REPORT

ON IMPLEMENTATION OF THE PROJECT

DEMONSTRATION OF CLIMATE CHANGE MITIGATION MEASURES IN NUTRIENTS RICH DRAINED ORGANIC SOILS IN BALTIC STATES AND FINLAND

WORK PACKAGE

MONITORING AND MEASURING THE LIFE KEY PERFORMANCE INDICATORS (D.3)

ACTIONS

Deliverable title	**Report on progress regarding LIFE key performance indicators**
Deliverable No	D3/1
Agreement No.	LIFE18 CCM/LV/001158
Report No.	2020- D3/1
Type of report	Final
Organization	Latvian State Forest Research Institute "Silava"

Report title	**Report on progress regarding LIFE key performance indicators**
Work package	Monitoring and measuring the LIFE key performance indicators (D.3)
Authors	J.Champion, A.Lazdiņš, I. Līcīte, A.Bardule, A.Lagzdiņš, A.Nipers, K. Soosaar, A.Kull, V.Kazanavičiute, A. Haber, A.Mancini
Photos and drawings	A.Lazdiņš
Report No.	2020- D3/1
Type of report	Final
Place	Salaspils
Organization	Latvia State Forest Research Institute "Silava"
Contact information	Riga street 111, Salaspils, LV-2169
	Phone: +37129183320
	E-mail: ieva.licite@silava.lv
	Web address: www.silava.lv
Date	2020
Number of pages	25

"LIFE OrgBalt compiled the first regional Baltic/ Finnish GHG emission factors for managed nutrient-rich organic soils (current and former peatlands), which have been made available for the customary scientific review and further verification for national GHG inventories in the hemiboreal region in Finland and the Baltic countries. While the project analysed selected CCM measures for drained organic soils in agriculture and forestry and developed spatial models and tools, it also identified remaining knowledge gaps. To bridge the remaining limitations and fill the gaps, it is essential to continue GHG measurements and model development, as well to broaden and complete the scope of the evaluated CCM measures in the after-LIFE-project period, notably by including rewetting and restoration of peatlands that are currently considered to be among the most recommended CCM measures on drained peatlands in the EU. In addition, the developed Simulation and PPC models still include limited macroeconomic considerations and lack assessment of all environmental impacts. For all these reasons, these models should be used carefully in CCM strategy development for identification of gaps in climate neutrality transition policy and funding frameworks and need further optimization for broader applicability as decision-making tools."

SUMMARY

Yearly reports on LIFE key performance indicators are part of the Project monitoring process that is in general aimed to enhance successful implementation of the Project by preventive minimization of the potential implementation risks. The main aim of the measuring and monitoring of the LIFE key performance indicators is to analyze the Project progress towards initially set indicators and targets.

Guidelines for monitoring and measuring the Project LIFE key performance indicators (KPI) are already developed within the Project deliverable A.1.1 "Project work plan including monitoring guidelines". Monitoring guidelines include description of the monitoring methods, indicators, and criteria. KPI are set based on the indicators that are defined in the Project proposal and they are broadly divided into indicators that are directly related to the greenhouse gas (GHG) emissions reduction, sustainable land management and economic improvements and there is also set of indicators related to communication and dissemination activities. Separate set of indicators is set for Project lifetime and the end of the Project and separate for the period of three years after the Project has ended. Indicators characterizing climate performance (GHG emissions reduction) and sustainable land use (agriculture and forestry) and economic performance and replication stay the same for both periods, but indicators characterizing communication, dissemination and awareness rising are narrowed down in the post project implementation period.

Monitoring and measuring of LIFE key performance indicators will be done in accordance with methodology described in deliverable A.1.1 - monitoring guidelines part.

Reports on KPI progress monitoring is to be prepared once per year starting from the first year of the Project implementation - 2020. This document is the initial KPI progress report that sets overall structure of the monitoring framework and will be yearly followed by the two mid term progress reports (2021 and 2022) and the final one in 2023.

ABBREVIATIONS

KPI – key project indicators

CCM – climate change mitigation

CH_4 – methane

CO_2 – carbon dioxide

GHG – greenhouse gas

CAP - Common Agriculture Policy

LLU – Latvia University of Life Sciences and Technologies

LSFRI "Silava" – Latvian State Forest Research Institute "Silava"

FRS - agency "Forest research station"

N_2O – nitrous oxide

FTE - Full Time Equivalent

SG – Steering Group

GWP- Global warming potential

TABLE OF CONTENTS

Figures

Tables

1. INDICATORS RELATED TO THE ENVIRONMENTAL AND CLIMATE PERFORMANCE

Indicators related to the reduction of GHG emissions are set to be achieved at the end of the Project and within the 3 years after the Project end. Both sets of indicators and their characteristics is given in Table 1.

Table 1: LIFE key performance environmental and climate indicators to be achieved by the end and within the 3 years after the Project

Objective	Indicators	Measurement unit	Estimated impact (absolute values)	Estimated impact (in %)	Brief explanation of assumptions used for the calculation
At the end of the Project					
Improved environmental and climate performance (including resilience to climate change)	Reduction of GHG emissions	CO_2 (carbon dioxide)	338 t CO_2/year	40% change	Default emission factors for nutrients-rich organic soils in cool temperate moist climate zone provided in the IPCC 2014 Wetlands supplement are used for calculation of impact of the implemented measures in case of land use changes. Literature reviews are used to estimate impact of wood ash application, changes in crop rotation and replacement of clear-felling with selective felling in spruce stands and gap-felling in pine stands. Following to approach applied in IPCC 2006 guidelines tier 1 methods no transitional period is applied. Growth curves of trees on drained or wet organic soils are considered in calculation of contribution of the living biomass o CO2 removals. However, the most of reduction of CO2 emissions is reached by reduction of CO2 emissions from soil. Role of living and dead biomass will increase in 20-40 years after afforestation. Estimated impact is calculated as difference

				between projected and current emissions.
CH_4 (methane)	35 tons CO2 eq. / year	85 % change		Several measures are associated with rewetting or temporal increase of groundwater level; therefore, methane emissions will increase after implementation of the measures. The default emission factors for nutrients-rich organic soils in cool temperate moist climate zone provided in the IPCC 2014 Wetlands supplement are used for calculation of impact of the implemented measures in case of land use changes. Literature review was used in calculation of impact of variation of groundwater level. No transition period is applied according to tier 1 methods of IPCC 2006 guidelines. Estimated impact is calculated as difference between projected and current emissions.
N_2O (nitrous oxide)	47 tons CO2 eq. / year	33 % change		Default emission factors for nutrients-rich organic soils in cool temperate moist climate zone provided in the IPCC 2014 Wetlands supplement are used for calculation of impact of the implemented measures in case of land use changes. Literature reviews are used to estimate impact of introduction of legumes into a rotation cycle. No transition period is applied according to tier 1 methods of IPCC 2006 guidelines. Reduction of N2O emissions mostly relates to measures associated to land us changes and rewetting. Estimated impact is calculated as difference between

					projected and current emissions.
Three years after the Project					
Improved environmental and climate performance (including resilience to climate change)	Reduction of GHG emissions	CO2 (carbon dioxide)	1041 tons CO2 in 3 years period	40 % change	Further reduction of GHG emissions due to implementation of the proposed measures in research forests and farmlands managed by the project partners. According to tier 1 method proposed in IPCC 2006 guidelines no transition period is applied to the GHG emission factors, therefore the projected impact in 3 years after implementation of the project is equal to the impact directly after implementation of the project. Only emission reduction in demo sites is considered in calculation, respectively, further implementation of the measures within the scope of the Rural development plan will increase climate change mitigation effect.
		CH4 (methane)	105 tons CO2 eq. in 3 years period	85 % change	Further reduction of GHG emissions due to implementation of the proposed measures in research forests and farmlands managed by the project partners. No transition period is applied to the GHG emission factors, therefore the projected impact in 3 years after implementation of the project is equal to the impact directly after implementation of the project. Explanation of the assumptions is provided earlier.
		N2O (nitrous oxide)	141 tons CO2 eq. in 3 years period	33 % change	Further reduction of GHG emissions due to implementation of the proposed measures in research forests and farmlands managed by the project partners. No transition period is applied

					to the GHG emission factors, therefore the projected impact in 3 years after implementation of the project is equal to the impact directly after implementation of the project. Explanation of assumptions is provided earlier. Explanation of the assumptions is provided earlier.

1.1 Reduction of greenhouse gas emissions (Carbon dioxide (CO₂))

CO_2 emissions reduction indicator value is calculated based on literature studies about CCM implementation effects and IPCC guidelines. IPCC 2014 Wetland Supplement default EFs are used for land use change measures and literature reviews for wood ash application, crop rotation impact and replacement of clear felling with selective felling. Estimated impact is calculated as difference between projected and current emissions. Reduction amount is calculated as reduction of t CO_2/year from demonstration sites in Latvia – in the period by Project end, and as reduction of t CO_2 from territories where CCM measures will be implemented 3 years beyond the project end.   Reduction is planned after full establishment of demonstration territories, no reduction during the period when demonstration sites are under establishment.

Data gathering during and after Project run:

1) information about areas where CCM are implemented provided by the Project partners;
2) calculation of emission reduction – done by Project experts based on methodology described in deliverable A 1/1 "Project work plan including monitoring guidelines" – GHG flux monitoring, and deliverables under D1 - "Monitoring of the implementation of project activities".

1.2 Reduction of greenhouse gas emissions (Methane (CH4))

CH_4 emissions reduction indicator value is calculated based on literature studies about CCM implementation effects and IPCC guidelines, literature review was used in calculation of impact of variation of groundwater level. Several measures are associated with rewetting or temporal increase of groundwater level; therefore, methane emissions will increase after implementation of the particular measures. IPCC 2014 Wetland Supplement default EFs are used for land use change measures and literature reviews for impact of variation of groundwater level. Global warming potential (GWP) in accordance with IPCC`s 4th Assessment Report (CH4 -25). Estimated impact is calculated as difference between projected and current emissions. Reduction amount is calculated as reduction of t CO_2 eq./year from demonstration sites in Latvia – in the period by Project end, and as reduction of t CO_2 eq. from territories where CCM measures will be implemented 3 years beyond the project end.   Reduction is planned after full establishment of demonstration territories, no reduction during the period when demonstration sites are under establishment.

Data gathering during and after Project run:

1) information about areas where CCM are implemented provided by the Project partners;
2) calculation of emission reduction – done by Project experts based on methodology described in deliverable A 1/1 "Project work plan including monitoring guidelines" – GHG flux monitoring, and deliverables under D1 - "Monitoring of the implementation of project activities".

1.3 Reduction of greenhouse gas emissions (Other GHG (nitrous oxide N2O))

N_2O emissions reduction indicator value is calculated based on literature studies about CCM implementation effects and IPCC guidelines. IPCC 2014 Wetland Supplement default EFs are used for land use change measures and literature reviews calculation of impact of the implemented measures in case of land use changes. Reduction of N2O emissions mostly relates to measures associated to land us changes and rewetting. GWP in accordance with IPCC`s 4th Assessment Report (N2O - 298). Estimated impact is calculated as difference between projected and current emissions. Reduction amount is calculated as reduction of t CO_2 eq./year from demonstration sites in Latvia – in the period by Project end, and as reduction of t CO_2 eq. from territories where CCM measures will be implemented 3 years beyond the project end. Reduction is planned after full establishment of demonstration territories, no reduction during the period when demonstration sites are under establishment.

Data gathering during and after Project run:

1) information about areas where CCM are implemented provided by the Project partners;
2) calculation of emission reduction – done by Project experts based on methodology described in deliverable A 1/1 "Project work plan including monitoring guidelines" – GHG flux monitoring, and deliverables under D1 - "Monitoring of the implementation of project activities".

2. INDICATORS RELATED TO SUSTAINABLE LAND USE IN AGRICULTURE AND FORESTRY

Indicators related to sustainable land use are set to be achieved at the end of the Project and within the 3 years after the Project end. Both sets of indicators and their characteristics is given in Table 2.

Table 2: LIFE key performance sustainable land use indicators to be achieved by the end and within the 3 years after the Project

Objective	Indicators	Measurement unit	Estimated impact (absolute values)	Estimated impact (in %)	Brief explanation of assumptions used for the calculation
At the end of the Project					
Sustainable land use,	Forestry	Reforested areas;	28 ha	100 % change	According to the work plan 10 ha will be afforested during project

agriculture and forestry		increase in area under sustainable forest management			implementation in Latvia and other climate change mitigation targeted measures will be implemented in 18 ha of forest lands. Estimated impact is calculated as difference between proposed area of demo sites and area of demo sites established within the scope of the project.
	Agriculture	Areas of agricultural land under sustainable management	17 ha	100 % change	Climate change mitigation targeted measures will be implemented in 17 ha of cropland and grassland. Management of these areas according to recommendations elaborated by the project will be continued as a part of program of maintenance of long-term research plots by Latvian University of Life Science and Technologies and agency "Forest research station". Estimated impact is calculated as difference between proposed area of demo sites and area of demo sites established within the scope of the project.
Three years after the Project					
Sustainable land use, agriculture and forestry	Forestry	Reforested areas; increase in area under sustainable forest management	84 ha	304% change	20 more hectares will be afforested after project implementation in Latvia by Joint stock company "Latvia state forests" and other climate change mitigation targeted measures will be implemented in 32 ha of state forest lands. Estimated impact is calculated as difference between proposed area of demo sites and area of demo sites established within the scope of the project.
	Agriculture	Areas of agricultural	17 ha	100 % change	Climate change mitigation targeted measures will be implemented in 17

		land under sustainable management			ha of cropland and grassland. Management of these areas according to recommendations elaborated by the project will be continued as a part of program of maintenance of long-term research plots by Latvian University of Life Science and Technologies and agency "Forest research station". Estimated impact is calculated as difference between proposed area of demo sites and area of demo sites established within the scope of the project.

Forestry

Estimations about increase in area under sustainable forest management within the Project is based on the area of demonstration sites to be established in Latvia. In demo territories innovative climate change mitigation measures are implemented in nutrient rich forest land area. Planned forest area under demonstration sites in Latvia is 28 ha. Around 10 ha of 28 ha are to be afforested under CCM (climate change mitigation) measures that include land use change form agriculture land to forest land. The rest of 18 ha are areas where other than afforestation CCM measures will be implemented – e.g. continuous forest coverage, wood ash application, specific planting methods and species for nutrient rich organic soils - thus ensuring sustainable land use practice. Reach of after the Project end indicator will be evaluated by the amount of established demo site areas. In general, this goal will be reached well before the Project end – when all demonstration sites in Latvia will be established. According to C 3/2 deliverable "Report on implementation of CCM measures in demo sites in Latvia" information demo sites` establishment activities (soil preparation, planting, cutting, thinning, agrotechnical clearing etc.) will be caried out in 2021/2022. In following LIFE key performance indicators reports gradual progress of demo sites establishment will be monitored. Data gathering – regular progress information from Latvian field teams.

In 3 year period after Project implementation Project results dissemination will ensure replication of the sustainable forest land management practices in nutrient rich organic soils and another at least 20 ha of agriculture land on nutrient rich organic soils are supposed to be afforested (most likely but not only by Joint stock company "Latvia state forests") and other CCM mitigation practices are projected to be implemented in 36 ha of state forest land on nutrient rich organic soil. Information will be gathered also from partner countries as Project replication and results dissemination activities will impact also land management there.

Data gathering:

1) information exchange based on regular collaboration practices established among LSFRI "Silava" and Joint stock company "Latvia state forests";
2) tentatively - information from Rural Support Service of Latvia about nutrient rich organic soils afforested with CAP (Common Agriculture Policy) support. Information exchange with Rural Support Service is already organized on yearly basis;
3) during and after Project run – information provided by the Project partners.

2.1 Agriculture

Indicator for sustainable land use in agriculture is set based on demonstration territories area where CCM measures in agriculture land on nutrient rich organic soil will be implemented in Latvia. The total area for this indicator is 17 ha and it stays the same for "by the end of the Project" period and for the period "3 years after the Project end". Both - cropland and grassland area are considered and these areas are under management of Latvian University of Life Science and Technologies (LLU) and agency "Forest research station" (FRS)". Continuation of sustainable practices after Project end in these territories is ensured by the fact that sites are part of program of maintenance of research plots in case of both institutions. Information about 3 years period after Project end will be gathered also from partner countries as Project replication and results dissemination activities will impact also land management there

Data gathering:

1) LSFRI "Silava" is collaborating with and exchanging information on regular basis with both institutions – LLU and FRS. LLU is one of LIFE OrgBalt project partners.;
2) during and after Project run – information provided by the Project partners.

3. INDICATORS RELATED TO ECONOMIC PERFORMANCE AND REPLICATION

Indicators related to economic performance and replication are set to be achieved at the end of the Project and within the 3 years after the Project end. Both sets of indicators and their characteristics is given in Table 3.

Table 3: LIFE key performance economic and replication indicators to be achieved by the end and within the 3 years after the Project

Objective	Indicators	Measurement unit	Estimated impact (absolute values)	Estimated impact (in %)	Brief explanation of assumptions used for the calculation
At the end of the Project					
Economic Performance, Market Uptake,	Employment	Jobs created	FTE 7	3 % change	Calculations are based on internal estimations of the Partner organizations and assumptions that the sustainable approaches in land

Replication					management will be integrated more
	Replication / Transfer	No of organizations	15	100 % change	Organizations/ institutions to be involved in the further implementation of the Project results - the Partner organizations and in addition 2 from each participating country
Three years after the Project					
Economic Performance, Market Uptake, Replication	Employment	Jobs created	FTE 15	3 % change	Calculations are based on internal estimations of the Partner organizations and assumptions that the sustainable approaches in land management will be integrated more
	Replication / Transfer	No of organizations	30	200 % change	Organizations/ institutions to be involved in the further implementation of the Project results. State governmental organizations (ministries and agencies), universities and research institutions, non-governmental organizations involved in climate change reduction and adaptation (6 organizations in each of 5 partner countries). Organizations will use the measurements developed within project and replicate the scenarios tested.

3.1 Employment

Employment indicator "Jobs created" is based on assumption about number of fully employed persons thought a year during the Project run time and in 3 years period after the Project end. FTE (Full Time Equivalent) is a unit to measure the number of fully employed persons throughout a year in a way that makes employments comparable even though some work less and others work more hours over that period.

For calculation of FTE 8 hours per day are considered as equivalent to one full working

day, and 220 full working days per year as equivalent to one annual FTE worked by an employee. Project numbers are calculated in the Project scope – for Finland, Latvia, Lithuania, Estonia and Germany together and based on assumption that fully employed percentage of persons in Project will stay stable during the Project run, involved persons will continue working with Project themes related topics in their institutions also after project end and in period of 3 years after Project additional persons will hired to work full time in partners institutions on sustainable land use approaches in nutrient rich organic soil management in agriculture and forestry. FTE values to monitor the indicator are calculated as fully employed persons (additional employees, 58%) during the one year (average) of the project run.

Data gathering:

During and after Project run – information provided by the Project partners.

3.2 Replication and transfer

Replication and transfer indicator are based on the number of organizations that will be involved in implementation of the Project results in practice. In general, all partner organizations are considered and in addition 2 organizations to be involved from each partner country. Institutions to be involved include governmental institutions (e.g. ministries, agencies, state services and centers), research organizations (e.g. universities and research institutes) and non-governmental organizations. At the Project end 15 organizations should be involved, but in the period 3 years after Project end – 30 organizations form all 5 Project partner countries (6 organizations per country).

During project run Project Steering Group (SG) is established and meeting on regular basis – twice per year. SG members are time by time encouraged to comment and consult Project results preparation process also in between SG meetings thus ensuring that organizations are involved in Project results preparation process during the project run and thus will be actively involved also in practical implementation. In 2020 LIFE OrgBalt SG consists of members form 10 institutions (ministries, agencies, state services, research institutions), together with partner organizations (8) total number organizations involved in implementation is 18. Non-governmental organizations will be more involved when there will be Project results to share and disseminate. For period 3 years after project end intensive Project results dissemination and replication activities will ensure the fulfillment of the indicator target.

Data gathering:

During and after Project run – information provided by the Project partners.

4. INDICATORS RELATED TO COMMUNICATION, DISSEMINATION AND AWARENESS RISING

Indicators related to communication, dissemination and awareness rising are set to be achieved at the end of the Project and within the 3 years after the Project end. Communication, dissemination and awareness rising indicators will be monitored in accordance with the Project`

internal Communication guidelines.

Both sets of indicators and their characteristics is given in Table 1.

Table 4: LIFE key performance communication, dissemination and awareness rising indicators to be achieved by the end and within the 3 years after the Project

Objective	Indicators	Measurement unit	Estimated impact (absolute values)	Estimated impact (in %)	Brief explanation of assumptions used for the calculation
At the end of the Project					
Communication, dissemination, awareness rising	Awareness raising	Number of entities/individuals reached/ made aware	500	5 % change	This number is based on estimated reach of individuals via social media accounts, taking into consideration previous experience with communication feedback within similar projects.
	Website	total website hits	10,000	n/a	
	Behavioral change	Number of entities/individuals changing behavior	300	5 % change	
	Reach, print media, no of copies	no. of individuals	2,000.00		
	Reach,e-update, no of downloads	no. of individuals	2,500.00		
	Reach, film, broadcasts	no. of individuals	10,000.00		
	Reach, manual, no of copies	no. of individuals	2,000.00		
	Conference	no. of individuals	150.00		

	Twitter followers	no. of individuals	200.00		
	Facebook followers	no. of individuals	200.00		
Three years after the Project					
Communication, dissemination, awareness rising	Awareness raising	Number of entities/individuals reached/ made aware	2,000	7 % change	This number is based on estimated reach of individuals via social media accounts, taking into consideration previous experience with communication feedback within similar projects.
	Website	total website hits	40,000	n/a	
	Behavioral change	Number of entities/individuals changing behaviour	1500	7 % change	

4.1 Awareness raising

Awareness rising indicator is set based on the target to be achieved as number of individuals reached. Indicator value is to be monitored by collecting participants lists` and other information certifying awareness rising, including e-mails sent to interested stakeholders. Over first year of active project run, more than 170 e-mails were sent to interested stakeholders and above 200 individuals participated in the first round of National workshops on climate change mitigation measures for nutrient rich organic soils in each partner country (Finland 29 participants, Deutschland 48 participants, Lithuania 35 participants, Estonia 36 participants, Latvia 54 participants).

4.2 Website (www.orgbalt.eu)

Indicator for website activity monitoring is set as total website hits. Activity is monitored by using Google Analytics and website analytic parameters. There are discrepancies between indicator values in the application (total website hits) and KPI web tool (unique visits). Parameter `unique visits` is more precise measure in assessment of website performance. In the application the term `hits` has been wrongly used and should be replaced with the parameter `pageviews`. Pageviews are expected to meet the value included in the application under the wrong terminology `hits`, i.e. 10.000 during Project run. Indicator is to be used and achieved for both periods – by the Project end and 3 years after Project end.

Data gathering: indicator is monitored by using website analytic parameters.

In period 01.08.2019. – 31.07.2020. the website had 1299 sessions or unique visits, 710 individual visitors or users and in total 4674 page views (that is 47% of total planned 10 000 hits in project proposal).

Project information is provided also in beneficiaries` websites and linked to the project main website www.orgbalt.eu.

In following figures Project website traffic statistics, website visitors by country and most visited sections of the LIFE OrgBalt website are shown.

Figure 1. LIFE OrgBalt website traffic statistics (source Google Analytics, as of July 31, 2020)
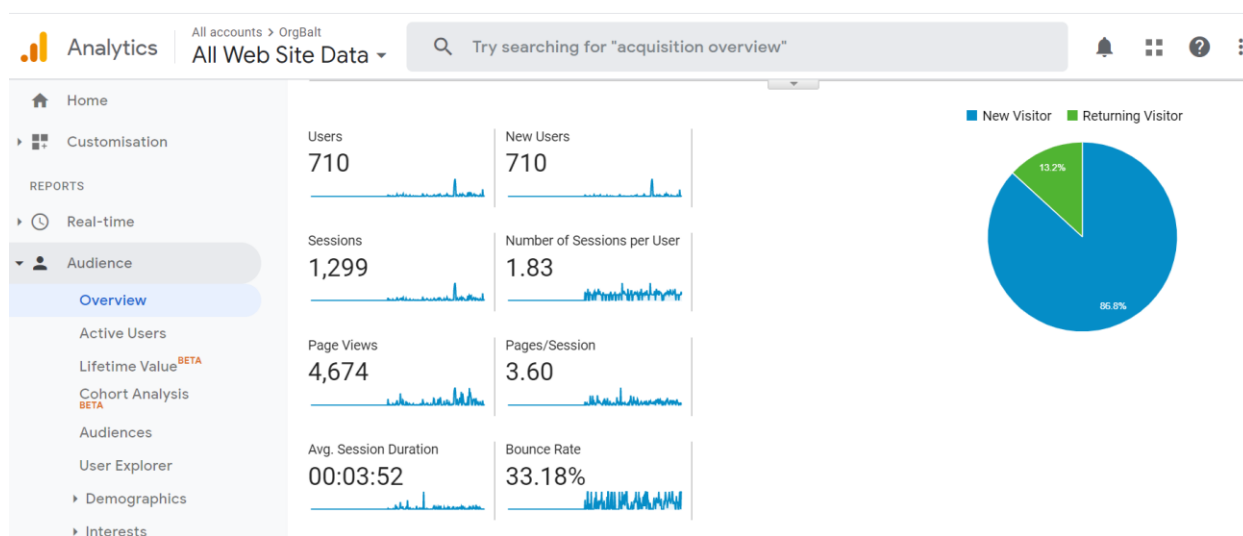
Figure 2. Website visitors by country – TOP 10 (source Google Analytics, as of July 31, 2020)

Country	Users	% Users
1. Latvia	188	26.15%
2. United States	72	10.01%
3. China	53	7.37%
4. United Arab Emirates	35	4.87%
5. India	29	4.03%
6. Lithuania	29	4.03%
7. Estonia	27	3.76%
8. Finland	27	3.76%
9. Germany	24	3.34%
10. (not set)	13	1.81%

view full report

Analyzing the most visited sections one can see that the most popular section of LIFE OrgBalt website is website's landing page or start page in English, followed by section Activities and results in English, Start page in Latvian, Events' Presentations section, News section, Project description section, Events calendar, Communication platform section, Contacts and Partners section – all of these on English version. Statistics in Figure 3:

Figure 3. Most visited sections of LIFE OrgBalt website - TOP 10 (source Google Analytics, as of July 31, 2020)

Page		Page Views	% Page Views
1. /		1,456	31.15%
2. /?page_id=2381		427	9.14%
3. /?page_id=1719&lang=lv		353	7.55%
4. /?page_id=2510		291	6.23%
5. /?page_id=2354		202	4.32%
6. /?page_id=2363		138	2.95%
7. /?post_type=tribe_events		68	1.45%
8. /?page_id=2602		67	1.43%
9. /?page_id=2391		66	1.41%
10. /?page_id=2372		56	1.20%

4.3 Behavioral change

Behavioral change indicator is to be measured by number of individuals or entities changing behavior. Indicator will be monitored and reported by data gathering about CCM implication practices – cases. Indicator can be measured only at the end phase of the Project when Project results are ready and at least partly disseminated.

Data gathering:

1) CAP payment agencies data – information from partner countries;
2) Information form NGOs – farmers` and foresters' organizations.

4.4 Reach, print media, no of copies

Indicator – print media is to be measured by number of printed materials distributed to the Project` stakeholders` audience. Data gathering – information on printed and distributed materials. When printed materials are ready according to the Project work plan, distribution is to be started – form 2021.

4.5 Reach, e-update, no of downloads

Communication indicator – number of downloads is planned to be monitored by numbers obtained according to the Google Analytic statistics and website statistics, e-update – by distribution of newsletters, popular and technical articles, policy briefs and press releases.

4.6 Reach, film, broadcasts

Film/broadcasts indicator is to be measured by number of individuals reached. Indicator value will be monitored by using Google analytics and website analytic parameters. Indicator will be measured during Project run – starting from 2021 when filming material is available according to the Project work plan.

4.7 Reach, manual, no of copies

Communication indicator – number of manual copies distributed will be monitored by collecting information on distributed copies by all partners. Manual (training workshop materials – manual of the Project` tools under C4/C5 activities) will serve as dissemination material in the framework of training courses to be organized towards the end of the project to inform each country's stakeholders about the project results as well as by disseminating PPC model tool. Manual materials will be distributed in all Project` countries and distribution information will be then collected from Project` partners to report this indicator.

4.8 Conference

Communication, dissemination and awareness rising indicator – *conference* is to be measured by using attendance register. Indicator is set for the period- at the end of the Project and target achievement will be monitored after final Project conference at the end of the Project.

4.9 Twitter and Facebook followers

Communication, dissemination and awareness rising indicators – social media followers (Twitter and Facebook) is to be measured by using accounts` information. Indicators are to be measured during the project run – by the end of the Project. Reach of Twitter followers is more complicated than Facebook since Twitter is not so popular in Project` region.

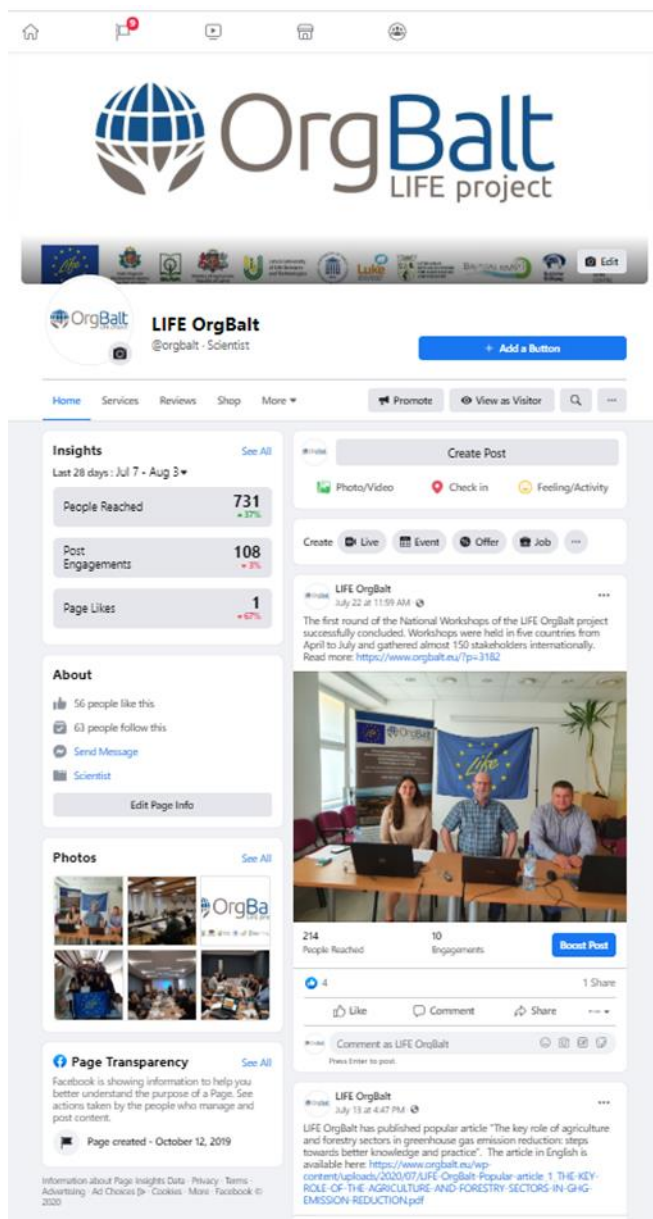Figure 4. LIFE OrgBalt account on Facebook: https://www.facebook.com/orgbalt

Figure 5. LIFE OrgBalt account on Twitter: https://twitter.com/orgbalt

5. SUMMARY OF INDICATORS` MONITORING

Indicators` monitoring summary shows current progress and monitored values in due time. Table is to be complimented yearly by the end of the Project and in 3 years period after Project end. Values "n/a" mean not applicable at the particular time, values "-" is placeholder for indicator value at the particular time period.

Indicator	Estimated impact in absolute values, end of the Project	Estimated impact in absolute values, 3 years after the end of Project	Target achievement 2020	Target achievement 2021	Target achievement 2022	Target achievement 2023	Target achievement 2024	Target achievement 2025	Target achievement 2026
Carbon dioxide CO_2	338 t CO2 eq. /yr	1041 t CO2 eq. /yr	n/a	n/a	n/a	-	-	-	-
Methane CH_4	35 t CO2 eq. /yr	105 t CO2 eq. /yr	n/a	n/a	n/a	-	-	-	-
Nitrous oxide N_2O	47 t CO2 eq. /yr	141 t CO2 eq. /yr	n/a	n/a	n/a	-	-	-	-
Sustainable land use, forestry	28 ha	84 ha	n/a	28	-	-	-	-	-
Sustainable land use, agriculture	17 ha	17 ha	n/a	17	-	-	-	-	-
Employment, jobs created	FTE 7	FTE 15	9.9	9.9	-	-	-	-	-
Replication/ transfer	15 organizations	30 organizations	18	20	-	-	-	-	-
Awareness raising	500 Number of entities/individuals reached/ made aware	2000 Number of entities/individuals reached/ made aware	200	-	-	-	-	-	-
Website	Total website hits 10 000	Total website hits 40 000	4674 page views 01.08.2019.-31.07.2020.	-	-	-	-	-	-
Behavioral change	300 no of	1500 no of	n/a	n/a	n/a	-	-	-	-

	individuals/entities	individuals/entities							
Reach, print media, no of copies	2 000 no. of individuals	n/a	n/a	-	-	-	n/a	n/a	n/a
Reach, e-update, no of downloads	2 500 no. of individuals	n/a	710	-	-	-	n/a	n/a	n/a
Reach, film, broadcasts	10 000 no. of individuals	n/a	n/a	-	-	-	n/a	n/a	n/a
Reach, manual, no of copies	2 000 no. of individuals	n/a	n/a	-	-	-	n/a	n/a	n/a
Conference	150 no of individuals	n/a	n/a	n/a	n/a	-	n/a	n/a	n/a
Twitter followers	200 no. of individuals	n/a	10	11	-	-	n/a	n/a	n/a
Facebook followers	200 no. of individuals	n/a	63	-	-	-	n/a	n/a	n/a