

INCREASING PROFITABILITY, EFFICIENCY AND SUSTAINABILITY IN LIVESTOCK MANAGEMENT

PRESENTED BY: **KIERAN SUPPLE (CEO – FOUNDER)**

Date: 25/02/2025



Introduction

Transforming Agriculture in Asia with BovinePlus



- **Mission Statement:** "Empowering sustainable livestock management through innovative technology."
- **Vision:** "To revolutionize the agricultural industry by enhancing productivity and sustainability for farmers globally."
- **Impact:** "Committed to improving animal welfare, reducing environmental impact, and increasing farm profitability."



- **Innovation at the core:** "Leading with cutting-edge, data-driven solutions tailored for on the ground farmers."
- **Global Reach:** "Expanding boundaries with strategic deployments in the USA and potential in Asian markets."
- **Recognition:** "Overall winner – Innovation of the year award 2024."

THE FOUNDER



KIERAN SUPPLE
Beef producer

Lives In Ireland



- Born and reared on suckler and beef farm
- Owns and runs his own farm
- Background in computer science, business management, MBA

PERSONAL VISION



- Through technology, we can transform livestock farming into a data-driven industry, where decision is informed and every animal viewed individually.
- Ensuring livestock production is profitable and sustainable into the future

NOTABLE RECOGNITIONS



- Designed, Developed and launched BovinePlus – the first market solution to accurately measure Daily Live Weight Gain (DLWG) and water intake per animal, providing vital data for optimizing feed, health and environmental management.
- Partnership with Enterprise Ireland – recognizing the innovative potential and growth prospects of Reap Interactive.
- Collaborations with global industry leaders in livestock production and management.
- Overall winner '**Innovation of the year**' award for Ireland

Problem Statement

Challenges in Asian Agriculture



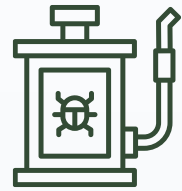
- **Challenge in Efficiency:** "Traditional livestock management practices are labor-intensive and prone to inaccuracies, leading to inefficiencies in both time and resources."
- **Environmental Impact:** "Current livestock management contributes significantly to environmental stress, with a high carbon footprint and inefficient use of water and feed."
- **Animal Health Monitoring:** "Lack of real-time health monitoring leads to delayed treatment, increasing mortality rates and veterinary costs."
- **Data Utilization:** "Underutilization of data in making informed decisions that could enhance productivity and animal welfare."
- **Economic Pressure:** "Farmers face increasing economic pressures to improve productivity without compromising on animal welfare or environmental standards."
- **Global Food Supply:** "Growing global demand for protein requires scalable, sustainable solutions to increase supply without exacerbating environmental impacts."



BovinePlus tackles these challenges by providing real-time monitoring, optimizing resource use, and improving farm efficiency.

Solution – How it works

BovinePlus: Precision Agriculture Technology



◦ **Step 1:** Place compact device in animals environment and connect up water supply

- Suitable for indoors or outdoors systems
- Suitable for extensive or intensive livestock systems



◦ **Step 2:** Every time animal drinks their weight, water and tag number are monitored

◦ **Step 3:** Data is sent to the cloud for assessment

◦ **Step 4:** Analyzed data returned to farmer daily

■ Analyzed data includes (on an individual animal basis)

- Daily Live Weight Gain (DLWG)
- Water quantity
- Health alerts
- Behavior analysis



◦ **Step 5:** Informed management decision on a daily basis include:



- Identify feed efficiency
- Identify efficiency of water usage
- Identify early onset of animal health issues
- Identifying underperforming animals
- Identifying target weight animals
- Reduction in carbon emission by increasing production efficiencies



Solution Overview

BovinePlus: Precision Agriculture Technology



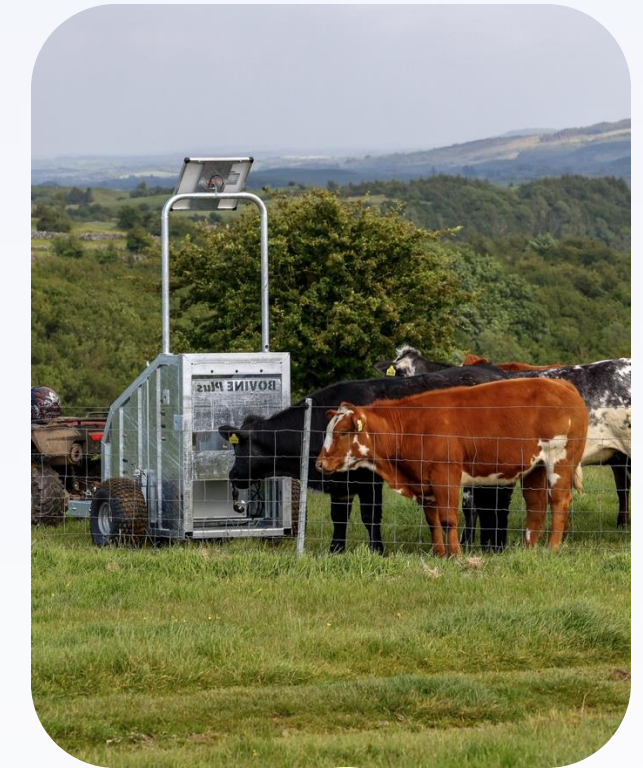
Optimized Resource Use



Data-Driven Insights



Smart Monitoring



Improved Farm Productivity

- *Data-Driven Insights: Uses AI to provide actionable recommendations.*
- *Optimized Resource Use: feed, water, labor, medications*
- *Improved production efficiency and productivity*
- *Reduced GHG emissions*
- *Improved livestock health*
- *Improved Farm Productivity: Helps farmers make informed decisions to enhance sustainability and profitability.*

Technology and Innovation



Innovative Features of BovinePlus

- **Real-Time Data Analytics** – Monitor herd health and performance instantly.



- **Automated Water Management** – Smart systems optimize hydration and resource use.



- **Machine Learning Predictions** – AI-driven insights for early disease detection.



- **Feed Efficiency** – optimize feed efficiency based on animal and environmental conditions



Impact and Benefits



Impact on Sustainability and Efficiency

Higher Yields – Data-driven decision-making increases feed efficiency by 15%



Animal Welfare – continuous monitoring and early detection increases welfare by 25%.

Water Savings – Reduced water usage by 25% through automation.



Carbon Footprint Reduction – Efficient management practices reduces carbon footprint of beef production by 18%

Health Improvements – Reduce veterinary costs by 20% and decrease mortality rates by 30%.



Labor Efficiency – Automated monitoring reduces low value manual workload by 25%.

Scalability and Implementation



Scalability Across Asia

Adaptable for All Farm Sizes – Works for small, mid, and large-scale farms.

Tech-Enabled Expansion – Cloud-based data for easy integration and scale

Regional Customization – Tailored solutions for diverse climates and practices

Support & Training – Localized education programs for seamless adoption.

Partnership and Collaboration Opportunities



Strategic Partnerships for Widespread Impact

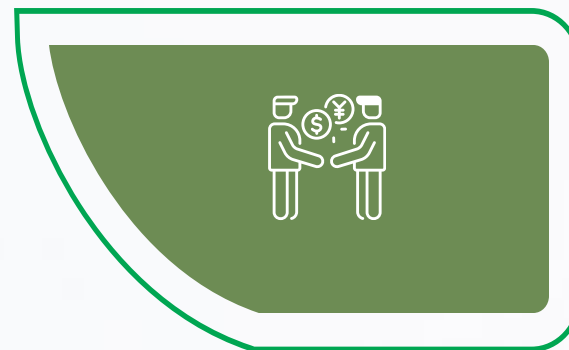
ADB-Funded Projects – Align with sustainable agriculture initiatives.



Research & Innovation – Partner with universities for technology advancement.



Joint Ventures – Collaborate with local firms for market expansion.



Supply Chain Integration – Work with distributors to streamline adoption.



Government Partnerships – Support policy driven agri-tech adoption.



Farmer Cooperatives – Engage directly with farming groups for grassroots impact.



Join Us in Revolutionizing Agriculture in Asia



- **Aligned with ADB's Goals** – Advancing sustainability, efficiency, and food security.
- **Proven Impact** – Data-driven solutions enhancing productivity and resource use.
- **Scalable & Adaptive** – Designed for diverse farming operations across Asia.
- **Collaborate with Us** – Launch projects and drive long-term transformation.
- **Be a Change Maker** – Partner with BovinePlus to shape the positive future of agriculture.



THANK YOU



...relying on herd averages lets profitability slip through the cracks. BovinePlus identifies the uniqueness of each animal, allowing us to make informed, tailored, management decisions. It's not just a game-changer, turning potential losses into measurable gains.

-Eric Reid, Beef Finisher.



<http://www.reapinteractive.com/>



kieran.supple@reapinteractive.com

