

Mountain Hazelnuts



Impact Management Case Study



Location Bhutan

Sector Agriculture

BOP Stakeholders Hazelnut growers, direct employees and suppliers along the hazelnut value chain

Total Reach 15% of Bhutan's population is involved in the hazelnut value chain



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Business Model

Mountain Hazelnuts was founded in 2009 as Bhutan's first 100% foreign direct investment with a mission of creating a profitable business that provides long-term income for vulnerable rural communities by planting 10 million hazelnut trees that restore degraded mountain slopes. While hazelnuts are indigenous to Bhutan, historically they have not been cultivated for commercial production or consumption locally. Mountain Hazelnuts has since established fully traceable hazelnut production, boosting the country's exports and providing income generation opportunities for as much as 15% of the population through direct employment, extending to its supply chain, as well as hazelnut growers who sell their harvests to the Company.

Mountain Hazelnuts has integrated more than 5,000 women-led farming households in its value chain. Growers and community groups (e.g., nunneries) are provided with hazelnut trees and inputs, plus training on best agricultural practices, followed by bi-monthly extension visits. Mountain Hazelnuts buys all harvested nuts according to a guaranteed price structure that removes market risk for the growers and ensures a profitable crop. Mountain Hazelnuts transports the nuts to its processing plant for further drying, size sorting, and various value-adding processes. In addition to integrating women farmers as suppliers of hazelnuts, Mountain Hazelnuts also directly

employs 261 Bhutanese women from the rural communities it operates in, and provides training and support for their health and personal finance.

Mountain Hazelnuts takes a holistic approach to address household income generation, community development, cultural preservation, local ecosystems, and global climate change.



7 million
trees planted by
12,000
smallholder farming
households¹



USD 30 million
invested by Founders
and leading international
financial institutions



Supplying **3%**
of the global
USD 7 billion
market for hazelnuts



5,395
women-led smallholder
farming households



42%
women employees

¹ As at March 2020



Key Stakeholders

Bhutan's economy is based on agriculture, forestry, tourism and the sale of hydroelectric power to India. About 70% of the population live in rural areas, and most depend on subsistence agriculture, with the average farm size of 1.7 hectares. With much of Bhutan too steep, too high or too cold to farm, only 8% of land is cultivable. Most of this is fragmented and scattered in difficult terrain, making mechanisation difficult and farming practices labour intensive. Smallholder farmers also face other constraints, including the small size of landholdings, limited access to irrigation, poor soil fertility, limited access to technologies and inputs, poor access to markets and high transport costs.

Notably, rural-urban migration is a significant constraint on labour supply for farming. The rural population grew at an annual rate of only 0.6% from 1985-2005, compared to an urban population growth rate of 6.1%² (Population Census, 2005). In a study of rural-urban migration in 2004, almost half of rural households (47%) reported that one or more family members had migrated. That trend has accelerated in the subsequent 15 years. Due to this demographic shift, there are indications that the rural labour force is ageing faster than that in urban areas, further restricting labour supply. In addition, it appears that access to labour is constrained on the demand side by the inability of farmers to pay the wage rates required to compete with urban employment³ (FAO, 2012).

In 2018, Mountain Hazelnuts conducted a baseline survey to better understand key characteristics of the overall farming community, as well as its key stakeholder group of hazelnut growers. Of the 996 respondents surveyed, 312 were non-hazelnut growers, and 684 were hazelnut growers. Overall, a majority of both growers and non-growers identified their main source of income for livelihoods as deriving from the cultivation of annual cash crops. Of the hazelnut growers, while 65% of household heads had no formal education, 62% sent all of their children to school. In terms of access to healthcare facilities, around 90% of hazelnut growers had access to a health care facility within five hours of walking distance. While overall financial literacy amongst rural farming communities tends to be low, 67% of all respondents had a bank account, representing a first step towards greater financial empowerment.

2 Population Census, 2005: <https://catalog.ihnsn.org/index.php/catalog/1374>

3 FAO Agricultural Sector Review, 2012: http://www.fao.org/fileadmin/templates/tci/pdf/Buthan_Vol1_web.pdf



47%

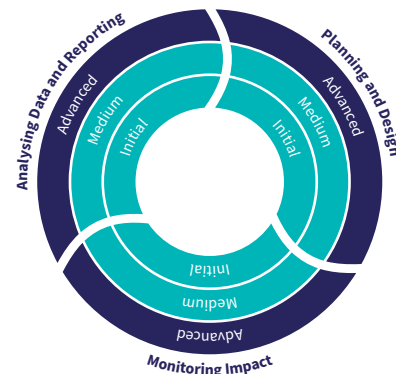
In 2004, almost half of rural households reported that one or more family members had migrated

1. Assessing Readiness and Capacity

Mountain Hazelnuts conducted a survey in 2018 to establish baseline data for measuring the impact it is having on communities. Building on this exercise, Mountain Hazelnuts joined Business Call to Action's (BCTA) **Impact Champions Programme** to design a complete impact management framework that enables improved decision-making and helps drive value for its business and stakeholders.

At the start of the Impact Champions Programme, Mountain Hazelnuts was found to have an **advanced capacity** for undertaking impact measurement and management. This is because the Company's senior managers view social impact management as a critical activity and devote resources to develop monitoring systems. The Company is already collecting and reporting on non-financial data as part of regular monitoring of Key Performance Indicators (KPIs). Moreover, Mountain Hazelnuts uses web-based tools, laptops, smartphones and other software to track progress against KPIs. The Company's senior managers are strongly committed to dedicating time and attention to carry out impact management. Lastly, Mountain Hazelnuts' field staff regularly collect and use data for their daily operations and are ready to dedicate their time for impact management.

Mountain Hazelnuts is committed to impact measurement and management as it supports their reporting to investors, donors and other stakeholders, and to serve as a model for other social impact enterprises.



Companies can have an initial, medium or advanced level of impact management capacity





2. Planning For Impact

I. Impact Value Chain

The **Impact Value Chain** is a visual map of how an organization's strategy and operations contribute to its business value and the Sustainable Development Goals (SDGs). The Impact Value Chain allows the organization to holistically understand the effects of its inclusive business activities on different groups and the environment.

Mountain Hazelnuts has a systemic approach for the social and economic uplift of the communities it works in. Hazelnut grower households are provided with hazelnut tree saplings at no cost, along with continuous technical support and training on raising the trees by a 200-strong field extension team present in the farming communities. The Company also employs women from the communities, thereby generating income and revitalizing the local economy. Both hazelnut growers and employees receive training on entrepreneurship, personal finance, management, and soft skills. By actively engaging rural communities, including women-led farming households, Mountain Hazelnut fosters close relationships and trust with its stakeholders. Mountain Hazelnuts runs mindfulness programmes and encourages healthy lifestyles and personal growth. They also partner with the Royal Government of Bhutan (RGoB) to conduct regular health screenings and awareness sessions, including on issues specific to women's health. Mountain Hazelnuts was the first private sector company in Bhutan to offer health screenings to all its staff. Moreover, the Company is partnering with the RGoB and other actors to bring services such as banking and education facilities to rural farming communities, and to improve the climate for private sector growth and foreign investment in Bhutan.

As a result of its activities, more households are engaged in hazelnut cultivation and more income-earning opportunities have been created for rural communities in Bhutan, especially

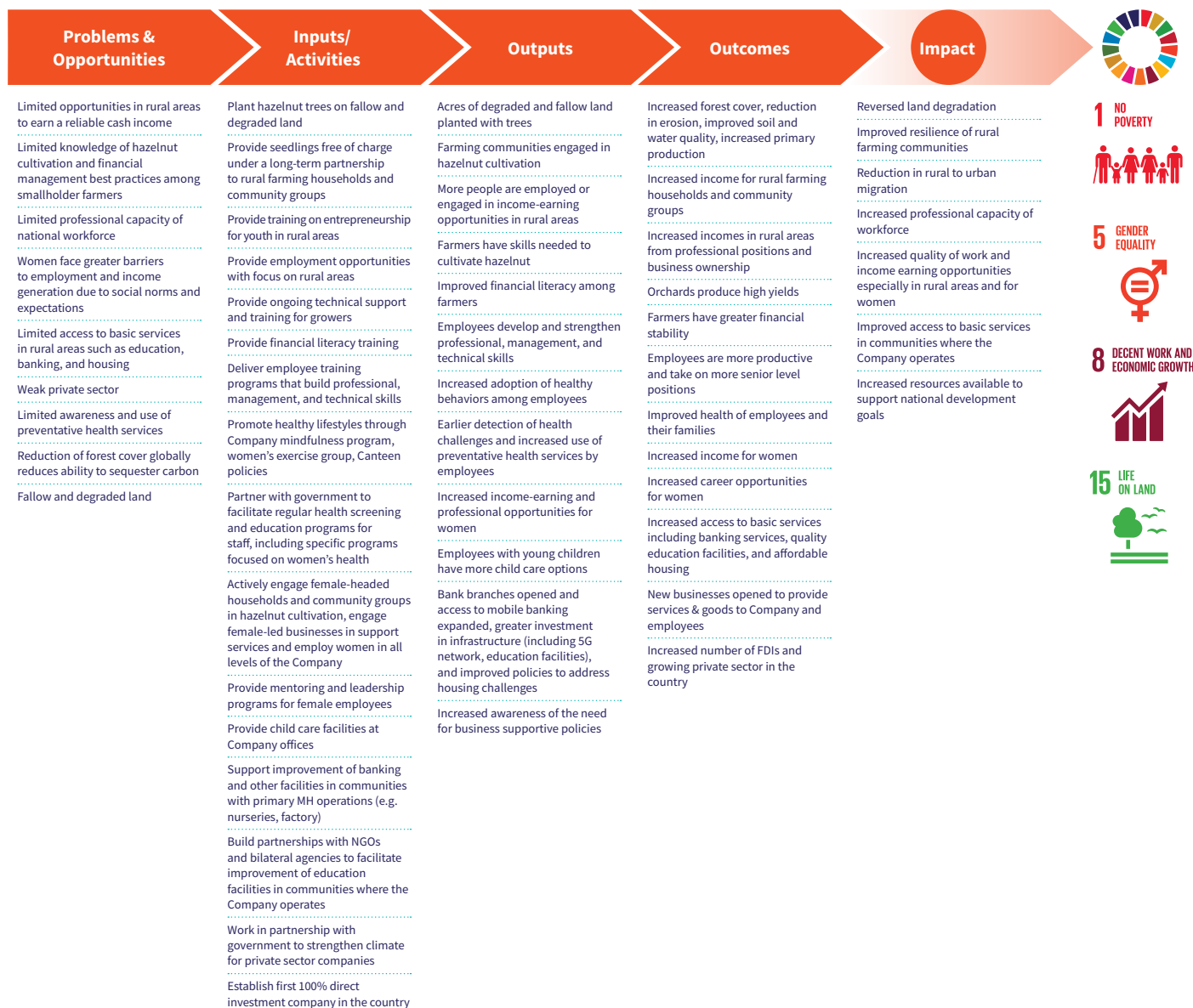
for women. Farmers have access to skills and training to cultivate hazelnuts. There is increased knowledge of financial literacy and technical skills amongst employees, and greater adoption of health-seeking behaviour and preventative care. This contributes to early detection of health challenges as well as improvement in overall health of the community. There is an increased presence of banking, infrastructure, and technology services and a better environment for business growth.

In the medium-term, Mountain Hazelnuts contributes to increased crop yields and a higher level of income for both the farming households as well as the Company's employees. More women have access to career opportunities and better livelihoods. Economic productivity and financial stability also improve in hazelnut growing communities, with more households being able to access basic services for the first time. Health and education outcomes continue to improve, leading to a better standard of living. Furthermore, there are key economic spill-over effects, where Bhutan becomes an attractive market for more local and foreign investment and hazelnut export is projected to become the nation's third largest earner of foreign exchange.

In the long run, the rural communities that Mountain Hazelnuts operates in become more resilient as the quality of life and work improves, especially for women. There is an increased access to services, more resources available for development, and a decrease in rural to urban migration. In addition to the social impact, Mountain Hazelnuts is also working to mitigate the negative impacts of climate change. By planting hazelnut trees on degraded and fallow land, the Company increases forest cover, reduces erosion, and improves soil and water quality throughout the country.

Mountain Hazelnuts tracks the performance of its inputs, outputs, outcomes and impact goals using the following framework.

Mountain Hazelnuts Impact Value Chain








Decision-Making Questions	<p>What is the current socio-economic situation of growers?</p> <p>Are female-led grower households and community groups represented proportionally?</p> <p>What new skills do growers need to ensure success?</p>	<p>What technical and financial training is needed for growers to ensure success?</p> <p>How do we ensure women are engaged as growers, direct employees and through the supply chain?</p>	<p>Are we reaching all of our growers with the training and technical support needed?</p> <p>How do we know if the training and technical support is successful?</p>	<p>Are growers maximizing yields and income?</p>	<p>How are farming communities impacted by hazelnut cultivation?</p>
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Indicators	<p>Number of women employed in supply chain</p> <p>Number of female-headed smallholder grower households and community groups engaged</p> <p>Average grower household income per year (total and female-led)</p> <p>Percentage of growers who have previous agricultural experience with fruit trees</p>	<p>Number of youth trained</p> <p>Number of years' agricultural experience with hazelnut or other fruit trees</p> <p>Number of growers with a bank account (total and female)</p> <p>Number of female-headed smallholder grower households and community groups</p> <p>Number of smallholder households and community groups engaged</p> <p>Number of children utilizing Company child care facilities</p> <p>Number of participants in women's leadership and mentoring programs</p>	<p>Total number of growers receiving extension services</p> <p>Satisfaction of growers with extension services</p> <p>Number of farmers trained in financial literacy (total and female)</p> <p>Number of farmers with bank account (total and female)</p> <p>Number of growers that report having money in savings</p> <p>Number of smallholder households and community groups engaged</p> <p>Number of employees outside capital city</p> <p>Number of women employed in supply chain</p>	<p>Average yield per acre</p> <p>Income of growers from hazelnut</p> <p>% of total revenue coming from hazelnut</p> <p>Perception that hazelnut production is a viable option for their children</p> <p>Amount invested in farm assets per household</p> <p>Income of female-led grower households and community groups from hazelnut</p>	<p>Level of food security among grower households</p> <p>Perception of wellbeing and inclusion</p>
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II. Understanding and Describing Impact

The Impact Management Project (IMP) is a forum for building global consensus on how to measure and manage impact. Through a series of consultations and convenings across the world with thousands of practitioners including investors and multilateral institutions, IMP has developed shared fundamentals on how to describe and understand through the lens of the 5 dimensions of impact. These 5 dimensions are: WHAT, WHO, HOW MUCH, CONTRIBUTION and RISK.






	tells us what outcomes the enterprise is contributing to and how important the outcomes are to stakeholders.
What	
	tells us which stakeholders are experiencing the outcome and how underserved they were prior to the enterprise's effect.
Who	
	tells us how many stakeholders experienced the outcome, what degree of change they experienced, and for how long they experienced the outcome.
How Much	
	tells us whether an enterprise's and/or investor's efforts resulted in outcomes that were likely better than what would have occurred otherwise.
Contribution	
	tells us the likelihood that impact will be different than expected.
Risk	

The Business Call to Action integrates IMP's shared logic in the Impact Lab to help companies plan for impact measurement and management starting with assessing their outcomes considering the 5 dimensions described above.

Mountain Hazelnuts is contributing to distinct outcomes: **(1) Improved Resilience of Rural Farming Communities, (2) Reduction in Rural to Urban Migration, (3) Increased Professional Capacity of its Workforce, (4) Increased Quality of Work and Income Earning Opportunities Especially in Rural Areas and for Women, (5) Increased Access to Basic Services in the Communities, (6) Increased Resources Available for National Development Goals, and (7) Reverse Land Degradation.**

Mountain Hazelnuts mapped each of these effects on the five dimensions of impact to understand better its significance and to be able to better manage and communicate its impact.

Goal 1: Reverse land degradation

<p> What</p> <p><i>What is the importance of your goal to your stakeholders?</i></p> <p>Suppliers and Producers</p> <p>Not Important ————— Important</p>	<p> How Much</p> <p><i>How significant is the impact that occurs in the time period?</i></p> <p>Scale: Did the outcomes happen at scale?</p> <p>Small Scale ————— Large Scale</p> <p>Duration: Do the outcomes last for a long time?</p> <p>Short Term ————— Long Term</p> <p>Depth: Is your organization a deep driver of the outcome for these stakeholders?</p> <p>Marginal Change ————— Deep Change</p>
<p> Who</p> <p><i>How underserved are your stakeholders in relation to the SDGs?</i></p> <p>Suppliers and Producers</p> <p>Underserved ————— Well-served</p>	<p> Risk</p> <p><i>What is the risk that the impact is not achieved due to external or internal factors?</i></p> <p>Risk</p> <p>Low Risk ————— High Risk</p>
<p> Contribution</p> <p><i>How does the impact compare to what is likely to occur anyway?</i></p> <p>Because of our efforts, our stakeholders' access to SDGs is:</p> <p>Likely Worse ————— Same ————— Likely Better</p>	

Goal 2: Improved resilience of rural farming communities

□ What

What is the importance of your goal to your stakeholders?



○ Who

How underserved are your stakeholders in relation to the SDGs?



+ Contribution

How does the impact compare to what is likely to occur anyway?



≡ How Much

How significant is the impact that occurs in the time period?



Duration: Do the outcomes last for a long time?



Depth: Is your organization a deep driver of the outcome for these stakeholders?



△ Risk

What is the risk that the impact is not achieved due to external or internal factors?



Goal 3: Reduction in rural to urban migration

□ What

What is the importance of your goal to your stakeholders?



○ Who

How underserved are your stakeholders in relation to the SDGs?



+ Contribution

How does the impact compare to what is likely to occur anyway?



≡ How Much

How significant is the impact that occurs in the time period?



Duration: Do the outcomes last for a long time?

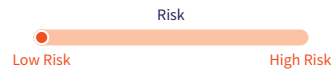


Depth: Is your organization a deep driver of the outcome for these stakeholders?



△ Risk

What is the risk that the impact is not achieved due to external or internal factors?



Goal 4: Increase quality work and income earning opportunities, especially in rural areas and for women

□ What

What is the importance of your goal to your stakeholders?



○ Who

How underserved are your stakeholders in relation to the SDGs?



+ Contribution

How does the impact compare to what is likely to occur anyway?



≡ How Much

How significant is the impact that occurs in the time period?



Duration: Do the outcomes last for a long time?

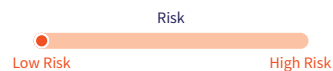


Depth: Is your organization a deep driver of the outcome for these stakeholders?



△ Risk

What is the risk that the impact is not achieved due to external or internal factors?



Goal 5: Increased professional capacity of workforce

□ What

What is the importance of your goal to your stakeholders?



○ Who

How underserved are your stakeholders in relation to the SDGs?



+ Contribution

How does the impact compare to what is likely to occur anyway?



≡ How Much

How significant is the impact that occurs in the time period?



Duration: Do the outcomes last for a long time?

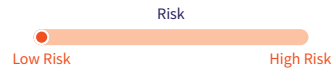


Depth: Is your organization a deep driver of the outcome for these stakeholders?



△ Risk

What is the risk that the impact is not achieved due to external or internal factors?



Goal 6: Improved access to basic services in communities where the Company operates

□ What

What is the importance of your goal to your stakeholders?



○ Who

How underserved are your stakeholders in relation to the SDGs?



+ Contribution

How does the impact compare to what is likely to occur anyway?



≡ How Much

How significant is the impact that occurs in the time period?



Duration: Do the outcomes last for a long time?

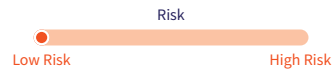


Depth: Is your organization a deep driver of the outcome for these stakeholders?



△ Risk

What is the risk that the impact is not achieved due to external or internal factors?



Goal 7: Increased resources available for national development goals

□ What

What is the importance of your goal to your stakeholders?



○ Who

How underserved are your stakeholders in relation to the SDGs?



+ Contribution

How does the impact compare to what is likely to occur anyway?



≡ How Much

How significant is the impact that occurs in the time period?



Duration: Do the outcomes last for a long time?

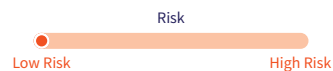


Depth: Is your organization a deep driver of the outcome for these stakeholders?



△ Risk

What is the risk that the impact is not achieved due to external or internal factors?



3. Monitoring Performance

Mountain Hazelnuts has established various avenues to rigorously monitor performance against its KPIs. Besides periodic surveys which aim to track impact (e.g. the 2018 baseline survey), data collected and recorded by field staff provides regular updates on the Company's performance. In addition, routine administrative data support the continuous tracking of progress against specific goals identified in the Impact Value Chain.

Following from the baseline survey conducted in 2018, Mountain Hazelnuts plans to undertake its next comprehensive impact survey in 2022. Many aspects of medium- to long-term impact only manifest in the medium-term, which limit the meaningfulness of survey intervals which are less than five years. Nevertheless, the baseline survey sets the Company up well to track some of the goals in the Impact Value Chain.

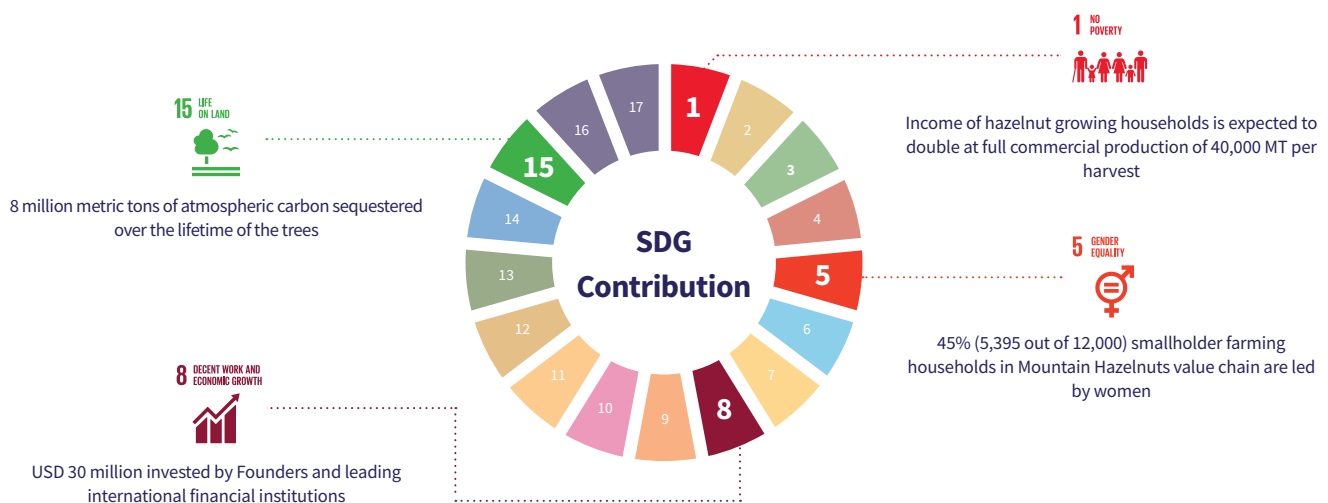
In relation to measuring the resilience of rural farming communities, the impact survey asked respondents whether they have any savings, and if so, how much savings they have. Mountain Hazelnuts expects that over time, as income from hazelnut cultivation increases in line with yields, a higher proportion of farming communities which grow hazelnuts will have an increased amount of savings. This is likely to increase the ability of households to recover from difficulties and external shocks such as a death in the family which can have a large impact on household finances.

The impact survey also gathered data on quality of work and income earning opportunities, especially in rural areas and for women. The survey asked respondents about total household income, relative composition of household income from various crops, and information about the quality of work (e.g. access to farming equipment and contract labour). Mountain

Hazelnuts expects that over time, the quality of farm work on hazelnut orchards will increase, bringing greater income earning opportunities from hazelnut cultivation.

In addition, the impact survey tracks access of hazelnut growers to basic services in the communities. Data is collected on children who are sent to school, proximity to the nearest healthcare facility, as well as availability of banking facilities. The Company expects that with increasing income and savings of hazelnut growers, banking service penetration in rural communities will increase. This will complement the financial literacy training Mountain Hazelnuts offers to hazelnut grower communities, including to female-headed households.

Mountain Hazelnut aims to track progress against its commitment towards Goal 7 on reversing land degradation. In line with the Company's commitments to achieve Land Degradation Neutrality (LDN), Mountain Hazelnuts has recently secured USD 9 million in long-term financing from the LDN Fund. The LDN Fund proposes to assess three indicators, namely trends in land cover, land productivity, and carbon stocks to determine progress. Mountain Hazelnuts plans to periodically measure the three indicators across its hazelnut orchards, to calculate the total degraded land area on which hazelnut growers operate, and subsequently the total land area improved as a result of the Company's ongoing operations. Of the three indicators, analysis of land productivity and land cover will be done using remote sensing data. For soil organic carbon, however, field data is required in order to monitor changes in carbon storage because of management practices. Despite the considerable cost, Mountain Hazelnuts is committed to undertaking periodic field sampling on 15 sites across the country to measure changes in soil organic carbon content.



Lessons Learned

Mountain Hazelnuts' participation in the Impact Champions Programme has been valuable in clarifying the impact of its work on hazelnut growing communities, business operations along the hazelnut value chain, as well as the environment. As a result, senior managers in the Company now have a more nuanced and in-depth understanding of the different aspects and extent of the organisation's impact on a range of key stakeholders. "The Impact Value Chain, in particular, has been a valuable tool in helping senior managers to unpack different impact pathways, and to more clearly articulate the social and environmental vision of the Company through specific impact commitments", says Co-Founder and Chief Financial Officer (CFO), Teresa Law. In addition, results of the baseline survey have been revealing. For example, from this survey, Mountain Hazelnuts found out that cultivating hazelnuts is most growers first exposure to caring for tree crops. As such, this has led to an increased focus on field staff teaching growers good orchard management practices, including planting, fencing, weeding, irrigation, mulching, pruning and harvesting.

Way Forward / Next Steps

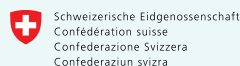
Going forward, Mountain Hazelnuts will continue to track its KPIs on a quarterly basis. These targets are set in alignment with Mountain Hazelnuts' overall impact objectives. The Company will use its comprehensive system of impact and business indicators to capture progress against operational objectives at the same time as capturing measurement of impact (For e.g. number of female growers trained in financial literacy). This system allows the organisation to track whether (and how fast) it is achieving impact against planned objectives. Quarterly review points are used by Mountain Hazelnuts managers as a basis for recalibrating and adjusting operational plans to ensure key impact targets are achieved. In particular, the baseline survey has been helpful in identifying the technical skills hazelnut growers need to increase yields and incomes.



Contact the Business Call to Action

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