AlphaMundi approached Terrafertil in 2008, and the collaboration that ensued has made us proud. Terrafertil became AlphaMundi’s first impact investment in agriculture, and since then the company has doubled its annual sales each year, expanded to 12 countries, earned a 4-star impact rating from GIIRS, and provided market access and technical assistance to hundreds of smallholder farmers in Ecuador and Colombia.

AlphaMundi was set up and designed to mobilize growth capital for social ventures that are financially viable and have a potential for nation-wide or cross-border scale. Since the creation of our open-ended impact fund SocialAlpha-Bastion in 2009, we have financed and supported 15 ventures in 9 developing countries and 4 sectors: rural microfinance, sustainable food and agriculture, renewable energy, and affordable education. 3 of the loans have already been fully amortized, and all others are performing, yielding a gross annual interest rate of 10% across the investment portfolio each year. In 2012, Bastion was the first Fixed Income impact fund to secure a GIIRS rating, among the top quintile of all rated impact funds. Based on this early investment track record and our in-house capacity to continue to identify new investment opportunities with similar potential, we are opening our Bastion fund to new investors for the first time in 2013.

In the meantime, we look forward to our continued collaboration with Terrafertil, and trust you will find this first field impact investee report both informative and inspiring. Sustainably yours,

Tim Radjy
Founder and Managing Partner
AlphaMundi
The Terrafertil idea first came to us as I was working for my father’s herbal tea company, ProConsumo (which we acquired in 2011), after some experience in investment banking. I wrote the business plan and won the CAF & WRI competition in 2004 in Peru, resulting in capital commitments from EcoEnterprise and other partners including Jonathan Berg, Terrafertil’s co-founder.

Since then, I’ve faced more entrepreneurial challenges than I could ever imagine. To date, the most rewarding achievements include the involvement of my two brothers Raul and Daniel and of Jonathan’s cousin Ramon, and the outstanding management team we’ve assembled under the banner of our brand and values. I’m particularly proud of the quality of our products, which have earned stringent international certifications and been endorsed by a high-growth client base in multiple geographies. In 8 years, we have built a multinational enterprise with physical presence in 4 countries and with products in more than 30. Most importantly, we have proven that a socially responsibly company can also be profitable and successful.

At Terrafertil, we further derive a lot of satisfaction from the development impact the company is having on its employees and outgrowers, and from our contribution to consumer health. We employ over 300 people, including a majority of women, and work with more than 400 smallholder outgrowers. This gives true meaning to our commercial ambitions and the social mission they serve.

That leads me to my final observation: our biggest success cannot be measured in economic terms. Today, Jonathan & Ramon are still my best friends. My brothers and I are closer than ever despite geographical distances. New outgrowers are often referred by existing ones, and we maintain a high retention rate among our staff, creditors and clients. We all form a team that stands dedicated and united across the entire value chain, from farm to market: this is the real key to our success.

With this report, we invite you to join us on our journey to impact.

David A. Bermeo
Presidente Ejecutivo / Executive President
Terraholdings LLC
The Netri Foundation is a Spanish private charitable organization, established in 2005 by my family, with the mission to alleviate poverty by investing directly in social enterprises.

Since 2006, we have been providing loans and facilitating guarantees to microfinance institutions across the developing world. We support only the most socially committed institutions that work in rural and semi-urban communities. Since early 2012, Netri has been actively investing in companies beyond the microfinance sector where our focus is on companies promoting rural development, education, health, and sustainable energy solutions.

We have been working with AlphaMundi in building our portfolio. Terrafertil was a company they introduced us to and subsequently became one of our first investments to promote rural development and fair trade.

The foundation fully embraces the entrepreneurial spirit of my family by investing in social enterprises with driven management, whose business models are designed to meet specific social or environmental challenges. We were very impressed by the Bermeo brothers’ drive to improve the social conditions of the farming communities they work with and their success in building a thriving commercially viable company. Social impact is our most important consideration and we like to support companies that are also driven by understanding their social impact and who take the time to measure and monitor it. We contributed to this survey to benefit from greater insight into the depth of impact Terrafertil has on the smallholder farmer communities it works with.

We are especially thankful to David Bermeo for facilitating this survey and to Tim Radjy for all his hard work in bringing this report together and for his personal involvement with many of the outgrowers that contributed to the survey.

Néstor Oller
Founder and Executive Director
Netri Foundation
Development Context

Colombia and Ecuador represent 9% and 3% respectively of the population of Latin America, and 6% and 2% respectively of the Latin American GDP.

In Colombia, between 1980 and 2012, GNI per capita increased by 66%, life expectancy by 8 years, mean years of schooling by 3 years, and the Human Development Index (HDI) by 29%. The country’s current HDI is in the high human development category and close to the average for Latin America, and drops by about 28% when adjusted for inequality. From 1997 to 2010, the Multidimensional Poverty Index (MPI) dropped from 51% to 23% in urban areas, and from 86% to 53% in rural areas; the imbalance between urban and rural areas steadily increased on all multidimensional poverty indicators.

One third of the population lives in rural areas. The National Planning Department calculates that poverty reached 46% in rural areas in 2011, and extreme poverty 22%. 77% of the land is currently in the hands of 13% of owners, and according to the Gini index this land concentration has also been increasing in the last decade. 18% of smallholder farmers do not hold formal titles to their lands. Since 2012, the Victims’ Law has enabled the restitution of more than 1 million hectares to peasants and other people displaced by the longest internal conflict in Latin America, but there are still more than 1 million landless farmer families in the country.

Because of difficult working conditions in rural areas, the country has had to import coffee since 2004, and coffee growers went on strike earlier this year demanding government relief. “The entire country should be declared a reserve where the rural population is protected”, stated the director of the ecological agriculture program at the National University of Colombia, referring to a 1994 law that yet has to be codified and which would establish reserve areas for farmer and indigenous communities — one of the key points of the on-going peace talks between the government and the Revolutionary Armed Forces of Colombia.

In Ecuador, between 1980 and 2012, GNI per capita increased by 36%, life expectancy by 13 years, mean years of schooling by 2 years, and the Human Development Index (HDI) by 21%. The country’s current HDI is in the high human development category and
close to the average for Latin America, and similarly drops by about 26% when adjusted for inequality. The structural determinants of poverty in Ecuador include inequality, low human capital institutionalization, and productivity. In 2010, 70% of the population did not have health insurance, 63% couldn’t afford the basic basket of goods and services, and 16% suffered from multidimensional poverty. The highest levels of poverty are still concentrated in rural areas, led by the Rural Sierra with a 24% share of the country’s multidimensional poverty.

A new constitution was introduced in September 2008, based on social justice, human rights and the rights of nature, and implemented through the National Plan for Good Living 2009-2013. Oil revenues increased from 7.8% of GDP in 2006 to 13.8% in 2010, but rising public expenditures have led to fiscal deficits in 2009 and 2010. The social expenditures of the central government stood at USD 143 per capita or 12.6% of GDP in 2010, below the weighted average of 18% for Latin America. On average, 1% of the population overcomes its food and water deprivation each year.
MAP OF MULTIDIMENSIONAL POVERTY IN COLOMBIA

Source: NPD, OSD, SDQLD calculations using Census Data 2005

Source: INSTITUTE FOR SOCIAL AND ECONOMIC RESEARCH, JANUARY 2013

DEVELOPMENT & AGRICULTURE INDICATORS

<table>
<thead>
<tr>
<th></th>
<th>GDP per Capita 2012</th>
<th>Gini</th>
<th>Unemployment 2012</th>
<th>Below USD 2/day</th>
<th>Population % Poverty</th>
<th>Agri as % GDP</th>
<th>Agri as % Labor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colombia</td>
<td>USD 7,910</td>
<td>58.5</td>
<td>10.3%</td>
<td>8.2%</td>
<td>34.1%</td>
<td>6.8%</td>
<td>18%</td>
</tr>
<tr>
<td>Ecuador</td>
<td>USD 5,557</td>
<td>48.7</td>
<td>4.9%</td>
<td>2%</td>
<td>46%</td>
<td>6.4%</td>
<td>27.6%</td>
</tr>
<tr>
<td>Latin America</td>
<td>USD 9,912</td>
<td>49.21</td>
<td>6.2%</td>
<td>6.5%</td>
<td>36.4%</td>
<td>6.26%</td>
<td>18%</td>
</tr>
<tr>
<td>World</td>
<td>USD 12,400</td>
<td>39</td>
<td>9.2%</td>
<td>22.4%</td>
<td>50%</td>
<td>5.9%</td>
<td>36.4%</td>
</tr>
</tbody>
</table>

Sources: CIA WORLD FACTBOOK, UNDP HDR2013, FOCECONOMICS, WORLD BANK 2011
INTRODUCTION TO THE GOLDENBERRY

Terrafertil’s main fruit product is the Incan Goldenberry, also known as Physalis peruviana, a native to high-altitude, tropical Peru, Colombia and Ecuador. Goldenberry is a source of Vitamins A, C, P, and complex B vitamins, and also contains high amounts of calcium, phosphorous and protein (16%).

The Goldenberry production cycle in Ecuador starts with the distribution by Terrafertil of plants and soil nutrients to smallholder farmers, on credit and at cost. Seeds germinate in 8 to 14 days in an unheated greenhouse. The seedlings are planted when they are 15 to 20 cm tall with 1-3 meters between each plant, at 1,800-2800 meters of altitude.

To ensure productivity and reduce vulnerability to pests, the plants should be trellised or staked, allowing for sun exposure and wind flow. The first yellow, bell-shaped flowers typically appear within 3-6 months of planting and continue flowering for up 6-9 months after its first fruit become ripe. Fruits are handpicked, and harvesting is therefore labor-intensive.

Each plant yields 15-25kg of fruit in total, half of which are sold to Terrafertil at USD 1.25 per kg, the remainder being sold to other buyers as fresh fruit export for USD 0.50-3.00 per kg depending on international market conditions. After paying for all production costs, outgrowers usually retain >50% of the Terrafertil price as net income.

It should be noted that Colombia has a longer history of commercial cultivation of Goldenberry than Ecuador, resulting in better practices and higher yields. Over the last 5 years, Goldenberry production has experienced substantial variations from year to year, driven by international market prices as well as agricultural scale and practices: the largest country differentials amount to 32% for land dedicated to Goldenberry cultivation, 44% for total production volumes, and 21% in terms of productivity, in favour of Colombia.
**COLOMBIA CULTIVATED HA**

2008: 961  
2009: 1087  
2010: 745  
2011: 743  
2012: 825

**COLOMBIA PRODUCTION TONS**

2008: 15128  
2009: 19333  
2010: 12024  
2011: 10771  
2012: 11625

**COLOMBIA FRUITT KG/PLANT**

2008: 48  
2009: 41  
2010: 38  
2011: 41  
2012: 41
The survey is the first field impact survey of AlphaMundi, and is designed to complement the perspectives provided by GIIRS and SROI ratings on the impact of AlphaMundi’s investments.

Survey results are based on 100 individual interviews conducted by Terrafertil field staff with the company’s smallholder outgrowers in Ecuador and Colombia in May 2013, from a total of about 400 outgrowers the company is currently working with. The questionnaire for the interviews was designed by AlphaMundi and reviewed by the Netri Foundation and Terrafertil. Adding to the individual interviews, AlphaMundi and Terrafertil jointly conducted group discussions with the outgrowers as well as a dozen field visits, and additional insights were provided through AlphaMundi interviews with senior Terrafertil staff. Survey results were then consolidated and validated by AlphaMundi and Terrafertil.

While an attempt was made to be as comprehensive as possible within the scope of the survey, information goals had to be balanced with available resources to fit within the desired timeframe. We expect future field impact surveys to benefit in their design and implementation from this first experience and the feedback provided by survey readers.

We hope you will find this survey both helpful and instructive, and look forward to your questions and comments at: info@alphamundi.ch
FINDINGS

PARTICIPANT PROFILE

On average, Terrafertil outgrowers are in their forties, in a relationship and usually married, have two children and live in a household of four. About half of the outgrowers have gone beyond a primary education, with one in ten standing at the benefit of a vocational or university education beyond high school.
Agricultural Activity

Most Terrafertil outgrowers rely on agriculture to sustain their livelihoods. They typically rely on 2-4 agricultural products to diversify their risk, such as cattle, potatoes or strawberries, in addition to Goldenberry of course. Most own and cultivate their own land, but very often they also either rent additional land for cultivation or collaborate with other farmers and share the proceeds. On average, outgrowers dedicate a third of the lands they cultivate to Goldenberry, with significant capacity to increase that production surface once Terrafertil can purchase more product. It should be noted that while Goldenberry has a 20-year history in Colombia as a commercial crop, it is a relatively new one in Ecuador. This has led to a differentiated approach by Terrafertil for each country: in Colombia, outgrowers are less in need of technical assistance, achieve higher productivity rates, and are loathe to move to organic production as they would need to let their land rest for 3 years and face significant certification expenditures for a minor sales price premium only. In Ecuador, outgrowers are very much in need of technical assistance, have lower productivity rates, and face fewer hurdles in adopting organic practices.

The seeds of hope

Nubia’s family has been rooted in Bocaya for generations, working the earth to live from its bounties despite the occasional hardships. When the potato price crisis struck and the family was driven close to ruin 5 years ago, the eldest daughter of three knew it was time to look for alternatives. She had heard about the profitability of Goldenberries from other farmers, and convinced her father to risk 25% of their land for a try out. Drawing on her Agricultural Engineer knowhow and on support from the Goldenberry producer cooperative Procoaven, she was able to turn around her family’s fortunes and even became the President of the cooperative. “I always enjoyed working on our family farm. I did not enjoy the experience of potato farming in difficult conditions for someone else’s gain, while with Goldenberry I can preserve my independence and my family’s legacy.”
On average, outgrowers increased their Goldenberry productivity by 20% following the inception of their collaboration with Terrafertil within the last 2 years. The vast majority have also experienced positive impacts in household wealth, education opportunities, home improvements, and even health — Goldenberry being an alternative to flower cultivation and its heavy pesticide use. Most outgrowers recognize the benefits resulting from their collaboration with Terrafertil, which explains why more than half of the company’s outgrowers were initially introduced to Terrafertil by friends and neighbours.

**Collaboration Results**

Terrafertil’s success has not come easy, and each step forward is a struggle — to convince outgrowers to produce Goldenberry and sell it to Terrafertil, to process and package food and beverage products according to international certification standards, to persuade retail distributors to give the products a chance, and to repeatedly secure growth capital from banks and social investors. In 2012, the international Goldenberry market collapsed just as outgrowers produced bumper crops, while pledged funding was delayed by 9 months after Terrafertil had committed to the purchase of customized machinery. The company kept its promise to purchase Goldenberries at the same price, paid its new machines, negotiated loan extensions and bank overdrafts until the expected funding materialized, and still managed to achieve most of its annual growth objectives.

**Crisis Leadership**

The international Goldenberry market collapsed just as outgrowers produced bumper crops, while pledged funding was delayed by 9 months after Terrafertil had committed to the purchase of customized machinery. The company kept its promise to purchase Goldenberries at the same price, paid its new machines, negotiated loan extensions and bank overdrafts until the expected funding materialized, and still managed to achieve most of its annual growth objectives.
NURTURING STAFF

A model employee

Soledad Parra grew up on a farm in Pimampiro, completing primary school. She started to work as a cook for the Bermeo family, and they financed part of her children’s education. She then became an employee of their herbal factory, proving as dedicated as she was effective. When the factory passed from father to son through the purchase of ProConsumo by Terrafertil in 2007, the Bermeos delegated the operation to Soledad who now manages 10 employees and 110 outgrowers.

“I never dreamt of being entrusted with such autonomy and responsibilities. Now that my children have grown up, I intend to help as many farmers as possible, in the same way the company’s helped me.”
Terrafertil was founded 8 years ago, and in that time a lot has happened: we’ve proven our viability and created a new market for Goldenberry and all its producers. The desire to innovate is in our corporate DNA, and that has helped us grow and differentiate ourselves from our peers. We’ve also demonstrated by now that you can be profitable and socially and environmentally responsible at the same time.

Although we’re no longer a start-up, our business is still at an early stage. The market is rife with many growth opportunities, and Terrafertil partners are only in their thirties, so we still have a long journey ahead of us: our vision is to reach USD 100 million in sales, have 1,000 staff, and benefit thousands of smallholder farmers. Given the wealth of experience and lessons we’ve acquired in the early years, the next phase of growth should come more easily.

We’re relying on the backing of all our faithful stakeholders to achieve this vision, our staff, our clients, our providers and our investors. Investors who believe in Terrafertil enable the growth of our business of course, but they also contribute directly to the development of hundreds of smallholder farmers in impoverished areas of the Andes. In my opinion, the greatest impact of the assessment you are now reading was to reveal how working with us has brought substantial stability to the income and lives of our smallholder farmers, and enhanced their children’s education prospects.

We will continue to work hard to honour your trust and reward your capital. We hope our story inspires you to come visit us, and join us in this adventure of business innovation and social impact.
CORPORATE RESPONSIBILITY

Principles of responsibility
- Market leadership in organic, conventional and dried food
- Consumer health
- Environmental preservation
- Honesty
- Transparency
- Corporate social responsibility

Sustainability certifications
1) Buenas Practicas de Manufactura (BPM) held by Terrafertil Ecuador
2) Hazard Analysis and Critical Control Points (HACCP) held by Terrafertil Ecuador and Terrafertil Colombia
3) British Retail Consortium (BRC) held by Terrafertil Ecuador and Terrafertil Colombia
4) ISO 9001 held by Terrafertil Ecuador
5) GIIRS impact rating held by Terrafertil Holdings
6) Global GAP held by Terrafertil Ecuador
7) Kosher held by Terrafertil Ecuador
8) US National Organic Program (NOP)
9) EC BCS Öko-Garantie
CREDITS & COPYRIGHTS

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Information sources:
Economic Commission for Latin America and the Caribbean, Defining and Measuring Multi-Dimensional Poverty in Ecuador, December 2012
Economic Commission for Latin America and the Caribbean, Social Panorama of Latin America 2012

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