

# Climate adaptation & sustainability

We integrate environmental sustainability principles into DNA's design; leveraging the **Dairy Sustainability Framework (DSF)**, we work to reduce emissions towards the global dairy industry's goal of **Net Zero emissions** linked to **country mitigation plans**

DNA integrates with the **DSF** with a focus on 5 out of 11 key areas of measurement and impact



*Building a vibrant global dairy sector providing safe and nutritious products from healthy cattle while preserving natural resources & protecting livelihoods*



**Development of Markets** that are transparent and fair and support economically viable businesses



**Rural Economies** and farming communities become more economically viable and resilient



**Soil Nutrients** application is managed to minimize impact and maintain soil quality



**Soil Quality and Retention** is managed to ensure optimum productivity



**Greenhouse Gas Emissions** across the dairy value chain are quantified and reduced

DNA works on- and off-farm to **reduce emissions**, aligning efforts with **country mitigation plans**

## Farmers

- **Improve productivity** through optimized feed and improved animal welfare
- **Link SHFs to market** by aggregating output and maximizing consumption of supply
- Implement **climate-smart ag practices** through training
- **Soil nutrient plans** ensure efficient use of manure\*

## Processors

- **Optimize operations** for efficient use of energy and inputs for sustained reductions per liter
- Introduce more **efficient cold-chain** infrastructure
- Transition **away from carbon-based energy** sources\*

## Consumers

- **Reduce freight** through increased national food self-sufficiency
- Reduce **single-use plastics**
- Embed **circular economy activities** as processors scale\*



**DNA links efforts with processors and farmers with country mitigation plans from the Paris Agreement**

\* Longer-term activities incorporated as DNA scales

# Pathway to Low Carbon Dairy

DNA is party to the industry's global Net Zero commitment and will specifically look to craft a pathway to **de-carbonization in Africa** through our work directly with processors and smallholder farmers; our initial focus is on reducing emissions



Strengthen operating environment

Net-zero is achieved when emissions created are displaced by removing the same amount of emissions from the atmosphere

→ **Reducing** emissions through climate smart agricultural practices is the first and most economical step toward net zero

→ **Offsetting** emissions can be costly and is appropriate to larger more established players – a future DNA focus



## Farmers



**Soil nutrient plan** ensures efficient use of manure ensuring GHGs are not vented to the atmosphere



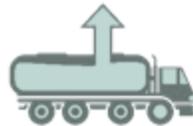
**Improved productivity**, particularly through optimizing feed and improved animal welfare for reduced GHGs/L



**Linking SHFs to markets** by aggregating output reducing incremental carbon costs and reducing waste by ensuring what is produced is consumed



**Instilling climate smart ag** practices through training including discouraging burning of crop residues, and the benefits of biodiversity and circular systems



## Processors



**Optimizing operations** for efficient use of energy and inputs for sustained reductions per liter



**Introducing more efficient cold-chain** infrastructure or reducing the need by focusing on reduced bacterial count



**[FUTURE] Transitioning away from carbon-based energy sources** to renewable sources and distributed grids (applicable to farmer-level as well)



## Consumers



**Reduced freight** due to increasing national food self-sufficiency by linking local producers with consumers



**Reduced single-use plastics** by doubling down on bring-your-own-container distribution approaches



**[FUTURE] Embedding circular economy activities** as processors scale and logistics infrastructure matures

Mix of interventions in consultation with governments and aligned with national sustainability agendas