


# Dairy Nourishes Africa

## A Case Study in High Impact Interventions

### Why Dairy


Investment in East Africa's dairy sector can help **transform food systems delivering enhanced nutrition, environmental sustainability, and improved livelihoods** as well as more **inclusive societies**



#### Improve nutrition and food security

Many in East Africa are undernourished and 33% of children are stunted, with dairy consumption 20-50% of the recommended WHO amount


DNA provides access to affordable, safe, and nutritious dairy to vulnerable consumers and develops resilient local food systems



#### Enhance women and youth inclusion

Women make up 70% of dairy jobs, but, with youth, lack access to skills and resources to improve livelihoods or expand earnings beyond the farm


DNA provides inclusive access to skills and empowers women / youth entrepreneurs across the value chain



#### Accelerate climate mitigation

Agriculture is the largest source of GHG emissions (36%), with emission intensity 5-10x the global average

DNA drives adoption of climate-smart agriculture practices that strengthen climate resilience and accelerate pathways to Net Zero dairy

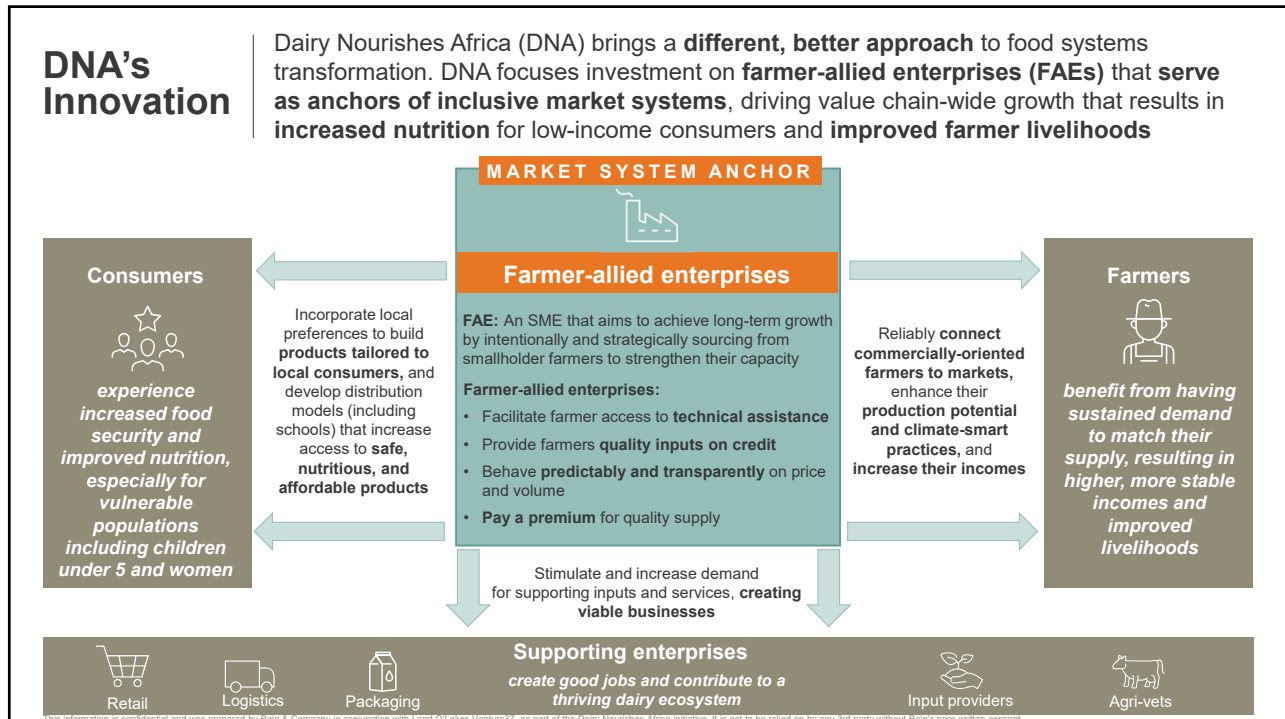


#### Catalyze growth and improve livelihoods

Agriculture is 30-40% of employment, but majority of cattle herd is producing <50% full potential and average processor utilization <50% with many unprofitable

DNA improves farmer incomes to reduce poverty, grows dairy enterprises and stimulates job creation from farm to fork


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## DNA Interventions

DNA has trialed and refined a **repeatable model** to deliver each component of the Strategic Framework, starting with a **pilot in Tanzania in 2020**

Grow Consumer Demand	Drive Enterprises to full potential	Increase Farmer Production
 <ul style="list-style-type: none"> <li>Collaborate with government and industry to <b>grow consumption via behavior change campaigns</b> and consumer <b>market research</b> to inform commercial strategies</li> <li>Launch <b>sustainable models for school milk promotion</b> with processors and government support to build stable demand sinks and future consumers of processed dairy</li> <li>Enhance <b>processors' route-to-market and consumer access to dairy</b> by launching direct to consumer distribution and unlocking point-of-sale cold chain bottlenecks</li> </ul>	 <ul style="list-style-type: none"> <li>Support high-potential processors with <b>multi-year, actionable roadmaps to growth</b> focused on commercial and operational excellence and optimized farmer engagement models, and implement <b>quick hit initiatives</b></li> <li>Facilitate <b>access to best-in-class technical expertise</b> for improving milk quality, product development and plant optimization</li> <li>Facilitate <b>access to finance</b> by providing grant-matching for catalytic investments and linking to investors/funders (incl. lower-cost debt financing)</li> </ul>	 <ul style="list-style-type: none"> <li>Provide technical expertise to <b>enhance processor extension services</b> and drive farmer adoption of <b>sustainable and climate-resilient practices</b> to intensify production</li> <li>Enhance <b>access to inputs</b> (e.g., forage seeds, AI services) by partnering with providers and developing demo training plots</li> <li>Facilitate access to volunteer expert assistance to <b>enhance raw milk quality</b></li> </ul>

This information is confidential and was prepared by Bain & Company in conjunction with Land O'Lakes Ventures37, as part of the Dairy Nourishes Africa initiative. It is not to be relied on by any 3rd party without Bain's prior written consent

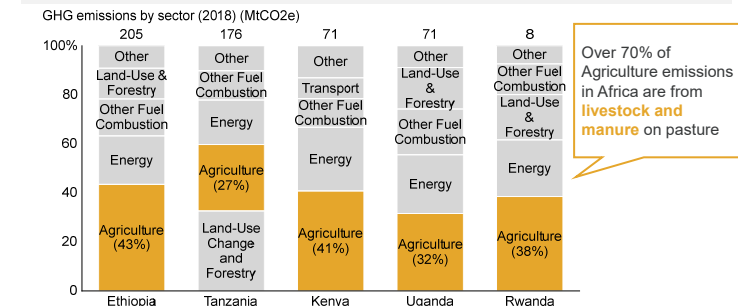
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## Pathways to Dairy Net Zero

DNA is party to the dairy industry's global net zero commitment and our current focus is on reducing **emissions intensity**

### Dairy has a critical role to play reducing carbon emissions

“ Even if fossil fuel emissions were eliminated immediately, **emissions from global food system alone** would make it impossible to limit warming to 1.5°C



Over 70% of Agriculture emissions in Africa are from **livestock and manure** on pasture

(1) Country mitigation commitment

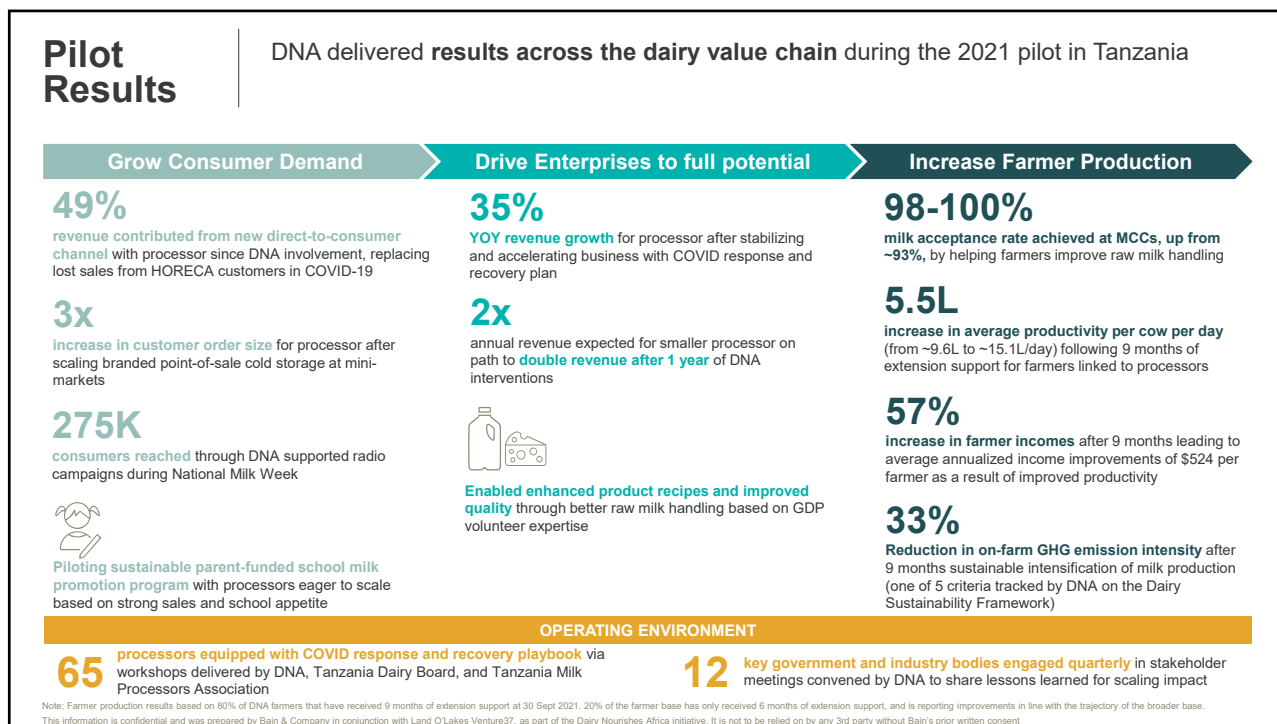
➔ Reducing dairy emissions is key to country mitigation plans

### DNA steps towards dairy net zero

- 1 Reducing on-farm emission intensity by increasing **smallholder milk production, at lower emissions per liter**, to meet growing nutrition/food security needs
  - Reducing livestock **methane emissions** (91% of on-farm emissions) through improved productivity (e.g., feeding, breeding) and methane-inhibiting feed
  - Reducing **emissions from manure, water and soil management** (8% of emissions) by improving farming practices
  - Mitigating **emissions from feed** by improving grazing and land cultivation practices
- 2 Increasing adoption of adapted farming practices to **improve climate resilience**, e.g., fodder crop technologies and conservation, animal husbandry technologies

Notes: (1) Country Nationally Determined Contribution (NDC) is unconditional committed reduction in total emissions vs. BAU by 2030, updated July 2021; Total emissions include land use and forestry (LUCF) except Kenya, where LUCF emissions of -7.62MtCO<sub>2e</sub> were excluded due to data discrepancy between WRI CAIT and other sources showing continued deforestation  
Source: Global food system emissions could preclude achieving climate change targets: Clark et al (2020). GHG emissions including LUCF (2018) were sourced from World Resources Institute Climate Analysis Indicators Tool (WRI CAIT) 2015 - 2018.  
Split of emissions by sector was cross-referenced with FAOSTAT 2015 - 2018.

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You can access the GDP video library [here](#) for more information.