

BENEFIT PARTNERSHIP

Key Achievements of 5 Programmes

OVERALL ACHIEVEMENTS • THE CONTEXT • WHAT WE DID • RESULTS • CHANGE STORIES • CHALLENGES • LESSONS LEARNED • FUTURE OPPORTUNITIES

BENEFIT: a partnership

In line with the development priorities of the Ethiopian government, the Bilateral Ethiopian—Netherlands Effort for Food, Income and Trade Partnership (BENEFIT) was established in 2016 to bring together five agricultural development programmes working to improve Ethiopia's agricultural sector.

The BENEFIT Partnership targeted to demonstrate evidences of innovations in policies, practices and institutions to contribute:

- increased quantity and quality of sustainable agricultural production;
- improved markets and trade; and
- strengthened enabling institutional environment for the agricultural sector.

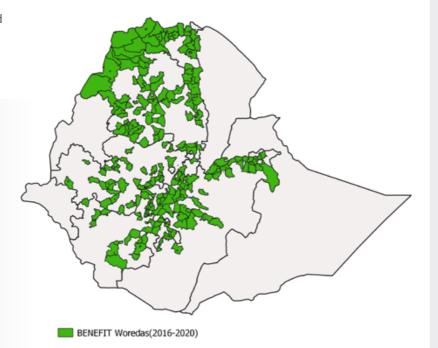
The BENEFIT partnership was coordinated by the Wageningen Centre for Development Innovation of Wageningen University & Research, and funded by the Embassy of the Kingdom of the Netherlands in Ethiopia. It was implemented in close collaboration with universities, agricultural research institutes, government at various levels, NGOs, public enterprises, and private companies.

Geographic coverage

From 2016–2021, the BENEFIT Partnership programmes were operational in 233 woredas across four regional states of Ethiopia: Amhara, Tigray, Oromia and Southern Nations Nationalities and Peoples Region (SNNPR).

The BENEFIT Partnership, as a research for development program, has followed its own pathway of influence and focused on the following steps and key activities:

- 1. Targeting key challenges and opportunities in the areas of policies, practices and institutions;
- Identification and benchmarking of potential technologies, policies and practices for testing and validation;
- Testing and validating, together with regional and federal implementing partners, to demonstrate evidences of innovations in technologies, policies, practices, and institutions;
- Engagement with relevant stakeholders to mainstream or institutionalize demonstrated evidences of innovation;
- 5. Capacitating partners for sustainability.



Uniting five agricultural development programmes

The BENEFIT Partnership united the following five agricultural development programmes:



Integrated Seed Sector Development in Ethiopia (ISSD Ethiopia)

GOAL:

ISSD supported the development of a vibrant, pluralistic and market-oriented seed sector in the country.

137 woredas

Wheat • Sorghum • Barley • Teff • Maize

- Sesame Faba bean Haricot Bean
- Field pea Potato Sweet potato



Ethiopia-Netherlands Trade for Agricultural Growth (ENTAG)

GOAL:

ENTAG supported private sector development and trade in Ethiopia.

- Poultry Spices Aquaculture
- Soya bean Haricot bean Mung bean





The Realising Sustainable Agricultural Livelihood Security in Ethiopia (REALISE)

GOAL:

REALISE contributed to sustainable livelihood through the introduction of improved farming practices, innovations and social experiments to strengthen the current Productive Safety Net Programme (PSNP) in Ethiopia

60 woredas

• Maize • Teff • Haricot bean • Potato

• Wheat • Barley • Sweet potato

• Finger millet • Sorghum



of evidence-based best practices in agricultural production (CASCAPE)

GOAL:

CASCAPE improved agricultural productivity by promoting evidence-based best fit agricultural practices.

64 woredas

- Potato Wheat Faba bean
 - Rhodes grass Lupin
 - Vegetables and fruits

SBN

The Sesame Business Network (SBN) programme

GOAL:

SBN supported stakeholders of the SBN in developing competitive, sustainable and inclusive sesame value chains in Ethiopia.

13 woredas

- Sesame Sorghum Soya bean
 - Mung bean Cotton
 - Vegetables and fruits

FARMLAND REACHED

77,490 ha reached with **BEST** FIT AGRICULTURAL **PRACTICES**

247,512 ha where **IMPROVED SESAME PRODUCTION** is practiced

1,407,649 ha covered with **QUALITY SEED** of farmer-preferred varieties











5 clusters

65 woredas

MBEN3FIT

SBN 2 teams 14 woredas

ENTAG national 13 woredas

REACH MARKET ACCESS AND BUSINESSES

113,743 farmers with **ACCESS TO OUTPUT MARKETS**

1,161 businesses supported in **MARKET LINKAGES** **16** businesses supported by **GRANTS** to help innovate







7,071,225 farmers **INCREASED** productivity

4,138,372 farmers have improved **ACCESS TO INPUTS**





225,367 men and women **TRAINED** on improved technology and skills



Ethiopia 2016-2021

FARMERS REACHED

woredas

163,316 female farmers INCREASED productivity



66,830 female farmers have improved **ACCESS TO INPUTS**









803,755 farmers **TRAINED** on sustainable agricultural production & practices





157,879 female farmers TRAINED



39,293 female farmers having direct access to **SEED OF NEW VARIETIES**



125 **TECHNOLOGIES** validated



392 VARIETIES of 35 crops shared

ACCESS TO CROP VARIETIES

AND TECHNOLOGIES



85,556 farmers having direct access to with farmers **SEED OF NEW VARIETIES**



229,758 ha reached with NUTRIENT dense crops



1,164,063 farmers reached with **NUTRIENT** dense crops



27 policy changes supported

POLICY CHANGE



266 JOBS created **FOR YOUNG PEOPLE** (Internship + funded projects)



125,799 youth trained in agricultural production

REACH OF YOUNG PEOPLE

IMPROVED NUTRITION



The context

Ethiopia has significant agricultural potential. It has the potential to feed its own population and become a major exporter of agricultural goods due to its soil fertility, cheap labour force, strategic geographical location and agro-ecological zones. Even though agriculture is the most dominant sector in the Ethiopian economy, the sector is far from reaching its full productive and economic potential, failing to provide sustainable incomes and enough food for the country's growing population.

Ethiopia continues to rely on food aid with an estimated 25 million people vulnerable to malnutrition. Farmers find it hard to obtain quality seed and fertilisers at the right time and place, in required quantity and acceptable quality at affordable prices. Weak linkages, broken value chains, weak enabling environment and limited capacity of service providers are among the major bottlenecks.

What we did

Through the demonstration and scaling of innovations in technology, practices, policies and institution in line with the priorities of the Ethiopian government, BENEFIT Partnership programmes (ISSD, CASCAPE, SBN, ENTAG and REALISE) has contributed in achieving the objective of increasing the quality and quantity of sustainable agricultural production.

ISSD improved the availability and use of quality seed of new, improved and farmer preferred varieties. CASCAPE tested, validated and disseminated best fit agricultural practices for Agricultural Growth Program (AGP) woredas and worked on building woredas' capacity for scaling. SBN reduced production cost by enhancing sesame production and reducing harvest, transport and storage losses. REALISE worked in PSNP woredas with many chronically food insecure housholds, on identifiction, validation, demonstration and pre-scaling of agricultural technologies and best-fit practices to increase agricultural production and diversify diets. ENTAG improved market access and stakeholders linkages.

Key results

Developed and validated Best Fit Practices and innovations. BENEFIT programmes helped identify suitable Best Fit Practices (BFPs) to increase agricultural productivity. Bottom-up planning and farmers' preferences played a key role in the selection process. Evidence-based information was compiled in best-fit practice manuals. Some manuals were translated into extension training materials in local languages. Implementing partners were capacitated to validate and test potential BFPs to ensure sustainability.



Increased demand for quality seed of new, improved and farmer preferred varieties. Seed of 390 varieties was made available for farmers to test and select their preferred varieties. This was done through Participatory Variety Selection (PVS) and Crowd Sourcing. In this way farmers were exposed to new and improved varieties. The demand for quality seed of the preferred varieties increased. To ensure sustainability, implementing partners were trained on planning and implementing PVS and Crowd sourcing as innovative approaches in varietal and quality seed demand creation.



Increased availability and use of quality seed. The availability and use of quality seed has improved for more than 4 million farmers with the support from BENEFIT. The programmes strengthened seed producers' capacities in the areas of seed production, seed quality management, demand orientation, marketing and business management. Technical and financial support to farmers groups, Seed Producer Cooperatives, Local Seed Businesses, Private Seed Producers, and Private and Public Seed Businesses. Links between seed producers and seed users were established and Direct Seed Marketing was promoted to ensure sustainable seed supply.



Building human, organisational and institutional capacities. The programmes provided regular technical support and training to farmers, development agents, subject matter specialists, government representatives, investors, managers, experts, businesses, researchers, and interns. Capacity building focused on bottom-up planning, climate-smart agriculture, nutrition-sensitive agriculture, seed production, post-harvest handling, marketing, financial literacy, business and financial management, entrepreneurship, and technical issues. Field based training empowered farmers to continuously innovate and adopt agricultural technologies. Training of Trainers provided to researchers and extension experts equipped them to match, validate and scale Best Fit Practices.

Best Fit Practice manuals, field guides and other training materials were developed to build the technical skills of experts at woreda and kebele level. Topics included production of potato, maize, wheat, malt barley, finger millet, sorghum, mung bean, faba bean, soya bean, lupin, garlic, homegarden vegetables, poultry, garlic, animal feed and intercropping.

Farmer field days were organised, to facilitate the exchange of knowledge and mutual learning among farmers and support the dissemination of agricultural practices. Field days also served as forums for farmers and decision-makers to discuss pressing issues in the sector.

Provision of financial co-investments to improve quality and quantity of production. Farmers, cooperatives, unions, research institutes, companies, entrepreneurs, SMEs were supported to apply new technologies and gain access to finance for investment purposes. SBN facilitated input finance through the Kebele Agro Economic Planning. ENTAG strengthened the working relationship between the private sector and smallholder farmers in the herbs and spices sector.



Kaleata Hiluf, a young development agent from Central Kebele, Humera

"Farmers awareness on improved production technology was very limited. Now a considerable number of farmers have started applying good agricultural practices. Together with the SBN, we demonstrated the 20 steps sesame production technology and improved technologies of rotational crops. Farmers have seen the yield gap between the 20 steps and the conventional practice as they are getting 700 kg per hectare from the 20 steps while less than 300 kg from the conventional practice. Farmers especially liked the newly introduced and demonstrated sesame and mung bean varieties. They however informed us that row planter is the major limitation for adopting the recommended practices fully."

Mohammed Yusuf who lives Haramaya woreda participated in one of the pilots implemented with an improved potato variety in East Hararghe zone

Mohammed said, "I harvested 33 quintals of potato from the 0.125 ha of land using 2 quintals of seed tubers supplied by Haramaya University cluster and 25 kg of NPSB and 19 kg of urea fertiliser with compost. I sold 17 quintals of potato for 18,700 Birr (EUR 430). I saved 5 quintals for next season seed, 5 quintals for family consumption, and gave 6 quintals to relatives as seed. On the same piece of land, I used to produce sorghum and have been harvesting only three quintals of sorghum. But now from this potato production I can get sufficient income that enables me not only fulfill my family needs, but earn enough money to finish the construction of my house, I started near the town of Adele."

Strengthened financial literacy to improve farmers' access to input credit. The training of farmers in record keeping and cost-benefit analysis has improved farmers' entrepreneurial outlook and eligibility for input finance. The training reached more than 20,000 farmers in the sesame production zone of Northwest Ethiopia. The guideline for this innovative approach was prepared in different languages and shared with relevant partners for scaling at regional and national level.

Supported bottom-up planning in woreda agricultural development plan. Specific support was given to the woreda agriculture planning teams. This was instrumental to ensure that recommended practices were properly included and supported for successful pre-scaling and scaling of activities. It can help farmers in receiving better training and coaching, high-quality seeds and agro-inputs, adequate input finance, enabling them to effectively implement recommended agricultural technology. The key steps in bottom up Woreda planning were documented and shared with relevant partners for scaling.

Weather forecasting. Farmers were empowered to make appropriate management decisions through suitable information, tools and techniques. SBN facilitated the signing of an agreement between the National Meteorological Agency (NMA), Weather Impact (WI), Apposit and Wageningen Centre for Development Innovation, for the delivery of location-specific weather information via SMS on farmers' phone. Nearly 10,000 farmers were receiving location-specific weather forecast information.

Access to crop insurance. To mitigate the risk of financial failure of seed-producing cooperatives, programmes facilitated access to crop insurance.

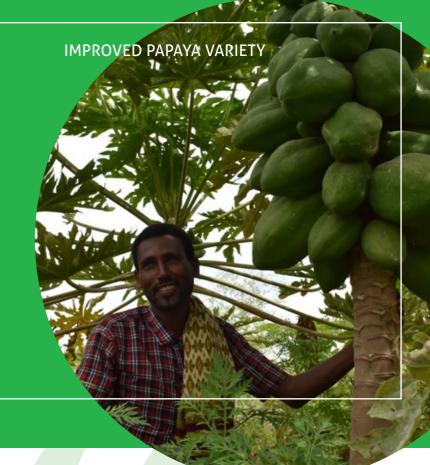
Priest farmer, Gebremedhin Gebreslassie, Rawiyan Kebele, Kafta Humera woreda

"Previously, my family did not keep track of our farm expenses. We used to do our farming business without recording expenditures. After we received the financial literacy training, we started recording all costs, including my family labour, foods served to labourers and other costs. This year we calculated our expenses and realised that we had made a profit of about 50,000 Birr (EUR 1,150). The profit we made encouraged us to continue sesame farming. My wife and my son also received the training. Because of the various capacity building support services provided by the SBN support programme, our farm management capacity has improved significantly."

Kiflom Eyasu, a 21-year old farmer from South Tigray, involved in improved papaya production said, "First of all, the new improved papaya variety takes only 7–9 months to flower, which means in less than a year you can start selling your papayas. A single fruit plant can yield ten or more big size papayas bringing you more money.

Now we have regular income! No more suppor from the government. We live in a better home we constructed using over 60 iron sheets, our house is always full.

Our quality of life has improved – we eat better, sleep on comfortable bed and save regularly, about 400 Birr (EUR 9) per month. The benefit is like having a cow that gives milk but with even less work/management."



Safiya Ahmed Abdule, a 54 year-old mother of 10 (4 girls), living in Meta woreda said, "In 2019, I started growing Adu variety on a small portion of my land (0.04 ha) and produced 1.2 ton from the plot (equivalent to 30 t/ha). Looking at higher and better quality yield, I expanded to more than 0.1 ha in 2020.

Before the project, what I produced was not enough for consumption let alone for the market. I had no experience of selling sweet potato tubers. That changed after growing the Adu variety. The high yield, good taste, early maturity period, and its suitability for intercropping are among the desirable characteristics of Adu variety. The local varieties took five months to mature while the new variety, Adu, matures in three months. In addition to improving the food and nutrition security of my household and reducing the food gap months, I am able to earn additional income. I made around 1,950 Birr (EUR 45) from the sale of surplus tubers for the first-time in 2019. Observing and understanding of the advantages, the surrounding farmers are asking me for vine cuttings of the variety and I have provided to six farmers so far."



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The context

In Ethiopia, value chain development and commercial agribusinesses development can contribute to improved food and nutrition security for the poor. It can serve as a catalyst to introduce new technology and knowledge, better management practices, value addition to primary products, increased employment and higher foreign exchange earnings.

Employment opportunities created by agribusiness companies not only serve as a source of income but also serve as an incubation ground for local micro and small enterprises.

What we did

ISSD, ENTAG and SBN, contributed through various activities to the objective of improved markets and trade. ISSD enhanced the performance of the seed value chain, while ENTAG contributed to increased performance of key sub-sectors and enhancing B2B linkages to raise the volume and value of trade in domestic and international markets. SBN supported the development of sesame products and markets.

Key results

Provision of technical support to businesses.

BENEFIT programmes supported the private sector in Ethiopia on farm management, production quality, launching new businesses, investment and market opportunities. This was done through innovation fund grants and hands-on advisory services. Among others, the programme supported producers, input suppliers, traders, processors and exporters.

Market Linkages. All programmes facilitated market linkages among several local businesses, input and service suppliers and markets. For instance SBN tried to link commercial soya bean farmers with Richland Biochemical Production PLC, which is an oil pressing company; market connections were established for Selet Hulling PLC, which is a Dutch-Ethiopian joint-venture with organic sesame farmers and Tsehay union.

PLATFORMS ESTABLISHED OR SUPPORTED BY BENEFIT PROGRAMMES:

Poultry • Spices and herbs • AquacultureLegumes • Sesame

Marketing credit for farmer cooperatives and unions.

A risk sharing scheme based on a guarantee fund was piloted. This lifted financial constraints of sesame farmers and increased trust and collaboration between farmers, financial institutions, cooperatives and unions. The registered 100% repayment rate is a sign of sustainability. Pre-harvest loans from cooperatives to members financed the last stages of production. In addition, access to marketing credit also increased the level of understanding of cooperatives and unions on loan management and resource mobilisation. The performance of the piloted risk sharing scheme has been documented and shared with key partners for scaling.

Trade missions. Ethiopian delegates traveled to regional and country events to create market linkages and to attend sector-specific training. The missions were also a great opportunity to invite foreign companies to explore business potentials in Ethiopia. Participants from private companies, government, farmer organisations, visited Vietnam, Egypt, UAE, India, Rwanda and the Netherlands.

Innovations in the seed value chain. The programmes strengthened strategic linkages between seed producers and input and service providers and facilitated seed-related business with Dutch/International seed companies. Demand-driven interventions piloted contributed to:

- Increased public expenditure in the seed sector;
- Establishment of 3 independent seed regulatory authorities;
- Construction of new seed laboratories and upgrading existing ones; and
- Investment in seed marketing infrastructure.

Subsector platforms. Facilitated the establishment and functioning of subsector platforms to initiate discussion on pertinent challenges and opportunities in relation to improving quality, access to finance, role of the private sector and public-private coordination. The meetings were a great tool to network and create business-to-business linkages.

Innovation funds. Increasing investment money through innovation grants helped promote the introduction of new technologies and promotion of innovations solving sector challenges. Co-financing grants were provided in poultry, aquaculture, legumes, spices, sesame, potato, dairy and seed sectors.

Mr Bere Shimelash

To address sesame growers concerns regarding mono-cropping effects on soil health and fertility, SBN introduced crop-rotation and facilitated market linkages between processor companies and producers of the rotation crop. "The agreement is an assurance for us that we will not have market problems after the crop (soya bean) has been produced. It allows us to sell the produce in advance. It will reduce costs that are paid for the brokers. The company will collect our produce from the production sites and this will reduce the transportation cost that we spend."

Support direct foreign investment. ISSD and ENTAG supported members of the Ethio-NL Seed Committee by organised visits and dialogues between Dutch highlevel delegates from the ministries of Foreign Affairs and of Agriculture and breeding companies East-West Seed and Limagrain-Hazera. Following the approval of the directive on unregistered varieties, two joint ventures with Enza Zaden and Rijk Zwaan have started.

In addition ENTAG has supported the establishment of the Kunzila Integrated Sustainable Development Program (KISDP) Park, a new investment corridor with foreign (Dutch, German & Belgian) flower companies next to Kunzila town and Lake Tana, 55 km west of Bahir Dar. When fully developed an additional 10.000 jobs will have been created.

Capacity Building. All programmes worked on improving the knowledge and skills of private companies, commercial farmers, cooperatives and Unions through exposure visits, theoretical and practical training by foreign and local companies, experts and knowledge institutes. Several manuals and guides were developed to support the capacity development.

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Finance is a major challenge for farmers and farmer organisations to fully engage in marketing. In response, a risk sharing scheme was established with Cooperative Bank of Oromia (CBO), Ambessa and Abay banks in collaboration with Agriterra. The scheme started with 50% cash quarantee deposit (Bank: SBN) for the provision of a one year marketing loan to Setit, Dansha and Metema unions and very recently to Godebe and Sanja cooperatives of the Selam union. Slowly, the risk share increased from 50:50%, to 70:30% and 80:20% in the case of Abay bank. The improved loan repayment, invited commercial banks to take more and more risk every year, indicating the growing interest of banks to finance agriculture, with a nominal guarantee if 100% repayment assured. The unions channeled this money to cooperatives that supported member farmers with input loans at 15–18% interest rate. Such credit arrangement reduced production cost by more than 80%. It also improved relationship between farmers and cooperatives, and between unions and cooperatives, increased supply of agricultural products to their affiliated cooperatives for marketing. Furthermore, it increased cooperatives visibility at spot markets that reduced traders' collusion.



Zeleke Mamo, manager, Metema Farmers' Cooperative Union

"The major change is that the guarantee fund scheme strengthens the relationship and trust between the union and the bank. It also strength-

ened the relationship between the union and its primary cooperatives and also farmers with their primary cooperatives. The loan management training provided to unions and cooperative staff by SBN and Agritera improved our financial management and internal resources mobilisation capacities. The credit, though given to unions with the purpose of marketing, is also serving as input credit for farmers to invest on weeding and harvesting."



Mrs Mulu Mekuriaw, 38, married women with four children is a member of Meka Farmer Cooperative, Metema woreda, Amhara region

"I have eight hectares of land. The credit accessed through the guarantee fund has helped me a lot.

There was a time where I was in a bad financial situation and planned to sell my farm. Because of the loan that I received from the cooperative in the past four years, I managed to save my farm."

Evidence-based information gathering and sharing:

- Business opportunity reports provided up-to-date information on the current status of the sectors in Ethiopia and served as a tool for private investors, government and any other interested body to make informed decisions for tailored interventions.
- Rapid assessments on the impact of COVID-19 on seed, sesame, poultry, aquaculture and legumes sectors were developed and actionable recommendations were shared with relevant.
- 'Seed Information Exchange', a digital platform for sharing information on seed availability was developed together with stakeholders and will be handed over to the Ministry of Agriculture.
- Lessons learned, experience papers and issue briefs were developed and shared, for instance on agrifinance, financial literacy, value creation, guarantee fund risk sharing scheme.
- Radio programmes, newsletters, websites, social media channels, documentaries and short videos, books and other information sharing materials were developed and used to share information.

THE CASE OF TUKA KETAR SPC

In 2016, ISSD started supporting the Tuka Ketar SPC, building their capacity to obtain a Cerificate of Competence. Training and support was offered on quality seed production, seed quality control mechanisms, seed business plan development, marketing strategies, organisational and financial managements. In addition, ISSD linked the SPC with different development partners to develop their infrastructure, and provided periodic grants to improve their performance capacity.

The SPC now autonomously produces, cleans, packs and supplies quality seed of different crops and varieties to local smallholder farmers and other customers. They annually produce and supply an average of 4000 quintals of quality seed of different crops and varieties. They are adding value to their produce by providing small seed packs with their name and logo. Their annual profit has significantly improved from 2,055 Birr (EUR 47) (2016) to 138,165 Birr (EUR 3,177) (2019).

In addition to enhancing the SPC members' income, local availability, accessibility and affordability of farmers' preferred varieties of quality seeds has improved considerably. The SPC's confidence in the local seed business has Increased, encouraging them to re-invest on infrastructural development.



Having a Certificate of Competence helped attract development partners relevant to support improving existing infrastructure, such as adding seed threshing and cleaner machine. This allowed the SPC to sell value added faba bean seed (cleaned) earning 2,150 Birr (EUR 50) per quintal compared to 1,750 Birr (EUR 40) sold as raw seed in 2018.



The "Explaining wheat yields" paper resulted in the decision of the Ministry of Agriculture to stop importing wheat by 2023 by adopting the CASCAPE validated best fit practice of site-specific blend fertiliser application for the 1.7 million ha of farmland conducive for wheat production in the highlands coupled with irrigated wheat production. It is estimated that if all wheat farmers would adopt the validated best-fit practices and obtain the same yields as the pre-extension demonstration, the total wheat production would equal to the national consumption and wheat import would no longer be needed. This would save over 56 million USD foreign currency annually.

Alignment through advisory boards. National advisory bodies (boards and councils) were instrumental in strengthening the alignment between the programmes and government as well as in institutional embedding. Members were drawn from Ministry of Agriculture and included the State Minister, the extension directorate director, the food security coordination directorate director. Also the Ethiopian Institute of Agricultural Research (EIAR) was represented in advisory boards by its Director-General.

At regional level advisory bodies (boards and core groups) were established with members from the Bureau of Agriculture(BoA), the Regional Agricultural Research Institutes (RARIs), food security coordination offices and universities.

The context

The absence of enabling policies and institutional inefficiency in Ethiopia are major sources of poor performance of the agriculture sector and key challenges to attaining sustainable and inclusive food systems.

Enabling policies and institutional innovations in public and private sectors are needed to facilitate long-lasting economic growth.

What we did

To meet its goal of strengthening the enabling institutional environment for the agricultural sector, BENEFIT partnership programmes interventions covered a range of activities including:

- Identification of relevant policy issues for further discussions;
- ii. Documentation of demonstrated evidence for identified priority issues;
- iii. Engagement with relevant stakeholders to ensure the communication of the demonstrated evidence; and
- iv. Contribution and facilitation of the design of new policies, directives and regulations.

Results

Institutional and regulatory reform. All BENEFIT programmes played key roles in institutional and regulatory reform, to meet existing challenges and build enabling agricultural environment for growth.

Secondment of senior experts to the Ministry of Agriculture. Through day-to-day engagement with Ministry staff, three BENEFIT seconded experts provided advise, supported the development of policies, strategies and guidelines and contributed to the institutionalisation of piloted innovations and best-fit practices into the Ministry programmes.



Scaling innovations and bringing systemic change through sharing evidence-based information. Best fit practice manuals and training guides were prepared to be included in the national extension system. Rapid assessments, policy briefs, lessons learned, reports, experience papers, scientific articles, books, video documentaries, stories of change and findings of in-depth studies were developed and used to initiate dialogues with policymakers and ensure wider circulation and follow-up action.

The information was shared as publications, aired on radio, shown on television and shared through newsletters, websites and social media.

Members of Parliament, staff of Ministries, Bureaus of Agriculture, and staff of Agricultural Research Institutes at national and regional level participated in high-level policy discussions. The platforms served as a catalyst for developing new national and regional policies, institutional reforms and drafting new regulations.

Field visits were relevant to conduct a fruitful discussion with local stakeholders on the achievements and challenges of the programme.

One Timad package – Downscaling technology packages to meet the specific needs of poor farmers. The costly standardized extension packages for different crops contain seed and fertilizer for bigger landholdings than the small fields of poor farmers in PSNP areas. Therefore farmers do not buy the package and instead use their own saved seed, often without fertilizer or with less fertilizer than the recommended dose. This results in low productivity.

In response, the 'One Timad Package' was developed and piloted. One 'timad' is 1/4th of a hectare and the package consists of the recommended amount of seed for a one 'timad' plot size, and the half the recommended amount of fertiliser half the recommended chemical fertiliser. The other half can be supplemented by the farmer as organic fertiliser (composts or farm yard manure) prepared at home.



Since the outbreak of COVID-19 pandemic, BENEFIT continuously assessed the impacts of the pandemic on the development of activities in the various sectors. The impact assessments data was collected from different sources and stakeholders through a short online questionnaire and focus group discussions (FGDs). Multiple rapid assessments for seed, sesame and poultry were conducted. They highlighted the most pressing challenges and the required action points and were broadly shared with stakeholders including policy makers.

| BENEFIT Partnership 2016–2021 | | Enabling institutions for lasting economic growth |

BENEFIT contribution to institutional and regulatory reform



- Supported the establishment of the National Seed Advisory Group to advise Ministry of Agriculture on strategy and policy;
- Supported the development of a stakeholder-owned and Ministry of Agriculture endorsed Seed Sector Transformation Agenda;
- Supported preparation of a draft national seed policy and proposed amendment to 2013 Seed Proclamation;
- Systematized Early Generation Seed (EGS) production and marketing through contractual agreements;
- Supported the Ethiopian Seed Association in their advocacy to address identified policy constraints to private seed sector development in the new draft seed policy;
- Developed a digital platform for seed marketing information, the "Seed Information Exchange";
- Contributed in the development of the draft Plant Breeders' Right Regulation.

ENTAG

- Facilitated the establishment of Ethiopian Pulse Council, a public-private partnership entity;
- Drafted the poultry marketing legal framework;
 Supported the Ethiopian Poultry Producers and Processors Association in developing a strategy to control and setup safe bio-security system for the
- poultry sector;
 Supported the implementation of the Poultry Disease
 Control Strategic Plan and reopening of the national poultry training;
- Facilitated approval from the Ethiopian Veterinary
 Drug and Feed Administration and Control Authority
 to export poultry feed to countries outside Ethiopia;
- Supported the Ministries of Agriculture and Finance in developing an incentive package for investors in aquaculture and fisheries sector.



- Facilitated the inclusion of rotation crops like soya bean and mung bean in the Ethiopian Commodity Exchange (ECX);
- Developed a digital information management system for the sesame sector;
- Facilitated policy discussions to prevent the inflation of sesame domestic and ECX market prices;
- Facilitated stakeholders' engagement to ensure tax exemption for agricultural machineries;
- Sparked increased interest of banks to provide access to finance to smallholder farmers and be involved in the sesame sector.



- Facilitated institutionalisation of "Innovation Recommendation Mapping" (IRM) to identify to which areas innovations can be scaled. IRM was done for sweet potato, maize-haricot bean intercropping, faba bean and potato;
- Supported capacity development of ministry staff in "Digital Soil Mapping".
- Initiated the establishment of zonation, increasing the collobaration between the various research partners.

Successes in the institutionalisation of BENEFIT programmes pilots and approaches

Participatory Action Research (PAR) approach.

EIAR and RARIs have started to adopt the bottom-up and farmer-centered participatory action research (PAR) approach – to generate demand-driven technologies.

Best Fit Practice manuals included in the national extension system. Based on the findings of tested and validated promising technologies and innovations for different agro-ecological zones and farming system settings, 49 best fit technologies were identified. Of these, seven technologies were successfully incorporated into the national extension package. These practices are translated into Amharic and become the part and parcel of the extension system.

Research-extension-university linkage. A successful pilot that brought research-extension-university together in a platform for joint experimentation resulted in increased scaling and improved local capacity for technology adaptation and innovation. The government has now adopted the approach and installed it within the extension directorate. The platform is fully funded jointly by EIAR and extension and is led by the Ministry of Agriculture.

Adoption of integrated validation protocol (IVP) for technology screening. Some Agricultural Research Institutes are now using Integrated Validation Protocol (IVP) that involves a wide range of parameters for technology evaluation, beyond just yield increment (farmer preference, gender relations, nutrition, profitability, and environmental sustainability).

Best fit practice identification and scaling process now include the validation step. After successful implementation of an innovative approach that looks at biophysical, socio-economic and environmental conditions before scaling, the best fit practice process of the Ministry of Agriculture's Agricultural Growth Program (AGP) has been revised to include the critical stage of validation.

The approach has now been adopted by the AGP system. The agricultural research system is mandated to do the testing and validation.

Financial literacy is adopted and included in national extension system. The financial literacy (record keeping and cost-benefit analysis) training has been included in the national agricultural extension system to improve farmers' decision making, their entrepreneurial outlook and eligibility for input finance.

Seed sector transformation agenda incorporated in federal and regional plans. The seed sector transformation agenda has been incorporated in the (multi-) annual plans of stakeholders at federal and regional state levels; the specific agenda to establish dedicated leadership bodies to the seed sector in each region has been advanced in particular in Amhara and Oromia regions. Innovations in relation to seed quality were included in the strategy of the Ministry of Agriculture and EIAR to improve seed quality control and assurance in the country.

Early generation geed (EGS) multiplication system guideline submitted. To establish a sustainable system of early generation seed (EGS) supply, a guideline was prepared that provides for the participation of Seed Producer Cooperatives that hold a Certificate of Competence in EGS production of public varieties. The guideline was submitted to the Ministry of Agriculture for endorsement and implementation.

Institutionalization of mandate zonation approach for members of the National Agricultural Research System. The approach was accepted by the MoA in order to ensure improved research-extension-education linkages for enhanced agricultural innovation



The context

Structural exclusion of women and youth has a devastating impact on food and nutrition security for rural households. A study conducted by BENEFIT, looking at intra household gender dynamics among smallholder farmer families, showed the inequality in roles and decision making in relation to food production, income benefits and consumption. Youth unemployment is a major challenge, especially in PSNP areas.

Poor dietary diversity remains one of the key critical factors leading to poor nutritional outcomes in Ethiopia. Baseline surveys for BENEFIT in PSNP areas show that most rural housholds predominantly consume cereal-based foods with limited consumption of vegetables, fruits and animal source foods.

What we did

Social inclusion and nutrition were mainstreamed into all five BENEFIT programmes.

The BENEFIT partnership used women's and youth needs in the design of activities and specifically targeted women and youth. Also time and labour saving technologies, specifically for women, were identified, validated, introduced and promoted. Inclusive business models where women farmers organised in cooperatives were supported. In the sesame zone BENEFIT worked with various stakeholders in improving the living and working conditions of wage labourers.

A range of nutrition sensitive interventions have been implemented by various BENEFIT programmes, including promoting and supporting home gardens, and promoting biofortified crops and animal source foods.

In addition, an add-on project, the CASCAPE Nutrition and Gender project (CANAG), was initiated. The project financed by the World Bank was designed to diversify the diets of households by introducing nutrient-dense crops and behavioral change through nutrition education.

Results

Specific targeting of women, youth and labourers.

To increase their decision-making power women and youth were given special attention in all programme activities. For example, the validation protocol for best fit practices integrated gender and nutrition dimensions as criteria for the evaluation of technologies in the screening process. Cooperatives were supported to develop bylaws that encourage increased women's equity in the business in general and participation at the management level in particular. Women were specifically targeted in on farm variety testing and selection trials, in that way more than 39.000 women got access to seed and planting material of 39 varieties of 35 crops.

In the sesame production areas, more that 5,000 labourers were reached with awareness campaigns through radio and mobile cinema on the treatment and rights of labourers.

Beyond inclusion, programmes designed women and youth-targeted projects that addressed their specific problems and challenges. The following are some examples that succeeded in improving the productivity, income and resilience of marginalised groups.

- Introduction of technologies aimed at female farmers and female members of households: fuel saving stoves, potato harvester, enset scraper; bags to speed up enset fermentation, milk churner; maize sheller, and water fetching pulley;
- Commercial poultry production improved the resilience of poor households and contributed to asset holding, improved nutrition and income;
- Goat fattening increased income and resilience of farmers in PSNP areas, and dairy goat breeding increased women's income and families nutrition (milk);
- Job creation for youth through introduction to improved charcoal making;
- Set up of an 'Internship program' creating favorable conditions for the employment of 86 young college and university graduates.

Mr Mohamed Aman, labourer from South Wollo Borena woreda, Amhara region, working in the sesame area

"The awareness raising campaign is really interesting, I have never taken part in such a campaign before. I was hoping for such an opportunity to express my frustration. I am a family man and make my living by working as a labourer for investor farmers. It is known that we cannot live without investor farmers and they can't produce without us. However we receive much misery. We want a smooth relationship between us and the farmers who invest. I can't tell it's just farmers who are causing the problem, there are some labourers who behave badly. Investor farmers and labourers should recognise and benefit from our shared interest. The relevant public agency should monitor and improve the relationship."



Promoting nutrition dense crops and home gardens for dietary diversity.

- BENEFIT programmes supported the uptake of various nutrition dense crops such as orange-fleshed sweet potato, high yielding papaya varieties, green leafy vegetables, quality protein maize and pulses.
- Pulses were also promoted as rotation crop. This
 contributed both to increased household income and
 nutrition security. To promote uptake of rotational
 crops and pulses for local consumption, recipes
 using soya bean and mung bean were developed and
 shared, mainly with women.
- Home gardens were supported. The home garden products were mainly used for home consumption and contributed to a more diverse diet. Small scale sales also improved farm household income. Trainings of Trainers were organised for extension staff to train women on home gardening setup, seedbed preparation, water management, vegetable production, pest and disease control, post-harvest handling, consumption and preservation.

Awareness creation and capacity building on gender. Gender trainings were facilitated for BENEFIT programme staff, for woreda and zone officials, agronomists, researchers, and cooperative members. Key elements of the trainings included awareness on gender relations, gender mainstreaming, gender responsive planning.

Nutrition education and behaviour change. The nutrition oriented agricultural activities were combined with behaviour change communication and trainings focusing on health, the importance of nutrition, food groups, causes and consequences of poor nutrition and the benefits of fruits, vegetables and other nutrient dense crops. Women were trained in the establishment and management of the vegetable gardens.



Hindi Ahmed is a Productive Safety Net Programme (PSNP) beneficiary and one of the women selected to participate in home garden demonstration. She is a 45 year-old mother of 3 boys and 2 girls, and lives in the lowland area of Tokuma Meta Lencha kebele in Doba woreda.

Hindi said, "Before the project intervention I only planted some of those vegetables for the market and rarely consumed them at home due to my financial limitation. In 2019, the project trained me and gave me seed for home garden production. I was not convinced with the small amount of seed they gave me at first and I was really surprised when I saw the result. On a small plot, I planted onion, beetroot, chili pepper, swish chard, head cabbage, tomato and carrot as well as fruits such as banana, papaya and avocado. Outside what we consumed I saved about 5,000 Birr (EUR 115) from selling the surplus I produced.

My family diet has changed significantly. We have been eating fresh vegetables for the last four months from my own garden. My children consume fresh carrot daily. They also like working in the garden. The proximity of the garden to our home helped us in frequently taking care of the garden. My family's experience and knowledge on vegetables has improved and I plan to continue yearround production." She added, "I also demonstrated what I had learnt to seven female farmers in my area and provided technical assistance when needed." A total of 105 women farmers were engaged in the demonstration.

Inclusive Business Model

The concept of the project was to engage 270 smallholder women farmers organised in a 1:10 scheme to work with spice and an essential oil processing company based on a contractual agreement with the company, Damascene. The women used a revolving fund to finance their seed and other inputs throughout the production season, with an agreement to pay back their loan using the harvested spices to be delivered to Damascene. One "model farmer" in the group of 10 would follow up on the quality in production and semi-processing (drying) after harvest. She was also responsible for the collection of the produce of the other nine and bringing it to the cooperative, which would further check on quality and deliver to Damascene.

This pilot project has been picked up by another development organisation as a best practice and the approach has been scaled up to 5,000 smallholder women in the same area, partnering with the same company. The women used a total of around 100 ha of their land (mostly back yard) to produce Korarima (Ethiopian Cardamom), black pepper, long pepper, green cardamom, ginger, thyme, turmeric, tenadam (Rue), mint, lominat (lemon verbena), oregano, rosemary, lavender, koseret (lippia javanica), and basil. So far, 120 women have harvested 38,222 kg of spices to sell to Damascene from which they have earned around 285,000 Birr (EUR 6,555). The earning per farmer ranges from 900 to 12,000 Birr (EUR 20-276), the difference mainly arising from scale of production, sales and management of farm. The farmers have also sold their produce on the local market. Other women sold to traders or they used their produce as seed to expand their production.

Generally, the model, though it has some individual partner and system challenges, can be duplicated for other crops and other areas.

Mekedes Teferra, Intern for Florecens Ethiopia, Mojo, Ethiopia

"If it was not for the Internship Program, I would have been going from office to office looking for someone to hire me. Finding a job right after graduation in Ethiopia is really hard as the market is already small even for those who have work experience. The Internship Program gave me an opportunity to get experience and show others what I am able to do. The people like my work and made me permanent, for which I am very grateful. Now I am thinking to peruse my Master's degree in Business Management, which will help me upgrade my position in the organisation for which I am working now."

Lessons learned and future opportunities

Hereunder we share some of our lessons learned and recommendations for the future. While not comprehensive, it gives highlights of key success factors learned and barriers encountered.

1. Demonstration of evidences of innovation in technology, practices, policies and institutions crucial for agricultural transformation

The sequenced approach (i) participatory identification of major challenges, (ii) identification of possible innovations for testing and validation from abroad and in country, (iii) joint testing and validation, and (iv) engagement for scaling was crucial for agricultural transformation.

2. Active partnership, joint experimentation, generation of evidence, and platforms for greater impact

The success of BENEFIT as a whole is a result of strong collaboration among government, industry, science and civil society across the various value chains. As a point of departure from the conventional transfer of technology that has little effect, the work of BENEFIT that brought research and extension institutions, universities and farmers together for joint experimentation to generate evidence for innovations in the areas of technology, practices, policies and institutions. This was instrumental for adapting and generating demand-driven technologies as well uptake by farmers.

Active involvement of the extension staff at zonal, woreda and kebele levels was crucial for successful implementation of the project activities as well as for creating ownership of the innovations and institutionalization of diverse



policy and institution related innovations. Collaboration and frequent contact between the AGP, ATA, MoA, BoA and ARIs and the programmes paved the way for institutionalisation of innovations and approaches.

On the other hand, limited commitment of some authorities, frequent leadership and staff changes and changing decision-making hierarchies were challenges that delayed the institutionalisation of some achievements. Some efforts could not be institutionalized. For instance the linkages between financial organisations, woreda office of agriculture, farmers' cooperatives are still weak.

To facilitate collaboration between development actors and business, BENEFIT established platforms where the private sector raise questions and share experiences with other actors, concerned governmental and non-governmental bodies. The platforms were also used to introduce new market information, technologies and regulations to better equip the sector players. The facilitating role of regional platforms organised regularly were taken up by BoA, ARI's, regional governments and ATA.

3. Diversification of interventions to avert risks, contribute to nutrition, generate income and build resilience

In order to address the many challenges of smallholder farmers in marginal areas, BENEFIT gave special attention to diversification. For example, farmers who planted crops like sweet potato and early maturing maize were less affected by desert locust infestation. Backyard poultry production was extremely important in providing income and high-quality protein in the diets of rural people whose traditional foods are typically rich in carbohydrates but low in protein. Small ruminant fattening for income and resilience, mostly implemented by women had a high return on investment, stabilise income flow that otherwise fluctuates due to climate risk in crop production. Integrating fruits in cereal-based farming was a strategy used to fight hunger and malnutrition on a long-term and sustainable basis.

This demands institutionalization of customized extension approach, which was piloted and validated through 'One-Timad' extension package specially in resource poor and marginal areas of the country.

4. Production, distribution of quality seed is a complex challenge

BENEFIT programmes have contributed significantly to the transformation of the Ethiopian seed sector. Endorsement of the seed sector transformation agenda and Ethiopia's first seed policy, which give direction to the country's future were major successes achieved together with relevant partners. Frequent contact and sharing of information with input directorates of MoA and BoAs helped raise seed sector leadership and coordination on the agenda of government officials.

More work is needed to increase private domestic and foreign direct investment in the seed sector. And more effort is needed so that seed production continues to become more demand-driven, and winner varieties for diverse agro-ecologies are taken up in the product portfolios of seed producers. Early Generation Seed Production needs to be systemized and EGS needs to be consolidated before seed supply is boosted

5. Provide need-based, tailored extension services for different categories of farmers

BENEFIT's experience shows PSNP farmers can produce better yields to fill food gap months when using locally adapted best-fit practices and technical support. Innovations like 'The one timad package' is an example of how the extension services can be customised to different types of farmers, based on their capacity, resource endowments and demand. To reach the marginalised section of the community institutional commitment and coordination is needed to endorse micro packaging, redefine recommended packages, provide tailor-made in-situ training and conduct joint monitoring and evaluation. Customising extension services can improve the inclusiveness of the poor, women and youth.

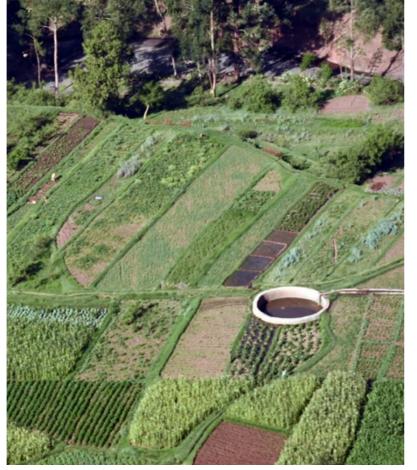
6. Youth entrepreneurship empowerment

Youth employment initiatives should be different in terms of design and aspiration as compared to conventional income-generating activities. Youth groups prefer knowledge-intensive, full-time, profitable and market-linked businesses. Access to finance, institutional support and market linkages are key success factors that improve the participation of youth and success. There is a need to provide financial and technical support until the group starts generating income.

7. Support to agribusiness means advancing the entrepreneur opportunities for farmers

BENEFIT's work on strengthening the private sector and their working relationship with smallholder farmers facilitated the adoption of new technologies and access to finance for investment purposes – moving from local to national to global markets. The private sector can contribute to facilitation, coordination and quality control functions. In addition, linking training/education and research with the private sector is very important.

The linkage between the private sector and the government would need to be strengthened to solve sector issues sustainably. Work on regulatory, enabling environment and service provision to promote private investment is of key importance. Realistic domestic market prices, for instance for sesame, can open doors for investments, value addition and new market relations.





Selected publications

Extension materials and short guides in Amharic or Tigrinean

- 20 important steps sesame production guide
- 16 steps to improve the productivity and quality of soya bean
- Poster on soya bean production
- Posters and extension material on Faba bean production
- Sesame post-harvest loss reduction posters
- Cost recording and calculating tool (Manual and recording book)
- Kebele Agro Economic Planning tool (Manual and planning sheet)
- Extension materials on Garlic production
- · Extension materials on Poultry
- Sorghum training manual
- Cotton production guide
- Mung bean production guide
- Pest, disease and weed management guide
- Soya bean production guide
- Homegarden vegetable production guide
- Manual One timad package

Guides for crop production and management

- Wheat production guides (different varieties and agroecologies)
- Finger Millet production guide
- Malt Barley production guides (different varieties and agroecologies)
- Animal feed management guide
- Integrated use of organic and inorganic fertilizers guide

- Potato production and utilization guides (different agroecologies)
- Hybrid maize production guides (different varieties and agroecologies)
- Maize-legume (Vetch) intercropping guide
- Oat-legume intercropping guide
- Faba bean production guide
- Soya bean production guide
- Sweet Lupin production guide

Guides for seed producer cooperatives (SPCs)

- An introduction to SPCs in Ethiopia
- Governance and leadership of SPCs
- Organization and management of SPCs
- Financial Management of SPCs
- Quality Seed Production
- Seed Quality and Control Assurance
- Post-Harvest Value Addition for SPCs Working With Quality Seeds
- Entrepreneurship
- Market Research and Customer Relations

Books and reports

- Agricultural sector transformation is a team work: Experiences and lessons learned of the Sesame Business Network support programme in Ethiopia
- Innovations for Food and Livelihood Security, Experience of REALISE
- Business Opportunity Reports (Legumes, Herbs and Poultry)
- Case study food safety Ethiopian spices

List of partners and collaborators

Implementing Partners

UNIVERSITIES (LOCAL AND INTERNATIONAL)

Addis Ababa University Araba Minch University Arsi University

Bahir Dar University

Haramaya University

Hawassa University

Jimma University

Mekelle University

Oda Bultum University

Woldia University

Wageningen University and Research

Collaborators

GOVERNMENT

Ministry of Agriculture
Regional Bureaus of Agriculture – Amhara, Tigray, Oromia
and SNNPR
Labour and Social Affairs Office
Cooperative Promotion Agency

THE PRIVATE SECTOR (NATIONAL AND INTERNATIONAL)

Banks: Development Bank of Ethiopia (DBE), Cooperative Bank of Oromia (CBO), Ambessa Bank and Abay Bank; Microfinance institutions: Amhara Credit and Saving Association (ACSI), Dedebit Credit and Saving Association (DECSI), Adeday Microfinance; Enza Zaden, Rijk Zwaan, Selet Hulling PLC, Richland Company, Weather Impact, Apposit LLC, eProd, Fair and Sustainable

RESEARCH INSTITUTES

Ethiopian Institute of Agricultural Research (EIAR)
Amhara Regional Agriculture Research Institute (ARARI)
Tigray Agriculture Research Institutes (TARI)
Southern Agricultural Research Institute (SARI)
Tepi Research Institute
Oromia Agricultural Research Institute (OARI)
Ethiopia Soil Research Institute (ESRI)

OTHERS

Oromia Seed Enterprise (OSE)
Agricultural Transformation Agency (ATA)
Agriculture Growth Program (AGP)
Productive Safety Net Program (PSNP)

DEVELOPMENT ORGANISATIONS

Global Alliance for Improved Nutrition (GAIN); SNV (2Scale), Resilience, CommonSense, AgriProFocus, Agriterra, GAWT, ICARDA, GIZ, USAID, AGRA, ECTSA, TNSRC, SARC, MARC, FBPIDI, SITA, IPD, ITA (Italy Trade Agency), Germany Food and Beverage Industry Federation, World Bank

ASSOCIATIONS

Private Sector Association Ethiopian Seed Association (ESA) Ethiopian Poultry Producers and Processors Association (EPPPA)

Ethiopian Pulses, Oilseeds and Spices Processors-Exporters Association

Ethiopian Seed Association

Ethiopian Spice Aromatic and Herbs Growers and Processors Association (ESAHGPA)

Ethiopia-Netherlands Business Association (ENLBA)

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