

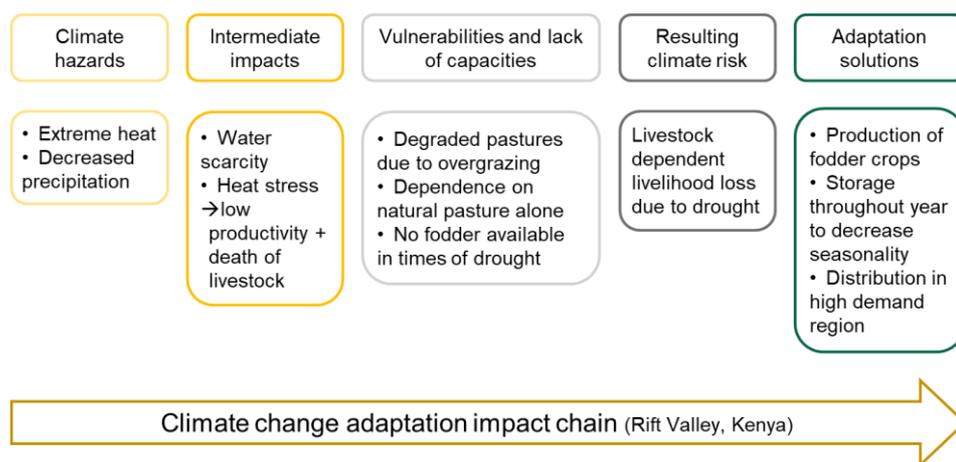
# Fodder Production as an Adaptation Business Case

## - Eor Ekule Dairies Ltd (EDL)

Case information	
Action area:	Adaptation
Focus area:	Financing
Country:	Kenya
Sector(s) involved:	Commercial finance for fodder crops, livestock
Timeframe:	Founded in 2015, ongoing
Case summary:	<p>Eor Ekule Dairies Ltd (EDL) is a commercial cattle dairy company in the start-up phase that has recognized <b>climate change related risks as a business opportunity</b> to develop a new service for other related businesses.</p> <p>Operating in a <b>drought prone region of Kenya</b>, EDL realized that the provision of fodder for the cattle was seasonally at risk, as the company and competitors were relying on natural pastures alone. These go dry during times of low precipitation and extreme heat – projected to be more extreme in the future – and animals produce less or die.</p> <p>The company added the <b>new business line of hay production</b> to its dairy operations and now feeds it to its own herd and sells to neighboring farms as well, increasing the productivity of an entire region.</p> <p>The company received USAID <b>grant funding for business development</b> support and <b>successfully sourced a loan from a local commercial bank</b>. The lending is on purely commercial terms.</p> <p>The project aligns well with <b>Kenya’s Nationally Determined Contribution (NDC) adaptation targets and the country’s National Adaptation Plan (NAP)</b>: As a minimal contributor to global greenhouse gas (GHG) emissions, <b>Kenya’s clear priority is adaptation</b>, specifically to enhance the resilience of agriculture and livestock value chains by promoting climate-smart solutions. The Kenya NAP has a separate chapter on <b>livestock development, given the subsector’s importance for employment</b>. The presented case study contributes to the development of new feed sources, fodder banks and strategic reserves – actions that are of national importance.</p>
Case description	
Background	<p>EDL is a good example of how one company’s climate risk is another’s market opportunity. Independently of a climate vulnerability assessment in their Northwest Kenyan production site (Narok County), they noticed a demand for fodder crops within the local livestock industry. <b>Dairy farmers and others often are forced to sell their cattle or even loose cattle during times of drought</b> as in 2017. <b>EDL provides an alternate source to feed their animals year round, so farmers become less vulnerable to the climate threat of more frequent droughts</b> and their animals tend to be healthier and produce more milk. For EDL, it is an expanding business, now supplying hay to around 250 livestock farmers.</p>

Published by

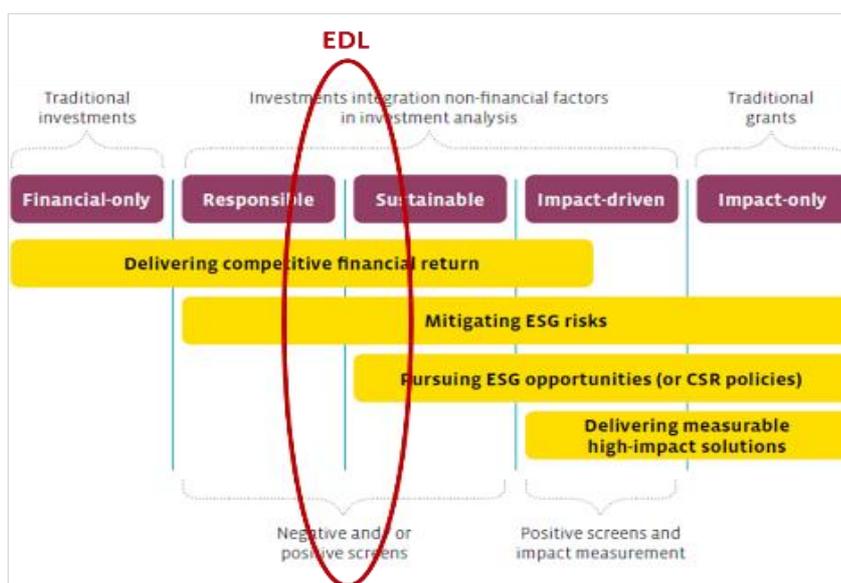
The **adaptation logic** can be summarized as follows:



The dairy industry in Kenya is an important sector that accounts for about fourteen per cent of the agricultural GDP and four per cent of the total GDP. The key to unlock the huge potential and enhance the competitiveness of the Kenyan dairy industry lies with the improvement of feed and fodder systems, especially with respect to pasture management and preservation of fodders.

Presently, there is a **large demand and market for fodder** by both the progressive smallholders and medium scale dairy farmers (15-30 cows). The demand for forage is high due to a commercializing and growing dairy sector in Kenya. The demand is also  **fueled by high milk prices, population growth, growing urbanization and development of an affluent middle class**. The biggest challenge is to ensure that fodder products reach consumers (dairy farmers, horses and other livestock keepers) at affordable prices. The consumers also need to be educated on fodder quality for them to appreciate good hay and also to get value for their money.

**EDL is a mainstream company in the commercial sense, which recognized a market opportunity in the form of unstable feed supply to the local livestock industry. Their core business activities – production, storage and delivery of hay – are ecosystem based adaptation measures for their own dairy operation and happen to be adaptation measures for neighboring stakeholders growing livestock in a drought prone region.**



<b>Activities</b>	<p>EDL first wrote a thorough business plan in order to secure financial and operational support throughout the later stages of the project. After conducting a <b>local market and demand analysis</b>, they decided to invest in <b>quality feed production to ensure best practices in animal production, besides their core business of dairy farming</b>. As a first step, they have invested in <b>production areas for hay, processing machinery and storage</b>.</p> <p>In summary, the following project activities were implemented since 2015:</p> <ul style="list-style-type: none"> <li>• Registration of the company business</li> <li>• Consultation with local stakeholders in community meetings</li> <li>• Leasing and consolidation of land</li> <li>• Preparation of land</li> <li>• Establishment of hay fields</li> </ul> <p>Since 2017, the <b>production of hay, harvesting, baling and marketing to currently over two hundred customers</b> are ongoing activities.</p> <p>In the future, EDL aims at producing a wide range of livestock feeds and has the long-term goal to expand its own dairy production. This venture already creates <b>business opportunities for the local communities</b> and is an agent of change in Narok County.</p>
<b>Institutions involved</b>	<p>Project implementer and equity investor: EDL          Technical assistance grant provider: USAID          Commercial loan provider: Transatlantic Bank Kenya</p>
<b>Cooperation with</b>	<p>n/a</p>
<b>Finance</b>	<p>Technical assistance grants from USAID were provided via the <b>Feed the Future East Africa Catalytic Sustainable Agribusiness Investment (CSAI)</b> project.</p> <p>The company was then able to source a commercial loan from the <b>Trans National Bank Kenya</b> for a hale baling machine. For a small startup company, operating based on purely commercial financing is a great success so far. For future expansion of the project, there is good potential to tap into <b>donor sources for adaptation</b>, if the theory of change is linked to local climate risks.</p> <p>Average investment per hectare: 600 USD          Average total investment per farm: 6,000 – 20,000 USD          Ratio of grant and reimbursable financing: 100% commercial loan</p>
<b>Impact of activities</b>	<p><b>800 acres of improved feed production</b> were established, with the combination of new storage capacity installed. In the process, a total of <b>26 local jobs</b> were created for workers and an additional management team. Currently, EDL is <b>selling hay to about 250 local dairy farmers</b> who, as a result, are less dependent on seasonal natural fodder.</p>
<b>Case learning:</b>	
<b>Why is it good practice</b>	<p>The fact that this <b>purely commercial business model has a positive (adaptation) impact</b> in the value chain is remarkable in itself in the development sphere. The business oriented technical assistance provided has enabled the economic sustainability of the operation, without the reliance on donor project cycles.</p> <p>Hay production and storage is a <b>good adaptation practice</b> in regions with increasing climate variability and resulting fodder shortages. Adding another fodder source for cattle <b>lowers their physical vulnerability</b>, while storage decreases the <b>economic vulnerability</b> of the operation by reducing milk production losses.</p>
<b>Success factors</b>	<p>If farming is seen as a business, it needs a <b>dedicated Chief Executive Officer (CEO)</b> who follows through with a previously laid out <b>business plan</b>. There is ongoing technical assistance support through a third party service provider who helps adjust financial and operational planning and to secure further funding. This type of support can be phased out once enough funding is secured and the business is more mature.</p>

	The developed adaptation product (hay and hay storage) has a <b>high demand in the local market</b> , ensuring the viability of the operation. Last but not least, <b>affordable local financing</b> was made available from a commercial bank.	
<b>Overcoming barriers/ challenges</b>	What were the main barriers / challenges to delivery?	How were these barriers / challenges overcome?
	<b>Information:</b> Making rural farmers aware of a new product can be very challenging. Farmers tend to be risk averse and delay investment decisions.	Hiring a marketing expert to analyze existing and potential future demand helped in defining this barrier. Community meetings were used as a tool to gather information on local demand, as well as a marketing tool for the product once the investment was done.
	<b>Institutional:</b> There is no climate-related crop insurance available in the region, making hay production a high risk endeavor.	This barrier has not yet been overcome. Both EDL and neighboring livestock farmers are still financially affected by seasonal droughts and too much rain at other times. Insurance would add another layer of protection against climate risk.
	<b>Financial:</b> The company is operating with the above described model but has been so far unable to access more funding, which is required for scaling up.	The USAID financed business accelerator program is identifying concessional investors who could provide larger volumes of financing.
<b>Lessons learned</b>	<p>Many climate risks have fairly simple solutions that many in the development world take for granted. Availability of quality feed is taken for granted in Europe, for instance, but is not available year round in Kenya. It is very effective to identify <b>businesses whose entire business model improves a sector's vulnerability</b>.</p> <p>These <b>businesses development process can be accelerated</b> through the support of business management practices, such as financial planning for example.</p>	
<b>How to replicate this practice</b>	<p>The business model can be replicated in any region within or beyond Kenya, by conducting <b>detailed market analyses of sectors and regions affected by climate change</b>. The technical adaptation solutions will vary sector by sector and geographically, but in many cases, <b>private sector driven solutions</b> will likely be an option.</p> <p>Once such options are identified, <b>targeted business development support</b>, tailor made to the need of the selected companies is very much needed in order to ensure the viability and economic sustainability of a project.</p>	
<b>Further information</b>		
<b>Contact for enquiries:</b>	Prof. Francis Muthuri Mbijiwe, Managing Director Eor Ekule Dairy Ltd, PO BOX 1285-00606, Nairobi, Kenya Email: <a href="mailto:corekuledairy@gmail.com">corekuledairy@gmail.com</a>	
<b>Further key resources:</b>	For interested investors, a full business plan and project teaser can be provided upon request from UNIQUE forestry and land use GmbH, the technical assistance service provider.	
<b>Website(s):</b>	Company website: <a href="http://www.narokfresh.co.ke/">http://www.narokfresh.co.ke/</a> USAID Feed the Future Program: <a href="http://www.snv.org/project/feed-future-east-africa-catalytic-sustainable-agribusiness-investment-csai">http://www.snv.org/project/feed-future-east-africa-catalytic-sustainable-agribusiness-investment-csai</a> Commercial lender Trans National Bank: <a href="https://www.tnbl.co.ke/">https://www.tnbl.co.ke/</a>	
<b>Case study author:</b>	Dr. Katalin Solymosi, UNIQUE forestry and land use GmbH	
<b>Case study contributor(s):</b>	n/a	
<b>Edited by:</b>	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH	
<b>References</b>	Kenya National Adaptation Plan 2015-2030: <a href="http://www4.unfccc.int/nap/Documents%20NAP/Kenya_NAP_Final.pdf">http://www4.unfccc.int/nap/Documents%20NAP/Kenya_NAP_Final.pdf</a>  Kenya NDC: <a href="https://www4.unfccc.int/sites/ndcstaging/Pages/Home.aspx">https://www4.unfccc.int/sites/ndcstaging/Pages/Home.aspx</a>	

**Published by:**  
Deutsche Gesellschaft für  
Internationale Zusammenarbeit (GIZ) GmbH

Registered offices  
Bonn and Eschborn, Germany

Dag-Hammarskjöld-Weg 1-5  
65760 Eschborn  
T +49 61 96 79-0  
F +49 61 96 79-11 15  
E [info@giz.de](mailto:info@giz.de)  
I [www.giz.de](http://www.giz.de)

Support Project for the Implementation  
of the Paris Agreement (SPA)

**Author**  
Dr. Katalin Solymosi, UNIQUE forestry and land use GmbH

**Photo credits:**  
© Eor Ekule Dairy Ltd.

**URL links:**  
Responsibility for the content of external websites linked in this publication  
always lies with their respective publishers. GIZ expressly dissociates  
itself from such content.

GIZ is responsible for the content of this publication.

On behalf of:



Federal Ministry  
for the Environment, Nature Conservation  
and Nuclear Safety

of the Federal Republic of Germany

Berlin, 2019