



Australian Government

**Australian Centre for
International Agricultural Research**

Annual report

project

Enhancing livelihoods from improved forest management in Nepal

project number

FST/2017/037

period of report

July 2021 – June 2022

date due

14 July 2022

date submitted

11 July 2022

prepared by

Ian Nuberg, Naya Paudel, Edwin Cedamon,

*co-authors/
contributors/
collaborators*

Rahul Karki, Hemant Ojha, Krishna Shrestha, Craig Johns, Bishnu Pandit, Shambhu Dangal, Doug Bardsley

approved by

Contents

1	Progress summary	3
2	Achievements against project activities and outputs/milestones.....	5
2.1	Achievements to date	5
	<i>Objective 1: Enhance adoption and benefits from Active and Equitable Forest Management (AEFM) and improved private forestry practices</i>	<i>5</i>
	<i>Objective 2: Develop and institutionalise equitable community forestry planning and governance frameworks within the new local government system</i>	<i>9</i>
	<i>Objective 3: To design and facilitate the establishment of pro-poor small-scale forest enterprises</i>	<i>12</i>
2.2	Summary of achievements to date (for ACIAR website)	14
2.3	Summary of activities in FY 2020/2021	16
3	Impacts	28
3.1	Scientific impacts	28
3.2	Community impacts	29
	3.2.1 <i>Economic impacts</i>	29
	3.2.2 <i>Social impacts</i>	29
	3.2.3 <i>Environmental impacts</i>	30
3.3	Communication and dissemination activities	30
4	Training activities	32
5	Intellectual property	33
6	Variations to future activities.....	34
7	Variations to personnel	35
8	Problems and opportunities	36
9	Budget	37
10	Appendices	38
10.1	Appendix 1: Activities in private forest trials and nurseries & silviculture trainings	39
10.2	Appendix 2 Training activities	43
10.3	Appendix 3 Khasru management trails in Kalapani CFUG.....	44
	Appendix 4 Harvested timber volume in research plots.....	49
	Appendix 5: Summary of meetings with stakeholders	50
	Appendix 6: Revitalising Community Forestry in the Changing Socio-economic Context of Nepal: Report launch 15/03/2022	56

1 Progress summary

The report documents the EnLiFT2 activities and achievements made during July 2021-June 2022. The project activities and priorities have followed the revised project document, reflecting the recommendations of the MTR. Accordingly, important progress has been made in the following five areas.

Reshaping policy discourse: Heavy and steady field engagement of researchers with forest communities and stakeholders over the last eight years (starting from EnLiFT 1st phase) has been synthesised and has been published ‘as a Revitalising Community Forestry Report’ (Paudel et al 2022). EnLiFT2 built a collaboration with most influential researchers and professionals working in the field of community forestry and forest governance in Nepal to leverage the impact of EnLiFT lessons in reshaping the policy discourse in the changing context, the report was jointly launched by the Secretary of the MOFE/GON and Australian Ambassador to Nepal in the first of its kind event and obviously a very influential moment in EnLiFT period (see the launch event proceeding – Appendix 6). The key message of the report – urgent need for revitalising Community Forestry (CF) in the context of changing socio-economic contexts of Nepal – has been received well by the larger forestry sector community in Nepal, and is widely hailed as a major breakthrough in policy message coming out of the EnLiFT program. Later, the message entered into the recently held 7th National CF Workshop with its title, ‘Five decades of CF: Emerging opportunities in the changing contexts’. EnLiFT researchers and project outputs had an important influence shaping the workshop design, papers/presentations and outcomes. This Report has stimulated the team to embark on a whole new edited volume on community forestry to be published concurrently by a Kathmandu based and New Delhi based publisher. This book will serve as a critical synthesis of the past two decades of community forestry research in Nepal, presented in less academic and more practice-oriented way. The entire EnLiFT team feels immense pride in these achievements.

New institutional and planning innovation: As we highlighted in the CF Reframing Report, community forestry needs institutional and planning innovation at the local level in the changing contexts. While CFUGs as the key community institutions played a central role in halting deforestation and forest degradation during the 1980s and 1990s, they are struggling to function due to weakening forest-people relations and high transaction costs in recent years. Under changing socio-economic and political (federalism) contexts, CFUGs are struggling to remain effective, as their scale of ‘business’ is too small to operate and not economically viable, and as they remain fragmented losing the benefit that may have come from the network model of planning and governance (such as keeping shared infrastructure, shared technical personnel etc). This gap was also reinforced by the 2021 MTR recommendations, and accordingly, we have begun the process of forming cluster level CF planning and governance mechanisms in two focus Local Government Areas (Bhumlu and Chautara) involving local governments, DFO, FECOFUN and CFUGs. They have recently hired forest technicians and have begun to provide services to member CFUGs. This is our bold new experiment with a huge potential for scaling up nationally, enabling CFUG to access services and gain economies of scale for forest management, trade, and enterprises. We expect to make significant progress in this direction in the remaining project period

Technological innovation/introduction: A range of technological and methodological innovation and introductions have been made aimed at increased productivity and efficiency in forest management, harvesting and processing. Establishment of research cum demonstration plots (12 in Sindhupalchowk and 4 in Kavre), testing of portable saw mill for on-site milling, introduction of chain saw in tree felling, thinning of private forests, new methods in nursery management have been successfully piloted during this period. These methodological and technological interventions have proved to be productive in forest management and efficient in tree felling and timber sawing.

CF Planning and forest revenue investment: This year harvested timber was sold to the market and a good amount of revenue has been secured by the CFUGs (three in Sindhupalchowk). We have introduced the Tole-based bottom-up CF planning in these CFUGs by employing the new

ideas of a Planning Studio so that hard earned revenue is invested in good projects with high productivity, sustainability and equity. The Tole level planning has been agreed with CFUG leadership and with the local government. EnLiFT has facilitated these meetings, documented discussion which will be finalised and formalised at the Executive Committee level and will be implemented soon.

Capacity building: Following the gradually decreasing risk of COVID-19, several training programmes were planned and conducted. Major training includes: nursery management, forest fire management, chainsaw handling, portable saw mill handling, gender and social inclusion, legal literacy on regulatory/administrative requirements for timber harvest and sale etc. These training packages have contributed to increase capacity building of CF members, DFO staff, private nursery managers and other stakeholders. Most of these training packages were field based, with direct practical relevance and were put to immediate use. Besides, we have started engaging Kathmandu University faculty and post graduate students in co-learning through EPPL. This is likely to provide important inputs to Kathmandu University's curriculum on public policy, thus creating an impact pathway for capacity building on research-policy interface management in Nepal.

Scientific contributions: In this reporting period five papers in the Research Paper Series were uploaded on the project website; two conference papers and five posters presented at 7th National Community Forestry Workshop, Lalitpur, 12-14 June 2022, and four scientific papers published scholarly journals.

2 Achievements against project activities and outputs/milestones

2.1 Achievements to date

NOTE: This version of the outputs table follows the revised structure advised from the Mid Term Review and the costed extension for a further two pay periods. An early draft of this structure was submitted as Appendix 5 in the Annual Report 2020-2021

Objective 1: Enhance adoption and benefits from Active and Equitable Forest Management (AEFM) and improved private forestry practices

Output	Due	Status/comments
<i>1.1 Working model of equitable and sustainable community and private forest management in two Local Government areas</i>		
O-54 Assessment of business potential of community and private forests within two Local Government areas	Dec 2021	Assessment report of Bhumlu has been shared in basecamp (RPS 2022-02).
O-55 At least 2 highly visible demonstrations of AEFM including report on stand structures	June 2023	AEFM demo plots in two sites in Chautara are well established. Regular monitoring and documentation is ongoing .
O-56 Report on experiments in in-field milling and storage	June 2022	Draft ready and under review by the team. The report will be uploaded under the Project/Event Reports section in the EnLiFT website upon finalisation
O-57 Aspirational 3 visible demonstrations of AEFM in periphery LGs including report on stand structures	Dec 2022	Khasru demo trial plots have been established in Kalapani CF.
O-58 Managed community and private forests in two Local Government areas, one in each district (each involving a cluster of 8-10 community forests and private forest owners).	Dec 2023	Formation of two cluster level mechanism completed in both municipalities. <i>Forest technician has been hired for Chautera and arrangements for similar in Bhumlu still in progress</i>

1.2 Training & service activities in Active & Equitable Forest Management		
O2: Training Manual for AEFM practice in community forests (UA lead, FAN contribute)	June 2022	A draft of the Manual is being prepared.
O3: 3 10-minutes videos as supplementary training material for AEFM practice on CF (UA lead, FAN contribute)	June 2022	in progress
O4 Report on Training of Trainers of Forest Technician including analysis of exit surveys from-participating CFUGs	June 2022	Will be conducted following the above two outputs.
59 Report on training to CFUG leaders in two municipalities	Dec 2023	
60 Arrangements/ mechanisms for technical and other support CFUGs and private forest owners identified and tested	June 2022	Cluster level mechanism has been formed and is in the process of hiring technicians

1.3 Participatory action research on developing silviculture regimes for private forestry in Nepal		
O7: At least 15 private forests demonstrating major AEFM regimes across 6 sites (FAN lead, UA & NAF contribute)	Dec 2019	Completed
O8: At least 15 more (i.e 30 overall) private forests demonstrating major AEFM regimes across 6 sites (NAF lead, UA & FAN contribute)	Dec 2023	Completed
O9: 6 government small-scale forest nurseries implementing best-seedling production and nursery management practices (FAN lead, UA & NAF contribute)	June 2020	Completed (RPS Vol 2020-01)
O10: 1 Manual of best seedling production and certification with 1 supplementary video (UA lead, NAF contribute)	Dec 2022	To be published as RPS2022-04 in Dec Also a small book to be published in association with FRTC

O11: A scientific paper reporting growth and yield performance of private forests (UA lead, FAN contribute)	Dec 2022	Revise to submit by Dec 2023
O61 Mechanism for accreditation/ certification are established along with standards for good practice nursery	Dec 2023	
O62 Municipality level PF owners' association established and functioning	Dec 2023	

1.4 Monitoring and assessment of social, economic and ecological impacts of silviculture practices

O13 Socio-ecological monitoring protocol (UA lead, FAN & UNSW contribute)	June 2019	Completed (RPS Vol 2020:03)
O14: Report on the performance of different community forestry and private forestry silviculture regimes in relation to financial, ecological and social values, including resource extraction and disaster management		Completed (RPS Vol 2021:05)
O15: Recommendations for suitable forest management regimes (UA lead, FAN contribute)	June 2022	A draft book chapter is being finalised for one suggested regime (Agroforestry in community forest); further case studies during the second/final SE survey will be derived. Requests changed of due date to December 2023 because the second/final SE survey will occur sometime in 2023.
O16: Scientific output on the socio-ecological impact of AEFM in community and private forestry on three local government areas. (UA lead, FAN contribute)	June 2023	
O17: Report of follow-up analysis of most significant changes on small-scale nursery operations to support active and equitable forest management (UA lead, FAN contribute)	June 2024	

1.5 Institutionalising science-informed silviculture and forest management policy in community forestry		
O18: A report of “policy network analysis” identifying the relevant policy and other decision makers at different levels that the project needs to engage with (FAN leads, UC, UCAN and UoA contribute)	July 2019	Completed RPS 2022-03. Actor dynamics and evidence informed policy process in Nepal’s forest sector.
O19: EnLiFT Policy Lab reports detailing stakeholder views and perspectives key problems, barriers and challenges to promoting active, sustainable and equitable silvicultural and forest management technologies (FAN leads, UC,UCAN and UoA contribute)	July 2019 July 2020 June 2022 June 2023	Completed (July 2019), report on advancing AEFM through EPPL in EnLiFT website. Completed (Provincial officials visit to field sites) EPL on Private Forestry – Report uploaded in EnLiFT2 website under Project/event report (publications)
O20: Exploring Policies and Regulatory Arrangements for Active and Equitable Forest Management: Lessons from ENLIFT Project” which can be potentially incorporated in the upcoming CF Report (FAN leads, UCAN, and UoA contribute)	Dec 2023	
O 63: Report on knowledge generation, communication, legacy and ownership including exit strategies. (FAN leads, UoA, UCAN contributes).	March 2024	

Objective 2: Develop and institutionalise equitable community forestry planning and governance frameworks within the new local government system

Output	Due	Status/comments
2.1 Analysis and demonstration of community forestry planning framework at CFUG level		
O22: Report on the advances in planning literature, focussing on community-based planning and management of natural resources in developing countries (FAN leads, UNSW and UC contribute)	July 2019	Completed (RPS Vol 2021:01)
O23: Report of 4 case studies assessing current CFUG planning practices and identifying opportunities and challenges (FAN lead, UNSW and UC contribute)	July 2022	Two case study reports have been finalised, while the remaining two reports are being drafted. Revised due date Dec 2022
O25: CF Provincial Workshop Report, plus a CFUG Planning Guidebook, outlining how to develop more inclusive and strategic plans at CFUG level (FAN leads, UNSW and UC contribute)	July 2023	This workshop will draw on the four case study reports developed above (O23) expected to lead to a CFUG Planning Guidebook
O26: A journal article or a book chapter, analysing issues and opportunities of the planning practices within CFUGs and the nested planning between CFUGs and LGs (UNSW leads, UoA, UCAN and FAN contribute)	Dec 2023	
2.2 Analysis and demonstration of responsive institutional cooperation framework between CFUGs and local government		
O27: Report on regulatory analysis of CF and local governance systems (FAN leads, UNSW and UC contributes)	Dec 2019	Completed (RPS Vol 2021:04)
O28: Cross-case Analysis Report including literature review on CFUG-LG collaboration (FAN leads, UNSW and UC contributes)	July 2023	This Output will draw on the four case study reports developed above (O23).
O29: A journal article on collaboration between CFUG and LG (UC leads, UNSW, UoA and FAN contributes)	Dec 2023	

2.3 Analysis and piloting of gender equitable decision-making model in CF governance

O31: Report on gender equity in forest management (FAN leads, UNSW contributes)	July 2019	Completed (RPS Vol 2020:05)
O32: Interim report on gender empowerment (FAN leads, UNSW and UC contributes)	July 2020	Completed (RPS Vol 2020:06)
O33: Report on gender analysis in three levels: a) within the CFUG planning level, b) the cluster level and c) at the interface of the CFUG -LG. (FAN leads, UNSW contributes)	Dec 2022	Baral et al. presented a paper in the 7 th National Workshop on Community Forestry Workshop in Nepal (12-14 June 2022). The paper is being developed and is expected to be delivered by Dec 2022.
O34: A journal article on gender analysis within CFUG planning and in the interface of CFUG and LG collaboration (UNSW leads, UoA and FAN contribute)	June 2023	This article may form a part of the Community Forestry book that is under preparation by Ojha et al.

2.4 Facilitating government ownership of research outputs through research-policy interface for improved CF planning and governance

O35: Regulatory review report analysing the issues, gaps and opportunities in relation to CFUG and local government interface, including planning, institutional cooperation, accountability and oversight (FAN leads, UC and UNSW contributes)	July 2019	This matches with O27 and part of the details are included in the same output, but this will require reflections of the ongoing work and can be saved until June 2023 to bring in more details from the field
O36: EPPL events proceedings documenting stakeholder perspectives at two local government areas and district level agencies on identified policy problems and opportunities for negotiated policy solutions informed by EnLiFT and other research (FAN leads, UC and UNSW contributes)	Dec 2022 Dec 2023	Shared in Basecamp and also uploaded onto EnLiFT website under Project/Event Reports (EPL report on policy makers field visits)
O37 National CF Workshop Proceedings in year 3 (FAN leads, UC and UNSW contributes)	Dec 2020	Completed. 7 th National CF workshop held in 12-14 June and EnLiFT played an important role in it. See Section 3.3
O38: Video documentary policy lab methodology (10-12 mins) (FAN leads, UNSW & UCAN contributes)	July 2022	Script is being prepared. Video clips are being recorded. Final product will be delivered by Dec of 2022

O39: A policy brief highlighting evidence on improving multilevel governance of community forestry, linking communities with three layers of governance (local, provincial and national) (UC leads, FAN, UNSW, and UoA contribute	March 2023	
---	------------	--

2.5 Planning & governance aspects of working model of equitable and sustainable community and private forest management in two Local Government areas

O-64: Political economy and policy analysis of factors supporting and constraining active and equitable use of forests including the experimentation work. Crosscutting forums, 2 district (UCAN Leads, FAN and UNSW contributes)		
O-65: Application of tools and “best bet” options (e.g. planning studio, deliberation process etc.) to trial governance systems that are appropriate to the new context and that reduce marginalisation of already marginalised groups and minimise transaction costs within the CFUG level. (FAN leads, UNSW contributes)	Dec 2023	
O-66: Planning Studio (at the CFUG level) and Policy Labs (at the interface of the state and local communities) operating at local, district, provincial and national levels to connect the field level learning with multi-scale processes of decision-making and regulatory practices, both within the CFUG level and at the LG level (FAN leads, UNSW and UCAN contribute	Dec 2022	

Objective 3: To design and facilitate the establishment of pro-poor small-scale forest enterprises

Output	Due	Status/comments
Activity 3.1 Survey of existing forest enterprises in two districts		
O40 Report of survey design workshop.	Dec 2018	Completed (WS conducted Oct 2019). Survey design incorporated in O41 and O42
O41. Survey results report on: forest production activities and the relationships among all actors in the timber industry; their understanding and perceptions on timber markets and policy; and specific market information identified in the gap analysis. Recommendations for industry partnerships (UA lead, NAF & FAN contribute)	Jun 2019	Completed (RPS Vol 2021-02)
O42. Value chain report identifying forest enterprise opportunities (UA lead, UNSW & FAN contribute)	Feb 2022	Revised to complete by Dec 22 Second round interviews are still ongoing need to be written in. Currently reported on website as: Challenges and opportunities for improving timber value chain governance in Kavre and Sindhupalchowk

Activity 3.2 Analyse and facilitate better regulatory systems for sale of timber and other forest products from private and community forests		
O43. Workshop report developing better regulatory system. (UA lead, all contribute)	Dec 2021	Complete (RPS Vol 2021-03)
O44. Publication "How can forestry regulations be improved to support sale of timber and NTFPs from small scale enterprises" (FAN lead UA and other contribute)	Dec 2022	
O45 Report on outcomes and lessons from attempts to facilitate a better regulatory system. (UA lead, all contribute)	Dec 2023	

Activity 3.3 Facilitate local forest-based enterprises that address social disadvantage		
O47. Resource book to facilitate pro-poor forestry enterprise (UA lead all contribute)	Dec 2022	
O48 Report documenting 2 case studies of small-scale forest enterprises (FAN lead, UA contribute)	Dec 2022	
O49. Journal article on successful models forest business models (UA lead all contribute)	Dec 2023	

3.4 Facilitate policy development promoting local forest entrepreneurship		
O50: A policy review report identifying critical regulatory issues and challenges in relation to small scale forest enterprise registration and operation (FAN leads, UC, UA, contributes)	Dec 2019	Completed (RPS Vol 2021-02)
O51: EPL & EPPL events proceedings highlighting important policy recommendations and message for forest enterprise registration, development, and forest products marketing (FAN leads, UC, UA, contributes)	Dec 2020 Dec 2022 Dec 2023	Completed on 15 Oct 2020 (Report – EPPL on timber harvest and trade issues at district and local level) Completed on 23 June 2022 (Report - EPPL on timber harvest, sale and transport in private forest) All three reports will be published as a single RPS in 2023
O52 Report analysing the policy implications of action research on community forest enterprises (FAN leads, UC, UA, contributes)	June 2023	
O53 A scientific paper on improving policy for enterprise-oriented management of forest and tree products (UC leads, UA, FAN and UNSW contribute)	Mar 2024	

2.2 Summary of achievements to date (for ACIAR website)

The EnLiFT2 Project has made considerable achievements for the period July 2021 to June 2022 which are summarised below:

- **Cluster level CF governance and planning mechanism:** EnLiFT2 facilitated, and supported, the formation of an entity comprising local government, DFO, FECOFUN, CFUG, leasehold forestry groups, and private forest owners, to institutionalize a cluster level governance and planning mechanism in Kavre and Sindhupalchowk. The main objective of this mechanism is to: i) reduced transaction on supplying forest products; ii) design and enforce service provisioning at the local level; iii) increase the bargaining power of the local user group members; iv) establish a community-public-private partnership model; and v) establish a knowledge sharing and exchange forum.
- **Report launched:** ‘Revitalising community forestry in the changing socio-economic context of Nepal’ report launched by the Secretary of Ministry of Forests and Environment and H.E Ambassador of Australia, Ms. Felicity Volk, in Kathmandu. The report presents nine separate chapters encompassing different dimensions of community forestry including silviculture, enterprise, governance and institutions, policy, and climate change among others in addition to laying out future directions to revitalising CF in the changing socio-economic condition of the country.
- **National CF workshop:** EnLiFT2 (and its team members) were involved in the overall organization of the 7th National Community Forestry Workshop (12-14 June 2022). In addition to supporting the organizing of the workshop, EnLiFT2 researchers presented research papers, moderated a panel discussion, participated as a presenter in a panel discussion, organized a side event (where posters of EnLiFT2 activities were presented), and supported in the reporting of the three days event.
- **Testing of portable saw mill:** A three-day testing and demonstration of portable saw mill was held on April 2022 to test the technical, economic and social performance of the mill. The technology largely proved to be a very useful intervention for on-site milling in Nepalese hills where transporting logs to nearby towns for sawing has been costly. The next step is working towards assessing regulatory and institutional strategy for its wider scale out.
- **Power chainsaw training:** A two-day refresher training on chain saw operation was conducted on 16 February 2022. Local youths who have been using chain saw and relevant forest technicians from both districts (nine in total) benefited from it. Introduction of these chain saws has substantially reduced cost of tree felling including the loss of wood. The training has helped strengthen the efficiency, safety and confidence of forest technicians.
- **Khasru trial plots:** Four Khasru research plots established in Kalopani community forest, Bethanchowk rural municipality. Khasru is the major fodder tree species which substantially contributes to the emerging dairy enterprises of CF members in the area. The trial is aimed at enhancing the productivity of Khasru.
- **Nursery training:** A five-day nursery training on quality seedling production was held, in which 20 nursery managers and forest technicians representing the government, community and private nursery benefited.
- **Nursery certification:** A national nursery standardisation and certification process has been initiated in partnership with FRTC. A draft manual with standards and criteria, and proposed institutional mechanism has been prepared and is under review. After review it will be refined, shared among stakeholders and submitted to the FRTC for its formalisation

process. This initiative will be a game changer in nursery management, and will facilitate promotion of private nurseries in the country.

- **Gender training:** Four two-day training sessions on introductory issues of gender in forestry were conducted for women leaders of 30+ CFUGs in Bhumlu and Chautara. These training remained very instrumental in bringing women leaders to the forefronts of not only CFUG activities but also cluster level institutional processes.
- **Forest fire training:** Two 2-day training on forest fire was organised one in each cluster for the CFUG leaders and members of 30+ CFUGs. Both of our clusters are experiencing heavy forest fires every spring that destroys felled and piled logs, new regeneration, and even the standing trees. These training are expected to develop basic awareness, some core skills and also develop workable mechanisms at CFUG level and cluster level to mitigate forest fire.
- **Second phase interviews:** with forest-based entrepreneurs based in Kavre and Sindhupalchowk were conducted. Four categories of interviewees were involved - farmers and CFUG members; local traders (at district level); sawmill operators; and DFO staff. The primary purpose of the interviews was to have a better understanding of opportunities and challenges in the value chain of timber trade. In addition, a regulatory framework that facilitates, and/or hinders the supply chain of timber was also assessed.
- **Tole level planning:** Seven Tole level planning meetings were held in two CFUGs in two clusters. Each CFUG has several toles which are the primary units of CF planning and implementation. Apart from bottom-up planning, these meetings help improve CFUG governance and performance. Besides, the Tole level planning meetings are also an important source of qualitative data on governance, institutions and enterprises.
- **Advancing research -policy interface methodology in the new federal governance context:** EPPL methodology is being further advanced involving local and provincial government agencies, vis-à-vis local communities and small scale forest entrepreneurs to stimulate new policy options based on EnLIFT's participatory research. More recent adaptations of the methodology include: i) organising structured sites visits of the policy makers and creating situations for researcher facilitated informal conversations between policy makers local communities and small forest enterprises; ii) adapting EPL type of policy dialogue models in the government led community forestry conference at the national level; iii) engaging University faculty and a post graduate student in EPPL process.

2.3 Summary of activities in FY 2020/2021

The following record of activities is presented as evidence of the capacity of the EnLiFT2 team to continue working in difficult times. More quantitative details on community private forestry silviculture trials and training activities are provided in Appendices 1, 2 and 3.

Activity & progress	
1.1 Working model of equitable and sustainable community and private forest management in two Local Government areas	
24 July 2021	<p>Meeting of cluster level forest planning and management mechanism in Chutara (5 members from the committee along with EnLiFT team members - Bishnu Hari Pandit and Sarada Tiwari as invitees)</p> <p>Mechanism for registration procedure based on Local Government Formulation Act 2074; inter ward level meeting conducted in regards to forest management, vacancy announcement for forest officer, were key decisions made during the meeting</p>
7-August-2021	Meeting of Ward Level Forest Network, Chautara-13: Among the CFUGs in Ward-13, 11 CFUGs' representatives and ward leaders suggested allocating budget from local government, provide support to stakeholders, and seek commitment for share of contribution from CFUGs for Cluster level forest management committee formulation and management.
Nov 2021-May 2022	Bhumlu Cluster Level Forest Assessment Report- Shared in the Basecamp. This report provides information on social and biophysical status in Bhumlu Cluster, existing forest management practices, forest governance status and prospects for LG-CFUGs collaboration. Also provides economic rationale for clustering the CFUGs.
11th August, 2021	<p>Meeting with CF network at Shreechhap CFUG office, Chautara-13 to form cluster level mechanism</p> <p>Participants: representatives of all CFUGs (10), Leasehold forest (4), FECOFUN (2), Ward Chairperson, EnLiFT2 members</p> <p>Decided on the needs for Cluster Level Mechanism, structure of committee, contribution of CFUGs to the mechanism</p>
20 th August 2021	<p>Meeting with Bimreni CFUG for sensitizing cluster-level mechanism</p> <p>The primary objective was to sensitize the CFUG executive committee on cluster level forest management mechanism.</p> <p>The executive committee discussed on the possible amount that can be contributed to the mechanism</p>
28 Feb 2022	Coordination meeting on Local level forest act of Chautara Municipality to incorporate CFUGs interest
16 November 2021	<p>Cluster Level Forest Management Mechanism meeting at Chautara, participated by committee members, DFO representative and EnLiFT team members</p> <p>Main Agenda: Discussion on the Cluster Mechanism Constitution; written in Nepali to be uploaded onto website</p> <p>Constitution approved with minor corrections, agreed on Registration at the municipality</p>
4 March 2022	<p>Participated by Bhumlu ward no 4 and 5 leaders (ward chair), 12 CFUGs representatives, Sub-DFO and EnLiFT2 members; main objective was to orient on the cluster level mechanism; formed seven members of Salle-Chaubas Cluster level Forest Management committee</p> <p>Division of work was done for the development of the Constitution, coordination with Palika; and registration process among committee</p>
11 March 2022	<p>Cluster Level Forest Management Mechanism meeting at Chautara; participated by all mechanism members and EnLiFT team</p> <p>Main Agenda:</p> <ul style="list-style-type: none"> ● Opening of a bank account at Rastriya Banijya bank by the Coordinator and member (ward chair of both ward 13 and 8) ● Vacancy published for technical field staff (with BSc in forestry) to support CFUG planning, management and implementation ● Cluster level training packages such like forest fire management, enterprise development, portable sawmill testing and GESI training within cluster level as per the need ● ToR prepared for staff recruitment and mobilization <p>Cluster level forest management committee mobilization and fund allocations</p>

21 April 2022	Cluster Level Forest Management Mechanism meeting at Chautara participated by members of the newly formed mechanism and DFO staff; the primary objective was to form a Technical staff selection committee. Three members of the committee were formed to prepare the ToR, shortlist candidates, call for interviews, and recommend the candidate.
Nov 2021- Jun 2022	<p>Cluster Level Forest Management Mechanism</p> <p>1. Joint meeting of CFUGs (from EC), LG (Chairperson and Secretary) and stakeholders(S-DFO, FECOFUN) and EnLiFT (Bhumlu 4): 3rd Sep 2021, 23rd Nov 2021, 3rd March 2022</p> <p>Agendas: Status of CFUGs, planning for institutional events of CFUGs (GA, audit, annual plan preparation), estimation and harvest of 4D trees, service provisioning to assist CFUGs' planning and governance.</p> <p>Outcomes:</p> <ul style="list-style-type: none"> • Out of nine CFUGs of the ward, four CFUGs (Lakuri, Fagar Khola, Maidali Dhadinge, Chapani, Thople Kamere & Pokhari Chaur Thulokhola) conducted general assembly and audit of which three CFUGs (Maidali Dhadinge, Pokhari Chaur Thulokhola & Thople Kamere) conducted general assembly after a gap of several years. • Community level planning meetings of Dharapani, Chapani and Lakuri (CFUGs having funds in their account) planned and conducted before the general assembly. • The estimation and harvesting of 4D trees from two CFs (Chapani and Lakuri) completed and the selling process ongoing in both CFs. • The realization of the need of effective technical services for efficient CF management and planning as well as appreciation of cluster level mechanisms as a better way forward. • Decided to have a meeting with the collaborating ward and further the process.
February 2022	<p>2. Joint meeting of CFUGs, LG and stakeholders (S-DFO, FECOFUN) (Bhumlu 5): 10th Sep 2021</p> <p>Agendas: Status of CFUGs, planning for institutional events of CFUGs (GA, audit, annual plan preparation), estimation and harvest of 4D trees, service provisioning to assist CFUGs' planning and governance.</p>
17 April 2022	<p>3. Joint meeting of CFUGs, LGs and stakeholders (S-DFO, FECOFUN) (Bhumlu 4 & 5) : 4th March 2022</p> <p>Agendas: Service provisioning for CFUGs' planning and governance, formation of the entity (Salle Chaubas Forest Management Committee), fund collection and management for hiring a technical person.</p>
March 2022	<p>4. Meetings of Salle Chaubas Forest Management Committee: 7th March 2022, 27th May 2022</p> <p>Agendas: Registration of entity, implementation of need based capacity building activities (exposure visit, trainings- Forest Fire Management, Women Leadership Development in Forest Management)</p>

February 2022	<p>Joint meeting of CFUGs (EC and users), local government (Chairperson and member) and stakeholders (S-DFO, FECOFUN) and EnLiFT2 (Bhumlu 5): 10th Sep 2021</p> <p>Agendas: Status of CFUGs, planning for institutional events of CFUGs (general assembly, audit, annual plan preparation), estimation and harvest of 4D trees, service provisioning to assist CFUGs' planning and governance.</p> <p>Outcomes:</p> <ul style="list-style-type: none"> • Out of three CFUGs in the Ward, Rachchhma CFUG conducted community level planning meetings, general assembly and audit. • The estimation and harvesting of 4D trees from Rachchhma has been completed. (Approval process is on hold at DFO). • The gap in effective technical services was realized and the working modality of CLM was appreciated. • Agreed to have collaboration with neighboring ward (working site of EnLiFT)
March 2022	<p>Meetings of Salle Chaubas Forest Management Committee : 7th March 2022 & 27th May 2022</p> <p>Agendas: Registration of entity, implementation of need based capacity building activities (exposure visit, trainings- Forest Fire Management, Women Leadership Development in Forest Management)</p> <p>Outcomes:</p> <ul style="list-style-type: none"> • Finalization of constitution and annual plan and submitted to RM office for registration. • Capacity building activities (trainings on forest fire management, women leadership) • Vacancy announcement for technical person, application collection, shortlisting, interview and selection
22-25 March 2022	<p>A team was mobilized to protect research plots at Sansari and Shreechhap from forest fire by constructing fire line and slash collection, cleaning of ground for abundance regeneration. 14 female and four male were hired for four days for clearing the plots.</p>
17 April 2022	<p>Joint meeting of CFUGs (office bearer of CF executives), local government (Chairperson) and stakeholders (S-DFO, FECOFUN) and EnLiFT2 (Bhumlu 4 & 5) : 4th March 2022</p> <p>Agendas: Service provisioning for CFUGs' planning and governance, formation of the entity, fund collection and management for hiring a technical person.</p> <p>Outcomes:</p> <ul style="list-style-type: none"> • Seven members (Ward Chairpersons-2, S-DFO-1, FECOFUN-1, CFUGs-2, EnLiFT-1) Salle Chaubas Forest Management Committee was formed. • One-third of cost sharing for appointing a technical person has been committed by the CFUGs, one-third by EnLiFT and remaining financial support was decided to be requested with the rural municipality. • The registration process of the entity is in progress (preparation of constitution and annual plan).
10 February 2022	<p>Municipality working procedure preparation and approval:</p> <p>EnLiFT2 team supported the local government to develop the organization registration procedure as per the Local Government Formulation Act 2074.</p> <p>The draft was handed over to the municipality and has been approved; The initiative has made it easy for registration of organization like farmer group, irrigation canal group, resource base organization groups</p>

1.2 Training & service activities in Active & Equitable Forest Management	
January-March 2022	<p>Demo plot at Kalopani:</p> <p>A silvicultural experiment was conducted in Khasru (<i>Quercus semecarpifolia</i>) forest, through the joint effort of forest-users of Kalapani Community Forest and EnLiFT-2 field staff.</p> <p>The objective was to study the possibilities of increasing fodder production using different silvicultural interventions. Three treatments were conducted: (i) shelterwood-coppice with standards and reserves, (ii) coppice with standards and reserves; and (iii) pruning were conducted in 50mX50m blocks, while a control block was established over an area with the same dimensions. Baseline information on plant species compositions, dimensions and environmental variables were taken through December 2021-January 2022, before these interventions were conducted in February-March 2022.</p>
April-May 2022	<p>OP amendment: Three CFUGs (Fagarkhola, Lakuri, Bhagwanthumki); OP amendment support was basically aimed at technical and administrative aspects. Forest boundary survey, inventory, OP preparation, conduction of general assembly following OP amendment.</p>
May 2022	<p>Support to prepare the harvesting plan of Lakuri CFUG:</p> <p>Stem mapping (measurement of tree height, diameter and quality, GPS location, mapping), calculation of volume, draft preparation of harvesting plan and support on approval process from general assembly as well government legacy (SDFO to DFO).</p>
September-May 2022	<p>Technical support for the harvesting process in Lakuri CFUG:</p> <p>Log measurement, log yard maintenance, felling register establishment, lots preparation and bidding process were facilitated for timber sale in three CFUGs (Deupokhari, Sansari and Shreechhap in Sindhupalchowk and Lakuri in Kavre)</p>
16 Feb 2022	<p>One day Power chainsaw orientation was conducted in Kalapani CFUG within 9 (4 EC and 5 general members) members of CFUG. It oriented CF members on safe handling and operation of chain saw. Also sensitized CFUG on potential risk of power chain saw.</p>
28-31 March 2022	<p>Two forest fire management training was conducted in Chaubas and Chautara one each. In total 70 (CFUG-54, fire fighter-14 and police-2) learned about fire control mechanisms. DFO and SDFO facilitated a one day outdoor practical session on fire line construction, control burning and fire fighting mechanism.</p>
April 25-28, 2022	<p>Four days Portable sawmill testing was organized at Sansari and Bajekapase CFUG where 6 members - 3 CFUGs and 2 staff from DFO, were involved. Cost of sawing, quality of sawn timber, handling mechanism was observed during the sawmill testing.</p>
April-May 2022	<p>Due to heavy wind and rainfall, a large number of <i>Pinus patula</i> species were felled in Chappani, Shreechhap, Rachma and Sansari CFUGs.</p> <p>Technical and administrative support was provided for measurement, GPS location, volume calculation and sale procedure to Chappani. Support was also provided to other CFUGs for data collection and volume calculation to process the sale of 4D trees.</p>
July-2021-June 2022	<p>Two forest watchers were engaged in protecting the demo plots in Sansari and Shreechhap; MoU with CFUGs and EnLiFT2 was prepared;</p> <p>The main responsibilities included protection from forest fire, grazing, grass cutting and illegal harvesting of forest products around demo plots.</p> <p>Likewise, a team (18) was mobilized for forest fire line construction, removal of slash and cleaning of ground for natural regeneration improvement.</p>

September-December 2021	EnLiFT2 established 0.42 x2 ha regeneration management plots having 1.5x1.5 and 3x3 m plant to plant distance at Chappani. A lesson from learning by doing reflects that three communities of Chaubas area adopt the thinning practice in Chhappani (1.5 ha), Dharapani (2 ha), Racchama (3 ha) to manage regeneration having 2x2 m plant to plant distance.
-------------------------	---

1.3 Participatory action research on developing silviculture regimes for private forestry in Nepal	
1-7 July, 2021	Nursery support (financial) for development of private nurseries in Chaubas and Chautara cluster; Outcomes: Financial support of NRs.32,000 were made to three private nurseries (NSK nursery chaubas, K & K enterprise, Family organic agriculture pvt.ltd, Siddhartha nursery) for the purchase of nursery material and development
22-24 July, 2021	<ul style="list-style-type: none"> Seedling distribution in private forest of Chautara for interplanting of high value cash generating tree crops inside harvested mixed broadleaf forest and broadleaf tree plantation establishment on underutilized land. Demonstration on the technique of proper plantation of distributed species in private forest of Chautara cluster Distributed species for plantation: lime, timur, tejpat, pine, coffee, ipil ipil
9-14 August, 2021	Mapping and monitoring of private forest in Chaubas cluster Boundary survey of 10 private forests; growth, diameter measurement; number of retained trees counting; collection of preliminary data from the farmers
15-22 Sept, 2021	Mapping and monitoring of first year planted trees in Dadwa, Chautara Cluster Growth measurement and verification of plantations carried out in the first year; collection of preliminary data on private forest
21 - 23 Oct, 2021	Mapping and monitoring of pine plantation in private forest of Kalapani, Dhunghara Boundary survey of 10 private forests; growth, diameter measurement; number of retained trees counting; collection of preliminary data from the farmers; silviculture trial for pine plantation plot establishment;
23 - 27 Nov, 2021	Nursery material support to Local Government nursery Chaubas Supported with silpaulin plastic sheets, green net, tags, see support (timur, moringa, walnut)
1 - 4 March, 2022	Discussion on private forest issues , with private forest owners of chaubas and chautara cluster Thinning and pruning training in Chaubas private forest demonstration plot to all the private forest owners of Chaubas
23 - 25 March, 2022	Geo-tagging of demonstration private forest plot in Chaubas (cleanliness, numbering, measurement) Replication of management of private forest by owners based on the learnings of managed demo plot and thinning and pruning training
3 - 7 April, 2022	Nursery management and certification manual testing training The training was primarily aimed at introducing the training manual and nursery establishment, propagation through seeds, tree improvement through vegetative methods, seedling quality maintenance and certification, and nursery enterprise development and marketing.
23 - 24 May, 2022	Visit to private forest demonstration plot of Chaubas and DFO and local government supported nursery with ACIAR team Appreciated the private forest demo plots and enthusiasm and work of farmers.

23 June, 2022	<p>EPPL meeting on private forest issues discussion</p> <p>The participants primarily involved forest officials, farmers, EnLiFT2 members, local government representatives</p>
---------------	--

1.4 Monitoring and assessment of social, economic and ecological impacts of silviculture practices	
9 Nov 2021	<p>Coordination meeting among DFO Dhulikhel team and EnLiFT2 team to discuss the selection of CFUGs for model forestry practice and human and technical resource management.</p> <p>Concepts and protocols for model forestry were discussed. Dharapani and Chapani CFUGs were recommended for the model forestry practice. As there are insufficient technical human resources, technical capacity building of DFO's field staff was requested with EnLiFT.</p>
8 Dec 2021	<p>Meeting to determine the modality of Operational Plans of CFUGs</p> <p>A decision was made to omit the term "Scientific Forest Management" while other content would remain the same was decided; before June 2022, the 4D trees are to be harvested and for next year the harvesting of the standing trees to be done as per OPs was decided.</p>
9 March 2022	<p>Meeting with DFO and AFO to discuss the process of amending the OP of Bhagwanthumki CF</p> <p>Discussion: OP amendment of Bhagwanthumki; Finalize OP of Lakuri Bhulbhule; Data available on Dhunge Pakha Bahal Ban with Madan to be provided to the DFO</p>
23 March 2022	<p>Meeting with DFO team Sindhupalchowk (newly appointed)</p> <p>Primary purpose was to orient about EnLiFT2 project, plan to test portable saw mill at community level, explore about model forestry criteria and indicators</p>
23 April 2022	<p>Consultation meeting with the Ward-13 chair and FECOFUN Chautara</p> <p>Decision on preparing the planning process of CFUGs in order to match the planning process of the local government; planning process carried out from tole level to executive committee and finally to general assembly</p>
Jul-Aug 2020	Completed cleaning of the socioecological survey (SES data). Finalising the Monitoring report.
Sep-Oct 2020:	Completed and published the Monitoring Report. Australian researchers began analysing for relationships between values, silvicultural management approaches, forest types, and community and household characteristics. Began co-supervising new PhD student, Nicola McGunnigle.
Nov-Dec 2020:	Analysis of the SES data continuing. Drafted report of initial results for Activity 3. Wrote mid-term report for Activity 1.3.
Jan-March 2021:	Further statistical analysis and drafting of report.
April – June 2021:	Preparation of reports and manuscript for a book chapter on Reframing CF in Nepal
July-August 2021	Completed final production of report: Bardsley D.K., Cedamon E. and Nuberg I. (2021) Socio-ecological monitoring to guide sustainable development of complex community-based agroforestry systems, Research Paper Series on Agroforestry and Community Forestry in Nepal, ACIAR Vol 2021-05:1-60. https://enliftnepal.org/wp-content/uploads/2021/08/2021-05-Socio-ecological-Monitoring-to-Guide-Sustainable-Development-of-Complex-Agroforestry-Systems.pdf
July – Nov 2021	Developed draft paper: Bardsley D.K., Cedamon E., Paudel N. and Nuberg I. (In Review) Barking up the wrong tree? Forest livelihood values and management pathways to support the agricultural transition in Nepal. Ecological Economics

July 2021 – June 2022	Supported PhD applicant Nicola McGunngle's research on reforestation and land abandonment in the Mid-Hills, including undertaking a survey and field visits.
Oct 2021– March 2022	Supported the EnLift report to the Ministry of Forestry and Environment by compiling: Cedamon E., Bardsley D. and Nuberg I. (2022) Revitalising community forestry in the changing socioeconomic context of Nepal. Paudel, N.S., Ojha, H., Banjade, M.R., Karki, R. and Tamang, S. (Eds.) Revitalising community forestry in the changing socioeconomic context of Nepal. Kathmandu: EnLiFT2 programme and ForestAction Nepal. Research Paper Series on Improved Forest Management in Nepal, 2022-01, 61-71.
Sep 2021-June 2022	Developing Drafts for 2 Book Chapters: <ul style="list-style-type: none"> Cedamon E., Bardsley D.K. and Nuberg I. (In review) Changing forestry interests in the mid-hills of Nepal: implications for silviculture policy and practice. McGunngle N., Nuberg I., Bardsley D., Cedamon E. and Pandit B.H. (In review) Reforestation on private land: rethinking landscape level forestry management.
Jan-Jun 2022	Bardsley D.K., Cedamon E., Paudel N. and Nuberg I. Education and sustainable forest management in the mid-hills of Nepal. Journal of Environmental Management; accepted for publication 6 July 2022

1.5 Institutionalising science-informed silviculture and forest management policy in community and private forestry

18 February 2022	A paper entitled 'Lessons from Managing for the Extremes: A Case for Decentralized, Adaptive, Multipurpose Forest Management within an Ecological Framework' was published in <i>Forests</i>
15 March 2022	Launch of Revitalising Community Forestry report
12-14 June 2022	EnLiFT2 researchers participated in the 7th National Community Forestry Workshop ; in addition the team members presented papers, organized a side event where five posters on project activities were presented; and moderated a panel discussion
Ongoing discussions	Contribution to Scientific Forest management task force

2.1 Analysis and demonstration of community forestry planning framework at CFUG level

Feb 2022	Formal and informal CFUG planning meetings: <ul style="list-style-type: none"> Shreechhap CFUG (9 Feb 2022, Lampate CFUG (9 Feb 2022) Tarebhir CFUG (9 Feb 2022) Bajhebesuna CFUG (10 Feb 2022) MahaKal CFUG (10 Feb 2022) Chihandanda CFUG (11 Feb 2022) Deurali chihandanda CFUG (11 Feb 2022) Bajhekapase CFUG (22 Feb 2022, 20 April 2022) Sansari CFUG (11 March 2022, 20 April 2022) Agenda: CFUGs' general assembly, support on planning and implementation process, technical and institutional support/guidance, coordinate with different stakeholders
Sep 2021	Policy makers visit in EnLiFT research site, meeting with stakeholders, Chaubas (4th Sep 2021)
Sep-Oct 2021	Data collection for forest Cluster level assessment report (Social and biophysical data, forest inventory, needs assessment, traditional and existing forest management practices)

Oct 2021	<p>Formal and informal CFUG planning meetings:</p> <ul style="list-style-type: none"> • Pokhari Chaur Thulokhola CFUG: 2nd Sept 2021 • Thople Kamere CFUG: 3rd Sep 2021 • Maidali Dhadinge CFUG: 3rd Sep 2021 • Chapgaira Dadhunne CFUG: 3rd Sep 2021 • Dharapani: 2nd Oct 2021 • Fagar Khola: 1st Sep 2021, 30th Sep 2021 • Lakuri Rukh Bhulbhule: 3rd Oct 2021, 21st Feb 2022 • Chhekarka CFUG: 19th Sep 2021 • Chaurkuna Bhirpani CFUG: 19th Sep 2021 <p>Agendas: OP revision/amendment, prospects of CFUG-CFUG and LG-CFUG collaboration, enterprise development, model forestry</p>
Nov-Dec 2021	<p>Planning meetings of CFUGs:</p> <ul style="list-style-type: none"> • Dharapani CFUG: 27th Nov 2021 • Chapani CFUG: 30th Nov 2021 • Lakuri Rukh Bhulbhule CFUG: 2nd Dec 2021 <p>Agendas: Prioritization of user's demands, annual plan preparation and fund mobilization, planning for GAs.</p>
25 December 2021	<p>Cluster level community forest planning meeting (organized by SDFO):</p> <p>Agendas:</p> <ul style="list-style-type: none"> • Develop a participatory CFUG planning system, local-level planning; • Establish linkages between local governments, SDFO, DFO and province level planning; • Mobilize community forest and local government resources to stimulate forest based livelihood and enterprise development; and • Create and strengthen local government institutions for the sustained execution and supervision of community forest users and private forest users.
Nov- Dec 2021	<p>Community level meetings of CFUGs:</p> <ul style="list-style-type: none"> • Dharapani CFUG: 25th Nov & 26th Nov 2021 • Chapani CFUG: 28th Nov 2021 • Lakuri Rukh CFUG : 30th Nov & 1st Dec 2021 <p>Agendas: Discussion on user's issues and expectations from the CFUGs, demand collection for annual planning</p> <p>Outcomes:</p> <ul style="list-style-type: none"> • Increased the legal literacy of CF members. • Two way sharing of issues and expectations between CF members and EC reduced the gap and misunderstanding between CF members and EC. • Annual plan of Dharapani, Chapani and Lakuri CFUG prepared on the basis of community level meetings. • Such meetings facilitated CF executives in the planning process.

Nov-Dec 2021	<p>Planning meetings of CFUGs:</p> <p>Dharapani CFUG: 27th Nov 2021 Chapani CFUG: 30th Nov 2021 Lakuri Rukh Bhulbhule CFUG: 2nd Dec 2021</p> <p>Agendas: Prioritization of user's demands, annual plan preparation and fund mobilization, planning for general assemblies.</p> <p>Outcomes:</p> <ul style="list-style-type: none"> • Annual plan prepared of Dharapani, Chapani and Lakuri CFUGs of which the plan of Chapani and Lakuri CFUGs were endorsed through the general assembly of respective CFUGs. • The funds reserved for several years in the bank account of CFUGs were mobilized as per the legal provisions in their annual plan. The plan has also addressed the relevant demands of users to support their livelihood. • CF members aware of legal provisions of CF's fund mobilization.
Sep 2021-April 2022	<p>CF Planning: General Assembly (GA) of CFUGs:</p> <ul style="list-style-type: none"> • Pokhari Chaur Thulokhola CFUG: 16th Sep 2021 • Thople Kamere CFUG: 17th Sep 2021 • Fagar Khola CFUG: 2nd Oct 2021 • Maidali Dhadinge CFUG: 3rd Oct 2021, 26th Oct 2021 & 7th Nov 2021 (GA conducted three times due to insufficient participants to meet the quorum) • Lakuri Rukh CFUG: 9th Dec 2021 • Rachchhma CFUG: 19th Dec 2021 • Chapani Gadidanda CFUG: 13th Mar 2022 • Bhagwanthumki CFUG: 25th Apr 2022 <p>Agendas: OP revision/amendment and endorsement, timber harvest, governance and planning (Annual plan preparation, progress report and audit report)</p> <p>Outcomes:</p> <ul style="list-style-type: none"> • Decisions for OP amendment/revision endorsed in all CFUGs, except Chapani CFUG. Amended OP of Lakuri CFUG and Bhagwanthumki CFUG approved, revised OP of Fagar Khola CFUG approved. • Lakuri CFUG: Decision on timber harvest of and harvest of 4D trees of endorsed. Harvesting plan approved, harvest completed and timber selling in progress • Chapani CFUG: Decision on collection of 4D trees endorsed. Harvesting plan approved, harvest completed and timber selling in progress. • Bhagwanthumki CFUG: Decision on harvesting in research plot endorsed. • Chapani CFUG and Lakuri CFUG decided to contribute financially on Cluster level forest management committee (hiring forest technician)
24-27 May 2022	<p>CF Planniong: Tole and executive committee meeting</p> <p>Orient about planning process on executive committee meeting and carried out tole meeting regarding with forest development, income generating activities, social development and enterprises</p>

2.2 Analysis and demonstration of responsive institutional collaboration framework between CFUGs and local governments	
Sep-Oct 2021	<p>Formal and informal planning meetings of CFUGs (Chaubas):</p> <ul style="list-style-type: none"> • Pokhari Chaur Thulokhola CFUG: 2nd Sept 2021 • Thople Kamere CFUG: 3rd Sep 2021 • Maidali Dhadinge CFUG: 3rd Sep 2021 • Chapgaira Dadhunne CFUG: 3rd Sep 2021 • Dharapani: 2nd Oct 2021 • Fagar Khola: 1st Sep 2021, 30th Sep 2021 • Lakuri Rukh Bhulbhule: 3rd Oct 2021, 21st Feb 2022 • Chhekarpa CFUG: 19th Sep 2021 • Chaurkuna Bhirpani CFUG: 19th Sep 2021 <p>Agendas: OP revision/amendment, prospects of CFUG-CFUG and LG-CFUG collaboration, enterprise development, model forestry, data collection for cluster level forest assessment report</p> <p>Outcomes:</p> <ul style="list-style-type: none"> • Issues of CFUGs identified and discussed in local government meetings. • Strengthened the inter CFUG collaboration and collaboration between LG-CFUGs. The meetings were the very initial approach for Cluster Level Forest Management Mechanism. • Bhumlu Cluster Level Forest Assessment Report completed and shared at Basecamp.
Aug 2021-Jun 2022	<p>Community Forest Profile of Bhumlu Rural Municipality:</p> <ul style="list-style-type: none"> • Data collection by FECOFUN, Bhumlu • Data analysis, report writing and design by EnLIFT • Publication by FECOFUN • Financial support from LG <p>Outcome:</p> <ul style="list-style-type: none"> • Local government and stakeholders benefited by the detailed information and current status of CFs within the territory of local government. • The report provides baseline information as well as existing gaps between CFs and prosperity to respective authorities like local government and S/DFO. This helps the authorities to allocate services for the sustainable management of CFs.

2.3 Analysis and piloting of gender equitable decision-making model in CF governance	
12-14 June 2022	<p>Paper presentation at the "7th National Community Forests Workshop"</p> <p><i>(Gendered process of women (dis)/empowerment in the changing socio-economic and political changes in the community forestry of Federal Nepal)</i></p> <p>Outcome</p> <ul style="list-style-type: none"> • Dissemination of research findings among decision making authorities, advocating agencies and researchers. • The presentation was appreciated by the panelist for analyzing gender roles in CFs from a new perspective.

Apr 2022 and Jun 2022	<p>Training on Women Leadership Development in Forest Management (4 events- 2 in Bhumlu and 2 in Chautara) conducted for participants representing CFUGs (members and ECs), FECOFUN and local government. Mainly women participation in the training was targeted.</p> <p>Bhumlu: 10th-11th Apr and 12th-13th Apr 2022 Chautara: 21st-22nd Jun and 23rd-24th Jun 2022</p> <p>Outcome:</p> <ul style="list-style-type: none"> 70+ CF members (95% women members) sensitized on women contribution to CFs, their role and position in decision making and leadership qualities through participatory approach. Participants are aware of gender focused policy provisions on CFs (50% representation in the executive committee, Women's inclusion in OPs and Constitution, one man and one woman from each household to be present in the general assembly, 37.5% fund allocation for women and marginalized focused livelihood activities, etc). Data verification for research paper (Gendered process of women (dis)/empowerment in the changing socio-economic and political changes in the community forestry of Federal Nepal)
Mar 2022 to Jun 2022	<p>Journal paper manuscript under construction</p> <p><i>(Gendered process of women (dis)/empowerment in the changing socio-economic and political changes in the community forestry of Federal Nepal)</i></p>

2.4 Facilitating policy uptake of research outputs through active policy management for improved CF planning and governance

Sep 2021	<p>Visit of Policy makers (Provincial officers, DFOs, FECOFUN and FenFIT) along with EnLiFT team in the project sites of Bhumlu and Chautara (4-5 Sep 2021)</p> <p>Outcomes:</p> <ul style="list-style-type: none"> Ensure the availability of S/DFO based staff on Chaubas since Sep/Oct 2021. This was one of the immediate impacts of policy visit in Chaubas and was highly appreciated by local government and CFUGs. Smoothness in services from DFO and S-DFO as per their capacity to CFUGs.
15 March 2022	<p>The report entitled 'Revitalising CF in the changing socio-economic context of Nepal' was launched by the Secretary of MoFE and HE Ambassador of Australia in Hotel Himalaya. The report primarily highlights the challenges and opportunities facing community forestry in addition to underlining the future directions. Over 40 participants from the ministry, departments, academia and developmental/research organizations provided critical feedback over the report.</p>
	Journal manuscript under development

2.5 Planning & governance aspects of working model of equitable and sustainable community and private forest management in two Local Government areas

2020-2021	<p>Two case study reports have been finalised, while two additional case study reports are being developed. Meetings, interviews, cluster level mechanisms, and informal discussions in the four case study sites have increased our data set, and enriched our understanding on the nature of a framework to be developed for improving the CF Planning and Governance in the two LGAs.</p>
	Field reports on cluster level mechanism activities ready in draft form

Activity 3.1 Survey of existing forest enterprises in research districts	
May-June 2022	A second stage survey with timber traders and entrepreneurs was conducted; the primary purpose of the interviews was to have a better understanding of the regulatory provisions that allow (or disallow) the promotion of timber enterprise, in addition to understanding the opportunities and challenges in the overall value chain. 16 interviews have been conducted with different actors in Kavre and Sindhupalchowk.

Activity 3.2 Analyse and facilitate better regulatory systems for sale of timber and other forest products from private and community forests	
	A paper entitled 'what limits domestic timber production in Nepal?' has been accepted for publication in Journal of Forest and Livelihood
23 June, 2022	An EnLiFT Policy and Practice Lab (EPPL) has been organised recently focusing on practical issues around harvesting, sale and transportation of timber from private forestry. 20 people including DFOs, AFOs, private forest owners and timber traders participated in the event. There is now an increased understanding and readiness to address those issues.

Activity 3.3 Facilitate local forest enterprises that address social disadvantage	
May, June 2022	Ketuke (<i>Agave americana</i>) , a good fibrous plant, is available both in private and public lands in Chautara. Our field team is supporting some local entrepreneurs in its feasibility study, especially its processing technology and market demand.
25-28 April 2022	A three-day testing and demonstration of a portable saw mill was organised in Chautara. The programme was attended by DFO, CF/FECOFUN leaders, timber traders and local government officials. Sindhupalchowk DFO had purchased the mill a couple of years back but was not put into use. This time the EnLiFT team organised a testing and demonstration to examine its technical feasibility, cost efficiency, quality of sawn timber, convenience and social acceptance. Though there are some challenges, the mill fits the Nepalese rural context. We now have to work further in its potential expansion.

Activity 3.4 Facilitate policy development promoting local forest entrepreneurship	
	Time has not yet arrived to undertake this activity.

3 Impacts

3.1 Scientific impacts

The **Research Paper Series** available on <https://enliftnepal.org/research-paper-series/> records the scientific knowledge generated in this period. The specific RPS reports generated in this reporting period are:

Volume 2022

Paudel, N.S., Ojha, H., Banjade, M.R., Karki, R. and Tamang, S. (Eds.). 2021. Revitalising community forestry in the changing socioeconomic context of Nepal. Kathmandu: EnLiFT2 programme and ForestAction Nepal. Research Paper Series on Improved Forest Management in Nepal, **2022-01: 1-86**.

Tiwari, S., Dahal, K., Bashyal, M., Timsina, S., Karki, S., Baral, S., Karki, R., Paudel, N.S., Pandit, B.H., Banjade, M.R., Dangal, S., Cedamon, E., Nuberg, I., Ojha, H., Shrestha, K.K. 2022. Cluster level forest assessment report. Research Paper Series on Agroforestry and Community Forestry in Nepal, **Vol 2022-02**.

Volume 2021

Amatya SM, Johns C, Ojha HR, Paudel NS, Nuberg I, (2021), Regulatory challenges relating to the sale of timber and other forest products from private and community forests in Nepal, Research Paper Series on Agroforestry and Community Forestry in Nepal, **Vol 2021-03 (Output 43)**

Banjade MR, Paudel NS, Jha BN, Paudel M, Shrestha KK, Ojha H, (2021) Fostering Partnership: Report on Regulatory Analysis and Developing a Collaborative Framework for CF and LG, Research Paper Series on Agroforestry and Community Forestry in Nepal, **Vol 2021-04 (Output 27)**

Bardsley DK., Cedamon E. and Nuberg I. (2021), Socio-ecological monitoring to guide sustainable development of complex community-based agroforestry systems, Research Paper Series on Agroforestry and Community Forestry in Nepal, **Vol 2021-05. (Output 14)**

Journal / conference papers related to EnLiFT2 published in this reporting period are:

Baral, S., Tiwari, S., Shrestha, K.K., Tamang, S., Lama, K. and Bhandari, K. 2022. Gendered process of women (dis)/empowerment in the changing socio-economic and political changes in the community forestry of Federal Nepal. Paper presented at the 7th National Community Forestry Workshop, Lalitpur, 12-14 June 2022.

Bardsley DK., Cedamon E. NS Paudel and Nuberg I. (2022) Education and sustainable forest management in the mid-hills of Nepal. Journal of Environmental Management. Accepted for publication 6 July 2022

Paudel, N.S., Chapagain, A., Ghimire, B., Acharya, B., Ghimire, M., Pudasaini, N., Karki, R. and Bhandari, T. 2022. Community forestry institutions and governance: Suggestions for revitalising. Paper presented at the 7th National Community Forestry Workshop, Lalitpur, 12-14 June 2022

Shrestha, K. K., Paudel, G., Ojha, H., Paudel, N., Nuberg, I. and Cedamon, E. 2022. Community entrepreneurship: Lessons from Nepal's Chaubas community forestry sawmill, Forest Policy and Economics, 141, doi: <https://doi.org/10.1016/j.forpol.2022.102779>.

Timsina S, Sharma LN, Ashton MS, Poudyal BH, Nuberg IK, Baral S, Cedamon E, Bajracharya SB, Paudel NS. Lessons from Managing for the Extremes: A Case for Decentralized, Adaptive, Multipurpose Forest Management within an Ecological Framework. Forests. 2022; 13(2):333.

Timsina, S. et al. 2021. What is restricting Nepal's domestic timber supply? Journal of Forest and Livelihood, 20(1).

Posters

Cluster level forest management mechanism. Poster presented at the 7th National Community Forestry Workshop, Lalitpur, 12-14 June 2022

Testing of a portable sawmill. Poster presented at the 7th National Community Forestry Workshop, Lalitpur, 12-14 June 2022

Safe operation of power chainsaw. Poster presented at the 7th National Community Forestry Workshop, Lalitpur, 12-14 June 2022

Forest Nursery Certification. Poster presented at the 7th National Community Forestry Workshop, Lalitpur, 12-14 June 2022

Demonstration of improved silvicultural practices. Poster presented at the 7th National Community Forestry Workshop, Lalitpur, 12-14 June 2022

3.2 Community impacts

As an action-research project, EnLiFT works directly with the local communities either through community institutions such as CFUG or individually with private forest owners. In our project site almost every household is a member of one or another CFUG. Though the CFUG benefits are often realised through community infrastructure such as rural roads, drinking water, part of the revenue is invested in livelihood enhancement of poor and other disadvantaged groups. During this year project activities have important community benefits through: i) increased CFUG earning from the sale of timber, local employment and nursery business; ii) increased social capital, skill, knowledge and enthusiasm in CF and private forest; and iii) improved community forests, private forests and plantation in private lands. Details of these impacts are discussed below.

3.2.1 Economic impacts

Project actions have resulted in important economic benefits to the local communities and private sector along with revenue to the government. Establishment of research plots in three sites produced 28179.31 cft pine timber from which the CFUGs earned a sum of NPR 9.24 million (AUD 106,303). In this process a total of 907 person days of employment was generated with a total wage value of NPR 689320 (AUD 7,925). Similarly, total income from private and government nursery accounts to income of NPR 664026 (AUD 7,566) this year. Besides, CF members and stakeholders benefited from project financing as a part of compensation of their time in project activities, which come to a sum of NPR 5,00,000 (AUD 5,748). Major project activities that directly rewarded participants include: silviculture operations, training and workshops, meetings, preparatory work before harvesting, monitoring and measurement, tree felling, chainsaw training, portable saw mill training, forest fire, etc.). These impacts likely to be multiplied as these demonstrations are upscaled horizontally through community to community network and vertically through policy improvements catalysed by the project.

3.2.2 Social impacts

Major part of field work involves small formal and informal meetings at community level with CF members, executive committee leaders, local government officials. These meetings, workshops and training have facilitated dialogue that has helped improve transparency and accountability, resolve misunderstanding, increased trust and optimism in CF institutions. Women, Dalits and other marginalised groups have utilised these spaces to voice their concerns that has resulted in better recognition of their roles and readiness to address them. Annual general assemblies have been organised after several years of gaps (postponed due to earthquake and covid) that helped revive the whole institutional process. Legal awareness and discussion in other procedural aspects has helped improve communities' relation with DFO staff.

3.2.3 Environmental impacts

The project has resulted in positive environmental impacts through six ways: **i)** Research and demonstrations in mature pine plantation forest in three sites in Sindhupalchowk has promoted an inventory based planning and management of forest in CF. Establishment of these plots and benefits materialised through harvested products has contributed to increased faith in science based management and reduced unsustainable and illegal extraction of forest products, **ii)** CFUGs have protected the harvested sites from fire, grazing and grass cutting and natural re-generation is coming well in all sites, **iii)** Good coppices have emerged in Khasru demo-plots, an indication of increased productivity of fodder tree species in this CF, **iv)** Shreechhap CFUG has supported its members to plant fodder seedling in their private land from its timber revenue, **v)** Training on forest fire has resulted with proactive actions from CF members in mitigating forest fires, **vi)** promotion of community and private nurseries have resulted in increased plantation in private and community lands.

3.3 Communication and dissemination activities

The EnLiFT project in particular and Australian legacy in Nepal's forest sector in general have been highlighted through five events in this reporting period.

First, 40+ scholars both in Nepal and abroad got involved during preparation of the CF Revitalising Report for almost one year. There were over two dozens of zoom based meetings among these scholars and almost every time EnLiFT and its insights were referred to. **Second**, the report was jointly launched by Dr Pem Kandel, Secretary of MOFE and Her Excellency Felicity Volk, the Australian Ambassador to Nepal in a grand ceremony at the Himalaya Hotel where almost all the MOFE senior officials and key players in Nepal's forest sector were present. Both the secretary and the Ambassador highlighted the work of EnLiFT and provided their commitment to support it further. **Third**, EnLiFT was recognised as one of the major contributors during the recently held 7th CF National Workshop with its logo as the support agency, EnLiFT researchers contributing in keynote presentations and other papers, and EnLiFT organised a side event which was observed by a large number of participants. Two EnLiFT researchers (Naya and Shambhu) also moderated two important panel discussions respectively: i) regulatory framework and ii) future of CF management. In fact, the title of the workshop itself and the scope of the workshop influenced by the CF Revitalising Report, an EnLiFT work. **Fourth**, Geoffrey O'Keefe, one of the Capacity Building Managers from ACIAR, Dr Pratibha Singh from ACIAR South Asia Office (Delhi) and two senior officials from Australian Embassy in Kathmandu visited our sites and appreciated our ongoing activities. These events have helped raise EnLiFT's profile within the ACIAR, Australian Embassy, GON/MOFE and forestry stakeholders in Nepal.

We have placed information boards in all research plots with detailed descriptions of EnLiFT and its diverse streams in Nepali language. These have helped disseminate research activities among the local stakeholders. Periodic sharing with local governments has helped them understand the project funding, its governance structure and activities. In addition, we organised a field visit and reflection workshop for the provincial high-level officials, FECOFUN leaders and FenFIT leaders along with DFOs of both districts.

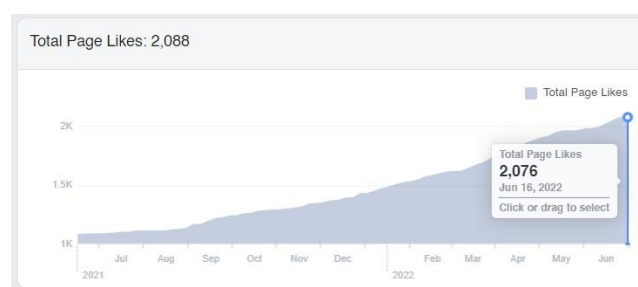
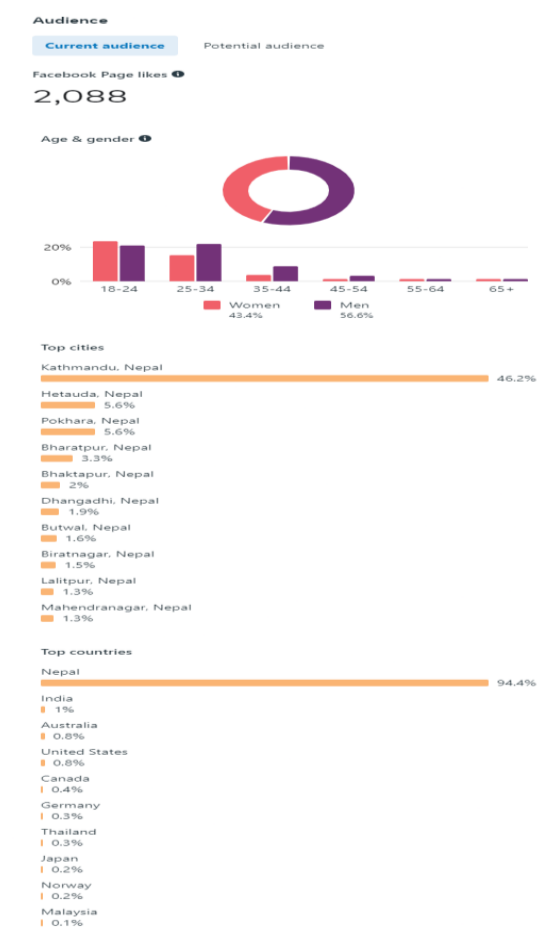
In addition, we had prepared a short promotional video, targeting the National CF workshop. It has been uploaded in the EnLiFT website and youtube channel as well. Not sure, but it would be nice if we could find some space to report that as well. (<https://www.youtube.com/watch?v=McTIm-e044c&t=226s>). We had given the title 'EnLiFT2 actions in field' for the video.

Dr Hemant Ojha in his blog 'Rebuilding community forestry' takes into account some of his reflections from the community interactions. He elaborates on how regulatory hurdles and priority on forest services, other than timber, has been reshaping the forest-people interaction. Likewise, Mr Rahul Karki in his blog 'Advancing community forestry in the new era of socio-economic change', depicts the evolving scenario of community forestry in Nepal. In doing so, the blog highlights the collaborative work of over 40 scholars in the form of a report, which investigates the new avenues for (re)adjusting community forestry. (<https://enliftnepal.org/blog/>).

Apart from these actions, EnLiFT2 has adopted social media platforms as an important tool to communicate its work and achievements. Various social media portals including facebook, twitter, Linkedin, youtube, and instagram have been used for communicating/disseminating our actions on the ground, and news and events related to our project's priorities. Among the various social media portals, Facebook has been the most popular one in regards to the viewership along with interaction through comments and feedback. In fact, the majority of the agencies/individuals including development practitioners, NGOs/INGOs, academia, researchers, forestry agencies and officials, and local CFUG members have been using facebook as a choice of networking platform, thus making it the most visited platform for our viewers.

Until June 2022, the number of our Facebook page followers has reached 2166 while 2076 people have liked our postings. Majority of the followers come from a number of organizations based in Nepal. Our viewership spans across 10 different cities in Nepal. Besides, it is also interesting to note that people from different countries across continents have interacted with our postings at different occasions.

In addition to the social media platforms, EnLiFT2 has a dedicated website (www.enliftnepal.org) and serves the repository of our outputs in addition to the news and events. The website offers a range of details about the project including the project partners and objectives of the project, publications, including blogs written by EnLiFT2 researchers. Besides, the project uses Basecamp for project related communications.



4 Training activities

With gradual ease of Covid-19 EnLiFT team embarked and accomplished a series of training programmes. This year, six important training packages were prepared and conducted.

Forest Fire Management: A two-day training was conducted in both municipalities (28-29 March in Chaubas Bhumlu, and 30-31 March in Chautara). These sites are highly prone to forest fires and every year these are getting worse. These training programmes were aimed at generating awareness and readiness to mitigate, basic skills to safely involve in mitigation and also developing local institutional mechanism to timely respond to the incidents of fire. A total of 70 people (54 CFUG members, 14 fire fighters, 2 police) attended the training. The training has developed some social awareness and specific skills in mitigating forest fire among the CF members of 30+ CFUGs in two clusters.

Women Leadership Development: Four two-day training, two in Bhumlu and two in Chautara were conducted this year (10-13 Apr in Bhumlu and 21-24 June in Chautara). These training were targeted mostly to women members of CFUGs, FECOFUN and elected leaders of Municipalities. The training was aimed at enhancing understanding social analysis and imparting leadership skills among the women members of those institutions. The training adopted a participatory learning for adult women and was highly appreciated by the participants. After the training, participants have expressed deep satisfaction, increased confidence and enthusiasm to contribute to the forest management and wider societal changes from their respective positions and roles.

Chainsaw operation: An orientation training in handling chainsaw was conducted for CF members in Kalapani CFUG on 12-13 April 2022). Nine people attended and benefited from it. It was a field based practical training that helped people to handle the chainsaw safely. In the long term, these trained people are expected to adopt the occupation of professional tree feller.

Portable sawmill operation: This is a new technology that is expected to substantially reduce the cost of milling by helping on-site milling. These days portable sawmill are available in the market. However, there is no one capable of handling this mill in the district. Therefore a four-day training (25-28 Apr, 2022) on handling of this portable sawmill was conducted in the DFO Sindhupalchowk. It was aimed at familiarising the mills among the local youths and imparting them the necessary skills to handle it.

Nursery training: The training was organized with an aim to strengthen the capacity of the community leaders/nursery practitioners on quality forest seedling production, management and certification, and learn about the nursery enterprise development and making strategies. The training was held from 3rd to 7th April 2022, at Bishal chowk talim Kendra/budol nursery, Budol, Banepa. The participants included Director General of the Forest Research and Training Center - Mr Yam Prasad Pokhrel, private nursery owners (from Chaubas, Chautara, Lamjung, Dhulikhel, Melamchi), DFO and AFO from Kavre and Sindhupalchowk, experienced nursery owners from Banepa, DFO support nursery naikey (caretaker), Local government support nursery naikey. Among other issues discussed during the training, the manual for the nursery management and certification was appreciated and supported by all the participants, including the Director General of the Forest Research and Training Center.

Thinning and pruning training to private forest owners of Chaubas: The training was primarily aimed at creating awareness among the private forest owners about the management practice in forest for better growth of the trees. The training was held from 1 to 4 March 2022, in Chaubas. The participants included Chair of Bhumlu Rural Municipality, private forest owners of Chaubas, AFO (sub division, Chaubas), and EnLiFT2 team. There was an overwhelming appreciation by all the private forest owners and 10 private forest owners (Gumandhoj Kunwar, Netra Prsada Chaulagain, Hom Nath Chaulagain etc.), who actually replicated the management practice by themselves.

5 Intellectual property

No issues of intellectual property have emerged.

6 Variations to future activities

There are no significant variations to report as this annual report comes very shortly after the comprehensive variations in line with the proposal for an additional two pay periods.

However, over this reporting period the idea of a new book ***Revitalising Community Forestry in the Changing Socio-economic Context of Nepal*** has emerged. This was formally launched on 15 March 2022 with Ambassador HE Felicity Volk in attendance, and reported in Appendix 6. Several of the scheduled EnLiFT2 will be written as chapters in this book. As such work on this publication will be considered as part of EnLiFT2's scientific impact.

7 Variations to personnel

As usual there have been several changes in the personnel of the federal, provincial, and local government level among bureaucratic leadership and newly elected political leadership. The table below provides the details of these changes.

Table 1. Change in government personnel (EnLiFT collaborating partners).

Designations	Previous	Current
Director General at DoFSC	Man Bahadur Khadka Prasad	Rajendra KC
Director General at FRTC	Deepak Kharal	Yam Prasad Pokharel
Secretary at Bagmati Provincial Ministry of Forest	Sindhu Dhungana	Yagya Nath Dahal
Focal person at FRTC	Megha Raj Poudel	Sunita Ulak
DFO Sindhupalchowk	Lok Raj Nepal	Padam Raj Nepal
AFO Lishankupakha	Om Sagar Bhandari	Shankar Raj Giri
AFO Chautara	Jiyalal Yadav	Shraddha Sigdel
AFO Banepa	Ram Kumar Bhandari	Nhukchhekrishna Shrestha
AFO Bhumlu	Rajan Shrestha	Devraj Ghimire
AFO Bethanchowk	Hem Thapa	Ranita Baral
Mayor Chautara Municipality	Amansingh Tamang	Krishna Prasad Sapkota
Chairperson ward 8, Chautara	Tirtha Bahadur Shrestha	Amrit Bahadur Dangal
Chairperson – Bhumlu Rural Municipality	Guman Dhoj Kunwar	Prem Bahadur Bhujel

Also there has been change in the field team. There are two new staff appointed in the second half of 2021 and first half of 2022:

1. Hari Narayan Acharya - Senior Programme Officer
2. Kapil Dahal - Research officer Chautara

8 Problems and opportunities

Additional challenges and new opportunities have emerged during this year due to following four dynamics.

1. Policy, legal and regulatory environment: As a part of implementation of new federal structure three levels of governments are in operation and they have issued new forest acts, regulations and tax systems. Many of these are overlapping and sometimes conflicting and are posing new challenges to the CF management. At the same time there has been a prolonged conflict between communities and government on which silviculture system is to be adopted while developing management plans and their implementation. These have resulted in stagnation in harvesting, imposed communities with three separate taxes, and both producers and traders have experienced additional regulatory and administrative burdens.
2. The local election was held on 13 May 2022. Field activities had to be suspended for almost for 45 days – during the election campaign and also after the election when people were anxiously waiting for results followed by rallies. The project team has to meet and introduce the project to the newly elected leaders in local governments.
3. COVID-19 continued to pose restrictions in project events, especially larger workshops and training especially during the early month of this fiscal year. Though the formal restrictions were beginning to ease, people still did not feel comfortable in attending such events. Many CFUGs halted their AGM. Face to face meetings and field visits by Australian partners have been hampered but we are now discussing resumption of their field-based engagements in the coming months.
4. Temporary outmigration of CF leaders to Kathmandu has remained an emerging challenge to conduct conventional CFUG institutional functions and to implement some project activities. As most of the key persons are away, the rest of the members wait until these leaders return home and provide some time to their communities. This challenge is being taken to cluster level CFUG networking work as presented above.

Budget

As this annual report comes very shortly after the comprehensive variations in line with the proposal for an additional two pay periods, they have been re-stated below for the record and transparency to all partners. This is the budget presented for the contract variation, which was approved 31 May 2022.

EnLiFT2 Extension up to mid-2024						EXTENSION	
pay period PP	6	7	8	9	10	11	12
	1/1/2021	1/7/2021	1/1/2022	1/7/2022	1/1/2023	1/7/2023	1/1/2024
UADEL							
Salary							
Cedamon (0.6FTE)	29,381	29,969	29,969	30,568	30,568	31,180	31,180
Johns	17,167	17,510	0	10,684	0	10,684	0
Bardsley	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Nuberg	0	0	17,500	17,500	17,500	17,500	17,500
salary subtotal	\$ 51,548	\$ 52,479	\$ 52,469	\$ 63,752	\$ 53,068	\$ 64,364	\$ 53,680
Operating	5360	5360	5360	7060	7060	7060	7060
Travel			9670	9670	9670	9670	6820
Infrastructure	10104	10181	8054	8172	8031	8109	5368
udent Nicola McGunnigle	11000			7000			
subtotal	\$ 78,012	\$ 68,020	\$ 75,553	\$ 95,654	\$ 77,830	\$ 89,203	\$ 72,928
original budget	\$ 111,143	\$ 111,987	\$ 88,592	\$ 89,890	\$ 88,342		
available to Nepal	\$ 33,132	\$ 43,968	\$ 13,039	\$ (5,764)	\$ 10,513	\$ 94,886	
carryover	\$ 120,000				\$ 214,886	available for Nepal	
UNSW							
Salary	10,079	10,281	10,281	10,487	10,487	10,487	10,487
operating	3,525	3,525	3,525	3,550	3,550	3,550	3,550
travel	2,800	1,700	1,700	1,700	1,700	1,700	1,700
subtotal	\$ 16,404	\$ 15,506	\$ 15,506	\$ 15,737	\$ 15,737	\$ 15,737	\$ 15,737
UCAN							
Salary	26,985	27,524	27,524	28,075	28,075	33,128	33,128
Operating	0	0	0	0	0	0	0
travel	2,800	1,700	1,700	1,700	1,700	1,700	1,700
subtotal	\$ 29,785	\$ 29,224	\$ 29,224	\$ 29,775	\$ 29,775	\$ 34,828	\$ 34,828
NEPAL							
ForestAction							
Salary							
FAN original	35700	33450	33450	33450	33450		
FAN revised	66,000	75,325	75,325	78,930	78,930	82,877	82,877
extra	30,300	41,875	41,875	45,480	45,480	205,011	
Operating	50,594	50,594	50,594	50,594	50,594		
Travel	5,100	5,100	5,100	5,100	5,100		
subtotal	121,694	131,019	131,019	134,624	134,624	82,877	82,877
NAF							
Salary							
NAF original	8775	8775	8775	8775	8775		
NAF revised BHP	6600	6435	6435	6757	6757	32,984	7095
Rupa	3000	3600	3600	3780	3780	17,760	3969
extra	825	1260	1260	1761.75	1761.75	6,869	
operating	1627.5	1627.5	1627.5	1627.5	1627.5		
travel	1250	1250	1250	1250	1250		
subtotal	\$ 13,303	\$ 14,173	\$ 14,173	\$ 15,176	\$ 15,176	\$ 11,064	\$ 11,064
DOF							
operating	5381.25	5381.25	5381.25	5381.25	5381.25		
travel	1875	1875	1875	1875	1875		
subtotal	\$ 7,256	\$ 7,256	\$ 7,256	\$ 7,256	\$ 7,256	\$ -	\$ -
FRTC							
operating	5381.25	5381.25	5381.25	5381.25	5381.25		
travel	1875	1875	1875	1875	1875		
subtotal	\$ 7,256	\$ 7,256	\$ 7,256	\$ 7,256	\$ 7,256	\$ -	\$ -
						\$ 233,708	\$ 217,433
Nepal partners sub total	\$ 149,509	\$ 159,704	\$ 159,704	\$ 164,313	\$ 164,313	\$ 93,940	\$ 93,940
							\$ 451,141

Explanation

Following the recommendations of the MTR, the budget was revised for the period of the original project life (i.e until pay period 10 Jan-Jun 2023). While there is significant internal re-distribution of funds, there is no net change in the grant from ACIAR. The re-distribution of funds from Uni Adelaide to ForestAction Nepal (and associated Nepal partners) up to the end of pay period 10 will be close to \$215,000. The components of the revision are:

- Re-distribution of salary lines because of personnel changes. See Section 6.2 Significant changes to Personnel in project description V2
- Re-allocation of a large carryover (~120K) in the UniAdelaide budget largely due to unspent travel funds because of COVID-19 restrictions, and unspent funds related to delayed project start (described in Annual Report 2019/2020).
- Review of day rates for senior Nepal researchers who were hitherto operating on 2013 rates. See Section 6.2 Significant changes to Personnel in project description V2
- Inclusion of modest consultant rate for I.Nuberg from pay period 8 to continue leading the project beyond his retirement from teaching at Uni Adelaide on 31/12/21 (He will retain a formal affiliation with the university). Σεε Νυβεργ γονσολαταντ παψμεντο βελωο
- Inclusion of modest payment to D.Bardsley, beginning pay period 6, equivalent to 8% FTE (while remaining 15% time committed to project) ;
- Reduction of C.John's payment beyond pay period 8 to bring it in line with D.Bardsley's allocation.
- Re-allocation of \$18K from UniAdelaide carryover to PhD scholar Nicola McGunnigle, principal supervisor I.Nuberg; co-supervisors BH Pandit, D.Bardsley, E.Cedamon. This will fund her field work investigating reforestation options on under-utilised land in Nepal.

10 Appendices

Appendix 1: Activities in private forest trials and nurseries

A1.1 Silviculture trials in private forests

A1.2: Income and other benefits from private forest trials

A1.3: Other benefits from trial plots

A1.4: Nursery summary

Appendix 2: Silvicultural and private forestry training activities

Appendix 3. Khasru management trials in Kalapani CFUG

Appendix 4. Harvested timber volume in research plots

Appendix 5: Summary of meetings with stakeholders

Appendix 6: Proceedings of CF reframing report launch event

10.1 Appendix 1: Activities in private forest trials and nurseries & silviculture trainings

Table A1.1: Silviculture trials in private forests

Name of the silviculture trial	No. of farmers/total area	Farmers name	Retained trees	objective
Inter-planting of high value cash generating tree crops inside harvested mixed broad leaf forests	2/5.8 ropani	Shiva Puri, Pramila Chaulagain	275	To demonstrate the inter plantation in harvested (schima and alnus) mixed broadleaf forest. Planted species: <i>cinnamom tamala</i> , <i>zanthoxylum armatum</i> , <i>lime</i> etc.
Broadleaf tree plantation establishment on UUL	12/ 28 ropani	Deepak, Resham, Vesh Bdr, Ram Bdr, Parbati, Krishna Bdr, Balkrishna, Shiva Ram, Sunita, Maiya, Badri Prasad, Bishnu Bdr.	495	To demonstrate the plantation in underutilized land with broad leaf
Pine plantation establishment	6/40 ropani	Hom Nath, Bibek Chhetri, Purna Prasad Chauagain, Madhav Prasad Chaulagain, Shiva Raj Gautam, Tanka Prasad Chaulagain	2100	To demonstrate the pine plantation
Early thinning of regenerated pine forests on UUL	6/51 ropani	Gunja Man, Keshar Bdr, Gumandhoj, Kumar, Narbu Lama, Netra Chaulagain	10475	To demonstrate the early thinning of regenerated pine forest
Pine harvesting and management trial	4/32 ropani	Harka Bahadur, Kaji Man, Jagat Kumari, Hom Nath Chaulagain	3531	To demonstrate the alnus harvesting and management trial
Alnus harvesting and management trial	10/61.78 ropani	Tikaram shrestha, Gopilal Timalisina, Govinda, Krishna Bahadur shrestha, Krishna Bahadur shrestha, Ram Krishna shrestha, Resham Pandey, Chetra bahadur pandey, Keshar bahadur khatri, Lok bahadur kunwar	1618	

Table A1.2: Income and other benefits from private forest trials

Farmer Name	Plot size in Ropani	Stand age	Number of Harvested trees/saplings	timber volume sold (in CFT)	Research site	Income generated (NRS)
Rameshor Timalsina	2	20 yrs Alnus	87	514 cft	kavre , Dhunkharka	108,000
Chakra Bhadur Karki	9.11.2.3	20 yrs Alnus	292	4,000 Cft	Vumltar-Saping, Ward no 8	850,000
Harka Bahadur Tamang	5	26 yrs Pine	107	700 cft	Chaubas 4, Bange lakuri	140,000
Kaji Man Tamang	7	20 yrs Pine	84	540 cft	Chaubas 4, Bange lakuri	108,000
Table 4: Other benefits	10	25 yrs Schima and Alnus	80	500 c.ft	Thulo sirubari, Chautara	105,000
Ram Bahadur Nepal	7	25 yrs Schima and Alnus	300	1913.41 cft	Thulo sirubari, Chautara	401,816
Bharat Ghimire	2	Alnus Harvesting	30	142.3 cft	Dhunkharka	30,000
Tek Kumari Timalsina	5	Alnus Harvesting	200	1000 cft	Dhunkharka	210,000
Ghana Nath Timalsina	3	Alnus Harvesting	90	426 cft	Dhunkharka	89,460
Harka Bahadur Tamang	8	20 yrs pine	107	700 cft	Chaubas, Kavre	1,40,000
Gumandhoj kunwar	30	25 yrs pine		3000 cft	Chaubas, kavre	2100000
Keshar bahadur lama	3.2	15 yrs pine	52	800 cft	Chaubas, kavre	50000
Netra Prasad chaulagain	2.5	20 yrs pine	35	600cft	Chaubas, kavre	60000
Tikaram shrestha	7.04	Alnus harvesting	60	500 cft	Dhungkharka, kavre	70,000
Gopilal timalsina	18.05	Alnus harvesting	34	200 cft	Dhungkharka, kavre	30,000
Govinda timalsina	11.91	Alnus harvesting	69	1000 cft	Dhungkharka, kavre	2,35000
Krishna bahadur shrestha	2	Alnus harvesting	22	300 cft	Dhungkharka, kavre	21000
Krishna bahadur shrestha 2	2.29	Alnus harvesting	15	200 cft	Dhungkharka, kavre	12000
Pramila chaulagain	3.54	Schima and alnus	150	500 cft	Chautara, sindhupalchowk	105000
Ram Bahadur Nepal	2.09	Schima and alnus	20	50 cft	Chautara, sindhupalchowk	7000
Deepak Nepal	3.28	Schima and alnus	30	100 cft	Chautara, sindhupalchiwk	15000
Hom Nath chaulagain	1.4	pine	45	600 cft	Chaubas, kavre	50000
Jagat kumara kunwor	14.47	pine	357	1500 cft	Chaubas, kavre	500000
Norbu lama	2.39	pine	25	350 cft	Chaubas, kavre	25000
Total Rs						5462276

Table A1.3: Other benefits from trial plots

Farmer Name	Plot size in Ropani	Stand age	Number of Harvested trees/saplings	timber volume sold (in CFT)	Research site	Other benefits
Jagat Kumari Kunwar	2	10 yrs Pine	50	0	Chaubas	Firewood
Keshar Bahadur Lama	2	5yrs Pine	67	0	Chaubas	leaf litter
Narbu Lama	2	2.5 Yrs Pine	300	0	chaubas	leaf litter
Deepak Nepal	9	7 yrs Mixed	0	0	Thulo sirubari, Chautara	Firewood
Siva Puri	3	20 yrs Schima and Alnus	Ready to harvest	0	Chautara	
Netra Chaulagai	1.5	2.5 years Pine	200	0	Chaubas	leaf litter
Siva Chaulagai	2	3 years pine	100	0	Chaubas	leaf litter
Kumar Chaulagai	1	2.5 years pine thinning Pruning in Middle aged	120	0	Chaubas	leaf litter
Guna Man Tamang	7	Pine	0	1000	Chaubas	Firewood

Table A1.4: Nursery summary

Name of nursery	Main species	Income (Rs)	
		total seedlings	
N & S nursery, Chaubas	Kiwi	4500	10,000
KK enterprise, Chaubas	Fruit & fodder	217635	80,000
Siddhartha nursery, Chautara	Mix species	1150	11665
Family organic agriculture, Chautara	Mix species	115005	3,75,900
Prem Shrestha, Dhungkharka	Mix species	1235	35080
Budol Forest nursery, DFO Kavre	Mix species	85365	28416
Patle pani nursery, DFO Sindhu	Mix species	59255	55291
Chaubas forest nursery, local government support, chaubas, Kavre	Tree species	25253	67674
Total		509398	664026

10.2 Appendix 2 Training activities

Date/venue	Theme	Content details	Participants
16 Feb 2022, Kalapani, Dhungkharka	Orientation on power chain saw handling	<ul style="list-style-type: none"> Safe handling and operation of chain saw. Sensitize on potential risk 	9 (4 executive committee members and 5 CFUG general members)
1 -4 March,2022	Thinning and pruning training to private forest owners	<ul style="list-style-type: none"> Private forest issues discussion Importance of management practice in private forest 1-4 march, 2022 of thinning and pruning in demo plot of Chaubas 	Private forest owners: 22 Sub-DFO: 1 AFO, 1 Ranger, 1 Forest guard Rural municipality: 1 chairperson
3 rd -7 th April,2022	Nursery management and certification training: manual testing	<ul style="list-style-type: none"> Introduction to training manual and nursery establishment Propagation through seeds Tree improvement through vegetative methods Seedling quality maintenance and certification Nursery enterprise development and marketing	DFO kavre:1 DFO, 2AFO DFO sindhu: 1DFO, 1AFO DFO nursery: 2 Local government support nursery:1 Private nursery: 3 FRTC:1 (Yam Prasad Pokhrel)
10-13, April 2022, Chubas cluster 21-24, June, 2022, Chautara cluster (4 events)	Women Leadership Development in Forest Management	<ul style="list-style-type: none"> Conceptual clarity on gender and sex Socialization of gender Activity and Resource Profile Women leadership Affirmative discrimination Barriers in women leadership 	Chubas 29 female and 4 male(CF users-20, EC-8, FECOFUN-3, LG-1) Kapil Jee for Chautara
18-21 March 2022, Chaubas and Chautara (2 days 2 events)	Forest Fire Management	Causes of Forest fire Forest fire control mechanism (control burning, fire line construction) Beneficial and harmful effect of forest fire Field practices	CFUGs members-54, DFO/SDFO fire fighter-14 and police-2 (male 45 and female 25)
25-25 April, 2022 Chautara	Portable sawmill testing training	Assess technical, financial and social performance. Unit sawing cost, acceptable to users, perception and operation capacity of users, quality of output	CFUGs-6, DFO-2, Voluntarily interest persons-6 (all male)

10.3 Appendix 3 Khasru management trails in Kalapani CFUG

Summary:

A silvicultural experiment was conducted in Khasru (*Quercus semecarpifolia*) forests, through the joint effort of forest-users of Kalapani Community Forest and EnLiFT-2 field staff. The objective of the experiment was to study the possibilities of increasing fodder production using different silvicultural interventions. Three treatments: (i) shelterwood-coppice with standards and reserves, (ii) coppice with standards and reserves and (iii) pruning were conducted in 50mX50m blocks, while a control block was established over an area with same dimensions. Baseline information on plant species compositions, dimensions and environmental variables were taken through December 2021-January 2022, before these interventions were conducted in February-March 2022.

Inception of the Khasru Management Research Plan:

EnLiFT had actively worked in Kalapani Community Forest with its users since the first phase of the project (2013-2018), during which experimental silvicultural timber harvests were conducted in pine (*Pinus roxburghii*) and hemlock (*Tsuga dumosa*) forests. During the implementation of the experiments, members of the Kalapani CFUG had expressed a sincere interest in conducting silvicultural trials to increase the production of Khasru fodder. The leaves of the evergreen Khasru tree are a major source of nutrition to the livestock raised by members of Kalapani CFUG, especially during the winter when other sources of forage are rare. Following this request, in November 2020, we assisted Kalapani CFUG in amending their Operation Plan to include the establishment of research blocks for Khasru fodder management. In November 2021, the CFUG organised a meeting, to which ENLiFT staff were invited, to discuss research objectives. During this meeting, we learned about prior Khasru fodder management approaches, security concerns and shared and sought ideas for management interventions. We also discussed the potential locations and extent, in terms of area, over which the trials could be conducted.

Research Objectives and Existing Management Practices/Concerns:

Khasru (*Quercus semecarpifolia*) is a high-elevation oak tree species distributed across the Himalayas. It is the most desired source of fodder by livestock herders, across much of its range within Nepal, including in Kalapani CF. Khasru wood has one of the highest caloric values among trees in Nepal, and is therefore an excellent source of firewood as well. Khasru wood can also provide strong reliable construction lumber, but this use in Nepal is rare because management is not geared towards raising straight long boles.

At Kalapani CFUG, the approved form of harvesting Khasru fodder is periodic lopping of lateral branches. However, in practice, many trees are not only lopped but also illicitly topped, i.e. leading stems are chopped off, prompting tree crowns to prematurely expand horizontally and retard height growth. This practice affects the regeneration potential of Khasru - by limiting acorn (nut) production (and hence also seedling establishment) since the tree cannot attain its full stature. It can also induce injuries leading to rot and eventual mortality of trees. After a certain point, most likely decades, trees may eventually stop growing back in response to persistent topping, and start dying back instead. If a topped tree dies completely, it has to eventually be replaced with seedling origin tree. Another downside of pervasive and persistent topping is that it completely wipes out the potential to mitigate climatic and financial risks. Topped trees cannot provide the quantity, quality and diversity of regeneration sources necessary to generate tree populations that can adapt to climatic shifts. This practice also wipes out the potential to produce lumber - a resource that is very valuable and useful to hedge against financial risks in forest management, even if not currently in great demand.

When conducted too frequently and intensively, even the lopping of lateral branches, can impair tree growth and reduce the capacity for acorn production. As a result of previous consultations with EnLiFT and internal agreement, Kalapani CFUG banned the lopping of Khasru trees that currently produced nuts, which were marked with metal tags indicating them as 'mother-trees' in 2020. These mother-trees have undergone a history of both lopping and topping, but have evaded it enough to

gain sufficient stature and crown size to produce a minimal quantity of nuts. This indicates that even decreasing the frequency of topping can allow Khasru trees to respond with vertical growth and nut production. A year onwards in November 2021, we found that the policy of protecting mother-trees had been satisfactorily adopted. However, in order to promote the seedling-based regeneration of Khasru, it is not enough to protect existing mother-trees from being lopped and topped off. Firstly, the tops of unmarked trees with vertically growing branches also have to be protected, in order to train them into well-developed acorn-bearing trees. The vertical growth of such trees could be promoted by pruning off horizontal side-branches. Secondly, topped trees can also be cut down to the base (coppiced), to encourage the development of stool and stump sprouts which can be then protected and grown vertically.

Furthermore, at Kalapani, CFUG members also indiscriminately cut back any cooccurring vegetation, including regenerating trees and shrubs of other species, creating a largely single-storied forest featuring mostly only low-stature Khasru. This lack of compositional and structural diversity can increase the vulnerability of the forest to pathogens, and reduces the options available to the CFUG in the event that they develop other management interests besides Khasru fodder production.

With these considerations in mind, we aimed to test the possibility of converting the currently low-stature Khasru forest into a multi-storey forest featuring (i) an even-aged understorey of periodically pollarded (a pruning method which removes upper branches encourages a dense regrowth of foliage above browsing height) and coppiced Khasru trees, (ii) interspersed with shrubs and small trees of other species, and (iii) featuring a sparse multi-aged overstorey of standards of full-stature Khasru mother-trees and occasionally standards and reserves of other species. These management interventions being tested to improve resource regeneration must also be understood as opportunities to systematically harvest fodder, firewood and the occasional timber. Eventually, the forest would have to be divided into felling coupes from which these resources are collected periodically.

Together with members of Kalapani CFUG, we decided on implementing the following four treatments (labelled 1-4 in Figure 1) over an area of 50mX50m each:

1. Control block (no intervention)
2. Coppice with standards and reserves:
Khasru trees with a potential to become an acorn-bearing mother-tree were maintained every 15-20m, and seedlings and vertically growing saplings were also reserved, while all other Khasru trees were cut to the stump. The canopy of potential mother-trees were also thinned (upper branches selectively pruned) and lifted (lower lateral side-branches pruned off). Trees and shrubs of most other species were also cut to the stump. However, trees (pines and alder) on erosion-prone areas and vertically growing shrubs (especially rhododendron) were pruned and reserved. Some promising pine and hemlock poles were kept as standards that could be harvested later.
3. Shelterwood-coppice with standards and reserves:
Khasru trees with a potential to become an acorn-bearing mother-tree were maintained every 10m, and seedlings and vertically growing saplings were also reserved, while all other Khasru trees were cut to the stump. The canopy of potential mother-trees were also thinned (upper branches selectively pruned) and lifted (lower lateral side-branches pruned off). In contrast to the first coppice treatment, this treatment maintains a greater density of Khasru trees, in order to study the protection from intense exposure to sun and frost by the shade of retained trees (hence the shelterwood label) on regenerating sprouts and seedlings. Trees and shrubs of most other species were also cut to the stump. However, trees (pines and alder) on erosion-prone areas and vertically growing

shrubs (especially rhododendron) were pruned and reserved. Some promising pine and hemlock poles were kept as standards that could be harvested later.

4. Pruning – Canopy Thinning and Lifting:

The canopy of all Khasru trees were thinned (upper branches selectively pruned) and lifted (lower lateral side-branches pruned off). At least a quarter of the foliage on each tree was left in-tact with this treatment. All branches infested by mistletoe were pruned off, while trees with particularly heavy infestation were cut to the stump. Trees and shrubs of other species were not cut, but some were pruned. In this block, we had originally intended to study the business-as-usual practices of lopping off the tops and branches of all trees, but CFUG members were reluctant to conduct this operation as part of the trials. Instead, they wanted to see how EnLiFT staff suggest they collect fodder from the existing trees. We then wanted to experiment with pollarding, but very few Khasru trees actually had vertical boles that rose above browsing height. Therefore, we decided on this pruning approach that would yield fodder from side-branches while promoting the stature of the trees.

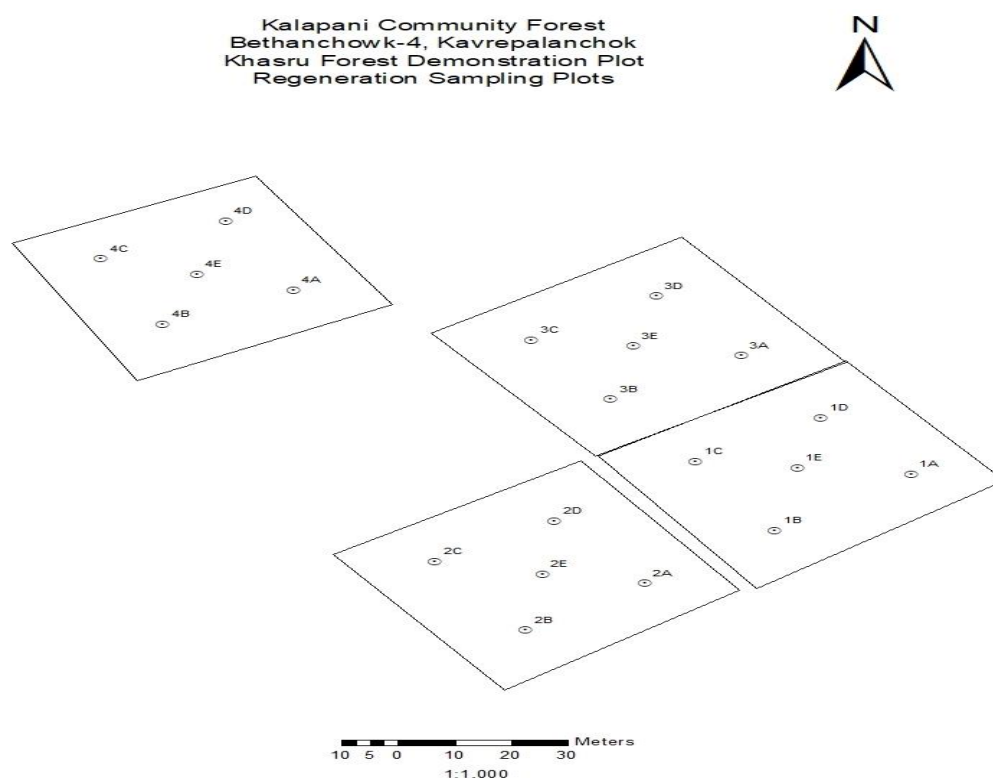


Figure 1: The treatment blocks (1-4) and sampled plots (A-E) contained within the blocks.

We must note here that while the regeneration success in our coppice and shelterwood-coppice treatments can be compared to one another, our pruning treatment cannot really be compared to another treatment – unless we have rotation-long experiment to see which of the treatments produce the greater amount of fodder over time. However, since all three treatments have some pruned trees, we can measure and compare the degree to which the pruned trees survive, produce new foliage, and grow in height. We can also compare changes in vegetation composition between the treatments.

Field Activities

Pre-intervention Sampling

Baseline information on existing species compositions and environmental variable were collected in 5 plots (labelled A-E) within each treatment block (Figure 1). These plots were spatially regularly

distributed, such that plot E is at the centre of the block, while two other plots lie on each of the two diagonals traversing the block, equidistant from the centre. This sampling was conducted through December 2021-February 2022, engaging at least 2-3 EnLiFT staff and 2-3 CFUG members.

In each plot, across a radius of 1.37m (area: 10m²), we recorded (in cm) the height and diameter at base/root-collar of tree and shrub (defined as woody plants that form a distinct canopy) seedlings (below 1.3m in height), the height and diameter at base/root-collar of bushes (defined as woody plants that cannot form a distinct canopy) greater than 50cm in height. The number of individuals and percentage coverage of forbs (non-graminoid herbs) and bushes smaller than 50cm in height, and the percentage coverage of graminoids were also recorded.

Likewise, across a radius of 3.57m (area:40 m²), we recorded the height (to the nearest 0.1m), diameter at base/root-collar (in cm), diameter at breast height of the tallest branch (in cm), and crown dimensions (longest+shortest diameters to the nearest 0.25m) of tree sapling and shrubs (above 1.3m height, less than 10cm root-collar/stump diameter). Finally, across a radius of 5.65m (area:100 m²), we recorded the height (to the nearest 0.25m), diameter at base/root-collar (in cm), diameter at breast height of the tallest branch (in cm), and crown dimensions (to the nearest 0.25m) of trees (above 1.3m height, more than 10cm root-collar/stump diameter).

Diameter measurements were made mostly with calipers, but diameter tapes were used for larger trees. Heights and crown dimensions of smaller plants were measured using a distance tape, but measurements for larger trees and shrubs were made using marked poles. Furthermore, the heights of trees taller than 7 metres were measured using laser rangefinder. The environmental variables measured in each plot included elevation (in m, using Garmin GPS), aspect (in cardinal directions, using a compass), canopy density (in %, using a spherical densiometer), coverage of bare ground without living vegetation (in %, using ocular estimation).



Treatments

The treatments were conducted through February-March 2022, engaging at least 2-3 EnLiFT staff and 4-7 CFUG members. The weight of the foliage harvested from trees lying within our plots were measured, in kg, using a hanging scale. The harvested foliage and fuelwood were distributed internally among interested users.



Prospective Plans

The CFUG member expressed interest in cutting back bushes that could compete with Khasru regeneration during the implementation of these treatments. We asked them to cut them after they had developed new leaves and used up their carbohydrate reserves, in order to discourage vigorous resprouting. However, some CFUG members cut some of them back anyways while we were conducting the treatments. We are currently exploring the possibility of building a protective wooden fence around our treatment block in order to protect the regenerating vegetation from herbivory and trespassers. Alternatively, we can also leave the slash generated by harvesting in place, in order to deter browsing animals from entering the plots. We will also measure the regeneration of stump/stool sprouts in the coppice and shelter-wood coppice treatment blocks, after the monsoon season.

Appendix 4 Harvested timber volume in research plots

S.N.	Name of CFUG	Species	No of tree harvested	Timber volume (CFT)
1	Deupokhari	<i>Pinus patula</i>	358	8416.57
		<i>Pinus wallichina</i>	321	3063.01
2	Srichhap Deurali	<i>Pinus roxburghii</i>	605	8322.86
		<i>Pinus patula</i>	115	1997.22
3	Sansari Dada	<i>Pinus patula</i>	66	1034.96
		<i>Pinus roxburghii</i>	443	5197.01
		<i>Pinus wallichina</i>	4	147.69
Total			1912	28179.32

Appendix 5: Summary of meetings with stakeholders

Date	Site	Events	Participant s	Agenda	Outcomes
3/09/2021	Chau bas	Joint meeting (LG, FECOF UN and CFUG)	Municipality Chair Ward# 4 Chair AFO Municipality FECOFUN Chair 13 CFUG leader EnLiFT members	CFUGs forest manageme nt and regulation	<ul style="list-style-type: none"> ● Discuss on managing 4D trees from Rakchhama, Dharapani, Lakuri Bhulbhule and Chapani CF. We also agreed to measurement and estimation of 4D trees and trees cutting on road expansion. Sub division office will submit to final compilation to DFO. ● We also agreed to prepare Operational plan and harvesting plan of Lakuri Bhulbhule CF. ● For those CF who cannot renew their OP because of financial crises, ward office will support them. To get support CFUG need to give request letter to ward office.
10/9/2021	Chau bas	ward level CFUGs meeting	Ward chair CFUGs member FECOFUN EnLiFT team	Strategy of Forest Manageme nt	<p>Agendas Discussed</p> <ul style="list-style-type: none"> · Possible strategy for FM · Preparation of plan for regular activities of CFUGs <p>Decisions made:</p> <ul style="list-style-type: none"> · The idea of CLFM mechanism and mobilizing a technical person was agreed by the LG and CFUG's representatives and was left to discuss on the idea separately by the LGs of both wards (Ward 4 & 5). · The plan for GAs and audit was prepared.
13/9/2021	Chaut ara	Sharing meeting	Ward Chairs of Chautara 8 & 13 Shambhu Dangal Madan Bashyal	Cluster level formation mechanis m	<ul style="list-style-type: none"> ● The meeting agreed to further proceeding for formation of cluster level forest management mechanism. ● That team also visited to municipality office and met Mayer and Vice-Mayer to inform formation of mechanism. Both Mayer and Vice-Mayer committed to provide any kind of support regarding to mechanism.

9/11/2021	Dhulikhel	Planning meeting	DFO AFOs : Gaurav Bhatta, Devraj Ghimire, Rajan Shrestha Shambhu Dangal Madan Bashyal Kapil Dahal Sharda Tiwari	Field level CFUGs forest management issues and implementation model	<ul style="list-style-type: none"> Model Forestry's main motto is to establish technically and socially sound CFs and CFUGs. It aims to achieve sustainability, good governance, and partnership for positive changes in the legal, technical, economic, and social and ecosystem values of the forests. The program will be executed in the close coordination with Division Forest Office, Local Government, FECOFUN, CFUGs and other relevant stakeholders. For executing the concept, two CFUGs (Dharapani CFUG and Chapani Gadidanda CFUG) were recommended by the DFO team. Khasru forest management will be carry out in Kalapani CFUG, Dhungharka selected site. As there is shortage of good technical human resources in DFO Kavre, capacity enhancement of DFOs field level staffs and support in office set up for better coordination with DFO in field level was discussed.
2/11/2021	Chaubas	Coordination meeting	Ward chair SDFO FECOFUN	Harvesting planning of CFUG	<ul style="list-style-type: none"> To share the progress on CFUG's activities of Chaubas cluster. To discuss on further strategy to facilitate CFUGs. <p>Decisions made</p> <ul style="list-style-type: none"> Assist CFUGs in conducting audit and GA by Mangsir, 2078 Estimation of fallen trees to be conducted 5 CFUGs (Chapani, Fagar Khola, Lakuri, Rachchhma and Dharapani) preliminary selected for model forestry. Awareness program on PF management to be conducted by Mangsir

9/11/2021	Dhulikhel	Coordination with DFO	DFO, AFO, Shambhu Dungal, Kapil Dahal, Madan Bashyal, Sarada Tiwari	Support to CFUGs forest management	<p>Agendas Discussed</p> <ul style="list-style-type: none"> • Review of Chaubas Cluster's forest development • Model Forestry • Human resources mobilization and resources management <p>Decisions Made</p> <ul style="list-style-type: none"> • The major issues existing in CFUGs were discussed • Concept and protocols on model forestry were discussed. DFO recommended Dharapani CFUG and Chapani Gadidanda CFUG for model forestry. • As there is shortage of good technical human resources in DFO Kavre, capacity enhancement of DFOs field level staffs and support in office set up for better coordination with DFO in field level was discussed
16/11/2021	Chautara	Cluster meeting	Ward Chairs of Chautara 8 & 13 AFO Jiyalal Yadav Municipality Level FeCoFUN chair Madan Bashyal Ward council member Karsang Lama	Cluster constitution draft discussion	<ul style="list-style-type: none"> • A meeting of Cluster level forest management committee has been approved constitution and made a decision to register in municipality office with recommendation letter from DFO.

23/11/2021	Chaubas	Coordination meeting	<p>Ward chair, Fecofun, CFUGs members</p> <p>Kapil Dahal, Sarada Tiwari and Srijana Karki</p>	Cluster level mechanism and model forestry application	<p>Major Agendas</p> <ul style="list-style-type: none"> • Reflection of the previous meeting (3rd September) and progress • Action plan of CFUGs for coming week • Cluster level forest coordination committee • Model forestry practice <p>Decisions made</p> <ul style="list-style-type: none"> • Four CFUGs (Fagar Khola, Thople Kamere, Maidali Dhadinge, Pokhari Chaur Thulokhola) have completed their GAs and audit. The remaining five CFUGs (Chapani Gadidanda, Dharapani, Lakuri Rukh Bhulbhule, Lamrang aahaldanda, Chapagaira Dadhunne) have not completed their GAs and audit. • Working plan prepared for Dharapani, Chapani Gadidanda, Lakuri Rukh Bhulbhule and Rachchhma CFUGs. (Tole meetings and planning meetings of ECs to be completed by 3rd December in each CFUGs. Estimation of 4D trees from each CFs to be taken before GAs. GAs planned for 9th December to 12th December. • Rachchhma and Lakuri Rukh Bhulbhule CFUGs showed their interest to implement model forestry practice.
8/12/2021	Dhulikhel	Consultation meeting	<p>DFO</p> <p>AFOs (Gaurab Bhatta, Rajan Shrestha, Sarita Lama)</p> <p>Kapil Dahal</p> <p>Madan Bashyal</p>	OP preparation model and harvesting plan preparation	<p>Coordination meeting with DFO, Kavre at Dhulikhel. That meeting agreed to,</p> <ul style="list-style-type: none"> • Prepare Operational plan on the basis of Pinus thinning guidelines that CFs who applied scientific forest management before. • For this fiscal year, only two CFs Lakuri Bhulbhule and Bhagawanthumki can harvest trees according to their harvesting or research plan. • DFO will provide technical and other support for these 2 CFs (If necessary borrow money for harvest from DFO program)

25/12/2021	Chaubas	Consultation	<p>Lok Bdr Kunwar</p> <p>Dev Raj Ghimire</p> <p>Raj Komal</p> <p>Khadka Kharel</p> <p>Madan Bashyal,</p> <p>Kapil Dahal</p>	Cluster level planning	<ul style="list-style-type: none"> • Develop a participatory CFUG planning system, local-level planning; • Establish linkages between local governments, SDFO, DFO and province level planning; • Mobilize community forest and local government resources to stimulate forest-based livelihood and enterprise development; and • Create and strengthen local government institutions for the sustained execution and supervision of community forest users and private forest users.
11/1/2022	Chautara	Consultation meeting	<p>CEO, Chautara Municipality</p> <p>Planning officer, Chautara Municipality</p> <p>Enterprises Dev. facilitator, Chautara Municipality</p> <p>Madan Bashyal</p> <p>Kapil Dahal</p>	Registration process of clusters	<ul style="list-style-type: none"> • Worked on NGO registration and renewal working procedure and draft prepared and submitted to Municipality for further process.

28/2/2022	Chautara	Coordination with LG	Municipality chair CEO Planning officer Ward chair Shambhu Dangal Kapil Dahal	LG forest Act draft discussion	Coordination Meeting regarding Forest Act of Chautara Municipality <ul style="list-style-type: none"> • Chautara Forest Act have purposed 10% income tax from selling forest product outside CFUG. Which had shown strong discomfort from FECOFUN. Most of the local CFUG are unaware about this new change in taxation. So, FECOFUN have asked for coordination meeting to discuss this issue of triple taxation (Central government, Province Government and Local Government) process and shown their objection on it. • Main question was- why is forestry sector only punished with this triple taxation. Is there any way forward to minimize this tax or one door taxation system? Why taxation process and timber selling mechanism is time taking? Aren't there way out to simplify this governmental procedure hurdle? • Discussions on finalizing the exact percentage were put on the floor where every CFUG personal can be agree. Finally, Mayer of Chautara suggest 5% income tax from selling forest product outside CFUG, where most of the participant showed the acceptance. • Planning Officer was asked to finalized the forest act with revision and share to stakeholder before it published in municipality rajpatra.
-----------	----------	----------------------	--	--------------------------------	--

Appendix 6: Revitalising Community Forestry in the Changing Socio-economic Context of Nepal: Report launch 15/03/2022

This appendix records the formal launch of this publication on 15 March 2022 at Hotel Himalaya, Lalitpur.

Dr. Srijana Baral, a Senior Researcher at Forest Action Nepal and the MC of the event introduced about the programme and continued the formal session with the chairing of Dr. Sindhu Dhungana, Head of Participatory Forestry Division, MOFE. Dr. Pem Kandel, Secretary, MOFE and Her Excellency Felicity Volk, Australian Ambassador to Nepal were the chief guest and the special guest of the programme respectively. More than 40 participants including division heads and department heads within the MOFE, academic institutions, development partners, civil society organizations and professionals attended the event



Welcome note and report launch

The programme formally kicked off with the welcome note from Dr Rajendra KC, acting Director General of the Department of Forests and Soil Conservation. Along with the overview of the programme, he provided a brief synopsis of the success of community forestry in restoring degraded forest, livelihood improvement, environmental services and leadership development in Nepal. He also expressed his gratitude towards the Government of Australia for being supportive, both technically and financially, in introducing and nurturing community forestry in Nepal since the very initial days. Updating the changing socio-economic context of Nepal in terms of education, economic opportunities, demand of forest products, land fragmentation, cropping pattern, outmigration, and population growth, he emphasized the need to reenergize the community forestry in the above changing context. He also invited the Government of Australia to continue and expand its support in the days ahead.

With these highlights, he welcomed the chief guest, special guest, and all the attendees of the programme. He also appreciated the inspiration that participation of all attendees have provided to work with more dedication and devotion for the promotion of community forestry in Nepal further.

Following the welcome speech, the report was jointly launched by the Secretary of Ministry of Forests and Environment, Dr Pem Kandel, and HE Felicity Volk, Australian Ambassador to Nepal.

Presentation

Dr Naya Sharma Paudel, one of the editors of the report, highlighted the key findings of the report. In doing so, he underlined some of the pressing issues around community forestry in Nepal, and also offered a couple of directions to manage community forestry in the changing context. Some of the key highlights from the presentation are elaborated below:

This report is a collaborative effort where the editors are partly supported by the EnLiFT project, however, more than 40 scholars working on community forestry have voluntarily contributed as authors. After two years of this collaborative effort, we have been able to bring this report. Moreover, we are also moving towards production of an edited book, that will be published by Mandala, by the end of 2022 wherein most of the authors of the report along with a few additional experts, are working on. There are eight thematic chapters in the report that primarily focus on policy, institutions, forest management, biodiversity, climate change, business, gender inclusion and equity around community forestry.



Key messages

The changing socio-economic context and its impact, compounded by low economic incentive has had a toll in the management of community forestry in Nepal. In the early stages of community forestry, though monetary benefits were

nominal, there was a high stake in economic returns from community forests. But now a days, the benefits are skewed towards a few leaders who may have been employed in various ways or misused the funds, while poor are largely detached from the incentive structure of CF.

Besides, the existing legal and administrative requirements do not match to the scale of operation and potential environmental risk. Introduction of new regulatory instruments, which are partly rationalized in the context of expanding business and potential risks around those businesses, might have checked unsustainable harvesting. Nevertheless, the scale of the operation and the associated environmental risk are so small that the regulatory instruments can be seen as burden. In most of the cases, groups managing small area of forests cannot comply with those existing standards and requirements.

The report attempts to discuss on alternative options to address the current problems facing community forestry. The report stresses on the need for more supportive role of the government in addition to sole regulatory functions. In addition, it also emphasizes the role of market and private sector in order to actually manage the forests. The report appreciates the FECOFUN's advocacy for further devolution of rights to the community, but also highlights its limitations. Contrary to the commonly made three different lines of arguments, this report suggests following six strategies to revitalize CF.

Strategies to revitalise community forestry

Strategy 1: Strengthening the economic rationale is the primary concern, because of the fact that many CFs have weak economic rational to continue their institutional functions. Most notably, the investments put on community forestry is not giving any returns. Similarly, regulatory requirements have become burden to many CFUGs. The term "burden" has been used in the sense that the scale of operation is too small and the standards that needs to be met are relatively higher. At this moment, there is a need to encourage the market related innovations to ensure that the economic rationale if fulfilled.

Strategy 2: Leaving no one behind - when there is a macro discourse that many people are shifting away from subsistence livelihood to a more market-oriented lifestyle and commercial resource management, there are also certain social groups who continue to rely on forest resources. These groups should not be overlooked by the shifting discourses and hence should not be left behind.

Strategy 3: Diversifying technical and institutional services - the current laws and regulations that are being introduced, has acknowledged DFOs and other actors into service provisioning system. This would possibly help, but the point is how to diversify the service provisioning when the DFO service system is too much stretched with the limited human resources and increasing amount of work under their responsibility. So diversifying technical and institutional services is of utmost importance.

Strategy 4: Differential treatment based on the categorization - The CFUGs have different capacities, size, nature of resources and thousands of them do not sell any product in the market. This implies there is little or no environmental risks associated in their management and harvesting. So, there is little justification for imposing same standards to all CFUGs. Perhaps, categorization and differential treatments accordingly could be one strategy to addressing the issue.

Strategy 5: Integrate CF with the local environmental governance system – As local governments are very close to the local communities and are better fit for supporting the local groups, there is a need to link community forestry with the local governance system. Currently, CFUGs are detached from the local environmental and governance system.

The changing socio-economic context

The recent population census shows that a lot of people are migrating from rural areas to urban areas. In addition, the livelihood pattern is diversifying from subsistence agriculture to a rather commercial one, and that has implications on forest-people relations. When people out-migrate for a couple of years and then come back, they usually adopt different occupations usually other than subsistence agriculture resulting in decreasing stake on forest.

Few years back, EnLiFT team published a scientific article explaining the socio-economic, policy and institutional, environmental and technological factors that are driving the underutilization of agricultural lands. The paper has been well referred. Likewise, the fuel use pattern is gradually moving away from firewood to LP Gas or electricity. This too shows the declining interest in forest management. The case of one of the CFUGs from Kavrepalanchok district, covering 50 HHs, where the income is 50 lakhs annually, is a good illustration. If the figures on the income are to be calculated, estimates show that it would come to be around 1 lakh per HH/year. However, the data of around 5-6 years shows that 20 HHs have already migrated from the place due to the lack of employment. So, the potentiality of our forest resources, are largely limited to calculator, while in terms of the actual practice, we have not been able to materialize the potential benefits from forest resources. As a consequence, there is declining interest in community forests, both in institutional as well as in forest management activities.

Last year, only 3 out of 580 CFUGs in Kavre submitted their annual progress and audit reports, and planning reports to the DFO. Similarly, in Sindhupalchok, out of 527 CFUGs, only 53 submitted their reports to the DFO. This gives a sense on the status of our CFUGs. Many of the CFUGs are not being able to conduct their general assemblies on time. One of the obvious explanations is there is no any incentive for the participants. In general, the members are not adequately incentivized to invest in community forestry. The scenarios from the last five years shows that people have been placing least effort in harvesting fodder, grass, firewood, clearing unwanted trees and planting, and labor in forest management. There are a couple of drivers as well some consequences particularly in terms of declining interest and participation of

people, weakening institutional function, other forest management activities and that is ultimately leading to increase in the human-wildlife conflict. Most importantly, the potential of community forests has not been realized.

Another issue is how to make CF management relevant to the local economy. For example, Kalapani CFUG in Kavrepalanchok has almost zero migration and heavily relies on farming, especially dairy enterprises. Though they have a 175ha of forest, they import rice straw and manufactured feed from Banepa and Terai to feed their livestock. The forest little serves their economy. So, the point here is how we can make our forest more relevant to the local economy.

The statistics from six CFUGs in Kavre and Lamjung districts, in regards to the time that CFUG' chairs are investing on various forest related activities accounts to 40+ days. In most of the CFUGs, either they don't have funds to pay for those spent days or they have not made such provisions to pay. In the context of rising opportunity costs even in the rural areas an important question is, how to incentivize the community forestry leaders to engage in CF activities

Another issue is how to recognize and support diverse forest-people relations within CF policy and practice. There are certain groups (for instance in Dhamilikuwa, Lamjung) are heavily involved in particular kind of economic activities related to particular biomass component of the forest. So, if we don't recognize these particular activities, and simply advance our policy based on the broader discourses that we are moving away from agriculture, then that would undermine the interest of forest dependent groups. Therefore, while acknowledging larger drivers of discourse, we should also acknowledge that there are certain socio-ecological groups who continue to rely on traditional practice of resource extraction and use.

Out of 20,000+ CFUGs, not all are harvesting timber or any commercially valuable resources. Moreover, thousands of groups are not active in terms of the market approach. Also, many of them don't even exchange their forest products or export them out of their groups. So, how can we develop our regulatory instrument to have customized treatment over these different groups? We can categorize the groups not only based on their size, but also based on the potential resources going to the market, or nature of transactions, or biodiversity significance, and can design a differential treatment. In doing so, focus should also be laid on to how to integrate CFUGs with the local environmental and other government system so that they are not isolated and solely operating within the DFO. The primary focus is to how to make them relevant with other economic and political activities.

Questions and feedback

The presentation was followed by quick round of questions and feedback over the report. The discussion following the presentation is summarized below:

Dr. Deepak Kharal (Chief, REDD Implementation Center)

This report has provided the indication on the trend that our society is shifting towards. I would like to highlight two main issues in this report.

The report has concluded that enhancing agroforestry models in community forestry through national policy in future can be effective. As we have observed in the mid hills of Nepal that agricultural land is being largely abandoned due to increasing outmigration, why do you propose agroforestry in forests? Isn't it challenging? I think, there needs a rethinking.

Another point is, working examples of collective actions are visible often in situation with high poverty. Here you have argued that economic incentive will strengthen collective action. I see a paradox.

Prof. Bir Bahadur Khanal Chhetri (Dean, Institute of Forestry - Pokhara)

The presentation was very interesting. The presentation mentioned that size of HHs and community forests in CFUGs are highly skewed. Some are too small and some are too large. There is also a high variation in terms of economic return and other aspects too. From the eyes of an academician and during the implementation by managers, the question is - what does an ideal size mean? While we are talking about increasing the economic returns and increasing the interest of users, the pertinent question is what actually determines the ideal size? For example, whether a CF with 100ha can be regarded as a good size? This is very challenging. Until and unless we determine the ideal size, that will not deliver the expected outcome. Is there any insight from EnLiFT on this aspect (ideal size of CFUGs)?

Dr. Buddhi Sagar Paudel (DG, Department of Plant Resources)

The current average size of CFUGs is around 70-80 ha. This is not a viable unit. Consequently, it cannot provide needed economic incentive to users for their participation. The second point is while we are connecting forests with the national prosperity, we should not solely focus on the economy. We should also value environmental services that CF is providing.

Mr. Birkha Shahi (General Secretary, FECOFUN)

Community forestry is not merely as an economic entity but also contributes to sustainable development including building institutions and leadership.

Moreover, the report shows decreasing users' engagement in collection of forest products like firewood, grass, fodder. But several studies, for example, the study by the Ministry of Energy, Water Resources and Irrigation shows that still



60% of the energy is derived from forests. This report seems to have missed to analyze this aspect. Also, acknowledge that we have not been able to utilize forest products since 2011 due to various regulatory obstacles.

Mr. Gopal Aryal (DG, Environment Division)

The report has highlighted that the possibility of improving market system and enhancing economic rationale of community forest products by increasing people-forest relation in the changing context. How can that be met? Also, have the theoretical underpinnings been changed now due to change in the livelihood? If yes, what has been its implication on nature of formal institutional and informal institutional interaction? I want to know whether this report has highlighted this aspect.

Dr. Dil Bahadur Khatri (Executive Director, SIAS)

Very recently, we were a part of an interaction programme (webinar) where Don Gilmour said-"The socio-economic context during the formation of community forests and now has changed significantly. However, there has been no significant movement in the institutional modality of community forests."

This report has highlighted that the socio-economic context of community is changing so as their response towards community forest. However, we should not underestimate the fact that the farm-based livelihood is still crucial for local livelihood. The modality of farming has been changed of course. Therefore, forest management modality that also contribute in farming should be considered. The modality of community forests should be analyzed from the perspective of farm-based need, economy and broader societal and environmental value.

Next is the theoretical underpinnings. Theories also change according to the changing context. While initiating community forestry, we have started it by formalizing and packaging the informal and traditional ways. On this context, community forest's relation to theoretical reflection is also necessary in case of Nepal.

Mr. Thakur Bhandari (Secretary, FECOFUN)

The presentation has not highlighted the term "sustainable forest management" anywhere. The term might have been included in the content of report elsewhere. But how this report specifically represents sustainable forest management as an umbrella and its scope, is important. Another thing is how this report ensures the fact that "the concept of community forestry that was developed through traditional knowledge, skills, and practices" has been preserved. We must get out of narrow framing of seeing CFUG as an economic entity.

Responses to the questions

Dr Naya Paudel responded to the questions and queries of the participants. The responses are highlighted in the following points.

This report is the joint effort of 40+ scholars and we also should understand that all 40+ people are from diverse field. However, we have come together in the version of report that we have produced.

When we are talking of some kind of adaptation to a new situation that we all are undergoing, this means we are not completely abandoning community forestry. Rather, we are trying to address the issues, build the strength, the key qualities, and the theories of collective actions on common.

Second, when we are talking of the economy, we are not abandoning other aspects like cultural, environmental, among others, of the forest. But we also should realize the fact that people are not attending general assemblies or meetings or other basic institutional functions. This is not because of these cultural and ecological factors. Rather, it is primarily because of economic factors. In such, we can't question the people's rationale but we have to respond to their rationale.

While we were talking about the economy of scale, yes, there were debates on integrated management of multiple CFs. But I think it is possible that without undermining the emotional attachment and institutional integrity of CFUGs, even if they have less than 1 ha, we can actually pool resources and opportunities out of these small forests to develop some higher-level economic transactions and business. Whether its forest products or business attributed to ecosystem services, for example, tourism or any other kind of business without compromising the basic belongingness and tenure security of community forestry, we have to explore to the extent possible. So, while we are talking about the basic economy, we are not dismantling the current community forestry system.

From the agroforestry point of view, bringing agroforestry into forest doesn't automatically hamper the forest quality. Because one can do agroforestry without compromising the forest quality. Second, the increasing trend of underutilized land begs the question of access. Most of the abandoned land are of those who have relatively higher land holdings. So, there are people seeking land and there is land being abandoned. So, agroforestry can benefit those with small land holding.

Remarks (Bharati Pathak, Chairperson-FECOFUN)

The report time and again emphasised on the declining interests of community forestry members. But the point is they are frustrated, mainly due to the control by the authorities. For the last two years, they have not been able to harvest anything from the forest. Most of the time, the regulations have been too stringent. The report has not highlighted these aspects.

State has not invested on people for several years and how can the ordinary people, the women, Dalits, and poor manage their resources properly. Once we move to federalism, community forestry has been the first victim due to imposition of multiple tax, increased pressure on community forestry land. Likewise, the government initially handed over

forests when it was in a poor condition, following which people invested for the last 40 years, resource stock increased, but now, the government has increased its claim.

The community forestry modality is the best in the world and any country, expanding this programme have learnt from us. However, we at home are looking for alternatives. There is something wrong in our thinking.

Remarks (H. E. Felicity Volk, Ambassador of Australia)

When I arrived to Nepal last January and met with people, almost everywhere, I heard people taking reference of Australia's early support in Nepal's forestry, and community forestry. In this context, this report is very timely. It also shows the good collaboration between Australian and Nepali scholars.

We must adapt to the new emerging situation. The report has rightly highlighted the key issues and their implications to community forestry in Nepal. Migration, urbanisation, remittance, changing livelihood patterns all have changed forest landscapes. Covid-19 has further affected this sector.

Generations of Australian foresters have worked in the community forestry programme and generations of Nepalese foresters have undertaken their post graduate studies in Australia or have been trained by Australian foresters in Nepal.

This time we have supported AUD 2.5m through EnLiFT2 which is working on enhancing rural livelihoods through better forest management and forestry business. In the two districts of Sindhupalchok and Kavre, 26000 ha of forests have been established through Australian support. The partnership between Australia and Nepal has made an important contribution to developing and fostering community-based approaches to forest management, which is still relevant today, but obviously needs to be adjusted to the new circumstances.

With the significant socio-economic and socio-political change, and shifts in national and international contexts, community forestry models and approaches clearly need to evolve too. HE the Ambassador stressed that the report generates more discussions and that it will make valuable contributions into shaping the future directions of the sector.

Remarks (Dr. Pem Kandel, secretary, MOFE) The secretary expressed his appreciation to all the editors and authors of the report. He stressed that this is a very timely report and will be a foundation for MOFE to revisit and revise many of the policies and regulations.

Nepal's community forestry is not only a forestry program but also a rural development programme comprising a whole range of issues, including health, drinking water, income and employment, and most importantly leadership which has now spread across civic and political organizations.

However, we must acknowledge the changing socio-economic contexts and its implications on forest-people relation and community forestry management which the report has rightly highlighted. He expressed his agreement on the fact that community forestry is still important from economic and other aspects and therefore should be revitalised.

This report will become a foundation for MOFE to review and review many policy and regulatory aspects to facilitate adaption in the current contexts.

Closing remarks (Dr. Sindhu Dhungana, chair of the programme and Head of Participatory Forestry Division)

Dr. Sindhu Dhungana, Chair of the report launch programme expressed his appreciation to the Chief guest, Special guest, and participants from government and non-government institutions. He expressed that as the Ambassador is not only a diplomat, but a writer as well and invited HE to contribute a chapter to the upcoming community forestry book.

Community forestry is not a monolithic and 43 of us (authors) may have diverse opinions. He expressed that; community forestry is the only programme to showcase inclusive institution that is why I decided to contribute to that chapter.

The report has highlighted gaps and we should be mindful of those gaps, it is not advocating for alternative. We should not be afraid of 'silviculture' of 'private sector' or 'market' per se. But the question is how to deal with these and benefit from there.

What is important is the core principles of collective action in local commons. Also important is the issue of economic incentive, and while saying so, we are not only talking about timber but a range of other products and services from forestry sector. Likewise, tenure security of people is most important and we must defend that. Forest officials should not worry with the term. Finally, the Chair thanked all the participants for attending and closed the programme.