

Imvubu Projects (Hippo Roller)



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The Care Economy
Knowledge Hub

the-care-economy-knowledge-hub.org

Profiling Businesses in the Care Economy

The care economy consists of paid and unpaid labor and services that support caregiving in all its forms. In Africa, Asia and Latin America, women spend between three to five times as many hours on unpaid care and domestic work as men. This represents 80 percent of a household's total hours devoted to unpaid care work.

Care economy businesses can help recognize, redistribute, reduce and reward – also known as the 4 Rs – unpaid and paid care and domestic work in the following ways:



Recognize: Initiatives that increase visibility and recognition of paid and unpaid care and domestic activity as "productive" work that creates real value and contributes to economies and societies.



Redistribute: Services and initiatives that redistribute care work from individuals to public and private sector entities, and redistribute care and domestic work within the household.



Reduce: Products and initiatives that reduce the time spent on and burden of unpaid care and domestic work.



Reward: Products, services and initiatives that ensure that care and domestic workers are paid fairly and have professional growth potential. This provides them with financial reward and security.

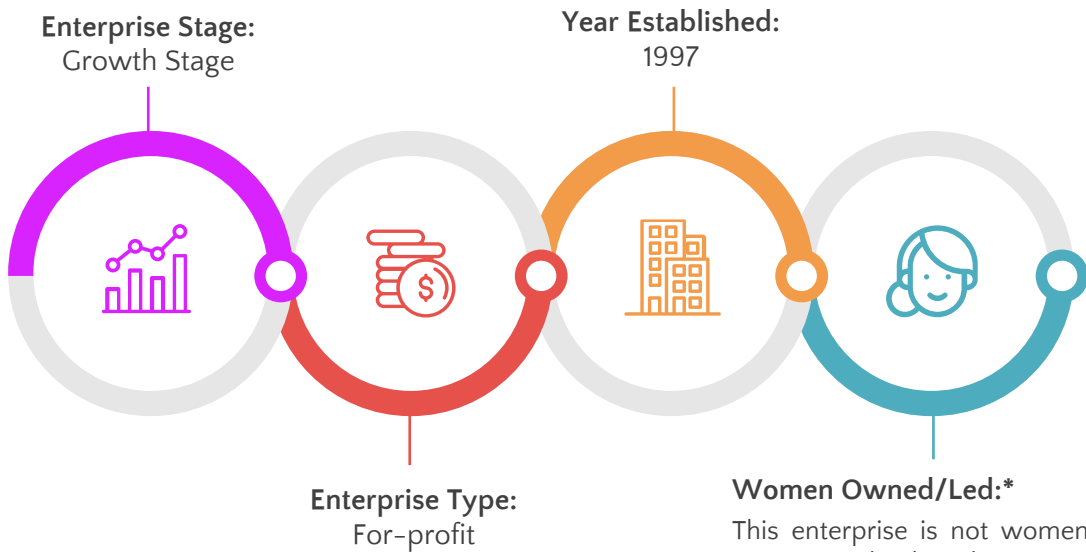
The Care Economy Knowledge Hub aims to address the knowledge gap around care businesses by showcasing various business models and creating a resource base for relevant stakeholders. It also aims to raise awareness and increase knowledge of the state of impact-driven care economy business models and attract a broad range of funders to invest in care economy solutions by showcasing opportunities. These business profiles are intended to showcase said potential investment opportunities. They have been created from information and data provided by the business itself.

This project is supported by Canada's International Development Research Center, in partnership with the Soros Economic Development Fund at the Open Society Foundations. Building on their track record and commitment to transforming the care economy and mobilizing finance for gender equality, they have jointly launched this action research program to help transform the care economy through impact business and investment.

Executive Summary



Imvubu Projects is a for-profit enterprise that manufactures and distributes the award-winning water transportation technology, Hippo Roller. Designed to minimize the physical strain of carrying individual containers of water, Hippo Roller is able to transport a higher volume of water, with minimal effort. The Roller consists of a plastic drum, placed on its side, affixed with two steel arms. This enables the user to either push or pull. Given its capacity and ease of use, Hippo Roller allows for the human transportation of water in rural areas, with limited access to both water and infrastructure. Imvubu manufactures the Hippo Roller, currently exporting them to 56 countries (mostly in Sub-Saharan Africa). To date, more than 65,000 Hippo Rollers have been sold. Headquartered in South Africa, with outsourced manufacturing, the company earned a revenue of US\$ 307,000 in 2021, and has 4 full-time employees.



Company Contact
support@hipporoller.org

Founder's Contact
Grant Gibbs
[LinkedIn Profile](#)

Women Owned/Led:*
This enterprise is not women-owned or women-lead. It does not meet the criteria of having either: a woman founder, being 51% women-owned, having at least 30% of women in senior leadership (executive level/C-suite positions), and/or a board composed of at least 30% of women

*According to 2X "women entrepreneurship" and "women leadership" criteria; [2X Challenge Criteria](#)

1. About The Enterprise

1.1 Problem

According to a 2020 report by the WHO and UNICEF, 1-in-4 people, or 2 billion, worldwide lack safely managed drinking water in their homes.¹ Of these, 1.2 billion people report using water from improved water sources,² with a total water collection time of less than 30 minutes, round trip. However, there are 771 million people who report limited, unimproved, access to water. Often relying on surface water collection, from an unprotected water source, wherein collection time is more than 30 minutes round trip. At the time of reporting, 386 million people lacking basic access to safely managed drinking water lived in sub-Saharan Africa.³ Furthermore, Sub-Saharan Africa faces significant disparity in coverage of safely managed drinking water between urban (54%) and rural (13%) areas.⁴

A study of 24 Sub-Saharan countries revealed that an estimated 3.36 million children, and 13.54 million women, were solely responsible for water collection; with the total collection time being more than 30 minutes.⁵ Traditional methods of water collection require the carrying of heavy, 20-liter, buckets on the head. This daily task is very time-consuming, as the multiple trips required can take up to 6 hours per day. Further, the weight and arduous journey can be detrimental to the physical and mental health of those tasked with collection. UNICEF revealed that, worldwide, women and girls collectively spend 200 million hours fetching water every day; thus sacrificing educational and income-generating opportunities.⁶

¹World Health Organization (WHO), the United Nations Children's Fund (UNICEF). (2020) *Progress on household drinking water, sanitation and hygiene 2000–2020: Five years into the SDGs*. <https://www.unwater.org/publications/who/unicef-joint-monitoring-program-water-supply-sanitation-and-hygiene-jmp-progress-0>

²As per the SDG ladder for drinking water source, there are five service levels ranging from safely managed, basic, limited, unimproved and surface water. i) Safely Managed : Drinking water from an improved source that is accessible on premises, available when needed and free from fecal and priority chemical contamination; (ii) Basic : Drinking water from an improved source, provided collection time is not more than 30 minutes for a round trip, including queuing; (iii) Limited : Drinking water from an improved source, for which collection time exceeds 30 minutes for a round trip, including queuing; (iv) Unimproved: Drinking water from an unprotected dug well or unprotected spring; (v) Surface Water: Drinking water directly from a river, dam, lake, pond, stream, canal or irrigation canal.

³World Health Organization (WHO), the United Nations Children's Fund (UNICEF). (2020) *Progress on household drinking water, sanitation and hygiene 2000–2020: Five years into the SDGs*. <https://www.unwater.org/publications/who/unicef-joint-monitoring-program-water-supply-sanitation-and-hygiene-jmp-progress-0>

⁴World Health Organization (WHO), the United Nations Children's Fund (UNICEF). (2020) *Progress on household drinking water, sanitation and hygiene 2000–2020: Five years into the SDGs*. <https://www.unwater.org/publications/who/unicef-joint-monitoring-program-water-supply-sanitation-and-hygiene-jmp-progress-0>

⁵UNICEF (2016). *Collecting water is often a colossal waste of time for women and girls*. <https://www.unicef.org/press-releases/unicef-collecting-water-often-colossal-waste-time-women-and-girls>

⁶UNICEF (2016). *Collecting water is often a colossal waste of time for women and girls*. <https://www.unicef.org/press-releases/unicef-collecting-water-often-colossal-waste-time-women-and-girls>

1.2 Solution

Imvubu Projects enhances access to basic water services in communities that face water scarcity and poor infrastructure. The Hippo Roller was designed in 1991 by South Africans Pettie Petzer and Johan Jonker. It is a plastic drum, placed on its side, affixed with two steel arms for movement control. In the absence of readily available water, women and children are often forced to travel long distances for water collection. With a capacity of 90 liters, the Hippo Roller can hold up to 5 times more water than a traditional bucket. Thus, the Hippo Roller has greatly reduced the number of water collection trips, and directly benefits people living on less than US\$2-US\$5 of PPP per day.

The enterprise has outsourced its primary manufacturing in South Africa. In order to export to over 56 countries, Imvubu partners with local distributors to fulfill bulk orders.

1.3 Customer Segment

Customer Segment	Product / Service Provided	Paid / Unpaid
<p>NGOs, faith-based missions, individuals, governments and donors</p>	<p>Hippo Rollers:</p> <p>Hippo Rollers are durable and well suited for tough terrain, lasting an average of 5-7 years. The rollers are made up of low density polyethylene, which is considered a food grade material. Further, by embedding grains of sand into the rollers during their construction, there is an added layer of protection against any potential, structural, damage resulting from dirt roads.</p> <p>The rollers also have a utility cap, allowing for the connection of external water filtration devices, or purification tablets; preventing water contamination. The utility cap also has a dual function, as removing it allows for the simple irrigation of vegetable plots.</p> <p>Customers often order Hippo Rollers with the intention to distribute, or donate, them to rural households. In 2017, the UAE</p>	<p>Paid</p> <p>Customers pay the total cost of each unit. This payment can be made through grants and donation programs. Imvubu also organizes their own fund-raising campaigns, to help mobilize donations.</p> <p>Hippo Rollers are provided to end-users (rural households), at no cost. Though, in some cases, NGOs will ask for a small contribution to cover their distribution costs.</p>

Customer Segment	Product / Service Provided	Paid / Unpaid
	<p>Embassy in South Africa sponsored the distribution of 500 Hippo Rollers. Beneficiaries were identified through the support of local NGO partners.</p> <p>NGO partners and community leaders work together to identify and prioritize beneficiaries who would benefit from the rollers most, including: child-headed households, the elderly, and persons with disabilities. However, the rollers are often shared amongst all community members.</p>	<p>Paid</p> <p>Customers pay the total cost of each unit. This payment can be made through grants and donation programs. Imvubu also organizes their own fund-raising campaigns, to help mobilize donations.</p> <p>Hippo Rollers are provided to end-users (rural households), at no cost. Though, in some cases, NGOs will ask for a small contribution to cover their distribution costs.</p>
<p>Corporations/ Businesses</p>	<p>Corporate Social Investment Opportunities:</p> <p>Companies can order branded Hippo Rollers, in order to promote their business. Imvubu will customize the rollers to include requested logos, color preferences, banners and molds. In the past, entities such as Cargill and Nedbank have funded Hippo Rollers, through the use of corporate social investment opportunities.</p>	<p>Paid</p> <p>Corporations/businesses provide grant funding, or donations, to order Hippo Rollers for distribution to rural communities. Recipients are selected with support from local NGO partners.</p>

1.4 Team And Governance Structure

The enterprise has 4 full-time employees. At present, the Imvubu project is managed by the founder and his family members. The team structure is as follows: the Founder (who serves as the Executive Director), the Project Manager, the Creative Director, and a Customer Support Representative. The Imvubu project has outsourced manufacturing and distribution to a third-party. The company hires consultants, when required, to undertake sales, auditing and accounting duties.

1.5 Enterprise Policies

Policy	Yes / No
Overall HR Policy	No
Equal pay for equivalent work policy	No
Non-discrimination / Equal employment opportunity / Diversity and inclusion policy (gender, LGBTQIA+, PWD, etc.)	No
Anti bullying and sexual harassment policy / Respectful workplaces	No
Whistleblower policy / Employee grievance mechanism	No
Maternity / Paternity leave policy	No
Safeguarding policies for vulnerable groups (children, elderly, PWDs)	No
Safeguarding policies for the environment or to reduce detrimental impact on the environment (covers reducing carbon footprint, reduced water consumption etc.)	No

2. Impact

2.1 Mission Statement

Imvubu's mission is “to help communities to improve access to water, 90 liters at a time.” Imvubu intends to do so by providing the Hippo Roller in regions where water collection is a major challenge, and wherein people travel long distances for water collection.

2.2 Intended Impact

Imvubu's work is aligned with two of the four Rs.

- The Hippo Roller **reduces** the time taken to collect water, as well as eliminates the physical burden of carrying a heavy load: improving people's health, hygiene and productivity.
- The Hippo Roller has enabled some **redistribution** of care work from women and children to men. The utilization of the product is viewed with pride, resulting in men becoming more willing to participate in water collection.

2.3 Monitoring And Measurement

Imvubu monitors the number of Hippo Rollers distributed and the number of beneficiaries reached in order to track valuable business data. By recording the number of persons in a household who use the Rollers for water transportation, multiplied by the Roller's capacity, Imvubu is able to estimate the liters of water transported annually.

A number of independent evaluations have been conducted on Hippo Rollers. Details can be found in Section 2.4.

2.4 Results To Date

- Over 65,000 Hippo Rollers have been distributed, within 56 countries: positively impacting 650,000+ direct beneficiaries.
- An estimated 2 billion liters of water per year is transported using Hippo Rollers.
- The Hippo Roller has reduced the time spent collecting water by up to 80% amongst its users.
- The product has enabled the transportation of up to 5 times more water to homes and vegetable gardens.

Hippo Rollers have been evaluated by several independent agencies. An impact assessment was conducted by the Technology Research and Development in Rural Development and Land Reforms Department in 2012 in selected sites where rollers were used. The assessment reported that the use of Hippo Rollers reduced the time taken to travel and collect water, as well as health concerns such as spinal pain, blisters, and other related injuries. Further, Hippo Rollers increased the participation of men in water collection as Rollers were seen as a possession of prestige.⁷

Customers, such as corporations, have also conducted their own evaluations of Hippo Rollers. For instance, Cargill Inc. provided Hippo Rollers to chicken farmers in Mozambique (chicken farmers are an integral part of Cargill's supply chain). Cargill Inc. found that the use of rollers reduced daily walking distances by more than 70%. Based on this impact, Cargill Inc. initiated further projects in other African countries.⁸ The UN World Food Program (WFP) found that, when used in primary schools in drought-prone and food-insecure districts of Tanzania, Hippo Rollers significantly reduced the burden of water collection for women and children.

Invubu is aligned with the following Sustainable Development Goals (SDGs):



⁷Rural Development and Land Reforms (2012). *Hippo Water Roller Impact Assessment- 8 selected sites*. <https://www.hipporoller.org/wp-content/uploads/2015/02/HippoWaterRollers-EasternCape-ImpactAssessmentReport-Oct2012.pdf>

⁸Frost & Sullivan (2016). *2016 African Rural Portable Water Solutions Product Leadership Award*. <https://hipporoller.org/wp-content/uploads/2016/09/Frost-Sullivan-Best-Practices-Research-Report-Hippo-Roller-2016-1.pdf>

3. Financials

3.1 Financial Status

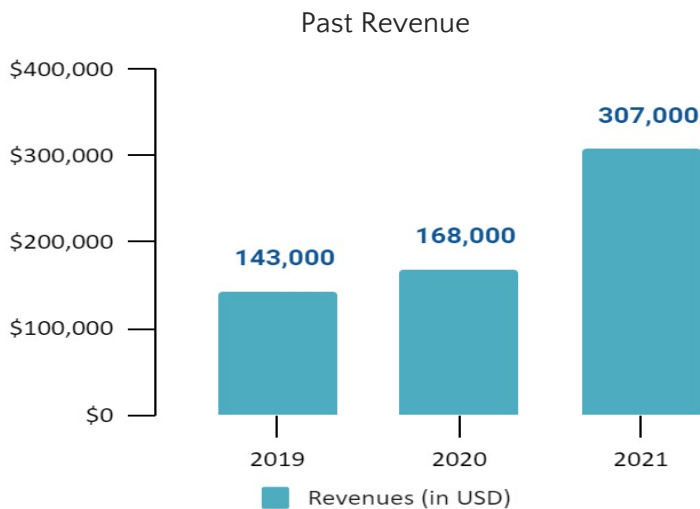
Imvubu is funded through grants, donations and sponsorships. These funds are provided by customer institutions, who directly buy the rollers for the end-users.

(Amounts in US\$)	FY 2019	FY 2020	FY2021
Total Revenue	143,000	168,000	307,000

Imvubu can be contacted directly, for further details on expense and profit margins.

3.1.1 Revenue Streams

99% of the business' revenue comes from the sale of Hippo Rollers that are sponsored by customers, through grants and donations.



3.1.2 Expenses

Imvubu can be contacted directly for further details on expenses.

3.2 External Funding Sources (Past and Current)

Imvubu has received grants and donations from corporations, UN bodies and donors. Funding was used to directly finance the production and distribution of Hippo Rollers. Notable contributors include: Rotary International, Africa Foundation, UN World Food Programme, World Water Forum, AIDEX, and JAM. In addition, Cargill Inc. used Corporate Social Investment for brand promotion.

Imvubu actively organizes fundraising campaigns through the use of crowd-funding platforms, as well as on Hippo Roller's webpage. Currently, Imvubu's fundraising campaign, 450 club, is aiming to fill a shipping container with 450 donated Hippo Rollers. Those who contribute to the 450 club will be told exactly how many Hippo Rollers they have donated, as well as how many beneficiaries they will help.

3.3 Challenges Faced In Accessing Capital

Availability: Imvubu faces challenges in accessing donor funds and currently has not raised additional external funding. Thus, it is relying on the use of retained earnings to fund working capital and the distribution of Hippo Rollers.

4. Path To Scalability

4.1 Potential Avenues For Growth

Imvubu intends to impact 600,000 families, over 5 years, through:

- **Geographic expansion within the existing 56 recipient countries:** Currently, manufactured products are exported from South Africa, which increases cost and contributes to carbon emissions. Imvubu plans to scale-up by partnering with like-minded organizations, including corporations and manufacturers, in existing recipient countries. Imvubu will use local manufacturers in order to significantly reduce the cost of both manufacturing and distribution. This will increase widespread affordability and distribution efficiency.
- **Product expansion:** Imvubu plans to expand its product offering by introducing the Hippo Mobile Spaza. "Spaza" is a word used to describe an informal convenience shop in South Africa. Thus, the Mobile Spaza will be a cart, made by folding and re-positioning the Hippo Roller drum and steel arms, so that vendors and informal traders can display products in rural areas.

⁹The campaign allows donors to pick a range of donation amounts. For example, if a donor contributes US\$ 90,000, Imvubu will supply 450 Hippo Rollers. A donor could also contribute US\$ 200 to support 1 Hippo Roller. Options available are for 2, 3,4,5, 50, 100, 200 and 450 Hippo Rollers.

- This product will provide:
 - Trolley mode: for transporting products to market;
 - Display mode: as described above; and
 - Emergency transport for the sick and injured.

4.2 Risks And Challenges

Operational: A major challenge to the export of Hippo Rollers is shipping costs and custom duties. The drums occupy significant space and, therefore, can only be transported as bulk orders. In addition, shipping is charged by volumetric weight rather than actual weight, which is costly in bulk.

4.3 COVID-19 Impact On The Enterprise

The COVID-19 Pandemic reduced Hippo Roller's sales by an estimated 25-50% due to restrictions imposed on shipping goods, as well as lockdown slowing manufacturing and distribution processes. However, COVID-19 drew greater attention to issues such as health and hygiene, as well as women's unpaid care burdens; thus, demand for Hippo Rollers are increasing.

4.4 Support Received To Date

The Imvubu Project has won several awards and recognitions:

- 2016 African Rural Portable Water Solutions Product Leadership Award, Frost and Sullivan.
- African Rural Portable Water Solutions Product Leadership Award (2016)
- INDEX Denmark: Top Nominee (2005)
- SABS Design Institute: Design for Development (1997)
- SABS: Cullinan Design Award (1992)

Imvubu has also received endorsement from Nelson Mandela, Steven Spielberg, UN World Food Program, and CNN International. This wide media coverage has brought acclaim to Hippo Rollers, resulting in greater corporate investment.

4.5 Inputs Required For Growth

Financial

- Imvubu is seeking US\$75m over the next 5 years in order to provide Hippo Rollers to 600,000 families. These funds will largely be used to build additional manufacturing capacity, in partnership with local manufacturers.
- Assuming there is an existing manufacturer in targeted countries with the correct equipment, Imvubu could bring its existing molds. Thus, only needing to train the manufacturer on the development of the drum components, as per the Imvubu specification.
- Partnering with a new manufacturer would cost US\$150,000 per location. This includes: the cost of 4 new molds; shipping; travel; the initial stock of components; legal agreements; and registrations.
- Imvubu has a licensing model through which regional partners can further distribute Hippo Rollers at the same (recommended) retail price across the globe.
- To manufacture and distribute the Mobile Spaza, Imvubu will require US\$550,000. This includes: the production of new jigs; 1,000 units of stock; distribution of stock to 15 major cities in South Africa; and marketing material, website, and social media campaigns.

Non-Financial

- Partnerships with local distributors, or manufacturers in other regions.