



Food and Agriculture Organization
of the United Nations

WHAT INVESTMENT IN DAIRY?

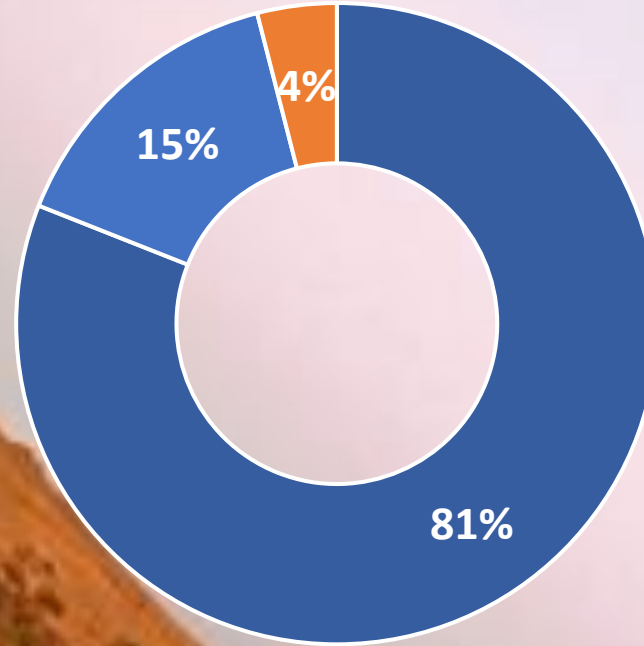
Environmental and economic perspectives of camel milk industry

*The rise of camel milk marketing in the Mediterranean basin
Montpelier, 15-16 November 2021*

Inna Punda, Economist (Agribusiness), FAO Investment Center

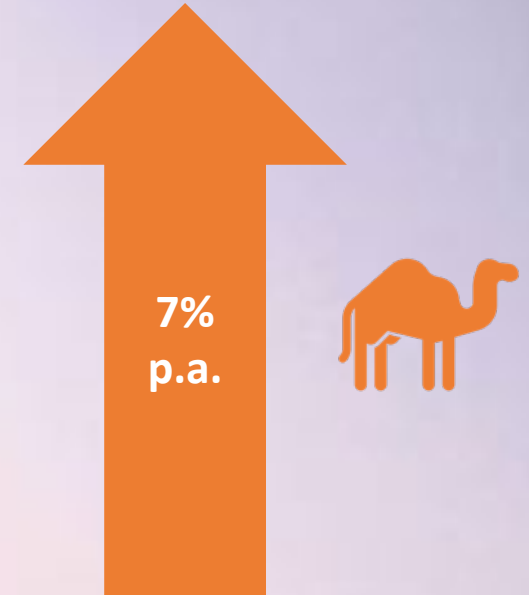


Global milk output 2021



■ Cattle ■ Buffalo ■ Camel, Sheep Goat

Source: FAO/OECD Outlook 2021-2030



DEMAND

Camel milk production is on the rise, yet **insufficient** to satisfy the booming demand

Change in consumption of food

(higher per capita incomes)



- health benefits
- environmental
- animal welfare
- biodiversity



COVID-19 pandemic increased the demand for traditional and health-boosting products

Urbanization: rural people in cities maintain their food preferences





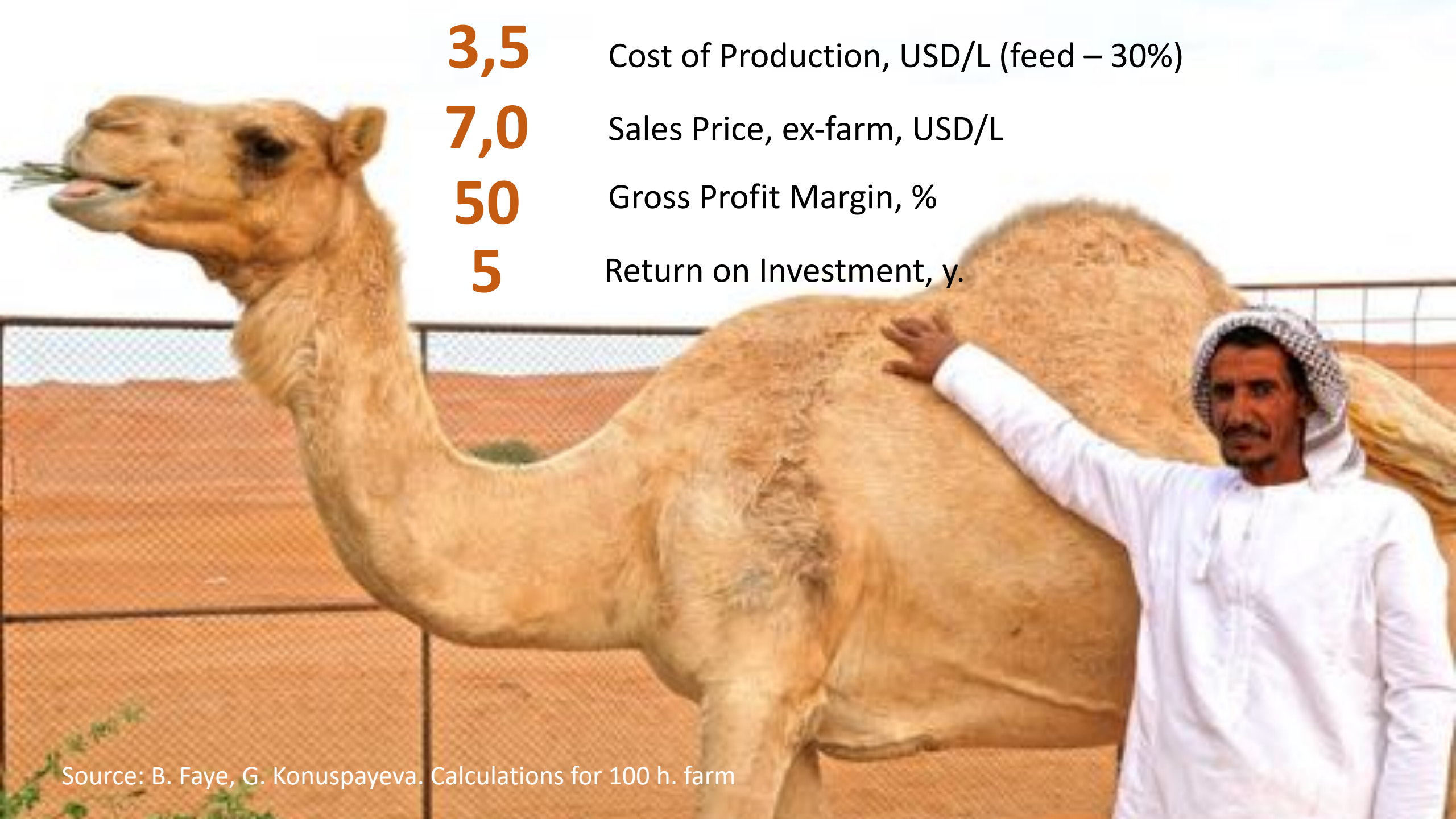
SUPPLY

Different systems



*WITHOUT DATA YOU ARE JUST
ANOTHER PERSON WITH AN
OPINION*

W. Edwards Deming



3,5

Cost of Production, USD/L (feed – 30%)

7,0

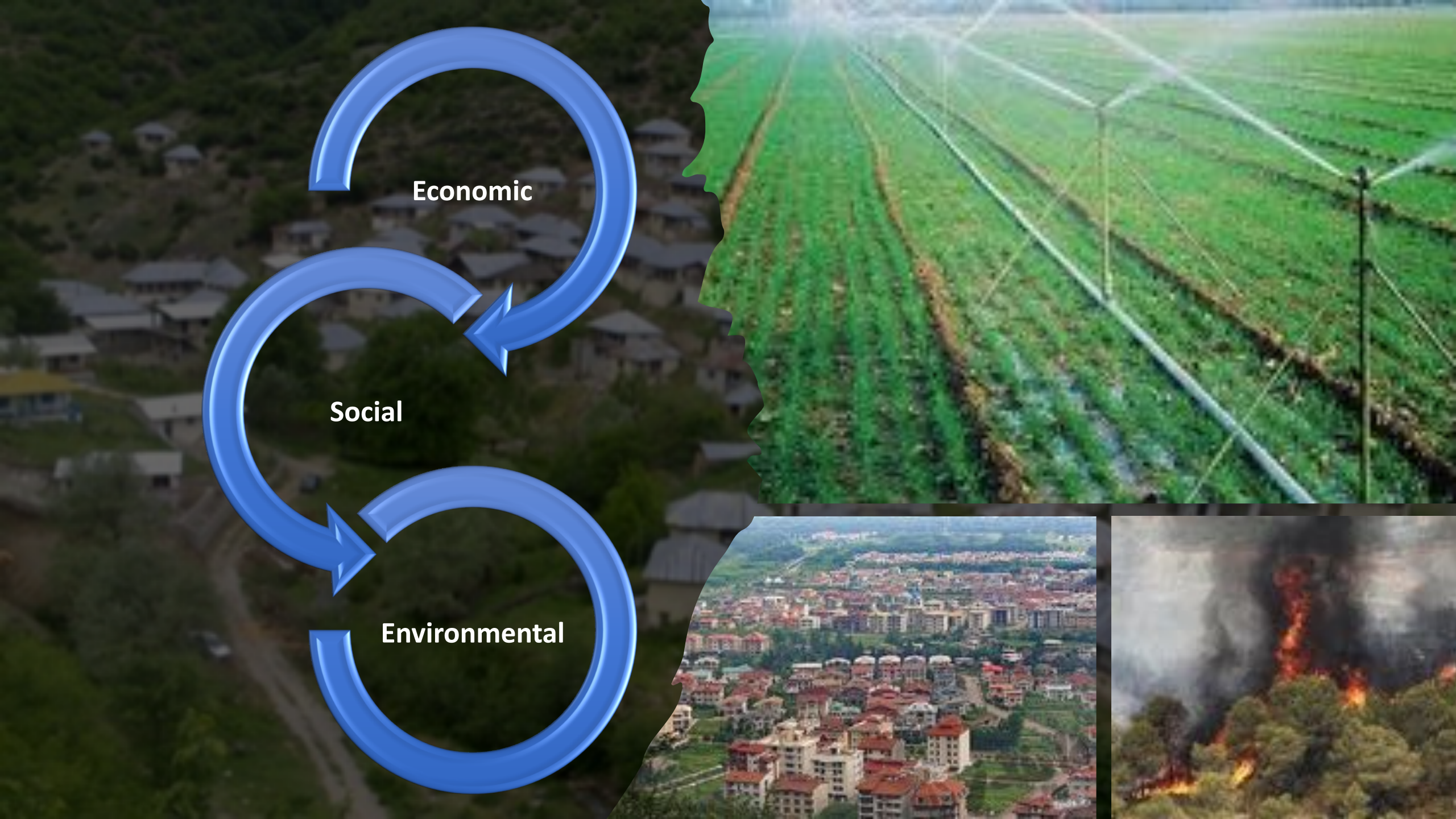
Sales Price, ex-farm, USD/L

50

Gross Profit Margin, %

5

Return on Investment, y.



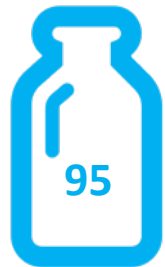
Economic

Social

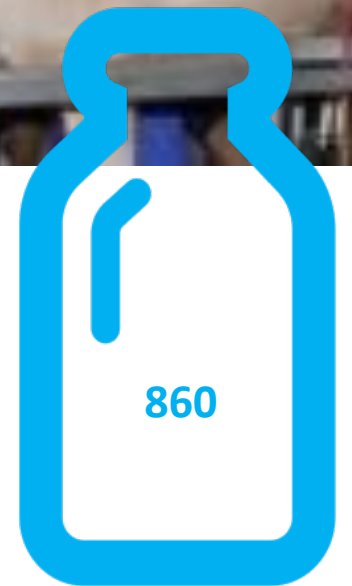
Environmental



=



=





1000 (camel,
intensive)

2000 (cow, intensive)

Water footprint

Water (all types) per L of raw milk



Learn the lesson of highly productive dairy operations in arid countries



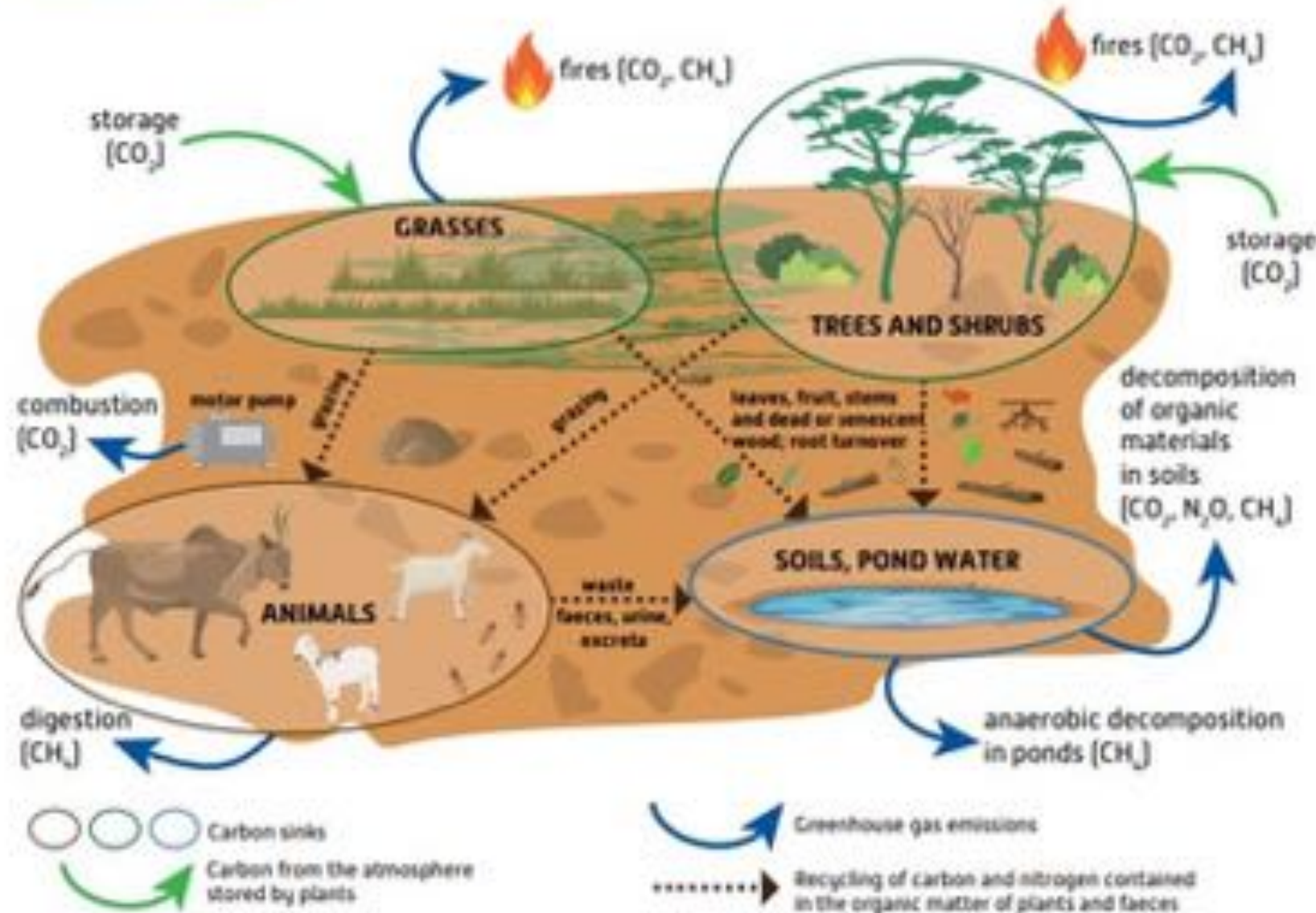


Camels emit less methane than cows or sheep!

Lower metabolism -> Less feed -> Less methane

Pastoral systems can have neutral carbon balance

Simplified model of greenhouse gas emissions and carbon storage in a Sahelian pastoral landscape: the carbon balance ecosystem approach is based on this model.



A photograph of three young women wearing headscarves, smiling. The woman in the center is wearing a colorful floral headscarf, the woman on the left is wearing a purple headscarf, and the woman on the right is wearing a white headscarf. The image is overlaid with a semi-transparent dark grey filter.

Equation is fragile

Natural resource &
animal stocks balance

Joint forces to **yield** results!

Investment priority areas:

- Farm-level
- R&D
- Feeding systems' productivity & sustainability programs
- Industry associations (enabling environment, market, access, consumer education)






Camel Industry Unions
to unlock industry's
potential

FAO Pastoralist Knowledge Hub: Bringing pastoral voices to the global stage

Pastoralist Knowledge Hub

What do Knowledge repository Pastoralist networks Partners Forum News and Events

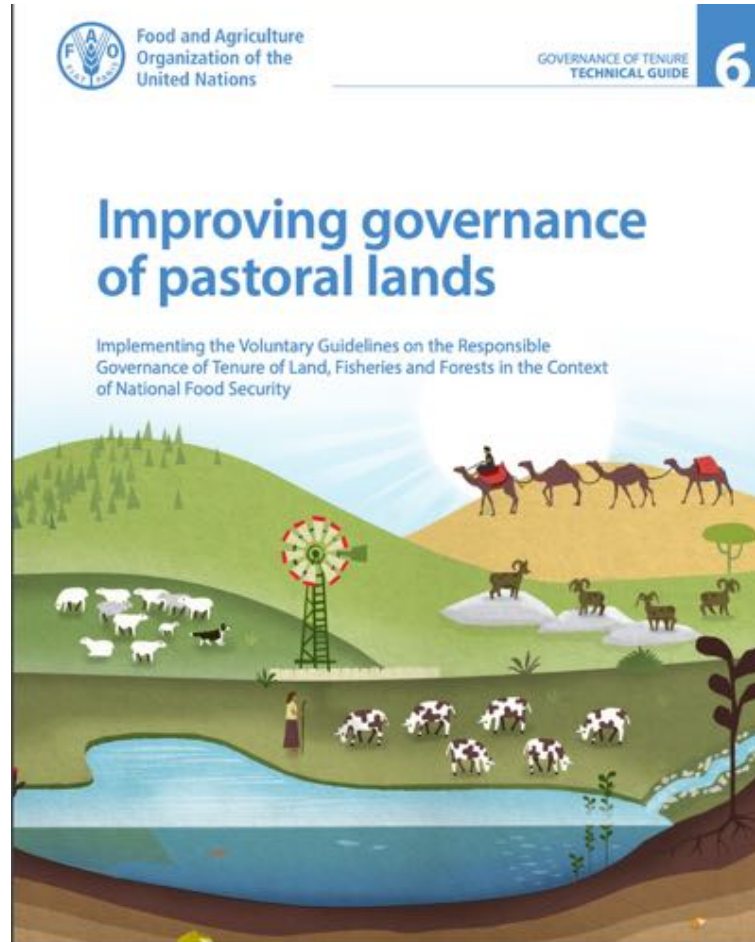


Maasai pastoralists protect the land, sustainable tourism protects the Maasai

Agricultural heritage designation helps preserve a way of life
All seems at peace. Just the sound of bleating goats...



PARTNERS, POLICIES and PASTORALISM
Bringing pastoral voices to the global stage

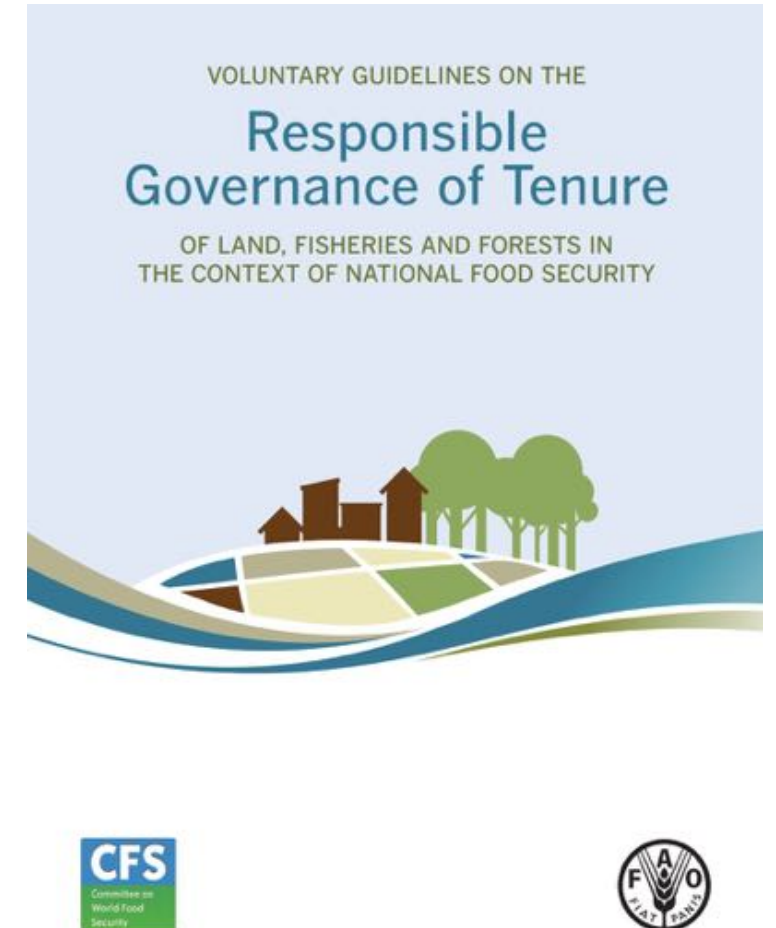


Food and Agriculture Organization of the United Nations

GOVERNANCE OF TENURE TECHNICAL GUIDE 6

Improving governance of pastoral lands


Implementing the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security




VOLUNTARY GUIDELINES ON THE

Responsible Governance of Tenure

OF LAND, FISHERIES AND FORESTS IN THE CONTEXT OF NATIONAL FOOD SECURITY



CFS
Committee on World Food Security





FAO Investment Centre



A woman with long dark hair, wearing a white cap, glasses, and a light-colored vest over a black shirt, is smiling and petting a brown camel. The camel is standing in a desert landscape with sand dunes in the background. The sky is overcast. The text "Let's change together the *statis quo* of the camel dairy!" is overlaid on the image in white font.

Let's change together the *statis quo* of the camel dairy!