COWMAS

cattle monitoring and analytics system

FOOD SECURITY. FARM LEVEL.

A FARM MANAGEMENT PLATFORM WITH REMOTE LIVESTOCK IDENTIFICATION AND MONITORING.

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CICA

المنظمة الإسلامية للأمن الغذائي
Islamic Organization for Food Security
l'Organisation Islamique pour la Sécurité Alimentaire


«Maksat, you know...
This summer I lost 10 heads from an unknown disease.
And I've got only 40 calves out of 100 cows...
«Areke..
I am also tired..
Vet is a problem, no control of animals without myself.. »

Beef supply chain

Breeder farms

3 000 farms with 650.000 heads of cattle

14 000 farms with 4,2 mln heads of cattle

Cow-calf

Feedlot

~50 feedlots

Meatpacker

Market

Customer

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Data source: Meat Union of Kazakhstan, 2022

Problems

in farms level

Breeder farm

RECORDS
primitive or
no records at all

PROCESSES
Failure to comply with
animal husbandry
technology

SERVICE
poor veterinary services,
zootechnics & farm
management

PRICE
Not fair selling prices

Feedlot

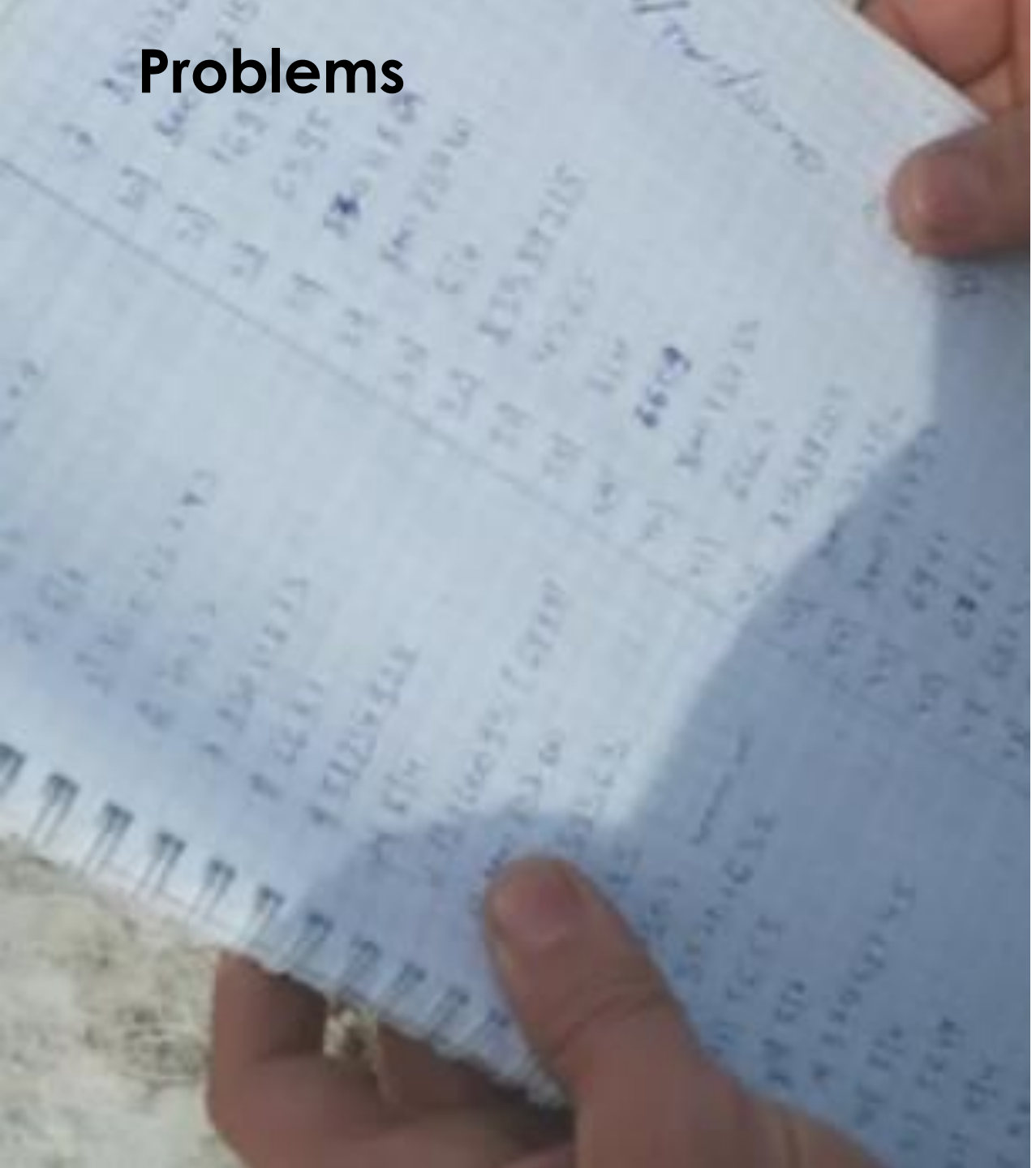
NON-UNIFORMITY
of calves supplied (weight,
age, diseases, poor genetics)

BLACK MARKET
Competition from
household feeders,
bazaars

NO GUARANTEE OF
BULL CALVES SUPPLY
uncontracted livestock

NO TRACEABILITY
from cow-calf farms,
only at feedlot gates

Problems



LIVESTOCK IDENTIFICATION and TRACEABILITY

Real up to up-to-date information about each head at a farm level is necessary

SOLUTION: monitoring and control at a farm level

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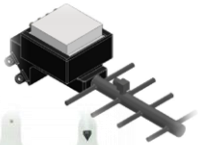
Farm records

Scales and drafters



Long-range reader, **30 meters**

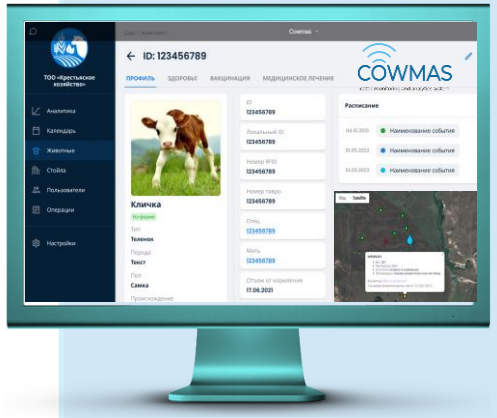
Hand-held reader, **15 cm**

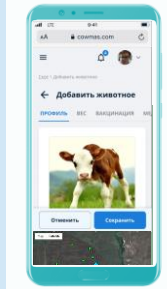
Cameras, Computer vision

Smart-sensors

Breeder small scale farms

Feedlot





Platform 24/7

Feedlot

Meat processing

Customers

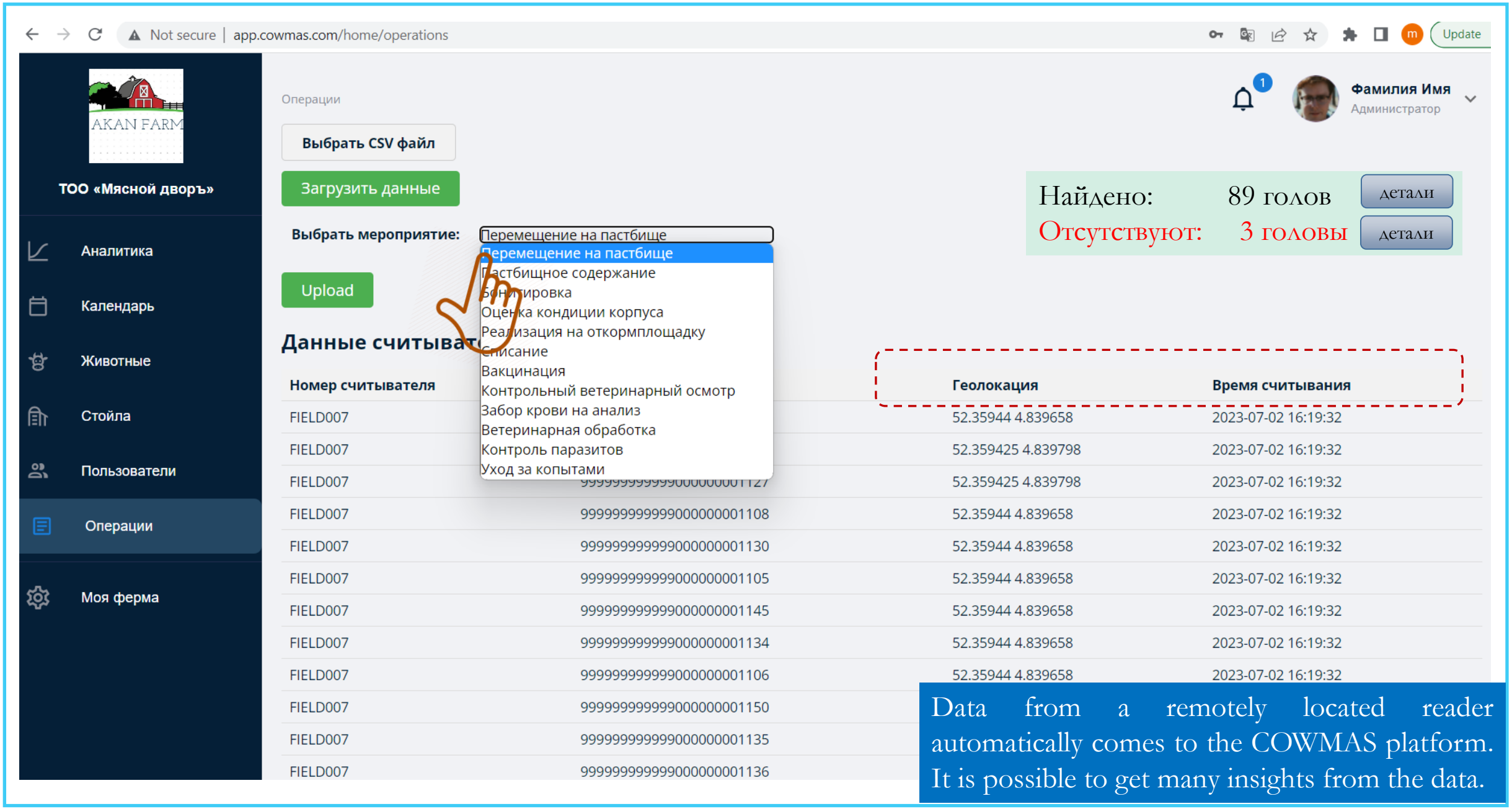
Breeding and genetics

Farm audit

Zootechnical and veterinary support

Call center

Remote livestock identification and counting


Not secure | app.cowmas.com/home/operations
Update
ТОО «Мясной дворъ»
Аналитика
Календарь
Животные
Стойла
Пользователи
Операции
Моя ферма
Операции
Выбрать CSV файл
Загрузить данные
Выбрать мероприятие:
Перемещение на пастбище
Перемещение на пастбище
Пастбищное содержание
Бонитировка
Оценка кондиции корпуса
Реализация на откормплощадку
Списание
Вакцинация
Контрольный ветеринарный осмотр
Забор крови на анализ
Ветеринарная обработка
Контроль паразитов
Уход за копытами
Upload
Фамилия Имя
Администратор
Найдено: 89 голов
детали
Отсутствуют: 3 головы
детали
Данные считыват
Номер считывателя
Геолокация
Время считывания
FIELD007 52.35944 4.839658 2023-07-02 16:19:32
FIELD007 52.359425 4.839798 2023-07-02 16:19:32
FIELD007 52.359425 4.839798 2023-07-02 16:19:32
FIELD007 99999999999900000000001108 52.35944 4.839658 2023-07-02 16:19:32
FIELD007 99999999999900000000001130 52.35944 4.839658 2023-07-02 16:19:32
FIELD007 99999999999900000000001105 52.35944 4.839658 2023-07-02 16:19:32
FIELD007 99999999999900000000001145 52.35944 4.839658 2023-07-02 16:19:32
FIELD007 99999999999900000000001134 52.35944 4.839658 2023-07-02 16:19:32
FIELD007 99999999999900000000001106 52.35944 4.839658 2023-07-02 16:19:32
FIELD007 99999999999900000000001150
FIELD007 99999999999900000000001135
FIELD007 99999999999900000000001136
Data from a remotely located reader automatically comes to the COWMAS platform. It is possible to get many insights from the data.

SUSTAINABLE DEVELOPMENT GOALS

Efficiency

of cattle farming operations

is a key to improve social, economic and environmental impact.

By using

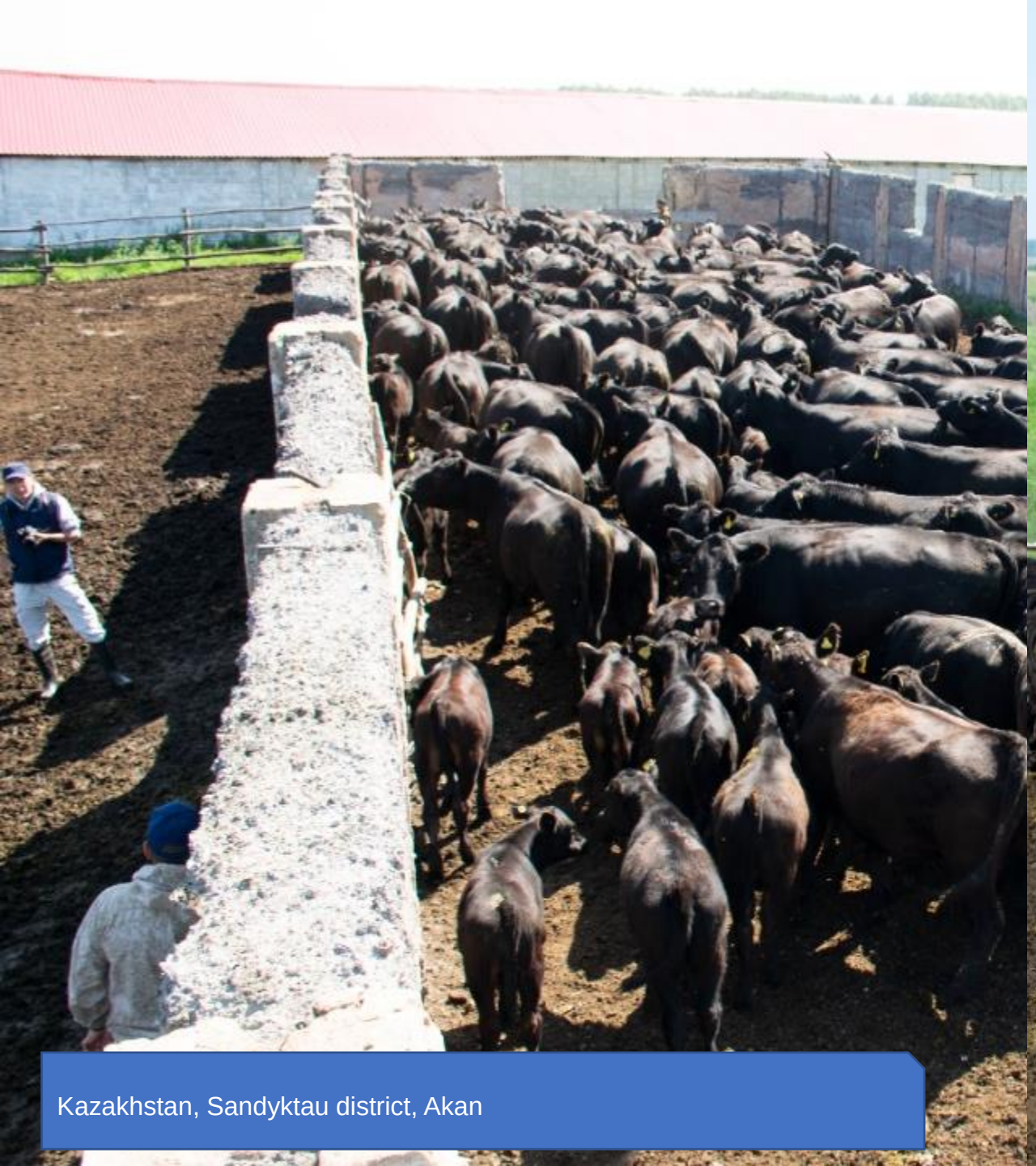
existing best practices and technologies

farmers can reduce GHG emissions by 30-35%

in any given system, region or climatic zone across all species

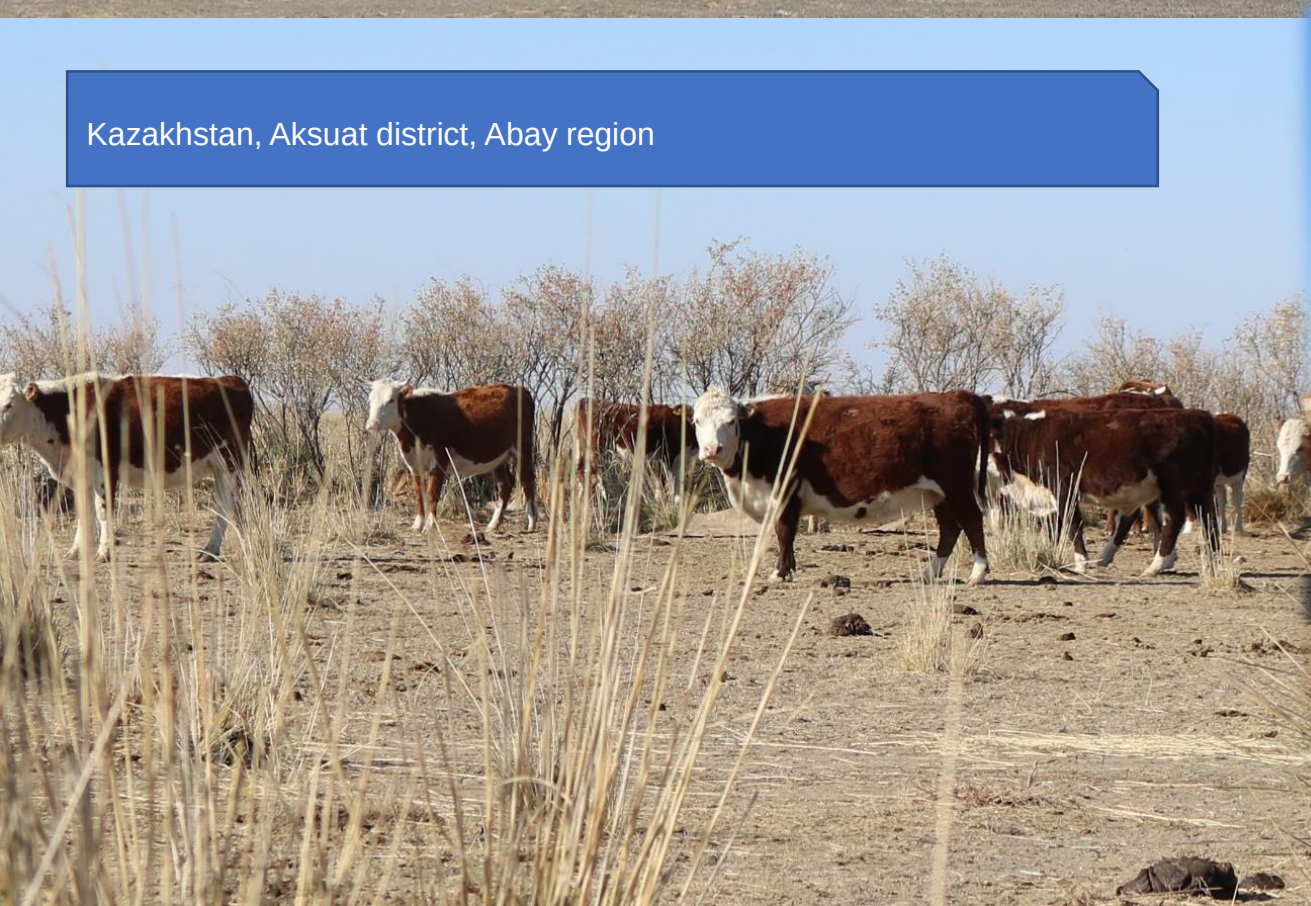
Food and Agriculture Organization of the United Nations

Sources: FAO, 2018: Transforming the livestock sector through the Sustainable Development Goals, p.146, http://www.fao.org/3/CA1201EN/ca1201en.pdf



Kazakhstan, Sandyktau district, Akan

Kazakhstan, Aksuat district, Abay region



Sheep breeding farms cooperative

The cooperative focuses on establishing efficient sheep flocks in the northern regions of Kazakhstan to support the country's lamb meat **export goals**.

BREEDING STOCK 45.000 heads,
5 farms from the Northern Kazakhstan regions

BREEDING GOALS

- ✓To reduce the age of first mating from 18 to 8 months.
- ✓To decrease the frequency of mating from 12 to 8 months.
- ✓To increase the number of lambs per ewe's life cycle from 5 to 12
- ✓To increase the total weight of lambs from 1 ewe from 125 to 370 kg.
- ✓To Improve meat qualities and characteristics of lambs.

PARTNERS

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АСЫЛ ТҰЛІК
РЕСПУБЛИКАНСКИЙ ЦЕНТР ПО ПЛЕМЕННОМУ ДЕЛУ В ЖИВОТНОВОДСТВЕ

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BASE SHEEP BREED: EDILBAY

- ✓ Breed Type: Meat and Wool
- ✓ **Maturity: High**
- ✓ Milk Productivity: 150-180 liters of milk
- ✓ Milk fat content ranging from 3% to 9%
- ✓ Wool: Fiber length of 15 cm, with ewes yielding ~ 2.3 kg of fleece and rams ~ 3.5 kg.
- ✓ **Meat Quality: Tasty, relatively lean, without a specific odor.**
- ✓ Slaughter yield is 50-53%.
- ✓ **Maintenance: Low-maintenance**
- ✓ **Feed Conversion: High**

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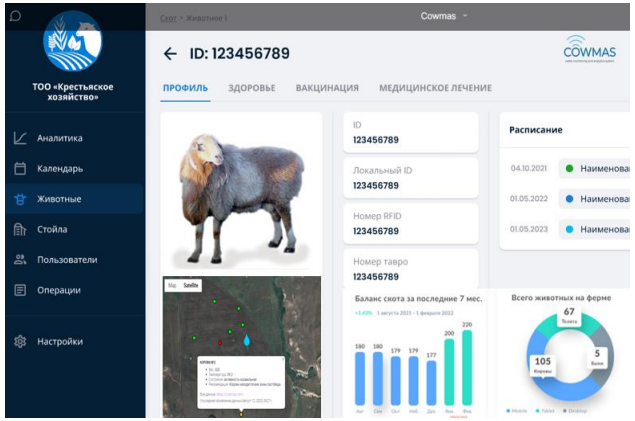
THE MAIN GOAL:

Stability, quality, and homogeneity of lamb meat production and supply to Arab Gulf countries

Sheep breeding farms cooperative



Sheep farm management platform

Artificial insemination

Drafters

Infrastructure

Feeding

Veterinary and zootechnics

Sheep breeding farms cooperative

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MARKET POTENTIAL of MUTTON and LAMB EXPORT TO GULF COUNTRIES

The number of sheep in the Republic of Kazakhstan:

- **20.1 million heads of sheep stock.**
- **167 mln Ha of pasture lands**.

- There is a **deficit in meat (mutton and lamb) of 120 thousand tons in the Arab Gulf countries.**

- Saudi Arabia (18.8 thousand tons),
- Kuwait (8.3 thousand tons),
- Oman (9.1 thousand tons),
- Bahrain (7.3 thousand tons),
- Qatar (29 thousand tons) and
- UAE (47.6 thousand tons).

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