**MILKING HYGIENE OBSERVATION SHEET + QUESTIONNAIRE**

Farm number:______                Location:______________

Type of milking:  hand ☐  machine milking ☐

Milkers wash hands before milking   yes ☐   no ☐
If yes, with water ☐ +soap ☐ disinfectant ☐ at the beginning of milking ☐ between each cow ☐

Udder and teats are cleaned dry ☐/ wet ☐ with hands ☐ with cloth ☐ one cloth for each cow ☐ all cows ☐

Are teats dried before milking with separate cloth ☐ one cloth ☐ by air ☐
Is the premilk checked before each milking yes ☐ no ☐
If yes, by visual control on the floor ☐ into a container ☐ CMT ☐

Are teats dipped before ☐ after ☐ milking with _________; no dipping ☐

The milker(s) is (are) calm ☐ noisy ☐ rude ☐ during milking

The cows are calm ☐ nervous ☐ during milking

Drying off cows is applied abrupt ☐ intermittent ☐

Drying off therapy is applied no ☐ yes ☐ with _______________

Cows with known mastitis are milked at beginning ☐ at end ☐ of milking no difference ☐

Mastitis is a serious ☐ minor ☐ no ☐ problem in the farm

Mastitis treatment is done by farmer ☐ vet assistant ☐ veterinarian ☐

Following drug is used for treatment:_________________
Anhang II: Hygiene-Beobachtungen und Fragebogen 2

Periurban and Urban Dairy Production and Reproduction Study
FU - Berlin - Addis Ababa University

ON - SPOT FARM OBSERVATION - AND DATA - SHEET

No. of farm:__________                           Area:_______ Urban □ Periurban □
Name of owner:_____________________ Sex  M □ F □ Age:__________
Full time farmer □          Farming secondary □
Attendant is on the farm since:______________
Total No. of cows:_________                   No. of cows lactating:___________
Type of farm:   Dairy □ Mixed farm □
If mixed farm:   Crop □ Beef □ Other animals □
Type of breed used:  HF □ Jersey □ Crossbred □ which:_________________
Heifer management:          self reared □ purchased □
Estimated lactation period:_________ days
Average milk yield/day _____ ltr x ___ days = ___ ltr / lact. period within herd
Quality of data recording:       good □ medium □ poor □ no data □
Type of housing for animals:
open barn □ concrete stable □ local hut □ kept outside □
Ventilation:           good □ medium □ poor □
Floor:                    concrete □ soil □
Exercise available:          yes □ no □
Farm hygiene:         good □ medium □ poor □
Feeding management:   grazing available yes □ no □
                    type of roughage_________________
                    concentrates available yes □ no □
RESULTS OF THE MASTITIS PREVALENCE INVESTIGATION ON FARM

No.____
LOCATION OF FARM:_______________
NAME OF OWNER:_________________
DATE OF VISIT:___________________

PROCEDURE:
The quarter milk of all lactating cows was screened using the CALIFORNIA-MASTITIS TEST. Of the positive milk, a sample was taken in order to do a microbiological examination at ILRI laboratory in Debre Zeit.
The following cows in your farm were positive on the CMT and gave the below mentioned microbiological results:

<table>
<thead>
<tr>
<th>COW No.</th>
<th>CMT +,++;++</th>
<th>DIAGNOSIS</th>
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TOTAL NUMBER OF LACTATING COWS:_________
TOTAL NUMBER OF COWS WITH CLINICAL/SUBCLIN. MASTITIS:_____/_____
PERCENTAGE OF COWS WITH MASTITIS:_______% 

THE MASTITIS SITUATION IN YOUR FARM IS:

☐ ALARMING
☐ ABOVE AVERAGE
☐ AVERAGE
☐ BELOW AVERAGE
NO REASON TO WORRY

IN ORDER TO IMPROVE THE QUALITY OF PRODUCED MILK AS WELL AS THE HEALTH STATUS OF THE DAIRY CATTLE, THE FOLLOWING RECOMMENDATIONS SHOULD BE TAKEN INTO CONSIDERATION:

( those boxes marked are of major relevance )

- IMPROVE HAND WASHING OF MILKERS
  1) wash hands with soap between every cow

- IMPROVE UDDER HYGIENE BEFORE / AFTER MILKING
  1) wash udder and teats with a separate towel or cloth for each cow
  2) use clean fresh water for every cow
  3) dry teats and udder with paper towel before milking
  4) do teat dipping after milking

- IMPROVE GENERAL HYGIENE IN YOUR FARM
  1) remove manure before milking
  2) flush the remains of manure with water
  3) wash the cows in regular intervals ( i.e. every week once )
  4) keep the outside surrounding of barn in a clean and dry condition

- KEEP A CONSISTENT LACTATION PERIOD OF 10 MONTHS ( = 305 d )

- IMPROVE THE VENTILATION OF THE BARN

- KEEP A STRICT MILKING ORDER
  1) those cows who are known to have a mastitis have to be milked at the end

- DO NOT UNDERMILK THE COWS
  1) The udderquarters have to be emptied sufficiently until the milk flow obviously reduces to a minimum

- OFFER ENOUGH WATER TO THE COWS
  - if there is no permanent access to water, offer it 3 times a day

Comments:

____________________________________________________________________
____________________________________________________________________
_______________________________________________________________