afimilk®

Tailored Farm Solutions







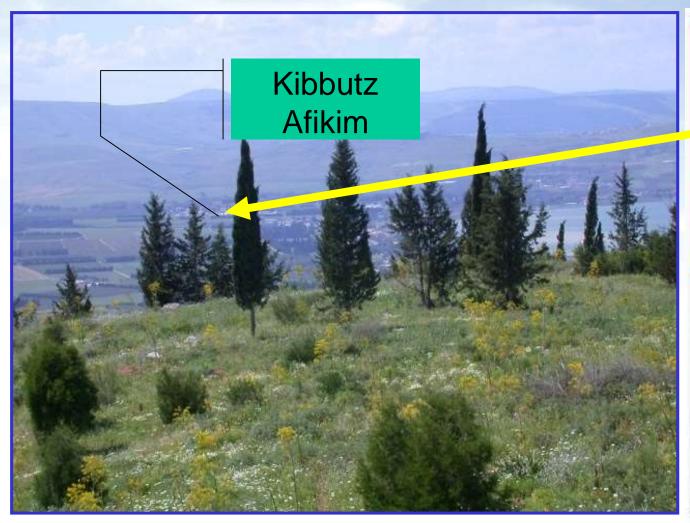








Location











Products

Sensors Software







Global Distribution



More than 30 years of innovation

- World leader since 1977
- The first milk meter and pedometer more than 30 years ago
- Advanced farming solutions
- More than 10,000 farms with afi systems
- Six million pedometers
- In 52 countries over 5 continents





Professional solution for establishing a competitive, profitable dairy farm



Dairy farm - project process

Master Plan (frame work)

Feasibility/Business plan

Planning & detailed architectural design

Licensing & authorizations

Production of equipment & transportation

Animal sourcing

Projection, building & system running (TK)

Training of local staff

On-going support



Fertility & Welfare Milking Barn Concept by afimilk





Welfare - Happy Cows Produce More





General

- Africa is considered as an growth market for dairy production
- The dairy market is huge, yet complex
- The need for change is clear, but in which direction?
- What is THE "product" suitable for this kind of farming
- The solution should combine the needs & possibilities of the market players (Win/Win situation)



Objectives

- Affordable & viable solution for rural dairy farming
- Possibility to incorporate several farmers into one advanced barn
- Improve milk production of the local cattle
- Improve welfare (husbandry conditions) of the local cattle
- Improve milk quality and hygiene parameters to meet high processing & consumers standards
- Expose the farmers to computerized systems



Professional constraints

- Huge number of cows are kept in poor environmental conditions:
 - Tied up in one place,
 - Suffer insufficient feed and water supply,
 - Suffer heat stress,
 - Insufficient health control
- The above mentioned, result in very poor fertility
- Milk collection method causes fast deterioration of milk quality



Rural Dairy Farming





Human Constraints

- Farmers are reluctant to accept initiatives for few main reasons:
 - They regard their cows as an asset (guaranty for "rainy" days to come...)
 - They are scared of the need to invest, or lack possibility for accessing loans





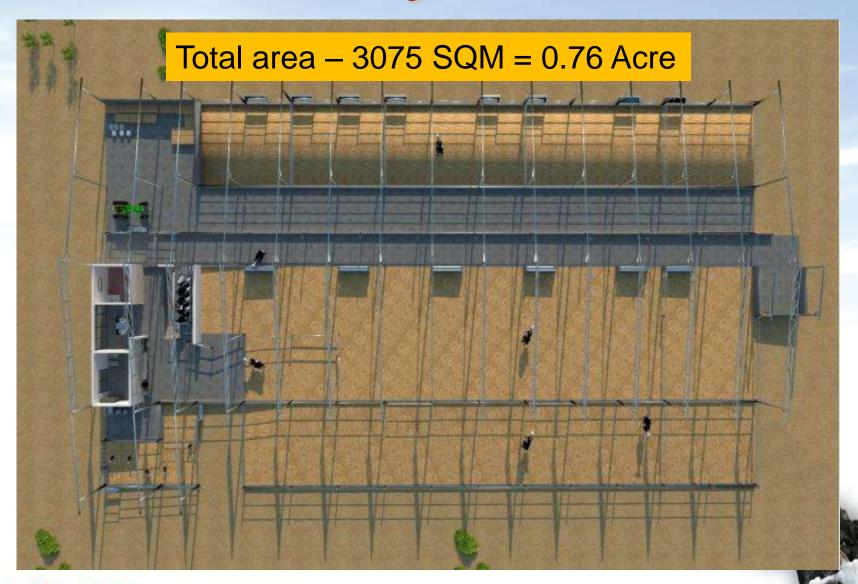
Main Concept

Modern "All included" barn which will provide adequate cows' welfare conditions, adapted to farms with up to 100 cows with a vision to future development





General Layout





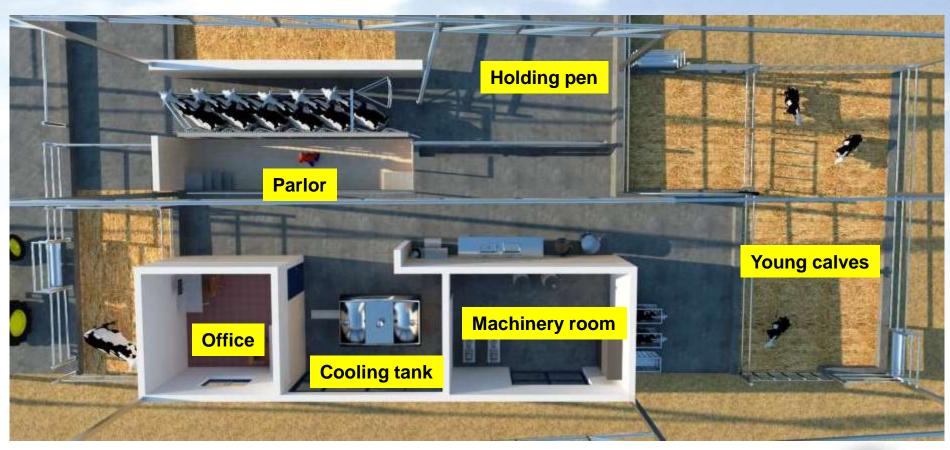
Front & Back View







Milking Parlor







Feed Alley & Cow Cool System







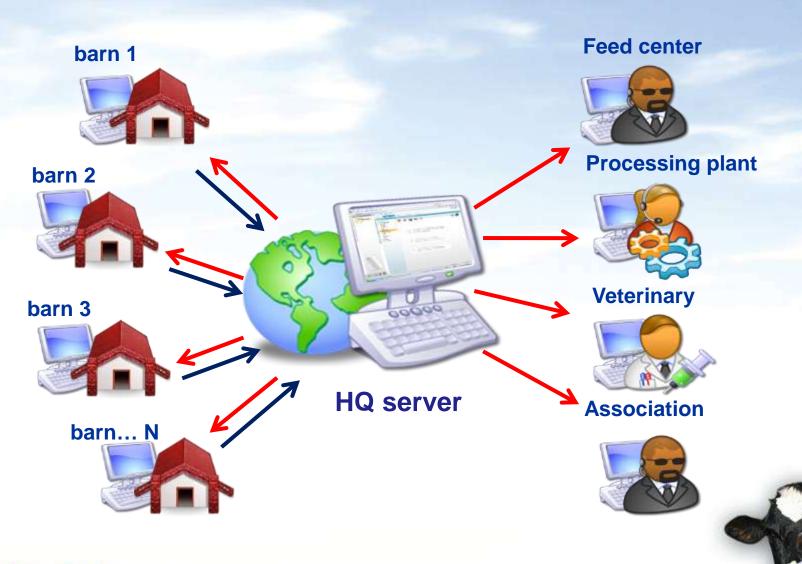
Milking Parlor







HQ Control & Monitoring





Economic Calculations Guidelines

- Average production increase of <u>8.0</u> liters per cow, during 1st year of operation, mainly due to enhanced <u>welfare</u>, fertility & modern milking
- Price per liter increased to due to improved quality & quantity





Professional Services

- Herd health protocols
- Field crops and nutritional consultancy
- Management tools
- Breeding and genetic techniques
- Lowering heat stress
- Seminars and training on different levels
- Knowledge transfer







Today





Today





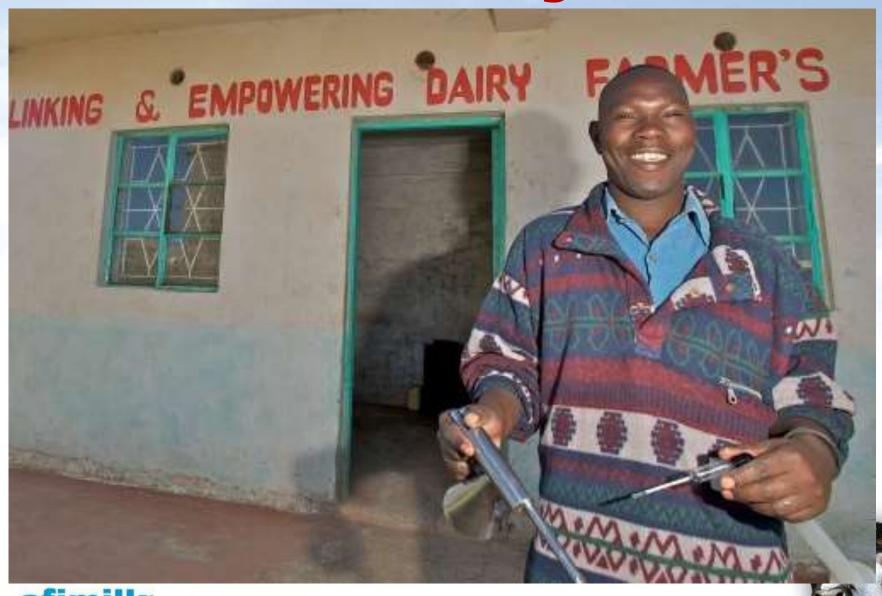


Progress
Fresh green grass
Niebe
and others...



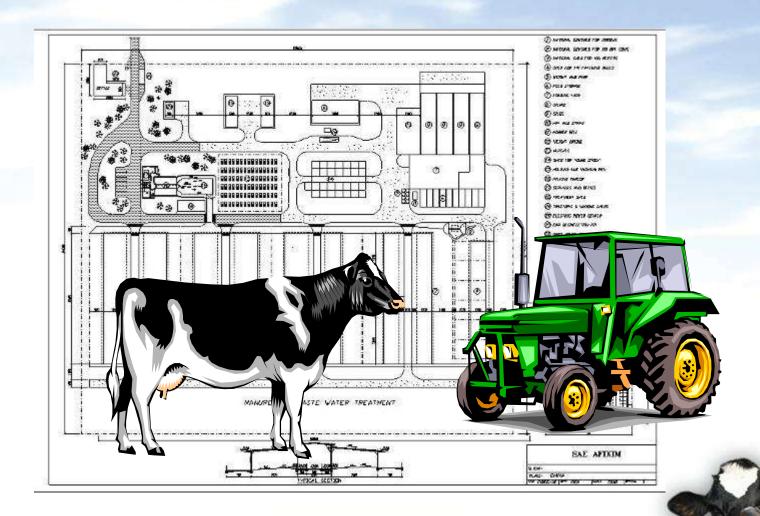


The need to organize





Let's talk solutions!





From the field to the supermarket

- > Field crops
- Sheds and buildings
- Cattle importation
- Milking centers
- > Feed centers
- Service facilities
- Processing advisory







Local cattle





Watusi



Gudali - Cameroon





N'Dama





Kenyan Sahiwal

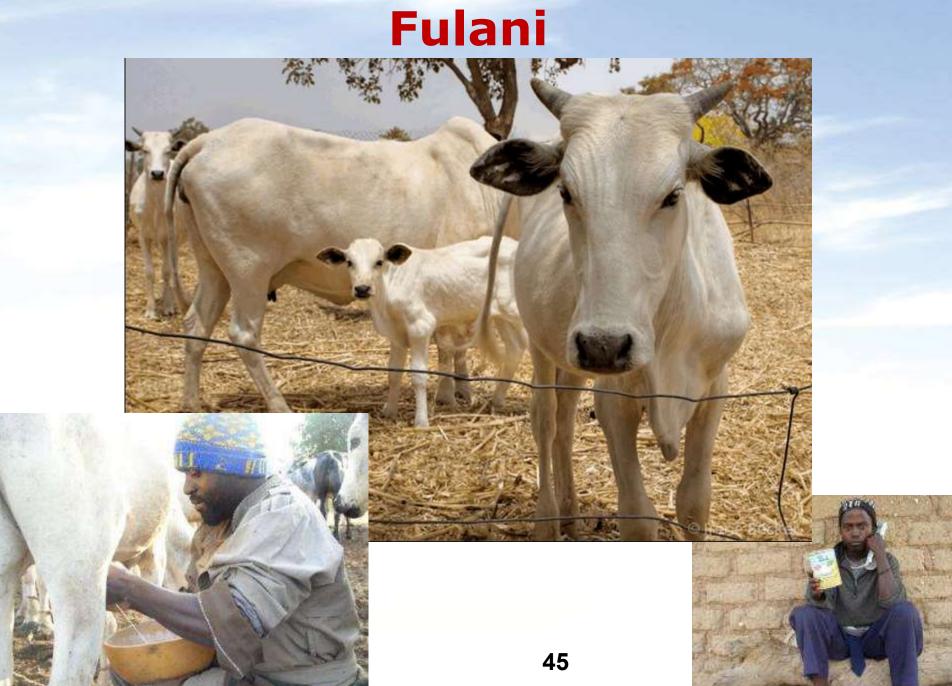




Kenyan Sahiwal & Crossbreeds





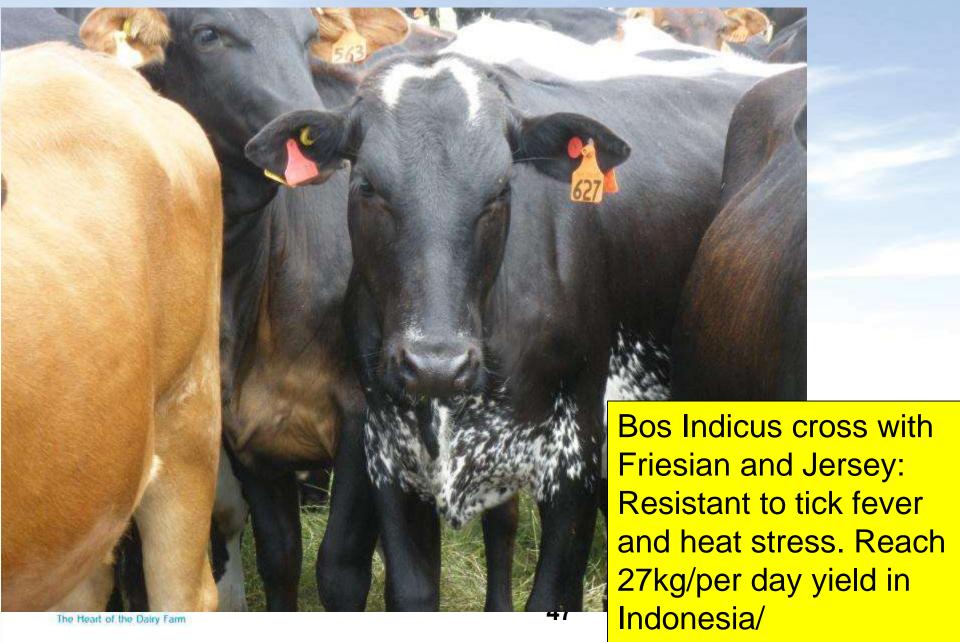


Import or improve local breeds?

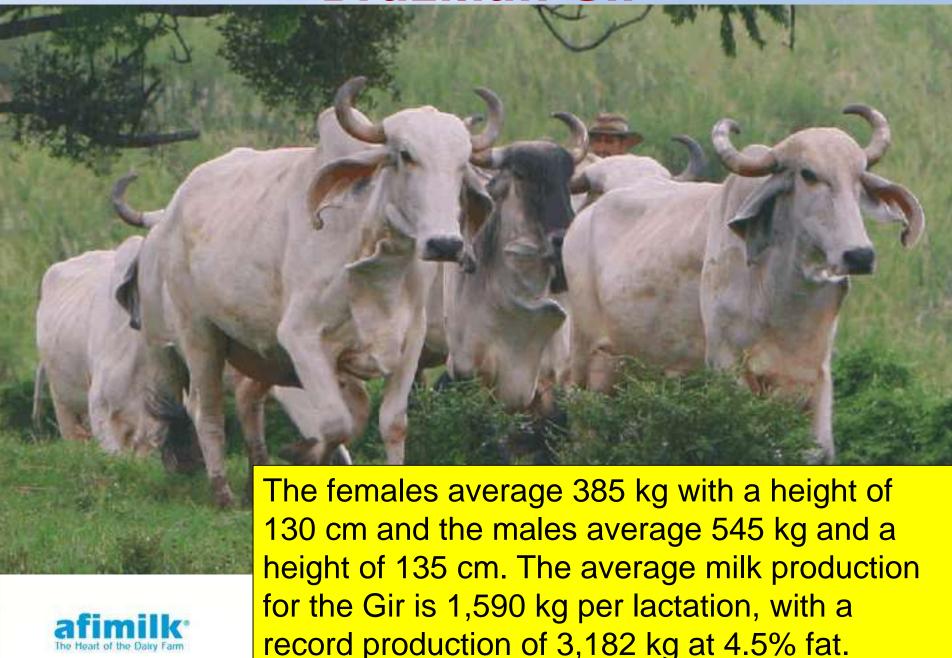




Taurindicus Cross - New Zealand Export



Brazilian Gir



Girolanda





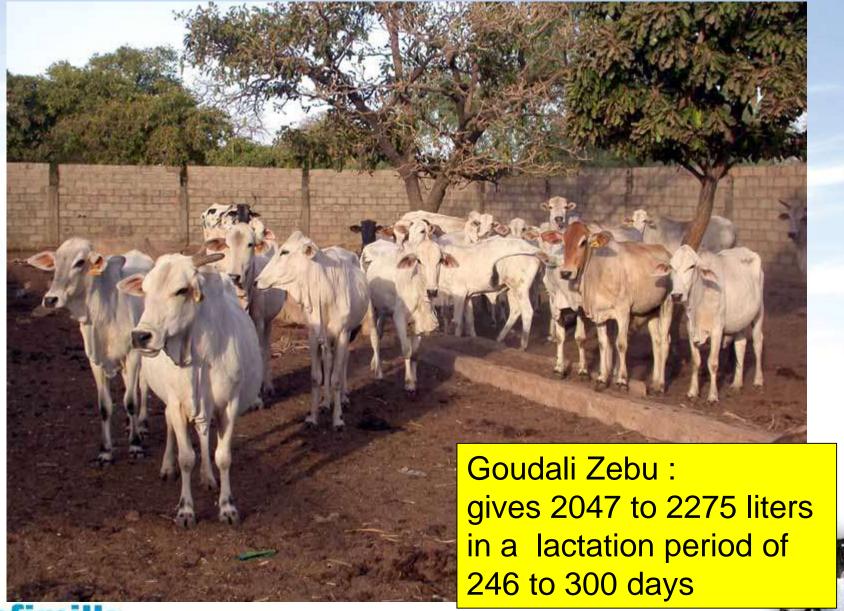
5/8 Holstein and 3/8 Gir gives 3000 liters in 305 days with 4% fat

Red Poll over N'Dama





Goudali - Ouagadougou farm





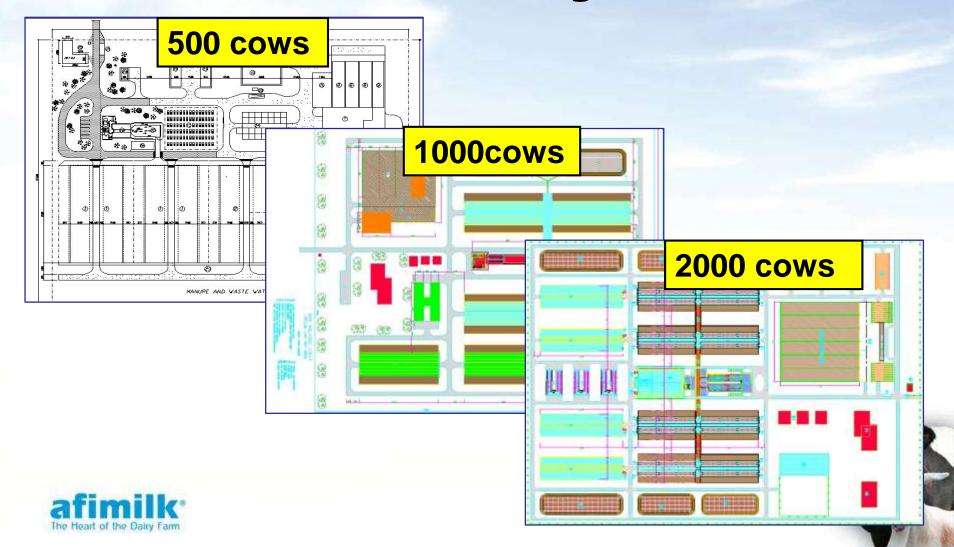
Réseau de surveillance sérologique FAO/AIEA Laboratoires vétérinaires nationaux d'Afrique Diguimbaye (Tchad) Issoufou (Niger) Tounkara (Mali) Karim (Egypte) Elamin (Soudan) Diallo (Mauritanie) -Gopilo (Ethiopie) Sarr (Sénégal) Ndungu (Kenya) Cessay-Bojang (Gambie) Couacy-Hyman (Côte D'Ivoire) Loretu Sidible (Burkina Faso) (Tanzanie) Opoku-Pare (Ghana) Twinamasiko (Ouganda) Kondolas (RCA) Obi, Ezeokoli Majiyagbe (Nigéria) -Ngangnou (Cameroun)



Vaccinate!!!



Different farm designs Small to large



Early planning of a project in Nigeria - 03/2013







Early planning of a project in Nigeria - 03/2013







Wide array of options

Barns and sheds

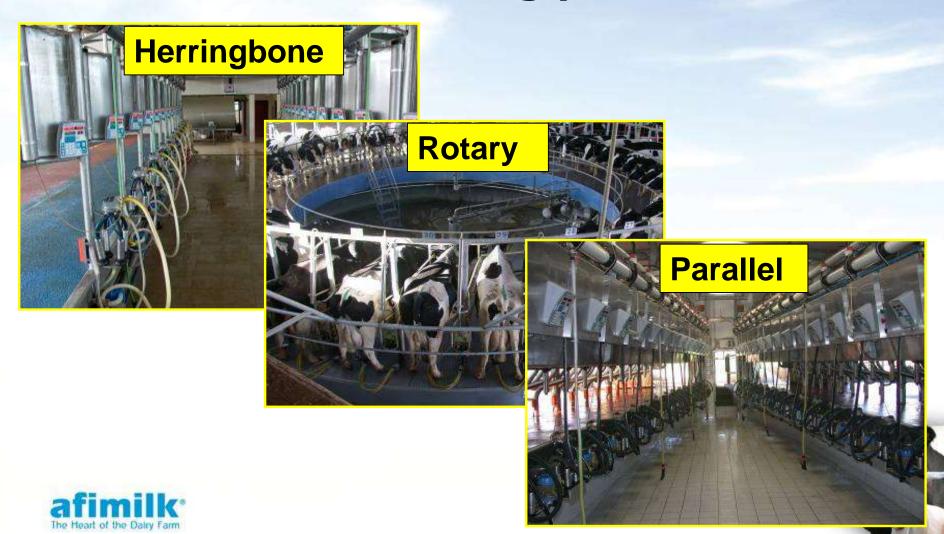


Modern construction adapted with local materials



Milking parlors

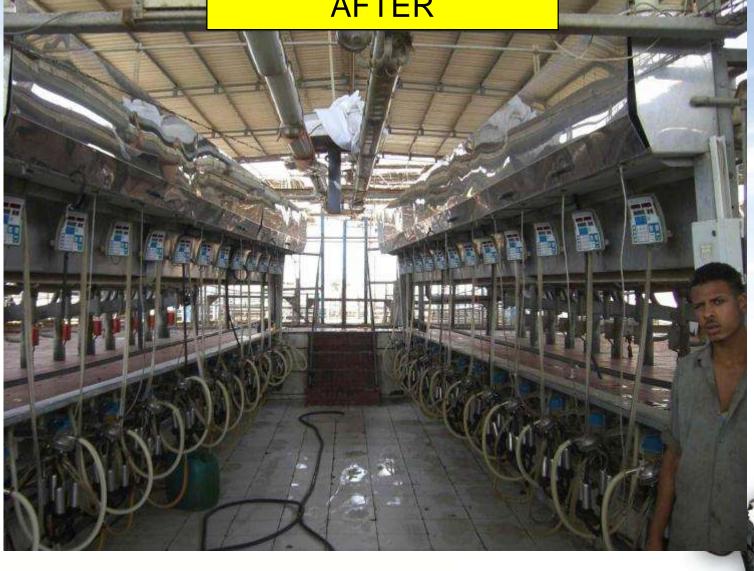
Different milking platforms



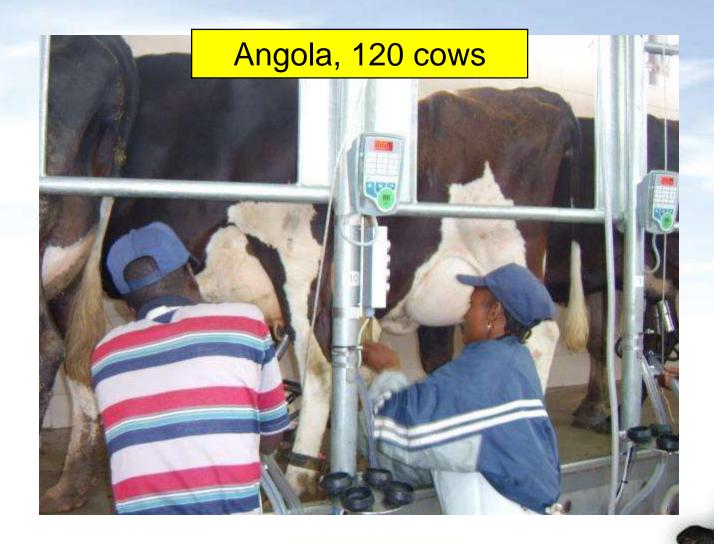




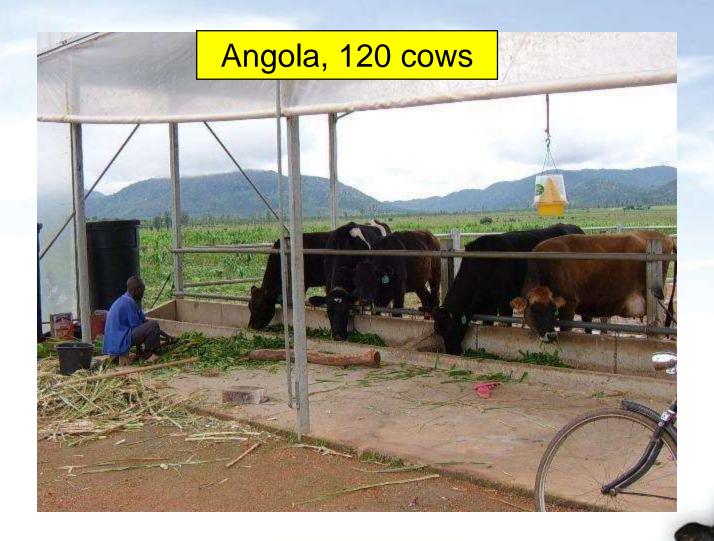
Egypt, 600 cows



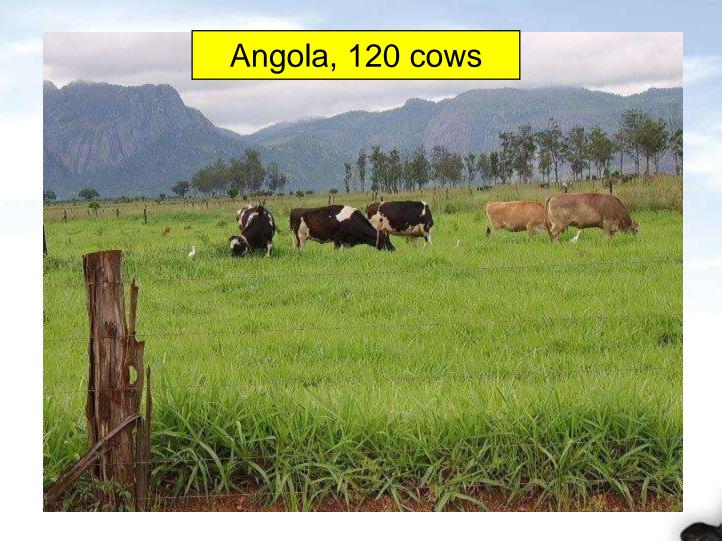












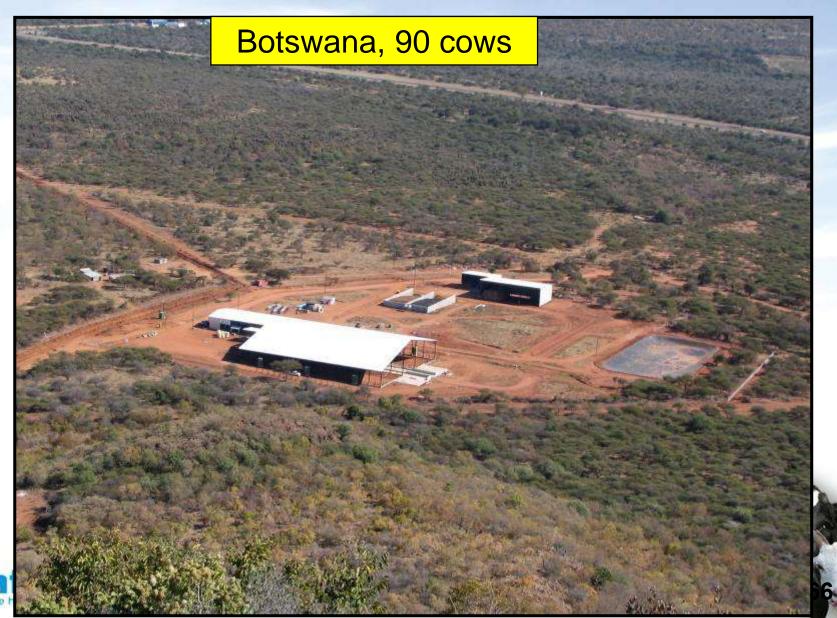












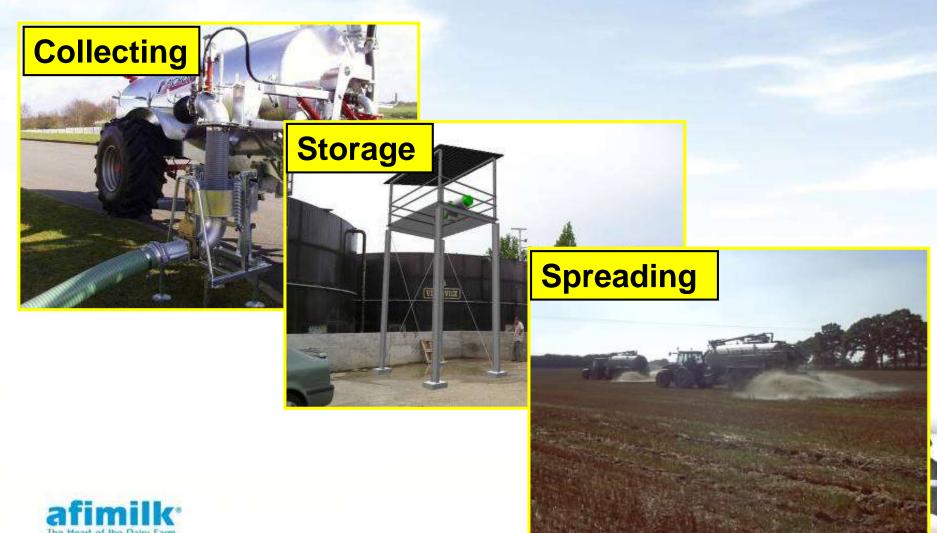






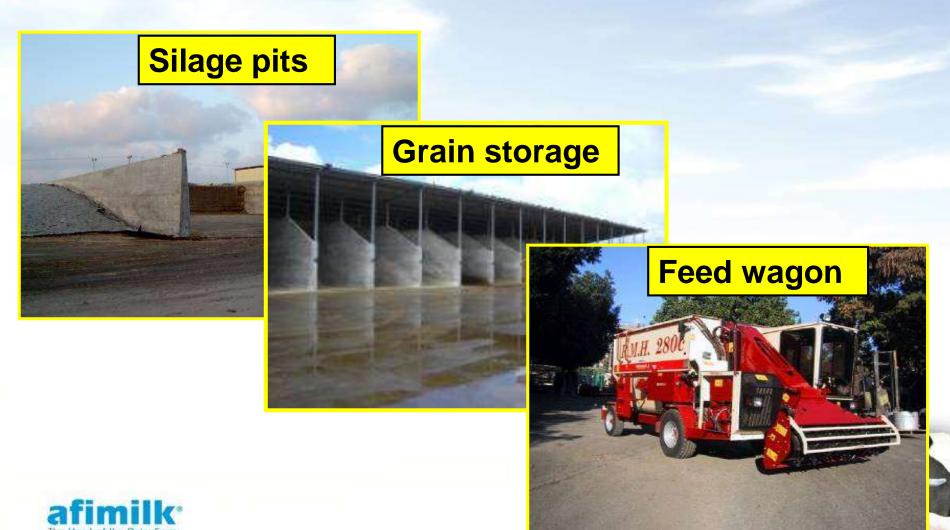
Manure treatment

Returning vitality to the fields



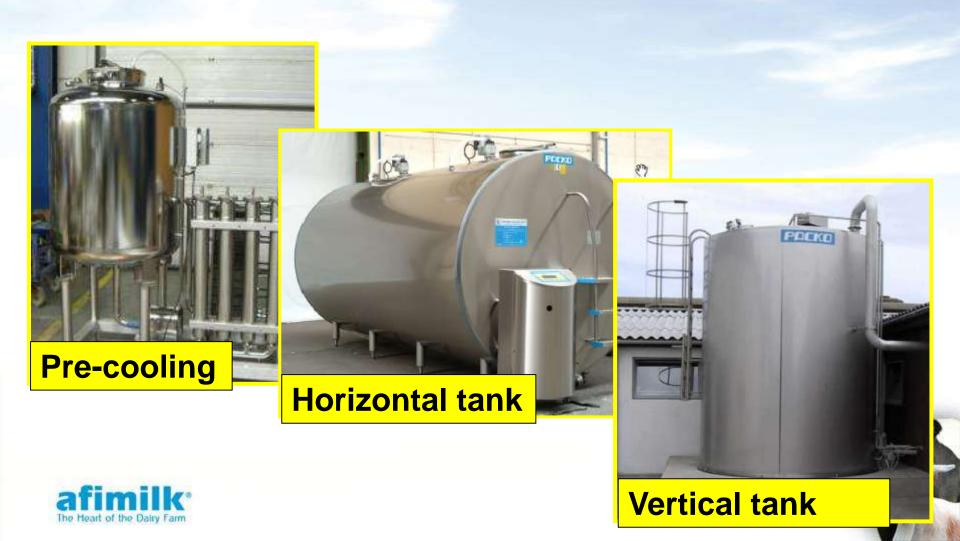
Feeding center

TMR - Total Mixed Ration



Milk cooling

Pre-Cooling & cooling



From:

Mini dairy processing plant:

500 to 5000 liters per day

To:

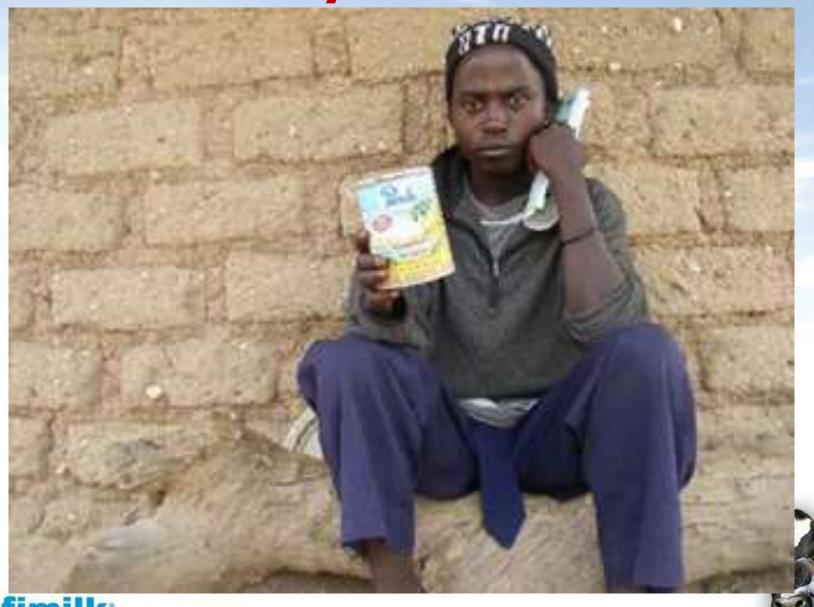
Mega milk plant:

up to 300,000 tons of milk per year (820,000 liters per day)





Dairy Products







MGT Liquid and Process Systems specializes in designing and Manufacturing of custom made, innovative storage, agitation and process solutions for the food & dairy, beer & beverage, bio-pharma, cosmetics and chemical industries. We offer advanced solutions encompassing design, manufacture, transport and installation to clients worldwide.













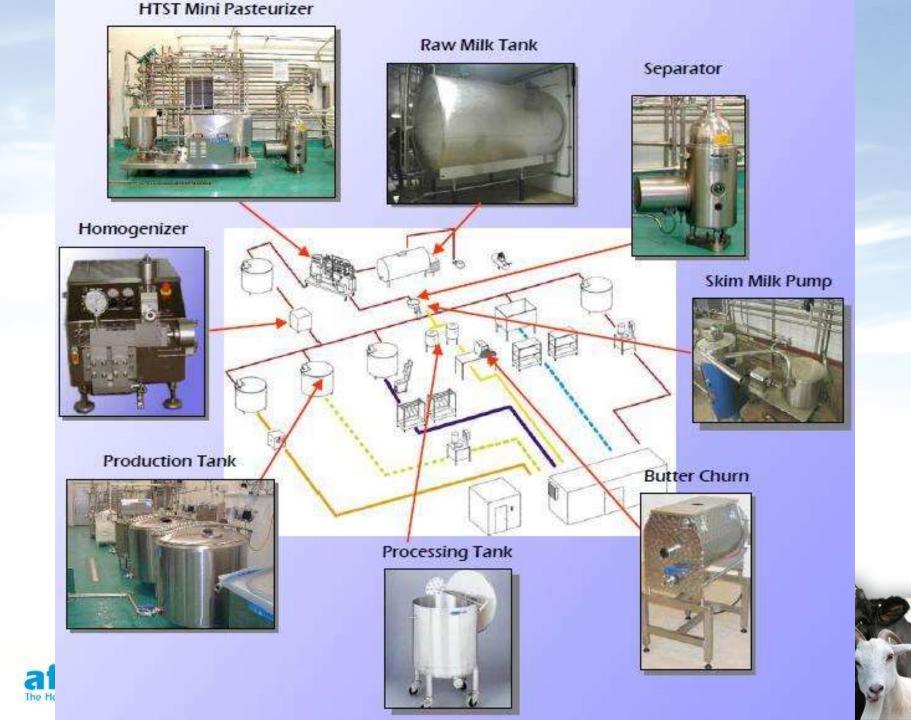
Mini Dairy











Modern Milk Plants



Advanced Dairy Technology and Farm AfiFarm Management Training Courses



- Two or three months, of theoretical in class lectures and workshops and on job training in dairy farms.
- Not less than eight trainees with similar previous dairy experience.
- In cooperation with Galilee College a syllabus is built to allow us to certify the trainees for various managerial tasks.
- Periodic testing of both theoretical knowledge and on-job performance.



Training and follow up



MINISTERE DES AFFAIRES ETRANGERES CENTRE DE LA COOPERATION INTERNATIONALE "MASHAV"

ETAT D'ISRAEL



MINISTERE DE L'AGRICULTURE ET DU DEVELOPPEMENT PURAL CENTRE DE COOPERATION INTERNATIONALE POUR LE DEVELOPPEMENT AGRICOLE "CINADICO"



STAGE INTERNATIONAL

AMELIORATION DE L'ELEVAGE ET DES PRODUITS DES RUMINANTS

KIBBOUTZ SHEFAYIM

4.7-27.7.2006

COTE D'IVOIRE





N'DRY K.J.J.



SILUE L.



TAGBO T.G.





DIASSE SALL L





KAMA A. MANDIAMY D. SOW A.M.





CAMEROUN

ESODE S.B.

BENIN





BAMBARA A.JdD



BARRO



COMPAGRE OUEDRAGGO P. SAWADOGO A.



FORO DARGA A.L



GUEDRAGGO LLBOUDO A.



ZONGO KOUMBEM R



QUEDRAGGO H.



Professional services follow-up

- Herd health protocols
- Field crops and nutritional consultancy
- Management tools
- Breeding and genetic techniques
- Lowering heat stress
- Local Seminars and training on different levels
- Knowledge transfer







Technical training





Training





Jinshan - China



TH Milk - Vietnam

10 farms, each with 2400 cows, with loose barns and a 2x2x30 milking parlor





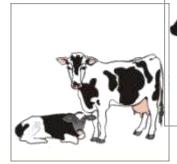
Why choose Afimilk..?

- Experience & know how transfer
- Tailor made solutions
- Strong emphasis on <u>ALL</u> cows' needs
- Best management system in the world
- Long term success and quick investment
 - recovery
- One stop shop

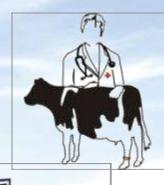


afimilk® Herd Management System

- Milk production, quality and quantity
- Animal health control
- > Fertility, heat detection
- Reproduction and genetics
- Tools for selection strategy
- Management















Herd Management





afimilk

Partners for success!

































Thank you for your attention



