Kebele planning for agro-economic development

Five-step approach for effective local economic development: profiling, performance, mapping, planning and M&E

December 2018

Introduction

In the past 6 years, the Sesame Business Network has been well established at woreda, zone and regional levels, supporting good agricultural practices for sesame yield and quality improvement (‘20 steps package’), good agricultural practices for rotation crops, financial literacy training for farmers, supporting marketing credit for cooperatives and other innovations.

The Sesame Business Network now covers 13 woredas:
- Tigray: Since 2013 Kafta Humera, Tsegede and Wolkait and since 2016 Taytay Adiabo, Tselemti and Asgede Tsimbila in North-western Tigray.
- Amhara: Since 2013 Quara, Metema, Mirab Armachiho, Tach Armachiho and Tegede, Jawi since 2016 and Belesa since 2018.

In each of the woredas, the planning of activities is done under the coordination of a woreda focal point, in close collaboration with Benefit-SBN staff. At this moment, most farmers have been trained on the recommended agricultural practices for sesame production (20 steps) and have seen demonstration plots. In each kebele and cooperative there are farmers who can act as farmer-trainers. Some of them have received a Certificate of Competence for this purpose.

Effective adoption of good agricultural practices could be much improved. The most important limiting factors are the access to inputs, row planters and to credit. To meet the challenge, a combination of the following strategies is required:
- Teaming up of kebele administration, DA’s, cooperatives and farmer-trainers for the scaling out of the recommended good agricultural practices and the coaching of farmers that are adopting the practices;
- Ensuring that 20 steps adopters and interested farmers have access to quality seeds and agro-inputs, and highest effort to have appropriate solutions for mechanized row planting;
- Defining the training programme that responds to farmers’ needs;
- And last but not least, ensuring that farmers have access to credit, which requires close collaboration with local financial institutions, cooperatives, local technical staff and credit committees.

Field realities vary from one place to another. To increase the adoption of good agricultural practices, it is important to have plans per kebele, prepared as joint effort of (1) Kebele administration and DA’s; (2) Farmers and cooperatives; and (3) Local financial institutions and the kebele credit committee. These three parties would form a ‘triangle of collaboration’. This three-party collaboration is important for several reasons:
- Collaboration between Government extension service and farmer trainers;
- Technical information provision to financial institutions, allowing them to better assess cash flows and risks;
- Provision of agricultural credit that is required to adopt innovation and improve yields per hectare.
The following core ‘agro-economic team’ of 6 persons is proposed:
- Kebele staff: Agronomy DA and 2nd to be identified;
- Farmers: cooperative board member and star farmer (having had high yields already);
- Financial institutions: manager or loan officer of MFI branch (in kebele or nearby) and member of kebele credit committee.
Woredas and kebeles can of course decide to extend this core team.

The kebele agro-economic planning methodology is proposed to follow 5 steps:

<table>
<thead>
<tr>
<th>Step</th>
<th>Activity</th>
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<tbody>
<tr>
<td>1.</td>
<td>Profiling: essential information about kebele realities</td>
</tr>
<tr>
<td>2.</td>
<td>Assessing: activities undertaken and results obtained (input supply, training and extension cooperatives, credit)</td>
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<tr>
<td>3.</td>
<td>Mapping: visualize kebele realities and current adoption dynamics situation on kebele map, with proposal of kebele production clusters</td>
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<tr>
<td>4.</td>
<td>Planning: reasoning the best strategy and required operational activities to improve performance</td>
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<tr>
<td>5.</td>
<td>Monitoring and evaluating: keeping track of the implementation of planned activities</td>
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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).
- 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).

The five steps are explained in more detail in the next sections. The explanations follow the suggested format for a work plan for agro-economic development that the kebele actors could prepare together.
Explanation of the format

The idea is to have a format that can be filled out manually by the kebele team. The filled out working documents could be recorded in the computer (with inclusion of maps and drawings) and then printed. Well-presented work plans would then be available to the key players.

Cover page
- Standard title
- Fill in: Name of kebele and month that the work plan is prepared
- Under figure: fill in: region, zone, woreda and kebele

Preface
- Standard introductory text
- Presentation of the team (fill out the table)
- Under table: first place and date, then name of the focal person of the kebele agro-economic team, this can be the woreda administrator, DA or somebody else.

Table of Contents
- Correct page numbers for handwritten version
- To adapt when information is recorded in computer (pages may change)

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 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:

1.1. Population and administration of the kebele
- Demography: male, female, total and youth
- Households: urban and rural households, male and female headed households and households according to size of holding (6 categories)
- Sub-kebeles (got)

1.2. Land use (ha), production (qt) and productivity (qt/ha)
- Land use summary: Cultivated acreage + fallow land = total areable land. Total arable and non-arable land is total land area of the kebele.
- Total land area mentioned here should be the same as total land size mentioned in table on sub-kebeles
- It is important to check that the mentioned acreage for 2018 is the same as the cultivated acreage in the land use summary overview for 2018.
- Analysis can be made of land use tendencies: extension acreages, relative importance of sesame and other crops, ....

1.3. Sesame sales, price and value: production x average price = total value of sesame.
- Minimum and maximum price help to estimate average price
- An estimate of the total value of the sesame sales is OK, the main point is to have a good estimate of the monetary value of the sesame that was produced and sold.

1.4. Agricultural production and marketing
- Observations on food crops, livestock, cash crops, and on food and nutrition security status of the kebele. These observations can be qualitative. It is however good to include quantitative data as much as possible.
1.5. Labour and labourers

- This is to be sensitive of the importance of labour, both in terms of number of people, cost of production and inclusive pro-poor development.
- What does the labour in-flow look like? Where are the labourers coming from? When do they come, maybe a first wave for land preparation and planting and a second wave for weeding and harvesting? What are there typical characteristics of the labourers who are normally coming to the kebele? Are they youngsters/students? Are they poor farmers from highlands?
- What are their working and living conditions? Have measures been taken to improve the labourers’ conditions? What are priorities for improvement?

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.

2.1. Agricultural inputs provided and/or used in past two years

- Seeds: fill out the table
- Fertilizer and other inputs: fill out the table

2.2. Farmers trained on good agricultural practices

- Overview of the training activities of the past two years (2017 and 2018) with quantitative information.
- Some standard parameters are already mentioned: DA’s, FTC’s, model farmers, 20 steps training, FTC field days, model farmer field days
- Other (agronomic) trainings are to be specified
- Reflection on the involvement of female farmers, young farmers and investor farmers in training and extension activities

2.3. Farmer trainers

- This is to promote the involvement of farmers in the roll-out activities
- A distinction is made between farmers with Certificate of Competence (CoC) and farmers with good results and good motivation, but not (yet) having CoC.
- The location, gender, cooperative membership and telephone number of the identified farmer trainers are to be mentioned in the tables. This helps to mobilize them for training activities.

2.4. Adoption 20 steps

- This is important for strategizing further action for promoting the adoption of good agricultural practices.
- Four levels of adoption are distinguished, from conventional farmer practices to full adoption.
  - Conventional: traditional farmer methods: own seeds, broadcasting, no use of fertilizer, no thinning, no large hillas nor use of plastic sheets
  - Limited partial adoption: Farmers who adopted some of the major components of the 20 steps package (at least two of the following: improved seeds, row planting, fertilizer, thinning, plastic sheet, large drying spot)
  - Advanced partial adoption: Farmers willing and trying to apply full package since at least 2 seasons, use fertilizer, but may miss one or two elements (for instance row planting, thinning and/or plastic sheets)
  - Full adoption: applying all the steps mentioned in overview below
Both for smallholders and investors (if these are present in the kebele), define the number of farmers that are in the four categories and their acreage. The totals should of course correspond to the total number of farmers and the total acreage.

Percentages can be calculated by dividing the number of adopting farmer households by the total number of farmer households (mentioned in first chapter) and dividing the acreage under good agricultural practices by the total acreage under sesame.

The second table is the adoption analysis, challenges for adoption relate to the 4 A’s: whether farmers accept the proposed technologies/practices (acceptability), whether they can do them (accessibility/availability, for instance of seeds, inputs, machinery), whether farmers have the funds (own resources and credit) to do them (affordability) and whether farmers find that the proposed 20 steps are profitable (attractiveness).

Based on the identified challenges, strategies for action can be identified.

2.5. Agricultural credit
- Identify the financial institutions of the kebele first, these can be banks, MFI’s and SACCO’s. They may have their branch office in the kebele or elsewhere. A financial institution is relevant if farmers of the kebele get credit from the identified branch.
- Fill out one table per identified financial institution, with a good effort to get as accurate data as possible on:
  - Location of nearest branch
  - Number of clients
  - Profile of clients
  - Type of loans
  - Client savings
  - Loan repayment
- Key information to have is the loan amount that was provided to farmers in 2018 and the number of farmers in the kebele who received a loan.
- Based on this information: define challenges and opportunities (with perspectives of banks/MFI’s, farmers, cooperatives and technicians if possible)

2.6. Cooperative profile and performance
- Profile and performance combined in this table
- Info on: name of union (if affiliated), intervention area of the cooperative, address
- Furthermore info on: members, shares, assets, total own capital, credit provided to members, staff members of the cooperative
- Main activities of the cooperative. Among others, this could be: input supply, storage, credit to member, financial literacy training and any other activity
- Based on information: define challenges and opportunities (with perspectives of banks/MFI’s, farmers, cooperatives and technicians if possible)

2.7. 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. What is change in behaviour that is observed?
- Observation on involvement of women and children
Step 3: Kebele mapping and identification of production clusters

3.1. Kebele map
Maps are very helpful to visualize and to think strategically.

Basic map
Benefit-SBN has officially acquired woreda maps from the Central Statistical Agency (CSA), with the following information: Delimitation of kebeles; Main roads and rivers and Main settlements. For mapping and strategizing, it is proposed to use the outline of the kebele according to CSA maps.
Before going to the kebele, the team:
- Copies the CSA map on a flip chart
- Indicating the boundaries of the kebele
- Indicating the neighbouring kebeles and their names
- Main roads (in black)
- Main river and water resources (in blue)
- Main settlements (black dots, main settlement as square dot)

Markers of different colours and additional empty flipcharts are needed for the mapping session.

Completing the map
Having the outline of the kebele in front of them, and using pencils and then markers of different colours, the kebele core team is asked to insert more detailed information on:
- Indication of the sub-kebeles (blue dotted lines), with - if possible - the estimated number of farming households (numbers written in green)
- Important settlements not yet on the map (black circles). give the name of the settlements and indicate the size (nb. inhabitants) if appropriate.
- Farming training centre (write ‘FTC’ in green)
- How main roads are connected to towns/villages outside the kebele
- Secondary roads (in black; make sure that main road is shown as being larger than the secondary roads).
- Seasonal rivers (blue; make sure that main river is larger than seasonal river), write name of river if found appropriate
- Spot markets (write ‘SP’ in green)
- Branches/satellites of financial institutions (MFIs, Bank, Sacco’s); write name of financial institution, for instance DECSI or ACSI, in blue
- Any other information found important to add to the map: for instance:  
  - offices: kebele administration, BoA, CPA, Trade and industry, primary cooperative  
  - warehouses (concrete and non-concrete) and their capacity  
  - shops of input dealers  
  - farmer service centres  
  - .....  

With this specific information, a nice kebele map is produced.

Sesame farming and farmers
The next step is the visualisation of sesame farming, by answering the following questions:
- Where is the sesame production zone? (it is possible sesame is only grown in a certain area of the kebele)
- Where are the investor farmer areas located?
- Where are the smallholder farmer areas located?
**Training and extension results (red colour)**

And subsequently the kebele team visualizes the results of training and extension:
- Farmer-trainers (see 2.3; symbol is a small red star): farmer-trainers are the stars of the kebele. They may include farmers with a CoC and potential farmer-trainers, as suggested by cooperatives and DA’s.
- Farmers adopting most of the recommended practices (symbol is a small red dot)

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.**

**Service area of financial institutions (blue colour)**

Financial institutions do not always effectively reach all parts of the kebele. With blue dots, it can be indicated where most clients of financial institutions are located.

### 3.2. Sites, services and infrastructure

The table of this paragraph allow to provide some explanations on elements that are drawn in the kebele map. It helps to understand the map better.

<table>
<thead>
<tr>
<th><strong>Strategizing for upcoming agricultural season</strong></th>
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<tbody>
<tr>
<td>Having the current results on the kebele map, it is possible to:</td>
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<tr>
<td>- Indicate the focus zones: where to concentrate training and coaching activities, for instance sub-kebeles not yet well reached</td>
</tr>
<tr>
<td>- Areas where current and potential farmer-trainers can operate</td>
</tr>
<tr>
<td>- Areas where current adopters can spread information and experience to their neighbours</td>
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In this reflection, it is very important to check if the targeted adopters are - or can be - reached by the financial institutions !! For the application of the recommended agricultural practices, farmers need access to credit.

### 3.3. Cluster farming – identification of production clusters

One of the possible strategies is to focus on certain geographical areas with in the kebele. A production cluster is an area where farmers have decided to work together, for access to inputs, mechanization, pest and disease control, access to finance, marketing and possibly other (economic or social) reasons.
Step 4: Annual planning

The profile, assessment and map show the current situation and dynamics.

4.1. Targets for 2019 agricultural season: acreage, production and yield
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
  o These targets can be compared with the acreage, production and yield in preceding years, presented in chapter 1 (paragraph 1.2).
- Adoption of ‘20 steps’, with targets for smallholders and investors.
  o These targets can be compared with the adoption rates presented in chapter 2 (paragraph 2.4).

4.2. Agricultural input requirements for 2019
The production and adoption targets require inputs:
- Seeds
- Fertilizer
- Other inputs

4.3. Training of farmers on good agricultural practices
Based on the dissemination strategy and adoption targets, a farmer training and coaching plan has to be conceived.

4.4. Financial literacy training
Based on the achievements so far, and interest of farmer households, the financial literacy training plan can be developed for 2019.

4.5. Labour and labourers
It is important that the agro-economic targeting and planning is supported by the facilitation of labour services and improvement of labour conditions.

4.6. Cooperative activity planning
It is important that the agro-economic targeting and planning is supported by the cooperative activity planning.

4.7. 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 tables help to calculate the finance requirement for:
- Smallholder sesame production
- Investor sesame production
- Smallholder production of rotation crops
- Investor production of rotation crops

For the calculations, realistic real cost estimates are required !!!
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 can be compared with the credit that was provided in preceding year(s). In case of a large discrepancy:
- There should be more credit availed → Check in paragraph 4.8 !!!
- Or targets have to be adapted.

In any case, it is important to:
- Have an idea of the number of (small and investor) farmers that are targeted for sesame or farm loans
- Have an idea of the amount of credit per hectare, for small and investor farmers.

**4.8. Agricultural credit provision 2019**

It is important that the agro-economic targeting and planning is supported by the financial institutions serving the farmers in the kebele. The tables in this paragraph help to get the picture per financial institution by specifying:
- The amount of credit that the financial institution can avail
- The type of credit
- The parameters the financial institution uses for providing credit, both for sesame and rotation crops and both for conventional practices and for recommended agricultural practices (which are more costly per hectare).

**The results of the analysis of the credit that can be availed in 2019 has to be related to the planning. Should targets be adapted? Should local branches request for more capital for financing the kebele plans?**

**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 acreage (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
- ...
- ...
- ...