#### Mercredi Solution Pvt. Ltd.

Innovating for Fodder Security, Livestock Productivity & Rural Prosperity

# **About the Company**

Mercredi Solution Pvt. Ltd. is a forward-looking Indian enterprise dedicated to developing cost-effective, compact fodder solutions that enhance livestock nutrition, reduce post-harvest waste, and promote rural employment. Our pioneering innovation — Fodder Block Biscuits made from wheat straw and other crop residues — provides an easy-to-store, easy-to-transport feed source for livestock. These fodder blocks expand upon hydration, offering 1 kg  $\boxed{2}$  5 kg nutrient value, especially vital during emergencies such as floods in India or dry seasons in arid regions.

We also promote Fodder Banks for year-round feed availability, ensuring that farmers receive the true value for their straw and by-products while reducing fodder waste and air pollution caused by stubble burning.

## Fodder Types and Relevance to the UAE

## 1. Wheat Straw (Compact and Stored Form)

Wheat straw is one of the most abundant dry fodder sources in India. Through densification and compaction technology, it can be converted into **high-density fodder blocks** or **bales**, reducing volume by up to 70%.

#### **Relevance to UAE:**

- Provides a low-cost, non-perishable feed option for dairy and camel farms.
- Compact form makes it **easy to transport and store** in UAE's desert climate.
- Reduces the UAE's dependency on alfalfa and supports its sustainable water management goals
  by sourcing from India instead of cultivating locally.

## 2. Paddy Straw (Organised Fodder Production)

Paddy straw, often burned as waste in India, can be processed into **nutrient-enriched fodder blocks** using microbial treatment and densification.

# Relevance to UAE:

- Provides an economical and sustainable feed substitute for roughage-deficient regions.
- Minimizes air pollution by preventing open-field burning.
- Offers a reliable bulk feed resource for large livestock units in UAE's feedlot systems.

## 3. Silage Making (Green Fodder Preservation)

Silage involves fermenting green crops like maize, sorghum, or Napier grass under anaerobic conditions to preserve nutrients and improve digestibility.

## **Relevance to UAE:**

• Silage is a moisture-retaining, high-energy feed ideal for camels, dairy cattle, and goats.

- Vacuum-sealed silage bags and bales can be **exported from India to UAE**, ensuring year-round feed supply.
- Reduces spoilage losses and supports **UAE's dairy sector** in maintaining consistent milk yields throughout the year.

## 4. Hay Making (Sun-Dried and Mechanically Baled Fodder)

Hay is made by drying grasses and legumes such as alfalfa, oats, and berseem to 12–15% moisture and baling them for storage.

#### Relevance to UAE:

- Serves as a **lightweight**, **long-shelf-life** feed option suitable for desert logistics.
- Hay bales from India's fodder-rich regions can **complement UAE's imported feedstocks**.
- Promotes balanced nutrition when combined with silage and concentrate feeds in dairy and camel rations.

## **Objectives**

## **Short-Term Objectives**

- Conservation and utilization of dry fodder
- Compacting and nutrient enrichment of dry fodder
- Employment generation and income enhancement for rural farmers

# **Long-Term Objectives**

- Price stability for dry fodder
- Enhanced livestock productivity and prosperity in rural India

#### **Problem Areas & Solutions**

Problem	Solution
Burning and wastage of dry fodder	Protection and utilization of wheat/paddy straw for livestock feed
Difficulty in transportation and storage	Compacting and easy storage via biscuit/block technology
Fodder shortage in rain or lean season	Fodder bank development for consistent year-round supply
Nutritional insecurity for smallholders	Enriched fodder to ensure balanced livestock nutrition
Air pollution from stubble burning	Environmental protection and sustainable fodder use

# **Proposal for Collaboration with the UAE**

The UAE faces unique challenges in food and fodder security due to its arid climate, limited arable land, and dependence on imported feed. Mercredi Solution Pvt. Ltd. offers sustainable solutions through high-quality processed fodder sourced from India. We can ensure consistent supply, lower water footprint, and improved livestock productivity for the UAE's dairy, camel, and equine sectors.

We aim to collaborate with UAE entities to: • Supply compact, nutrient-rich fodder blocks and silage products • Support local fodder processing and technology transfer • Improve feed efficiency and dairy yields • Strengthen food and fodder security under UAE Vision 2031

## **Strategic Advantages**

• India's vast fodder base and 230 million tonnes of annual milk production ensure reliability • 3–5 day India–UAE shipping time reduces cost and improves freshness • Proven expertise in fodder densification, silage, hay, and TMR systems • Export-ready facilities with robust quality control infrastructure

## **Support and Recognitions**

- NIDi EIR KIET Technology Business Incubator (NSTEDB, Govt. of India)
- HDFC Parivartan Grant
- Rashtriya Krishi Vikas Yojana (RKVY), Ministry of Agriculture, Govt. of India

# **Key Team Members**

**Dr. Vikas Kumar** – Sr. Scientist, ICAR–NIAP, New Delhi; Ex-Scientist, IGFRI Jhansi

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