myloo
My story. My dignity.

THE FUTURE OF SUSTAINABLE SANITATION

MYLOO DRY SANITATION TECHNOLOGY

Initiative by Amalooloo

Background

Betram (Pty) Ltd was founded in 1986 and has developed a character of passionate involvement in bringing about high quality, sustainable sanitation solutions.

We have been able to close the sanitation loop through extensive investment in research and development.

Over 20 years of experience has revealed that the industry's biggest challenge is the inability of current technologies to treat faecal sludge or human organic waste on site, in a way that is safe and eco-friendly.

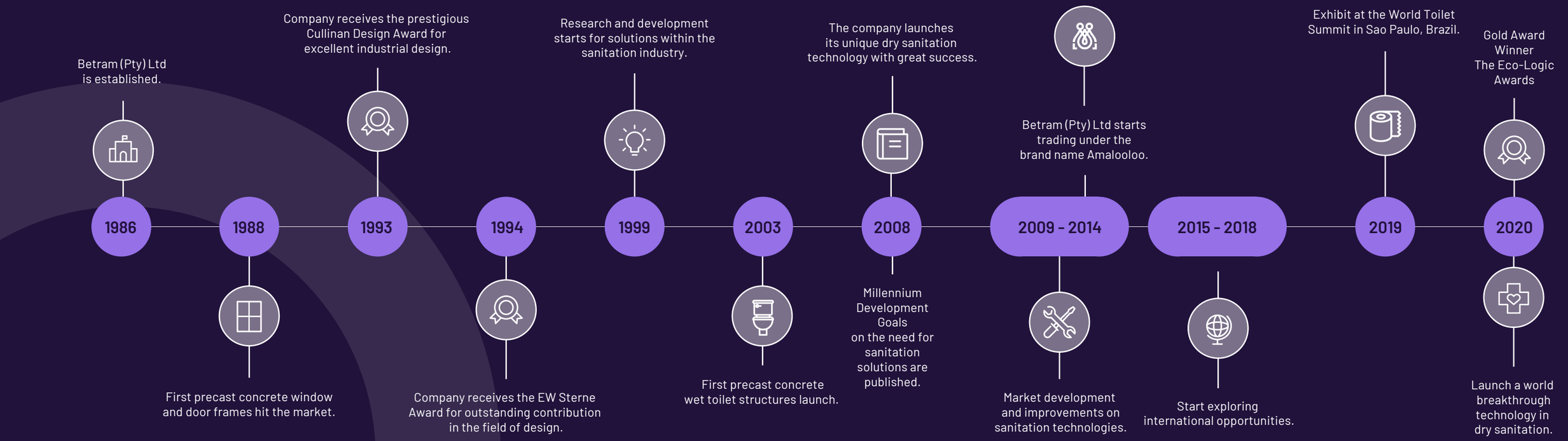
Another key aspect of this challenge is the lack of communication between the supplier of the technology and the end user for sustainability.

We have realised that we need to approach sanitation in a holistic way that includes the design, manufacturing, transportation, installation, education, communication, maintenance, and recovery of nutrients for the growth of healthy agricultural products for households and communities. In 2020, Betram (Pty) Ltd patented a world-first in dry sanitation technology, MyLoo, which will launch during the first quarter of 2021.

The MyLoo sanitation system is at the forefront of solving sanitation problems in urban, peri-urban, and rural areas, as well as in schools. It is an affordable, superior product that does not compromise on quality or style and includes the safe management, storage, collection, treatment and disposal of human excreta.

We believe in the empowerment of people through the transfer of skills, training, technologies, and processes for the provision of sustainable job opportunities.

OUR HISTORY:

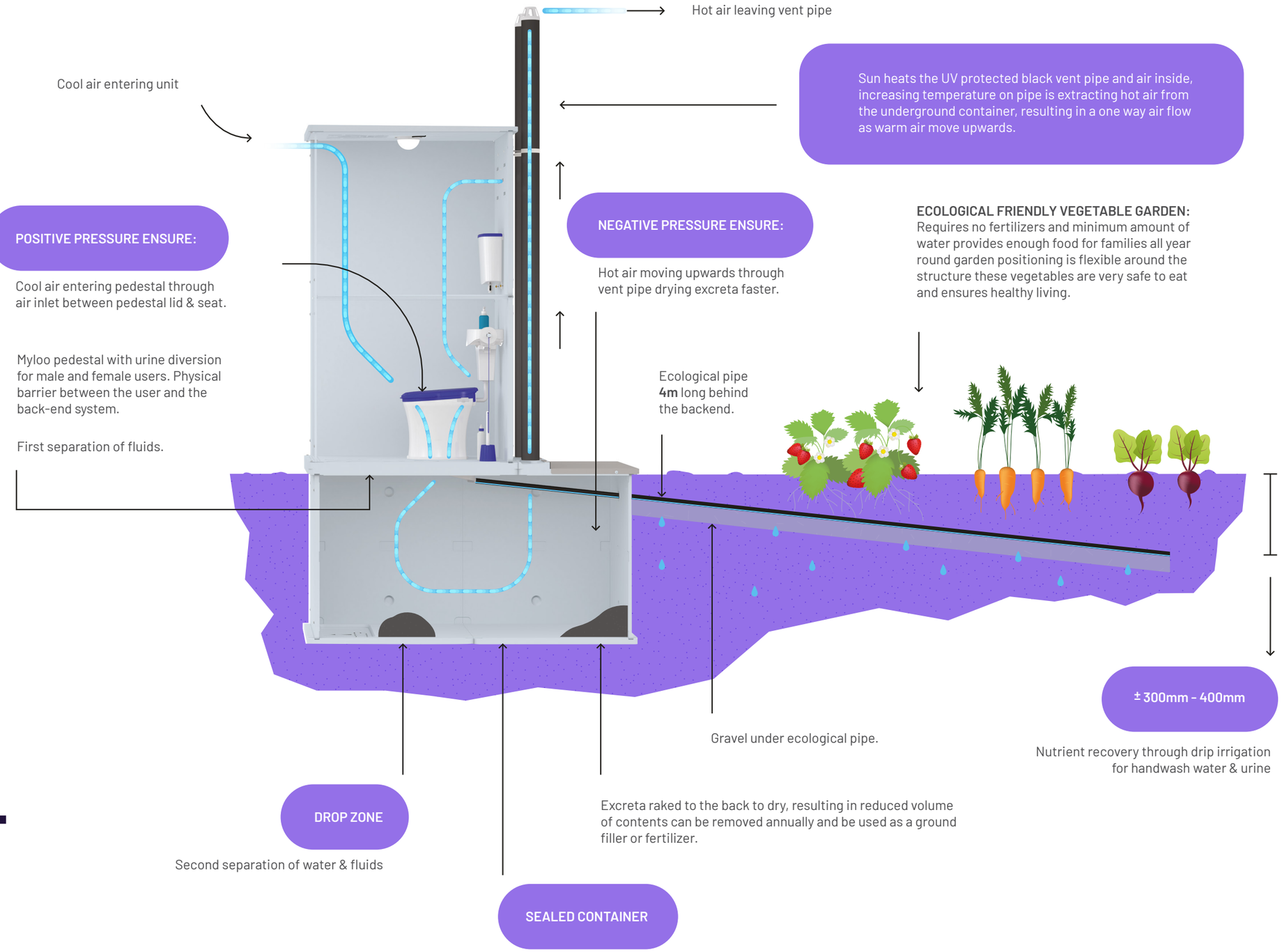


MyLoo

Scientific processes behind the technology

The scientific principle behind the technology is aerobic, natural composting of human excreta that is separated at source.

This technology is only dependent on natural, environmental conditions, resulting in a sustainable eco-friendly system.



Key features

1 **Key design features include the unique separator design in accordance with the new ISO 30500 standards. The pedestal has a unique patented flap that serves multiple purposes.**



- *The flap automatically opens when the user takes a seat on the pedestal and automatically closes when the user stands up.*
- *The flap also serves as a urinal for men. The urine is diverted to the back of the pedestal into the separator and through the ecological pipe into the soil via a drip irrigation method.*
- *The flap automatically opens when the user takes a seat on the pedestal and automatically closes when the user stands up.*
- *The flap eliminates any odours and flies from entering the sanitation system.*
- *The flap can also be manually operated by foot to dispose of incidentals and/or other sanitation related products.*

2 **The pedestal is designed to accept both urine and faeces, as well as incidentals like toilet paper, sanitaryware and nappies.**

3 **All solid human waste (faeces) is deposited into the back end, which is an aerobic environment with high temperatures during the day, and a constant flow of air through the pedestal into the back end and out through the ventilation pipes.**

4 **The size of the back end can vary between 1m3 and 1,5m3.**

5 **Pathogens are eliminated through dehydration in the back end, where urine and faeces are managed separately.**

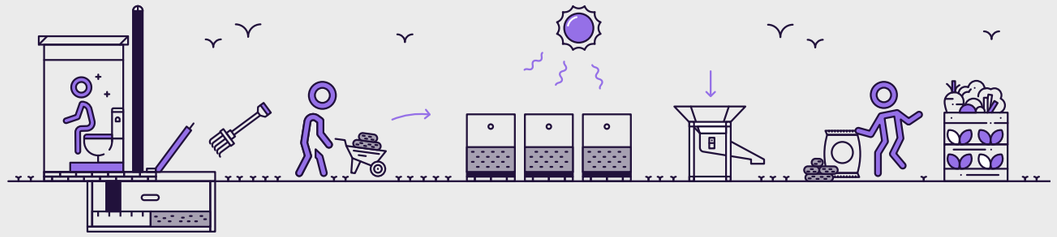
6 **With this methodology, the contents are simply isolated from human contact for a specified period to reduce and eliminate the presence of pathogens over a period.**

7 **The MyLoo technology does not require any water to function, but water can be used to wash hands for health and hygiene purposes.**

8 **This system prevents the production of faecal sludge, reducing the human organic waste moisture content by 85%–95%, which means that there is no costly energy requirement for the transportation and removal of the dry contents.**

9 **The dry human organic waste can be removed on an annual basis by a service provider at a very affordable rate, or by the household themselves at no cost. The dry human organic waste can be used as a fertiliser as a method of nutrient recovery.**

10 **The system can accommodate high usage per day as it is not dependent on any mechanical or biological processes. The system has been tested for up to 10 uses per household without any negative results.**



Usage › **Raked for 1st drying process** › **Excrement is moved via wheelbarrow to containers for 2nd drying process** › **Dried excrement is shredded** › **Shredded excrement is packaged and used for fertiliser**

The Myloo on-site dry sanitation technology comprises:

- Aesthetically designed super structure
  - Torsion stainless steel door
  - Foot peg for opening the door without using your hands
- Bottom structure—back end
  - Collapsible structure
  - Secondary drying process imbedded in the design
  - Can be sealed completely to prevent underground water pollution
- Combination and construction of super structure with bottom structure
- MyLoo pedestal with complete urine diversion system (UDS)
- Ecological system
- Handwashing technology
- Sanitation starter pack technology

Pedestal design

The aesthetic design of the pedestal was a collaborative effort, taking into consideration the wide range of users, from both male and female users of every age.

KEY FEATURES



Hygiene pad



Child safe

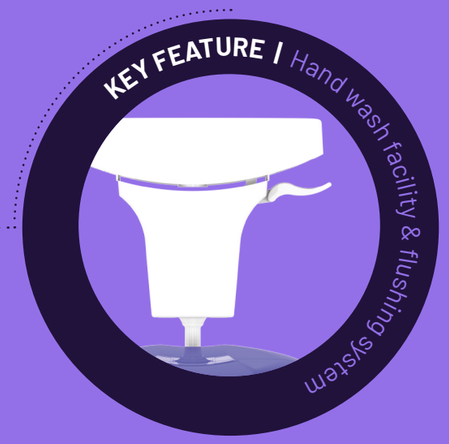


Foot pedal

- The urine diversion pedestal design technology allows for the effective separation of urine and faeces at source. A major technology design feature of the separator is that it is not visible to the end-user and thus does not have a negative impact their dignity. Another key design feature is that the inlet of separated urine and fluids is smaller than the outlet, therefore securing a non-blockage system.
- The lid has a hygiene tab that enables the user not to touch the seat of the pedestal, reducing the spread of disease and viruses like COVID 19.
- The lid is designed to function as a child safety seat.
- The lid is designed to allow a small opening around the seat when it is closed, therefore allowing airflow into the back end, resulting in an odourless and fly free toilet.
- The pedestal is provided with a handwashing facility inside the toilet specifically for health and hygiene, purposes.
- The facility inside the toilet also has a flushing mechanism that rinses the pedestal with the handwashing water. This gives the user the unique experience of flushing the toilet.

COMPLETE SANITATION SYSTEM





Flushing mechanism rinses the pedestal with water from the hand wash basin.

- The MyLoo system is scalable from individual households, communal ablution facilities as well as school sanitation solutions.
- MyLoo also provides facilities for the physically disabled.
- The area footprint of the sanitation system does not exceed 2m2.



LET'S TALK TOILETS

UNICEF estimates that 5,7 billion people could be living in areas with water scarcity by 2050.

Without running water, the traditional flush toilet cannot work.

The creators of the innovative Amalooloo Dry Sanitation Solution have used years of experience and research to develop and produce the future of sanitation.

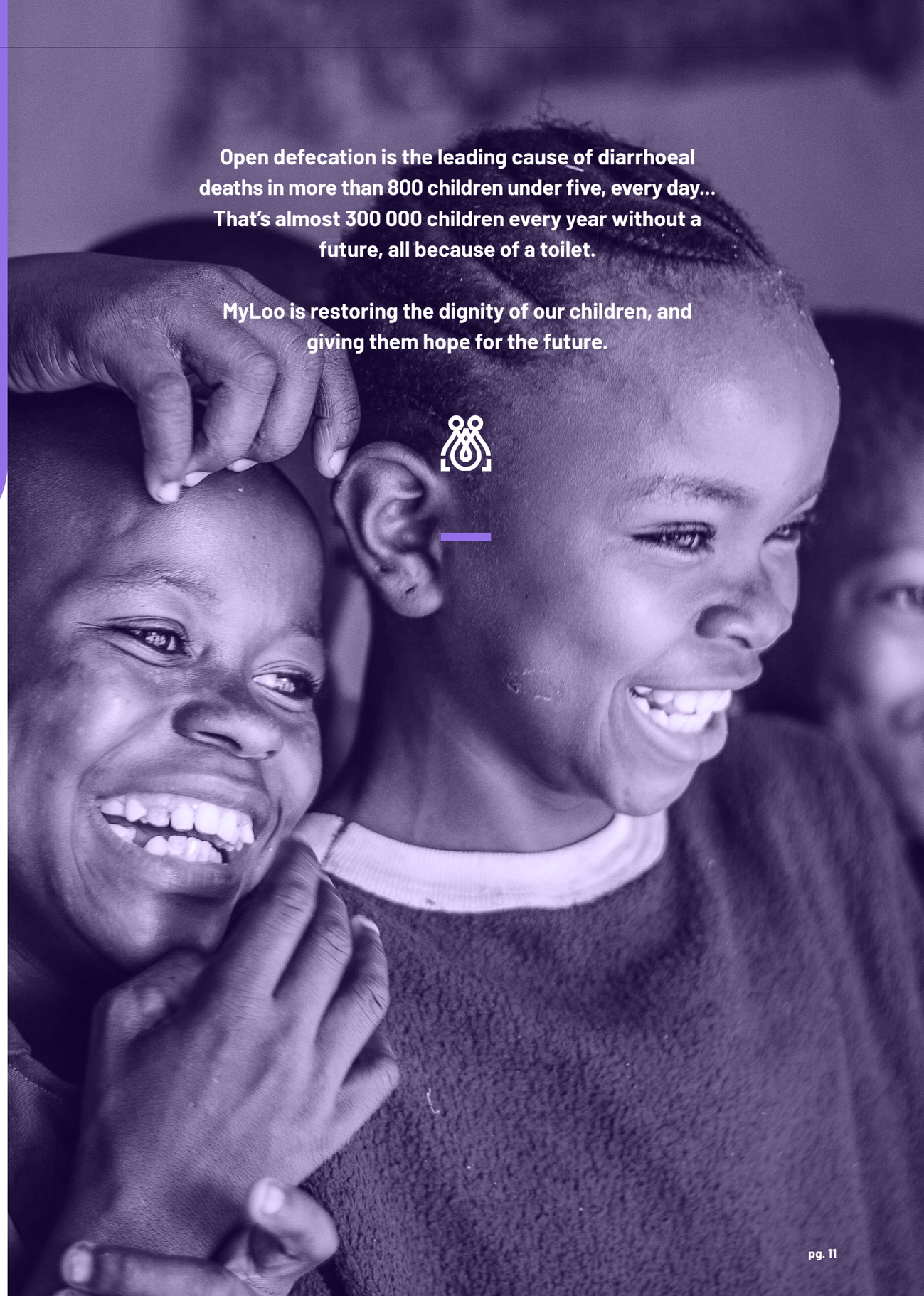
MyLoo safely manages human waste in drought-stricken areas, without using water.

MYLOO—SIMPLE, SUSTAINABLE SANITATION

Many have endeavoured to rethink the toilet, but solutions have been complex, expensive and inaccessible to the impoverished communities that truly need safe sanitation solutions. Myloo is a simple, unique and sustainable sanitation solution that separates human waste at source.

APPLICATION IN THE SANITATION INDUSTRY

The sanitation solution has been implemented in residential households, clinics, ablutions, and schools across South Africa and abroad.



Open defecation is the leading cause of diarrhoeal deaths in more than 800 children under five, every day... That's almost 300 000 children every year without a future, all because of a toilet.

MyLoo is restoring the dignity of our children, and giving them hope for the future.

myloo
My story. My dignity.

Initiative by Amalooloo

betram®
Patented Waterborne and Dry Sanitation Solutions

Contact details

Contact person	Lumar Fourie
Telephone	012 333 8326
Fax	012 333 8418
Email	lumar@betram.co,za
Position	Director

Organisation details

Company name	Betram Pty Ltd.
Postal address	9 Steenbok street, Koedoespoort, 0186, Pretoria
Street address	9 Steenbok street, Koedoespoort, 0186, Pretoria
Website	www.amalooloo.com