

## Foreword by Jaap-Jan Verboom

#### Introduction

The year 2022 was a turbulent year, shaped by several impactful global challenges. Just as the situation started to look a bit better after Covid, our investee companies were faced with the war in Ukraine which led to a humanitarian, political and economic crises across the globe. Inflation increased and economic growth slowed down. Inequality rose, the climate crisis continued to unfold (disproportionately affecting low- and middle-income countries), and a global recession began to loom, pushing an increasing number of vulnerable people into food insecurity, reduced and expensive energy access and poverty. These intersecting crises are heavy burdens on the shoulders of our company's investees. In our <u>lessons-learned</u> we reflect on how these global challenges impacted the macadamia sector.

The performance reported in this impact report should be viewed in light of the challenging environments businesses operate in. Many companies found ways to keep going. 2023 will tell us to what extent their efforts are sustainable enough. One thing is for sure and that is the enormous flexibility, creativity and perseverance of our investees.

### **Our Response**

It is our co-entrepreneurial role to help the businesses survive in times of crisis and accelerate their growth in good times. These businesses pursue long term growth and value creation which lasts beyond the current crises. As Truvalu, we've proven to be a stable co-entrepreneur for our investees, working side-by-side with our partners. We have supported them in times of crises and were able to assure that we are there when they need us. We are actively following and supporting the companies at risk with measures to increase control and protect our investments while at the same time supporting sales and growth of turnover.

#### **Our Goals**

Despite the uncertain global outlook, we are driven and determined to do everything in our power to support early-growth, impact-oriented agri-SMEs and indirectly small holder farmers in emerging markets. We contribute to a system change with SMEs as our point of departure and create economic development with an economically viable and sustainable business model, tackling underlying challenges in the entire system. We inspire and capacitate SMEs and others to make food production future-proof in an innovative way. With our proven approach, and together with our investors, other financiers and partners, we act as a catalyst of change by strengthening our investees, and through them also their supplying smallholder farmers, other suppliers, and communities. We aim to raise a new round of capital and continue investing with a focus on the long term and maximize our impact.

### Our Approach

We enable ecosystem development, intensify our partnerships and strengthen business development by working together with local partners such as civil society organizations, incubators, accelerators, business networks, and universities. We value the ongoing engagement with civil society and other stakeholders as this can amplify impact, help us broaden our views and look at impact from multiple perspectives.

### **Our Impact**

In this report, we briefly summarize our impact thesis, present our portfolio under Truvalu Enterprises 1 and provide the data and analyses per impact field in the following pages. Despite the enormous challenges of the last two years, we are successful in thriving SMEs, connecting smallholder farmers to markets, giving them an increased income and hence opportunities to serve their families. We are increasingly making our impact assumptions more and more explicit, analyzing and discussing our impact data, learning continuously from our practical experiences and using our learnings to adjust our long-term strategies and way of working. Last year we presented a few lessons learned in our impact report, which we continue to do so this year.



#### **Our New Investees**

We onboarded four new companies in 2022 Ndivisi Enterprises from Kenya, Pomario from Colombia, Ecodudu in Kenya and a smaller investment in Cocina Soluciones in Colombia. In this report, we already introduce two of our new investees. All four new companies will be included in our next year's impact report. More information on our ambitions, our way of working and the <u>TruStories</u> we share, can be found on <u>our new website</u>, which was recently launched.

#### Conclusion

We hope this report inspires you to see how positive impact can be achieved, even in difficult circumstances. I want to extend a huge word of thanks to our investees, our investors and partners who share our drive for fair and inclusive value chains and local ecosystems and our model of co-entrepreneurship. I am also grateful to our dedicated team spread over the globe, putting our strategies in practice.

We look forward to our continued work together with many other stakeholders in the years ahead, and in particular with the entrepreneurs we partner with. Our work would not be possible without their resilience and determination and a continued focus on making impact. They are our heroes!

With gratitude,

Jaap-Jan Verboom | founder and director of Truvalu B.V.















Bangladesh



Bolivia



Kenya



Paraguay



### **Farmers**

Smallholder Farmers Impacted 8,399



Female Farmers 58.9%



Young Farmers 41.3%



Total Farmer's Value
6.6M €

Average farmer value 788 €



### Jobs

Jobs Created and Sustained (FTE)

4,315



Female Employees 83.9%



Young Employees 71.2%



# Wages

Annual Wages paid to Employees

2.9M €



## **Trainings**

Number of Individuals Trained 6,878



Agri

Business Practices 4.794

3,366



# **Introduction and Methodology**









This social impact report presents the 2022 impact results of the portfolio of Truvalu Enterprises 1 B.V.. While Truvalu holds a portfolio of over 30 investments this impact report concentrates on seven companies included in the portfolio of Truvalu Enterprises 1 which are based in Bolivia, Paraguay (2), Kenya (3) and Bangladesh (2).

Data collection has been done since 2018. Reports have been published in 2018, 2020 (covering 2019 and 2020) and in 2021. This report presents the impact created by our portfolio companies in 2022, but does also contain historical data since 2018. This shows the progress we have made over time. All data was entered in an aggregate Google Sheets and data analysis and visualization was done by Looker Studio.

Compared to last years' impact report, there are a few differences to highlight.

Data from two companies are not included this year, since we did not receive enough data on time. A new company added to our investment portfolio and included in this years' report is the Kenya company The Big Thundernuts. You will find more information about this company on page 7. Truvalu started investing in 4 new impactful companies in 2022, amongst others in Colombia and Kenya. We started collecting baseline data from all these companies. However, it is too immature to demonstrate impact, for which reason we decided to include more statistics in next years' impact report. To get acquainted with two of these new companies, we include a TruStory of the companies Pomario (Colombia) and Ecodudu (Kenya).

To collect data, surveys were distributed among the portfolio companies. Follow-up for checks and balances was given by our local teams. They verified and cross-checked the information obtained for accuracy and reliability. Although the data may contain some errors, we do notice that the quality of data from our investees is improving. One of the reasons is a growing trust and therewith openness from our investees to share information with us as an investor.

For this report we deliberately looked at the outliers in the analyzed data to ensure we present as realistic picture as possible of the impact achieved. For five impact areas, we present our analysis. In some cases, we provide the data including and excluding numbers from a company once these might influence the overall picture too much (as in the case of total farmers value or the wages of employees). We also aim to present a rather nuanced picture, since we see that the contexts in the four operating countries vary widely.

Another difference in this report, compared to our previous ones, is our reporting on gender equality. Based on internal strategic discussions within the management team about Truvalu's impact thesis, the decision was taken to add SDG 5 (Gender Equality) in our Theory of Change. Meaning we not only contribute to gender equality by coincidence, but also intentionally. We do so by investing in women owned and/ or founded companies and/ or by supporting companies promoting gender equity in the workplace and their value chains. This year we are able to report on not only the number of women workers, but also on the number of female and male founders! In addition, we present information on the female employees at management level of the companies we invest in.

We acknowledge that the impact reported in this report cannot be fully attributed to the investment made by Truvalu, but we believe that our support and investments have significantly contributed to it.



## Sustainable Development Goals



We believe that local SMEs are the cornerstone to many economies and that they have a unique opportunity for inclusiveness, social impact and environmental protection. They have this unique position since they are based in a local community, are mostly owned by local community members, source from local producers, and employ local workers. They either sell in local or international markets and bring income and profits into the local economy.

Investing in decent SMEs drives growth, promotes equity in the value chain and drives sustainability so that everyone benefits. Truvalu unlocks the capacities of such agribusinesses in emerging economies and we do so with a focus on fair distribution of profit, value and power along the value chain.

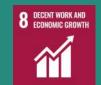
We do so with impact, contributing to the following Sustainable Development Goals (SDGs):

We operate as a co-entrepreneur for entrepreneurs by providing capital, useful connections, concrete business advice, trade support, knowledge and access to technology. Internationally, regionally and locally.

Truvalu realizes that investing in agri-SMEs in emerging economies requires the collective synergies of various organizations in the ecosystem and thus works with public and private partners (NGOs/DFIs/Accelerators/Incubators/FIs/ governments) who share Truvalu's vision and values to support investees, build a support ecosystem for impact entrepreneurs, and offer blended financing.









Truvalu contributes to this goal by progressively helping to improve land and soil quality and ensuring sustainable food production systems. This leads to increased agricultural productivity and hence higher incomes for small producers (especially women, youth and indigenous people).

Tuvalu contributes to gender equality and women empowerment by investing with a gender lens. Truvalu strives for a portfolio of companies that are gender focused by promoting gender equity in the workplace and their value chains. A good number of Truvalu's investee companies are either women-owned, co-owned or women-led.

Truvalu contributes to this goal by investing in scalable SMEs with a specific focus on: creating sustainable employment for both qualified and unqualified workers; increasing knowledge and skills in the workforce and; promoting market-based solutions that further improve the sector's productivity and added value.

Truvalu invests in SMEs that purchase their raw materials from a large network of producers / smallholder farmers. We strive for a fair distribution of power, profit and value creation throughout the value chain.

# Portfolio companies of Truvalu Enterprises 1 B.V. | Bangladesh and Kenya

Classical Handmade Products produces home decoration products, such as rugs and baskets, from natural fibers for the international market. The company is founded and led by Tauhid Bin Abdus Salam. He believes in production units in the villages to create employment for rural workers, mostly women. Through a combination of visionary entrepreneurship and creative designer skills, Tauhid has grown his company to a scale, now able to produce for international brands.

#### Value chain

The company sources natural and biodegradable materials, such as jute, water hyacinth, cattail and banana fiber from smallholder farmers.









Value chain

exploring a range of new products.

The company sources coconut husk and other natural materials from smallholder farmers.

NF Coir Ltd., operating under the name Natural Fibers, is owned and

managed by Mozahid Ahmed and Mostafiz Ahmed. Located in

Bagerhat, the coconut triangle of Bangladesh, the company produces

products out of the fibers and peat of the coconut husks. And thus

providing employment opportunities and eco-friendly products.

Coming from fiber mattresses, the company is now producing and

**GrowPact Kitale** is a nursery farm producing seedlings for a variety of crops for farmers. Better seedlings lead to improved yields at farmer level and hence a better income and improved food security. The company is owned and led by a Kenyan couple, Joshua Mugendi and Mercy Njiru. The company received financial and technical support from Visser/ Viscon, a Dutch entrepreneur and company.

#### Value chain

The company supplies high-quality vegetable seedlings such as cabbage, tomatoes, cucumber and capsicum to smallholder farmers resulting into higher yields.











The Big Thundernuts sources macadamia shells from other processors and sells them as biomass to companies to fuel their boilers. Led by Moses Wachira and with Truvalu's investment, the company will start processing the nuts into oil themselves, greatly adding value and giving the opportunity to source from smallholder farmers directly.

Alex Mutua and his mother are founders of **Goshen Farm Exporters**, based in Machakos, Kenya, south-east of Nairobi. The company sells fresh and processed fruits and vegetables to the local and international market, sourced from contracted rural smallholder farmers. Goshen is active on the local and the international market (Middle East and Europe).

#### Value chain

The company sources fresh fruits like mango, pineapple and banana from contracted smallholder farmers throughout Kenya which addresses the post-harvest losses.





# Portfolio companies of Truvalu Enterprises 1 B.V. | Bolivia and Paraguay

**Fruta de mi Tierra** is a Bolivian company established in 1999 with experience in the production and marketing of quality fruit seedlings to farmers and the sale of fresh peaches and apples in the Bolivian market. With the support from Truvalu, the company acquired a fruit selection and packaging line which increases the efficiency of the production process and enables the company to serve the needs of different customers.

#### Value chain

The company is active in the value chain of fresh apples and peaches in Bolivia which is still at a premature stage. The company distributes fruit seedlings to small producers and provides them with the service of sealing, cleaning and packaging the fruit.









Alimentos Liofilizados Natur SRL produces Freeze Dried (super) fruits, such as Acai powder and freeze dried tropical fruits for the local, regional and international market. The company operates a unique, energy-efficient form of freeze drying, developed by the entrepreneur, André Luiz Napravnik.

#### Value chain

The company purchases the acai berries from a local community in the Amazon regions of Bolivia (Porvenir).

**Manduvira** is a cooperative that sources organic sugar cane from more than 900 smallholder farmers in Paraguay. With the support of Truvalu, the cooperative has set up a new business line through which the organic refined sugar is sold to the retail market in addition to the existing bulk market. Manduvira has obtained various important organic and fairtrade certifications giving the a strong position in international markets.

#### Value chain

The company is in organic sugar cane value chain, based in a difficult and poor area in Paraguay named Arroyo y Esteros where the cooperative set up a Credit Cooperative and then a productive cooperative supporting smallholder farmers in the region.









**Frutalia** was established in 2007 and is active in processing oranges, passion fruit and grape fruit into natural juices. These juices are sold on the domestic markets, mainly to private schools and restaurants.

#### Value chain

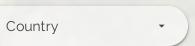
The company has developed a partnership with small producers of orange, mandarin and grapefruit in a few regions near Asunción. The farmers cultivate and harvest the fruits after which the company washes, squeezes, mixes and bottles the juice extracted from the fruits.





# 1 | Smallholder farmers impacted

Year: 2022 (1) 🕶

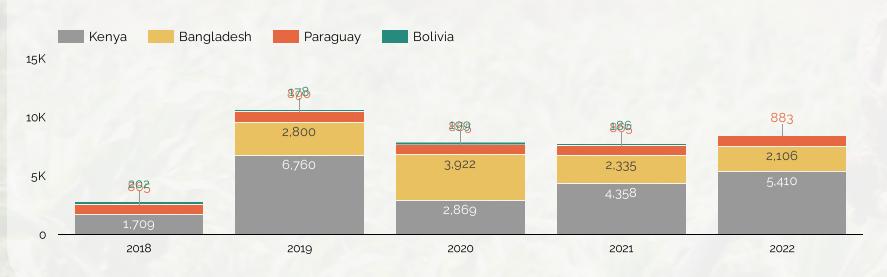








### Number of smallholder farmers impacted over the years per country



### **Analysis**

The number of smallholder farmers impacted by Truvalu's portfolio companies has increased by approximately 10% compared to last year. The largest increase was reported by the Kenyan portfolio companies which is explained by the growth of two companies and the addition of a new company called The Big Thundernuts in which we invested late 2021, early 2022.

Truvalu's claim of investing in companies with on average 1,000 smallholder farmers per company still stands.

The percentage of female farmers has slightly reduced compared to 2021 but at the same time has grown in absolute numbers from 4,770 in 2021 to 4,947 in 2022.

Similarly to youth, percentage-wise there was a slight drop but in absolute numbers Truvalu's companies are working with 178 more young smallholder farmers compared to 1 year ago. Youth is defined as individuals aged between 15 and 35 years.

Number of smallholder farmers impacted 8,399



58.9%



41.3%

supplier 5,469

client 2,930

Bangladesh



2,106

Kenya



5,410

Bolivia





Paraguay

883

# 2 | Total Farmer's Value

2019

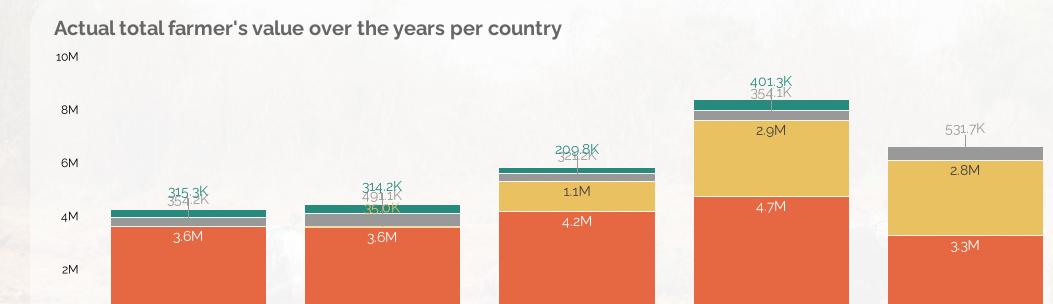
Paraguay

Country

Company





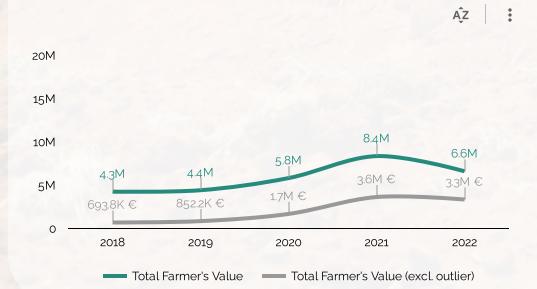


2020

Bangladesh

#### Total Farmer's Value

2018

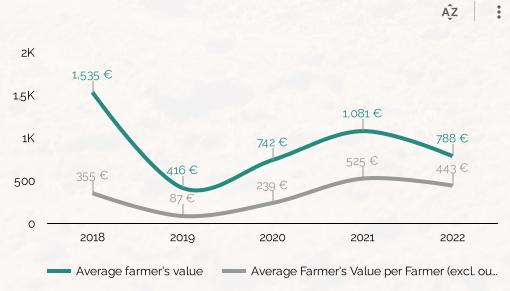




Kenya

2021

Bolivia



### **Analysis**

After an increasing trend in the past years, a decline in the total farmer's value is reported from € 8.4M in 2021 to € 6.6M (-21.4%) in the year 2022. To a large extent this is attributed to a significant drop in the turnover of Manduvira (Paraguay). The harvest in 2021 was the highest in the company's history. A company in Bangladesh has been struggling for some time due to raw material shortage as a result of a disease in coconut trees which impact the payment made to smallholder farmers.

The two charts below provide the data inclusive (green) of and exclusive (grey) of the data of Manduvira.

However, the factor currency also plays a role here. All the amounts are converted from local currencies into euro which had a significant effect due to significant depreciation of local currencies in 2022. However, this effect only exists on paper and not in reality since farmers are paid in local currencies. To illustrate this, if we would iron out the currency exchange difference the total farmer's value would have been  $\in$  7.0M (instead of  $\in$  6.6M), implying that 22% of the reported decline was caused by the FX effects.

The decline in the total farmer's value does obviously also affect the average value per farmer where it dropped from € 1,081 in 2021 to €788 in 2022. The grey line shows however, that the decline at the other portfolio companies is lower (-15.6%) compared to the entire portfolio.

A last observation is that a company that works with smallholder farmers as a client is different compared to a company that works with farmers as its supplier. Companies that have smallholders as their client works typically with a larger number but the impact per individual farmer is lower. Excluding these companies from the dataset changes the average value per farmer from  $\bigcirc$  443 to  $\bigcirc$  680 per farmer per year.

#### **Definition**

Farmer's value can be defined as 'money in the pockets of the farmers' generated either through the sale of raw materials to our portfolio companies (suppliers) or through increased yields as a result of better inputs sold by our portfolio companies (clients).

2022



# TruStory | Get to know our new portfolio company Pomario from Colombia (I)



#### Introduction

The Botero brothers from Antioquia - Colombia had a dream, which started eight years ago: to reach many kitchens and transform them, dignifying work in the countryside and supporting small producers. The founders Mariana, Elisa, Juan Pablo and Luis Miguel decided to combine efforts and capabilities and thus create Del Campo por Tradición SAS using the brand "Pomario".

With an organic production, they began to offer different products like lettuce, cabbage, radish, spinach, chard, carrot, edible flowers, based on their purpose of 'eating better': tastier, healthier and special.

In this way they experimented with flavors, sensations, seeds and different cultivation practices until they obtained a diversity of products as pre-packed salads, sprouts, edible flowers, and micro vegetables that are now offered in large stores (supermarkets), for the HORECA sector (hotels, restaurants and coffee shops) and also through online sales to reach the final consumer directly.

Pomario hopes to continue its expansion process in the country as a socially conscious company that seeks to promote organic agriculture, the formalization of work in the Colombian countryside, and the creation of opportunities for its employees.

### From the Entrepreneur

"With the resources provided by Truvalu, we have been able to plan the growth of Pomario in order to supply almost all the main cities in Colombia with special vegetables. We are developing new greenhouse crops and building a transformation plant that allows us to deliver even more value to our customers. Also, with the participation in the board of directors of the company, the knowledge and experience that is shared are valuable when considering this growth strategy."

Mariana Botero - Co-Founder



### The Entrepreneurs

The four siblings have been trained in prestigious universities in Latin America in environmental, industrial and agronomy engineering, surrounding themselves with other workers who complement their abilities, making Pomario a company that leads the way in the production of special vegetables in the country.

Working as a family has given them the opportunity to strengthen the concept of unity (rather than generating problems). Forming an extended family with all the people linked to the company, where the common principles of generating social and environmental impact are shared makes Pomario a life project and special mystique.

The entrepreneurs have two clear dreams: on the one hand, with their motto "With Pomario, eating better is easier" they want to consolidate their presence throughout Colombia and also explore possibilities of exporting their products to regional markets. On the other hand, dignifying the work in rural areas, a necessary basis for the development of any company in the food sector.



# TruStory | Get to know our new portfolio company Pomario from Colombia (II)



### **Social Impact**

Most of the rural population in Colombia works under informal conditions (85%). They do not have an employment contract, nor social benefits. They do not have access to quality health care and have no access to a decent pension for old age.

40% of the Colombian territory has erosion problems due to deforestation or bad agricultural practices. This makes life even more difficult for farmers, since their survival and well-being depend on the well-being of the land.

Del Campo por Tradición - Pomario is contributing with an innovative production model to solve these two problems and transform the way in which Colombia produces and consumes vegetables in a sustainable way. Pomario formalizes the working rural population in its areas of influence. Nowadays Pomario is employing 55 people, of which 45 are smallholders farmers (60% women).

Its employees have incomes above 25% compared with the national average income of the rural population in Colombia. Likewise, they have an education program through which they finance 50% of the student fee of anyone who wants to continue their studies. The social innovation about this model is the possibility to increase the income of the farmers based on a productivity bonus that is not common in Colombia for smallholders.

In addition, Pomario uses organic production techniques to ensure the reduction of erosion problems that afflict the country and the improvement of the ecosystems surrounding its production areas, increasing its levels of organic matter and renewing the biodiversity of its soils.

To generate wage formality for the farmers having a permanent salary and having access to social security and healthy insurance, receiving training and finally, giving people the possibilities to have a job in violent areas that were dedicated to illegal crops, is a good evidence of development and change based on the approach of a social vision company. The impact the program creates contributes to the Sustainable Development Goals SDG 5, SDG 8 and SDG 12.

#### From Truvalu

"Pomario is one of the companies that we have closely followed in the last five years, beginning with a process of business development services and after taking a certain distance where we both gained the necessary experience to confirm that as partners we can go further. In the end of 2022 we closed a partnership agreement that was complemented with the loan of an additional impact fund named NESsT.

For Truvalu it is very important to support companies that are developing innovative production models and at the same time incorporating technology and knowledge that are shared with small producers.

Pomario is a company that realized that when higher production volume forms are developed, they must also be accompanied by efficient ways of generating orders and delivery, thus maintaining a unique value proposition in the market - reaching the consumer in a timely no more than 24 hours after harvesting the products.

We are very happy to accompany Pomario in its dream of improving the conditions of the countryside in Colombia and feeding homes with special vegetables, improving their consumption habits"

Andres Jimenez - Truvalu



# TruStory | Get to know our new portfolio company Pomario from Colombia (III)



### **Uniqueness of Pomario**

Pomario has included some technology for the sowing, harvesting and the germination rates of the seeds have increased and times and quality of the harvest have been reduced to fulfill their promise of making deliveries in less than 24 hours.

The company handles very delicate products that are difficult to produce on a large scale, and even more complicated to reach clients in a country that has a large territorial extension. However, Pomario has been able to improve its productive capacity, mechanize certain processes and also make strategic alliances to overcome logistical limitations that prevented it from having a constant and convenient presence in the main cities. This combination of factors is what makes Pomario a company with high potential and positions it as a pioneer in a market that is highly demanding of quality products.



### **Scaling Opportunities**

Closing the deal with Truvalu and receiving the additional finance from NESsT gives to Pomario the possibility to scale up the production area with 5,5 new hectares of greenhouses, 10 additional hectares to boost production and to allow the company to build a second processing plant that will double capacity and also the sales in 2023.

Besides, the company has developed an important alliance with Setas de Cuivá a company that is part of Nutresa group (one of the largest food companies worldwide), this fact will help Pomario to improve logistic capacity to reach more cities.

Finally the company is strengthening the commercial team and dabbling in Vertical agriculture, that allows the company to immerse into the indoor farming world, giving them the clues for making future decisions about how to produce more efficiently.

The challenge of having a permanent national presence also requires the company to improve governance and the decision-making process, where strategic decisions and good cash flow management will be essential in its expansion process.



# 3 | Jobs created and sustained

Country

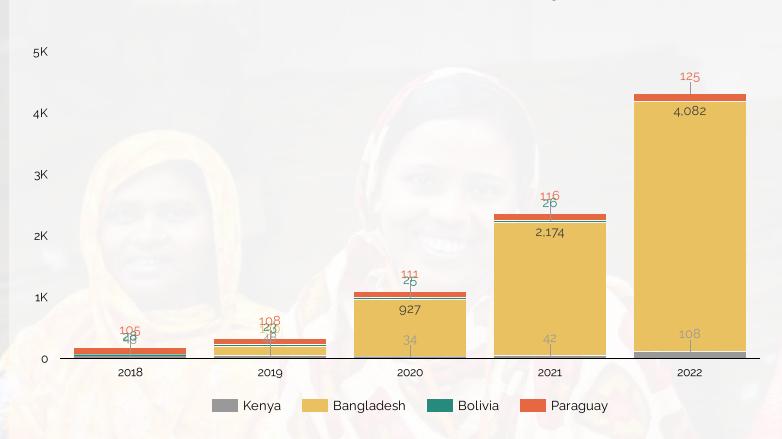
Company

Period: 2022 (1) ▼





### Actual number of jobs created and sustained over the years



### Female Employees



69.5%

### **Young Employees**



63.3%

### Analysis

The number of people employed by Truvalu's portfolio companies has grown from 2,358 in 2021 to 4,315 in 2022, representing an increase of 82.9%. It is clearly visible that this, like last year, was largely attributed to one of our portfolio companies in Bangladesh that was able to grow its revenues tremendously due to the onboarding of IKEA as one of its new clients. In order to meet this demand, the workforce increased drastically of which most of them are women. In the other countries the number of jobs also increased on average by 47.5%.

The number of people employed in Kenya grew from 42 in 2021 to 108 FTE in 2022. One company almost doubled its workforce thanks to increased revenues while the company new in our portfolio employed 41 staff.

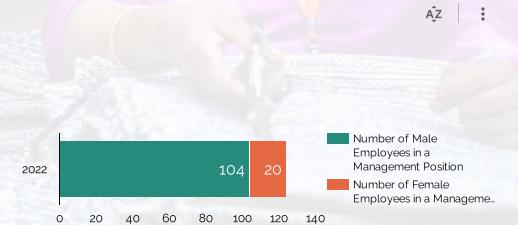
2,621 employees are female, representing 69.5% which clearly contributes to SDG 5 Gender Equality. Next to this, the number of youth employees is 2,731, representing almost two out of three.

# Number of permanent (female and young) employees



Jobs Created and S... Female Permanent... Young Permanent E...

### Number of female in management position



### Lessons-learned | Youth

More and more youth suffer from prolonged and systemic unemployment, because of a lack of jobs and a prevailing skills mismatch between education, training and labour market demand. Of the 12 million young Africans that enter the job market each year, only 3 million end up in formal jobs. Especially women and marginalized groups face labour markets that are not inclusive, diverse and equitable. In Colombia for example, 21% of young people live on less than \$ 3 per day. Agricultural development models in rural areas are not articulated to the expectations of young people and do not offer a solid alternative for young people to develop a life project with dignity. Additional action by a variety of parties, including impact investors, is needed in reaching the SDGs.

Truvalu supports the creation of jobs and entrepreneurship for young people. We see a business case from a societal perspective: Local communities benefit from the creation of employment opportunities for young people. And if we look at the costs of not investing in young people's human capital and job creation, we know these are extremely high. Underinvestment in youth leads to the replication of socioeconomic inequalities.

From a business perspective and impact investors view, we see the value of young people's characteristics. Of course we cannot generalize, but in many cases, we see young people possess interesting inherent advantages. For example, they tend to be more flexible and willing to learn; they bring innovation, Energy and optimism to the workplace; their imagination, dynamism and creativity are highly appreciated; Compared to older workers, young workers are more comfortable with new technologies and likely to adapt faster to such technologies; companies can benefit from the digital, social media skills of the younger generation; last but not least, young people are generally more adaptable, mobile and trainable. These reasons make it meaningful to work with young entrepreneurs and companies that are willing to invest in young people.

In our daily practices, we also notice that good guidance, mentoring and attention for skills development is a smart thing to do when working with less experienced entrepreneurs and workers. Furthermore, it is often guite challenging for our investees to work with young workers, especially in the rural areas. Young people usually have less experience, sometimes a low education or skills, can be more difficult to rely on. In terms of providing capital to young entrepreneurs, we deal with a problem of collateral, and with intergenerational issues (where the older generation does not always agree with the type of investments young people aim to make). And since we focus on the agri sector as Truvalu, we also see young people do not always find this sector, especially at production level, inspiring enough.

However, these challenges are to overcome when we connect with others. From 2023, we will actively seek collaborations with other stakeholders to support our investees in job creation and entrepreneurship for young people.



### Lessons-learned | Gender

As impact investor, we unlock the capacities of especially agri-food businesses in emerging economies. We have a focus on fair distribution of profit, value and power along the value chain, which also means power for women, giving them the opportunity to excel, and add value. Looking at our impact data, Truvalu has always contributed to supporting women-owned and gender-focused SMEs. In 2022, given the worldwide gender imbalances, we decided to do so in a more intentional manner.

Women tend to have a higher commitment to reinvest back in their communities, in education and health and food of their families. So, women's economic empowerment really has this ripple effect on society at large.

There is also a strong business case for companies to strengthen gender equality and diversity in the workplace and supply chain. Companies with a more gender diverse management team and workforce outperform their peers in terms of profitability, productivity, innovativeness, creativity and financial stability. We also know that diverse workforces support the retainment of talent and employee motivation. In addition, globally the purchasing power of women is also growing. By 2028 female consumers will control around 15 trillion dollars of global consumer spending. Companies and investors are taking note of the huge opportunity in accessing this capital, a business case in itself. Research of McKinsey, BCG, ILO & IFC, Morgan Sachs, and many others institutions confirm the business case. As Truvalu we also see in our portfolio that women-led and gender diverse companies show conscious management, decision making, enormous commitment and healthy leadership.

Truvalu is committed to promoting inclusive and equitable entrepreneurship. In 2023, we initiate activities together with other players in the financial landscape, to help entrepreneurs and capital providers understand gender imbalances created by social norms, to identify solutions to address these imbalances in the form of a business, to promote the importance of supporting gender-focused entrepreneurs among relevant stakeholders, and to facilitate the measurement and monitoring of impact related to Gender Lens investments.

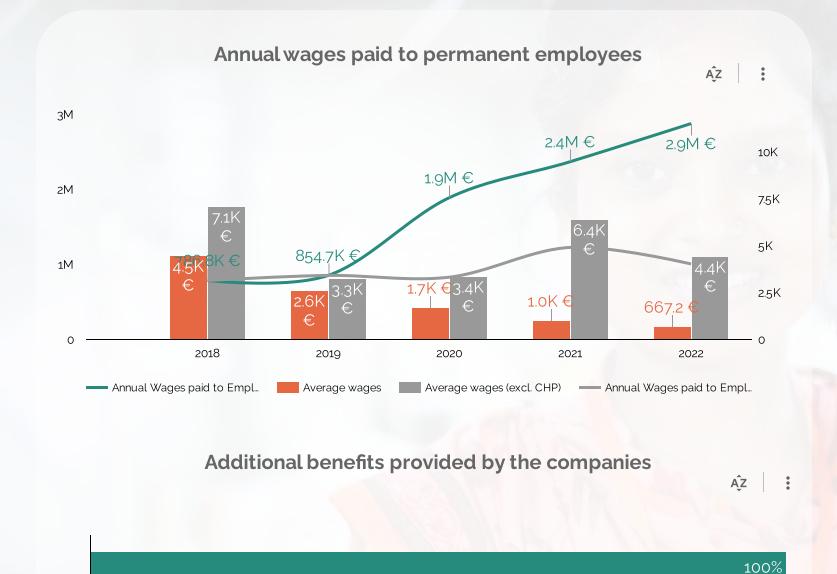
# 4 | Annual and Average Wages

Country

Company







50%

Lunch Provided

83.33%

83.33%

### Analysis

The total annual wages paid to permanent employees increased from € 2.4M to € 2.9M. A company in Paraguay paid out significantly lower amount of wages (-40.6%) due lower revenues (as a result of reduced harvest). By doing so, the wages paid were back to the level of 2019 and 2020.

The average wages paid to the employees employed by our portfolio companies went down from € 1,005 to € 667. There are two main reasons for this decline: 1. The lower wages paid by the Paraguayan company (see above) reduced the overall average wages substantially since the wages in Paraguay are relatively high compared to the other countries. 2. The large number of Bangladeshi employees as a part of our entire portfolio impacts the average wages significantly since the wages in rural Bangladesh are much lower compared to other countries in our portfolio. Although due to lack of benchmark data about the wages in rural Bangladesh, we find this an important question that we are addressing at the board level. There it is agreed that research will be conducted by the company in 2023.

To illustrate the impact of the Bangladeshi company on our dataset, the grey line and bar shows a different picture. On the one hand the average wages as such are much higher (€ 4,417), but the total and average annual wages without the Bangladeshi company included in the dataset have been reduced respectively by 21.5% and 30.9% from 2021 to 2022.

It should be noted that the devaluation of local currencies does also play a role here (see explanation on page 10).

Apart from wages, most of the companies provide other benefits as well, like maternity leave, healthcare and lunch during working days. Some companies do also contribute to a pension scheme.



an unskilled laborer in June 2006. I never felt the need to go anywhere else as the working environment and facilities here are very good. I am now a Supervisor here. I have a daughter, her education and medical costs are borne by the company. By God's grace I am well now.

I came to Bagerhat in 2007 in search of work. Then joined NF Coir LTD as a laborer. Ever since I came here I am doing well. My 5 daughters' education and medical expenses are borne by the company, among them I have married 2 with the help of the company. NF Coir LTD stood by me in times of struggle. I am very happy working here.





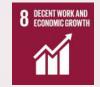


# 5 | Individuals trained

Country

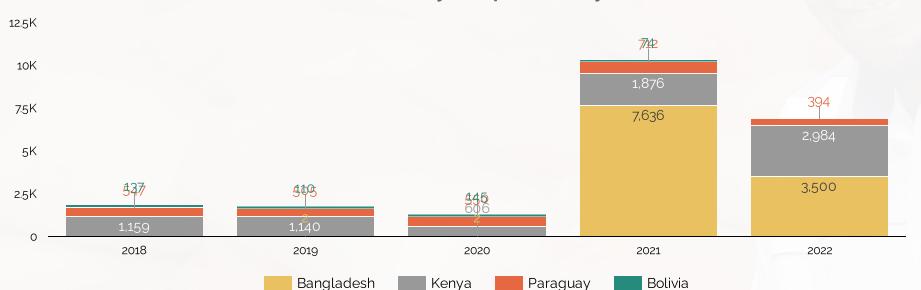
Company

Period: 2022





### Total number of Individuals Trained over the years per country



Agricultural (sustainable) practices\*



5,752

**Business practices\*** 



13,131

### Analysis

The total number of Individuals trained decreased from 10,298 in 2021 to 6,878 in 2022 (-33.2%). The steep increase last year was caused by the many workers that were trained by the Bangladeshi company which did not continue this year at the same level as many of these trainings are onboarding training for new employees. Portfolio companies in Kenya provided training to many more individuals compared to last year (+59.1%).

Most of the training focused on business practices (69.7%) which included topics like marketing & sales and production and almost half of the training focused on agricultural (sustainable) practices. Lastly, one company trained more than 1,000 individuals in GALS (Gender Action Learning System).

A Bangladeshi company provided training to 3,500 farmers and local unemployed people in value chains for new natural fibers, i.e. banana fiber, pineapple fiber etc., in partnership with NGOs.



# TruStory | Get to know our new portfolio company Ecodudu from Kenya (I)



#### Introduction

Ecodudu is an innovative waste-to-value company operating in Kenya's agricultural inputs value chains and animal feed industry i.e high quality, sustainable biomaterials derived from the black soldier fly.

The company produces organic fertilizers and highly nutritious inputs for animal feed by leveraging nature's recycling agent, the Black Soldier Flies (BSF) whose larvae convert organic waste into nutritious high-protein-dense animal feed. The resulting residues are subsequently processed into environmentally friendly and nutrient rich organic fertilizers.

The problems that Ecodudu is trying to solve can be summarized as follows: **Environmental:** such as soy cultivation, overfishing and waste management.

**Commercial:** such as feed mills supply chain, animal feed productivity, and access to quality fertilizers.

**Social:** food security, nutrition and unemployment.

### **From the Entrepreneurs**

"We are thrilled to add Truvalu to the Ecodudu Family. We're excited to have such a mission-aligned partner onboard to help us expedite our path toward scale and create more value faster for our clients. During the initial DD stage, they did things that other investors typically don't do. They built a financial model for us (we had one but it wasn't what typical investors want to see), built a strategic plan with experts in our field facilitated by Truvalu for us rather than only questioning it. This helped us solve most of our problems. We now know our strategic needs and steps to get there using the investment. It is great that Truvalu is walking with us."

Adan Mohammed and Starlin Farah

### **The Entrepreneurs**

Adan Mohamed began his career as a sales agent at an animal feed company which was an eye opener to the feed industry. He started a feed manufacturing company where he later realized the dire need for alternative protein. A discussion with his partner led to further research on BSF rearing and Ecodudu was born. Adan has a Bachelor's of Engineering degree from Kenyatta University.

Starlin Farah Co-founder of Ecodudu is a medical Doctor with a Bachelor of Medicine and surgery (MB ChB) from Kenyatta University. She is passionate about Black Soldier Fly and has done extensive research and trials on BSF larvae as an alternative source of protein. Currently she heads the research on various applications of the insect in pharmaceuticals, water purification and cosmetics and is the COO at Ecodudu.

### Social and Environmental Impact

Ecodudu deals with the majority of urban waste which is organic. By producing 1 kg of larvae = 6 kgs of organic waste is recycled, hence reduction of CO2 and methane thus promoting a cleaner planet. Next, Ecodudu contributes to decreasing overfishing and reducing the harmful chemical runoff from pesticides (SDG 14); collecting more organic waste (SDG 11); improving soil quality by offering organic fertilizer alternatives (SDG 15); and reducing greenhouse gas emissions & water saved (SDG 13).

With continuous Research & Development and application of new technologies, Ecodudu is able to scale its output with lower costs putting the company in a viable financial position in the long-run. It contributes to increasing agricultural yields and productivity (SDG 2), and more sustainable and circular poultry/animal/fish production (SDG 12).

The provision of affordable high-quality, organic and agricultural inputs helps farmers to improve their yields and revenues as well as reduction in use of harmful chemicals thus promoting a healthy community.



# TruStory | Get to know our new portfolio company Ecodudu from Kenya (II)



### The uniqueness of Ecodudu: Circular Solution to food waste

Driven by the food waste crisis and the need for sustainable animal feeds, Ecodudu through BSF farming, creates a circular economy by harnessing the food waste valorising powers of these insects to make animal feeds and organic fertilizer. Ecodudu also enhances the circular economy created by BSF farms by valorising byproducts generated through this process that would otherwise be discarded.

#### **Future plans**

Kenya produces about 1.4 million tons of animal feed annually of which protein ingredients make 25% of the feed mix, showing the magnitude of the market.

In the fish sector for example, Kenya is the country with the strongest growth in the number of aquaculture ponds growing at 30% annually. Kenya is also ranked the fourth-largest producer of farmed fish in Africa with an annual production of over 20,000 metric tonnes annually. While the demand for fish is growing, fish farmers are facing the challenge of having to incur higher raw material costs. The protein ingredient, specifically fish meal, remains the most and increasingly expensive part of the feed.

As soybean meal and fish meal exhibit low-quality protein intensity, insect protein becomes an attractive and a more sustainable substitute to large feed mills. Large commercial feed mills exerting a production capacity of 35,000 - 140,000 tons make less than 5% of the number of animal feed producers, but produce more than 85% of the market's volume. With production expansion these will be Ecodudu's main target customers.







### Co-entrepreneurship

### The solution provided by Truvalu:

- As the lead equity investor Truvalu is now Ecodudu's long term strategic partner. Truvalu has a board seat to offer strategic advice and act as the lead investor for onboarding new investors.
- · Business development by e.g. building of a financial model a reporting dashboard;
- Linkage to experts and technical expertise through the involvement of a Dutch consultancy firm ProEnto experienced in insect rearing to offer advice and recommendation for scaling up production.
- Promoting synergies through connections to other businesses in Truvalu's portfolio and network.

## **Lessons-learned | Business Development Services**

Truvalu has learned a number of lessons over the years regarding the business development services (BDS) it provides.

There is a real need for BDS. Entrepreneurs are usually willing to pay for these services, but the ability to pay can be a challenge. Truvalu believes that entrepreneurs should pay at least some amount to ensure their commitment.

Truvalu has seen that entrepreneurs are willing to pay for BDS that delivers added value, regardless of whether it leads to investment or not. Some entrepreneurs have even come back to Truvalu because of the value we created together during this phase.

Truvalu defines BDS as a project with a clear start and end. On average, it takes 3-6 months. Timelines are largely dependent on the availability of information. For some of these services, Truvalu seeks external funding, since some of its investment readiness activities cannot be fully included in its business model.

Truvalu does not outsource all BDS to external consultants. Relationship building with the entrepreneur is a crucial part of this phase. It gives Truvalu the possibility as an investor to get to know the entrepreneurs, the team, and the company. Gaining better insights into soft factors (such as responsiveness, communication skills and the ability to pivot) can be equally important as the actual outcomes of the BDS.

Truvalu's conclusions are in line with the report 'Effectiveness and Efficiency of BDS for Agri-SMEs' published recently by ISF Advisors. This report found that BDS contributes to an increase in revenue, employment, and capital raised. It also concluded that enterprises that paid for the BDS experience better outcomes (in terms of revenue and jobs created). The exact fee structure should be tailored to the context of the enterprises, and the BDS needs will vary according to the maturity of the enterprises.



In conclusion, Truvalu has learned that there is a real need for BDS, entrepreneurs are willing to pay for these services, and BDS should be a project with a clear start and end. Truvalu also believes that relationship building with the entrepreneur is a crucial part of this phase, and that outsourcing all BDS to external consultants can be counterproductive.

# Lessons-learned | Investment Project Implementation and the Impact of the Macroeconomic Situation

#### **Investment Project Implementation**

In our experience, companies often underestimate the time it takes to implement an investment project, especially when machines and equipment are imported. Additionally, the timelines associated with importing goods are now much longer than they were before COVID-19. This is because supply chains are still disrupted and not functioning as they used to.

Obtaining permits and licenses can also take longer than expected, particularly when government agencies are involved. These are just two examples of factors beyond the company's control that can easily cause delays.

Another lesson we learned is that it usually takes at least 6 months for a company to start reaping the benefits of an investment. This is because it takes time to implement the investment and for the company to adjust to the new changes. In addition, entrepreneurs often find it challenging to manage and implement an investment project while also running their business. This can lead to a decline in the company's current performance during the implementation period.

It is important to factor these challenges into growth projections. Hockey-stick projections, which imply that revenues will quickly grow as soon as capital has been injected into the business, are often unrealistic. In practice, S-curve projections, which show a gradual increase in revenues in the first period followed by a steeper growth, are a more realistic representation of how investments typically impact revenue.

#### **Macroeconomic situation**

In the foreword we already stated that the year 2023 has been a turbulent one. The global challenges related to the after-effects of COVID-19, the war in Ukraine, increased inflation, and the energy crisis have all had a significant impact. An example of a sector that was highly affected by these challenges is the macadamia sector in which one of the Kenyan companies is active. Being a relatively small player in this sector resulted in major challenges for this company.

One of the most significant challenges facing the macadamia sector is the growth in supply exceeding the growth in demand. This is due to a number of factors, including:

- 1. A huge drop in global demand due to the COVID outbreak in China, one of the largest markets for macadamia nuts.
- 2. A gut of supply from last year.
- 3. Increasing trend in terms of prices in the past year appeared to be not sustainable anymore, especially in the light of the inflation, energy crisis and other macroeconomic challenges

These factors have all contributed to a huge drop in demand and price by 50%. As a result, the entire market is in great distress.

The macadamia sector is a global industry and is therefore vulnerable to global challenges. Our investee company is working to mitigate the impact of these challenges, but it is a difficult task. The company is hopeful that the market will improve in the future, but it is too early to say when this will happen.

