

Sesame importers and business consultants from Europe and local exporters visit northwest Ethiopia



About this newsletter

The purpose of the SBN newsletter is to provide relevant and timely information about the overall activities of the SBN and its Support Programme.

In this issue we would like to highlight the major activities that have been taken place between July and October 2015

Inside this issue

Row planter demonstrated.....	2
Collaboration agreement with SBCs.....	2
Training on mung bean production.....	2
Regional field days held in North Gondar zone.....	3
Radio broadcasting agreement renewed	3
Benefits of sesame oil for people with high blood pressure and diabetes.....	4
Improved sesame technologies rolled out.....	5
Interview with Mr. Ryan Powers	6
Sesame marketing: ECX and export prices	7
GARC conducts different research activities.....	8
Upcoming activities.....	8

The Netherlands-African Business Council (NABC), together with the SBN Support Programme, organised a two-day field visit to sesame producing areas of northwest Ethiopia for importers and business consultants from Europe and for local Ethiopian exporters from the 6th – 7th October, 2015.

According to Mr. Hans van den Heuvel, agricultural counsellor of the Embassy of the Kingdom of the Netherlands in Addis Ababa, the objective of the mission was to bring Ethiopian suppliers and European buyers of oilseeds and pulses together so that they will be able to develop concrete business opportunities. It was also aimed at giving insights to participants about the current state of affairs and how the oilseeds' and pulses' sectors can develop in the years to come.

In the first day of the mission, presentations and discussions were made on topics such as: companies' profiles; sesame production and marketing in northwest Ethiopia, especially by farmers' cooperative unions; main challenges of the Sesame Business Network; and what the SBN Support Programme has been doing to support stakeholders. Regarding the latter, sesame marketing-related research activities and results

and the potential of organic sesame production in the country for generating a premium price were discussed.

Participants of the mission visited Ambasel Trading House PLC's sesame processing plant in Gondar; research activities being undertaken on Sanja testing station of Gondar Agricultural Research Centre (GARC); Tegede *woreda*, where sesame is grown; Seroka *kebele* sesame spot market; and the recently installed sesame cleaning machine of Dansha Awrora Farmers' Cooperative Union.

Participants included importers and business consultants from Europe, namely: Neilos Trading PLC; DLV plant/GreenQ Agro-business; ED Organics; Flavori; Global Networks Solutions SAGL; and Lithos Spices. Participants from Ethiopia were drawn from: DH Geda Trade and Industry PLC; Edau International Trading (ADAMA); Netco Trading PLC; Dehub Cooperative Federation; Tenaw Alehegn Import and Export; Anley Alem Seyoum Import and Export; the farmers' cooperative unions of Tsehay, Selam, Dansha Awrora and Setit; and finally researchers and staff members of the SBN Support Programme.

Sesame row planter demonstrated

The SBN Support Programme is popularising recommended agricultural practices for sesame production in northwest Ethiopia. Row planting is one of the essential steps of the recommended package for improving sesame yields and quality. Thus far, adoption rate of row planting is low due to its labour and time consumption and unavailability of row planters. To ease the burden and transform sesame production practices, the SBN Support Programme has approached different companies to introduce tractor-mounted row planters from abroad for large-scale farmers and to develop animal-driven sesame row planters within the country for small-scale farmers.

Different types of planters were evaluated and demonstrated to farmers in Abrehajira, Metema and Humera areas. While some farmers were able to witness the planters in action, others visited plots afterwards to see the results. Among the demonstrated tractor-mounted row planters for large-scale farmers were: NARDI precision



One of the row planters during demonstration

row planter; Baldan seed driller; SFOGGIA precision row planter; and SFOGGIA seed driller. For small-scale farmers, prototypes developed by Rhea Composites (the Netherlands based company) and local made row planter by Tegegn PLC, were tested and demonstrated to sesame farmers and

professionals in northwest Ethiopia.

The testing and demonstration of sesame row planters were conducted in collaboration with Mamaye Agricultural Development PLC; Humera Agricultural Research Centre (HuARC); Rhea Composites and Ultimate Motors.

Training on mung bean production

During the 2015 production season, some sesame producing areas of Western Tigray zone, including Adebay; Rawuyan; Maykadra; and Bereket, experienced serious rainfall shortages. This affected many sesame farmers, who were forced to reseed their sesame fields, in some cases even up to three times, but to no avail. Late in the production season, following the advice of professionals, a considerable number of farmers resorted to planting early maturing crops such mung bean.

Since mung bean is a relatively new introduction to the area, most farmers do not have the knowledge and skill to produce it. Due to this, the SBN Support Programme in collaboration with Kafta Humera Office of Agriculture and HuARC organised one day training for farmers and professionals on the

recommended mung bean production package at Rawiyan and Adebay clusters on September 19, 2015.

The objective of the training was to increase farmers, development agents and *woreda* experts' knowledge on improved mung bean production.

Eighty farmers and fifteen development agents and *woreda* experts attended the one-day training.

Participants of the training raised questions regarding markets for their future mung bean harvest. Feedback was given that the crop is registered on the Ethiopian Commodity Exchange (ECX) and that there is possibility of finding buyers. The SBN Support Programme is also working on marketing aspects of important potential rotational crops for sesame farmers.

SBN Support Programme has signed collaboration agreement with SBCs

To strengthen the local sesame business clusters in northwest Ethiopia, the Support Programme has signed collaboration agreements with 34 farmers' primary cooperatives. These cooperatives are captains of the different clusters. The agreements include financial support in strengthening clusters; sharing experiences within and among clusters; and further scaling out the '20 Steps' improved sesame production technologies package among farmer members of the primary cooperatives (for more information about the 20 Steps, please visit <http://sbnetiopia.org/brochures/>).

Sesame farmers' field days held in North Gondar, Amhara region

SBN Support Programme, together with GARC and Metema and Tach Armachiho *woreda* Offices of Agriculture, organised regional farmers' field days in Metema and Tach Armachiho *woredas* from September 19-20, 2015. The two-day field visit was organised with the objective of showing farmers, *woreda*, zone and regional officials, and other stakeholders of the SBN, that the rolling out activities of the '20 Steps' sesame production technologies is yielding promising results.

During the first day, led by the professionals from Metema *woreda* Office of Agriculture, participants of the field day visited demonstration plots of sesame and rotational crops at two farmer training centres (FTCs) and at model farmers' fields at Das and Kokit *kebeles*. The development agents who run the demonstration plots explained about the activities they have been conducting at the two FTCs. Visitors got the chance to compare the results of applying the '20 Steps' with traditional farming practices. They also visited the crop rotation trials and other research activities run by *woreda* Office of Agriculture and GARC. Afterwards, participants visited the Metema research centre in which GARC undertakes different research activities with the support of the SBN Support Programme. Among the activities are: variety selection; fertiliser application; and pest and disease control trials.

The second day of the field visit took place in Tach Armachiho *woreda*. Participants visited the FTC at Filwuha *kebele*, Sanja cluster, where sesame is planted by both traditional and improved production techniques. They also visited the research site of GARC, in which a number of research activities has been conducted on sesame and other rotational crops. What is more, participants visited demonstration plots of some model farmers in Ashere cluster who have employed the '20 Steps' improved sesame production technologies on one hectare of their land.

Finally, all visitors including, among

others: farmers; professionals; researchers; and administrators, came together and discussed the progress of the scaling out of improved sesame technologies in the region in general. The discussion was led by Dr Abrham Abiyu of Amhara Agricultural Research Institute (ARARI), Dr Shemelash Yeshaneh from Amhara region Bureau of Agriculture and Dr Geremew Terefe, SBN Support Programme national coordinator.

Several field days have been organised at *woreda* and *kebele* levels in both North Gondar and Western Tigray zones.



Participants while visiting the Metema research centre

The SBN Support Programme renews the sesame radio broadcasting agreement

The SBN Support Programme has recently renewed its sesame radio broadcasting lease agreement, with Dimtsi Woyane PLC and Amhara Mass Media Agency.

The Support Programme, in collaboration with Dimtsi Woyane PLC and

Amhara Mass Media Agency, has been airing "white gold", the sesame-related radio programme, since May 2014 in Tigrigna and Amharic languages.

The programmes are meant to support the sesame sector stakeholders in Amhara and Tigray regions by giving up

-to-date and relevant information about the production and marketing activities of the SBN. The information follows the seasonal pattern of sesame production and marketing activities.

Sesame oil has significant benefits for people with high blood pressure and diabetes

In this column, we highlight the use of sesame in the different parts of the world. For thousands of years, sesame seeds have been a source of food and oil. Sesame is very nutritious and healthy. It is unique in taste and aroma. It is proven to have medicinal value in treating diabetes, high-blood pressure, and certain other diseases. In this issue, we would like to share with you, research findings about the benefit of sesame for people with high blood pressure and diabetes.

Sesame seeds and oil have long been categorised as traditional health food in India and some East Asian countries. Researchers and commentators pointed out that sesame oil improves hair and skin health, stimulate strong bone growth, reduce blood pressure, improve heart function, manage anxiety and depression, protect infant health, boost dental health, prevent cancer, improve the digestive process, and lower inflammation.

Sesame oil is rich in proteins, carbohydrates, vitamins, unsaturated fatty acids, amino-acids and fibre. It has antioxidant and antihypertensive properties. Researchers evaluated the effect of sesame oil in hypertensive (having abnormal high blood pressure) and diabetes patients on medication in combination with either hydrochlorothiazide or atenolol (these are drugs which are used to treat patients with high blood pressure) as antihypertensive therapy.

The result showed that, not only did sesame oil have a marked effect on decreasing blood pressure, but it also had an effect in lowering the blood sugar level of type 2 diabetes mellitus patients. The total cholesterol level of those patients, who received only sesame oil, was dropped by 20%. LDL (low-density lipoprotein cholesterol, also called "bad" cholesterol) dropped by 33.8%, and triglycerides (fats carried in the blood from the food we eat) dropped 14%. In those who were receiving sesame oil and taking the aforementioned drugs simultaneously, the number was even better; the total cholesterol level was dropped by 22%, LDL by 38% and triglycerides by 15% respectively. HDL (High-density lipoprotein, also called "good" cholesterol) increased 15.7% in those patients who were taking sesame oil alone and 17% in those receiving the combination of oil and drug.

Other studies also show that sesame oil helps to reduce the level of blood glucose. In a 2005 published paper, Ramesh et al reported the result of the research conducted on the influence of sesame oil on blood glucose in rats. They found that, after 42 days of eating a diet supplemented with sesame oil, blood glucose of rats with chemically induced diabetes dropped greatly.

In 2006, Sankar et al reported the results from their pilot study on 40 hypertensive diabetics that found eating sesame oil caused significant effects in hypertensive diabetics medicated with atenolol and glibenclamide drugs.



The patients switched to sesame oil for cooking for 45 days at which point they switched to other oils like palm or peanut oils for another 45 days. During the sesame oil portion of the study, their blood pressure decreased remarkably. When oil substitution was withdrawn, blood pressure rose again. During the sesame oil phase of the study, body weight, body mass index, girth of waist, girth of hip, and waist: hip ratio decreased. So did plasma glucose, hemoglobin A1c, total cholesterol, bad cholesterol and fats carried in the blood.

Given these results, it seems reasonable to suggest type 2-diabetic patients try include sesame oil in their diets and see if this can help them maintain a healthy level of blood sugar.

Source

Jacob Schor. <http://naturalmedicinejournal.com/journal/2011-03/sesame-oil-and-diabetes>.

Ramesh B, Saravanan R, Pugalendi KV. Influence of sesame oil on blood glucose, lipid peroxidation, and antioxidant status in streptozotocin diabetic rats. *J Med Food*. 2005; 8(3):377-381.

<https://www.organicfacts.net/health-benefits/oils/sesame-oil.html>

Improved technologies rolled out to twice as many sites during the 2015 production season

In 2015 production season, the demonstration of the '20 Important steps to double yields and improve quality of sesame' production technologies package in northwest Ethiopia took place in around 1,950 locations. This is a more than a 100% increase compared to last year. The progress has been promising. Several demonstration sites, in particular, in Quara; Metema; Tach Armachio; and Tegede *woredas* of North Gondar zone and Tsegede; and Wolkaiet *woredas* of Western Tigray zone have been in good shape. While harvesting has already started in many places of North Gondar zone, other plots are in their maturation stages. In Kafta Humera and West Armachiho *woredas*, rainfall started very late. This affects the results achieved at certain demonstration sites. Farmers were forced to reseed their sesame fields, some even for a third time. With regards to their plots, model farmers have the following to say.

"I am expecting up to 10 quintals from the one hectare plot in which I applied the '20 Steps' technologies"

Mohammed Zeynu, a young farmer from Das *kebele*, is one of the model farmers in Metema *woreda*, who hosts a demonstration plot in 2015. He has followed the recommended '20 Steps' sesame production guide on one hectare of his land. Mohammed's sesame plot was visited during the regional field day. Mohammed explained to visitors that he had, thus far, followed the steps starting from land clearing and first ploughing to that of third weeding. He said that, apart from his one hectare land in which he employed the '20 Steps', the sesame he planted on four additional hectares applying traditional practices is highly affected by wind. He is impressed by the height of the sesame in his '20 Steps' plot, which reaches up to 1.80



meters. It displays good branching and the number of capsules per plant is high. He added, "I am expecting up to

10 quintals from the one hectare plot in which I applied the '20 Steps' technologies".

"I am going to dry the *hillas* in one place and put them on the plastic sheets."

Mr. Weleslase Desalign, a sesame farmer from Maychea *kebele*, Wolkaiet *woreda*, used to produce sesame by traditional methods. Last year, however, he followed training on improved sesame production technologies. He also participated in field day programmes with the support of Office of Agriculture and the SBN Support Programme. This production season, Weleslase applied improved sesame production technologies on one hectare of his land. He said that, because of the difference that his farm



shows compared with others, many farmers have been visiting him. Weleslase has informed those who visited him about what he is going to do after harvesting. He said, "to reduce [post-harvest] losses, I am going to dry the *hillas* in one place and put them on the plastic sheets". Following his footsteps, 10 young farmers in his neighbourhood aim to practice the same steps during next year's production season.

In the picture

In the picture entertains the profile of individuals, cooperatives, unions, and/or any other service provider organisations for the sesame business clusters in northwest Ethiopia. For this edition, we will cover the interview that we made with Mr. Ryan Powers, who recently visited the northwest Ethiopia sesame producing areas.

On the 6th and 7th of October, 2015, the Netherlands-African Business Council (NABC) and the SBN Support Programme organised 'oil seed and pulses trade mission'. NABC is a network organisation providing the platforms for enhancing business between the Netherlands and Africa through the Netherlands Embassy in Addis Ababa. The main goal of the mission was to bring Ethiopian suppliers and European buyers of oil seeds and pulses together to improve knowledge transfer and to identify investment and trade opportunities. Importers and business consultants from Europe and exporters from Ethiopia visited northwest Ethiopia sesame producing areas.

Mr. Ryan Powers, who works for the importer company High Quality Organics (HQO), is one of the participants of the trade mission. HQO is an importer, manufacturer and distributor of certified organic ingredients and has its headquarters in San Marino, Nevada, USA. He is the general manager for their Netherlands operations. We had a ten-minute interview with Ryan Powers and herewith we invite you to read the interview.



What is your business rationale for coming to the Ethiopian sesame sector?

"We see big potential for spice and oil crops production. There has been a huge gap in the market left by India because their internal consumption is continually increasing and we feel Ethiopians are best prime to pick up that slack in the market. We want to invest in the infrastructure here and financial stability to your farmers. We see a lot of potential."

What is the competitive advantage of Ethiopian sesame?

"Well, you have a very unique advantage in that you have a lot of virgin land, you do not use pesticide, or GMOs, and synthetic fertilisers are not in heavy use here. As being an organic ingredient company that is very important to us and that makes the path to becoming an organic certified producer much easier. If you had been growing crops using a lot of fertiliser and pesticides the situation



would have been different."

What is important for you in a business relationship and how could you achieve that with Ethiopian exporters?

"We believe in true partnership, so we are very transparent in what we charge for the product and what we will be paying for farmers. We provide market data for farmers, provide seed exchange programmes, certification assistance, capital funding for infrastructure development".

Do you think you will do business with Ethiopia? Why or why not?

Yes, I believe it is probably at least a

year may be two to get some pilot projects going, but yes, I believe we will be here for the long term".

What would be your advice to exporters?

"My advice would be, don't allow GMOs into your food chains. It will make it easier to keep the product organic, but I would say continue to focus on quality and the education system of the farmers that you are doing here, which is very unique. I would say continue that process, continue with research, and it will come".

What sesame product do you consume yourself?

"Most of the sesame that we purchase would be hulled and is natural sesame for strict bottling purposes to sell to a manufacturer who is going to make tahini (sesame paste) or sesame oil. We do not use it in the US very much, it is more of a specialty item, but in Europe we see a huge potential for it".

Finally, what is your impression about this mission?

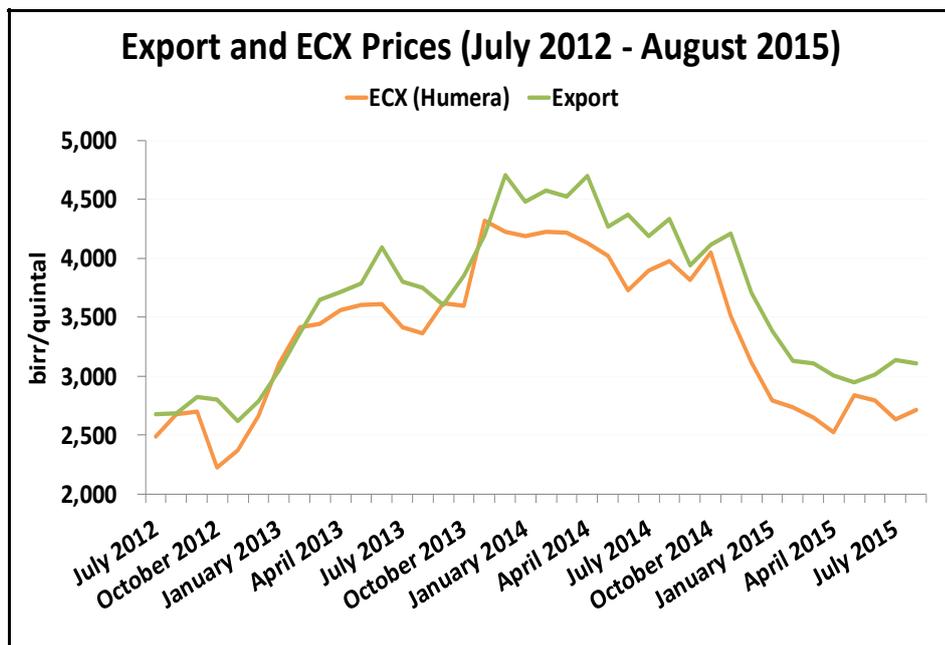
"Very educational, I would say enlightening. We got really a good idea how the infrastructure works here from the farmer to cooperatives to exporters. It was my first time in Ethiopia, it was a very educational experience for me and we want to arrange similar missions for different sectors also".

Sesame marketing: ECX and export prices

To understand market dynamics in the sesame sector, the SBN Support Programme keeps track of prices at different market-gates. The prices have been volatile in the past years, as can be seen in the figure below where the average ECX prices (Humera warehouse) and sesame export prices for July 2012 – July 2015, are displayed.

Prices at different ECX warehouses. The prices differ per ECX warehouse; sometimes this is more significant at certain periods than others. Since the end of 2014, two new warehouses were added at Abrehajira in Mirab Armachiho *woreda* and Shiraro in Tahtay Adiyabo *woreda*. These are also trading whitish Humera-/Gondar-type sesame (WHGS).

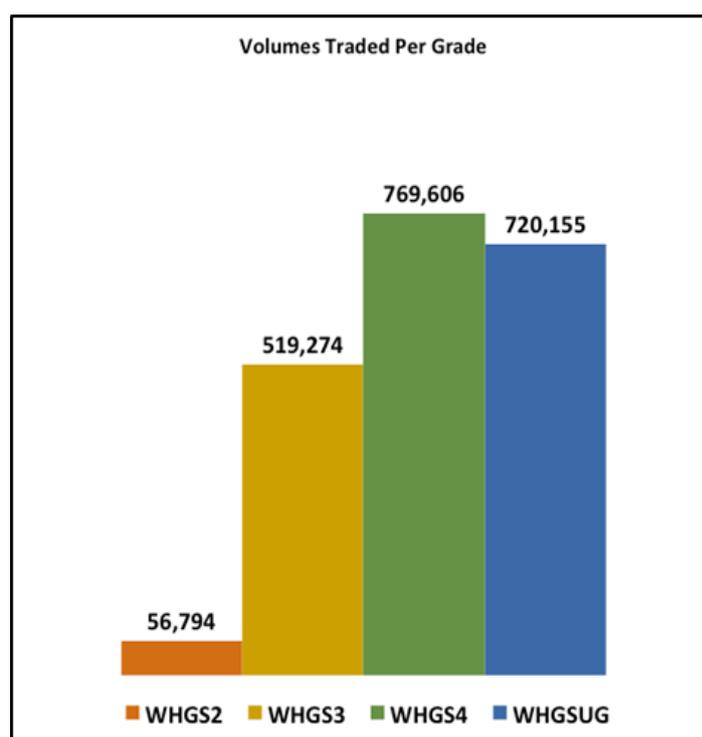
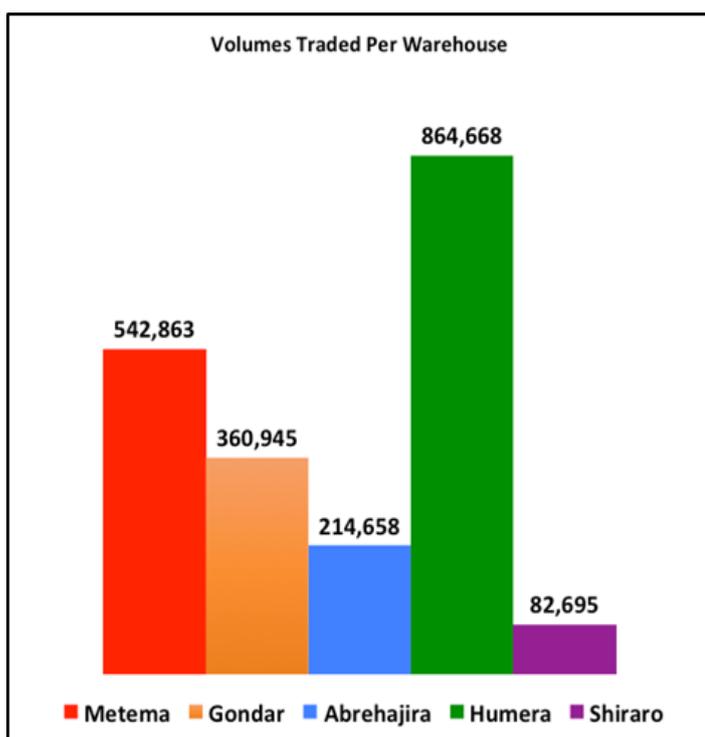
Prices and volumes at different ECX warehouses. Most of the time, Humera warehouse shows the highest average price. Shiraro and Abrehajira were almost always offering the



lowest prices. However, this does not say much about the quality that was traded in each warehouse. In fact, the crop harvested in 2014 was very often graded as WHGS4 or lower (77% of

WHGS traded volume). Hence, whitish Humera-/Gondar-type sesame is decreasing in quality, which could also be a reason for price decline in the world market.

Quantities traded (July 2014 – July 2015)



GARC conducts different research activities

In 2015 production season, GARC has been conducting different research activities on variety selection, fertiliser application, and pest and disease control trials; with the support of the SBN Support Programme.

In order to produce quality sesame seeds, GARC has been doing sesame variety verifications. Very recently, two new sesame varieties have been evaluated by the national seed release committee and the centre is waiting for the result. GARC has also been collecting and screening quality sesame seeds among the local ones.

To select best performing varieties, from the rotational crops for sesame, GARC has organised participatory variety selection of sorghum, haricot bean and soya bean in Metema and Tach Armachiho *woredas*.

Regarding soil fertility management, the centre is doing a comparative evaluation of blended or balanced fertiliser in Metema and Tach Armachiho



National seed release committee discussing with farmers

woredas. By taking into account the interest of different bodies towards organic sesame product, the centre is conducting research activities on the effect of compost and farmyard manure on the yield and yield components of sesame and it is also

evaluating the response of soya bean to particular rhizobium strains.

For pest management, GARC has been working to demonstrate available technologies for the management of striga in sorghum fields.

Upcoming activities

- ◆ Launching workshop for improved access to finance in the sesame value chain
- ◆ Evaluation of production season and field days
- ◆ Agronomic and economic field data collection and doing analysis
- ◆ Organising regional workshops (Amhara November, 28, 2015; Tigray December 1, 2015)
- ◆ Organising national workshop (December 17, 2015)
- ◆ Following up the marketing activities of this season

Contact us :

For more information, questions and comments you can contact us through: sbnethiopia@gmail.com

More information about the SBN and its Support Programme can also be found on the SBN website:

<http://www.sbnethiopia.org>

You can also find us on our facebook page: <https://www.facebook.com/SBNEthiopia>

Twitter: <https://twitter.com/SBNEthiopia>

Producer: Anteneh Mekuria Tesfaye

Inputs from Andualem T., Aregawi G, Hagos T., Oscar G., Tewodros N. and the rest of the SBN Support Programme team

To subscribe to the online version of the SBN newsletter please contact: sbnethiopia@gmail.com