



Stakeholder discussion during a field visit in Kareli Municipality (Daniel Zollner)

## Land Degradation Neutrality Transformative Projects and Programmes (LDN-TPP) for sustainable agriculture and rural development ( )

### LDN-TPP in Georgia

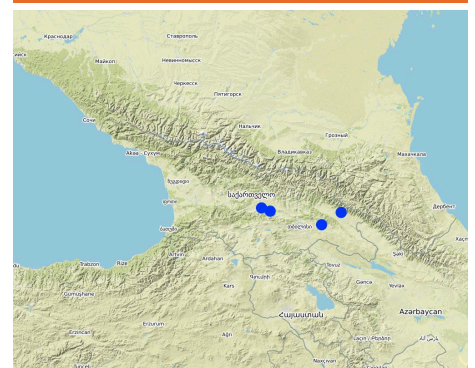
In the framework of the project 'Generating Economic and Environmental Benefits from Sustainable Land Management for Vulnerable Rural Communities of Georgia', Land Degradation Neutrality Transformative Projects and Programmes (LDN-TPP) were developed to implement the LDN targets at municipal level. The approach defines the process to break down global and international LDN targets and to translate these into local contributions from the municipalities of Gori, Kareli, Kvareli and Sagarejo.

The three-year project 'Generating Economic and Environmental Benefits from Sustainable Land Management for Vulnerable Rural Communities of Georgia' funded by the Global Environment Facility (GEF), is implemented by the United Nations Environment Programme (UNEP) and executed by the Regional Environmental Centre for the Caucasus (RECC). The initiator and beneficiary of the project is the Ministry of Environmental Protection and Agriculture of Georgia. Within this framework, Land Degradation Neutrality Transformative Projects and Programmes (LDN-TPP) were developed to implement the LDN targets at municipal level.

The project aims to create an enabling environment at the community level to achieve the country's goal of Gender Responsive Land Degradation Neutrality (LDN). The project supports local farmers to apply sustainable land management and climate-smart agricultural practices to promote food security and resilience in order to reduce the impacts of erosion, salinisation and soil fertility reduction in Sagarejo, Kvareli, Gori and Kareli on 20,000 ha of pilot land. As a result, it is expected that there will be an improved understanding of the economics of land degradation and integrated land use planning at national and sub-national levels. In the preceding approach recorded under WOCAT, namely 'Integrated Land Use Plans (ILUPs) for sustainable agriculture and rural development with special emphasis on SLM, CSA and LDN in four municipalities [Georgia]', ILUPs were developed for four municipalities providing a detailed spatial basis. A separate study (Ballesteros et al. 2020) compiled baseline information about LDN indicators.

This approach complements the ILUP. It combines the spatial information elaborated for land use planning, the LDN baseline information with national LDN targets, UNCCD principles for LDN and municipal stakeholder priorities to come up with a concrete plan for the municipal contribution to (inter)national targets. Thus, this approach serves to operationalise the national LDN targets at municipal level. At the time of documentation of this approach, planning was completed and the participatory process for validation and decision-making for concrete targets had been initiated.

Taking this into account, a targeted programme was designed, which breaks down national targets into municipal targets with related activities and spatially explicit priority areas for



: Gori, Kareli, Kvareli and Sagarejo, Shida Kartli and Kakheti,

- 44.09054, 41.97283
- 45.32193, 41.72196
- 43.88196, 42.02463
- 45.79584, 41.94752

: 2019

:





implementation. This approach serves to operationalise LDN-related recommendations and proposed actions as presented and defined in the Integrated Land Use Plan. It seeks to define the contribution of the municipalities Gori, Kareli, Kvareli and Sagarejo to the achievement of national and global LDN targets.

The output is intended to serve as a starting point for local discussion (especially with the LDN Working Group) to further specify and prioritise the objectives and measures proposed. It provides a solid basis for discussing (a) concrete measures and (b) the areas best suited for these measures. The approach is documented in a consolidated document on how the municipality can contribute to the national LDN goals, based on the specific situation and potentials of the municipality.

The LDN TPP focuses on specific objectives and actions in the area of the municipality and its various functional land units in a pro-active, forward-looking and visionary manner as a contribution to the nationally set LDN objectives and the overall LDN vision. It presents possible and recommended development pathways and focuses predominantly on LDN implementation options through the application and adoption of various SLM and CSA practices.



The approach seeks to define the local contribution of the municipalities Gori, Kareli, Kvareli and Sagarejo to the achievement of national and global LDN targets whilst meeting local needs and priorities

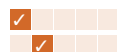
- **Integrate LDN principles into national policies, strategies and planning** : There is a recognised need to improve land use planning and to counter land degradation as agricultural production is declining
- **Improve irrigation & drainage systems** : The establishment of Municipal LDN Working groups allows for a concrete discussion of LDN with adequate municipal participation. It also allows for including local knowledge in the planning process
- **Afforestation, rehabilitation & sustainable management of forests** : REC has a very strong presence and links to the municipalities through previous and ongoing projects.
- **Rehabilitation of degraded land** : Well-supported through municipal involvement.
- **Increase the protected area cover to 12%** ( **Integrate LDN principles into national policies, strategies and planning** ) : Municipal LDN group as municipal sounding board was a big plus.
- **Integrate LDN principles into national policies, strategies and planning** **SLM** : There are several successful previous projects already providing a good set of measures and creating awareness amongst land users for SLM
- **Integrate LDN principles into national policies, strategies and planning** : Even though funding is provided through the project, the resources available at the municipality are very limited.
- **Integrate LDN principles into national policies, strategies and planning** : Currently, municipalities have very limited capacities for land use planning.
- **Integrate LDN principles into national policies, strategies and planning** / **Integrate LDN principles into national policies, strategies and planning** : This was very challenging due to COVID-19 restrictions. Fewer meetings were held than foreseen delaying the process of discussion of municipal targets and activities.
- **Integrate LDN principles into national policies, strategies and planning** ( **Integrate LDN principles into national policies, strategies and planning** ) : For the strategic planning, land tenure was only a minor topic. However, in general, when it comes to the specific location of measures, land tenure will be amongst the key issues.

/		
---	--	--

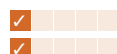


?		
/	Various farmers	Visits to the fields with the local farmers, discussions about the type of cultivation
	Tbilisi State University	Contribution of expert knowledge during meetings to interpret findings in a municipal context; provision of relevant scientific data;
	REC Caucasus	Supervisors, consultants, GIS analyses, participation in the LDN Working Group Meeting
	Executive Office of the Gori Municipal Council I Mayor's City Hall (formerly Municipal Administration "Gamgeoba"), Municipality of Gori I Mayor's City Hall (formerly Municipal Administration "Gamgeoba"), Municipality of Kareli I Mayor's City Hall (formerly Municipal Administration "Gamgeoba"), Municipality of Kvareli I Mayor's City Hall (formerly Municipal Administration "Gamgeoba"), Municipality of Sagarejo	Participation in the LDN Working Group Meeting
) (	Agricultural and Rural Development Agency (ARDA) Ministry of Environmental Protection and Agriculture of Georgia (MEPA)	Participation in the LDN Working Group Meeting

/



Local land users were consulted to gain experience and insight into the situation of agriculture in the different areas. The interviews were then incorporated in the preparation of the maps and land use plans. Stakeholder priorities formulated during the meetings were the basis for the setting of the municipal targets. Due to COVID 19 the related participatory process to validate the proposed targets, activities and locations has only started recently. Thus, finally the classification would rather refer to "interactive planning".



M&E will be provided in a later stage once the decisions are made regarding the final activities and priorities

## SLM

	)	(	✓	(	SLM	)
			SLM	✓	(	
			✓		(	)
✓	SLM					
	SLM					
/						



/	(	)
✓		
✓		



<div> <div></div> <div></div> <div></div> <div></div> </div>	/	<div> <div></div> <div></div> <div></div> <div></div> </div>	<p>Within the framework of the project, municipal Land Degradation Neutrality Groups were established comprising municipal stakeholders and land users. This board serves to discuss LDN issues, define priorities and provide knowledge about local phenomena of land degradation (e.g. participatory mapping of degradation)</p>
<div> <div></div> <div></div> <div></div> <div></div> </div>	/	<div> <div></div> <div></div> <div></div> <div></div> </div>	<p>Basically, these groups were consulted for the identification of priorities and land-degradation mapping in the municipality. In a follow-up step, these groups will play a crucial role in decision-making and implementation of the programme.</p>

<div> <div></div> <div></div> <div></div> <div></div> </div>	/	<div> <div></div> <div></div> <div></div> <div></div> </div>	<p>The designed programme builds on 3 main elements: (1) local knowledge through project-based experiences and implicit knowledge of land users and the LDN group, (2) a spatial analysis of land use within the frame of the land-use planning process (see Zollner, 2021, separate approach recorded under Wocat) and (3) a LDN baseline study about the three global LDN indicators (land cover, net primary production and soil organic carbon) (Ballesteros et al. 2020).</p>
--	---	--	--

<p><b>SLM</b></p> <div> <div></div> <div></div> <div></div> <div></div> <div></div> </div> <p>Precise annual budget:</p>	<div> <div></div> <div></div> <div></div> <div></div> <div></div> </div>	<p>This amount covers the elaboration of four programmes for four municipalities excluding the final implementation. Depending on the funding source and the final political decisions, the implementation of the programmes ranges from 500,000 - 4,000,000 USD. The costs for this process were funded by GEF via UNDP.</p>	<div> <div></div> <div></div> <div></div> <div></div> <div></div> </div>	/	
--	--	---	--	---	--

					~ ~ ~
It provides hard facts and spatial information about degradation, priority areas and potential measures for decision-makers		?			<div><div></div><div></div><div></div><div></div></div>
Not yet. As it is a plan.	SLM?				<div><div></div><div></div><div></div><div></div></div>
	SLM				<div><div></div><div></div><div></div><div></div></div>
It links the land-use planning process (and its results) with scientific information and translates it into actions - it builds on existing knowledge.					<div><div></div><div></div><div></div><div></div></div>
SLM?	/				<div><div></div><div></div><div></div><div></div></div>
By linking local priorities with (inter)national obligations, it is expected that it will help to mobilise additional resources.					<div><div></div><div></div><div></div><div></div></div>
SLM?					<div><div></div><div></div><div></div><div></div></div>
It provides solid condensed and local information to the Municipal LDN group					<div><div></div><div></div><div></div><div></div></div>
Close cooperation with international experts and local consultants increased the GIS-mapping capabilities of the national expert.		?			<div><div></div><div></div><div></div><div></div></div>
The municipal LDN group is a cross-institutional group of municipal stakeholders dealing with land degradation at municipal level.	/				<div><div></div><div></div><div></div><div></div></div>



This is expected to happen as together with land use planning it identifies priorities, challenges and needs.			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Not yet, as these groups have not yet been involved - but will be involved (particularly land-users) who are the final beneficiaries of the measures.	?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It was not a major consideration. Work was only with the Municipal LDN group (which included women).	?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SLM ?	/		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It was not a major consideration. Work was only with the Municipal LDN group	/		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SLM?			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It addresses and highlights some of the pressing issues.			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Not yet, but if implemented, it will make a major contribution.	/	?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Not yet, but if implemented, it will make a major contribution.	?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Not yet, but if implemented, it will make a significant contribution as water security , sustainable irrigation, and protection of water resources are key topics.	?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Not a priority.	/	?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Not yet, but if implemented, this is supposed to be one of the major contributions of the programme.	?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Not yet, but it seeks to enhance and secure incomes of farmers in the municipality and outlines alternative income opportunities	?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>Allows for a discussion based on maps displaying degradation challenges. This makes it easier to concretely agree on measures and priorities</li> </ul>   | <ul style="list-style-type: none"> <li>Local capacities are rather low and require external funding Increased capacity building of the Municipal LDN Group as key resource</li> </ul>  |
| <ul style="list-style-type: none"> <li>Combination of stakeholder priorities, local conditions, scientific baseline information and spatially very clear maps</li> <li>Linking different plans and strategies with (inter)national obligations and targets at local level. This is a good basis for attracting funding and targeted interventions</li> <li>Comprehensive, intersectoral and local approach connecting climate change, agricultural development, ecological and social aspects</li> </ul> | <ul style="list-style-type: none"> <li>Due to COVID 19 a more participatory discussion of targets and exact location and scope of measures is still required (but planned) The planning process can be extended to enable the participatory process</li> <li>Without a capable local lead, it will be challenging With REC which has been involved for a long time in the region, capable support and exact knowledge of local capacities is available.</li> </ul> |



Daniel Zollner

### Editors

Anneliese Fuchs  
Michael Huber

William Critchley  
Rima Mekdaschi Studer

: 22

2021

: 29

2021

Michael Huber (huber@e-c-o.at) -  
Daniel Zollner (zollner@e-c-o.at) -  
Maia Zumbulidze -

SLM  
SLM  
SLM

[https://qcat.wocat.net/km/wocat/approaches/view/approaches\\_5902/](https://qcat.wocat.net/km/wocat/approaches/view/approaches_5902/)

### SLM

Technologies: Community Land Use Planning in Arkhiloskalo [https://qcat.wocat.net/km/wocat/technologies/view/technologies\\_5762/](https://qcat.wocat.net/km/wocat/technologies/view/technologies_5762/)

Technologies: Remote Sensing as a Tool for Land Degradation Neutrality Monitoring

[https://qcat.wocat.net/km/wocat/technologies/view/technologies\\_5488/](https://qcat.wocat.net/km/wocat/technologies/view/technologies_5488/)

- Global Environment Facility Georgia (GEF Georgia) -
- Generating Economic and Environmental Benefits from Sustainable Land Management for Vulnerable Rural Communities of Georgia (GREENLANDS)

- Ballesteros Canovas, J.A., Da Silva Correia, G., Schlechten, J., Zumbulidze, M. & Stoffel, M. 2020: Report. Generating Economic and Environmental Benefits from Sustainable Land Management for Vulnerable Rural Communities of Georgia. University of Geneva: REC Caucasus
- Huber, M., Zollner, D., Zumbulidze, M., 2021: Sagarejo Land Degradation Neutrality Transformative Programme (LDN-TPP Sagarejo) for sustainable agriculture and rural development with special emphasis on SLM, CSA and LDN (Part B – LDN TPP Sagarejo). Version 2.0. Klagenfurt, Tbilisi, Sagarejo. 56 p.: REC Caucasus
- Huber, M., Zollner, D., Zumbulidze, M., 2021: Kareli Land Degradation Neutrality Transformative Programme (LDN-TPP Kareli) for sustainable agriculture and rural development with special emphasis on SLM, CSA and LDN (Part B – LDN-TPP Kareli). Version 2.0. Klagenfurt, Tbilisi, Kareli. 61 p.: REC Caucasus
- Huber, M., Zollner, D., Zumbulidze, M., 2021: Gori Land Degradation Neutrality Transformative Programme (LDN-TPP Gori) for sustainable agriculture and rural development with special emphasis on SLM, CSA and LDN (Part B – LDN-TPP Gori). Version 2.0. Klagenfurt, Tbilisi, Gori. 55 p.: REC Caucasus
- Huber, M., Zollner, D., Zumbulidze, M., 2021: Kvareli Land Degradation Neutrality Transformative Programme (LDN-TPP Kvareli) for sustainable agriculture and rural development with special emphasis on SLM, CSA and LDN (Part B – ILUP Kvareli). Version 2.0. Klagenfurt, Tbilisi, Kvareli. 54 p.: REC Caucasus
- Zollner, D., Zumbulidze, M., Kirchmeir, H., Fuchs, A. und Huber, M. 2021: Gori Integrated Land Use Plan (ILUP Gori) for sustainable agriculture and rural development with special emphasis on SLM, CSA and LDN. Part A – ILUP Gori. Version 2.0. Klagenfurt, Tbilisi, Gori. 80 p. + documentation volume/ annex.: REC Caucasus, E.C.O- Institute of Ecology: REC Caucasus
- Zollner, D., Zumbulidze, M., Kirchmeir, H., Fuchs, A. und Huber, M. 2021: Kareli Integrated Land Use Plan (ILUP Gori) for sustainable agriculture and rural development with special emphasis on SLM, CSA and LDN. Part A – ILUP Gori. Version 2.0. Klagenfurt, Tbilisi, Gori. 80 p. + documentation volume/ annex.: REC Caucasus, E.C.O- Institute of Ecology: REC Caucasus
- Zollner, D., Zumbulidze, M., Kirchmeir, H., Fuchs, A. und Huber, M. 2021: Kvareli Integrated Land Use Plan (ILUP Gori) for sustainable agriculture and rural development with special emphasis on SLM, CSA and LDN. Part A – ILUP Gori. Version 2.0. Klagenfurt, Tbilisi, Gori. 80 p. + documentation volume/ annex.: REC Caucasus, E.C.O- Institute of Ecology: REC Caucasus
- Zollner, D., Zumbulidze, M., Kirchmeir, H., Fuchs, A. und Huber, M. 2021: Sagarejo Integrated Land Use Plan (ILUP Gori) for sustainable agriculture and rural development with special emphasis on SLM, CSA and LDN. Part A – ILUP Gori. Version 2.0. Klagenfurt, Tbilisi, Gori. 80 p. + documentation volume/ annex.: REC Caucasus, E.C.O- Institute of Ecology: REC Caucasus
- UNCCD Checklist for Land Degradation Neutrality Transformative Projects and Programmes (LDN TPP): <https://knowledge.unccd.int/sites/default/files/2018-09/LDN%20TPP%20checklist%20final%20draft%20040918.pdf>
- UNCCD Land Degradation Neutrality Transformative Projects and Programmes: Operational Guidance for Country Support: <https://www.unccd.int/publications/land-degradation-neutrality-transformative-projects-and-programmes-operational>

This work is licensed under [Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International](https://creativecommons.org/licenses/by-nc-sa/4.0/)

