

Assessment of both banks of the Nistru River berry producers' market to identify opportunities for export





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Nistru River berry producers' market
to identify opportunities for export**

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Contents:

| | |
|------------------------------------------------------------------------------|-----------|
| INTRODUCTION | 5 |
| i.1 Purpose of the study | 5 |
| i.2 Methodology applied | 5 |
| PRODUCTION CAPACITIES OF THE SMALL/MEDIUM SIZED BERRY PRODUCERS | 7 |
| CONCLUSION..... | 13 |

Figures:

| | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| Figure 1: Respondents' profile, %..... | 7 |
| Figure 2: "Q5. What type of berries did you produce in 2019? (multiple answer)", % | 7 |
| Figure 3: "Q6. What type of berries do you PLAN to begin producing / to continue producing in 2020? (multiple answer)", %..... | 7 |
| Figure 4: "Q14. Which are the main 5 problems that your berry business faces? (open ended)", %..... | 8 |
| Figure 5: "Q10. Where do you currently sell your production? (one answer)", % | 9 |
| Figure 6: "Q11. Where do you sell your production in Moldova? (multiple answer)", % | 9 |
| Figure 7: "Q12. How do you sell your production abroad? (one answer)", N=64, %..... | 9 |
| Figure 8: "Q13. Where do you sell your production abroad? (multiple answer)", N=64, %..... | 9 |
| Figure 9: "Q15. Let's presume there is a unified system that assures regular berry collection from berry growers aiming at export. Given your berry production, how interested or uninterested would you be to participate in this system? Please evaluate on a scale from 1 to 5, where 1 – Very uninterested and 5 – Very interested. (one answer)", %..... | 10 |
| Figure 10: "Q16. How much of your berry production volume (in %) would you be ready to sell to an export collector? (open ended)", % | 10 |

Tables:

| | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| Table i.1: Survey call outcomes, N | 6 |
| Table 1: Capacity of the available refrigerator, freezer storage and refrigerated transport, "Q9B. What is your capacity for... ? Please indicate in kilograms. (open ended)", kg | 8 |
| Table 2: Cultivated land area and production quantity for different berries for 2019. "Q7A. In 2019, what was your area for... ? Please indicate the area and specify: ares or hectares. (open ended). Q7B. What was your production quantity for... ? Please indicate in kilograms. (open ended)", N=280 | 11 |
| Table 3: Forecasted land area and production quantity for different berries for 2020. "Q7A. In your opinion, in 2020 what area you think you will have for... ? Please indicate the area and specify: ares or hectares. (open ended). Q8B. What production quantity you think you will have for... ? Please indicate in kilograms. (open ended)", N=286 | 12 |

INTRODUCTION

This study was realized by *Magenta Consulting* for United Nations Development Program project Advanced Cross-river Capacities for Trade Project (AdTrade).

The overall objective of the Advanced Cross-river Capacities for Trade Project (AdTrade), financed by Swedish Government and implemented by UNDP, is to secure that men and women on both banks have better livelihoods and living conditions, due to an improved cross-river cooperation to access the opportunities offered by Moldova's external trade arrangements, contributing to an environment of trust and cooperation.

The proposed initiative will merge companies' effort to export, allowing left bank enterprises (particularly SMEs) to access trade mechanisms available on the right bank, but also by providing tailored support to build necessary knowledge and skills of ready to export and exporting companies, letting them to access opportunities offered by the DCFTA arrangements. The project envisages provision of methodological and practical assistance in establishing long-term trade links and promotion of exports, by supporting existing companies or by launching new businesses, facilitating creation of permanent jobs, especially for women and vulnerable groups (which include youth, elderly people, ethnic groups, minorities, persons with disabilities, persons with a limited lifespan, other).

i.1 Purpose of the study

The primary purpose of this study was to research the production capacities of the small/medium sized berry producers from both banks to identify their export potential. A second objective was the mapping of both banks berry producers to understand their capacities and needs, as a measure intended to further support small and medium producers to aggregate their efforts in accessing new markets.

i.2 Methodology applied

The data presented in this report were collected using the CATI method (telephone survey – Computer Aided Telephone Interview).

286 respondents were interviewed during the survey – 280 individuals and legal entities from both banks of the Nistru River that produced berries in 2019 and 6 that plan to produce berries in 2020. Since this was a mapping study, there was no sample and the aim was to include as many as berry producers as possible.

i.2.1 Structure of the questionnaire

The questionnaire was elaborated by *Magenta Consulting* in close partnership with the contractor. All comments and requirements were implemented.

The questionnaire consisted of 17 questions and covered the following aspects: entity and contact information, 2019 production volumes and 2020 forecasted volumes by berry type, availability of cold storage/freezer/refrigerated transport, points of sale in Moldova and abroad, problems with the berry business and interest in collaboration with an export collector.

i.2.2 Interviewing

Data collection included the following steps:

Selecting interviewers

A team of 10 interviewers was selected, who have considerable experience in conducting telephone surveys and their training has been conducted. As our experience has shown, it is necessary to make sure that the interviewer understands the purpose of the project, understands what types of response should be expected from the respondents, how to record the answers and how to follow the instructions in the questionnaire. All interviews were conducted in Romanian or Russian, depending on the preference of the respondent.

Data collection

There were 2 stages of data collection:

- I. Berry producers' contacts were contacted repeatedly, most being called 4-5 times on different days and at different hours. The contact numbers that were disconnected were also contacted on the Viber

app, in order to ensure that the producers whose phone number is disconnected due to being abroad were included in the study.

- II. After all of the available sources for berry producers' contacts were exhausted, current fruit producers were contacted and the questionnaire was conducted with those who declared they were planning to produce berries in 2020.

A total of 1546 contacts of potential berry producers were contacted. Apart from the contact database provided by the contractor, additional contacts of berry and fruit producers were collected from the following sources:

1. National Bureau of Statistics databases;
2. 153 town and village halls were contacted and asked to provide contacts for berry producers in their respective locality;
3. Association Moldova Fruct website – Moldovafruct.md;
4. Moldagro.md;
5. Kompas.md;
6. 999.md;
7. The respondents were also asked to provide contacts for other berry producers that they know in their locality.

Below is included the table with the call outcomes for the contacts that were called during the survey.

Table i.1: Survey call outcomes, N

| | N |
|-------------------------|-------------|
| Completed: | 286 |
| Refusal | 42 |
| Not eligible | 781 |
| No answer/ Disconnected | 437 |
| Total contacted | 1546 |

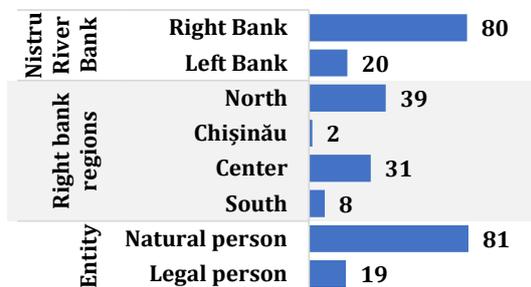
Data entry

The collected questionnaires were instantly entered into the database. As soon as the interviewer completed the answers, the data was transferred to the database, which eliminated the costs of double entry and helped reduce errors.

PRODUCTION CAPACITIES OF THE SMALL/MEDIUM SIZED BERRY PRODUCERS

Among the interviewed berry producers, roughly 80% are from the Right Bank and represent a natural person. Out of the Right Bank respondents, most are either from the North or Center regions of the country.

Figure 1: Respondents' profile, %



Roughly half of the respondents stated they grew strawberries in 2019. Other popular berry types are raspberries, blackberries, black currants.

Figure 2: "Q5. What type of berries did you produce in 2019? (multiple answer)", %

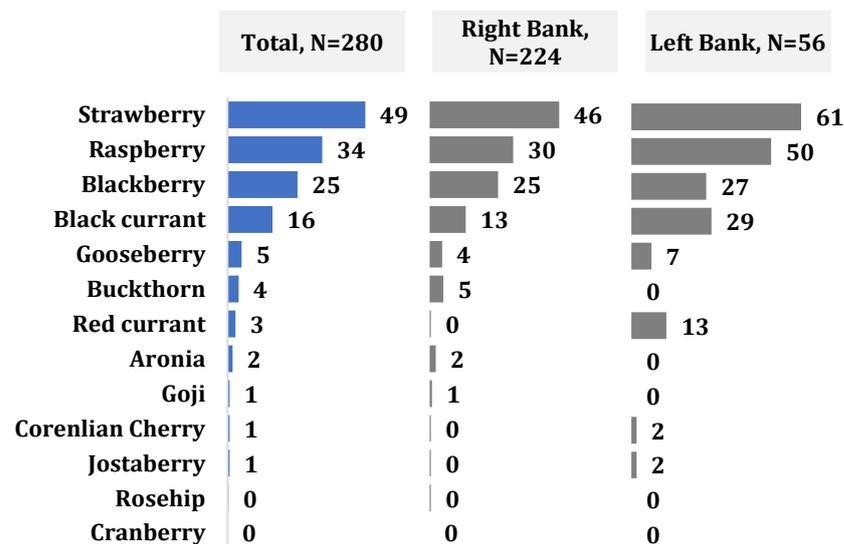
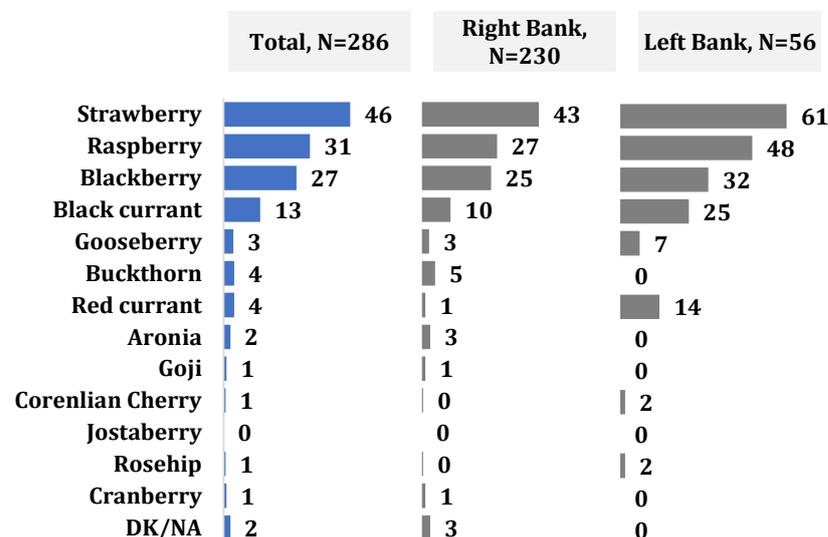


Figure 3: "Q6. What type of berries do you PLAN to begin producing / to continue producing in 2020? (multiple answer)", %



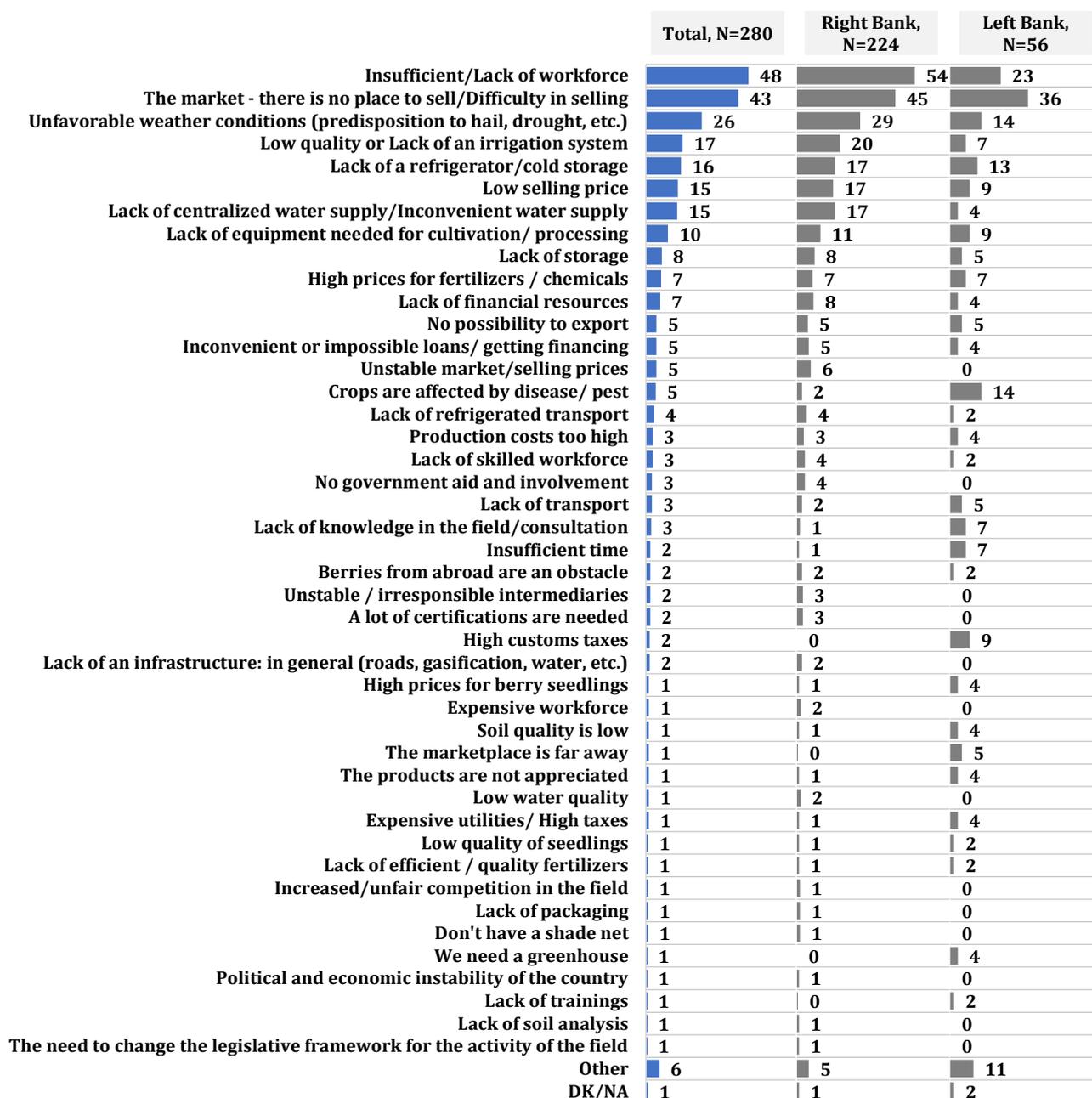
Most of the respondents stated they do not have any cold storage available. 21% of the producers mentioned they have a refrigerator, 3% - have a freezer and 8% - refrigerated transport. Among those that have these amenities, the total capacity of the refrigerator storage is roughly 12770 tons.

Table 1: Capacity of the available refrigerator, freezer storage and refrigerated transport, “Q9B. What is your capacity for... ? Please indicate in kilograms. (open ended)”, kg

| | Total | | | Right Bank | | | Left Bank | | |
|------------------------|----------|--------|--------|------------|--------|--------|-----------|--------|--------|
| | Sum | Mean | Median | Sum | Mean | Median | Sum | Mean | Median |
| Refrigerator storage | 12769565 | 228028 | 60000 | 10628000 | 265700 | 95000 | 2141565 | 133848 | 11750 |
| Freezer storage | 871160 | 87116 | 20000 | 871000 | 108875 | 22500 | 160 | 80 | 80 |
| Refrigerated transport | 2301900 | 100083 | 5000 | 2296400 | 109352 | 5000 | 5500 | 2750 | 2750 |

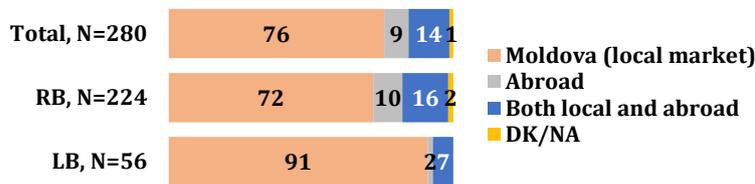
The main problems that the respondents’ berry businesses face are insufficient/lack of workforce (48% indicated as one of the main problems) and the market – there is no place to sell/difficulty in selling (43%). Roughly a quarter said that unfavorable weather conditions are an obstacle for their berry business.

Figure 4: “Q14. Which are the main 5 problems that your berry business faces? (open ended)”, %



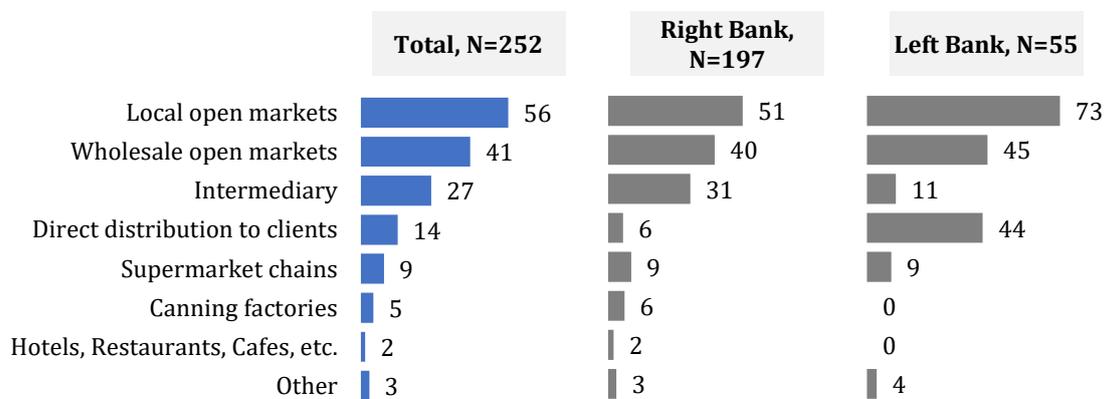
76% of the survey participants sell their berries exclusively on the local market. This share is higher among the Left Bank berry producers. At the same time, roughly every fourth Right Bank respondent is already exporting his/her produce.

Figure 5: “Q10. Where do you currently sell your production? (one answer)”, %



More than half (56%) of the producers sell the berries at local open markets in Moldova, while 41% mentioned they sell at wholesale open markets and 27% - to an intermediary. A share of 44% of the Left Bank producers stated they distribute directly to clients.

Figure 6: “Q11. Where do you sell your production in Moldova? (multiple answer)”, %



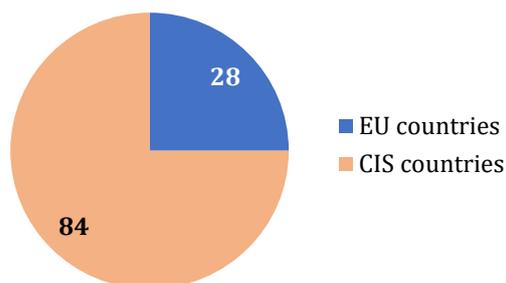
Among the producers that sell their produce abroad, 69% do it through an intermediary (either exclusively, or combined with selling directly to an entity/individual abroad).

Figure 7: “Q12. How do you sell your production abroad? (one answer)”, N=64, %



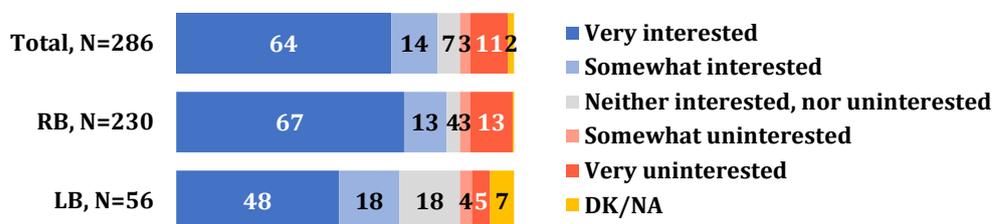
Most the respondents that sell their produce abroad export it to CIS countries (Commonwealth of Independent States, former and current members).

Figure 8: “Q13. Where do you sell your production abroad? (multiple answer)”, N=64, %



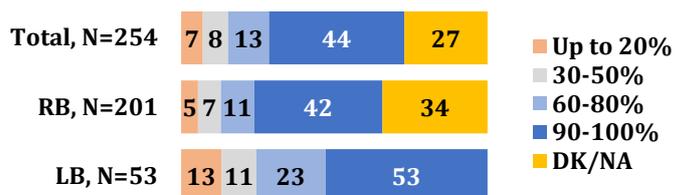
Approximately 3 in 4 berry producers indicated that they are generally interested in participating in a unified berry collection system aimed at export. It appears that the share of the Right Bank producers who are interested in collaborating with an export collector is higher than among the Left Bank interviewees.

Figure 9: “Q15. Let’s presume there is a unified system that assures regular berry collection from berry growers aiming at export. Given your berry production, how interested or uninterested would you be to participate in this system? Please evaluate on a scale from 1 to 5, where 1 – Very uninterested and 5 – Very interested. (one answer)”, %



The interviewed berry producers that offered marks from 2 – “Somewhat uninterested” to 5 – “Very interested” at the question regarding their interest in working with an export collector were asked what share of their produce they would be ready to sell. 57% declared they would sell more than half of their produce.

Figure 10: “Q16. How much of your berry production volume (in %) would you be ready to sell to an export collector? (open ended)”, %



According to the interviewed berry producers from Right Bank, in 2019 the biggest quantities were obtained for ordinary strawberries, blackberries and remontant strawberries. On the other hand, Left Bank producers mentioned biggest quantities for ordinary strawberries, blackberries and remontant raspberries. For both banks, there were circa 433 hectares cultivated with strawberry (ordinary) in 2019, yielding a total of roughly 3506 tons of produce.

Table 2: Cultivated land area and production quantity for different berries for 2019. "Q7A. In 2019, what was your area for... ? Please indicate the area and specify: ares or hectares. (open ended). Q7B. What was your production quantity for... ? Please indicate in kilograms. (open ended)", N=280

| | Total | | | | | | Right Bank | | | | | | Left Bank | | | | | |
|----------------------|---------------------|---------|--------|--------------------|---------|--------|---------------------|---------|--------|--------------------|---------|--------|---------------------|---------|--------|--------------------|---------|--------|
| | 2019 Land area (ha) | | | 2019 Quantity (kg) | | | 2019 Land area (ha) | | | 2019 Quantity (kg) | | | 2019 Land area (ha) | | | 2019 Quantity (kg) | | |
| | Sum | Average | Median | Sum | Average | Median | Sum | Average | Median | Sum | Average | Median | Sum | Average | Median | Sum | Average | Median |
| Strawberry Ordinary | 432.80 | 3.70 | 1.00 | 3506380 | 35064 | 8000 | 354.78 | 4.03 | 1.00 | 2871480 | 35018 | 9000 | 78.02 | 2.69 | 0.75 | 634900 | 35272 | 4500 |
| Strawberry Remontant | 23.65 | 0.84 | 0.50 | 226350 | 11318 | 3000 | 21.77 | 1.04 | 0.50 | 222750 | 13103 | 3000 | 1.88 | 0.27 | 0.05 | 3600 | 1200 | 1000 |
| Raspberry Ordinary | 33.72 | 0.52 | 0.25 | 180235 | 3277 | 1000 | 29.60 | 0.57 | 0.25 | 178695 | 3436 | 1000 | 4.13 | 0.32 | 0.08 | 1540 | 513 | 500 |
| Raspberry Remontant | 16.13 | 0.50 | 0.20 | 54486 | 2724 | 1250 | 6.03 | 0.55 | 0.40 | 26820 | 3353 | 2500 | 10.10 | 0.48 | 0.20 | 27666 | 2306 | 750 |
| Blackberry | 50.66 | 0.72 | 0.45 | 235591 | 4283 | 1500 | 43.76 | 0.80 | 0.50 | 193375 | 4029 | 1500 | 6.90 | 0.46 | 0.05 | 42216 | 6031 | 150 |
| Black currant | 57.45 | 1.34 | 0.20 | 46365 | 1405 | 300 | 45.54 | 1.69 | 0.30 | 40260 | 1678 | 300 | 11.90 | 0.74 | 0.02 | 6105 | 678 | 100 |
| Red currant | 1.13 | 0.16 | 0.02 | 3820 | 955 | 400 | 0.05 | 0.05 | 0.05 | 300 | 300 | 300 | 1.08 | 0.18 | 0.01 | 3520 | 1173 | 500 |
| Aronia | 12.60 | 3.15 | 1.55 | 41600 | 8320 | 3000 | 12.60 | 3.15 | 1.55 | 41600 | 8320 | 3000 | - | - | - | - | - | - |
| Gooseberry | 50.35 | 3.87 | 0.50 | 77725 | 7773 | 1500 | 48.95 | 4.90 | 0.65 | 75720 | 9465 | 1500 | 1.40 | 0.47 | 0.40 | 2005 | 1003 | 1003 |
| Goji | 6.00 | 3.00 | 3.00 | 1720 | 860 | 860 | 6.00 | 3.00 | 3.00 | 1720 | 860 | 860 | - | - | - | - | - | - |
| Buckthorn | 72.01 | 6.55 | 2.00 | 68100 | 8513 | 6500 | 72.01 | 6.55 | 2.00 | 68100 | 8513 | 6500 | - | - | - | - | - | - |
| Cranberry | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Jostaberry | 0.65 | 0.33 | 0.33 | 5000 | 2500 | 2500 | 0.50 | 0.50 | 0.50 | 4000 | 4000 | 4000 | 0.15 | 0.15 | 0.15 | 1000 | 1000 | 1000 |
| Cornelian cherry | 1.10 | 0.55 | 0.55 | N/A | N/A | N/A | 0.10 | 0.10 | 0.10 | N/A | N/A | N/A | 1.00 | 1.00 | 1.00 | N/A | N/A | N/A |
| Rosehip | 20.00 | 20.00 | 20.00 | 40000 | 40000 | 40000 | 20.00 | 20.00 | 20.00 | 40000 | 40000 | 40000 | - | - | - | - | - | - |

While for some berry types producers forecast a smaller quantity in 2020, it seems that respondents plan to have a bigger quantity of ordinary strawberries, blackberries, goji and buckthorn compared to 2019. Berry producers mentioned that they plan to cultivate a smaller area with ordinary strawberries in 2020 – roughly 330 hectares, but expect to have approximately 6350 tons of produce.

Table 3: Forecasted land area and production quantity for different berries for 2020. “Q7A. In your opinion, in 2020 what area you think you will have for... ? Please indicate the area and specify: ares or hectares. (open ended). Q8B. What production quantity you think you will have for... ? Please indicate in kilograms. (open ended)”, N=286

| | Total | | | | | | Right Bank | | | | | | Left Bank | | | | | |
|----------------------|---------------------|-------|--------|--------------------|-------|--------|---------------------|-------|--------|--------------------|-------|--------|---------------------|------|--------|--------------------|-------|--------|
| | 2020 Land area (ha) | | | 2020 Quantity (kg) | | | 2020 Land area (ha) | | | 2020 Quantity (kg) | | | 2020 Land area (ha) | | | 2020 Quantity (kg) | | |
| | Sum | Mean | Median | Sum | Mean | Median | Sum | Mean | Median | Sum | Mean | Median | Sum | Mean | Median | Sum | Mean | Median |
| Strawberry Ordinary | 329.97 | 2.95 | 1.00 | 6350318 | 79379 | 11000 | 253.34 | 3.05 | 1.00 | 5712168 | 82785 | 12000 | 76.63 | 2.64 | 1.00 | 638150 | 58014 | 2000 |
| Strawberry Remontant | 26.12 | 0.93 | 0.50 | 181300 | 12087 | 5000 | 20.86 | 1.10 | 0.60 | 170000 | 14167 | 4000 | 5.26 | 0.58 | 0.25 | 11300 | 3767 | 5000 |
| Raspberry Ordinary | 37.45 | 0.63 | 0.30 | 136150 | 3890 | 1000 | 32.30 | 0.69 | 0.30 | 135110 | 4094 | 1000 | 5.15 | 0.43 | 0.09 | 1040 | 520 | 520 |
| Raspberry Remontant | 17.11 | 0.52 | 0.25 | 41055 | 2281 | 1900 | 7.82 | 0.71 | 0.60 | 19500 | 2438 | 2000 | 9.29 | 0.42 | 0.20 | 21555 | 2156 | 500 |
| Blackberry | 101.46 | 1.35 | 0.50 | 330548 | 7186 | 2000 | 92.23 | 1.59 | 0.50 | 291008 | 7275 | 2000 | 9.23 | 0.54 | 0.10 | 39540 | 6590 | 725 |
| Black currant | 40.85 | 1.20 | 0.20 | 40150 | 2113 | 400 | 27.96 | 1.40 | 0.50 | 19550 | 1303 | 500 | 12.90 | 0.92 | 0.04 | 20600 | 5150 | 275 |
| Red currant | 99.65 | 12.46 | 0.04 | 2230 | 558 | 200 | 99.05 | 49.53 | 49.53 | 400 | 200 | 200 | 0.60 | 0.10 | 0.02 | 1830 | 915 | 915 |
| Aronia | 14.50 | 2.42 | 1.50 | 32300 | 6460 | 3000 | 14.50 | 2.42 | 1.50 | 32300 | 6460 | 3000 | - | - | - | - | - | - |
| Gooseberry | 9.40 | 1.18 | 0.75 | 47040 | 9408 | 2000 | 7.70 | 1.54 | 1.00 | 45040 | 11260 | 2500 | 1.70 | 0.57 | 0.50 | 2000 | 2000 | 2000 |
| Goji | 6.00 | 3.00 | 3.00 | 5540 | 1847 | 2500 | 6.00 | 3.00 | 3.00 | 5540 | 1847 | 2500 | - | - | - | - | - | - |
| Buckthorn | 82.51 | 7.50 | 5.00 | 159680 | 17742 | 3000 | 82.51 | 7.50 | 5.00 | 159680 | 17742 | 3000 | - | - | - | - | - | - |
| Cranberry | 3.30 | 1.10 | 1.00 | 20 | 20 | 20 | 3.30 | 1.10 | 1.00 | 20 | 20 | 20 | - | - | - | - | - | - |
| Jostaberry | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Cornelian cherry | 2.10 | 1.05 | 1.05 | 700 | 350 | 350 | 0.10 | 0.10 | 0.10 | 100 | 100 | 100 | 2.00 | 2.00 | 2.00 | 600 | 600 | 600 |
| Rosehip | 30.41 | 15.21 | 15.21 | 40000 | 40000 | 40000 | 30.00 | 30.00 | 30.00 | 40000 | 40000 | 40000 | 0.41 | 0.41 | 0.41 | N/A | N/A | N/A |

CONCLUSION

Based on the data obtained during this survey, the following conclusions ensue:

- Ordinary strawberry was reported as the most popular berry type for cultivation on both banks, and the type with the biggest obtained produce quantity in 2019.
- In regards to the cold storage and refrigerated transport availability, most producers do not have them available.
- Less than a quarter of the berry producers export their goods.
- Lack of a market for the produced berries is one of the biggest problems of the berry sector and most producers are interested in working with an export collector.

