





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

**PREPARED FOR: UNITED NATIONS DEVELOPMENT PROGRAM**  
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## 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

	<b>N</b>
Completed:	286
Refusal	42
Not eligible	781
No answer/ Disconnected	437
<b>Total contacted</b>	<b>1546</b>

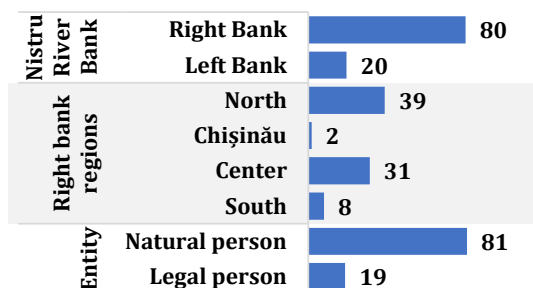
### **Data entry**

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)", %

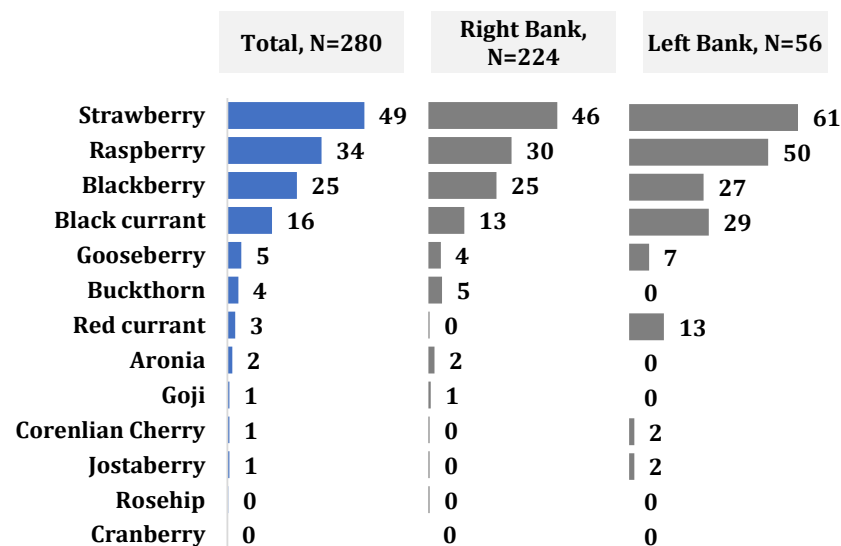
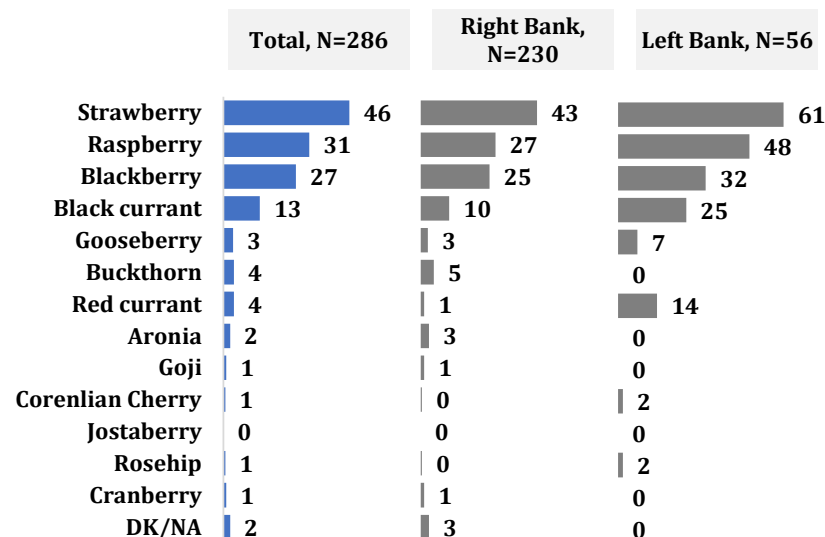


Figure 3: "Q6. What type of berries do you PLAN to begin producing / to continue producing in 2020? (multiple answer)", %





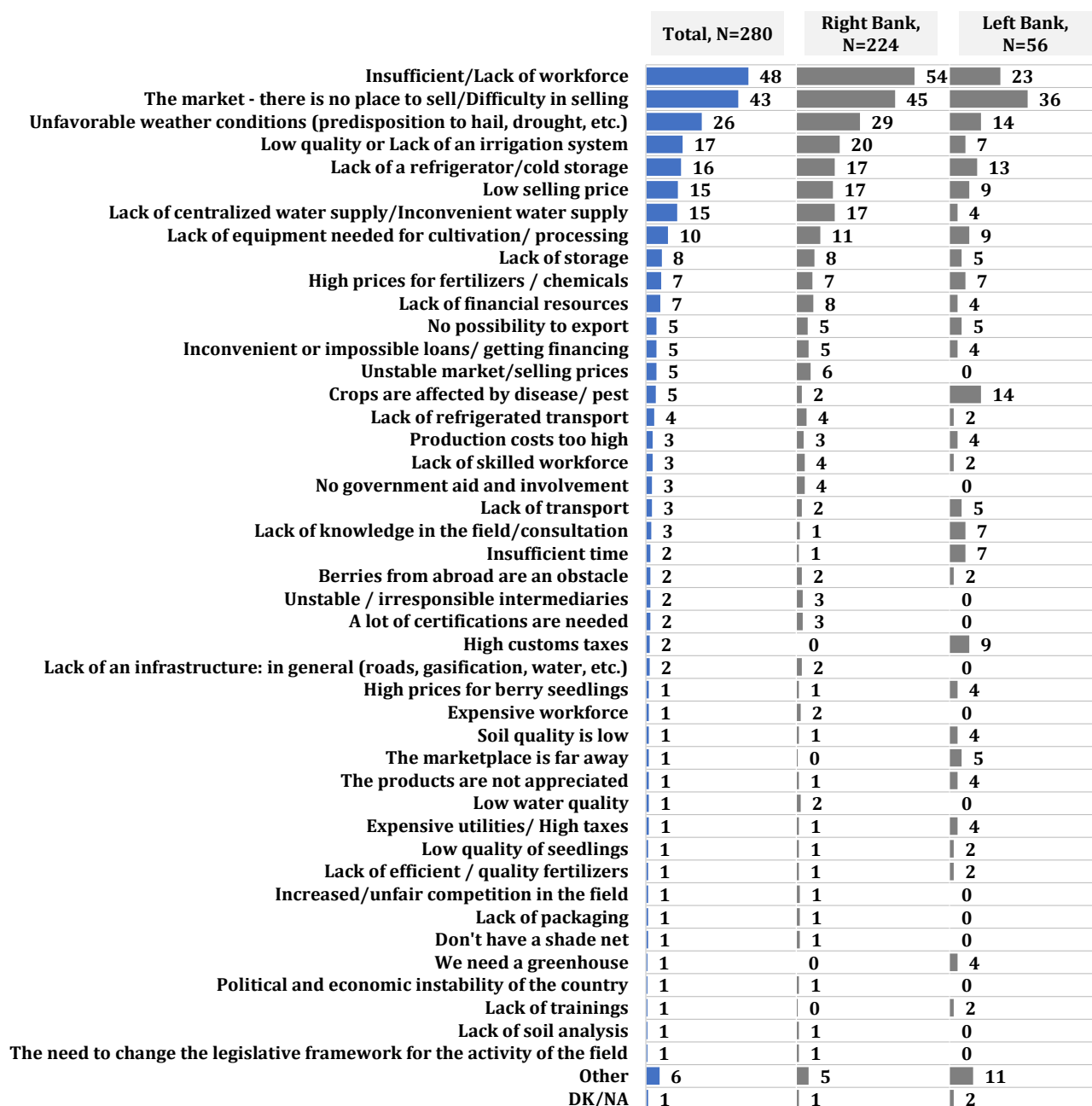
Most of the respondents stated they do not have any cold storage available. 21% of the producers mentioned they have a refrigerator, 3% - have a freezer and 8% - refrigerated transport. Among those that have these amenities, the total capacity of the refrigerator storage is roughly 12770 tons.

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

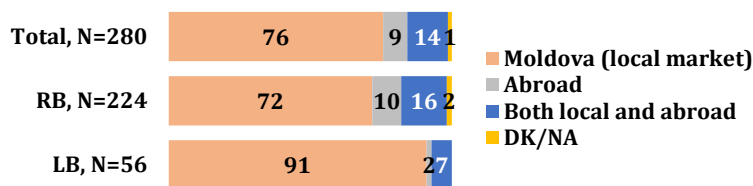
The main problems that the respondents’ berry businesses face are insufficient/lack of workforce (48% indicated as one of the main problems) and the market – there is no place to sell/difficulty in selling (43%). Roughly a quarter said that unfavorable weather conditions are an obstacle for their berry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

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



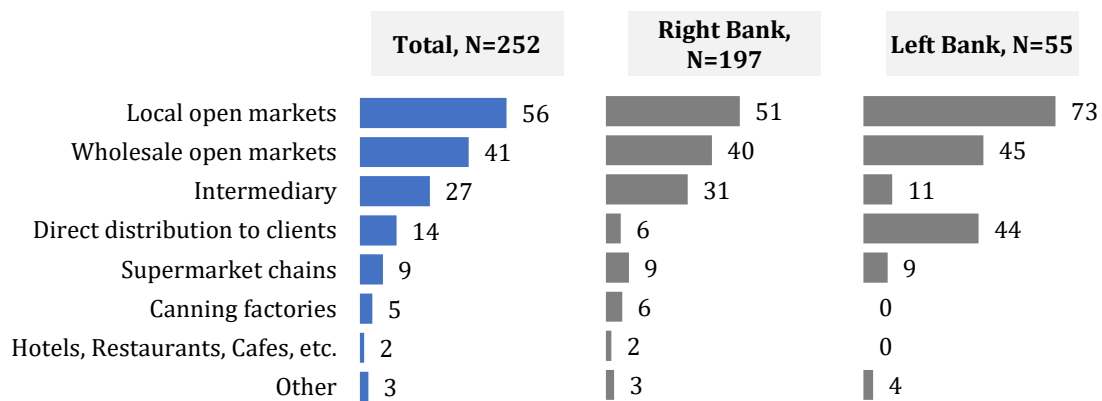
76% of the survey participants sell their berries exclusively on the local market. This share is higher among the Left Bank berry producers. At the same time, roughly every fourth Right Bank respondent is already exporting his/her produce.

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)”, %



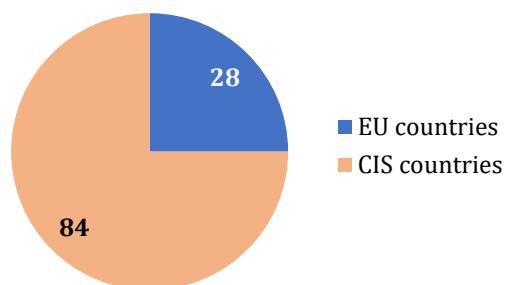
Among the producers that sell their produce abroad, 69% do it through an intermediary (either exclusively, or combined with selling directly to an entity/individual abroad).

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



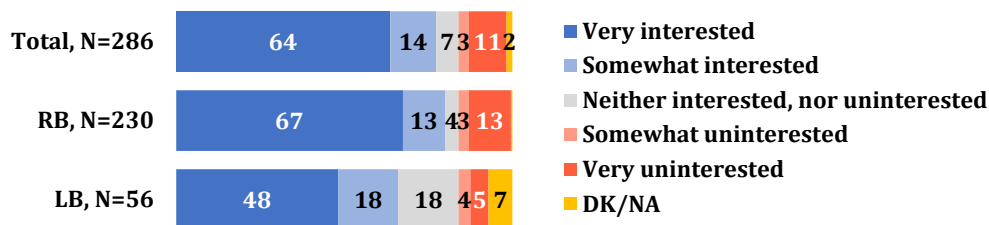
Most the respondents that sell their produce abroad export it to CIS countries (Commonwealth of Independent States, former and current members).

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



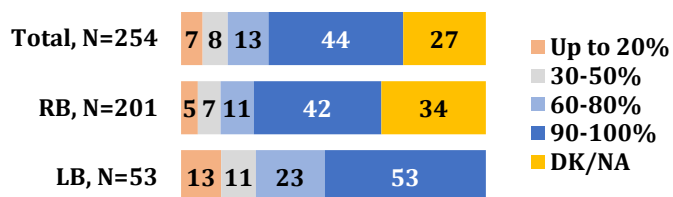
Approximately 3 in 4 berry producers indicated that they are generally interested in participating in a unified berry collection system aimed at export. It appears that the share of the Right Bank producers who are interested in collaborating with an export collector is higher than among the Left Bank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

