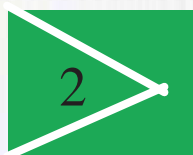


Ethiopia will be a leading supplier of sustainable cotton matching the requirements of the national and international textile industry.....



The Livestock and Fishery Extension is a Lead Executive under the Livestock and Fishery Resource Development Sector of MoA.....

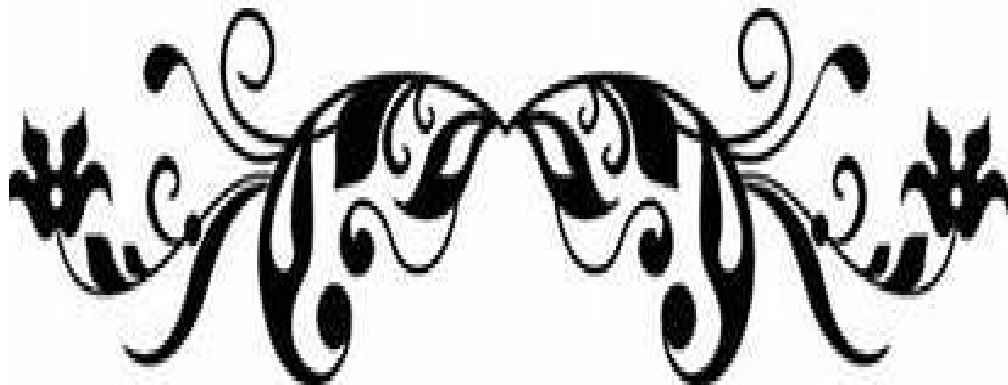


Sustainable livestock production in Ethiopia is highly dependent on the availability of quality feed and forage resources, production of adequate quantities of good quality forages, better nutrition, genetics, and animal health.....

**Together we can make a difference !**

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# About RED&FS

**R**EDFS SWG is an acronym for the Rural Economic Development and Food Security Sector Working Group. It is primarily Government and Development Partners' coordination platform for the broader agriculture sector coined in the context of the Ethiopian Food System Transformation. The primary objective of the REDFS is to jointly review sector level implementation status and coordinate efforts of various Development Partners supporting the sector

The REDFS platform is governed by Paris Declaration principles and Busan Commitments. Since its establishment the REDFS has maintained a three-layered structure having an Executive Committee (an oversight body), Technical Committees and Task Forces. The SWG is currently Chaired by H.E. Dr. Girma Amente, Minister for the Ministry of Agriculture and Co-Chaired by two DP representatives, notably Mr. Mawira Chitima from IFAD, and Mrs. Carlotta Preisis from the German Embassy.

The RED&FS SWG is assisted by the Secretariat whose main responsibility is to provide overall program support for the different RED&FS's structures with major roles in communication, networking, knowledge management and coordination.

This Newsletter, as part and parcel of the secretariat's responsibility, is prepared through a series of consultations with all providers of information. We hope such information will enable you to know and get insights on the overall flagship programs and projects of MoA and that of DPs' affiliated NGOs which eventually would serve you as an avenue for further collaborative works.

## National Cotton Development Strategy (2017- 2032)

The National Cotton Development Strategy (NCDS, 2017-2032) has been developed through consultative process involving consultations with key stakeholders. The vision of the strategy is “An internationally competitive, equitable, prosperous and sustainable cotton sector contributing to economic growth of the country”.

The overall goal of the Ethiopian cotton sub-sector, is to be as renowned worldwide as that of Ethiopian coffee by 2023. In effect, Ethiopia will be a leading supplier of sustainable cotton matching the requirements of the national and international textile industry thereby contributing to the overall development goal of the country.

Thus, the National Cotton Development Strategy (NCDS) aims at:

At the end of the implementation period of this strategy by 2032, the Ethiopian cotton sector will be:

- **Branded:** Ethiopia will be a world leading supplier of differentiated quality cottons highly demanded in premium markets throughout the cotton and textile value chain;
- **Resilient:** Ethiopia’s cotton sector will be well equipped to face the existing and future economic, environmental and social challenges;
- **Responsible:** Ethiopia will be the producer and supplier of environmentally and socially responsible cottons to the local and international markets;
- **Transformative:** Ethiopia’s cotton sector will be more innovative to reach new levels of performance that transforms productivity, competitiveness and profitability of the cotton, textile and apparel industry;
- **Inclusive:** Ethiopia’s cotton sector will be highly regarded not only for its sustainable way of cotton production but also for enhancing the livelihood and welfare of the community and all actors along the value chain with fair and equity share of the benefit obtained from the sector.

- Enhancing industry performance, competitiveness and sustainability through increased productivity, quality improvement, capacity building and institutional development;
- Bringing transparency to the local cotton market, provide information relevant to the solving of problems and to foster cooperation in the achievement of common objectives by bringing together all stakeholders of the cotton industry.
- Assisting stakeholders in fostering a healthy cotton economy in Ethiopia.

The National Cotton Development Strategy (NCDS) provides the Federal Democratic Republic of Ethiopia with a detailed Plan of Action to achieve growth in the sector within the next fifteen-year period (2017-2032). It is articulated around five strategic objectives prioritised as follows:

- “Improve the policy and institutional environment to raise the efficiency and the competitiveness of the cotton value chain”.
- “Increase transparency along the cotton value chain”.
- “Promote and manage environmentally and socially sustainable cotton supply chains”.
- “Raise the competitiveness and the profitability of cotton production”.
- Strengthen Ethiopia’s focus on investment as a vector for growth and integration in the cotton value chain”.

The target to reach after full implementation of the National Cotton Development Strategy (NCDS) is to be among the top producers of sustainable quality cottons in the world by 2032.

By then, the target is to grow cotton on one million hectares, which is half of the land area identified as highly suitable for cotton cultivation. Production would reach 2.6 million tonnes of seed cotton, i.e., an 18-fold-increase from the current level, which would produce 1.1 million tonnes of lint and 1.4 million tonnes of cotton oilseeds after ginning.

Each strategic objective is composed of operational objectives to answer specific constraints affecting the sector. Strategic interventions to be conducted to achieve the operational objectives are identified for each priority area.

The strategic plan will be implemented through a multi-year work programme. The strategy will be reviewed on a periodic basis, in order to adjust and improve it based on lessons learnt and changing realities within the sector.

**A** key factor for the success of the NCDS will be the ability to coordinate activities, monitor progress and mobilise resources for its implementation. It is therefore necessary to establish a permanent body representing stakeholders of the entire sector. Therefore, the implementation of the NCDS should be led by a dedicated authority.

Equally important is the strengthening of Ethiopian Cotton Producers, Ginners and Exporters Associate.

Even with institutional structures in place, without suitable capacity development interventions, the Strategy implementation framework will not be able to effectively fulfil the functions it has been assigned .

Most of the interventions considered to address the strategic challenges along the components of the cotton value chain require considerable financial

**Identified themes for intervention, among others, include:-**

1. Quality cotton seed access
2. Improving the quality of cotton
3. Promoting sustainable cotton production
4. Establish fair and transparent cotton marketing system
5. Capacity building of Commercial cotton producers
6. Improve the efficiency cotton research system.



## Livestock and Fishery Development Extension Strategy

Livestock is an integral component of Agriculture and plays a significant role in Ethiopia's socio-economic development. Ethiopia has a huge livestock population with a diverse genetic pool and agro-climate suitable for livestock production, revealing the potential of livestock for the country's economic development. Moreover, livestock is a major source of livelihood for many smallholder farmers, pastoralists, agro-pastoralists, and many livestock value chain actors.

However, the production system is predominantly extensive and low-input-low-output, which limits the returns from and the potential of the sector. This is due to various

factors, including the lack of a livestock extension approach tailored to commodities, production systems, and the value chain, limited access to extension services, and weak extension delivery resulting to low adoption of technologies and improved production practices.

The limited focus on the livestock and fisheries sector vs. crop exacerbates challenges of the livestock sector. With this consent, the livestock and Fishery Development Extension Lead Executive has been established under the Livestock and Fishery Resource Development Sector of MoA.

The Lead Executive among others, has the following responsibilities:-

- Establish and institutionalize a stakeholder linkage platform to improve coordination along the livestock and fisheries extension value chain.
- Provide capacity-building training for extension agents. Develop a new standardized curriculum and provide regular skill-based practical training together with ATVETs with experience sharing and demonstrations for extension agents and community leaders.
- Develop monitoring and feedback mechanisms to assess extension quality and extension agents' performance.
- Develop tailor-made and market-oriented extension packages that are regularly updated and delivered consistently.
- Equip existing services and develop new ones to ensure practical and accessible delivery
- Develop Extension strategies, Manuals and guidelines.
- Establish different livestock extension delivery approaches, eg. Farmers Field school/FFS/, Pastoral field school/PFS/.

Delivery of Livestock Extension services: Areas of focus

- Identification, Compilation, and dissemination of Best Practices at the farmer, pastoral and Agro-pastoral level.
- Strengthen the communication and collaboration of research, extension, farmers, pastorals, and Agro-pastoralists.
- Coordination and strengthening of demonstration of livestock production

at woreda, zonal, regional, and national levels.

- Coordination of experience sharing between Farmers, pastoralists, and Agro-pastoralists at woreda, zonal, regional, and national levels
- Introduce and disseminate new livestock development technologies to farmers, pastoralists, and Agro-pastoralists.
- Organize the Celebration of international and national livestock related events and awareness creation to the communities. e.g., World Milk Day and Egg Day.

The Livestock & Fisheries Extension Strategy which covers the period b/n 2023 and 2033 is now under implementation. The vision of the strategy is to create a sustainable and thriving livestock and fisheries sector, empowered by efficient and effective extension services, driving economic growth, food security, and improved livelihoods.

The strategy has four pillars to target improvement across policy and governance, human capacity, content, and delivery mode of livestock and fisheries extension services.

**Pillar 1:** Policy and governance: Establish an enabling environment for private sector integration through effective and inclusive policy and governance frameworks. This pillar aims to create an enabling environment for private sector integration, while simultaneously implementing an optimal governance structure through an effective and inclusive policy and governance framework. To achieve this, specific interventions are recommended, including creating and institutionalizing a communication platform for value chain actors, establishing separate livestock and fisheries bureaus in required regions, and implementing regulations to control the quality of services.

**Pillar 2:** Human capacity: Foster human capability by implementing continuous training and incentivization mechanism. This pillar seeks to foster human capability through continuous training

and incentivization mechanisms for extension agents. Specific interventions include providing skill-based training for extension agents and developing monitoring and feedback mechanisms to improve motivation and performance.

**Pillar 3:** Content: Customize extension content to address the requirements of diverse production systems while enhancing its comprehensiveness. The content currently delivered in the Ethiopian livestock extension system focuses on livestock production and overlooks other vital aspects of the value chain, including inputs, marketing, processing, and post-production management. It also does not differentiate between the skill levels of small holder farmers versus more commercialized farmers and fails to adjust to contextual challenges. This narrow approach means that there is not comprehensive support throughout all stages of farmers and the value chain and that the diverse needs and requirements of the livestock sector in



**Pillar 4:** Delivery mode: Incorporate innovative and multi-channel delivery methods into extension services, including an improved digital offering. This pillar integrates and implements innovative digital technologies, such as hotlines, and mobile applications, and adds delivery methods, tailored to each production system, to existing modes. To accomplish this, specific interventions are recommended, such as better equipping existing services or developing new services that enable practical delivery in accessible locations, designing a modality to facilitate peer-to-peer sharing of innovative best practices among farmers, and developing mobile extension services specifically tailored to marginalized and high mobile communities.

# Current Status, Challenges, and Opportunities for Improved Forage Production in Ethiopia Strategy

## Background

Livestock production is a crucial component of agriculture that can support livelihoods and food security of large numbers of people in developing world. Likewise, this sector plays a significant role in income generation, food and nutrition security, draught power and source of manure for about 85% of rural populations who depend largely on livestock and crop production systems in Ethiopia. About 15 to 17% of the gross domestic product (GDP) and 37 to 87% of household incomes are contributed from the overall livestock sector, including ruminant and nonruminant production (ILRI, 2010).

Ethiopia has a large livestock population. Despite the large number and importance of these animals, their productivity is low due to a number of factors such as inefficient management, poor infrastructure, poor marketing and credit facilities, feed shortages both in quality and quantity, and health constraints. Among these, shortage of feed is identified as one of the primary constraints in livestock production. One of the recommended profitable options to address this challenge is improved forage production using strategies suitable for a given farming system.

Sustainable livestock production in Ethiopia is highly dependent on the availability of quality feed and forage resources, production of adequate quantities of good quality forages, better nutrition,

genetics, and animal health. Such production factors are the only way to economically overcome livestock feed shortage and improve milk/meat production. Specially, during dry season the main feed resources are standing hays and crop residues in the country (Mengistu et.al, 2016 and Mayberry, D. et.al, 2017).

Green fodder is an essential component of the ruminants' ration to enhance their productive and reproductive performance. In spite of its long history in the introduction of improved forage species, the chance of obtaining green fodder for livestock is minimal.

## Past Efforts on Improved Forage Production in Ethiopia

In the past, considerable efforts were made to test the adaptability of various forage crops under different agro-ecological conditions in different parts of Ethiopia. Consequently, selection of quite a number of useful forages for different agro-ecological zones has been tried out and, different improved forage species have been progressively introduced to local farming communities since 1970 to supplement with the natural feed resources.

Forage development and research dates back to the establishment of agricultural colleges including the then Alemaya College of Agriculture (now Haromaya University) and the then Ambo College (now Ambo University). However, with the establishment of the Institute of

Agricultural Research (IAR) in the mid-1960s, forage research was formally established as a national program (Mengistu and Assefa 2012). Other efforts particularly by the Arsi Rural Development Unit (ARDU)/Chilalo Agricultural Development Unit (CADU) and the International Livestock Research Institute (ILRI), played crucial roles in assisting national forage research and development efforts.

For example, improved forage species, including Elephant grass, Oats, Rhodes grass, Phalaris, Panicum, Buffel grass, Green leaf Desmodium, Fodder beet, Pigeon pea, Sesbania species, have been introduced in an endeavor to increase the amount and quality of available forage and have been promoted in the different parts of the country by different government and non-government institutions since the last decade



(Fikre, H., 2018).

However, adoption of these technologies by smallholder farmers has failed to reach at the desired expectations.

### **Current Status of Improved Forage Production**

Currently, different improved forage species are being used in various livestock production systems. As

a result, the production and use of improved forage is increasing from time to time in different parts of the country. To this end, the Ministry of Agriculture developed a National Feed Resources Development Strategy in 2019. Based on this strategy, it has been possible to provide capacity building focusing on practical training for experts at all levels, model farmers and followers since the last three years in different parts of the country.

Following this, farmers have been able to experience on producing improved forages such as Oats (*Avena sativa*), Vetch (*Vicia sativa*), pigeon pea (*Cajanus cajan*), Tree lucerne (*Chamaecytisus palmensis*), Sesbania (*Sesbania sesban*), Leucaena (*Leucaena leucocephala*), (Desho grass (*Pennisetum pedicellatum*), Guatemala grass (*Tripsacum andersonii*), Rhodes Grass (*Chloris gayana*), and Elephant grass (*Pennisetum purpureum*) and some others

Accordingly, the total annual biomass potentially available for animal feeding has been increasing from time to time. The total annual potential availability of forage [in million tons of dry matter (DM)] is approximately to 180 million tons, which includes 5.8 million tons of stubble biomass, 57 million tons of grazing forage, and 46.9 million tons of crop residues primarily straw and Stover (FAO, 2017). Hay and crop residues, combined with natural grass, account for more than 90 percent of livestock diets in all regions, while the use of improved forages accounts for 0.35 percent, except in the Harari region, where it is 1.68 percent (FAO).

## Challenges and Opportunities

In spite of its long history and the existence of some improvement and exemplary forage production practices, the contribution of improved forage to the total feed resource is still less than one percent due to its low adoption level amongst the farming community.

Factors that affect the adoption of these technologies, among others, include:

- High cost of planting for improved forage seed,
- Lack of adequate seed availability and poor productivity of forage species,
- Lack of knowledge or awareness for improved forage species,
- Limited access to livestock extension services and,
- Lack of integration,

Opportunities for expanding improved forage and fodder production

- The implementation of National Feed resource development strategy and guidelines,
- Government attention for livestock sector such as the launching of Yelemat Turufat,
- Introduction and integration of forage crops in the existing farming system,
- Increased demand for animal-based products such as beef and milk and implementation of zero grazing in some areas of the country due to reduced size of grazing land,

### ***Next step - Actions***

*Major areas of interventions to intensify the possibility of the adoption of improved forage technologies:*

- *Need for strengthening the research-extension-farmers (R-E-F) linkage,*
- *Need for capacity building, including awareness for all concerned at all levels of the structures,*
- *Strengthening extension systems as well as capabilities of smallholder farmers,*
- *Efficient utilization of the cultivated land particularly utilization of fallow land for forage production, and hay and silage making,*
- *Planting or sowing of improved forage crops intercropped with some food crops either in contour strips areas of home steads areas.*
- *Need for conducting comparative studies on economic importance of improved forage production versus food crop production to enhance the adoption of forage in the study areas.*



## The German Development Cooperation Agriculture Program

The Rural Economic Development and Food Security Sector Working Group (RED-FS SWG) serves as a forum to foster dialogue and collaboration between the Government of Ethiopia and its development partners, aiming to propel the agricultural sector towards sustainable growth and food security. Established in 2008, RED&FS operates under a well-structured framework, ensuring effective coordination and alignment of policies and programs.

At the heart of this endeavor lies the German Development cooperation (GIZ), an avid supporter of Ethiopia's agricultural development. Through its comprehensive "Promotion of Agricultural Productivity" (PAP) program, GIZ is working on various projects aiming to enhance productivity, increase income, and foster job creation across different agricultural value chains and related innovations.

The Promotion of Agricultural Productivity program encompasses a diverse array of projects, each tailored to address specific challenges within Ethiopia's agricultural landscape. Projects such as the Global Project "Green Innovation Centers for the Agriculture and Food Sector" focus on improving productivity and sustainability in wheat, faba bean, and honey value chains. Similarly, bilateral projects like

"Strengthening Rural Value Chains" target the enhancement of avocado, onion, and soyabean value chains, contributing to the overall economic empowerment of rural communities.

The "Sustainability and Value Added in Agricultural Supply Chains in Ethiopia (SUVASE) project" focuses on improving the sustainability of the Ethiopian coffee value chain. By targeting multiple coffee cooperatives, the project aims to bridge the gap between global demand for sustainable coffee and local producers. Through activities such as Supporting the Ethiopian Coffee and Tea Authority (ECTA), supporting cooperatives in obtaining internationally recognized certifications, establishing traceability systems, and enhancing marketing capacities, the project seeks to ensure that sustainability remains at the forefront of the entire coffee value chain, facilitating long-term impact.

The program also works on important topics such as agricultural mechanization through the "Agricultural Mechanization for Smallholder Farmers (AMS)" project. By promoting the adoption of modern farming technologies, GIZ aims to enhance efficiency and productivity, ultimately improving the livelihoods of smallholder farmers.

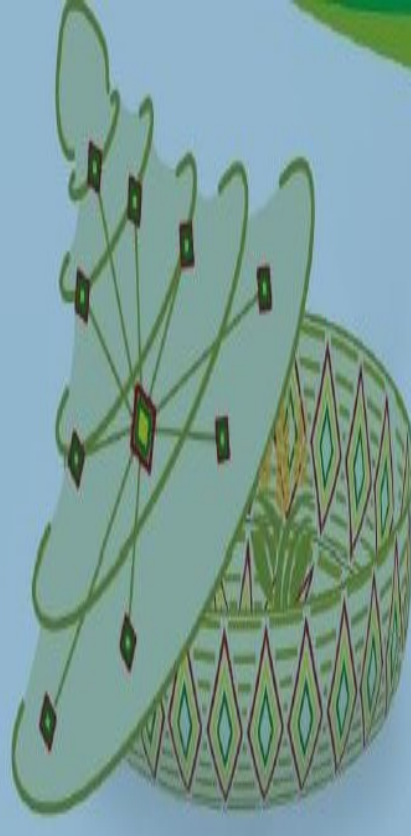
The program places a strong emphasis on knowledge transfer



and capacity building. Projects such as "Supporting Sustainable Agricultural Productivity (SSAP)" focus on providing farmers with access to improved seeds and imparting knowledge on sustainable farming practices, thereby equipping them with the tools to increase yields and adapt to changing environmental conditions.

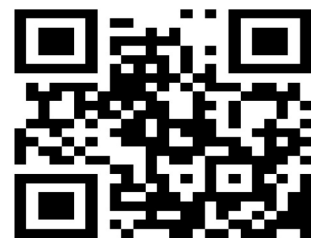
The collaboration between GIZ and the Ethiopian government underscores the importance of international cooperation in driving agricultural transformation. Through the PAP program, GIZ is not only contributing to the country's food security objectives but also laying the groundwork for sustainable development and cooperation goals.

**I**n conclusion, GIZ reaffirms its commitment to strengthening collaboration with the Ministry of Agriculture to ensure that the innovations emerging from our cooperative projects are continuously integrated into Ethiopia's agricultural sector. By leveraging partnerships and addressing key challenges, we strive to foster a more resilient and prosperous agricultural landscape, further enhancing the livelihoods of millions of Ethiopians.



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