

## Socio Economic Survey Questionnaire Instrument

### Economic Feasibility Study of Dairy Processing (Sheep and goat milk) at the Household Level: Case of Jordanian Badia Communities

#### *Strengthening Innovation and Technology Adoption towards Sustainable Agricultural Productivity in Arab Countries (Case of Jordan)*

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## Context of the Survey

The purpose of this survey is to collect information at household level from dairy milk processors with the aim to conduct a study concerning dairy production issues in the Badia communities in Jordan. Thus, the objective of such research is to understand dairy production systems, marketing and identify problems encountered these specific dry land areas.

This study will be conducted in three selected milk-shed areas throughout the Badia (Al Majdia; Al Khanasri; and Al Hosn). While the general conclusions of the study may be used to provide a smallholder inclusive business models and modalities plan to encourage these householders to contribute and benefit from the dairy sector value chain, and to help formulate government policy recommendations for improving dairy production in the dry land communities in Jordanian Badia. All the specific information about the targeted processors, their families and undertakings will be treated confidentially.

The NARC socio economic team in Jordan will collect the data and submit the raw data as well as the feasibility study report as part of the *Strengthening Innovation and Technology Adoption towards Sustainable Agricultural Productivity in Arab Countries* project developed workplan for the period January-December 2020.

## First: General Information

- 1- Form number: \_\_\_\_\_
- 2- Governorate: 1- Amman 2- Irbid 3- Al-Mafraq
- 3 -The Village: -1 Al-Majdia 2- Al-Khanasari 3- Al-Hosn
- 4- Name: \_\_\_\_\_
- 5- Marital status: 1- Single 2- Married 3- Widowed
- 6- Age \_\_\_\_\_
- 7- Education level:
  - 1- He does not read or write; 2- Primary education; 3- Secondary education; 4- Bachelor
- 8- Number of family members \_\_\_\_\_
- 9-Do you have (or have you had in the past 12 months) access to credit to support your dairy farm?  
Yes (1) No (0)
- 10 -If yes, where did you get the credit from .....

## Second Part: Associations

- 11- Name of the association: \_\_\_\_\_
- 12- Affiliation to the association: 1- A member of the association 2- A participant in the activities of the association
- 13- Annual subscription fee: \_\_\_\_\_
- 14- What are the services provided by the society to the community / individuals?
  - 14.a Community \_\_\_\_\_
  - 14.b Individuals \_\_\_\_\_
- 15- What are the activities that generate income in the association?
  - 1- \_\_\_\_\_
  - 2- \_\_\_\_\_
  - 3- \_\_\_\_\_
- 16- Are records used in the work of the association?      1- Yes      2- No

17- Proposals for the development of the association

- 1- \_\_\_\_\_
- 2- \_\_\_\_\_
- 3- \_\_\_\_\_

### **Third Part: Animal Wealth**

18- Total number of flocks \_\_\_\_\_

19- How many goats \_\_\_\_\_ 19.a - Number of mothers \_\_\_\_\_

20- Number of sheep \_\_\_\_\_ 20.a- Number of mothers \_\_\_\_\_

21-a Amount of milk produced / fenugreek (kg) \_\_\_\_\_

21.b - milking times / week / number of months \_\_\_\_\_ -

22- How did you get (Dairy Products) when you created your first dairy farm?

- 1- Credit from the government
- 2- Passing on credit by NGOs
- 3- He buys himself
- 4- Inherited or provided by relatives
- 5- Donated
- 6- Other, specify your answer?

23- Who owns animals / (dairy farm)

- 1 - The Husband
- 2- The wife
- 3- Both (husband and wife)
- 4- The son
- 5- The daughter
- 6- Relatives
- 7- A farm worker
- 8- Other, specify your answer?

24- Who manages animals (dairy farm) / farm

- 1- The husband
- 2- The wife
- 3- Both (husband and wife)
- 4- The son
- 5- The daughter
- 6- Relatives
- 7- A farm worker
- 8- Others, specify your answer?

25 - When did you start working on the dairy farm?

26- A- Do you have previous knowledge of dairy farm business?

- 1- Yes
- 2- No

27 - If the answer is yes, where did you get it?

28- How did you start working with (dairy farm)

- 1- Encouragement from family / relatives / friends
- 2- Provided by the government / NGOs 0000 select
- 3- By himself
- 4- Inheriting
- 5- Other, specify .....

29- Does any of your family / friends work on the dairy farm?

- 1- Parents (for a husband or wife)
- 2- Brother or sisters (for a husband or wife)
- 3- Friends (for husband or wife)
- 4- Other, specify .....
- 5- Nothing of the above

30- Why did you start working on a dairy farm?

- 1- To increase income
- 2- To increase food security
- 3- To diversify the sources of income
- 4- Other, specify .....

31- How many workers do you have on your (dairy farm)?

Male .....

Female .....

32- Who regularly performs the following activities on dairy farm?

| Activity                           | Responsible Person |
|------------------------------------|--------------------|
| Feeding                            |                    |
| Drinking, fetching water, cleaning |                    |
| Milking                            |                    |
| Cleaning                           |                    |
| Dipping                            |                    |
| Marketing                          |                    |
| Etc. ....                          |                    |

Write the number: 1- the husband; 2- the wife; 3- the worker; 4- Children (male); 5- Children (female)

33- What kind of grazing do you have for your dairy farm animals and for how many months per year?

1- Free grazing (in rangeland) The number of months of grazing in this category in the year ..... months

2- Free grazing on collective lands The number of months grazing in this category in the year .....months

3- Other, determine ..... the number of grazing months in this category per year .....

34- What type of feed / feed do you use to feed your animals?

- 1- Concentrate feed
- 2- Grass
- 3- Straw
- 4- Fodder additions

- 5- Silage
- 6- Other, specify .....

35 - How many times a day do you milk your animals?

- 1 -once            2 - 2 times      3 - 3 times

36- Do you clean hands before milking?

- 1- Yes              2- No

37- Do you clean the milking tools before milking?

- 1- Yes              2- No

38- How much average milk production per day (in the high season)

..... kg / number of milking times

39- How much average daily milk production (in low season)

..... kg / number of milking times

40 - Do you mix morning and evening milk before turning it on?

- 1- Yes 2- No

41- Are you planning to increase the amount of milk you produce?

- 1- Yes 2- No

42- If the answer is yes, how do you plan to increase milk production from the following?

- 1- Increasing the number of dairy products
- 2- Improving the degree of animals
- 3- Produce more feed
- 4- Buy more feed
- 5- Spending more on fighting animal diseases
- 6- It depends on the advice of guidance
- 7- Changing farm management practices (such as feeding)
- 8- I don't know
- 9- Others such as .....

43- Do you think that there are any major restrictions on the production of (dairy products) on the farm?

- 1- Yes                              2- No

44- If the answer is yes, what are the three most important restrictions that you direct in a dairy farm (choose three and rank them from 1 to 3 according to importance, so that No. 1 is the most important

- 1-lack fodder or roughage, arrangement .....
- 2- Low feed quality, ranking .....
- 3- The quality of concentrated feed is low, .....
- 4- The high cost of concentrated feed, .....
- 5- Lack of credit to buy new animals, .....
- 6- There are no workers on the farm, .....
- 7- Low Milk Quality, .....
- 8- Low milk production, .....
- 9- The low price of milk on the market, .....
- 10- The high price of animal feed, .....
- 11- Infertility, .....
- 12- Animal diseases, .....

- 13- Good quality semen and genetics, .....
- 14- Others, ..... specify ..... arrangement .....
- 45- Who provides guiding services (Albanians) in your area?  
 1- The government 2- The non-governmental organization  
 3- Both 4- Guidance services are not available 5 - Others
- 46- Is there an extension worker in your area?  
 1- Yes 2- No
- 47- If yes, how many times have you been in contact with in the past 12 months?  
 1- Once 2- twice 3- more than twice 4- Never 5- other select
- 48- Do you vaccinate your animals?  
 1- Yes 2- No
- 49- If the answer is yes, against any diseases, specify .....
- 50- Who vaccinates animals?  
 1- Yourself 2- Relatives / Neighbors  
 2- Veterinary advice and support 4- Private veterinarian  
 5- Other, specify .....
- 51 - Do you pay for the vaccination?  
 1- Yes 2- No
- 52- If you pay for vaccination, how much do you pay per year?  
 ..... Jordanian dinar
- 53- Who provides treatment to your animals in case of illness?  
 1- Yourself 2- Relatives / Neighbors  
 2- Veterinary advice and support 4- Private veterinarian  
 6- Health Factor 6- Other, specify
- 54- Was there any animal death on your farm during the past year?  
 1- Yes 2- No
- 55- If the answer is yes, state the reasons .....
- 56- Where are some veterinary services available?  
 1- Government veterinary offices  
 2- A private veterinarian  
 3- Other, specify .....
- 57- Are you satisfied with the veterinary services you use?  
 1- Yes 2- No
- 58- Do you have any suggestions on how to increase the effectiveness of the services you use, explain?

#### Fourth Part: Manufacturing

59- Production

| Amount of processed milk (kg) | Dairy products | Total production (kg) | Household consumption (kg) | Sale (kg) | Average price | Gross income |
|-------------------------------|----------------|-----------------------|----------------------------|-----------|---------------|--------------|
|                               | Jameed         |                       |                            |           |               |              |
|                               | Ghee           |                       |                            |           |               |              |

|  |             |  |  |  |  |  |
|--|-------------|--|--|--|--|--|
|  | Cheese      |  |  |  |  |  |
|  | Butter      |  |  |  |  |  |
|  | Brick       |  |  |  |  |  |
|  | Butter milk |  |  |  |  |  |

60- Number of manufacturing times / weekly -----  
monthly -----

61 - Methods of cleaning the tools used in manufacturing

| Tools | Before manufacturing | After manufacturing |
|-------|----------------------|---------------------|
|       |                      |                     |
|       |                      |                     |
|       |                      |                     |

62- manufacturing process Do you pasteurize the milk \boiling

63-Is the temperature measured by the thermometer when boiling milk?

1- Yes      2- no

64-Steps to manufacture milk

| Steps to manufacture milk | Change in the manufacturing step after the training course |
|---------------------------|--|
|                           |  |
|                           |  |
|                           |  |
|                           |  |
|                           |  |
|                           |  |
|                           |  |
|                           |  |

65-Do you work as:

1- Individual      2- Collectively

66- What is the percentage of family members participating in business?

| Distribution of roles among family members | Role | Rate% | working hours |
|--|------|-------|---------------|
| Wife                                       |      |       |               |
| Husband                                    |      |       |               |
| First son                                  |      |       |               |
| Second son                                 |      |       |               |

67- Have you participated in the previous milk manufacturing course:

- 1- Yes                      2- No

68- Was any of the previous manufacturing steps changed after attending a milk manufacturing training course?

- 1- Yes                      2- No

69 - Did the previous training course add knowledge, experience and benefit?

70 - Is manufacturing done, and how much percentage?

- 1- For home consumption only  
2- For sale and improve income  
3- For home consumption and sale

71- The source of milk used in manufacturing:

- 1- Sheep owned by the farmer  
2- Sheep in the village  
3- Purchase from the milk seller

72 - What are the storage methods used after manufacture for each item?

### Fifth Part : Costs

73- Costs

| Item                            | Cost | Item                 | Cost |
|---------------------------------|------|----------------------|------|
| 1- Milk                         |      | 7- Thermometer       |      |
| 2- Pot (boiling pot)            |      | 8- Balance of weight |      |
| 3- Gas                          |      | 9- PH Tester         |      |
| 4- The rennet for firing        |      | 10- Iodine free salt |      |
| 5- The initiator of the fitting |      | 11- Cheese piston    |      |
| 6- White fabric                 |      | 12- Transfer fees    |      |

## Sixth Part: Packaging

### 74- Packaging

| Product | Packaging type (box, bag) | Packaging price | Packaging size | Packaging costs | (Association logo) |
|---------|---------------------------|-----------------|----------------|-----------------|--------------------|
|         |                           |                 |                |                 |                    |
|         |                           |                 |                |                 |                    |
|         |                           |                 |                |                 |                    |

75- Have you ever had difficulties selling your products?

- 1- Yes                      2- No

76- If the answer is yes, what are the difficulties?

- 1- The quality of my product is poor
- 2- There is no market
- 3- Low price
- 4- Lack of transportation
- 5- Other, specify .....

77- Have you ever been late in getting money for dairy products sold?

- 1- Yes                      2- No

78- If you have a delay, how many days are on average per month (in the last 6 months)?

79- What do you do to increase the quality of milk for your dairy products to sell? .....days

## Seventh Part: Difficulties (In General)

80- Obstacles or obstacles encountered during manufacturing?

- 1- \_\_\_\_\_
- 2- \_\_\_\_\_
- 3- \_\_\_\_\_
- 4- \_\_\_\_\_

81 - What obstacles do you face during marketing?

- 1- \_\_\_\_\_
- 2- \_\_\_\_\_
- 3- \_\_\_\_\_
- 4- \_\_\_\_\_

82- What are the solutions you suggest overcoming these restrictions?

- 1- On the level of milk production

- 2- At the treatment level
- 3- On the marketing level

### **Eight Part: Difficulties during the COVID-19 Crisis**

83-Obstacles or obstacles encountered during manufacturing?

- 1- \_\_\_\_\_
- 2- \_\_\_\_\_
- 3- \_\_\_\_\_
- 4- \_\_\_\_\_

84 - What obstacles do you face during marketing?

- 1- \_\_\_\_\_
- 2- \_\_\_\_\_
- 3- \_\_\_\_\_
- 4- \_\_\_\_\_

85- What are the strategies you applied to overcome these threats?

- 1- On the level of milk production
- 2- At the treatment level
- 3- On the marketing level