

"SUREG" application of efficient flock/herd structure for herders

From Smart Herder to Productive Livestock

By team SPLICING of Mongolia

Outline





Problems addressed



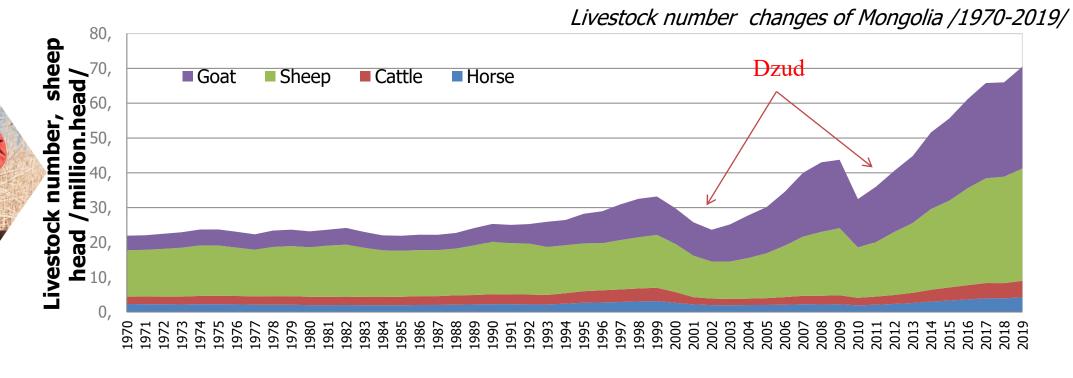
Proposed solution



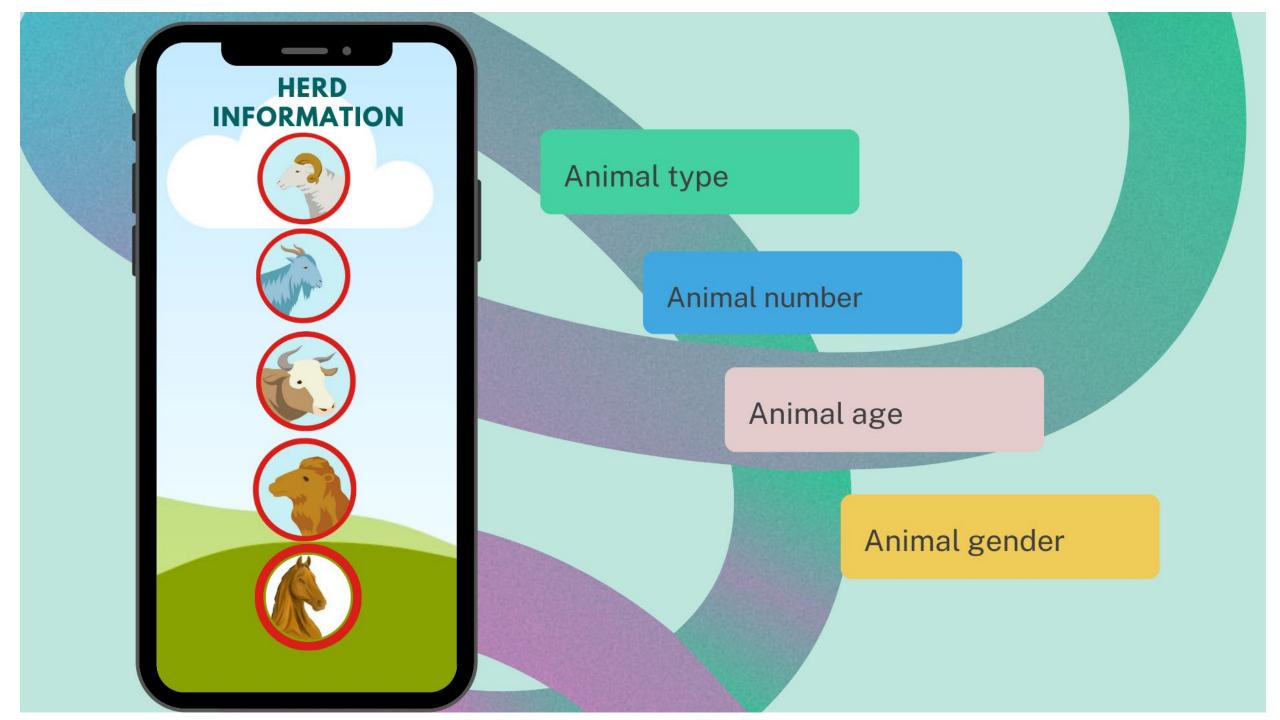
Impacts and development

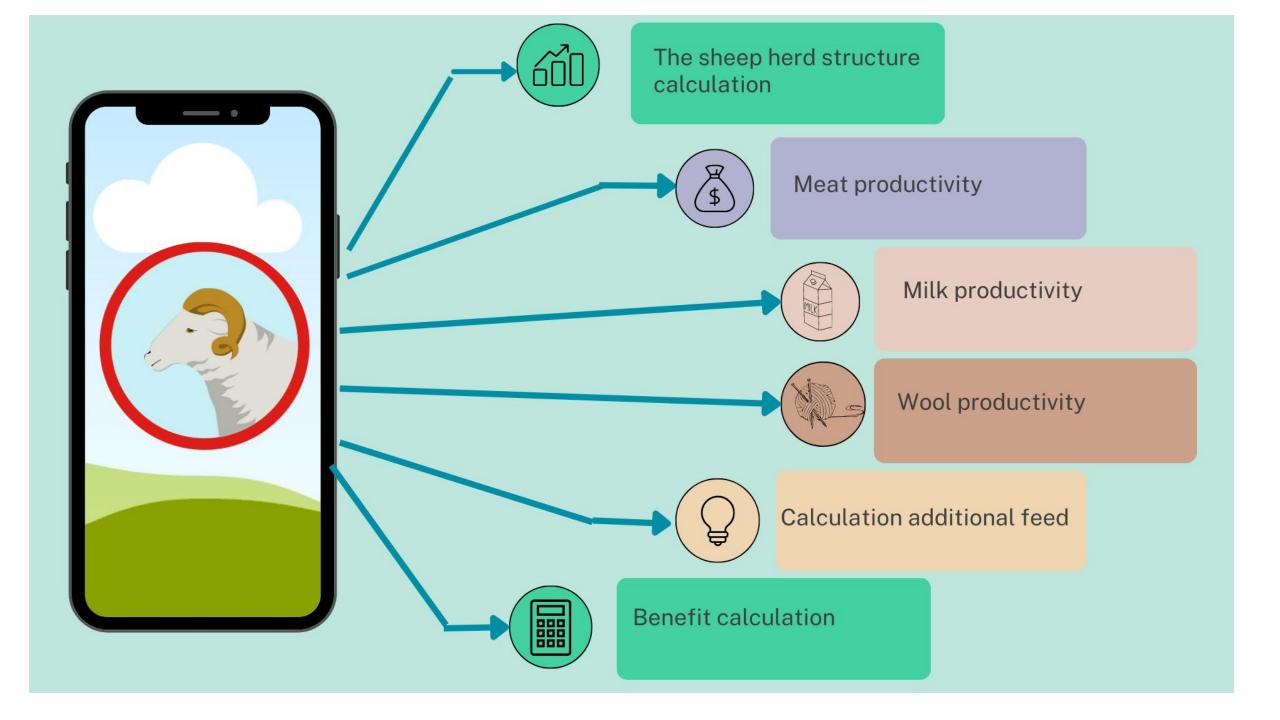
Problems addressed & need for the proposed solution

Grasslands and semi-arid grazing areas account for more than 80% of the land area in Mongolia, supporting almost 170 000 full time herder family groups 60% of the total population.



Herder incomes by encouraging increased animal numbers which has arguably contributed to the degraded state of grasslands





Raising sheep for 3 years without calculation of herd circulation

Details efficient of the herd circulation calculation

Raising the head of sheep for 3 years according to the calculation of herd circulation



160 496 heads

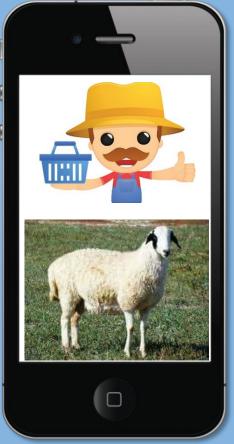


2,210,763 kg



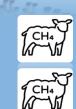
8,097,847 MNT







66 396 heads



914,272 kg



16,395,357 MNT





10,642,104 MNT





7,571,652 MNT

2025-2026 2023-2024 Source Integrated Provide Time since last update 0.4 s Latitude 47°53'9.945"N Longitude 106°54'22.920"E Altitude 4287.53 ft USNG 48T XU 4251 0539 Speed 6.62 mph Vertical speed *No data* 2023-2024 Horizontal accuracy 44.691 ft Vertical accuracy 13.123 ft Location Status

Develop GPS tracking & mapping based on app user seasonal location 2025-2026

Develop calculation GHG emission from livestock by sheep equivalent

Develop livestock performance & management calendar

Based on above

estimation for energy balance from grassland feed it would be possible

to measure GHG emission from adult

sheep (weight for 50 kg) each month of the year.