Level 4

8 credits

Produce business plans for a new venture

ACCREDITED C4L & FET FACILITATOR AND ASSESSOR

- Debo Adekunle
- VPK

Each learner is expected to explore the real business opportunities that do exist in the Green sectors in their own community. When they draft their own particular Business Plan - based on the match between their own inclinations and community profiling – they can then move on to technical training.



Finance, Economics & Accounting

FET Course

Level N4-N6

- Financial management and controls
- Economics
- Accounting practice

Each Coop should have at least one member who has completed each of these programmes.

ACCREDITED FACILITATOR AND ASSESSOR

- Ehlanzeni FET College



Cooperative Governance

Registration with DTI

DEDET support on compliance

- Specialized Coops like APOLICO
- Diversified Green Coops

It is not a prerequisite that every youth join a Coop, but they are encouraged to do so.

The motivation is that “micros” cannot easily engage with government contracts and other formal-sector opportunities. So Coops serve as a platform, to be used in different ways by different members of a solidarity group.

FET TRAINERS

- VPK

C4L MENTORS

- Debo Adekunle
- Nakiwe Matsebula

A new accredited Unit Standard is coming soon on *Managing Cooperatives*.

GREEN OCCUPATIONS

For thousands of years, the 5 basic elements we have to work with have been ***Water, Earth, Fire, Air and the Beyond***. These are the 5 focal points of the Green Livelihoods initiative:



WATER

There is a water emergency in South Africa. Population is rising and so are global temperatures, which translate into weather changes that do not bode well for future generations.

Leak repair

Worst of all, South Africa only delivers an average of 75% of the water captured by infrastructure to end users. The loss rate of 25% is much higher than the world average of 8%. This waste is unacceptable given the shortages, so the real focus of the LSU is to equip youth to reduce water loss and waste at community level.

116168: Maintain basic water quality, AgriSETA, 1 credit, Level 1

114917: Apply labour intensive construction methods to construct and maintain water and sanitation services, CETA, 4 credits, Level 2

246463: Demonstrate knowledge of water cycle, water and wastewater system and processes, EWSETA, 5 credits, Level 2



Control of alien invasive vegetation

Increasing streamflow is another key outcome of this labour-intensive opportunity for self-employment. Catchments get infested with species that are alien and have to be cleared.

113933: Demonstrate knowledge of the water cycle, EWSETA, 4 credits, Level 1

116064: Recognize and identify the basic functions of the ecological environment, Agriseta, 4 credits, Level 2

12512: Practice environmental awareness, FPM SETA Level 1

Rainwater harvesting

There are still areas without reliable water supply, so strategies like rainwater harvesting are also part of this focal point.

116274: Assist in farm planning and layout for conservation and rainwater harvesting, Agriseta, 3 credits, Level 3

246442: Operate pump, EWSETA, 5 credits, Level 2

244491: Fabricate & install sheet metal components, CETA, 8 credits, level 4

244495: Install, maintain and test Rainwater Systems, CETA, 5 credits, level 4



Basic Plumbing

There is a shortage of plumbers in South Africa and in Mpumalanga in particular. . Thus this focal point offers a niche into which youth can find perpetual work. Plumbing pertains to the water distribution and drainage within buildings.

11780: Understand and apply basic plumbing principles, EWSETA, 3 credits, Level 3

244507: Install, maintain and test cold water supply systems, CETA, 14 credits, Level 4

246442: Operate pump, EWSETA, 5 credits, Level 2

FOR WATER SUPPLY AND BASIC PLUMBING, FET AND C4L TRAINERS INCLUDE

- VPK
- Thami Maluka, plumbing trainer
- Nigel Lowe, water engineer



EARTH

Soil Conservation

As is the case with water and energy, another resource that needs protection is the soil. Furthermore, good erosion control is a big step towards water retention.

Landscaping around roads including stormwater control, and in public parks and cemeteries provides many opportunities for youth self-employment. The centrepiece of this erosion control focal point is the planting of Vetiver grass.

Mines are another market – where the formation of “dongas” can be controlled by terracing and planting Vetiver grass. This species is non-invasive and easy to propagate. It also provides linkages to other sectors – for example Vetiver grass is good for basket weaving and there is also a market for Vetiver oil in the perfume industry.

263995: Schedule the application of water to plants and landscape, Agriseta, 3 credits, Level 2

114916: Use labour intensive construction methods to construct and maintain roads and stormwater drainage, CETA, 8 credits, Level 2

119687: Demonstrate a basic understanding of the horticultural industry, Agriseta, 2 credits, Level 1

12575: Demonstrate an understanding of soil preparation, Agriseta, 5 credits, Level 1



FIRE

There are two sides to solar – photo-thermal (PT) and photo-voltaic (PV).

Photo-thermal

PT pertains to solar water heaters (SWHs). To date this has been a C4L focus – installing solar water heaters.

A recent development is that SWH installers can register as Energy Saving Companies or ESCOs. Previously, you could only register as such if you were generating electricity to add value to the ESKOM grid (e.g. wind or water turbine owners). Now that SWH installers can register, they can also contract installation work from ESKOM which will lead to “roll out” of the 5 million SWHs mandated for installation by 2030 in the NDP.

262784: Mount solar water heating system, CETA, 20 credits, Level 2

244499: Install and maintain solar water heating systems, CETA, 10 credits, Level 4

Photo-voltaic

PV applies to generating electricity for applications like lighting and charging.

113892: Design a solar pump system, EWSETA, 4 credits, Level 4

10624: Install a lighting system, EWSETA, 4 credits, Level 2



AIR

Beyond conserving water, energy and soil comes a concern for clean air. Specifically - for carbon catching. A succulent plant that is indigenous to South Africa is the centrepiece of this initiative, although trees for fruit and paper are more common in the Lowveld. *Portulacaria afra* is called Spekboom in Africans or Pork Bush. It is also called Elephant Bush because it is a favourite food of elephants. It captures carbon at a rate ten times higher than any other known tree.

In fact, in the townships along the Swaziland border, this plant is used commonly as “green fencing” between houses. For this same reason, the vernacular name for the plant in Shangan means “people lived here” – signifying that where it grows, there used to be some huts.

This species lends itself to propagation in nurseries and to planting out into pasture, parks, cemeteries or even along the median of double carriageways. Carbon offsetters overseas are keen to find carbon catching projects – and a new Carbon Tax is already slated for South Africa.

12512: Practice environmental awareness, FPMSETA, 4 credits, Level 1

119701: Create an awareness of environmental protection, Agriseta, 4 credits, Level 2

116199: Demonstrate basic understanding of the structure and function of a plant in relation to its environment, Agriseta, 4 credits, Level 1



BEYOND

Recycling

New legislation mandates that garbage be sorted and thus recycled by the end of 2012 in South Africa. This is a huge business opportunity for youth.

Waste is generally divided into two kinds – solid and organic. Solid wastes like metal and paper can be easily converted into cash. Other waste like glass can serve secondary purposes, like grinding it to dust from which beads are made – thus handicrafts.

Littering is a perennial problem in South Africa. It is a health hazard in many urban settings. It is not regarded as a resource, and that means that behaviour change is also needed. So there are important social benefits to businesses in this sector.

116064: Recognize and identify the basic functions of the ecological environment, Agriseta, 4 credits, Level 2

264461: Demonstrate an understanding of Integrated Waste Management, LG SETA, 8 credits, Level 5

243764: Demonstrate an understanding of natural (Macro) environmental principles, MQA, 6 credits, Level 1

13671: Demonstrate knowledge of environmental systems and ecology, ETDP SETA, 20 credits, level 4



Organic waste

Organic waste can be used in composting and permaculture.

116121: Apply sustainable farming practices to conserve the ecological environment, Agriseta, 5 credits, level 2

119703: Mulch and enrich the soil of established landscape areas, Agriseta, 5 credits, Level 1

Biogas

One kind of organic waste is effluent – not just human but also of animals in a farm setting. This waste is also a resource – able to provide renewable energy namely biogas for use in cooking appliances. The African wonder plant Moringa is especially useful in generating biogas.

264461: Demonstrate an understanding of Integrated Waste Management, LG SETA, 8 credits, Level 5

114219: Demonstrate an understanding and implement environmental initiatives on a construction activity, CETA, 4 credits, Level 2

ACCREDITED FET FACILITATOR AND ASSESSOR FOR WASTE

- VPK
- V Sun Tech



Computer Skills

These skills are “cross-cutting”, that is they apply to both the business and technical sides. Most business courses now include a segment of computer skills. However, although some Coop members can take the full qualification, others can take only some of its 11 Unit Standards:

Qualification #49077: End-user Computing

Level 3

Credits 130

Qualification #61591: Basic Computer Literacy

Level 3

Credits 43

**C4L ITSELF CAN PROVIDE
FACILITATION AND ASSESSMENT**

Total Transformation

C4L offers a one-day special on the Holistic approach to transformation - emphasizing that environmental degradation is part of a fallen world. Redemption has a green aspect to it. Part of good stewardship, indeed of good citizenship, is caring for the resources all around us. Squandering them robs future generations. This calls for behaviour change and a holistic view of Christian ministry.

Training Providers

The Ehlanzeni FET College has this remit. Its training resources include:

PROGRAMME	SUBJECTS
Civil engineering	Plumbing theory Civil & building technology
Building construction	Building & structural construction Masonry/plumbing Carpentry & roof work
Primary agriculture	Soil science Plant production Agri-business

Beyond this baseline FET College capability, other training providers in the province can be outsourced. For example:

PROVIDER	SUBJECTS
PUGS Landscaping	Vetiver grass erosion control
Eskom/BEAT team	Installation of Solar Water Heaters
V Sun Tech	Installation of solar lighting