

Summary report

Smallholder Livelihoods Facility

NKG BLOOM
Baseline Impact
Assessment



Executive summary

This report is a summary report of the four baseline impact evaluations carried out in Kenya, Uganda, Mexico, and Honduras under the NKG BLOOM program, supported via the Smallholder Livelihoods Facility. NKG BLOOM is an initiative of the Neumann Kaffee Gruppe (NKG) that aims to ensure the long-term viability of green coffee supplies by providing smallholder farmers with the opportunities and resources they need to run their farms at full potential and enter a pathway out of poverty.

With NKG BLOOM, NKG is aiming to move beyond what is often a limited certification-based interaction with smallholder farmers to a holistic set of services, including access to inputs, training and finance, delivered using innovative IT systems and tailor-made for each country. NKG BLOOM consists of three tenets:

Figure 1: Overview of the three tenets



In October 2019, NKG launched the USD \$25 million Coffee Smallholder Livelihoods Facility (the “Facility”) backed by IDH, ABN AMRO, BNP Paribas, Rabobank and USAID. The “Facility” is the first sustainable farmer finance facility that has a global reach and where commercial banks have joined forces with development and governmental organizations in taking direct credit risk in loans to smallholder farmers and farmer groups in developing countries. The novel risk-sharing structure enables NKG to scale its portfolio of loans to some of the poorest farmers in the world.

NKG's model is innovative in that the credit offerings are coupled with coaching, training and access to market and inputs, essentially creating an ecosystem of services for smallholder farmers in NKG's supply chains, which enables them to maximize their incomes from coffee, thus making them more resilient and able to transform their livelihoods. This in turn reduces credit risk, as the integral set of services are designed to increase farmers' profitability and thus their ability to repay the loans.

To be able to assess the impact of the Facility, as well as the entire ecosystem of services that NKG BLOOM represents, IDH is launching a 10-year, multi-country impact evaluation of NKG BLOOM. This report presents the findings from the baseline assessment. The baseline presented here outlines the key characteristics of the smallholder farmers that NKG BLOOM works with at the very beginning of them starting out to receive the services. This same population of farmers will be surveyed again in 3, 6 and 10 years to see how their livelihoods have evolved as a result of being part of NKG BLOOM.

Tenet 1: Enabling farmers to realize their full potential

Under Tenet 1, tailor-made services are provided to farmers and farmer groups like financing, provisioning of high-quality inputs and any know-how that farmers need to run their farms at their full potential and maximize their net incomes. One of the outcomes that is being evaluated as part of the Theory of Change is whether farmers adopt Good Agricultural Practices (GAPs). NKG is working to provide more and better training to farmers to drive a higher level of (correct) adoption of GAPs, which is expected to increase yields. One general finding across all four countries is that farmers and key informants believe that yields could be increased by adopting more and better inputs.¹ Moreover, it is expected that farmers will begin to apply inputs like fertilizers at optimal levels, thus increasing their overall cost structure. But because yields and thus revenues should increase significantly as a result of optimal fertilization, it is expected to see in three years that farmers' costs per kg coffee produced decreases and net income increases. The reduction of costs per unit of production can happen as a direct result of improved access to inputs as well as an indirect result of improved yields.

Honduras

Honduran coffee farmers have the highest median coffee net income across the four countries surveyed in the baseline with the median farmer earning 2,456 USD/ha. One key explanation for the higher income from coffee in Honduras compared to the three other countries is higher yield and tree density. The baseline survey showed a median yield of 907 kg GBE/ha. Still, there is ample potential to improve yields further. In the farmer and key informant interviews, it was brought up by several people that the farmers in 2020, on average, experienced a 20% crop loss due to two hurricanes (Eta and Iota). Farmers also stated that in the last two years, yields have been lower than anticipated, which they ascribe to climate change, particularly longer drought periods. Due to a lack of finance, many struggle to afford fertilizers and must rely on free inputs from the government which is seldom enough.

¹ The available data from surveys did not allow for analyses on uptake of agro-inputs. Data was only gathered as an aggregate cost item for 'inputs', without accounting for which sorts of inputs were adopted, amounts adopted, or the unit cost of inputs, which would allow for a disaggregated analysis of adoption.

Lack of finance is one of the key issues that NKG BLOOM is addressing in Honduras through short-term loans for agro-inputs and labor, medium-term loans for equipment and farm processing investments, and long-term loans for renovation. Thus, we expect to see the livelihoods significantly improve for farmers using the NKG BLOOM services over the next few years. Already in the baseline, loans are most common in Honduras where 56% of the surveyed farmers have taken a loan within the last 12 months with BECAMO being the most prevalent source of loans, representing 30% of farmers' loan source indicating that NKG / BECAMO is already filling a gap in access to finance.²

According to BECAMO field technicians, an average farmer has a yield around 1,500 kg GBE/ha, while high-performing farmers can reach 2,669 kg GBE/ha, an increase of 194% from the current baseline median yield. It is also worth noting that 16% of the farmers surveyed in the baseline produced no coffee in the previous season, likely due to renovation (the median yield among productive farmers is slightly higher at 999 kg GBE/ha).

Uganda

The median net income from coffee is 320 USD/ha per year. Farmers have a relatively high cost of production; the median farmer's costs related to coffee production is 174 USD/ha which is high compared to other studies. A 2020 NewForesight literature review of 17 studies in the Ugandan coffee sector commissioned by Fairtrade International found that the average smallholder has a production cost of 138 USD/ha.³ The median coffee farm in the survey is 1 hectare (the average is 1.53 hectares) which compares to 0.18 hectare for the average Uganda coffee farm according to the Uganda Coffee Development Authority.

The baseline median yield is 505 kg GBE/ha which is in line with comparable yields of 400-500 kg GBE/ha found in the same NewForesight literature review.⁴ There was a common belief in the focus group discussions that increased access to inputs and trainings from NKG have already enabled farmers to increase yields. Many of the cooperatives mention different innovations (access to fertilizers, training on GAPs, etc.) that have enabled them to increase yields with anecdotal evidence that fertilizers alone increased yields 133% above the average yield. Of particular importance to enhance yields is that NKG BLOOM provides a digital feature for farmers to request fertilizer and mobile money advances for consumption smoothing. This allows for an opportune disbursement of inputs and cash for farmers to have all needed resources along the year.

Mexico

In Mexico, the baseline survey data indicate a median yield of 0 kg GBE/ha because a large proportion (62.7%) of the surveyed farmers are undergoing necessary renovation. This being the case, the result likely reflects the production on the renovated plots only. In fact, farmers working with Exportadora de Café California (ECC, the NKG Mexican subsidiary) are asked to maintain one hectare

² Data was not captured on the loan size.

³ Fairtrade International & Newforesight (2020). Towards a Living Income in the coffee sector: Establishing the benchmarks for a Living Income Reference Price. Authored on behalf of Fairtrade International through research by NewForesight. Literature review with stakeholder validation. Publication forthcoming.

⁴ All metrics are per year unless otherwise stated.

of productive trees during renovation to ensure farmers still have income from the rest of the non-renovated coffee area, and therefore a yield of 0 kg should not be possible. To provide a full picture, it is therefore chosen to not only reflect the numbers including the farmers that reported 0 production, but to also report the number of farmers excluding those that reported 0 production. To complete the data it is complemented by NKGs own projections. The median yield among farmers with production (i.e., excluding farmers that reported zero production) is 210 kg GBE/ha (640 kg GBE/farmer).

Since 2014, ECC has worked with farmers through its Por Más Café/NKG BLOOM program to offer a holistic service package for renovation with highly productive and tolerant varieties after the coffee rust outbreak. As farmers are renovating their farms, the trees are in an underproduction stage (a process typically taking 2-4 years before the trees become more productive) and, as a result, produced no coffee in the 2020/2021 season for the part of the farm being renovated. Next to planting material for renovation, the NKG service offering includes a seven-year long-term financial scheme aimed at farmers to support the complete renovation cycle – getting through the “valley of death” period while trees grow – which includes training, individual on-farm visits 2-3 times a year, and access to fertilizers and agro-inputs, all of which combined can help to improve yields moving towards the mid-line.

Kenya⁵

The baseline evaluation found a median net income from coffee for Kenya of 499 USD/ha, which is the second highest per hectare income across the four countries. The median yield in Kenya is 474 kg GBE/ha and farmers receive a high share of the export price. There seems to be scope for improvement of the business case for the Kenyan baseline by improving efficiency and reduction of production cost per unit produced (as farmers invest in more inputs, the total costs will increase but as yields also increase, it is expected that costs per kg produced can be decreased).

A Kenyan study⁶ found that the average cost of production for smallholder farmers with a yield of 0-1.28 kg wet cherries/tree is 91.16 KsH/tree. This substantially decreases to 42.09 KsH/tree for smallholders producing 1.29-2.53 kg wet cherries/tree and 29.46 KsH/tree for smallholders producing above 2.54 kg wet cherries/tree. In comparison, the median producer in the baseline currently has costs related to coffee production of 70.77 KsH per tree.

Most farmers in the survey produce between 1 and 6 kg of wet cherries per tree. The average yield in Kenya is ~1 kg wet cherries/tree, while yields of 10-15 kg wet cherries/tree should be achievable with adoption of Good Agricultural Practices (currently 2.8% of the baseline sample), depending on the region and coffee variety adopted. Under the best conditions, yield of 20 kg/tree can be reached. Under NKG BLOOM, Tropical Farm Management Kenya (NKG subsidiary in Kenya) and farmer-owned cooperatives are increasing their investments in washing-station

⁵ Some of the sampled farmers have been in the NKG BLOOM program since 2019 and have started improving performance at their farms hence productivity is already up to 6 kg cherry per tree.

⁶ Kenya Coffee Platform (2018). Coffee Economic Viability Study. Authored on behalf of the Kenya Coffee Platform through research by Coffee Management Services. Available online: <https://www.globalcoffeeplatform.org/wp-content/uploads/2021/03/Kenya-Coffee-Platform-Coffee-Economic-Viability-Study-Report-F.pdf>.

infrastructure and technical assistance for farmers. Extension officers work closely with co-op members to address low yields and climate- and disease-related agronomic challenges. The next impact evaluation cycle, the mid-line, will include information on the cooperatives, their changes on performance and the impact of their services to their members.

Tenet 2: improved environmental sustainability – Adoption of conversation practices (KPI 2.1) and climate resiliency (KPI 2.5)

Tenet 2 of NKG BLOOM is developed to support inclusive sustainability, moving beyond checkbox compliance of certification schemes. At the essence of the tenet, BLOOM is aligning the service offering with social and environmental standards while taking a pragmatic approach by identifying key (sustainability) issues, and designing and prioritizing targeted actions. The tenet includes a total of 25 sustainability criteria across the topics of labour rights and working conditions, land tenure, occupational health and safety, biodiversity conservation, resource conservation, and waste management.

The main intermediate outcome of the ‘impact pathway’ towards improved environmental sustainability is adoption of conservation practices (KPI 2.1). The recommended conservation practices are tailored to the individual countries’ predominant challenges as well as aligned with the 25 environmental criteria in NKG BLOOM. The amount of baseline farmers adopting some conservation practices (CPs) is high in all four countries: In three of the four countries (Kenya, Mexico, Honduras) at least 98% of farmers adopt one CP. In Uganda, 74% of the surveyed farmers adopt some CPs.

The overarching aim of tenet 2 is to improve the climate-resiliency of farmers. The SLF Impact Evaluation Framework measures this in terms of farmers experiencing weather-related production losses over the past three years (KPI 2.5). Weather-related losses are very prevalent in the baseline: Across the four countries, the share of farmers experiencing weather-related coffee production losses range from 63% to 94% with the order of weather-event among all countries being: excessive rain (27%), droughts (22%) and heat waves (15%).

There seems to be an inverse correlation between the share of farmers experiencing weather-related production losses and the average number of conservation practices adopted. Weather-related production losses are most prevalent in Kenya, followed by Uganda, where farmers in both countries adopt less than two practices.

Adoption of conservation practices is more prevalent in the Latin American baselines compared to the two East African countries: In Mexico, farmers adopt an average 3.22 CPs of the four practices recommended by NKG, followed by 2.73 of four CPs in Honduras, 1.84 CPs of six in Kenya, and lastly 1.25 CPs of six recommended in Uganda.



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