# SKILS FOR RURAL EMPLOYEEMENT (S4RE)



# Report "Assessment of the cultivation of Black Marshmallow (Malva Sylvestris ssp Mauritanica L)"



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#### **Table of content**

1.	EXECUTIVE SUMMARY	3
2.	BACKGROUND	3
3.	INTRODUCTION	3
4.	OBJECTIVES	4
5.	METHODOLOGY	4
6.	INTERVIEWS IN ACTORS OF THE VALUE CHAIN	4
7.	MAIN FINDINGS	6
8.	RECOMANDATION	7
9.	ANNEX 1 – List of companies contacted	8
10	.ANNEX 2 – Companies interested for cultivation and purchase of Black marshmallow	9
11	.ANNEX 3 – List of input suppliers	10
12	.ANNEX 4 – Investment cost for planting 0.1 hectare of Black Marshmallow	11
13	.ANNEX 5 – Design of drying unit in form of a greenhouse covered with black plastic	12

#### 1. EXECUTIVE SUMMARY

The Skills for Rural Employment (S4RE) project implemented by the Helvetas Swiss Intercooperation (HSIC) has the goal to reduce poverty in rural areas of Kosovo through increased employment and income opportunities.

The Non-timber forest products (NTFPs) have had a big boom in terms of exports to Western European countries; majority of products have been wild gathered products, however, the export of cultivated products have been increasing rapidly — an exporter "Agroproduct.shpk" from Istog has long term export contracts with larger processors from Germany, Austria and Switzerland. In this context, interest of the farmers for cultivation has increased. That is the reason that the S4RE project has decided to undertake an assessment of Black Marshmallow with objective to collect data about the product, including the list main actors interested in the crop, investment needed and market position of the crop.

For the assessment were interviewed four processors/exporters, four collection centres, two input dealers and one NGO.

The main findings were:

- Black marshmallow has high potential for creation employment in rural areas;
- Demand for black marshmallow in Western European markets is high;
- Leading actor for promotion is processor/exporter "Agroproduct.shpk". Demanding at least 10 tons of dried flowers per year at price € 10/kg.
- Three collection centres have identified 25 farmers interested for cultivation of black marshmallow in 0.10 ha plots;
- Expected yearly yield for 0.10 ha is nearly 300 kg of dried flowers;

#### 2. BACKGROUND

The Skills for Rural Employment (S4RE) project implemented by the Helvetas Swiss Intercooperation (HSIC) has the goal to reduce poverty in rural areas of Kosovo through increased employment and income opportunities. The project is active in the Sharri Mountains area (Municipalities of Dragash and Shtepce), as well as in the area of Novo Brdo and Kamenica focusing on youth, women and minorities.

S4RE within the second intervention strategy "Working with existing businesses to increase employment and income through skills and business development" and third intervention strategy "Linking self-employed suppliers of raw material (agricultural and others) to national and regional buyers" has identified the sub-sector of the Non-timber forest products (NTFPs), more specifically the cultivation of NTFPs, as a sub-sector with high potential for increasing employment and income generation in rural areas.

#### 3. INTRODUCTION

Last four to five years, the sub-sector of the Non-timber forest products (NTFPs) has had a big boom in terms of exports to Western European countries — four processors/exporters have been expanding market linkages and increasing the quantities of NTFPs exported.

Majority of exported products have been wild gathered products including wild berries, mushrooms and medicinal plants; however, the export of cultivated products (Medicinal and Aromatic Plants) has been increasing rapidly (taking shares from wild gathered products). Furthermore, from the sustainability point of view, exports of cultivated products is much more sustainable comparing with

wild gathered products – an exporter "Agroproduct.shpk" from Istog has long term export contracts with larger processors from Germany, Austria and Switzerland.

In this context, the same exporting company has been promoting the cultivation of NTFPs, contributing to increased interest of the farmers for cultivation; however, due the fact that the cultivation of NTFPs is relatively new to Kosovo and there is still a need for dipper assessments of different species on NTFPs.

The S4RE project has decided to undertake an assessment of Black Marshmallow (Malva sylvestris ssp Mauritanica L), for which a local consultant has been hired for a five-day mission.

#### 4. OBJECTIVES

The main objective of the assignment is to collect data about the product, including the list main actors interested in the crop (farmers, input dealers, buyers and others), investment needed for planting 0.10 hectare and the market position of the crop (demand, prices and market channels). Data collected will be used for Project purposes.

#### 5. METHODOLOGY

The assessment was completed using interviews of actors of the sub-sector interested for cultivation and sales of black marshmallow including inputs dealers. Interviews were completed with four processors/exporters, four collection centres, two input dealers and one NGO. In addition, for the cultivation of black marshmallow literature and internet researches were consulted.

#### 6. INTERVIEWS IN ACTORS OF THE VALUE CHAIN

"AgroProduct.shpk", Istog – it is a Nursery, Producer, Processor and Exporter of NTFPs. During the interview the owner, Mr. Halit Avdijaj, he stated that the demand for black marshmallow in Western European markets is high. The company itself has a long term contract with the world's largest buyer of NTFP's Martin Bauer Group (<a href="http://www.martin-bauer-group.com/en/martin-bauer-group.html">http://www.martin-bauer-group.com/en/martin-bauer-group.html</a>) for 1 ton of black marshmallow flowers. However, even though that the market demand exists for considerably more quantities "AgroProduct.shpk" could not enter in contractual agreement for larger quantities due to current small scale cultivation in Kosovo.

During 2013, the company has purchased 3 tons of black marshmallow flowers – 1 ton for "Martin Bauer" and 2 tons for other buyers in Germany. The flowers have been sourced from small scale producers scattered in Municipalities of Istog, Mitrovica, Skenderaj and Vushtrri. The purchasing price paid to producers has been € 10/kg.

In this context, the company has been promoting the development of cultivation of black marshmallow among the producers and collection centres of NTFPs. For this purpose the company has collaborated closely with IADK, a local NGO, for initiation of cultivation of black marshmallow. In addition to collaboration with IADK, the company has constantly offered to interested parties the readiness to co-finance seedlings on 50% - 50% basis; and, what is the most important, the company would purchase all the quantities of black marshmallow flowers. Mr. Avdijaj suggested that the expansions of cultivation should be done gradually; e.g. from cultivation on year 2013 – 3 tons, to year 2014 – 10 tons, year 2015 – 15 tons and year 2016 – 20 tons. It should go hand-in-hand with development of market linkages – based on the increases areas, "AgroProduct.shpk" would enter in contractual agreements with international buyers.

Regarding the cultivation of the black marshmallow, the owner of "AgroProduct.shpk" based on the experience with local producers gave the following suggestions:

- planting should be done in second part of April by transplanting plugged seedlings (produced in trays) in open field;
- it is a crop that harvest has to be done every day from June to October; if harvest is not done
  for one day, plants start to produce seeds which reduces the quality of flowers followed by
  reducing production of flowers;
- due to the need for very high labour input for harvest farmers should plant no more than 0.10 ha;
- expected yearly yield for a 0.10 ha plot is about 300 kg of dried flowers; daily yield is 17 20 kg of fresh flowers or around 2 Kg dried flowers (at rate 9 -10 kg fresh flowers for 1 kg dried flowers);
- drying of flowers has to be done immediately after harvest in order to preserve quality of the flowers;
- due to small daily quantities harvested in a 0.10 ha plot and immediate drying needed, producers should have a simple drying unit a good example is greenhouses covered with black plastic which has zero running costs. Other alternative is drying at collection centres, which is not economically viable due to small quantities and harvest takes place for five months every day, so, the collection centres do not have enough drying capacities to occupy with black marshmallow only.

**"Fungo FF"**, **Kamenicë** – the company is focused in cultivation of mushrooms (champignons) and collection of wild mushrooms and berries. During the interview the owner, Mr. Fatmir Krasniqi, expressed no interest for neither in cultivation nor in purchase of black marshmallow.

"Hit Flores", Dragash - the company is focused in collection of wild mushrooms and berries and cultivation of raspberries. During the interview, the owner, Mr. Nuredin Bajrami, expressed no interest for neither in cultivation nor in purchase of black marshmallow.

**"Eurofruti"**, **Prishtine** - the company is focused in collection of wild mushrooms and berries. During the interview, the owner, Mr. Bejtush Gashi, expressed no interest for neither in cultivation nor in purchase of black marshmallow.

"Te Xhema", Novo Brdo – the company owns a collection centre located in Municipality of Novo Brdo collecting wild mushrooms and berries form collectors of the region; in addition, the company is involved in cultivation of NTFPs including saffron (*crocus sativa*). During the interview, the owner, Mr. Xhemajl Bunjaku, expressed interest to promote cultivation of black marshmallow among the farmers of the Novo Brdo municipality - the main reasons are interest of the processor/exporter, AgroProdukt.shpk, to purchase all quantities produced at price 10 €/kg and good agro climatic conditions that Novo Brdo has for cultivation of black marshmallow. Mr. Bunjaku has identified 11 farmers from municipality of Novo Brdo interested to cultivate black marshmallow (see the list ANNEX 3). The collection centre "Te Xhema" will purchase dried flowers on behalf of "Agroproduct.shpk".

"Natyra", Novo Brdo – the company has a collection centre located in village Stanishor, Novo Brdo Municipality collecting wild mushrooms and berries from the collectors of the region. In addition, the company does packing of NTFPs targeting supermarkets. During the interview, the owner, Mr. Ahmet Govori, expressed no interest for neither in cultivation nor in purchase of black marshmallow.

"Lulet e Kosovës", Ferizaj – the company has established a collection centre in Municipality of Shtepce collecting NTFPs only for "AgroProduct.shpk". During the interview, the owner, Mr. Skifter Ajvazaj, stated that seeing the high interest of "AgroProduct.shpk" to purchase the flowers of black marshmallow, he has promoted it amongst the collectors and farmers of the Municipality of

Shterpce. As result of it, he has indentified 10 farmers interested to cultivate black marshmallow (see the list ANNEX 3).

Mr. Rafi Kalenderi, Dragash Municipality – Mr. Kalenderi owns a collection centre located in village Kosavë, Dragash Municipality; he collects wild plants and berries. He has a small plot (100 m² or 0.01Ha) with black marshmallow; all flowers have been sold to "AgroProduct.shpk". His short but successful experience has increased his interest and interests of other producers of his region for cultivation of the black marshmallow. He has indentified five farmers interested to cultivate black marshmallow (see the list ANNEX 3).

"Initiative for Agriculture Development in Kosovo – (IADK)", Mitrovica – It is a local NGO promoting rural development. IADK has supported the development of black marshmallow value chain through supporting 15 producers with seeds, drip irrigation scheme and greenhouses (covered with black plastic but without shelves) for drying of flowers. In an interview with Mr. Basri Hyseni, Head of Department of Horticulture, he stated that results of the IADK's activities have shown that black marshmallow as a crop with high potential for employment – it requires high labour input for every day harvest for 5 months – it takes 56% of total costs of 0.10 ha plots including purchase of drying unit or 81% without drying unit (see ANNEX 5). For this reason cultivation should be done in plots not larger than 0.1 ha by producers that have larger families (at least four people – 2 hour each per day); more importantly labour has to come from family because if others people are employed for harvest – there will be very little profit.

Important to mention is that the IADK's collaboration with the company "AgroProduct.shpk" was critical for success because it was a source of planting material (seeds) and, more importantly, market for the producers – purchased all flowers produced.

Even though the black marshmallow's project was successful, IADK will not continue to financially support it anymore; however, the black marshmallow producers will be monitored and advised on demand by IADK staff. IADK will financially support cultivation of other NTFPs (e.g. sage, white marshmallow) and with other farmers.

"Jonathan", Gjakovë – it is an input dealer with strong focus in vegetable seeds and irrigation schemes. With the owner of "Jonathan", Mr. Elgen Bokshi, was discussed for the drip irrigation schemes for 0.1 ha for black marshmallow. He has presented possible designs of a scheme and information for different elements of the scheme and tentative price of elements. Mr. Bokshi offered free of charge services for designing of the irrigation scheme for every producer.

"Fatoni", Prizren – the company is a greenhouse manufacturer located near Prizren. During the interview with the owner, Mr. Faton Krasniqi, was discussed for possibilities of manufacturing a drying unit in form of a greenhouse (covered with black plastic) and with shelves. The owner stated that the company has capacities to produce such a drying units; a design of it was showed (see Annex 5). The metal structure should be as per normal greenhouses.

#### 7. MAIN FINDINGS

- Black marshmallow has high potential for creation employment in rural areas;
- Demand for black marshmallow in Western European markets is high;
- Leading actor for promotion of black marshmallow is processor/exporter "Agroproduct.shpk". It has a long term contract with possibilities for sign other contracts; purchases all the quantities produced (market for producers) and produces seedlings (source of planting material). Furthermore, the company has shown readiness to finance 50% of the costs of the seedlings;

- Demand of Agroproduct.shpk, in 2014, for dried flowers is at least 10 tons, with possibilities
  of increasing by 5 tons every following year; at price € 10/kg.
- Three collection centres have identified 25 farmers interested for cultivation of black marshmallow;
- Farmers should plant no more than 0.10 ha;
- Planting of plugged seedlings should be done in second part of month April;
- Expected yearly yield for 0.10 ha is nearly 300 kg of dried flowers;
- Producers should have a drying unit in form of a greenhouses covered with black plastic.

#### 8. **RECOMANDATION**

The consultant recommends to the S4RE project as follows:

- Support the expansion of cultivation of black marshmallow because it is a crop with high employment potential and income for rural families. The market demand exists and actors of the sub-sector have capacities to successfully produce, process and export it;
- Develop a strategic partnership with "Agroproduct.shpk" as the most important actor of the
  value chain; the partnership should be formalised through signing a MoU for joint promotion
  of the product. Furthermore, partnership should be developed with the collection centres as
  well as important actor for linking other actors of the value chain; they, as well, aggregate
  products on behalf of "Agroproduct.shpk";
- Support interested producers with inputs (seedlings), drip irrigation and a drying unit for establishing 0.10 ha plots. "Agroproduct.shpk" would co-finance seedlings;
- Continue to explore possibilities for initiation of the cultivation of black marshmallow in Kamenica, S4RE's project area, and later stage further;
- Assess the potential of other NTFPs products, because if producers manage to successfully cultivate black marshmallow, they could easily cultivate other products – several products are cultivated using similar technologies.

## 9. ANNEX 1 – List of companies contacted

Company	Activity	Person Contacted	Telephone	E-mail address
"Agroproduct.shpk", Istog	Nursery, Producer, Processor and Exporter	Halit Avdiaj, Owner	044 138 612	http://agroproduct- shpk.com/en/ agroproduct.shpk@gmail.com
"FungoFF", Kamenicë	Processor and Exporter	Fatmir Krasniqi, Owner	044 167 748	http://www.fungo- ff.org/en/index.html fungo ff@hotmail.com
"HitFlores", Dragash	Processor and Exporter	Nuredin Bajrami, Owner	044 148 155	hit flores@hotmail.com
"Eurofruti", Prishtinë	Processor and Exporter	Bejtush Gashi, Owner	044 173 331	eurofruti@hotmail.com
"Te Xhema", Novo Brdo	Producers and Collection centre	Xhemajl Bunjaku, Owner	044 729 997	te.xhema@hotmail.com
"Natyra", Novo Brdo	Producers and Collection centre	Ahmet Govori, Owner	044 425 003	natyrabma@hotmail.com
	Producers and Collection centre	Rafi Kalenderi	044 203 583	https://www.facebook.com/ra fi.kalanderi rafi ekosharri@hotmail.com
"Jonathan", Gjakovë	Input Dealer	Elgen Bokshi, Owner	044 503 540	jonathan gj@yahoo.com
"Lulet e Kosovës", Ferizaj	Collection centre	Skefter Ajvazaj, Owner	044 120 469	Skifter_06@hotmail.com
"Initiative for Agriculture Development in Kosovo", Mitrovica	NGO	Basri Hyseni, Head of the Department for Horticulture	044 414 135	basrihyseni 2@hotmail.com
"Fatoni", Prizren	Greenhouse manufacturer	Faton Krasniqi, Owner	044 216 047	fatoni_1977@hotmail.com

# 10. ANNEX 2 – Companies interested for cultivation and purchase of Black marshmallow

	Company	Farmers	Locality/Village	Area (ha)
1.	"Te Xhema", No	ovo Brdo		
		Valdete Bunjaku	Bunjak	0.10
		Ragip Llapashtica	Bunjak	0.10
		Sokol Bunjaku	Bunjak	0.10
		Afrim Makolli	Bunjak	0.10
		Shaip Bunjaku	Vllasali	0.10
		Islam Vllasaliu	Vllasali	0.10
		Naser Vllasaliu	Llabjan	0.10
		Sherif Vllasaliu	Izvor	0.10
		Sllobodan Bogdanovic	Izvor	0.10
		Sasa Ristic	Izvor	0.10
		Dragan Miljkovic	Izvor	0.10
2.	"Lulet e Kosoves", Ferizaj – Collection centre		re in Shterpce	
		Pavlovic Misa	Shterpce	0.10
		Dordevic Dalibor	Shterpce	0.10
		Petkovic Slavisa	Shterpce	0.10
		Dordevic Dragisa	Shterpce	0.10
		Pavlovic Nadica	Shterpce	0.10
		Borzanovic Stanomir	Shterpce	0.10
		Radonovic Sladjan	Shterpce	0.10
		Stanisavlevic Jovica	Shterpce	0.10
		Spasic Milan	Shterpce	0.10
		Pavlovic Miroslav	Shterpce	0.10
3.	Rafi Kalenderi, Dragash			
		Bekim Kalenderi	Kosavë	0.10
		Dashmir Kalenderi	Kosavë	0.10
		Halim Ajupi	Zhur	0.10
		Lirim Tertini	Kosavë	0.10
		Hajri Koloni	Kosavë	0.10
Total				2.50

### 11. ANNEX 3 – List of input suppliers

Input	Company	Person Contacted	Telephone	E-mail address
Black marshmallow seed and seedlings	"Agroproduct.shpk", Istog	Halit Avdiaj, Owner	044 138 612	http://agroproduct- shpk.com/en/
				agroproduct.shpk@gmail.com
Drip irrigation schemes	"Jonathan", Gjakovë	Elgen Bokshi, Owner	044 503 540	jonathan gj@yahoo.com
Drip irrigation schemes	"FitoFarma", Ferizaj	Isak Begisholli	044 124 858	fitofarma@yahoo.com
Drying unit	"Fatoni", Prizren	Faton Krasniqi, Owner	044 216 047	fatoni 1977@hotmail.com

## 12. ANNEX 4 – Investment cost for planting 0.1 hectare of Black Marshmallow

Cate	gory/Description	Units	Qty of Units	Unit Price (€)	Total (€)	
Ope	Operations/Services					
1	Ploughing	Service	1	20.00		20
2	Harrowing	Service	1	20.00		20
3	Manure spreading	Service	1	20.00		20
					Sub total	60
Inpu	ts	1		1	1	
1	Seedlings	Pcs	2000	0.11		220
2	Manure	Ton	4	10.00		40
					Sub total	260
Irriga	ation Scheme			1	<u> </u>	
1	Main pipe(Ø 39-40)	М	50	100		50
2	T Pipe	М	1000	0.06		60
3	Joints	Pcs	50	0.75		38
4	Filter (Ø 39-40)	Ton	1	43.00		43
5	Reservuor 1000 lt	Pcs	1	175.00		175
					Sub total	366
Labo	ur Input			1	<u> </u>	
1	Planting	Days	2	15.00		30
2	Weeding (5 x)	Days	10	15.00		150
3	Harvesting*	Days	153	15.00		2,295
Sub total 2475						
Gre	Greenhouse for drying					
1	Greenhouse for drying (5mx 10 m)	Pcs	1	1,250		1,250
				9	Sub total	1,250

<sup>\*4</sup> persons 2 hours per day for 153 days - in total 153 FTE

Grand Total	4,411 €

### 13. ANNEX 5 – Design of drying unit in form of a greenhouse covered with black plastic

