



KAEP: bottom-up planning and stakeholder collaboration for improved performance of sesame-based farming systems

Since 2017, with the aim to address the smallholder sesame farmers' challenge to access seeds, agro-inputs, training and input finance, Benefit-SBN has been promoting a bottom-up planning system that encourage stakeholders to plan and implement realistic kebele plans. The Kebele Agro-Economic Planning (KAEP) method was piloted in 2017 and 2018 in 12 woredas and 24 kebeles (2 kebeles per woreda). In 2019, after getting the buy-in from stakeholders at different levels, the KAEP has been extended to 50 kebeles in 13 woredas. After the introduction of the context and objectives of the bottom-up planning system, this paper first presents the five steps of KAEP approach and tool. It then shares the three-year experience with designing and piloting KAEP, highlights, lessons learned and suggests some recommendations for the way forward.

Background and justification

Together with stakeholders and partners, Benefit-SBN has supported the sesame sector since 2013. Various innovations have been introduced in order to increase the productivity and quality of sesame and rotation crops. The majority of the sesame farmers (> 100,000 households) have received training on the recommended Good Agricultural Practices (GAP), known as the '20 steps to increase sesame yields and quality'. Most farmers have received the 20 steps field guide and were exposed to the recommended agricultural practices at Farmer Training Centres (FTC's) and during field days. Moreover, information about the improved practices was shared via development agents (DA's), radio programmes, posters and short films.

Despite this multi-faceted extension approach, monitoring and evaluation results show that the adoption of the GAP is not progressing as expected. Full adoption of the 20 steps is rare; at best partial adoption is observed. As a result, the yield gap is still large, both for sesame and rotation crops. Most farmers do not get more than 4 or 5 quintals of sesame per hectare, and often less. In the past 6 years, it has however been proved that with the application of the 20 steps farmers can harvest 8 to 10 quintals per hectare. This means that farmers earn less than what is possible and it implies that Ethiopia earns less from sesame exports, which are crucial for reducing the large trade deficit of the country. If farmers would only increase their yields with one quintal per hectare, the country would earn 93 million USD more.

Objectives

The main objective of Kebele Agro-Economic Planning (KAEP) is to strengthen the collaboration and synergy among the kebele level stakeholders for improved planning and implementation of activities that support the adoption of recommended agricultural practices. Specific objectives are:

- Collaboration between Development Agents (DA's) and cooperatives for training and coaching of farmers and for timely supply of the required quantity and quality of seeds and agro-inputs.
- Improved information and risk management of financial institutions leading to the best possible targeting of farmers for agricultural credit (trained farmers, who are seriously interested in the adoption of best agricultural practices and who have a good credit repayment history).
- Organisation of clusters of collaborating farmers, allowing them to improve results and organise themselves for mechanization solutions, with a focus on row planters.

The ultimate aim is to increase the yields and quality of sesame and rotation crops, both for farmer income improvement and national export earnings. The envisage stakeholder collaboration would create a 'win-win' situation for all: better training and coaching of farmers, good supply of required seeds and agro-inputs, improved farmers' access to input finance and effective uptake of the recommended agricultural innovations.

The most important inhibitors for farmers' adoption of good agricultural practices are limited access to quality seeds and agro-inputs, appropriate machinery (especially row planters) and to input credit. The reach of micro-finance institutions is limited, which is driving farmers into the hands of informal money lenders. Many farmers who want to apply improved agricultural practices cannot do so because of lack of credit. Unfortunately, it is observed that farmers who do get credit, often do not use it for their farm activities.

These challenges have so far been insufficiently addressed. This requires coordinated action of different stakeholders, working together as a team, detailed planning that is based on local realities and targeted provision of input finance. It is in this context that Benefit-SBN has promoted a bottom-up agro-economic planning approach that encourage stakeholders to design and implement their own kebele plans.

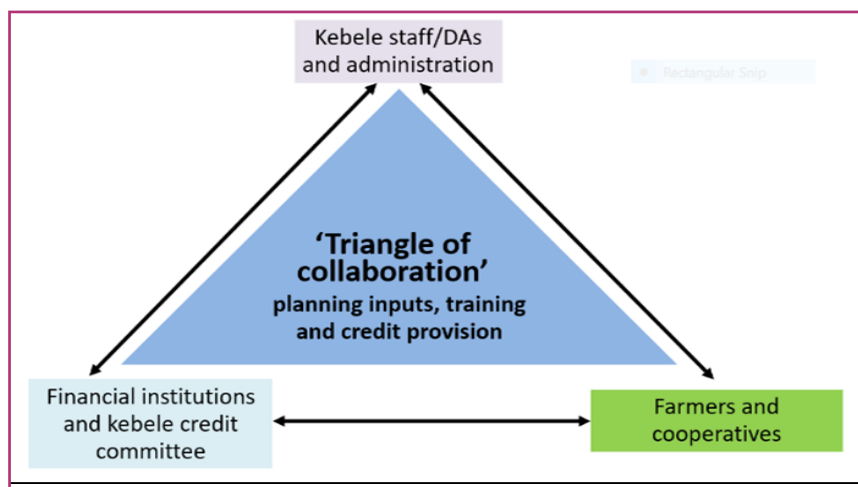
Stakeholder collaboration at different levels

Why stakeholder collaboration is so important

Stakeholder collaboration is essential, as the mentioned challenges cannot be solved by one actor. Extension needs farmers for scaling and needs financial institutions for availing input credit that would make the uptake of the promoted practices possible. Financial institutions need information for risk management and the best possible targeting of input credit. Farmers need extension and financial services, and their cooperatives can play important roles in training, loan management and field-level monitoring. Stakeholder team work is thus required and to the benefit of all.

Triangle of collaboration

These are the fundamental reasons why a 'Triangle of collaboration' is proposed, for coordinated action of Government, farmers and financial institutions. Field realities vary from one place to another. To increase the adoption of good agricultural practices, it is important to have plans per kebele, as it is at this level that field realities and farmers are known in detail. Benefit-SBN has developed a strategy that requires the teaming up of tripartite kebele team, which is composed of: (1) Kebele representatives (administrator, DA); (2) Farmer representatives (lead farmers and cooperative board members) and (3) Financial institution representatives (local financial institutions operating in kebele and kebele credit committee).



Bottom-up: from kebele to region

The idea is that Kebele Agro-Economic Plans are developed by the kebele teams at the request or upon instruction of regions, zones and woredas. Once elaborated, the KAEP's are communicated to woredas, and then to the zonal level and regional level, where the information is aggregated and the planning is endorsed and communicated back to the lower administrative levels. Relevant organisations are expected to collaborate, for instance at:

- Woreda level: (1) Woreda Office of Agriculture and woreda administration; (2) farmers' cooperatives and union; (3) financial institutions providing input finance, e.g. DECSI and ACSI branch managers.
- Regional level: (1) Regional Bureau of Agriculture and regional administration; (2) Farmer unions and (3) regional headquarters of financial institutions providing input finance.

The collaboration is meant and expected to create a 'win-win' situation for all: better training and coaching of farmers, adequate supply of seeds and agro-inputs, needs-based training, better risk management for financial institutions and effective uptake of the recommended agricultural innovations. This strategy was endorsed in 2019 by regional authorities, both Tigray and Amhara, who wrote a supportive letter to the 13 woredas of the sesame zone in North-West Ethiopia.

The KAEP guide, format and steps

The KAEP guide and planning format

Benefit-SBN developed a practical tool for agro-economic planning at kebele level: the Kebele Agro-Economic Planning (KAEP) tool. A planning format, accompanied by an explanatory guide was developed and tested in 2017 and 2018 and further adapted in 2019. As computers are not available at kebele level, the printed planning document is filled out manually by the kebele team. The kebele working documents could be recorded in the computer at woreda level. This would be input for setting up a digital planning, monitoring and evaluation system at woreda, zonal and regional level.

Kebele profile and 2019 work plan for agro-economic development

..... Kebele, 2019

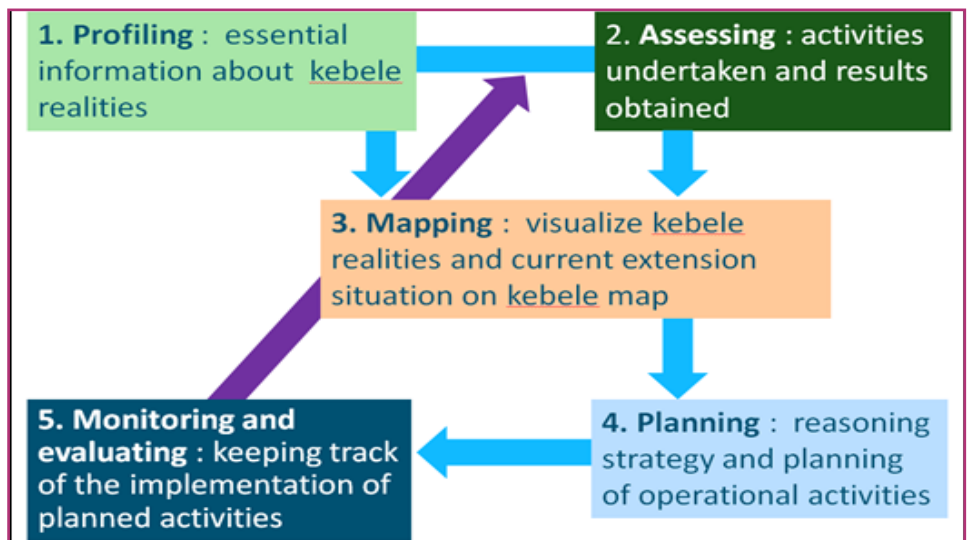


Region:
Zone:
Woreda:
Kebele:

Five-step approach for local agro-economic development

The KAEP methodology is proposed to follow 5 steps:

1. Profiling: essential information about kebele realities
2. Assessing: activities undertaken and results obtained (input supply, training and extension cooperatives, credit)
3. Mapping: visualize kebele realities and current adoption on a kebele map, with proposal of kebele farmers' production clusters
4. Planning: reasoning the best strategy and required operational activities to improve performance
5. Monitoring and evaluating: keeping track of the implementation of planned activities.



These five steps follow each other in a logical sequence: steps 1 and 2 allow to make a map (step 3); the profiling, assessment and mapping are input for strategic and operational planning (step 4) and the planned activities are monitored and evaluated throughout the year (step 5). The cycle is to be repeated every year. Because of the activities and other developments, the realities in the kebele change and the profile can be adapted (step 1 again). The monitoring and evaluation data are input for assessment (step 2 again).

Step 1 : Kebele profiling

Good planning is based on evidence. It is therefore important to make an overview of quantitative information (key parameters) and to highlight the main characteristics and challenges of the kebele. The first KAEP chapter is thus the Kebele profile, with a suggestion of key information to enter. All this information is essential for strategizing, planning, monitoring and evaluation. Considering their primary role in the administration of the country, kebeles are responsible for data recording on:

- Population and administration of the kebele
- Land use (ha), production (qt) and productivity (qt/ha)
- Sesame sales, realized prices and value of sales
- Agricultural production, marketing, food and nutrition (all agricultural commodities)
- Labour and labourers

Step 2: Performance assessment and current situation

The next step is the assessment of agro-economic development activities that were undertaken and the results that have been obtained. The assessment concerns the performances during the past two years. The main topics and analyses are the following:

Topics	Information and analysis
Agricultural inputs provided and/or used in past two years	Seeds distributed for different crops, with specification of varieties. Fertilizer and other inputs distributed, with observations on needs, distribution and use of seeds and inputs and orientations for what to improve.
Farmers trained on good agricultural practices	Number of DA's, availability and size of FTC, farmers training in 20 steps for sesame production, farmers trained on other subjects, participation of farmers in field days. Reflection on the involvement of female, young and investor farmers in training and demonstration activities.
Farmer trainers that can provide services	Identification of farmers who received a Certificate of Competence, their village or sub-kebele, gender, cooperative membership and telephone numbers and identification of farmers with good farming results and good motivation level.
Adoption 20 steps	Four levels of adoption are distinguished: conventional, limited partial adoption, advanced partial adoption and full adoption, both for smallholders and investor farmers. For reflecting on adoption, the following questions are suggested: do farmers accept the proposed technologies/practices (acceptability); can they do them (accessibility/availability, for instance of seeds, inputs, machinery); do they have the required funds (own resources and credit) to do them (affordability); and do farmers find that the proposed 20 steps are profitable (attractiveness). Based on the identified challenges, strategies for action can be identified.
Agricultural credit	For the analysis of the agricultural credit situation, the financial institutions that operate, or could operate in the kebele are identified, preferably with information on the location of nearest branch, the profile and number of clients, the type of loans, client savings and loan repayment. Key information to have is the loan amount that was provided to farmers in the previous season and the number of farmers in the kebele who received a loan. Based on this information, challenges and opportunities can be defined, with perspectives of banks/MFI's, farmers, cooperatives and technicians if possible.
Cooperative profile and performance	Information on : intervention area of the cooperative, affiliation to Union, members, shares, assets, total own capital, credit provided to members, staff members and main activities of the cooperative. Based on this information: definition of challenges and opportunities.
Financial literacy training	Financial literacy trainers in the cooperative; Number of persons trained so far (male, female, youth); Number of farmer coaches for peer-to-peer coaching; Observations on the actual use that members make of the financial literacy training and observations on the involvement of women and children.

Step 3: Kebele mapping and identification of production clusters

Maps are very helpful to visualize and to think strategically. The kebele map is proposed to be based on the woreda maps from the Central Statistical Agency (CSA) and to provide the following basic information: delimitation of kebeles; main roads and rivers and main settlements. The basic map is then completed with the following information: sub-kebeles (qot) and the number of farming households per qot, the Farmer Training Centre, main and

secondary road infrastructure, seasonal rivers, spot markets, branches/satellites of financial institutions (MFIs, Banks, SACCO's) and other information that is found to be important to the map. With this specific information, a nice kebele map is produced that can be used for strategizing and planning.

The next steps, which are more analytical, are the following:

- Visualisation of the sesame production zone in the kebele, with specification of smallholder and investor farmer areas
- Showing the reach of training and extension and current adoption levels of recommended practices. With the location of current/potential farmer-trainers and adopting farmers on the map, it can be seen where training and adoption are concentrated and where extension efforts have not yet reached or had impact. This is very important input for strategizing next steps.
- Indicating the service area of financial institutions. Financial institutions do not always effectively reach all parts of the kebele. The map visualised where most clients of financial institutions are located.

All this is input for strategizing:

- Where to concentrate training and coaching activities, for instance sub-kebeles not yet well reached?
- Where can farmer-trainers can operate and where can current adopters can spread information and experience to their neighbours?
- Where to consolidate and expand the provision of agricultural credit?
- What are potential suitable areas for developing Farmer Production Clusters? E.g. areas where farmers can work together, for access to inputs, mechanization, pest and disease control, access to finance, marketing, transport and possibly other (economic or social) reasons.

Step 4 : Annual planning

- The profile, assessment and map show the current situation and dynamics. The planning of activities is driven by targets that are set for the next season:
- Targets for main crops in the kebele: acreage, production and yield
- Adoption of '20 steps', with targets for smallholders and investors.
- Required seeds, fertiliser, agro-chemicals and other inputs
- Training and coaching of farmers
- Financial literacy training
- Facilitation of labour services and improvement of labour conditions.
- Cooperative activity planning
- Agricultural credit needs. This is a very important part of the planning. Increased production and higher yields/ha require a much better adoption of good agricultural practices, both for sesame and rotation crops, which requires credit.

The planning tables help to calculate the finance requirement for smallholder and investor sesame production and their production of rotation crops. The calculations allow to determine the estimated total production costs, the estimated total farmer own funds and the estimated total credit need for the kebele. This credit need is to be compared with the credit that was provided in preceding year(s). In case of a large discrepancy, there should be more credit availed or targets have to be adapted.

Step 5: Monitoring and evaluation

The monitoring and evaluation is aligned to set targets and planned activities. The planning of the kebele can be transformed in an M&E document. Record keeping would - among others - be needed for: Sales and distribution of seeds; Sales and distribution of fertilizer (cooperative or voucher system); Measurement of acreages (GPS) ; Sample of farmers to estimate/measure the production and yield per hectare (selection of sub-kebeles and farmers per sub-kebele); Training reports with list of participants; Input credit provided to farmers, Output credit provided to cooperatives, (...).

Activities and experiences in the past three years (2017-2019)

Introducing KAEP (2017-2018)

KAEP was first introduced to the SBN stakeholders as from the end of 2016. The background and objectives, the reasons for collaboration and bottom-up planning and the structure and contents of the KAEP planning tool were introduced to stakeholders. In 2017 and 2018, the KAEP tool was tested in 24 kebeles in all 12 woredas where Benefit-SBN was operating (two kebeles per woreda).

The 2017 exercise was merely a test of the newly developed tool, which was as such successful. Selected kebele planning team members were trained on how to use the tool and they managed to work with the planning tool. At hindsight, it was however realised that formal buy-in of the regional Bureau of Agriculture, cooperative unions and headquarters of the main financial institutions (e.g. ACSI and DeCSI) should have been sought.

In 2018, the KAEP was repeated in the same 24 kebeles, this time with the aim to act upon the planned activities. The follow-up on the planning was however not successful due to the late start of the activity and farmers' outstanding loans with the financial institutions. In 2018, one kebele in Mirab Armachiho woreda used the KAEP to identify eligible farmers, who got credit, applied good agricultural practice, increased their productivity and repaid their loan. Although this was only a limited success, it was the first proof of concept.

All in all, the 2017/2018 exercises were merely a test of the newly developed tool. The level of commitment varied strongly from one woreda to another. Without explicit instructions from higher levels, doing business as usual strongly prevailed. In most cases, the elaboration of KAEP was mainly in the hands of the development agents. Other stakeholders hardly

participated in the process and did not seem to see this work as an integral part of their job. In some places, project incentives were asked for. At woreda level, especially the offices of agriculture developed better understanding of the approach and provided feedback that the approach can bring required changes in the planning and delivery system. In some woredas, the weak relationship and communication between the woreda OoA and ACSI/DECSI affected the implementation of the activity. In general, staff of financial institutions did not yet see the kebele planning as part of their job. Nevertheless, the two years of testing increasingly led to the understanding that the KAEP tool helps to (i) define and visualize the realities of the kebele; (ii) identify agro-input and agricultural credit needs and (iii) to define the credit amounts per hectare (for sesame and possibly rotation crops).

Intervention zone of Benefit-SBN

The Benefit-Sesame Business Network operates in the sesame Agricultural Commercialisation Clusters (ACC's) in Tigray and Amhara and now covers 13 woredas:

- Tigray: Kafta Humera, Tsegede and Wolkait in Western Tigray since 2013 and Taytay Adiabo, Tselemti and Asgede Tsimbila in North-western Tigray since 2016. .
- Amhara: Quara, Metema, Mirab Armachiho, Tach Armachiho and Tegede woredas since 2013, Jawi since 2016 and Belesa since 2018.

Training of kebele committees and woreda and zone officials (2019) and kebele plan preparation

From February to mid-March 2019, Benefit-SBN facilitated training sessions for 55 kebeles. Seven one-day sessions were organized for 27 kebeles in Amhara (in Gondar, Jawi, Belesa and Mirab Armachiho) and two sessions were organized for 28 kebeles in Western and North-western Tigray. To effectively learn, participants exercised the different KAEP steps during the training.

The level of understanding of KAEP committee members varies; some understand it well and try to support the process while others do not seem to have a clear understanding. A complicating factor is that there is no culture of documenting information in most kebeles; often it is difficult to

find basic information. High staff turnover contributes to the lack of data and documents.

In addition to kebele committee members, woreda and zone level representatives (office of agriculture, cooperative promotion office, ACSI/DECSI branch managers) participated in the trainings. This increased ownership of the approach and tool.

Of the selected and trained 55 kebeles, 50 effectively prepared their kebele plans. Benefit-SBN staff members provided coaching support to the kebele committees. Due to the increased number of kebeles this was more cumbersome than in 2017-18.. In some areas, security issues affected proper coaching and follow-up.

The plans helped to assess the need for seeds and inputs and to identify farmers with agronomic and financial literacy training needs. It was however unfortunate that the plans were only available just 2 months from the onset of the agricultural season. A major lesson learned is that the Kebele planning process should start much earlier.

Access to finance for applying the recommended agricultural practices

The main objectives of the KAEP is to increase farmers' adoption of good agricultural practices. The kebele plan helps to identify those farmers who want to apply good agricultural practices but need credit to do so. In selecting farmers, kebele committees used the combination of the following criteria: (1) hardworking sesame farmers ready to apply improved agricultural technologies; (2) who have a good reputation in credit repayment and no outstanding loans from financial institutions and (3) who have the capacity and are willing to finance part of the costs with own capital.

With these criteria, 2,833 farmers (31% of the farmers trained in 20 steps) were identified as eligible for input finance (82% men and 18% women). Slightly more than 50% of these selected farmers received credit (1459 farmers, of which 1004 men and 455 women). 88% of the selected female received credit, compared to 43% of the selected male farmers (see table 1). Though limited, KAEP has shown encouraging results in five woredas: Kafta Humera, Wolkait and Tsegede in Tigray (1,387 farmers who got credit from DECSI or Adeday) and Quara and Jawi in Amhara (70 farmers who got credit from ACSI).

The 2019 results in Tigray are encouraging and suggest that the KAEP approach can be scaled and institutionalised. In Western Tigray zone, DECSI has a specific loan product for sesame farmers (9000 ETB per hectare), which is disbursed in May. For accessing DECSI loans, selected farmers had to form groups, as the group collateral modality applies; this often proved difficult. Adeday microfinance specifically targets women, which partially explains the proportionally high rate of credit provision to female sesame farmers in Western Tigray. In North-western Tigray zone, selected farmers did not credit for the season, as there were no clear guidelines and misunderstandings on how to use DECSI's agricultural loan for sesame.

Table 1. Number of farmers selected per woreda vs. farmers who got credit

Woreda	No. of kebeles	Kebeles with KAEP	Total HHs	Farmers trained in GAP (20 steps)	Farmers selected			Farmers who got credit		
					Male	Female	Total	Male	Female	Total
Belessa	24	3	4,109	206	163	30	193	-	-	-
T.Armaciho	24	3	2,590	320	209	17	226	-	-	-
W. Armaciho	14	6	7,334	1,795	-	-	-	-	-	-
Quara	22	4	3,555	-	320	14	334	26	9	35
Metema	22	4	3,632	816	379	22	401	-	-	-
Jawi	27	3	6,082	-	96	4	100	26	9	35
Tegede	14	3	2,465	1,486	166	6	172	-	-	-
Amhara Total	147	26	29,767	4,623	1,365	81	1,446	54	18	70
Kafta Humera	21	4		872	382	128	510	382	128	510
Tsegede	23	6		975	165	224	389	165	224	389
Wolkait	23	6		1,318	403	85	488	403	85	488
Taytay Adiabo	18	5		575						
Tselemti	27	1		-						
Asgede Tsimbila	23	2		688						
Tigray Total	135	24		4,428	950	437	1,387	950	437	1387
Total	282	50	29,767	9,051	2,315	518	2,833	1004	455	1,459

In Amhara, the credit from ACSI via KAEP was very limited. The major reason is that ACSI disburses agricultural credit in the first months of the year, which is long before the start of the agricultural season in the sesame zone. This bears a great risk that farmers use the credit for other purposes. A thematic meeting, organised to address the challenges of providing input finance to selected farmers, has not been effective to change this. The ACSI Central and Western Gondar zonal branch offices promised to facilitate credit to farmers selected by KAEP committee members, but this did not materialise. Furthermore, ACSI, had shortage of funds due to limited repayment from previous years.

It is clear that the regional officials have to decide on the modalities and conditions for allocating input finance for sesame farmers and to specify available amounts according to woredas and kebeles.

Production costs and credit needs

For estimating the cost per hectare, the kebele committees, with farmers' consultation, took the following practices into account: land clearing, ploughing (3x), row planting, use of quality seed, fertilizer application, weeding (3x), pest and disease control, harvesting, hilla placement on plastic sheets, bagging and transporting.

Table 2 shows that the kebele committees:

- Estimated the average costs for applying the 20 steps at 9,700

ETB per hectare (8,900 in Amhara and 10,300 in Tigray).

- Considered that farmers' own funds could cover almost half of these costs (49%; 45% in Amhara and 52% in Tigray).
- Suggest a credit amount of around 5,000 ETB per hectare (4963 in Amhara and 4921 in Tigray). This suggests that the amount for sesame input finance can – for now – be established at 5000 ETB/ha. This is significantly lower than the current DECSI sesame loan product for Western Tigray. A revision of the credit amount would stress farmers' responsibilities to save and prepare for the next season and would reduce the risks of DECSI.

Table 2: Production costs and credit needs for selected 20 steps acreage

Woreda	Kebeles with KAEP	Farmers trained in GAP (20 steps)	Area to be covered by 20 steps (ha)	Production costs 20 steps acreage (ETB)	Farmers own funds 20 steps acreage (ETB)	Credit needed 20 steps acreage (ETB)
Belessa	3	206	230	1,217,660	458,840	758,820
T. Armaciho	3	320	285	2,707,095	586,250	2,120,845
W. Armaciho	6	1,795	2,065	17,981,280	7,008,220	11,106,780
Quara	4	-	-	-	-	-
Metema	4	816	609	7,871,360	4,256,920	3,614,440
Jawi	3	-	1,453	10,680,720	6,942,500	3,738,220
Tegede	3	1,486	1,630	15,915,340	6,119,000	9,791,340
Amhara Total	26	4,623	6,272	56,373,455	25,371,730	31,130,445
Kafta Humera	4	872	564	6,480,250	2,012,050	4,468,200
Tsegede	6	975	656	6,910,000	2,944,800	3,965,200
Wolkait	6	1,318	2,563	31,238,614	16,685,450	14,553,164
Taytay Adiabo	5	575	2,951	25,417,916	15,076,185	10,341,731
Tselemti	1	0	30	180,000	?	?
Asgede Tsimbila	2	688	163	1,397,500	631,250	766,350
Tigray Total	24	4,428	6,927	71,624,280	37,349,735	34,094,645
Total	50	9,051	13,199	127,997,735	62,721,465	65,225,090

Challenges, lessons learned and way forward

Overall, the experiences and results of the past three years show that there is a lot of potential and ample room for improving the KAEP planning process and impact. Below, we discuss the KAEP materials and capacity, stakeholder collaboration and commitment, scaling and timing of the KAEP process, information management, credit modalities and required input finance for improving the adoption of the recommended agricultural practices and the performance of the sesame sector.

KAEP guide, manual, training and coaching

The KAEP guide and format have been developed and adapted in the past three years. Stakeholders increasingly see the importance of detailed bottom-up planning for an optimal preparation of the agricultural season. Experience has learned that the tool helps to (1) define and visualize the overall realities of the kebeles; (2) identify agro-input needs; (3) target farmers most eligible for agricultural credit needs; (4) define the farmers' own contribution and credit amounts per hectare and (5) define the need for agricultural credit, based on the targets for full adoption of recommended agricultural practices. After training, trainees do not have the same level of understanding on KAEP, which affects the implementation and quality of the planning.

- Adapt the KAEP guide and format based on experiences in 2019
- Intensively train a core group of experts at woreda and zone? level, composed of woreda OoA, woreda CPO, Union staff, and MFI branch managers and loan officers, for supervision and coaching of kebele teams
- Develop a training module for interactive training of kebele committees in dedicated two day training sessions, with ample room for reviewing of 2018 kebele plans and practical exercises.

Stakeholder collaboration, ownership and commitment

A culture of stakeholders planning and working together takes time. This applies for all levels, from kebele to region. Different offices and organisations can however benefit a lot from collaboration and achieve better results (higher adoption rates of recommended agricultural practices (BoA), better services to members

(cooperatives) and better targeting of farmers for agricultural credit and higher loan repayment rates (financial institutions). From the experiences of the past years it was learned that the KAEP approach helps to strengthen the collaboration and synergy among grassroot level stakeholders. It was also clearly learned that KAEP, although it is a bottom-up strategy, needs top-down direction and guidance for its effective realization. The full commitment of regional level authorities, including Bureaus of Agriculture, cooperative unions and regional headquarters of financial institutions (especially ACSI and DECSI) is crucial for successful implementation. Before starting the process in 2020, it is important to have the full buy-in and commitment from these bodies. Formal instructions are indispensable for lower level officials and staff.

- High level meeting with regional authorities about the purpose of the agro-economic planning approach and how it could be integral part of the work of their institutions.
- Have an official letter jointly signed by the mentioned regional authorities, Unions and financial institutions before the end of 2019, addressed to zones, woredas and selected kebeles, which
 - clarifies the importance of the joint KAEP planning process,
 - urges the establishment of tripartite teams at kebele, woreda and zonal level
 - provides directions related to duties and responsibilities, scaling and timing of the planning process.

Timing and scaling of KAEP process (2020)

Planning has to be timely to be effective. So far, the KAEP has been too late. Preferably the kebele plans should be ready by January. This means that the instructions from the regional level down to the kebele level (via zones and woredas) have to be communicated in the fourth quarter, preferably as from October. For 2020, it should not be later than mid-December. The training of experts and kebele committees should immediately follow and the planning process should start immediately after the training.

In terms of scaling, the ideal situation is that all kebeles participate, so as to have full data. For 2020, it seems however most important to consolidate the work in the 50 kebeles of 2019 and to focus on timely planning and effective follow-up. A realistic timing and scaling for 2020 could be the following:

- Regional letter send before mid-December
- Target the same 50 kebeles for timely and high quality planning
- Training of experts and kebele committees before Ethiopian Christmas
- Kebele planning in January 2020.
- Consolidation at woreda, zonal and regional level in February.
- Organisation of supply of seeds, agro-inputs and machinery, and provision of training as from February
- Communication of available input finance per woreda and kebele and selection of farmers, as soon as possible (see last paragraph below).
- Sesame input credit provision in second quarter (April-June; see one but last paragraph below).

Data collection, information management and PME system

The KAEP tool clearly improves the recording and documentation of key information (kebele realities, assessment of previous seasons, mapping) which is the basis for detailed planning and informed decision-making, and contributes to a culture of professional planning, monitoring and evaluation. In fact, it may be the basis for a digital information management and PME system, which is ambitioned by BoA, financial institutions and cooperative unions.

- Manual development of KAEP's at kebele level
- Support to digitalise the KAEP's at woreda level (in Word and Excel documents to start with)
- Use the planning as reference for monitoring, reporting and evaluation at different levels.
- Align the format of the KAEP to reporting requirements of the institutions involved; and or adapt reporting format according to the information in the KAEP.



Credit modalities and risk management of microfinance institutes

Credit modalities of micro-finance institutes are quite different in Amhara, Western and North-western Tigray. Western Tigray has a specific loan product for sesame farmers, which is disbursed some two months before the start of the rainy season. As discussed, the amount per hectare could be adapted from 9000 to 5000 ETB/ha. This could also be applied in North-western Tigray, which requires the development and communication of clear guidelines. Considering the importance of sesame in the Amhara lowlands, it seems indicated that ACSI develops a specific sesame loan product as well for Amhara. To enhance the likelihood that loans are used for the intended purpose, it is recommended that the disbursement would take place later than is currently the case. Considering the policy to promote FPC's and the requirements for group collateral, it is also recommended that small groups of farmers are selected for input finance.

- Define the credit amounts per hectare for farmers who adopt the full package. Based on the results of 2019, an amount of 5000 ETB per hectare is proposed, which gives farmers the responsibility to ensure the mobilisation of a similar amount per hectare, which encourages savings and wise use of revenues.
- Adapt the current DECSI sesame input finance product for Western Tigray to this amount and extend this DECSI loan product to North-western Tigray.
- Develop a tailored ACSI sesame input finance product for Amhara
- Disburse loans in the second quarter of the year, so as to reduce the risk of loans for other purposes than agricultural production;
- Target the farmers eligible for input finance, based on sound analysis and clear criteria; whenever possible recommend small groups of full package adopting farmers, who can provide group collateral.
- Through collaboration of financial institutions, development agents and cooperatives, monitor the appropriate use of input finance.

Available funds for input finance for the sesame sector

Currently, the available credit that is available for financing the sesame sector is not enough. This is the major bottleneck for the sesame sector in North West Ethiopia, and explains to a large extent the low adoption of recommended practices and large yield gaps. As a result, the revenues of farmers and the country at large are way below of what is possible. To give an indication: a yield increase of one quintal per hectare would yield to 93 million USD extra revenues. The analysis of credit needs and gaps, per kebele, woreda and the sesame zone at large can be used to provide input for discussing the efforts to be made to avail

enough credit to (eligible) sesame farmers, without which the increase of production will not be possible.

- Dialogue between regional administration, regional BoA, Union leaders and financial institutions, especially DECSI and ACSI, with the aim to decide on the amount of input finance available for the season, preferably specified per kebele and/or woreda.
- Relate the available credit to the targeting of farmers and acreages and the other way round. Should targets be adapted in case of scarce funds or should more capital be made available for financing realistic kebele plans?

Kebele Agro-Economic Planning, which is based on stakeholder collaboration, is thus very important for addressing the input credit challenge. Additional measures are farmers' financial literacy training, marketing credit for cooperatives with on-lending modalities, lease financing, improved information systems and involvement of the cooperative sector for reducing the transaction costs of the financial institutions.

The Sesame Business Network (SBN) is an informal innovation network that is driven by local entrepreneurs and other stakeholders for developing a more competitive, sustainable and inclusive sesame sector. Shared goals of those involved include farmers income improvement and other positive spill-over effects.

Benefit-SBN is a support programme that grafts its activities to stakeholders objectives, priorities and action plans. The programme is part of the Bilateral Ethiopian Netherlands Effort for Food, Income and Trade (BENEFIT) Partnership portfolio funded by the Dutch Ministry of Foreign Affairs through the Embassy of the Kingdom of the Netherlands (EKN) in Addis Ababa and coordinated by Wageningen University and Research (WUR).