Plan Vivo project validation report

EthioTrees: Ecosystem Restoration and Valorization by Associations of Landless Farmers in the Tembien Highlands (North Ethiopia)

Prepared by Wolde Merkuria (Ph.D)
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Name of Reviewers: Wolde Mekuria (Ph.D.); Researcher in Land Resources Management; P. O. Box 5689, Addis Ababa, Ethiopia. (wolde_mekuria@yahoo.com)

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Project Name: EthioTrees: Ecosystem Restoration and Valorization by Associations of Landless Farmers in the Tembien Highlands (North Ethiopia)

Project Description:
Land resources in the Ethiopian highlands are facing intense degradation. This situation often leads to loss of biodiversity and a reduction in services derived from ecosystems (Mekuria et al., 2015). A number of initiatives have been put in place by the Government of Ethiopia, local communities and development partners to restore degraded ecosystems. For example, policies and practices aimed at the restoration of ecosystems through establishing exclosures have become increasingly important in Ethiopia (Yami et al., 2013; Lemenih & Kassa, 2014; Mekuria et al., 2017). This is related to the multifaceted benefits of such interventions including rapid improvement in vegetation cover and aboveground biomass, reductions in soil erosion and associated nutrient depletion.

However, the biggest challenge is to ensure that exclosures are sustainable. Local communities are led to question the worth of exclosures due to the current lack of focus on the potential economic benefits of exclosures (Tilahun et al., 2007; Mekuria et al., 2017). These cited studies further elaborated that the limited short-term economic benefits of exclosures could negatively affect the wider adoption of exclosures in Ethiopia. Therefore, developing and implementing development projects that would enable a self-financing exclosures will be critical to ensuring sustainable and wider adoption of exclosures in Ethiopia.

The EthioTrees project seeks to strengthen the protection of 541 hectares of exclosures in three villages (Gidmi Gestet, Meam Atali & Adi Lehtsi), which will result in a total carbon benefits of 5,537 tCO2 per year. The project is implemented by Belgian-Ethiopian association (i.e., the EthioTrees association), which has a legal and organizational framework in place. The EthioTrees association has been supporting communities in the three villages since 2016. EthioTrees project, which aimed at improving the livelihood of rural households could contribute to sustaining exclosures, restoring degraded ecosystems and increasing ecosystem services. The EthioTrees association/project is also important in building local capacities and support the valuation of community-wide benefits such as the changes in carbon storage, flood reduction and non-timber forest production following establishing exclosures.

List of Principal documents reviewed (including list of sites visited and individuals/groups interviewed):
Document reviewed:

1. Project Design Document (PDD): EthioTrees: Ecosystem restoration and valorisation by associations of landless farmers in the Tembien Highlands (North Ethiopia).
2. PES agreement draft document: EthioTrees Payment for Ecosystem Services Contract between EthioTrees association and the participating communities in the Dogua Tembien district.
3. Quarterly reports of EthioTrees project/association.
4. Plan Vivo Standard (2013): Community Payments for Ecosystem Services program.

(www.planvivo.org).
5. Plan Vivo Procedures Manual (2017): For the registration and oversight of Plan Vivo projects and issuance of Plan Vivo Certificates. www.planvivo.org
6. Mekuria, W.; Barron, J.; Dessalegn, M.; Adimassu, Z.; Amare, T.; Wondie, M. 2017. Exclosures for ecosystem restoration and economic benefits in Ethiopia: a catalogue of management options. Colombo, Sri Lanka: International Water Management Institute (IWMI). CGIAR Research Program on Water, Land and Ecosystems (WLE). 28p. (WLE Research for Development (R4D) Learning Series 4). doi: 10.5337/2017.204.
7. Mekuria W, Langan S, Johnston R, Belay B, Amare D, Gashaw T, Desta G, Noble A, Workeleul A. 2015. Restoring aboveground carbon and biodiversity: the case study from the Nile basin, Ethiopia. Forest Science and Technology 11: 86-96.
8. Yami M, Mekuria W, Hauser M. 2013. The effectiveness of village bylaws in sustainable management of community managed exclosures in Northern Ethiopia. Sustainability Science 8: 73–86.
9. Descheemaeker, K., J. Nyssen, J. Rossi, J. Poesen, M. Haile, J. Moeyersons, and J. Deckers. 2006b. Sediment deposition and pedogenesis in exclosures in the Tigray Highlands, Ethiopia. Geoderma 132:291–314.
10. Tilahun M, Olschewski R, Kleinn C, Gebrehiwot K. 2007. Economic analysis of closing degraded Bosewellia papyrifera dry forest from human intervention: A study from Tigray, Northern Ethiopia. Forest Policy and Economics 9: 996–1005.

Visited sites:

Gidmi Gestet; Meam Atali & Adi Lehtsi; located in Douga Tembein District, Tigray region, Ethiopia

List of individuals interviewed:

During the field visit, three group discussion were conducted (i.e., with two landless farmers associations and one community) (Please see Pictures 1, 2, 3 below). Key informants interviewed during the field visit is summarized below.

Table 1: Key informants interviewed during the field visit

Name	Title	Village/institution	Responsibility
Seifu G/Selassie	Mr.	EthioTrees Ass.	Local project coordinator.
Buruh Abebe	Mr.	Mekelle University	Associate professor in forest ecology; coordinator of trees for farmers' project.
Tesfalem G/Yohanis	Dr.	Mekelle University	Associate professor in hydro-geomorphology.
Aklilu Negussie	Dr.	WeForest, Ethiopia	Country representative and project manager.
Taeme G/Selassie	Mr.	H/Selam Agri. Off.	SWC expert
Kidane Kahesay	Mr.	H/Selam Agri. Off.	Forestry expert
Kindeya Gebru	Mr.	Gidmi Gestet	Development group leader
Gidey Mebrhatu	Mr.	Gidmi Gestet	Guard of an exclosure
Aregawi G/hiwot	Mr.	Gidmi Gestet	Youth association chairperson
H/Selassie Ergaw	Mr.	Gidmi Gestet	Farmer
Abrehet Z/Buruh	Mrs.	Gidmi Gestet	Farmer (women)
Mebrehatu H/Hiwot	Mr.	Gidmi Gestet	Village land administration
Lielit G/Egzeabher	Mrs.	Gidmi Gestet	Women association chairperson
H/Micheal G/Selassie	Mr.	Adi Lehtsi	Landless association chairperson
Desta Fitsum	Mr.	Adi Lehtsi	Landless association audit
G/Libanos Hailu	Mr.	Amanit Tabia	Administrative head
Letemichael Hailu	Mrs.	Meam Atali	Women Association Head
G/Egizeabher G/Yohanis	Mr.	Meam Atali	Saving and Credit Association Chairperson
Nigussie G/Michael	Mr.	Meam Atali	Member of local administration body

Description of field visit:

The field visit was conducted from 25 to 29 August 2017 in three sites: Gidmi Gestet, Meam Atali and Adi Lehtsi. During the field visits, three group discussion were conducted (i.e., with two landless farmers associations and one community) (Pictures 1, 2, 3). The two landless farmers associations were established in Meam Atali (engaged in honey production) and Adi Lehtsi (engaged in non-timber forest product; i.e., frankincense or incense) production. Also, 17 key informant interviews (Table 1) and discussion with the local project coordinator were conducted during the field visits.

The field visits revealed that most of the area description presented in the project design document (PDD) reflects the actual ground situations. For example, the PDD elaborated that the local association of landless farmers established in Adi Lehtsi village is active in the tapping and sorting of frankincense. This also confirmed during discussion with the landless farmers association in the village (Picture 1).

Picture 1: Group discussion with the landless farmers associate at Adi Lehtsi village. The association is engaged in frankincense (or incense) production.

Similarly, the PDD described the exclosure in Gidmi Gestet village as degraded and located between an upslope part of the village and a hamlet more downslope, which is confirmed during the field visits (Picture 2a). Although, the PDD indicated that the landless farmers association in Gidmi Gestet was stablished in 2016, field observation and discussion with the local community (Picture 2b) demonstrated that the establishment of landless farmers association is still in progress.

(a)

(b)

Picture 2: The exclosure at Gidmi Gestet village (a) and discussion with the local community (b)

The PDD described the exclosure in Meam Atali village as suitable for honey production

and located on a gentle slope, which reflects the actual situations on the ground (Picture 3a). The field visits also revealed that the landless farmers association is active in honey production (Picture 3b).

(a)

(b)

Picture 3: The exclosure at Meam Atali village (a) and the landless farmers association engaged in honey production (b)

Validation Opinion:

EthioTrees is a combined Belgian-Ethiopian association, which has a legal and organizational framework in place. The EthioTrees association has sufficient capacity and a range of skills to implement all the administrative, technical and social requirements of the project interventions and activities. The EthioTrees association has an effective monitoring and reporting system in place that can regularly monitor progress and provide annual reports to the Plan Vivo Foundation. The review of the PDD, the draft payment for ecosystem service (PES) agreement document and quarterly reports also revealed that the association has measurable indicators for each ecosystem benefits realized through the implementation of project activities and interventions. The EthioTrees association has used appropriate carbon accounting methods. The project used data-driven approach, which is more appropriate than using models developed elsewhere. The review of the PDD and quarterly reports of the association as well as discussion with the local project coordinator confirmed that baseline information is collected and are well documented. The activities and interventions of EthioTrees association are crucial to minimize the financial, technical, social and institutional barriers and ensuring sustainable and wider adoption of exclosures in the Ethiopian highlands. The EthioTrees association looked at potential leakage and uncertainties as well as risks associated with the project and put possible mitigation measures. It is learnt that there are no any agreements that are in place that could lead to double counting. The association comprehensively identified the wider ecological impacts of project interventions and activities and included in the project impact monitoring plan. The association adapted the process of community-led project planning, has a good socio-economic impact assessment and monitoring plan, and drafted a clear procedures for entering into sale agreements and PES.

The PDD, the project quarterly reports and PES agreement documents provide comprehensive description on project activities and interventions, and provide adequate background on the roles and responsibilities of local communities and project sites. The PDD has detailed and clear description on livelihood benefits, indicators and payment modalities. The monitoring system described in the PDD seems feasible and achievable, and the selected indicators covers all aspect of monitoring (i.e., the indicators are specific,

measurable, achievable, relevant and time-bound). The Plan Vivo (or land management plans) of the project area and the processes followed during the preparation of the land management plans (i.e., existing/base and future/desired) are clearly described in the PDD. Carbon and other project benefits are likely to be delivered, and with the **following 23 minor corrective action (summarized below), the project could ready qualify for certification** with enhanced impact on rural livelihood.

Table 1. Summary of major and minor Corrective Actions (Insert CAR Text)

Theme	Major CARs	Minor CARs	Observations
Governance		a) The association could consider using informal institutions (e.g., church, Edir, Ekub, etc.) for conflict resolution. b) The association could consider to strengthen the participation of district (Woreda) level management bodies in the project, as this helps to effectively mobilize local communities and facilitates the selection of target groups. c) PES agreement document, section 1.3 needs to be revised, as a separate agreement between the landless farmers associations and the entire community is required to clearly specify the potential carbon benefits and benefit sharing mechanisms. d) PES agreement document, section 2: The agreement should be between **EthioTrees, landless farmers associations and local communities,** as the exclosures are communal resources of the entire community. The associations are provided a piece of land from exclosures and have benefited through integrating income generating activities such as beekeeping, livestock fattening, and production of other non-timber products, which is actually designed to strengthen the management and protection of exclosures. e) PES agreement document, section 2.2c needs to be revised on the stated role/responsibilities of the landless farmers associations. Selection of target	a) The establishment of landless farmers association at Gidmi Gestet is still in progress and needs support and close follow up from the association. b) The participation and involvement of the local communities and associations as well as Tabia and village level management bodies in the project activities and interventions is very strong. c) It is observed that identification of technical gaps for providing training is usually done based on experts, development agents and community representative observations and experiences. d) The local communities in all visited sites developed bylaws to use, manage and protect exclosures. The two established associations of landless farmers also have their own bylaws. However, there is no formal agreement between the entire community and landless farmers associations on roles and responsibilities and benefit sharing.

		groups and maintaining gender balance is the mandate of administration bodies (i.e., from district to village level administration bodies) and the entire community. The EthioTrees association should also work on awareness creation to achieve this. f) PES agreement document, section 2.2e needs to be revised. The **direct beneficiaries** of the PES investments are not only the landless farmers associations. The **entire communities** are also the direct beneficiaries. The benefits arises from the PES investments (mainly from the sequestration of carbon) is an additional benefit for the associations; as the association are directly benefiting through integrating exclosures with income generating activities. This measures could actually strengthen the protection of exclosures and support to generate and sustain ecosystem services such as carbon sequestration, spring development, erosion control and groundwater recharge. g) PES agreement document, section 3.3 needs to be revised, as the benefits from PES should be divided between the entire communities who own the exclosures. The association are just subsets of the entire community, and are selected by the community in order to create jobs for landless farmers and thereby strengthen the protection of exclosures. h) PES agreement document, section 3.3 needs to be revised, as carbon sequestration following establishing exclosures varies with differences among communities in managing and protecting exclosures. ***Suggestion:*** *the remaining 50% of the benefits from PES should be distributed*	

		proportional to ecosystem services (ES) generated in a hectare, instead of considering size as a criteria. i) PES agreement document, section 4.1: The entire community is the direct beneficiary of PES investment. Please also see the comment above. j) PES agreement document, section 5.2: Please include the entire community in this agreement. Please see the suggestions above. k) PES agreement document, Annex A needs to be revised, as the landless farmers associations cannot decide on the type of investments in a village. Making such decisions is the mandate of the entire community and management bodies. Please amend this throughout the document. l) PES agreement document, Annex B.1, indicator 2: Would be good if this is specified to facilitate the monitoring activities. m) PES agreement document, Annex B.1, indicator 4: This indicator could be one of the restoration activities. It seems there is an overlap between indicator 2 & 4. Please check it. n) The association could undertake comprehensive needs assessment by involving the entire community when identifying the technical gaps. Such approach could help increase the interest and participation of local communities in project activities and interventions. o) The association could provide support to develop an agreement between the associations and the entire communities, as such legal agreement helps formalize the responsibilities of each groups and rights over the use and management of communal resources as well as benefit sharing mechanisms. Failing to	

		include local communities in the process may make them less willing to establish exclosures in the future.	
Carbon	0	a) The association could consider using mixed-species allometric model for smaller-size trees developed for northern highlands of Ethiopia, thereby minimizing the underestimation of aboveground biomass. b) The association could consider the introduction of additional interventions that could help minimize the concerns of local communities on exclosures *(e.g., introducing alternative energy options as a mechanism to support the livelihood of the local communities).* c) The project could consider working with informal institutions rather than only focusing on formal institutions to effectively minimize the risks from political instability and disinterest. d) The information presented as risk 2, has to be included as a potential leakage and uncertainties and if possible should be quantified, and mitigation measures should be put in place. *Suggested mitigation measures: Introducing alternative energy options (e.g., solar, energy conserving stoves), establishing woodlot in the exclosures and diversifying livelihood.* e) The project could consider the establishment of runoff monitoring mechanisms in all exclosures. *The Hydrological studies started in Adi Lehtsi village could also be expanded by adding the assessment of the contribution of exclosures in reducing runoff and sediment load.*	(a) Recently, a mixed-species allometric model is developed for smaller-size trees in northern highlands of Ethiopia (Mulugeta et al., 2017). The paper is under review in Environmental Research Letters. Using the model for the estimation of aboveground biomass and carbon might provide accurate information and increase our understanding of the contribution of restoration efforts to mitigating climate change. (b) The involvement of local communities/committee members in monitoring activities is limited to provision of labor during data collection.
Ecosystem		(a) The association could consider conducting need assessment and consulting the entire community when selecting tree species to be planted in the exclosures. This measure	(a) Discussion with local communities and key informants revealed that the communities have interest in planting of exotic species.

		could help to address the need and priorities of local communities, which have implications on the sustainable management of planted trees. (b) The project needs to work towards meeting the demand of communities and project goals related to plantation activities. *Suggestion: the project could address issues related to the preference of exotic and native species by allowing the local communities to plant exotic plant species across the borders of exclosures and/or around homestead areas. The project could also consider the need to provide seedlings of exotic species and technical support.*	
Livelihoods		a) The EthioTrees association needs to finalize the PES agreement document, enter into an agreement with the local communities, and conduct awareness raising activities to familiarize the local communities about the entire processes of the project.	

Table 2 - Report Conformance (Delete Yes/No as appropriate)

Theme	Conformance of Draft Report	Conformance of Final Report
Governance	Yes	Yes/No
Carbon	Yes	Yes/No
Ecosystem	Yes	Yes/No
Livelihoods	Yes	Yes/No

Theme	**1. Effective and Transparent Project Governance**
Ensuring that the project meets requirements 3.1-3.16 of the Plan Vivo Standard (2013)	
A. Requirement	**1.1 Administrative capabilities** Is there a legal and organisational framework in place that has the sufficient capacity and a range of skills to implement all the administrative requirements of the project? Aspects of this framework may include: 1.1.1 A legal entity (project coordinator) that is able to enter into sale agreements with multiple producers or producer groups for carbon services 1.1.2 Standard sale agreement templates for the provision of carbon services 1.1.3 Systems for maintaining transparent and audited financial accounts able to the secure receipt, holding and disbursement of payments to

	producers 1.1.4 All necessary legal permissions to carry out the intended project activities 1.1.5 Mechanisms for participants to discuss issues associated with the design and running of the project 1.1.6 Procedures for addressing any conflicts that may arise 1.1.7 Ability to produce reports required by Plan Vivo on a regular basis and communicate regularly with Plan Vivo
B. Guidance Notes for Validators	Organizational and administrative capacity may be demonstrated through: • A record of managing other projects - especially those involving the receipt, safeguarding and management of funds and disbursement of these to smallholders/community groups • Project staff who can explain the legal status of the organisation and its management and financial structure i.e. how funds will be held and transferred – backed up by evidence of setting up bank accounts and record-keeping systems etc. • The views of others who have worked with the organisation in the past (such as government, other project partners or other NGOs) • A visibly efficient and functioning office with all necessary staff
C. Findings (describe)	EthioTrees is a combined Belgian-Ethiopian association, which has a legal and organizational framework in place. The EthioTrees association has sufficient capacity and a range of skills to implement all the administrative requirements of the project interventions and activities. The review of the PDD and the field observations revealed that the EthioTrees association is registered as a cooperative association (Picture 4), administered by the rules and regulation of the Ethiopian cooperatives agency, and has got project coordinator who is able to enter a legal agreement with local communities. The local project coordinator has worked in different offices and projects (e.g., Agricultural Office; Water Resource, Energy and Mining; Selam Water and Sanitation Project) for about 9 years. During this time, the coordinator was responsible for coordinating the planning and implementation of natural resources management (NRM) interventions, lead water resources development (e.g., the construction of hand dug wells, spring development and energy production), and managing financial resources allocated for implementing the above mentioned development activities.   (a) (b) **Picture 4:** A letter demonstrating the legal status of the EthioTrees association (a) and a certificate obtained from Ethiopian cooperative agency (b)

The association (i.e., EthioTrees) has strong partnership with the national, regional and district level government bodies as well with the local communities. Such strong partnership between the EthioTrees association and governmental organizations and local communities could help to mainstream the project interventions and activities into government plan and ensure wider adoption of project interventions and activities in the future. The fact that the governance structure has been formalized in a Memorandum of Understanding between all relevant actors could also strengthen the legal status of the association. The project financial management is transparent and can be audited upon request. Discussion with the local project coordinator and observations during field visits also confirmed that the association has a transparent financial auditing mechanisms and has got legal vouchers as well as bank account (Picture 5). One of the strength of the financial management of the association is that most of the money obtained from the sale of Plan Vivo certificate is planned to be invested back on communities, and the investment is decided after consulting the associations and local communities.

(a)

(b)

(c)

(d)

Picture 5: The EthioTrees financial management documents: bank account (a), financial recording book (i.e., journal voucher) (b), cash receipt voucher (c), and payment voucher (d).

The EthioTrees association drafted PES agreement document. It is noted that the draft agreement document describes the roles and responsibilities of the project partners, and the terms and conditions governing the generation of and payment for ecosystem services from forest protection, non-timber forest products and related management activities. The document also presented (i.e., as an annex) the

	mechanism through which payments will be transferred, which could be served as a standard sale agreement template. Further, the document describes forest monitoring activities and methods (including measurable indicators) and ecosystem services monitoring targets. As indicated in the PDD, the EthioTrees association uses organized meetings and trainings (e.g., on job and theoretical trainings) to involve target groups and the entire community and to discuss issues related to project activities. This is also confirmed by the local communities during the field visit. Regular discussion sessions (or field visits) is also among mechanisms used to involve participants. In this line, the field visit confirmed that the project coordinator meet the local communities 5-6 times a month. Issues including uses, management and protection of exclosures, and any challenge associated with exclosures discussed during such meetings. The project coordinator has also suggestion and complaints book, in which he registered any complain/suggestions arose during discussion with communities and associations of landless farmers. The EthioTrees association has the ability to produce timely reports required by plan Vivo and can communicate regularly, as the members of the organization have adequate experience, educational qualifications and understanding of the local conditions. The field visits, discussion with the local project coordinator and document reviews (e.g., quarterly reports) also revealed that the project coordinator is capable of producing regular activity-based reports. The EthioTrees association inclined to use formal institution for conflict resolution. The discussion with local communities and associations of landless farmers confirmed that local communities and association of landless farmers use both formal and informal (e.g., bylaws) institutions to address conflicts.		
D. Conformance	Yes [x]	No [ ]	N/A [ ]
E. Corrective Actions (describe)	(a) The association could consider using informal institutions (e.g., church, Edir, Ekub, etc.) for conflict resolution. (b) The association could consider to strengthen the participation of district (Woreda) level management bodies in the project, as stregthening the participation of Woreda level adminstration bodies helps to effectively mobilize local communities and facilitates the selection of target groups. (c) PES agreement document, section 1.3 needs to be revised, as a separate agreement between the landless farmers associations and the entire community is required to clearly specify the potential carbon benfits and benefit sharing mechanisms. (d) PES agreement document, section 2: The agreement should be between **EthioTrees, landless farmers associations and local communities,** as the exclosures are communal resources of the entire community. The associations are provided a piece of land from exclosures and have benefited through integrating income generating activities such as beekeeping, livestock fattening, and production of other non-timber products, which is actually designed to strengthen the management and protection of exclosures.		

	(e) PES agreement document, section 2.2c needs to be revised on the stated role/responsibilities the landless farmers associations. Selection of target groups and maintaining gender balance is the mandate of administration bodies (i.e., from district to village level administration bodies) and the entire community. The EthioTrees association should also work on awareness creation to achieve this. (f) PES agreement document, section 2.2e needs to be revised. The **direct beneficiaries** of the PES investments are not only the landless farmers addociations. The **entire communities** are also the direct beneficiaries. The benefits arises from the PES investments (mainly from the sequestration of carbon) is an additional benefit for the associations; as the association are directly benefiting through integrating exclosures with income generating activities. This measures could actually strengthen the protection of exclosures and support to generate and sustain ecosystem services such as carbon sequestration, spring development, erosion control and groundwater recharge. (g) PES agreement document, section 3.3 needs to be revised, as the benefits from PES should be divided between the entire communities who own the exclosures. The association are just subsets of the entire community, and are selected by the community in order to create jobs for landless farmers and thereby strengthen the protection of exclosures. *(h)* PES agreement document, section 3.3 needs to be revised, as carbon sequestration following establishing exclosures varies with differences among communities in managing and protecting exclosures. ***Suggestion:*** *the remaining 50% of the benefits from PES should be distributed proportional to ecosystem services (ES) generated in a hectare instead of considering size as a criteria.* (i) PES agreement document, section 4.1: The entire community is the direct beneficiary of PES investment. Please also see the comment above. (j) PES agreement document, section 5.2: Please include the entire community in this agreement. Please see the suggestions above. (k) PES agreement document, Annex A needs to be revised, as the landless farmers association cannot decide on the type of investments in a village. Making such decisions is the mandate of the entire community and management bodies. Please amend this throughout the document. (l) PES agreement document, Annex B.1, indicator 2: Would be good if this is specified to facilitate the monitoring activities. (m) PES agreement document, Annex B.1, indicator 4: This indicator could be one of the restoration activities. It seems there is an overlap between indicator 2 & 4. Please check it.
F. (Insert Project Coordinator's Name) Response	*(To be filled out by the Project Coordinator)*
G. Status	*(CLOSED or OUTSTANDING)*
A. Requirement	**1.2 Technical capabilities** Is the project through its staff or partners able to provide timely and good quality technical assistance to producers and/or communities in planning and implementing the productive, sustainable and economically viable forest management, silvicultural and agroforestry actions proposed for the project and for any additional livelihoods activities that are also planned?

B. Guidance Notes for Validators	Technical capabilities may be determined through: • Discussions with project staff who should be able to define clearly who is responsible for the provision of technical support • Interviews with project staff to demonstrate that they are familiar with the content of project technical specifications e.g. species to be planted, spacing requirements, management systems and any potential issues • Feedback from farmers/communities who have been supported in the past • On-site evidence of project activities (possibly from other projects) that have benefited from technical support
C. Findings (describe)	The review of PDD and field visits revealed that the project through its staff and/or partners was able to provide the necessary technical support, and able to successfully implement the project interventions and activities. Members of the association (i.e., both members of EthioTrees-Belgium and EthioTrees-Ethiopia) are well qualified and have adequate experience in natural resources management. The project members are familiar with the project site and can easily communicate with the local communities. The EthioTrees association also established a scientific board in collaboration with Mekelle University, which put the association in a good position to provide technical and logistical (e.g., lab facilities) support to the associations of landless farmers and the entire communities. The key informants from different partner organizations confirmed that they have been providing technical and logistical support to the EthioTrees association and are willing to extend their technical support. For example, key informant from district agricultural office elaborated this as: *"It is not a problem to cooperate with a project or an individual who has similar objectives with us. We are happy to provide technical and administrative support to EthioTrees association because their project activities and interventions and targets originated from the government plan and aimed at supporting the development efforts in the country and improve the livelihood of the local communities".* The key informants from Mekelle University also stated that cooperating with EthioTrees association is crucial as the project interventions and activities are similar with the interventions included in the project that they are currently undertaking (e.g., Trees for Farmers Project). They also stressed that integration and multi-stakeholder approach is essentials to manage and sustain exclosures. The field visit revealed that Mekelle University is actively participating with the association/project and providing support in generating science-based evidence on best practices, and designing and implementing hydrological monitoring. The project leader clarified his responsibilities including the provision of technical support. During the discussion, he discussed the technical support provided to the communities and landless farmers associations since the start of the project (i.e., 2016). Trainings provided include: separation, collection, management and grading of non-timber forest products, designing and implementing of soil and water conservation measures, pit excavation and handling of seedlings, and planting and post planting management of seedlings. The discussion with the local communities confirmed the provision of the mentioned technical support. For example, the landless association in Adi Lehtsi village

<table>
<tr><td></td><td>confirmed that they have received training on management of Boswellia papyrifera tree, collection and separation of frankincense (or incense) and proper storage of non-timber forest product (in this case incense). The review of quarterly reports prepared by the local project coordinator (e.g., pictures included in the reports) also revealed that the association has been providing different kinds of technical support to the associations and communities. It is also noted that the EthioTrees association introduced new equipment that can be used to distil important oils from trees (e.g., eucalyptus, Boswellia; Picture 6).
 
(a) (b)
Picture 6: The distillation equipment (a) and the project coordinator showing how the equipment works (b).</td></tr>
<tr><td>D. Conformance</td><td>Yes [x] | No [ ] | N/A [ ]</td></tr>
<tr><td>E. Corrective Actions (describe)</td><td>a) The association could undertake comprehensive needs assessment by involving the entire community when identifying technical gaps. Such approach could help increase the interest and participation of local communities in project activities and interventions.</td></tr>
<tr><td>F. (Insert Project Coordinator's Name) Response</td><td>(To be filled out by the Projct Coordinator)</td></tr>
<tr><td>G. Status</td><td>(CLOSED or OUTSTANDING)</td></tr>
<tr><td>A. Requirement</td><td>1.3 Social capabilities
Is the project, through its staff or partners able to demonstrate an understanding of the social conditions of the target groups/communities and likely implications of the project for these? This might include:
1.3.1 A demonstrated ability to select appropriate target groups through stakeholder analysis and to understand the implications of the project for specific groups e.g. poor, women, socially disadvantaged etc.
1.3.2 Groups/communities that are well-informed about the Plan Vivo System and the nature of carbon and ecosystem services
1.3.3 Local groups/communities that can demonstrate effective self-governance and decision-making
1.3.4 Well-established and effective participatory relationships between producers and the project coordinator
1.3.5 Demonstrated ability to establish land-tenure rights through engaging</td></tr>
</table>

	with producers/communities and other relevant organisations 1.3.6 Ability to consult with and interact with producers/communities on a sustained basis through participatory 'tools' and methods 1.3.7 Established system for conflict resolution
B. Guidance Notes for Validators	Social capabilities may be determined through: • Records/minutes/photographs of community meetings and training workshops etc. • Project staff able to explain (in line with PDD) how land tenure is checked by the project • Project staff and communities able to explain how communities/target groups were selected and involved in the development of the project and in the choice of activities • Project staff able to demonstrate that they are familiar with the communities/target groups and able to interact with them easily through meetings facilitated during the validation • Meetings held with specific target groups e.g. women, socially disadvantaged etc.
C. Findings (describe)	The field observations and review of the PDD demonstrated that project members are aware of the socio-economic conditions of the target groups. The gender balance of the two established associations of landless farmers demonstrated that the EthioTrees association works towards targeting women. For example, 13 out of the 20 members (i.e., 65 %) of the landless farmers association in Meam Atali (involved in honey production) are women. Similarly, almost 50% (i.e., 17 out of 33 members) of the association in Adi Lehtsi village (involved in the production of non-timber forest product; incense production) are women. It is observed that the EthioTrees association closely works with the local administrative bodies when selecting target groups and has good relationship with the entire community. The criteria of selecting members of the association include: the member should be landless, has interest to organize as an association and can make limited financial contribution to the association (the contribution ranged from ETB 250 to 300). It is observed that the EthioTrees association closely works with the committee members (about 12) of each association and community. The committee members are involved in all project activities including training, and planning, implementing and monitoring and evaluation of project activities and interventions. The review of quarterly reports prepared by the local project coordinator (e.g., pictures included in the reports) also revealed that the association has been interacting with the committee members. The EthioTrees association and partners are aware of the implication of the project for specific groups (e.g., women, landless, poor, etc.). The implications of project activities that are mentioned during discussion with the EthioTrees association and partners (i.e., Mekelle University, District Agricultural Office, WeForest) include: a) enhancing ownership, b) opening opportunities to diversify income of poor and women, c) supporting communities to send children to schools, d) creating job opportunity while improving or maintaining the quality of the environment, e) reducing social unrest, f) empowering women, and g) increasing the resilience of communities to

	climate variability/change.		
D. Conformance	Yes [x]	No [ ]	N/A [ ]
E. Corrective Actions (describe)	a) The association could provide support to develop an agreement between the associations and the entire communities, as such legal agreement helps formalize the responsibilities of each group and rights over the use and management of communal resources as well as benefit sharing mechanisms. Failing to include local communities in the process may make them less willing to establish exclosures in the future.		
F. (Insert Project Coordinator's Name) Response	*(To be filled out by the Project Coordinator)*		
G. Status	*(CLOSED or OUTSTANDING)*		
A. Requirement	**1.4 Monitoring and Reporting capabilities** Does the project have an effective monitoring and reporting system in place that can regularly monitor progress and provide annual reports to the Plan Vivo Foundation according to the reporting schedule outlined in the PDD? 1.4.1 Accurately report progress, achievements and problems experienced 1.4.2 Transparently report sales figures and demonstrate resource allocation in the interest of target groups		
B. Guidance Notes for Validators	Monitoring and reporting systems and capabilities may be determined through: • Staff and participating communities able to explain the monitoring system (how each of the indicators in the PDD will be monitored) • Records of any monitoring already undertaken e.g. baselines or other information • Project staff showing an understanding of the importance of annual reporting to Plan Vivo as a requirement for issuance of certificates • Demonstrated ability to produce simple reports (e.g. for other projects)		
C. Findings (describe)	The EthioTrees association have an effective monitoring and reporting system in place that can regularly monitor progress and provide annual reports to the Plan Vivo Foundation according to the reporting schedule outlined in the PDD. The review of the PDD and the draft PES agreement document also revealed that the association has measurable indicators for each ecosystem benefits realized through the implementation of project activities and interventions. Field observations demonstrated that staff of EthioTrees association, partners and participating communities able to explain the monitoring system. Records of monitoring were also observed during the field visits. For example, the association has produced three quarterly reports in which the activities of baseline data collection (e.g., soil sampling, vegetation inventory, and socio-economic survey), trainings, plantation activities, and interaction with communities presented. The review of PDD, quarterly reports of the association and the draft PES agreement document revealed that the project staffs are aware of the importance of annual reporting to Plan Vivo as a requirement for issuance of certificates.		

D. Conformance	Yes [x]	No [ ]	N/A [ ]
E. Corrective Actions (describe)	None		
F. (Insert Project Coordinator's Name) Response	*(To filled out by the Project Coordinator)*		
G. Status	*(ClOSED or OUTSTANDING)*		

Theme	**2. Carbon Benefits**
Ensuring that the project meets requirements 5.1-5.20 of the Plan Vivo Standard (2013)	
A. Requirement	**2.1 Accounting methodology** Have the carbon benefits been calculated using recognised carbon accounting methodologies and/or approved approaches and are the estimates of carbon uptake/storage conservative enough to take into account risks of leakage and reversibility?
B. Guidance Notes for Validators	Check the carbon accounting methodology used including: • The level of understanding of the methodology used amongst technical project staff • Whether all references and sources of information are available (include copies with the validation report if possible) • Whether the carbon accounting models are clear and transparent i.e. are the spreadsheets available and readily understandable? Can project staff answer and explain any technical questions about these? • Are local experts able to comment on the accounting methodology and on the sources of information used?
C. Findings (describe)	The EthioTrees association has used appropriate carbon accounting methods. The project used data-driven approach, which is more appropriate than using models developed elsewhere. The specific project sites are well studied (e.g., Mekuria et al., 2011 a, b; Mekuria and Veldkamp, 2012; Mekuria & Aynekulu, 2013) and important information to estimate ecosystem carbon stock (i.e., aboveground and soil C) is available. The project staff are aware of these studies and understand the technical content of the cited studies and other available studies conducted in the project area. The technical staff of EthioTrees association understand the methodology used to account carbon well. The association looked at some of the potential leakage and uncertainties associated with the project and put possible mitigation measures. The estimates of carbon sequestration (both below and aboveground) are conservative and considered risks of leakage and reversibility. The carbon accounting models used in the PDD are clear and transparent and payment modalities included in the draft PES agreement document is simple to understand and follow. The field visits revealed that the local project coordinator is aware of the accounting methodology and knows the sources of information. All sources of information cited in the PDD are available. The project used generalized allometric equation (FAO

	2017) to estimate aboveground biomass. This model might not be developed for multi-species smaller-size tree; the case in exclosures in project sites, and usually underestimate the aboveground biomass and carbon. This model could even make the estimation of aboveground biomass more conservative.		
D. Conformance	Yes [x]	No [ ]	N/A [ ]
E. Corrective Actions (describe)	a) The association could consider using mixed-species allometric model for smaller-size trees developed for northern highlands of Ethiopia, thereby minimizing the underestimation of aboveground biomass.		
F. (Insert Project Coordinator's Name) Response	*(To be filled out by the Project Coordinator)*		
G. Status	*(CLOSED or OUTSTANDING)*		
A. Requirement	**2.2 Baseline** Are the carbon benefits of the project measured against a clear and credible carbon baseline (for each project intervention)?		
B. Guidance Notes for Validators	Check the baseline scenario in the technical specifications of the PDD: • Check that baseline measurements have been carried out and information properly recorded • Check that the information from the baseline matches that in the PDD/Technical specifications and corresponds to the situation on the ground (by discussing with local experts and others)		
C. Findings (describe)	The benefits of the project are measured against a clear and credible baseline information. The baseline measurements have been carried out using a clear method and credible assumptions. The review of the PDD and quarterly reports of the association as well as discussion with the local project coordinator revealed that baseline information is collected and are well documented. The field visit also demonstrated that the baseline information described in the PDD corresponds with the situation on the ground. For example, the results of focus group discussion and key informants confirmed that encroachment of exclosures is common before the start of the project, and protection of exclosures improved following the establishment of landless farmers association and provision of trainings to guards.		
D. Conformance	Yes [x]	No [ ]	N/A [ ]
E. **Corrective Actions (describe)**	None		
F. (Insert Project Coordinator's Name) Response	*(To be filled out by the Project Coordinator)*		
G. Status	*(CLOSED or OUTSTANDING)*		
A. Requirement	**2.3 Additionality** Are the carbon benefits additional? Would they be generated in the		

	absence of the project? Will activities supported by the project happen without the availability of carbon finance?
B. Guidance Notes for Validators	Assess whether the project simply owes its existence to legislative decrees or to commercial land-use initiatives that are likely to be economically viable in their own right i.e. without payments for ecosystem services. Also, assess whether without project funding there are social, cultural, technical, ecological or institutional barriers that would prevent project activities from taking place.
C. Findings (describe)	EthioTrees project interventions add values to generate and sustain carbon benefits. Other studies (e.g., Mekuria et al., 2017) demonstrated that local communities are led to question the worth of exclosures due to the current lack of focus on the potential economic benefits of exclosures. Therefore, developing and implementing projects like EthioTrees could contribute to minimize the financial barrier and ensuring sustainable and wider adoption of exclosures in the Ethiopian highlands. The other barrier is the lack of technical skills in estimating ecosystem services and valuing the ecosystem benefits, which this project could improve the skills and capacity of local level experts and communities. In this line, the local project coordinator and key informants stressed the importance of this project in providing technical support. The key institutional and social barriers related to exclosures is the top-down approach used when establishing and managing exclosures. To date, most exclosures in Ethiopia have formally been initiated either by the state or by communities, but their establishment has been driven mainly by aid agencies and NGOs (Mulugeta and Habtemariam 2014). Further, the establishment of exclosures has been focused on physical aspects and on the protection of natural resources. The sites for exclosure establishment have generally been selected by government agencies, and the process has been dominated by development agents of the district agricultural offices and by Kebele administrators. The management of exclosures also remains largely top-down. In most cases, the participation of local communities is limited to consultation, including on ideas for the establishment of exclosures and target setting. Such poor participation of local communities in the establishment and management of exclosures affects the outcomes and sustainability of exclosures. To sustain exclosures, communities should experience the benefits of exclosures and feel ownership over their management. Therefore, local communities should participate in goal setting, planning, site selection, implementation, protection and definition of benefit-sharing mechanisms. The use of Bottom-up approach (or community-led natural resources management) in the EthioTrees project and involving local communities in all stage of development interventions and rewarding the local communities for their efforts is critical in solving the financial, institutional and social problems associated with the establishment and management of exclosures.

	This project is not the product of a legislative decree, or a commercial land-use initiative likely to have been economically viable in its own right. Rather, EthioTrees provides the practical training, technical support and incentives to develop ecosystem restoration activities. The EthioTrees project also works towards assisting natural regeneration and strengthening the protection of exclosures through training guards and other association members. Sustaining exclosures also contributed to other outcomes such as increased dry season flow (Dessalew et al., 2016), reduced runoff and sediment load (Anwar et al. 2016), and increased groundwater recharge (Girmay et al., 2009). These outcomes could also be considered as additionality of the project. Discussion with the local project leader and key informants confirmed that incentives (e.g., carbon finance) is crucial to sustain exclosures. Because such incentives increase short-term economic benefits, support livelihood diversification, help to develop sense of ownership, and reduce encroachment of exclosures. The key informant from Mekelle University and district agricultural office also indicated that the activities and interventions of EthioTrees association support to enhance resource utilization through the introduction of new technologies. The field visits revealed that the activities and interventions supported by the project cannot be sustained without the availability of carbon finance or other kinds of incentives. The key informant from the district agricultural office elaborated this as: *"We maintained exclosures in most part of the region for such long time because of the availability of safety net programs. It is crucial to introduce this kinds of incentives (i.e.., carbon finance) to support the local communities to adopt long-term conservation approaches such as exclosures"*		
D. Conformance	Yes [x]	No [ ]	N/A [ ]
E. Corrective Actions (describe)	a) The association could consider the introduction of additional interventions that could help minimize the concerns of local communities on exclosures *(e.g., introducing alternative energy options as a mechanism to support the livelihood of the local communities).*		
F. (Insert Project Coordinator's Name) Response	*(To be filled out by the Project Coordinator)*		
G. Status	*(CLOSED or OUTSTANDING)*		
A. Requirement	**2.4 Permanence** Are potential risks to the permanence of carbon stocks identified in the project technical specifications and are effective and feasible mitigation measures included in the project design?		
B. Guidance Notes for Validators	Assess whether members of the community/producers are aware that they will enter into formal sale agreements with the project coordinator and that they therefore need to comply with the monitoring and mitigation requirements of the project. Check whether the risk buffer proposed in the PDD and technical specifications for each intervention (that will be deducted from the		

	saleable carbon of each producer) conforms to the recommended percentages in the Plan Vivo Standard or other Plan Vivo documentation. Check with Plan Vivo if this is unclear.		
C. Findings (describe)	The project has identified potential risks such as political instability and disinterest in Ethiopia. Also the project identifeid that the establishment of new exclosures could lead to social problems between different farmers in the village, or higher cattle pressure on rangelands elsewhere that could affect the longevity of carbon benefits realized due to the project. The project included practical mitigation measures to reduce the adverse effects of the identified risks. The risk buffer proposed in the PDD is corresponds with the Plan Vivo standard.		
D. Conformance	Yes [x]	No [ ]	N/A [ ]
E. Corrective Actions (describe)	a) The project could consider working with informal institutions rather than only focusing on formal institutions to effectively minimize the risks from political instability and disinterest.		
F. (Insert Project Coordinator's Name) Response	*(To be filled out by the Project Coordinator)*		
G. Status	*(CLOSED or OUTSTANDING)*		
A. Requirement	**2.5 Leakage** Have potential sources of leakage been identified and are effective and feasible mitigation measures in place for implementation		
B. Guidance Notes for Validators	Check the sources of leakage and the effectiveness of mitigation measures: • By discussions with local experts, the project coordinator and others. • Assess whether there is a good understanding of the importance of addressing leakage amongst project participants • Assess whether the mitigation measures proposed are really effective and likely to be implemented. Have they already started?		
C. Findings (describe)	The EthioTrees association looked at potential leakage and uncertainties associated with the project and put possible mitigation measures. Discussion with local communities, landless farmers association and key informants revealed that communities used to get fuelwood from the nearby exclosures (usually illegal), as the protection of exclosures were not strong enough before the start of the project. Thus, strengthening the protection of exclosures through establishing landless farmers association and providing training to guards could cause the degradation of vegetation in the surrounding areas, as such newly introduced project activities/interventions, for example, reduce fuelwood availability. This issue is actually discussed under Risk 2 in the PDD. However, the issue needs to be included as a potential leakage.		
D. Conformance	Yes [x]	No [ ]	N/A [ ]
E. Corrective Actions	a) The information presented as risk 2, has to be included as a potential leakage		

(describe)	and uncertainties and if possible should be quantified, and mitigation measures should be put in place. ***Suggested mitigation measures****: Introducing alternative energy options (e.g., solar, energy conserving stoves), establishing woodlot in the exclosures and diversifying livelihood.*
F. (Insert Project Coordinator's Name) Response	*(To be filled out by the Project Coordinator)*
G. Status	*(CLOSED or OUTSTANDING)*
A. Requirement	**2.6 Traceability and double-counting** Are carbon sales from the project traceable and recorded in a database? Are the project intervention areas covered by any other projects or initiatives (including regional or national initiatives)? Are there formal mechanisms in place to avoid double counting?
B. Guidance Notes for Validators	Check the possibility of double counting and whether the carbon sales are traceable by: • By discussions with local experts, the project coordinator and other projects (including any national or regional level GHG coordination unit) • Understanding the project system for maintaining records of carbon sales and keeping records and determining whether this is sufficiently robust and transparent (through discussions with project staff and local participants)
C. Findings (describe)	The EthioTrees association has drafted a clear PES agreement document where recording carbon benefits and payment modalities are well elaborated (please see the section: administrative capabilities). The field visits revealed that the EthioTrees association has a well-established information recording mechanisms. Discussion with the local project coordinator and key informants confirmed that there are no any agreements that are in place, that could lead to double counting.
D. Conformance	Yes [x] No [ ] N/A [ ]
E. Corrective Actions (describe)	*None*
F. (Insert Project Coordinator's Name) Response	*(To be filled out by the Project Coordinator)*
G. Status	*(CLOSED or OUTSTANDING)*
A. Requirement	**2.7 Monitoring** Does the project have a monitoring plan in place? Is it being implemented and does it seem to be an effective system for monitoring the continued delivery of the ecosystem services? Does the project coordinator prescribe and record corrective actions where monitoring targets are not met and are these effectively followed up in subsequent monitoring?
B. Guidance Notes for Validators	Check whether the monitoring plan is effective and likely to be fully implemented: • Assess the level of understanding of project staff and participating communities of the monitoring system and ensure that there are responsibilities for monitoring are matched by sufficient capacity

<table>
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Are the selected indicators (covering all aspects of monitoring) SMART? I.e. Specific, Measurable, Achievable, Relevant and Time-bound?
Do the selected indicators properly measure impacts of the project or are they only able to measure inputs/activities?
Are communities effectively involved in monitoring and do they understand their role?

</td></tr>
<tr><td>C. Findings (describe)</td><td>
The EthioTrees project has put a well-developed monitoring plan in place. The monitoring system described in the PDD seems feasible and achievable, and the selected indicators covers all aspect of monitoring (i.e., the indicators are specific, measurable, achievable, relevant and time-bound). The selected indicators measure outputs/impacts of the project such as changes in biodiversity, ecosystem carbon stock and improvement in livelihood. These indicators are able to capture the dynamics of ecosystem services obtained through the establishment and protection of exclosures. During the field visit, the local project coordinator also explained that several baseline information was gathered on which the subsequent monitoring activities will be based on (Table 2). The review of quarterly reports produced by the project also confirmed this.

Table 2: Baseline data collected and documented by the project
<table>
<tr><th>Villages</th><th>Baseline information gathered</th><th>Remark</th></tr>
<tr><td>Gidmi Gestet</td><td>Soil C, aboveground biomass, wild animal assessment.</td><td>Socio-economic data is not collected, as the association (i.e., landless farmers) not established yet.</td></tr>
<tr><td>Meam Atali</td><td>Soil C, aboveground biomass, socio-economic (e.g., health status, wealth status, education, income source, annual income, wild animals)</td><td></td></tr>
<tr><td>Adi Lehtsi</td><td>Aboveground biomass, hydrological data (e.g., water recharge, spring development), socio-economic)</td><td>Soil data was not collected, as the site is rocky.</td></tr>
</table>

The field visit revealed that the local project coordinator is aware of the indicators and monitoring systems elaborated in the PDD. Some of the responsibilities of the local project leader include provision of technical support (e.g., design of SWC, providing training), data collection, supervision, organization and reporting of data, and finance management. It is also indicated that the EthioTrees association involves local communities in data collection and implementation of project activities. The discussion with the key informant from Mekelle University revealed that Mekelle University is actively involved in baseline data collection, particularly in providing technical support when designing hydrological studies and gathering hydrological data. The local project leader evaluated the monitoring system put in place as highly effective because the monitoring system support to gather sufficient data, does not impose any difficulties on local communities and help address problems associated with exclosures. The field visits revealed that the local project leader considers corrective actions based on complaints and suggestions (Picture 7), and these are effectively followed up in subsequent monitoring.
</td></tr>
</table>

	 **Picture 7:** Suggestions and complaints book on which the local project leader prescribes issues arises during consultation with communities and implementation of project activities and interventions.		
D. Conformance	Yes x	No	N/A
E. Corrective Actions (describe)	(a) The project could consider the establishment of runoff monitoring mechanisms in all exclosures. *The Hydrological studies started in Adi Lehtsi village could also be expanded by adding the assessment of the contribution of exclosures in reducing runoff and sediment load.*		
F. (Insert Project Coordinator' Name) Response	*(To be filled out by the Project Coordinator)*		
G. Status	*(CLOSED or OUTSTANDING)*		
A. Requirement	***2.8 Plan Vivos*** Are the *plan vivos* (or land management plans) clear, appropriate and consistent with approved technical specifications for the project? Will the implementation of the plans cause producers' overall agricultural production or revenue potential to become unsustainable or unviable?		
B. Guidance Notes for Validators	Where small-holder farmers have prepared individual *plan vivos*, check a sample of these on the ground (in the company of the farmer) to determine whether they have really been prepared by the farmer and what the farmer expects to be the results of implementation. For community-projects managing a common (forest) resource, check the management plan for the forest area and assess the extent to which target groups within the community have been involved in preparing it (especially women and disadvantaged groups) and the extent to which its future impacts have been discussed and agreed.		
C. Findings (describe)	The PDD sufficiently describes the plan Vivo (or land management plans) of the project area and the processes followed during the preparation of the land management plan. The project also took additional measures such as establishing exclosures on communal degraded lands to minimize the negative effects of exclosure in agricultural practices. The field visits and the review of the quarterly reports of the EthioTrees association revealed that each village had developed existing and future plans of the exclosures in their		

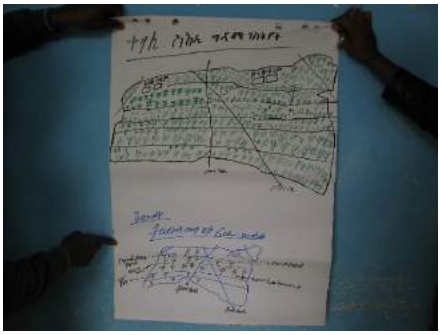
surrounding (Pictures 8, 9 & 10). The land management plan is prepared by the committee members (12 in number) including elders, youth, women, and poor and relatively rich farmers. The discussion with local communities and landless farmers association confirmed that the committee members were elected by the members of the local communities at a general meeting held at each village. The field visits confirmed that the future impacts of the project interventions and activities were discussed among the committee members and agreed upon when preparing the existing and future land management plan. Results of group discussion, key informant interviews and field observations demonstrated that exclosures positively affect farming activities in the project area, as exclosures, for example, protect/reduce soil erosion, increase groundwater recharge and reduce the loss of seed due to runoff. However, the local communities have concerns related to the increase in wild animals and associated crop damage though is not evident at the moment. The role of local project coordinator during the preparation of base and future map of the exclosures was limited to facilitation.

(a)

(b)

Picture 8: Base (a) and future (b) map of Meam Atali exclosure

(a)



(b)

Picture 9: Base (a) and future (b) map of Gidmi Gestet exclosure

	  (a) (b) **Picture 10**: Base (a) and future (b) map of Adi Lehtsi exclosure		
D. Conformance	Yes x	No	N/A
E. Corrective Actions (describe)	None		
F. (Insert Project Coordinator's Name) Response	*(To be filled out by the Project Coordinator)*		
G. Status	*(CLOSED or OUTSTANDING)*		

Theme	**3. Ecosystem benefits**
Ensuring that the project meets requirements 2.1-2.4 of the Plan Vivo Standard (2013)	
A. Requirement	**3.1 Planting native and naturalised species** Are the planting activities of the project restricted to native and naturalised species? If naturalised species are being used are they invasive and what effects will they have on biodiversity? Have the species been selected because they will have clear livelihoods benefits?
B. Guidance Notes for Validators	Check this using a number of sources: • Visual observations of local tree-growing practices • Discussions with communities and project staff • Discussions with local experts (forestry and biodiversity experts) • Published information (refer to this in the validation report if used)
C. Findings (describe)	The interventions of the project to assisting the restoration of degraded ecosystem include enrichment plantation and construction of SWC measures. The enrichment plantation is restricted to using native plant species. The selected species indicated in the PDD and verified during the field visit have multiple benefits and are important to meet the diverse needs of the communities (e.g., for fuelwood, construction materials, fodder, medicine, food, etc.). The field visits revealed that species such as Acacia salegna (important for environmental protection, nitrogen fixing, promote grass growth, fuelwood; Picture 11), Cordia Africana (furniture, construction, fuelwood), and Leucaena (animal feed) are planted in the exclosures. The discussion with the local project coordinator and key informants confirmed that the selection of native species is mainly based on the livelihood benefits of the trees/shrubs. The criteria used to select plant species include ecological benefits, economic benefits,

<table>
<tr><td></td><td colspan="3">adaptability/performance and meeting the needs of the community. However, the selection of tree species is mainly done by the experience of experts in the district agricultural office and development agents as well as with the interest of the project.

Picture 11: Acacia Salegna planted in the exclosures of Meam Atali village</td></tr>
<tr><td>D. Conformance</td><td>Yes [x]</td><td>No [ ]</td><td>N/A [ ]</td></tr>
<tr><td>E. Corrective Actions (describe)</td><td colspan="3">(a) The association could consider conducting need assessment and consulting the entire community when selecting tree species to be planted in the exclosures. This measure could help to address the need and priorities of local communities, which have implications on the sustainable management of planted trees.
(b) The project needs to work towards meeting the demands of communities and project goals related to plantation activities. Suggestion: the project could address issues related to the prefeence of exotoc and native species by allowing the local communities to plant exotic plant species across the borders of exclosures and/or around homestead areas. The project could also consider the need to provide seedlings of exotic species and technical support.</td></tr>
<tr><td>F. (Insert Project Coordinator's Name) Response</td><td colspan="3">(To filled out by the Proejct Coordinator)</td></tr>
<tr><td>G. Status</td><td colspan="3">(CLOSED or OUTSTANDING)</td></tr>
<tr><td>A. Requirement</td><td colspan="3">3.2 Ecological impacts
Have the wider ecological impacts of the project been identified and considered including impacts on local and regional biodiversity and impacts on watersheds?</td></tr>
<tr><td>B. Guidance Notes for Validators</td><td colspan="3">Check this using a number of sources:
• Visual observations of the environment in the project area
• Discussions with communities and project staff
• Discussions with local experts (environmental experts)
• Published information (refer to this in the validation report if used)</td></tr>
<tr><td>C. Findings (describe)</td><td colspan="3">The project exhaustively identified the wider ecological impacts of project interventions and activities, and included them in the project impact monitoring plan. The identified and included wider ecological impacts of</td></tr>
</table>

	the project interventions are also supported by studies conducted in the project area. For example studies (e.g., Mekuria et al., 2007; Girmay et al., 2009; Yayneshet et al., 2011; Mekuria et al., 2011; Mekuria, 2013) demonstrated that exclosures can be effective in restoring degraded soils and landscapes, increasing soil carbon content and support to adapt to climate variability/change. Discussion with local project coordinator and partners also confirmed that members of the association and partner institutions are aware of the wider ecological impacts of project activities and interventions.		
D. Conformance	Yes [x]	No [ ]	N/A [ ]
E. Corrective Actions (describe)	*None*		
F. (Insert Project Coordinator's Name) Response	*(To be filled out by the Project Coordinator)*		
G. Status	*(CLOSED or OUTSTANDING)*		

Theme	**4. Livelihood Benefits**		
Ensuring that the project meets requirements 4.1-4.14, 7.1-7.5 and 8.1-8.10 of the Plan Vivo Standard (2013)			
A. Requirement	**4.1 Community-led planning** Has the project has undergone a producer/community-led planning process aimed at identifying and defining sustainable land-use activities that serve the community's needs and priorities?		
B. Guidance Notes for Validators	Assess this by discussions with project staff and communities and by looking at any records of the planning process. It may be useful to conduct a time-line exercise with communities to understand the planning process that has taken place.		
C. Findings (describe)	The review of the PDD and field observations as well as consultation with key informants, local project leader and local communities revealed that the EthioTrees project participated the different groups of communities while planning and implementing project interventions and activities. For example, the project followed community – led planning through participating local communities when preparing the existing and future plan of exclosures.		
D. Conformance	Yes [x]	No [ ]	N/A [ ]
E. Corrective Actions (describe)	*None*		

F. (Insert Project Coordinator's Name) Response	*(To be filled out by the Project Coordinator)*		
G. Status	*(CLOSED or OUTSTANDING)*		
A. Requirement	**4.2 Socio-economic impact assessment/monitoring plan** Is there a robust socio-economic impact assessment and monitoring plan in place that can measure changes against the baseline scenario?		
B. Guidance Notes for Validators	Discuss with project staff and communities to understand how the baseline assessment was conducted and how the socio-economic monitoring plan developed out of this. Assess in particular: • Whether the livelihoods indicators can effectively monitoring socio-economic changes takeing place • The extent to which women, disadvantaged people and other social groups have been involved project processes and whether the selected indicators will enable impacts on them to be determined • Whether any groups in the community are likely to be adversely affected by the project and whether there are any mitigation meausures in place to addres this		
C. Findings (describe)	The review of the PDD revealed that EthioTrees prject has a good socio-economic impact assessment and monitoring plan. The project uses household survveys to gather baseline infromation of landless farmers association who are the direct beneficiaries of the livelihood activties (i.e., incense production, beekeeping and fattening). The indicators used (e.g., wealth stauts, annual income, source of income) are also able to measure changes in socio-economic condition of communties in the target areas. Different groups of communities are invovled in the project processs and determination of indciators.		
D. Conformance	Yes [x]	No [ ]	N/A [ ]
E. Corrective Actions (describe)	*None*		
F. (Insert Project Coordinator's Name) Response	*(To be filled out by the Project Coordinator)*		
G. Status	*(CLOSED or OUTSTANDING)*		

A. Requirement	**4.3 Sale agreements and payments** Does the project have clear procedures for entering into sale agreements with producers/communities based on saleable carbon from *plan vivos*? Does the project have an effective and transparent process for the timely administration and recording of payments to producers?		
B. Guidance Notes for Validators	Check the systems that are being proposed by the project and make an assessment of whether these are fully functional already or whether they can be made functional when required? Are communities/producers aware of the system and do they understand it? Are documents and materials readily available to producers/communities?		
C. Findings (describe)	The EthioTrees project has developed clear procedures for entering into sale agreements and payment for ecosystem services (please see the comments/suggestions on PES; Theme 1). The procedures have effective and transparent process for the timely administration of, and the recording of payments as well as procedures for investing on the local communities using the money obtained from the sale of carbon benefits.		
D. Conformance	Yes [x]	No [ ]	N/A [ ]
E. Corrective Actions (describe)	a) The EthioTrees association needs to finalize the PES agreement document, enter into an agreement with the local communities and conduct awareness raising activities to familiarize the local communities about the entire processes of the project.		
F. (Insert Project Coordinator's Name) Response	*(To be filled out by the Project Coordinator)*		
G. Status	*(CLOSED or OUTSTANDING)*		
A. Requirement	**4.4 Benefit sharing and equity** Will the project have livelihoods benefits for the local community? Are these benefits likely to accrue to all community members and/or are benefits targeted at particular groups within the community? What other actions is the project taking to ensure that disadvantaged groups e.g. women, landless households, poor people will benefit from sales of Plan Vivo certificates?		
B. Guidance Notes for Validators	Whilst there may be livelihoods benefits resulting from the project aspects of benefit sharing are critical to ensure that benefits are equitably shared. This can be assessed by: • Checking whether a local stakeholder/well-being analysis has been conducted to identify socio-economic groupings in the communities • Assessing the level of governance of local groups (are issues of equity and benefit sharing discussed during meetings? • Discuss with a small sample of households from different socio-economic groups to determine their level of understanding of the benefits they are likely to get from the project.		

C. Findings (describe)	The review of PDD and field observations showed that the key livelihood activities of the project include production of non-timber forest products, beekeeping and livestock fattening. The direct beneficiaries of the livelihood activities are the landless farmers associations engaged in the livelihood activities. Discussion with local communities and landless farmers associations confirmed that there is equitable benefit sharing and there are little or no challenges in this respect. Each of the associations have developed benefit sharing mechanisms and included it in their bylaws. The bylaws of the landless farmers association is key to ensure equitable benefit sharing. The project actively working to include women and other disadvantage groups in the associations and benefit them.		
D. Conformance	Yes [x]	No [ ]	N/A [ ]
E. Corrective Actions (describe)	*None*		
F. (Insert Project Coordinator's Name) Response	*(To be filled out by the Project Coordinator)*		
G. Status	*(CLOSED or OUTSTANDING)*		

Table 3. Site Visit Itinerary (Please Attach)

The Validator: (Insert Validator's Name)	
Signature:	**Date: 09/09/2017**

Appendix 3: (e.g. photos, lists of participants, scanned copies of receipts, etc.)