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# Sustainability and Value Added in the Supply Chain of Ethiopian Coffee

Deforestation-free coffee from its origin

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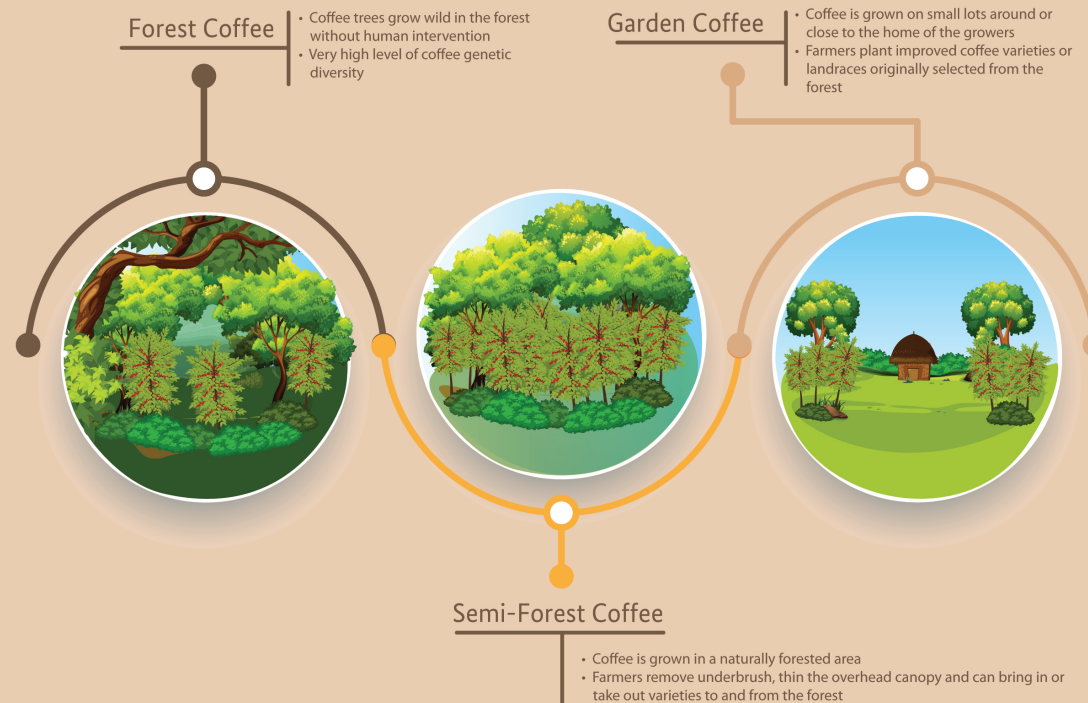
## Coffee from its origin



In Ethiopia, coffee has a longstanding tradition. As the legend goes, coffee was discovered more than a thousand years ago by an Ethiopian goat herder called Kaldi who noticed his flock jumping and dancing after eating the red coffee cherries. Today, coffee is deeply embedded in Ethiopia's culture, with millions of Ethiopians involved in its production. On average, Ethiopians drink around 200 cups of coffee per year and coffee ceremonies are an everyday ritual. Coffee has also become the country's most important export commodity, accounting for around one fourth of total export revenues.

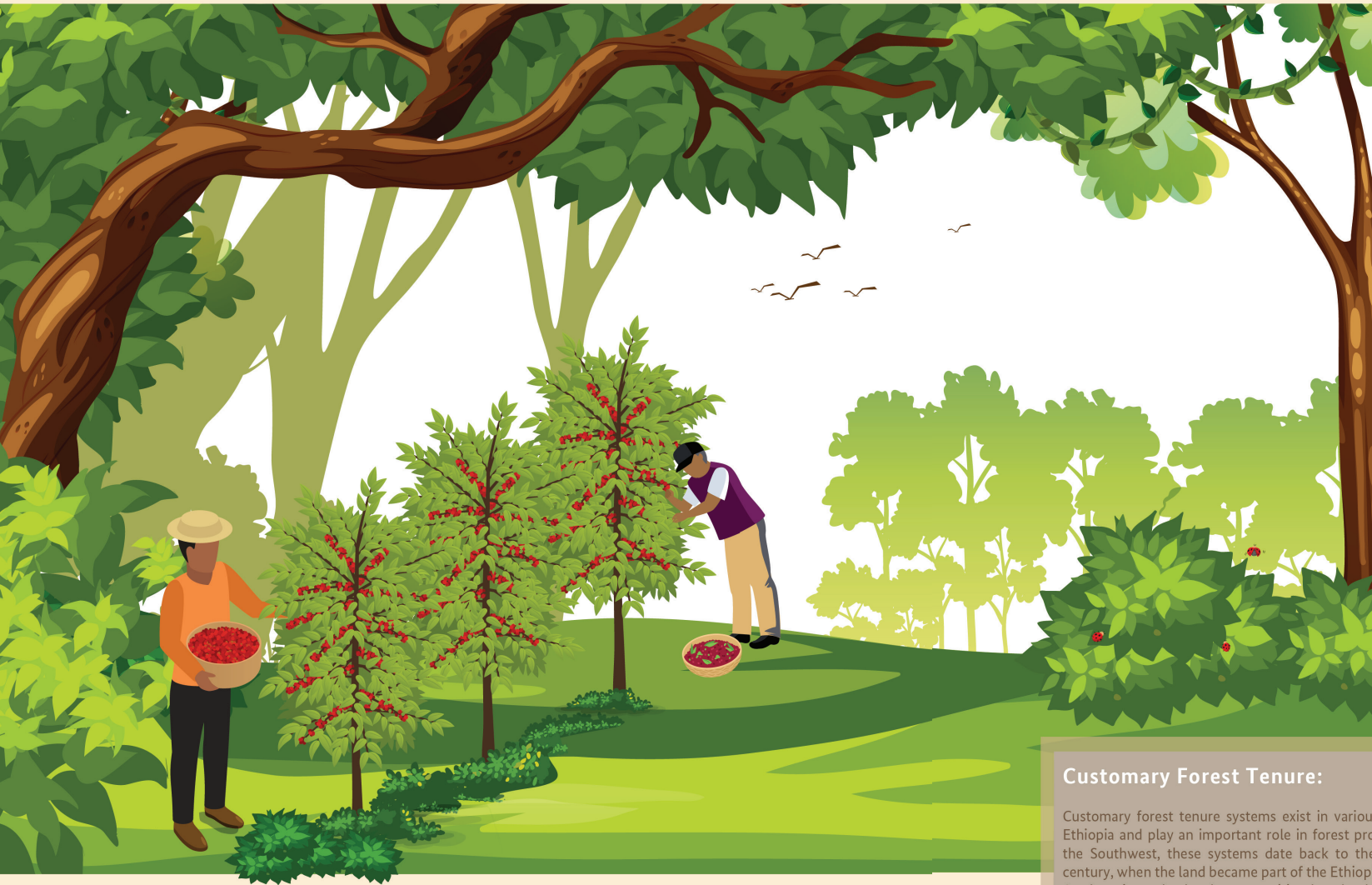
While it is hard to verify how much truth resides in the myth of Kaldi and his coffee-loving goats, it is a fact that Ethiopia is the primary centre of origin and diversity for coffee arabica. The original coffee habitats are located in the Afromontane rainforests in Western Ethiopia, which still harbour a large variety of wild coffee populations. This coffee, picked by farmers from naturally growing coffee trees with no or very limited management, is referred to as forest coffee. In some places, farmers improve productivity by applying some management practices like slashing or stumping. Coffee from such production systems is called

## Production systems



semi-forest coffee. Many farmers also cultivate so-called garden coffee on managed agroforestry plots around their houses. Plantation coffee on the other hand is produced on large-scale commercial plantations by private or state-owned farms. Unlike other countries, this last production system is not very common in Ethiopia and contributes only around 10% to the total production. The rest is produced by smallholder farmers as garden coffee (50%), semi-forest coffee (35%) or forest coffee (5%).

In a first processing step, coffee is either sundried or washed. Natural processing, during which the cherries are spread out to dry in the sun for several weeks, is often managed by smallholder producers at farm-level. The wet processing on the other hand takes place in central wet mills. The farmers thus sell either dried beans or red cherries to traders or cooperatives. Cooperatives vary in size (with some having less than 50 and others more than 1,000 farmer members) and are organized into unions which serve as umbrella organizations for cooperatives. The unions do the final processing (e.g. sorting) and sell the coffee either to the export market or locally.



## Coffee and its role for forest and biodiversity conservation

Forests are home to 80% of the world's terrestrial biodiversity and provide a wide range of ecosystem services. An estimated 1.6 billion people depend on forests for their livelihoods [1]. Yet, forests are destroyed and degraded at alarming rates with agricultural expansion being among the greatest drivers of

deforestation. More than 50% of the global forest loss associated with agriculture between 2001 and 2015 was related to the production of just seven commodities – coffee being one of them.

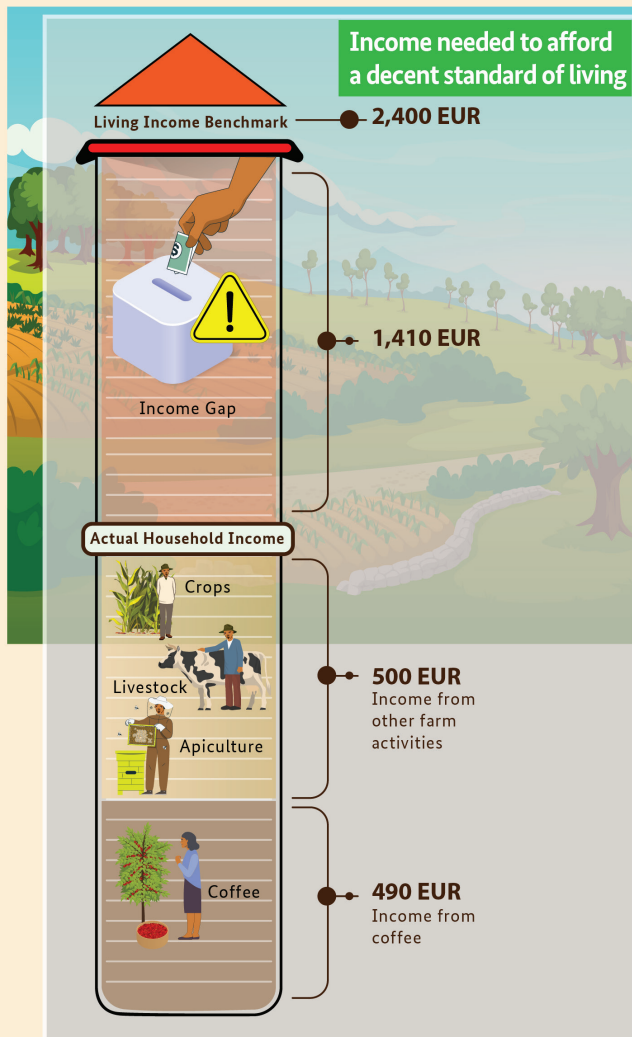
Ethiopia is no exception: with fuelwood accounting for more than 80% of households' energy supply [2] and agriculture expanding into forest areas, the country is heavily affected by deforestation. The coffee-growing areas in Western Ethiopia shelter some of the remaining natural forests with a rich biodiversity. These Afromontane rainforests comprise around 11% of Ethiopia's total flora and a significant genetic diversity of coffee. More than 130 coffee landraces have been identified, with a diversity of flavours and natural qualities [3]. Forest coffee and semi-forest coffee systems deliver not only important biodiversity benefits, but also store significant amounts of carbon. Above and belowground carbon stocks of natural forests and semi-forest systems amount to around 413 Mg/ha and 387 Mg/ha, respectively [4]. This is around 2.4 times more carbon than an average European forest can store [5]. The high density and biodiversity of coffee forests combined with the production practices, which don't rely on the use of pesticides and inorganic fertilizers, make the coffee from this area unique. To conserve these valuable ecosystems, the local communities need to be able to sustain their livelihoods. The sustainable use of non-timber forest products like coffee can therefore contribute to the protection of biodiversity and forests.

### Customary Forest Tenure:

Customary forest tenure systems exist in various places in Ethiopia and play an important role in forest protection. In the Southwest, these systems date back to the late 19th century, when the land became part of the Ethiopian Empire. At that time, the local communities lost land ownership rights to the landlords, but they could arrange agreements with the landlords to manage the forests for non-timber forest products.

Today, all natural forest areas are state-owned. However, many local communities still rely on the collection of non-timber forest products like forest coffee, honey and spices for their livelihoods. Thereby, they make use of traditional customary forest tenure systems which allocate forest blocks with defined areas to specific families. This system, also known as "Kobo", is well recognized by local communities and so is its importance for the sustainable management of the forest [6].





**Living income:**

The Living Income is the net annual income required for a household in a particular place to afford a decent standard of living for all members of that household. Elements of a decent standard of living include food, water, housing, education, healthcare, transport, clothing and other essential needs like provision for unexpected events. A living income gap is the difference between the actual income and the income required to cover the costs for a decent standard of living in a specific area (benchmark) [7]. The Living Income Reference Price for a commodity indicates the price needed for a farmer household to earn a living income.



## Coffee farmers do not earn a living income

In Ethiopia's rural areas, a household needs around 138,000 ETB (2,400 EUR) [9] per year to afford a decent standard of living. The reality looks quite different for most smallholder coffee farmers. In the four districts Alle, Becho, Didu and Nono Sale, the average net income from coffee is only 25,000 ETB (490 EUR). Even together with all other sources of income, a Living Income Gap of 58,000 ETB (1,400 EUR) remains. To close the income gap, the producers would need to sell their coffee for more than twice the farm gate price they currently receive.

There is no one-size-fits-all solution to close the Living Income Gap, nor can any individual player be held

responsible for the existing income gap. Rather, joint efforts by various actors are needed to address the issue. Special attention needs to be paid to women as they are usually particularly disadvantaged. Thus, actions tackling the Living Income Gap must set a focus on capacitating the women working in the coffee supply chain. At the production-side of the supply chain the provision of gender-inclusive agricultural services is an important lever. Another strategy that can help to ensure a steady income throughout the year is income diversification. In Western Ethiopia, many coffee farmers already rely on multiple income sources. Apart from coffee, farmers often also produce different crops and honey.

**Apiculture:**

Ethiopia is the ninth largest honey producer worldwide and ranks third in beeswax production. The country currently produces a bit less than 50,000 tons of honey and around 5,500 tons of beeswax per year but has the potential to produce ten times more. The coffee-growing areas in Western Ethiopia also have a high potential for honey production. Traditionally, beekeepers use cylindrical hives made from wood or mud. These hives are usually placed in trees in densely forested areas or in backyards. Other hive types like top-bar hives or frame hives can also be found but are less common [8].

While there is a high local demand for honey, beeswax is currently seldomly used. At the same time, residue-free beeswax is an internationally sought-after resource, especially if the beeswax is organic certified. It is estimated that the income of beekeepers could be more than doubled by improving production practices on the one hand and linking the farmers to the international market for organic-certified bee products on the other hand.

# The “Sustainability and Value Added in Agricultural Supply Chains in Ethiopia (SUVASE)” project

The “Sustainability and Value Added in Agricultural Supply Chains in Ethiopia (SUVASE)” project aims to increase the sustainability in agricultural supply chains with a focus on coffee from four districts of the Illubabor zone in Western Ethiopia: Nono Sale, Didu, Alle and Becho. The area shelters dense natural rainforests rich in biodiversity. To conserve these

valuable ecosystems, SUVASE promotes a sustainable use of non-timber forest products like coffee and honey and good agricultural practices for garden coffee grown outside the forest. By improving the livelihoods of the local population, the pressure on the natural forests shall be reduced.



## At a Glance

<b>Project duration:</b>	08/2020 – 03/2025
<b>Commissioner:</b>	German Federal Ministry for Economic Cooperation and Development (BMZ)
<b>Implementing organisation:</b>	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
<b>Project region:</b>	Nono Sale, Didu, Alle and Becho districts in the Illubabor zone of Ethiopia’s Oromia region
<b>Political Partner:</b>	Ethiopian Coffee and Tea Authority (ECTA)

## Global programme:

SUVASE is part of the Global Programme “Sustainability and Value Added in Agricultural Supply Chains” which aims to make supply chains fair, sustainable and deforestation-free. To this end, the programme works from “the SHELF to the FIELD”, cooperating with market drivers in coffee, cocoa, cotton, natural rubber, palm oil and soy supply chains. Together with global companies, international standard organisations and national partners, the programme implements project activities in a number of commodity hubs in South America, Asia and Africa. The global programme is part of the special initiative “ONE WORLD – no Hunger” (SEWOH) of the Federal Ministry for Economic Cooperation and Development (BMZ).

## Coffee Value Chain





INTERNATIONAL MARKET



### Digital market platform and blockchain-based traceability

To improve market access for producers, GIZ in collaboration with Progreso Foundation has designed a digital traceability system based on blockchain, which is linked to the online market platform Beyco (<https://beyco.nl>). With the help of a jointly developed mobile application (Farmer App), the coffee supply chain becomes transparent and traceable all the way to the export. For example, data on prices paid and the exact origin of the coffee is recorded. The application is currently built in such a way that information on coffee and apicultural

products can be entered easily by the cooperatives. A dashboard allows to analyse the collected data and to select the data points to be displayed on Beyco. The digital market platform allows the placement of detailed offers and the initiation and execution of direct trade contracts between producer organisations and international buyers. Corresponding data is stored tamper-proof on a blockchain. In addition, the Farmer App allows producer organisations to improve their internal management.

### Examples of activities implemented by SUVASE in the coffee supply chain include:

#### Cooperative Union

- Strengthen the quality control and marketing capacities of the Union
- Create market linkages between the Union and international buyers



#### Coffee Cooperatives

- Introduction of a blockchain-based traceability solution
- Strengthen the management capacities of the cooperative boards
- Supporting gender equality and youth inclusion



#### Framework conditions

- Support the Ethiopian Coffee and Tea Authority in creating enabling framework conditions for a sustainable coffee production and marketing
- Promote the transnational exchange on good governance and best practice examples

#### Forest, Semi-Forest and Garden Coffee Production

- Improve the harvest and post-harvest management practices to increase the coffee quality
- Strengthen the capacities of the local authorities mandated with the protection of the natural resources and biodiversity
- Support producers in acquiring certification



#### Garden Coffee Production:

- Strengthen the governmental extension service which provides agricultural advice for farmers, for example through trainings on good agricultural practices for development agents and the provision of equipment
- Improve the quality of existing demonstration plots and coffee tree nurseries



# Taking action together

The Sustainable Development Goals can only be achieved in cooperation with market-determining players. Therefore, SUVASE aims to partner with private sector actors to successfully develop supply chains that are fair, sustainable and deforestation-free, promoting better living conditions and the preservation of local biodiversity. There are various possible forms of cooperation:



### Buy our coffee

- Increasing coffee growers' incomes through direct market access
- Reducing the pressure on the natural forests and biodiversity by paying fair prices for sustainable products

### Shape supply chains to your needs

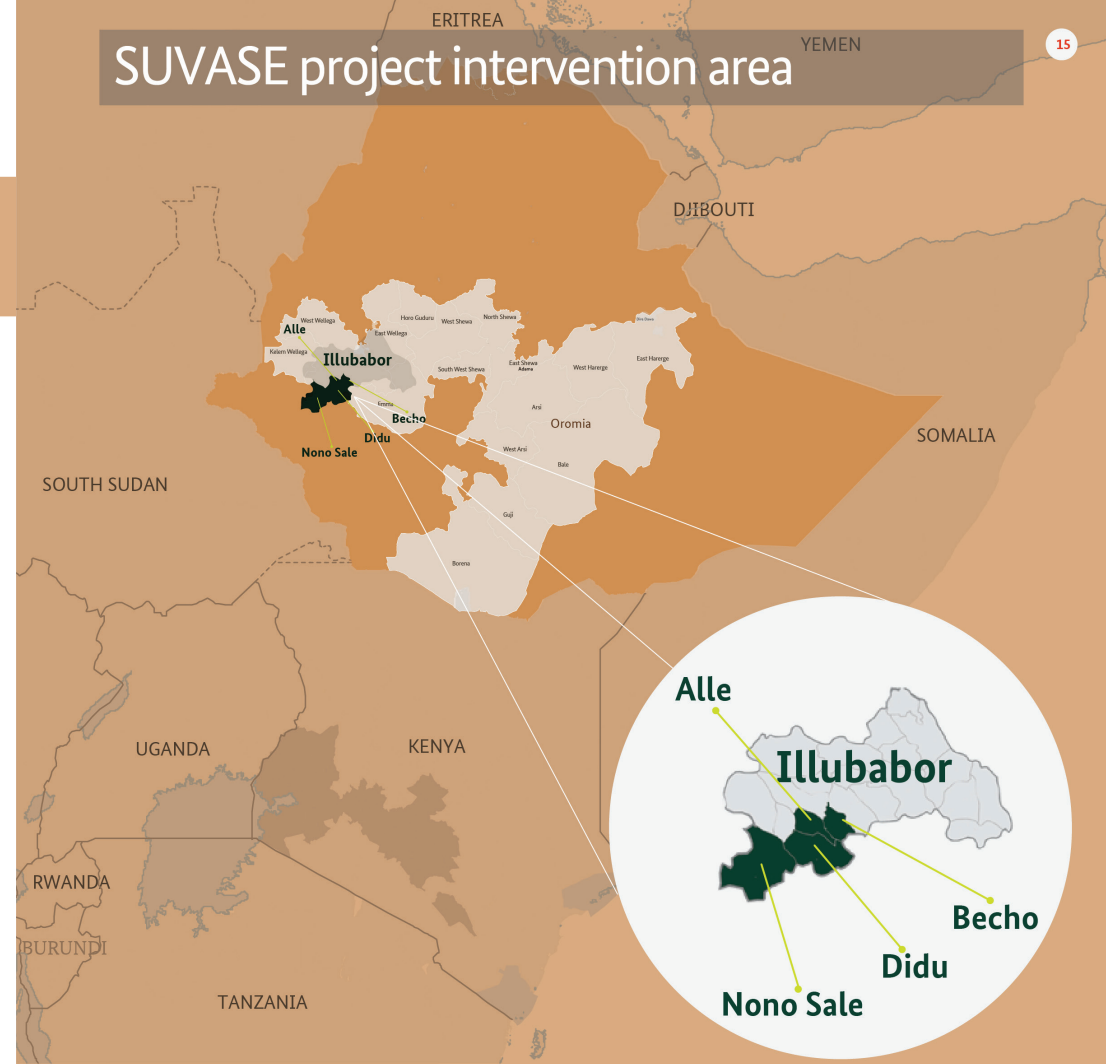
- Build up capacities at the production level to meet the quality requirements of the demand side
- Establish long-term relationships among value chain actors to provide security and incentives for investments for producers and producer organisations
- Implement gender-sensitive strategies for promoting sustainability and achieving living incomes
- Scale-up digital traceability and marketing
- Together explore new sustainability strategies, for example to assess the environmental impact of coffee farming or to link farmers to the market for carbon credits

### Implement corporate social responsibility projects

- Protect the natural resources, reduce the pressure on biodiversity and restore ecosystems beyond a deforestation-free production
- Improve livelihoods through the sustainable use of non-timber forest products



## SUVASE project intervention area



## References

- [1] <https://www.worldwildlife.org/habitats/forest-habitat>
- [2] Bekele et al. 2015: The context of REDD+ in Ethiopia: Drivers, agents and institutions
- [3] Feyissa et al. 2016: Community management of forest landscapes in Ethiopia
- [4] De Beenhouwer et al. 2016: Biodiversity and carbon storage co-benefits of coffee agroforestry across a gradient of increasing management intensity in the SW Ethiopian highlands
- [5] FAO 2020: Global Forest Resources Assessment 2020
- [6] Wakjira and Gole 2007: Customary forest tenure in southwest Ethiopia
- [7] Living Income Community of Practice: [www.living-income.com](http://www.living-income.com)
- [8] Teferi 2018: Status of Beekeeping in Ethiopia – A Review
- [9] Global Living Wage Coalition 2019: Update Report Ethiopia



