



2016 – 2018 Plan Vivo Annual Report

Rehabilitation and sustainable management by REACH Italia of degraded pastures in the Sahel region of Burkina Faso

Submitted by REACH Italia

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Summary

Project overview	
Reporting period	1 st November 2016 – 30 th October 2018
Geographical areas	Villages Bossey Etage, Peteldaye, Tadabat, Gagara I, Touro, Beiga, Gagara II, Ounare
Technical specifications in use	Rehabilitation and sustainable management by REACH Italia of degraded pastures in the Sahel region of Burkina Faso

Project indicators ¹	Historical	Added/ Issued this period (2016-2018)	Total
No. smallholder households with PES agreements	0	0	0
No. community groups with PES agreements (where applicable)	4	4	8
Approximate number of households in these community groups	438	1,370	1,808
Area under management (ha) where PES agreements are in place	376	691	1,067
Total PES payments made to participants (USD) ²	0	4,123 US\$	4,123 US\$
Total sum held in trust for future PES payments (USD)			0
Allocation to Plan Vivo buffer (tCO ₂)	153	0	153
Saleable emissions reductions achieved (tCO ₂)	612	0	612
Unsold Stock at time of Submission (PVC)			0
Total Unsold Stock (PVCs including this vintage)			0
Plan Vivo Certificates (PVCs) issued to date			612
Plan Vivo Certificates requested for issuance (01/11/2016 – 31/10/2017)			0
Plan Vivo Certificates requested for issuance (01/11/2017 – 31/10/2018)			0
Plan Vivo Certificates available for future issuance (REDD only)			0
Total PVCs issued (including this report)			612

¹ See also Document 'Plan Vivo Project record keeping_REACH Italia_20190930'

² Currency conversion: 1 € = 1.18 US\$

Part A: Project updates

A1 Key events

The REACH Plan Vivo project was marked by the end of the BKF/017 program “Azawak zebu livestock improvement project and sustainable management of natural resources”³ financed by Lux DEV between 2011 and 2016, and with the start of the start of the BKF/024 program “Project for land reclamation efforts towards pastoral usage and in conservation areas”⁴ in the same dynamic, which is the restoration and recovery of degraded grasslands. The BKF/017 program initiated the REACH Italia Plan Vivo project and the BKF/024 has the objective to continue to support the Plan Vivo process. The BKF/024 started in 2018 and will last till 2022. It aims to reduce the vulnerability of livestock stakeholders to climate shocks, the reduction and fragmentation of grazing areas through the implementation of pastoral resource restoration activities. Access to the carbon markets through Plan Vivo is considered as an opportunity to ensure the sustainable conservation and preservation of reclaimed land over the medium to long term.

Long spared by the Sahel’s armed groups, Burkina Faso faces increasingly since 2018 frequent and lethal attacks. In 2018, almost 400 security incidents causing 1201 deaths have been recorded in 40 of the country’s 45 provinces (ACLED). In the same year 24 security incidents have been recorded in the two provinces of the project boundary, ie the provinces of Oudalan and Seno. These armed attacks slow down project activities, as some villages might not be accessible for some time for local inventories or community meetings. It will be important to continue follow-up of the rehabilitated sites or Plan Vivos through the organization of meetings in the main city Dori on market days. Extension of the project in the province of Oudalan will be rather limited and more focused in the Province of Seno.

REACH Italia couldn’t realize the inventories for safety reasons. Nevertheless, the REACH Italia project was able to add some more villages to the Plan Vivo project and to follow-up together with the Village Development Councils or CVD⁵ managing the Plan Vivo. Community meetings have been organized for:

- Sensitization meetings with community leaders, advisors of the villages, religious and customary leaders on the project and the Plan Vivo process in preparation of the community meetings in order to insure the involvement of the whole community.
- Information meetings concerning explanation and planning of activities within the framework of the Plan Vivo process. Realization of focus group meetings in the context of the village's diagnosis (history, major events, transhumance, land, agro-silvopastoral production, etc.) and elaboration of the Plan Vivos in accordance with the local land charters. The priorities of the villages formulated in the PES contracts were adopted by General Assembly of the CVD after some consultation rounds through the focus group approach.
- Socio-economic impact assessments by village, through household surveys, and the opening of the accounts at village level for the management of the Plan Vivo fund;
- Reseeding activities in order to improve the performance of the rehabilitated pasture sites;
- Reception and benefit sharing of the Plan Vivo funds by the CVD, realization of activities with the funds Plan Vivo: reseeding activities and repairing of broken boreholes;

The project has been presented⁶ on the 19th of June 2019 during the conference “Desertif

³ <https://luxdev.lu/en/activities/project/BKF/017>

⁴ <https://luxdev.lu/en/activities/project/BKF/024>

⁵ CVD: conseils villageois de développement in french

⁶ See presentation: “Session 2 Plenary Lux Dev”

Action 2019" organized by IUCN in Ouagadougou on the theme "Pastoralism and restoration of rangelands: a dialogue of practitioners to increase investments in pastoral management of rangelands".

A2 Successes and challenges

Different reseeding activities have been organized by the communities on sites in 2017 and 2018 which contributed to better restoration of the sites. However, due to increased insecurity, the inventory measurements couldn't be realized.



Figure: CVD community meeting for the organization of reseeding activities in Peteldaye in July 2018 (PV-REACH Italia-002-Peteldaye)



Figure: CVD community meeting for the organization of reseeding activities in Bossey Etage in July 2018 (PV-REACH Italia-001-Bossey Etage)



Figure: Establishment of the Plan Vivo by the community of Touro (PV-REACH Italia-005-Touro)



Figure: Repair of broken borehole in Gagara I with Plan Vivo funds (PV-REACH Italia-004-Gagara I)

The revenues of the sales of the first Plan Vivo certificates have reached the communities and benefit sharing mechanisms have been put in place to involve the whole community on the usage of the Plan Vivo funds. As an example, the village of Gagara I has rehabilitated two broken boreholes.

Despite the fact the responsible animator (a key individual in the coordination team) for the Plan Vivo process left REACH Italia in 2017, four new villages have adhered to the Plan Vivo

project just prior the increase of insecurity in the Province of Oudalan, i.e. Touro (75 ha), Beiga (146 ha), Gagara II (231 ha) and Ounare (89 ha). Furthermore, the village of Gagara I (PV-REACH Italia-004) has added a site of 150 ha under its Plan Vivo. The total area under management (ha) where PES agreements are in place, has increased from 376 ha to 1,067 ha. Still more villages are willing to adhere to the project. However, security will be an important selection criterium to include a village in the Plan Vivo project in the coming year.

The implementation of the Local Land Charters within the Plan Vivos, based on the Rural Land Law (N°034-2009/AN), has allowed capacity building of the communities to develop and implement appropriate controls of pasture use. The establishment of the local land charter rules on the usage of the pasture sites and the establishment of the monitoring committees has allowed to apply a sustainable resource management of the rehabilitated sites.

The insecurity in the Sahel region remains the biggest challenge to overcome. In order to mitigate the effects of the aforementioned difficulties, an emphasis has been put on the monitoring of the sites and especially the empowerment of the local populations through the reinforcement of the capacities of the CVD to carry out a certain number of activities on the sites, namely inventory surveys and sensitization and animations with reports or minutes. For the realization of the forest inventories, transect level markers will be put in place to further facilitate forest inventories by local populations. A study is underway in order to evaluate the possibility to monitor the evolution of the rehabilitated sites through Satellite images. Result of this evaluation will be reported in the following annual report.

A3 Project developments

The baseline survey has been revised, as well as the annual reporting of socio-economic indicators.

Table A1: Document updates

PDD (including technical specifications) document version:		
PDD section	Date change	Short description of update
K2 Socio-economic impacts	10 2019 version 4	<i>Revision of baseline survey (simplification)</i> <i>Specification of the annually reported socio-economic indicators</i>

The updated PDD is submitted to the Plan Vivo Foundation for approval together with Annual Report 2016-2018.

Table A2: Progress against corrective actions

Document	Corrective action	Activity against this
Annual report	Define socio-economic monitoring in reporting period	The baseline survey used for the four pilot villages PV-REACH Italia-001 to PV-REACH Italia-004 has been reworked and simplified with focus on livestock production, access to pastoral resources, number of conflicts related to

		<p>natural management and tenure security. The new baseline survey has been applied on the new included Plan Vivo villages PV-REACH Italia-005 to PV-REACH Italia-008.</p> <p>In terms of annual reporting, the socio-economic indicators have been reduced to 5 indicators, i.e. (i) numbers of meetings organized by the CVD managing the Plan Vivo; (ii) number of beneficiaries benefiting from the PES payments; (iii) community pay-outs to the Plan Vivo Fund; (iv) expenditure of the Plan Vivo Fund in benefit of the community; and (v) number of conflicts related to rehabilitated pastoral sites managed by the CVD.</p>
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There is a risk that some villages might become temporarily inaccessible due to insecurity issues. For these reasons, the CVD or local management committees are empowered to conduct independently the activities like forest inventories and reseeding. In case a village remains inaccessible, the CVD will be invited to Gorom-Gorom for capacity building purposes or consultations.

A4 Future Developments

REACH Italia is planning to add another 611 hectares (among 8 villages of which 5 new and 3 existing villages) under management in the following annual reporting year 2018 - 2019. Nevertheless, these inclusions still need to be confirmed as the villages are in the municipality of Gorom-Gorom in the Sahelian Province of Oudalan, which is located in the most insecure area of Burkina Faso.

It is also foreseen to include 1,150 ha of 10 villages located in the Sahelian Province of Seno that has been rehabilitated under a FAO program 'Action against Desertification'⁷. Activities can still be deployed in Seno. In the framework of another collaboration, i.e. Regional Sahel Pastoralism Support Project (or 'Projet Régional d'Appui au Pastoralisme au Sahel' (PRAPS)⁸ financed by the World Bank, another additional 2,000 ha situated in the Sahelian Province of Yagha, could be included in the REACH Italia Plan Vivo project. The new program financed BKF/024 by Lux Dev will allow to add additional 1000 to 2000 hectares under management in the coming years.

It can be concluded that the potential is still there, but that security issues will influence the choice of Plan Vivo inclusion.

⁷ For more details about the FAO program: <http://www.fao.org/in-action/action-against-desertification/countries/africa/burkina-faso/en/>

⁸ For more details about the PRAPS: <https://praps.cilss.int/index.php/pays-praps-burkina-faso/> or <http://documents.worldbank.org/curated/en/478441539339311450/Afrique-de-lOuest-Projet-R%C3%A9gional-d-Appui-au-Pastoralisme-au-Sahel-PRAPS-Missions-d-Appui-%C3%A0-la-Mise-en-Oeuvre-1-Avril-au-30-Juin-2018>

Part B: Project activities

B1 Project activities generating Plan Vivo Certificates

The Plan Vivo technical specification is applicable to degraded pastures in the Sahelian zone of Burkina Faso. The sites are old degraded grazing lands of which the topsoil is characterized by a clogged, hardened and impenetrable surface. The responsibilities for and benefits from these activities are shared communally per village.

Table B1: Project activity summary

Name of technical specification	Area (Ha)	No smallholder households	No Community Groups
<i>Rehabilitation of degraded pastures in the Sahelian zone of Burkina Faso</i>	1,067	1,808	8

During the reporting period, the project has expanded to four new villages (see also Annex 8 for the map).

Table B2: New Plan Vivos included in the project during monitoring period

Plan Vivo ID	Name of village / Municipality / Province	Area (Ha)	No smallholder households
PV-REACH Italia-005	Touro / Gorom-Gorom / Oudalan	75	397
PV-REACH Italia-006	Beiga / Gorom-Gorom / Oudalan	146	622
PV-REACH Italia-007	Gagara II / Gorom-Gorom / Oudalan	231	148
PV-REACH Italia-008	Ounare / Gorom-Gorom / Oudalan	89	203

The technical specification “Rehabilitation of degraded pastures in the Sahelian zone of Burkina Faso” are applicable to the new Plan Vivos mentioned in Table B2, as:

- All new areas are located in the Sahelian zone of Burkina Faso;
- The baseline scenario are old degraded grazing lands of which the topsoil is characterized by a clogged, hardened and impenetrable surface;
- The project intervention is the natural regeneration of vegetation through the generation of “half-moon” shaped micro-catchments with the Delphino plough of the Vallerani system and direct seeding of grass and tree species organized with and by the local communities;
- The long-term effect of the project intervention is established with the implementation of the local land charters which includes the land managed rules for the rehabilitated pasture sites and are integrated in the Plan Vivo of each participating CVD.

B2 Project activities in addition to those generating Plan Vivo Certificates

The rehabilitated sites provide additional forage for livestock, like more specifically the herbaceous grass species *Alysicarpus ovalifolius*, *Andropogon gayanus*, etc. Well-fed livestock increases the selling price and thus revenues for the household. In addition, some grass species growing on the rehabilitated sites allow some income generating activities like *Casia Tora* for the production of Sekko and *Eragrostis tremula* to make brooms.



Figure: Rehabilitated pastures provide fodder for livestock (Bossey Etage 2017)

Part C: Plan Vivo Certificate issuance submission

C1 Contractual statement

Not applicable as inventory could not be organized due to insecurity in the Province of Oudalan.

C2 Issuance request for projects where issuance is made on the basis of ongoing activities on land already managed by the project (i.e. natural revegetation, calculated ex-post)

No issuance request due to insecurity in the Province of Oudalan.

Table C1: Statement of tCO₂ reductions available for issuance as Plan Vivo Certificates based on activity for reporting period 11/2016 – 10/2018⁹

Area ID	Total area (ha)	Tech. Spec	tCO ₂ available from previous periods*	Total tCO ₂ achieved this period**	% Buffer	No. of PVCs allocated to the buffer account	No. PVCs requested for issuance from saleable carbon	tCO ₂ available for future issuances
PV-REACH Italia-001	161	REACH Italia	0	N/A	20	N/A	N/A	0
PV-REACH	79	REACH	0	N/A	20	N/A	N/A	0

⁹ See also document 'Plan Vivo Project record keeping_AGED_20190905'

Italia-002		Italia						
PV-REACH Italia-003	42	REACH Italia	0	N/A	20	N/A	N/A	0
PV-REACH Italia-004	244	REACH Italia	0	N/A	20	N/A	N/A	0
PV-REACH Italia-005	75	REACH Italia	0	N/A	20	N/A	N/A	0
PV-REACH Italia-006	146	REACH Italia	0	N/A	20	N/A	N/A	0
PV-REACH Italia-007	231	REACH Italia	0	N/A	20	N/A	N/A	0
PV-REACH Italia-008	89	REACH Italia	0	N/A	20	N/A	N/A	0
TOTAL	1,067		0	N/A		N/A	N/A	0

*Number of tCO2 sequestered or avoided emission through participants' activities in previous reporting periods which have not yet been issued as PVCs

** Number of tCO2 sequestered or avoided emission through participants' activities this reporting period.

Table C2: Allocation of issuance request

Buyer name/ Unsold Stock	No. PVCs transacted	Registry ID (if available)	Tech spec
N/A	N/A	N/A	N/A
TOTAL	N/A		

C3 Data to support issuance request

N/A

Part D: Sales of Plan Vivo Certificates

D1: Sales of Plan Vivo Certificates

Table D1: Sales of Plan Vivo Certificates

Vintage	Buyer	No of PVCs	Price per PVC (\$)*	Total sale amount (\$)*	Price to participants per PVC (\$)*	% Sale price received by participants
2016	Lux Dev	500				47% ¹¹
2016	CO2logic	112				60%

*Pricing reported for internal monitoring purposes only. Pricing information will be removed from the final published document.

D2: Unsold stock available for sale

¹⁰ The transaction was realized at 13 €/PVC on 29/9/2017. The applied conversion rate on that date is 1.18 \$/€.

¹¹ The absolute benefit sharing of the Sales of this transaction is higher than foreseen in the contract PES. In their PES contracts, the project participants agreed, through the FPIC process, a fixed benefit of €7 per PVC sold. This was estimated to be 60% of the income from the sale of PVCs based on the predicted wholesale price at that time. By entering into this contract, the coordinator removed the risk of market volatility from the participants and agreed to absorb any losses that might arise from lower than anticipated PVC sale prices. Extenuating circumstances in this reporting period resulted in the PVCs being sold at higher-than-anticipated carbon prices. As a result, the percentage of income to the participants has deviated from the normal 60:40 share.

¹² The transaction was realized at 7 €/PVC on 3/1/2018. The applied conversion rate on that date is 1.18 \$/€

Table D2: Unsold stock of Plan Vivo Certificates

Vintage	No of PVCs	Price to participants (please indicate if this can be included in public version)
2016	0	

Part E: Monitoring results

E1: Ecosystem services monitoring

Inventory could not be organised due to insecurity. Proof of concept is ongoing in order to evaluate the density through the usage of satellite images. For this period the monitoring of ecosystem services (i.e. density and specific species diversity) has not been realized.

Table E1: Overview of performance indicators

Performance indicator	Density (#tree plants/ha) Min 260	Specific species diversity (not applicable in year 1)	TARGET MET
PV-REACH Italia-001 Bossey Etage	Not reported	Not reported	N/A
PV-REACH Italia-002 Peteldaye	Not reported	Not reported	N/A
PV-REACH Italia-003 Tadabat	Not reported	Not reported	N/A
PV-REACH Italia-004 Gagara I	Not reported	Not reported	N/A
PV-REACH Italia-005 Touro	Not reported	Not reported	N/A
PV-REACH Italia-006 Beiga	Not reported	Not reported	N/A
PV-REACH Italia-007 Gagara II	Not reported	Not reported	N/A
PV-REACH Italia-008 Ounare	Not reported	Not reported	N/A

E2: Maintaining commitments

No participants have resigned from the project this year.

E3: Socioeconomic monitoring

Monitoring activities have been realized for the Plan Vivos PV-REACH Italia-001 to 004 which already were included as from the start of the REACH Italia Plan Vivo project. The socioeconomic and other monitoring requirements (section K2 to K4) have been updated in the PDD and applied accordingly¹³. Data has been collected per Plan Vivo managed by the CVD. An overview of the results of the monitored parameters can be found in the table below and more details in Annex 4.

Table E2: Overview of socioeconomic and other parameters

Parameter	PV-REACH Italia-001: BOSSEY ETAGE	PV-REACH Italia-002: PETELDAYE	PV-REACH Italia-003: TADABAT	PV-REACH Italia-004: GAGARA I
Community_pay-outs	1,556 US\$	1,403 US\$	409 US\$	754 US\$
Spent_amount	0 US\$	0 US\$	360 US\$	601 US\$
Number_of_direct beneficiaries	0	0	432	417
Number_of_conflicts_related_to_natural resource_management	0	0	0	0
Monitoring_committee_in_place	Yes	Yes	Yes	Yes
Number_of_CVD_Meetings	7	5	4	5
Period of data collection	04/2019	04/2019	04/2019	04/2019

Some communities didn't spend already their amount available in their Plan Vivo village fund after receipt of the PES pay-outs, as the required budget for the chosen community activity

¹³ Annex 8 gives an overview of the retractive valuation of the reviewed annually measured socio-economic indicators of PV-REACH Italia-001 to 004 in Annual Report 1

exceeds the available funds. As an example, the community of Bossey Etage and Peteldaye would like to create a new borehole, but the available Plan Vivo fund is not enough. Nevertheless, the villages Tadabat and Gagara I were able to use the community pay-outs for the rehabilitation of broken boreholes.

The parameter “Number of direct beneficiaries” are rather estimates. As all villagers have access to the rehabilitated borehole, it is assumed that the number of direct beneficiaries is the number of persons living in the village.

Based on the monitoring of the parameter “Number of conflicts related to natural resource management”, the definition of conflict should be better defined and monitored. In the view of lack of pastoral resources, tensions regarding access to pasture should not be considered as conflicts. Conflicts should rather be considered as violations of the rules determined in the local land charters which are part of the Plan Vivo. During this monitoring period all CVD's reported no conflicts.

A committee for the monitoring of the rehabilitated sites is in place for all Plan Vivos as it is also put in place through the local land charter, which is a fundamental instrument for organizing the management of the pastures in the Sahel zone.

All CVD's organizes meetings on a regular basis. The CVD is also an important feature for fostering local development and as specified in the PDD is a governance structure that has been put in place since 2007 within the process of decentralization of state services in Burkina Faso. The CVD gives villages a unique and official structure to organize and develop local initiatives. Not all meetings are documented in meeting minutes. There are some meeting minutes organized by AGED, but this is not always the case when the CVD organizes the meetings by themselves. So, the results of the parameter ‘Number of CVD meetings’ is rather indicative. It can be concluded that all CVD's are functional, as it was also one of the selection criteria to include the village in the Plan Vivo project.

Four new villages have been included as Plan Vivo in the REACH Italia Plan Vivo project: ie (i) PV-REACH Italia-005 – Touro (75 ha); (ii) PV-REACH Italia-006 – Beiga (146 ha); (iii) PV-REACH Italia-007 – Gagara II (231 ha); and (iv) PV-REACH Italia-008 - Ounare (89 ha). In addition, another site of 150 ha has been added to the already existing Plan Vivo PV-REACH Italia-004.

Part of the inclusion process of a new village in the REACH Italia Plan Vivo project is the household and asset survey which serves as baseline situation of the village at the start of the project. The baseline survey has been updated based on the first annual report and new parameters have been identified in section K2 of the PDD. The parameters rather focus on livelihood, natural resource management, family economy and governance¹⁴. The results of the survey can be found in the table below:

Table E2: Overview of baseline indicators

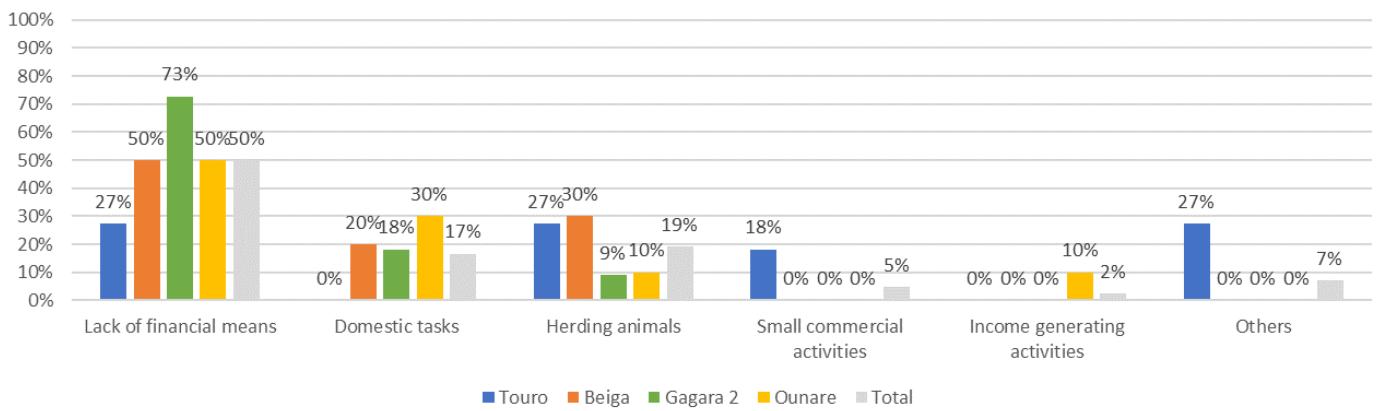
Indicator	PV-REACH Italia-005: TOURO	PV-REACH Italia-006: BEIGA	PV-REACH Italia-007: GAGARA II	PV-REACH Italia-008: OUNARE
% of girls going to school	8%	31%	7%	15%
Annual Revenue from the sale of livestock	48,636 CFA 74 €	37,083 CFA 57 €	24,545 CFA 37 €	29,500 CFA 45 €
Fraction of households selling milk	91%	58%	36%	60%
Annual Revenue from the sale of milk	50,000 CFA 76 €	32,571 CFA 50 €	23,500 CFA 36 €	40,417 CFA 62 €
Fraction of households purchasing agro-industrial by-products	82%	100%	64%	100%
Average number of purchased bags	8.0	6.9	5.0	6.5

¹⁴ Annex 8 gives an overview of the retractive valuation of the reviewed baseline indicators of PV-REACH Italia-001 till 004 in Annual Report 1

of agro-industrial by-products				
Fraction of households practicing transhumance	0%	0%	0%	0%
Fraction of households aware of conflicts related to the management of rehabilitated pasture sites during last year	0%	42%	0%	0%
Fraction of households perceiving that NOT all community members have access to the natural resources of the village	0%	0%	0%	0%
Fraction of households perceiving that tenure security is NOT guaranteed for all community members	0%	0%	9%	0%

It appears that most of the girls in households are not going to school. The most important reason is the lack of financial means followed by the necessity the girls in the households to herd the animals and realizing domestic tasks. More details can be found in the figure below.

Reasons why girls are not going to school



The average revenue from the sale of livestock varies among the different villages between 24,000 FCFA and 49,000 FCFA. It appears that the villages having most revenues from sales of livestock also generate most revenues from the sale of milk. Most of the households purchase agro-industrial by-products. Reasons for its usage are (i) the increase of milk production; (ii) the lack of access to fodder during the lean season; and (iii) the magnitude of the livestock in relation to the available pastureland. An important conclusion of the survey is that almost no households practice transhumance.

It seems that no conflicts have been reported in new villages of Touro, Gagara 2 and Ounare, whereas in the village of Beiga a significant number of households reported some conflicts. Nevertheless, care should be taken to what can be considered as a conflict. As explained in the section on annual reporting, this is an attention point in the following annual reports.

The survey shows that all households in the four new Plan Vivo villages perceive that all community members have access to the natural resources of the village. The same could be concluded concerning the perception of households that tenure security is guaranteed for all community members. Only in the village of Gagara 2 some households complained that their tenure security was not guaranteed due to their migration status within the village.

More details (with raw data) can be found in Annex 4.

E4: Environmental and biodiversity monitoring

The identified environmental and biodiversity indicators are the number of tree species and the number of herbaceous species. The environmental and biodiversity monitoring together with the ecosystem service monitoring couldn't be realized due to security issues in the Province of Oudalan.

The baseline has been determined based on a study of INERA¹⁵ within the framework of the BKF/017 programme.

Table E3: Overview of environmental and biodiversity indicators

Environmental/biodiversity indicators	Number of tree species	Number of herbaceous species
PV-REACH Italia-001 Bossey Etage	Not available	Not available
PV-REACH Italia-003 Peteldaye	Not available	Not available
PV-REACH Italia-003 Tadabat	Not available	Not available
PV-REACH Italia-004 Gagara I	Not available	Not available
PV-REACH Italia-005 Touro	Not available	Not available
PV-REACH Italia-006 Beiga	Not available	Not available
PV-REACH Italia-007 Gagara II	Not available	Not available
PV-REACH Italia-008 Ounare	Not available	Not available
Baseline	2	4.5

More detailed information in annex 5.

Part F: Impacts

F1: Evidence of outcomes

A proof of concept study is scheduled for last quarter of 2019 in order to evaluate the evolution of the rehabilitated pasture sites. Satellite images (Landsat 8 or Sentinel) of the dry and rainy season over the different years may allow the project to follow the evolution of the vegetation cover based on the Normalized Vegetation Index (NDVI). In addition, high resolution images of Google earth will be used for counting the number of trees or even estimate the biomass sequestration. This result will be cross checked with in situ measurements in order to evaluate the proof of concept.

Part G: Payments for Ecosystem Services

G1: Summary of PES by year

Overview of the payments can be found in the table below or in the tab "Actual payments" of file "Plan Vivo Project record keeping_REACH Italia":

Table G1: Summary of payments made and held in trust

1. Reporting year (mm/yy – mm/yy)	2. Total first year payment	3. Total ongoing payments	4. Total payments made (2+3)	5. Total payments held in trust	6. Total payments withheld
11/2015 – 10/2016	0 US\$	0 US\$	0 US\$	0 US\$	0 US\$
11/2016 – 10/2018	4,123 US\$ ¹⁶	0 US\$	0 US\$	0 US\$	0 US\$

¹⁵ Baseline based on external study from other sites which are situated in other villages than the Plan Vivos included in the project. These figures are rather indicative figures. Source: INERA (2014) : Rapports techniques d'état d'avancement du Protocole d'accord entre l'INERA et le Projet Azawak : Suivi scientifique des sites de récupération de terres dégradées réalisées par le Projet BKF/017 « Azawak Ressources Pastorales » notamment dans les communes de Gorom Gorom, Markoye, Dori et Bani.

¹⁶ Currency conversion: 1 € = 1.18 US\$

TOTAL	4,123 US\$	0 US\$	0 US\$	0 US\$	0 US\$
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No payments are being held by REACH Italia at the end of reporting period 11/2016 – 10/2018.

Contractual commitments (i.e. payments of the third year for the Plan Vivo's PV-REACH Italia-001 Bossey Etage, PV-REACH Italia-002 Peteldaye, PV-REACH Italia-003 Tadabat and PV-REACH Italia-004 GAgara I) can't be respected for the moment as the inventory hasn't be established due to security issues in the Province of Oudalan. No issuance of Plan Vivo certificates is requested, hence no money from the sales of Plan Vivo certificates is available for payment.

The total amount paid to the 4 Plan Vivo's (PV-REACH Italia-001 to 004) for AR1 has not been done according the PES contracts and will be adjusted in the future during following community pay-outs¹⁷.

Part H: Ongoing participation

H1: Recruitment

The Plan Vivo PV-REACH Italia-004 Gagara I has been extended with a site of 150 ha. In addition, four new villages have been incorporated into Plan Vivo in the REACH Italia Plan Vivo project: ie (i) PV-REACH Italia-005 – Touro (75 ha); (ii) PVREACH Italia-006 – Beiga (146 ha); (iii) PV-REACH Italia-007 Gagara II (231 ha); and (vi) PV-REACH Italia-008 – Ounare (89 ha). Contracts have been signed¹⁸. The technical specifications of the PDD also applies to the new participants as:

- All four villages are located in the Sahelian zone of Burkina Faso (see map in Annex 8);
- The sites¹⁹ are before project intervention old degraded grazing land of which the topsoil is characterized by a clogged, hardened and impenetrable surface;
- The used technology of the rehabilitation of the degraded sites is the Vallerani system with the Delfino plough;
- Communities are involved in the selection of the sites and the herbaceous and trees species, and in direct seeding activities;
- Local land charters have been put in place and CVD's are functioning in each corresponding village.

The respective communities have been well informed regarding the Plan Vivo process and the PES scheme and the necessary monitoring targets to achieve in order to receive the payments²⁰.

¹⁷ See column H in tab “Overview contract payments” of file “Plan Vivo Project record keeping”

¹⁸ See documents: (i) “Contrat PES PV - REACH Italia - 004 - Gagara 1 – avenant”; “Contrat PES PV - REACH Italia - 005 – Touro”; “Contrat PES PV - REACH Italia - 006 – Beiga”; “Contrat PES PV - REACH Italia - 007 - Gagara2”; and “Contrat PES PV - REACH Italia - 008 – Ounare”

¹⁹ See shapefiles in folder “Lux Dev _ REACH Italia _ QGIS”

²⁰ See meeting minutes of community meetings: “CR PV-REACH Italia-004 add sensibilisations village de GAGARA I_v2”, “CR PV-REACH Italia-005 sensibilisations village de TOURO_v2”, “CR PV-REACH Italia-006 sensibilisations village de BEIGA_v2”, “CR PV-REACH Italia-007 sensibilisations village de GAGARA 2_v2” and “CR PV-REACH Italia-008 sensibilisations village de OUNARE_v2”



Figure: Community meeting in the village of Touro for inclusion in the Plan Vivo project (PV-REACH Italia-005-Touro)



Figure: Community meeting in the village of Beiga for inclusion in the Plan Vivo project (PV-REACH Italia-006-Beiga)



Figure: Community meeting in the village of Gagara 2 for inclusion in the Plan Vivo project (PV-REACH Italia-007-Gagara 2)



Figure: Community meeting in the village of Ounare for inclusion in the Plan Vivo project (PV-REACH Italia-008-Ounare)

H2: Project Potential

Within the framework of BKF/017 programme²¹, mainly financed by Lux Dev between 2011 and 2016, REACH Italia rehabilitated in close collaboration with the local communities 5,410 hectares across 55 villages in the municipalities of Markoye, Gorom-Gorom, Djibo and Arbinda of which 8 villages have been included in the plan Vivo project. Another 5 villages (Kelguief with 132 ha, Bosse Barabé with 50 ha, Bossé Dogabé with 42 ha, Belagaoudi with 140 ha, and Kirohari with 80 ha) have been identified as potential project participants. The Plan Vivos have been developed through the introduction of local land charters focusing on sustainable land-use management of pastures, however no PES agreements have been signed yet. This will be dependent from how insecurity in the Province of Oudalan will evolve. Two project participants would like to extend their Plan Vivo, ie PV-REACH Italia-001 Bossey Etage with 57 ha, PV-REACH Italia-002 Peteldaye with 50 ha and PV-REACH Italia-005 Touro with 60 ha. The additional potential area in the Province van Oudalan under management where PES agreements will be in place is 611 ha.

It is also foreseen to include 1,150 ha of 10 villages located in the Sahelian Province of Seno

²¹ Financed through Indicative Programme for Cooperation II (2011 – 2016) between Luxemburg and Burkina Faso: <https://luxdev.lu/en/activities/project/BKF/017>

that has been rehabilitated under a FAO program ‘Action against Desertification’²². Activities can still be deployed in Seno. It concerns the following villages: i) municipality of Bani: villages of Wendignébé with 61 ha and Séno Sofaré with 105 ha; ii) municipality of Sampelga: villages of Sampelga with 88 ha and Damdégou with 117 ha; iii) municipality of Setyenga: villages of Soffokel with 318 ha, Ouro Daka with 110 ha, Bandiéda Gourmantché with 85 ha, Mboulakingal with 79 ha, Setyenga with 47 ha; and iv) municipality of Dori: village of Léré Ibaye with 140 ha.

Table H1: Details of potential project participants

Wider engagement	Province of Oudalan	Province of Séno	Total
No. community groups with plan vivos	5	10	15
Approximate number of individuals in these community groups (if known)	4,528	21,101	25,629

Lux Dev has initiated a new program BKF/024 “Project for land reclamation efforts towards pastoral usage and in conservation areas”²³ in the same dynamic, which is the restoration and recovery of degraded grasslands. The program started in 2018 and will last till 2022. The objective is to include a part of the pastureland rehabilitated through this program under PES management. More quantified information will be provided in the next annual report.

H3: Community participation

The communities represented by the CVD or Village Development Councils play an active role in the project. For existing Plan Vivos, local meetings were organized to manage the collection of seeds and reseeding activities of sites that could better perform. The surveillance committees of the rehabilitated sites organized several meetings discussing the application of the land management rules. Other meetings were organized by the CVD to discuss what could be done with the revenues of the sales of Plan Vivo certificates.

As new villages have been included in the Plan Vivo project, several meetings were organized on the Plan Vivo recruitment process. Through local meetings, all members of the community have been involved in the decision-making process regarding determination of the performance indicators, benefit sharing mechanism and land use management. The communities decided how the sites should be managed based on the local land charters. The sharing and awareness sessions helped local communities to understand the objectives of the rehabilitation of degraded pastures and to get involved in making decisions and to be responsible for the selection of species and management of these sites.

As already explained, meetings concerning the organization of inventories of the Plan Vivos 001 to 004 could not be organized due to increasing insecurity in the Province of Oudalan.

A summary of the content of the realized community meetings is presented in the table below.

²² For more details about the FAO program: <http://www.fao.org/in-action/action-against-desertification/countries/africa/burkina-faso/en/>

²³ <https://luxdev.lu/en/activities/project/BKF/024>



Figure: Community meeting for reseeding activities in the village of Bossey Etage (PV-REACH Italia-001-Bossey Etage)



Figure: Community meeting in the village of Peteldaye concerning the organization of reseeding activities (PV-REACH Italia-002-Peteldaye)



Figure: Community meeting in the village of Tadabat concerning the expenditure of the Plan Vivo fund (PV-REACH Italia-003-Tadabat)



Figure: Community meeting in the village of Gagara I regarding the extension of the Plan Vivo (PV-REACH Italia-004-Gagara I)

Table H2: Topics discussed during the community meetings²⁴

No	Topics	Content
1	Benefit sharing of Plan Vivo Fund	In all four villages (PV-REACH Italia-001-Bossey Etage, PV-REACH Italia-002-Petelday, PV-REACH Italia-003-Tadabat and PV-REACH Italia-004-Gagara I) which generated Plan Vivo certificates in Annual Report 1, community meetings were organized on what should be done with the Plan Vivo funds. The villages of Tadabat ²⁵ and Gagara I ²⁶ decided to rehabilitate respectively one and two boreholes. The villages of Bossey Etage and Peteldaye are rather planning to realize a new borehole for which the actual budget in the Plan Vivo fund is not enough.
2	Reseeding activities	Reseeding activities were organized through the CVDs for the 4 villages already included in the first annual report. The seeds were collected from stool of livestock, which improves the quality of the seeds: <ul style="list-style-type: none"> - PV-REACH Italia-001-Bossey Etage: seeds collection of 200 kg Balanites and 1,500 kg Acacia Radiana; 500 kg of organic manure; and 213 persons were involved in the reseeding activities; - PV-REACH Italia-002-Petelday: seeds collection of 900 kg Balanites and 500 kg Ziziphus Mauretania; 1,000 kg of organic manure; and 101 persons were involved in the reseeding activities; - PV-REACH Italia-003-Tadabat: seeds collection of 600 kg Balanites and 1,300 kg Ziziphus Mauretania; and 800 kg of organic manure; - PV-REACH Italia-004-Gagara I: seeds collection of 200 kg Balanites and 100 kg Ziziphus Mauretania; and 500 kg of organic manure.
3	Management of rehabilitated pasture sites	In all Plan Vivo villages the surveillance committee has been put in place and is composed of 5 to 6 persons of which at least two women. The surveillance committee is responsible for the adoption of the rules defined in the local charters and the Plan Vivo. Several meetings have already been organized to discuss the application of the rules.
4	Inclusion of new Plan Vivo villages in the project	Different meetings were organized with the CVDs of the villages of Touro, Beiga, Gagara 2 and Ounare on the Plan Vivo mechanism. Different topics were discussed such as identification of the land management rules based on local land charter, the identification of the key performance indicators, the benefit sharing mechanism, the identification of the priorities of the village and the signature of the Plan Vivo contracts. The process led to the inclusion of four new Plan Vivos, i.e. PV-REACH Italia-005-

²⁴ See also documents: "PV-REACH Italia-001_BOSSEY ETAGE Fiche_rapportage annuel_CVD_AR2-3_VF_v1", "PV-REACH Italia-002_PETELDAYE Fiche_rapportage annuel_CVD_AR2-3_VF_v1", "PV-REACH Italia-003_TADABAT Fiche_rapportage annuel_CVD_AR2-3_VF_v1" and "PV-REACH Italia-004_GAGARA I Fiche_rapportage annuel_CVD_AR2-3_VF_v1"

²⁵ See document 'PV_expenditure_Tadabat_AR 2-3': meeting minutes of meeting concerning the expenditure of Plan Vivo fund for the rehabilitation of one borehole

²⁶ PV_expenditure_Gagara I_AR 2-3: meeting minutes of meeting concerning the expenditure of Plan Vivo fund for the rehabilitation of one borehole

		Touro, PV-REACG Italia-006-Beiga, PV-REACH Italia-007-Gagara 2 and PV-REACH Italia-008-Ounare.
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Examples (in French) of meeting minutes can be found in Annex 7.

Part I: Project operating costs

I1: Allocation of costs

All expenditures have been met through the sales of PVC.

Table I1: Allocation of costs²⁷

Expense	Narrative	Amount	Contribution from sale of PVCs	Contribution from other sources
Reseeding activities	Animators Fuel cost	850 US\$	850 US\$	
Community meetings for introduction of 4 new Plan Vivos	Animators Fuel cost	920 US\$	920 US\$	
Surveys for new Plan Vivos	Animators Fuel cost	310 US\$	310 US\$	
Participation to 2 capacity building workshops organized in Ouagadougou	Per diem Fuel cost	610 US\$	610 US\$	
Community meetings with existing Plan Vivos	Animators Fuel cost	610 US\$	610 US\$	

²⁷ The table contains rather estimation of the costs (exchange rate of 1 e = 1.18 US\$)

Annexes

Annex 1. Monitoring results for issuance request

Not applicable.

Annex 2. Ongoing monitoring results for all participants

Not applicable

Annex 3. Reallocation of commitments

Not applicable

Annex 4. Socioeconomic monitoring results

See documents:

- Analyse_Situation de référence_PV-REACH-005-008_v1.0;
- PV-REACH Italia-001_BOSSEY ETAGE Fiche_rapportage annuel_CVD_AR2-3_VF_v1 ;
- PV-REACH Italia-002_PETELDAYE Fiche_rapportage annuel_CVD_AR2-3_VF_v1;
- PV-REACH Italia-003_TADABAT Fiche_rapportage annuel_CVD_AR2-3_VF_v1 ;
- PV-REACH Italia-004_GAGARA I Fiche_rapportage annuel_CVD_AR2-3_VF_v1 ;

Annex 5. Conservation and monitoring results

Not applicable

Annex 6. Impacts

Not applicable.

Annex 7. Community meeting records

See meeting minutes of community meetings in French: “CR PV-REACH Italia-004 add sensibilisations village de GAGARA I_v2”, “CR PV-REACH Italia-005 sensibilisations village de TOURO_v2”, “CR PV-REACH Italia-006 sensibilisations village de BEIGA_v2”, “CR PV-REACH Italia-007 sensibilisations village de GAGARA 2_v2” and “CR PV-REACH Italia-008 sensibilisations village de OUNARE_v2”.

Annex 8. Retroactive valuation of parameters of AR1

Review of socio-economic baseline indicators in Annual Report 1

Indicator	PV-REACH-001: BOSSEY ETAGE	PV-REACH-002: PETELDAYE	PV-REACH-003: TADABAT	PV-REACH-004: GAGARA I
% of girls going to school	Not possible	Not possible	Not possible	Not possible
Annual Revenue from the sale of livestock	209,000 FCFA 319 €	62,000 FCFA 95 €	37,000 FCFA 56 €	31,000 FCFA 47 €
Fraction of households selling milk	Not possible	Not possible	Not possible	Not possible
Annual Revenue from the sale of milk	Not possible	Not possible	Not possible	Not possible
Fraction of households purchasing agro-industrial by-products	Not possible	Not possible	Not possible	Not possible

Average number of purchased bags of agro- industrial by-products	Not possible	Not possible	Not possible	Not possible
Fraction of households practicing transhumance	42%	97%	63%	67%
Fraction of households aware of conflicts related to the management of rehabilitated pasture sites during last year	Not possible	Not possible	Not possible	Not possible
Fraction of households perceiving that NOT all community members have access to the natural resources of the village	Not possible	Not possible	Not possible	Not possible
Fraction of households perceiving that tenure security is NOT guaranteed for all community members	Not possible	Not possible	Not possible	Not possible

Review of annually measured socio-economic indicators in Annual Report 1

Parameter	PV-AGED-001: BOSSEY ETAGE	PV-AGED-002: PETELDAYE	PV-AGED-003: TADABAT	PV-AGED-004: GAGARA I
Community_pay-outs	0 US\$	0 US\$	0 US\$	0 US\$
Spent_amount	0 US\$	0 US\$	0 US\$	0 US\$
Number_of_direct beneficiaries	-	-	-	-
Number_of_conflicts_related_to_natural resource_management	Not possible	Not possible	Not possible	Not possible
Monitoring_committee_in_place	Yes	Yes	Yes	Yes
Number_of_CVD_Meetings	>4	>4	>4	>4

Annex 9. Detailed map of the villages included in the Plan Vivo project:

