

PROGRESS REPORT

Dutch-Sino East Africa Bamboo Development Programme: Phase II

Project Number: 4000003339

Reporting Period: Apr-Dec 2020

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**The Ministry of Foreign Trade and Development Cooperation of
the Netherlands**

Prepared by:

The International Network for Bamboo and Rattan (INBAR)



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Disclaimer

The authors accept full responsibility for the content of this report. The report does not necessarily reflect the views of the Ministry of Foreign Trade and Development Cooperation, the Netherlands and/or National Forestry and Grassland Administration, China.

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Acronyms and Abbreviations

Acronym	Abbreviation
BMB	Bamboo Mat Board
BAK	Bamboo Association of Kenya
BDS	Business Development Services
BoA	Bureau of Agriculture
BSG	Benishangul-Gumuz
BV	Dutch Limited Liability Company
CAS	Chief Administrative Secretary
CBO	Community Based Organisation
CCA	Coper-Chrome-Arsenic
CCB	Copper-Chrome Boron
CFA	Community Forest Association
CFMG	Community Forest Management Group
CIDCA	China International Development Cooperation Agency
CoC	Center of Competence
CoP	Community of Practice
CPTC	Common Production and Training Centre
CRGE	Climate Resilient Green Economy
DSR	Diagnostic Study Report
DUS / WDUS	Uganda Standards Code
EA	Ethiopian Standards Code
EBA	Ethiopia Bamboo Association
EEFCCC	Ethiopia Environment, Forest and Climate Change Commission
EEFRI	Ethiopian Environment and Forest Research Institute
EiABC	Ethiopia Institute of Architecture and Building Construction
EIC	Ethiopian Investment Commission
ESA	Ethiopian Standard Agency
ETTE	Ethiopia Tourist Trading Enterprise
EUR	Euro
F	Female
FeSMMIPA	Federal Small and Medium Manufacturing Industrial Promotion Agency
FOB	Friends of Bamboo Private Limited
FSC	Forest Stewardship Council
GPE	Green Pot Enterprises
HA	Hectares
HH	Household
ICBR	International Centre for Bamboo and Rattan
IFAD	International Fund for Agricultural Development
IISWA	Indian Institute of Soil and Water Conservation
Inter-Africa	Inter-Africa Smallholder Bamboo Livelihood Development Project
INBAR	International Network for Bamboo and Rattan
KEBS	Kenya Bureau of Standards
KEFRI	Kenya Forestry Research Institute
KFS	Kenya Forestry Service

KIEPA	Kalongo Integrated Environment Protection Association
KS	Kenya Standards Code
KWTA	Kenya Water Towers Agency
M	Male
Mn	Million
MoEF	Ministry of Environment and Forest (Kenya)
MoFA	Ministry of Foreign Affairs (the Netherlands)
MoFCOM	Ministry of Finance and Commerce (China)
MoWE	Ministry of Water and Environment (Uganda)
NaFORRI	National Forestry Resources Research Institute
NARL	National Agriculture Research Laboratory (Uganda)
NCPP	NGO-Community-Private Partnership
NFA	National Forest Authority
NFGA	National Forestry and Grassland Authority
NGO	Non-Governmental Organisation
NTFP	Non Timber Forest Products
OS	Occupational Standards
PIC	Productivity Improvement Center
PLC	Private Limited Company
PS	Participator Stewards
R&D	Research and Development
SME	Small and Medium Enterprises
SNNPRS	Southern Nations, Nationality and Peoples Regional State
SNV	Netherlands Development Organisation
TC	Theory of change
TOT	Training of Trainers
TTLM	Teaching Training Learning Materials
TVET	Technical, Vocation, Education and Training
UBA	Uganda Bamboo Association
UBC	Uganda Broadcasting Corporation
UFA	Uganda Forestry Association
UIA	Uganda investment authority
UIRI	Uganda Industrial Research Institute
UNBS	Uganda National Bureau of Standards
VGS	Voluntary guidelines of standards
WUR	Wageningen University & research
ZAFU	Zhejiang Agriculture and Forestry University

1. EXECUTIVE SUMMARY

The Dutch-Sino Phase-II East Africa Bamboo Development Programme (Grant Number: 4000003339) is implemented by INBAR since April 2020. The programme is financed by the Ministry of Foreign Affairs of the Netherlands and the National Forestry and Grassland Administration (NFGA) of China for a period of three years. This report covers the programme activities for the period from April 2020 to Dec 2020.

Programme goals and objectives

The overall programme goal is to enhance climate change mitigation and adaptation benefits by developing inclusive and sustainable industrial and SME bamboo value chains resulting in enhanced livelihood opportunities, food security and environment management in East Africa.

The *specific objectives* are:

- (a) Pro-poor Industry and SME Value-Chain development by upscaling the existing value chains and diversification into new value-chains;
- (b) Restoration and Sustainable Management of bamboo resources contributing to decreased deforestation, enhanced sinks and increased climate resilience on ecosystem and livelihoods; and
- (C) Improved business environment, market development, policy and regulatory framework for increased public and private sector investment.

The programme covers three beneficiary countries in Eastern Africa: Ethiopia, Kenya and Uganda, and includes China and the Netherlands, as knowledge providers.

Results: Key achievements against indicators

The programme achieved the following key deliverables, from April to December 2020, under its five outcome areas:

Outcome 1: Improved employment and livelihood opportunities: Green economic growth achieved through strengthening and diversification of SME value chains and specialisation of industrial bamboo value-chains.

The programme organized 41 (30 percent against the target indicator) skill development trainings; and 8 entrepreneurship training (27 percent of target indicator) and provided tools and equipment to 16 enterprises (18 percent of the target) to improve the quality and quantity of production. The programme trained 1368 (847M/521F) beneficiaries against the target indicator of 5000 beneficiaries achieving 27 percent of the target indicator. The programme supported four common production and training centers against the target of 10 CPTC over the period of project, which currently employs 16 (11M/5F) youth and women in production. In addition to strengthening one NCPP household charcoal production unit in Amhara (500 beneficiaries), the programme identified and finalised two clusters and infrastructure for setting up two NCPP household charcoal briquetting units in Kenya and Uganda. 2000 households were identified and mobilised to supply household charcoal, the purchase of the machines with capacity to produce 1 ton per shift is procured. These two enterprises will be operationalised in year 2 of the programme. Wageningen University and Research has submitted the final report on composite product research and shared with the leading bamboo industries in Ethiopia. TVET-CDACC agency in Kenya and Makerere University in Uganda agreed to develop bamboo curriculum. A joint action plan has been developed with ICBR to operationalise the BMB mats board in Ethiopia. The CIDCA/MOFCOM and Moso industry training was not possible, due to Covid-19 pandemic and international travel

restrictions. Overall, the programme have reached to 3884 beneficiaries against the overall indicator of 10000 beneficiaries.

Outcome 2: Increased bamboo restoration, sustainable management in forest and farms providing climate change mitigation and resilience benefits.

The programme supported 36 large scale nurseries, achieving 103 percent of the overall target indicators, and supported establishment of 25 small scale nurseries, achieving 25 percent of the target indicators. Overall, the nurseries produced 1,606,006 bamboo plants, achieving 40 percent of the target indicators. The nurseries provide employment to 249(92M/157F) beneficiaries achieving 25 percent of the target indicators. Taxonomic classification of high land bamboo in Ethiopia has been undertaken with Ethiopia Environment and Forest Research Institute(EEFRI). Besides, three bamboo site species matching study have been initiated in the beneficiary countries with EEFRI, KEFRI and NaFORRI. The programme facilitated establishment of 1295.97 hectares of bamboo plantation against the overall target of 5000 hectares (25 percent of target), which has benefitted 1338 (595M/743F) smallholder farmers planting bamboo in their farmlands and households to improve resilience. 468.45 hectares of bamboo farms has been brought under sustainable management regime benefiting 935 (170M/765F) smallholder farmers, achieving 9.35 percent of target indicator. The programme organized six ToTs trainings for 157(128M/29F) beneficiaries from government line departments on bamboo vegetative propagation, nursery development and sustainable management. Moreover, 42 community level trainings on bamboo resource development was provided for 1575 (577M/998) smallholder farmers, women and youth. Overall the programme build the capacities of 1732 (705M/1027F) smallholder farmers, line department and extension workers against the overall indicator of 7500 beneficiaries (23 percent of the overall target indicators).

Due to Covid-19 pandemic and international travel restrictions the carbon credit project, RBD research plot for growth, soil and hydrology study in Kenya including international and regional capacity building workshops could not be possible in this reporting year.

Outcome 3: Strengthened value-chain governance and institutional mechanism for creating enabling environment for increased public and private sector investment.'

The programme initiated the work on establishing three supply-chain development against the overall target of six supply chain development. The programme established eight cooperatives or association against the overall target of 30 primary and secondary cooperatives or associations (achieving 27 percent of the target) reaching out to 686 (378 M / 308 F) farmers and harvesters for establishing supply chain with SME and industry in the programme beneficiary countries against the target indicator of 3000 beneficiaries (achieving 23 percent of the target indicators). In collaboration with INBAR Inter-Africa smallholder bamboo livelihood development programme training and capacity building on supply-chain and marketing was provided to 474 (332M/142F) smallholders. Moreover, three local market infrastructure was developed against the target of six local market infrastructure. However, further support and upgradation is needed in the subsequent reporting periods.

The programme supported the development and publication of five national standards; out of which two are published and another three standards are under public review. The programme in collaboration with Ethiopian Environment Forest and Climate Change Commission (EFCCC) has identified 1000-hectare forest area for developing it as a FSC certified forest. Moreover, the programme organised three domestic trade fairs / exhibitions against the target indicator of nine

trade fair achieving 33 percent of overall target. A total of 100 entrepreneurs participated in the three local exhibitions. IEC materials for industries and enterprises for market development produced. The Ethiopian Investment Commission has included bamboo for green economic development in their investment guide. Nine awareness events and one video programme were organised for public awareness creation on bamboo which reached 2649 farmers, growers, consumers and SMEs. Six news blogs, programme flyers, four technical bulletins were produced. The organising / participation in an international trade fair, investor tour could not be organised due to Covid 19 pandemic and international travel restrictions.

Outcome 4: Facilitate building of multi-stakeholder platforms'

The field office for implementing the programme activities have been set-up in three countries. The programme supported the establishment of three bamboo units in the programme beneficiary countries. The three units were established at EEFC, KEFRI and NFA premises for Ethiopia, Kenya and Uganda respectively. Two bamboo associations (Kenya Bamboo Association and Uganda Bamboo Association) have been supported with computer, furniture and preparing their five years' strategic plan. The members for setting up multi-stakeholder platforms to standardize bamboo strategy and action plan of each country was identified. During the subsequent reporting periods, multi-stakeholder platforms meetings will be organised to integrate bamboo into government planning systems. Three communities of practice(CoP) were established. The cross learning visits and CIDCA/MoFCOM training workshop for policy makers and functionaries could not be organised due to COVID-19 situation.

Outcome 5: Mechanisms for continuous monitoring

The programme has finalised the baseline study and prepared the M&E framework. The programme has been identified and finalized 22 potential bamboo clusters (6 in Ethiopia, 8 in Kenya, and 8 in Uganda) and involved 10675 households; a cluster diagnostic study report prepared for interventions in the beneficiary countries. Further, the gender analysis study and gender mainstreaming strategy was prepared and implemented. An online monitoring and evaluation system is designed and the full application is under development. Moreover, 12 participatory stewards were deployed in the cluster for frontline facilitation. The programme steering committee has been formed and first steering committee meeting organised virtually.

2. BACKGROUND

2.1. PROJECT SUMMARY

Project title	Dutch-Sino East Africa Bamboo Development Programme: Phase II
Project number	4000003339
Project starting date	01 April 2020
Project completion date	31 March 2023
Implementing organisation	International Network for Bamboo and Rattan
Grant amount (EUR)	4, 689, 624
Beneficiary countries	Ethiopia, Kenya and Uganda
Reporting period	1 April – 31 December 2020

The Dutch-Sino East Africa Bamboo Development Programme - Phase II is planned to build on and scale up the interventions and opportunities opened as a result of the previous programme. East Africa especially Ethiopia, Kenya and Uganda have excellent bamboo resources and suitable agro-ecologic conditions for ideal growth of bamboo. Enormous domestic and international market opportunities exist for bamboo. However, the bamboo sector is at its infant stage and further support is necessary to strengthen bamboo value chain, enabling the countries to tap into the potential of bamboo for livelihood development, job creation, industry and SME development, and environment management that is climate change mitigation and resilience.

The programme is aligned to the Dutch Multi-Annual Country Strategy 2019-2022 of Ethiopia, Kenya and Uganda and has direct linkages with the Dutch results framework particularly (a) climate change, (b) energy, (c) forest and land use, (d) food and nutrition security, and private sector development. Moreover, the programme contributes to the national government priorities of beneficiary countries:

- Ethiopia - Bamboo Development Strategy and Action Plan (2019-30), Growth and Transformation Plan and Climate Resilient Green Economy Strategy (CRGE);
- Kenya - Kenya Vision 2030; Big Four Agenda; and Medium-Term Plan III; and
- Uganda - National Bamboo Strategy and Action Plan (2019 – 30); Uganda Vision 2040 and National Development Plan.

2.2. GRANT GOAL, OBJECTIVES AND TARGET GROUP

The overall programme goal is to enhance climate change mitigation and adaptation benefits by developing inclusive and sustainable industrial and SME bamboo value chains resulting in enhanced livelihood opportunities, food security and environment management in East Africa.

The specific objectives of the programme are to:

- develop pro-poor industry and SME value-chain by upscaling the existing value chains and diversification into new value-chains;
- restore and sustainably manage bamboo resources contributing to decreased deforestation, enhanced sinks and increased climate resilience on ecosystem and livelihoods;
- Improved business environment, market development, policy and regulatory framework for increased public and private sector investment.





The target direct beneficiaries are 28,000 (50 per cent women) smallholder farmers, women, youth, SME and industries. The main final beneficiaries will be the consumers through increased access

to high quality, economical and environment friendly bamboo products; and furthermore, the programme will contribute enormously to the climate change mitigation and building resilience to smallholder farmers. In addition, the impact investors, banks and financial institutions will benefit through access to new investment opportunities, and expansion of markets and operation. Governments will be able to meet their green growth, climate change mitigation and trade targets. The government line departments such as industries, rural development, and environmental security; technical and research institution, rural extension and business agents, and grass root organization will benefit by improved capacities.

To achieve these objectives and to reach the target beneficiaries, the programme will deliver the following outcomes:

- Outcome 1:** Improved employment and livelihood opportunities: Green economic growth achieved through strengthening and diversification of SME value-chains and specialisation of industrial bamboo value-chains;
- Outcome 2:** Increased bamboo restoration, sustainable management in forest and farms providing climate change mitigation and resilience benefits;
- Outcome 3:** Strengthened governance and Institutional mechanism for creating enabling environment for increased public and private sector investment;
- Outcome 4:** Facilitate establishment of multi-stakeholder platform.

Target Countries and Intervention Locations

	
<p>Beneficiary and knowledge provider Countries</p>	<p>Ethiopia: Target locations</p>
	
<p>Kenya: Target locations</p>	<p>Uganda: Target locations</p>

3. IMPLEMENTATION PROGRESS

3.1. PROJECT EXPENDITURE PER YEAR

Details	Year 1 (Apr2020 – Mar 2021)	Year 2 (Apr2021– Mar 2022)	Year 3 (Apr 2022– Mar2023)	Total (EUR)
Funds received (EUR)	1,553,215	999,126	Nil	2, 552,341
Expenditure (EUR)	536,259	Nil	Nil	536,259
Balance (EUR)	1,016,956	Nil	Nil	2,016,082

3.2. COUNTRY-WISE BUDGET AND EXPENDITURES TILL DECEMBER 2020

Project Country	Aggregated Actual Expenditures till Dec 2020 (in Euro)	Estimate Expenditures For Remaining Programme Period (in Euro)	Total in Euro
Ethiopia	214,419	1,210,789	1,425,208
Kenya	182,516	1,475,492	1,658,008
Uganda	139,325	1,467,083	1,606,408
Total	5,36,259	4.153,365	4,689,624

3.2.1. BRIEF COMMENTS ON EXPENDITURE

During the year-1 of the programme (Apr 20 – Mar 21), INBAR received EUR 1,553,215 from the Ministry of Foreign Trade and Development Cooperation of the Netherlands, and INBAR spent a total of EUR 536,259 for programme implementation from April – December 2020. Further, after submission of the interim progress, work plan and budget of year 2 (Jan 21 – Dec 21), INBAR received EUR 999, 126 from the Ministry of Foreign Trade and Development Cooperation of the Netherlands. An independent auditor's report for the year-1 expenditure and transaction list of expenditure (April – December 2020) is attached as **Appendix I** and **Appendix II**.

The expenses incurred are in line with the budget categories and allocated budget. Till date, there are no variances in the actual allocation budget versus expenditure.

3.3. PHYSICAL PROGRESS BY OUTCOME: PROGRESS FROM APRIL – DECEMBER 2021

In continuation of the Phase I of the programme, INBAR retained the contracts of the three national coordinators. Moreover, with the approval of the Phase II of the programme, INBAR recruited and appointed the Regional Programme Manager, three Technical Officer, one Communications Specialist, Finance Officer, two Cashier and a Driver.

Necessary approvals for rolling out programme and partnership with counterpart organisations in Ethiopia, Kenya and Uganda were obtained. In Ethiopia, with availability of INBAR East Africa Regional Office, the programme staff were hosted in INBAR regional office. In Kenya, Kenya Forestry Research Institute (KEFRI) and in Uganda the National Forestry Authority (NFA) hosts the programme staff and provide logistical support for the programme.

The programme activities are rolled out on the ground since the beginning of the programme from April 2020.

3.3.1. OUTCOME 1: IMPROVED EMPLOYMENT AND LIVELIHOOD OPPORTUNITIES: GREEN ECONOMIC GROWTH ACHIEVED THROUGH STRENGTHENING AND DIVERSIFICATION OF SME VALUE-CHAINS AND SPECIALISATION OF INDUSTRIAL BAMBOO VALUE-CHAINS.

ACTIVITY 1.1: CAPACITY BUILDING / TECHNOLOGY TRANSFER AND PROVISION OF BASIC EQUIPMENT, ENTREPRENEURSHIP AND BDS FOR EAST AFRICAN SME'S

INDICATOR: 135 trainings on bamboo value chain; 30 training on entrepreneurship; 3 CIDCA/MOFCOM training; 4 curriculum developed. 5000 people trained.

S. No	Outputs	Overall Indicator	Achievement			Overall Achievement	Percent (%) achieved
			Ethiopia	Kenya	Uganda		
1.	Training on bamboo value addition	135 Nos	17	14	10	41	30
2.	Training on Entrepreneurship	30 Nos	3	2	3	8	27
3.	Distribution of tools to enterprise	90 Nos	7	5	4	16	18
4.	CIDCA/MOFCOM TOT training programme	3	-	-	-	-	-
5.	Curriculum developed	4	-	1	1	2	In progress
6.	No. of people trained	5000	614 (463M/151F)	450 (252M/198F)	304 (132M/172F)	1368 (847M/521F)	27.36

The programme organised a total of 41 technical skill development training for SME entrepreneurs and industry workers benefiting 1247 (782M/465F) beneficiaries. The details of the training programme are shown as **Annexure I** and the photographs of the trainings are shown as **Annexure II**. Moreover, eight (8) trainings on entrepreneurship and business development were provided for 121 (65M/56F) beneficiaries. The details of the training programs and the photographs of business development trainings were shown as **Annexure III and IV** respectively. Tools and equipment were provided to 16 enterprises for improving the product quality and enhance the production efficiency. The details of the SME and tools / equipment are presented on **Annexure V**. The preparatory works for the development of TVET course curriculum in Kenya (TVET-CDACC) and Uganda (Mekerere University) is in progress. Overall, the programme-built capacity of 1368 (847M/521F) beneficiaries, achieving 27 percent of the overall programme target.

The detailed country wise activity achievements under this activity are as below:

Ethiopia: The total of 17 technical and skill development trainings were conducted for 569 (434M/135F) beneficiaries, out of which 11 trainings were organised under Dutch-Sino programme and six trainings were organised under Intra-Africa project. The training programmes focused on skill building of SME and household enterprises on production of bamboo furniture, bamboo beds for hospitals and primary health centre, and bamboo bio-plastic utility items i.e. litter bins, laundry basket, kitchen vegetable baskets and mat based products.

Three (3) training on Entrepreneurship and Business Development was provided to 45 (29M/16F) beneficiaries. Moreover, tools, jigs and fixtures were provided to seven SME located in three clusters. The tools and equipment distributed were efficiently by enterprises, that has diversified their product range, production in terms of both quality and quantity and reduction in wastage.

Kenya: A total of 14 technical and skill development training were conducted for 419 (236M/183F) beneficiaries. The focus areas of the training were bamboo utility products, housing, bamboo crafts, bamboo shoots, furniture, and bamboo treatment. Moreover, two trainings on entrepreneurship and business development was conducted in two clusters benefiting 31 (16M/15F) beneficiaries. Tools, jigs and fixtures were provided to 05 enterprises located in five clusters. Technical handholding and guidance was provided to Green Pot Enterprise for identification of machines and tools to establish a bamboo factory.

The programme-initiated consultations with TVET-Curriculum Development Assessment and Certification Council (TVET CDACC). There has been three rounds virtual meeting to discuss and agree on the way forward. Initially, the occupational standards (OS) will be developed and it will help the requirement of the bamboo course as per the industry and enterprises. Based on the occupational standards, course curriculum will be developed and the curriculum will be used as guide for the teaching training learning materials (TTLM) development. Finally, it was agreed with TVET-CDACC to develop level-1 curriculum and Kenya Forestry College will run the course and TVET-CDACC will conduct the CoC (certificate of competency). The actual work on curriculum development will start from beginning of Year 2 of the programme.

Uganda: A total of 10 technical and skill development training were conducted for 259 (112M/147F) beneficiaries. The focus areas of the training were bamboo construction, tongue depressor for Covid-19 testing, bamboo shoots production and bamboo utility products. Three entrepreneurship and business development training were conducted for 45(20 M/25F) beneficiaries. The business and entrepreneurship training focused on product pricing, cost management, micro business plan preparation, market development, branding the products and building the enterprises. Moreover, tools and equipment were distributed to the four prospective enterprises in two clusters. Most importantly, necessary technical support and handholding was being provided to Konkiti Bamboo Works for establishing the bamboo industry and initiating production of bamboo tooth picks and stick based products.

The bamboo curriculum development initiative has been undertaken in collaboration with Environmental and Geographical Sciences, School of Forestry, Makerere University. The programme is pairing an Indian University (Tripura Central University) with Mekerere University to curriculum development. Once developed, Makerere University and Nyabyeya Forestry College will be involved to run the course. The course development work will be done during Year 2 of the programme.

ACTIVITY 1.2: BAMBOO COMMON TREATMENT AND PROCESSING HUBS AS DEMONSTRATION, TRAINING AND ENTERPRISE PARTKS DEVELOPED WITH DESIGN, PROTOTYPING, MARKETING, BDS, INPUTS, TOOLS AND FINISHING FACILITY.

INDICATOR: Four new CPTC established, 10 CPTC strengthened; BMB industry operationalised in PPP model; 500 women and youth engaged.

During year-1, the programme team initiated the identification of suitable locations for setting up two CPTC – one each in Kenya and Uganda. A feasibility report has been prepared and shared with ICBR to identify the machines and tools for the CPTC. The programme strengthened the existing four CPTC (2 in Ethiopia and 1 each in Kenya and Uganda) with additional tools, materials, repair and rectification work to strengthen its operationalization. INBAR has entered into an agreement with ICBR to operationalise the Bamboo Mat Board (BMB) industry in Ethiopia. Support was also given to Ethiopia Productivity Improvement Centre(PIC) to prepare joint work plan, identify the potential PPP partners, identify cluster for supply chains of raw materials and formation of stakeholder groups. The existing CPTC in Moyo, Uganda is providing regular employment for 11 (6M/5F) youth and women, and CPTC Migori in Kenya is providing regular employment for 5 (5 M) youth and in Ethiopia two CPTC in Amhara and Oromia region generated consistent employment for 9(7M/2F) youth.

Ethiopia: The two CPTC located at Dare Enchini (Oromia region) and Injibara (Amhara) region were operationalised by rectification of electrical works and spare parts of the machinery. To operationalize the bamboo mats board (BMB) industry at production improvement centre (PIC) at Addis Ababa, Ethiopia, a joint action plan has been developed with International Centre for Bamboo and Rattan (ICBR). The programme team has organised a preliminary meeting with the PIC authorities to devise the PPP mechanism and to coordinate necessary approval from the line ministries. To install and commission the BMB industry, Chinese machine experts are needed to travel to Ethiopia to undertake assessment of the existing condition of machines and equipment and procure the needed parts that needs change and /or upgradation. Due to Covid-19 pandemic and international travel restrictions the ICBR experts could not travel to the PIC Addis Ababa Ethiopia. Once the COVID-19 situation improves, inspection visits will be organised and further action related to installation, commissioning and operationalization of PPP model will be undertaken.

Kenya: In addition to devising joint work plan with ICBR, the programme team in association with KEFRI identified the location for establishing new CPTC. The ground work in terms of survey of maintenance of building/working shed and electrifications are in progress. Discussions are ongoing with local stakeholders and ICBR to finalise the list of machines, tools and equipment. The programme will coordinate the procurement and establishment of new CPTC in next reporting period. The CPTC established during Phase I of the programme located at Migori with facilities for bamboo preservation and treatment, primary processing and furniture production is fully functional providing regular employment for 5 youth.

Uganda: In addition to devising joint work with ICBR, the programme team is working with National Forestry Authority (NFA) to identify suitable location and infrastructure for establishment of a new CPTC. Moreover, material, technical and handholding support for the CPTC established during the Phase I of the program (Friends of Bamboo Ltd (FOB), Moyo in Uganda). The CPTC is collaborating with Zetu Africa to produce portable bamboo seats for school children in addition to undertaking regular bamboo construction projects in Uganda. The existing CPTC in Moyo provide regular employment to 11 youth (6M/5F).

The details of the CPTC supported, and the pictures are shown as **Annexure-VI and VII**.

ACTIVITY 1.3: MODEL ENTERPRISES FOR HOUSEHOLD CHARCOAL AND BIOMASS ENERGY

INDICATOR: Five bamboo bio-energy industry established; three technology demonstrated; four stove and mould production enterprise. Two biomass energy business cases; 5000 (5000W) and smallholders benefiting from enterprise.

During the first year of implementation, the programme identified potential clusters in the beneficiary countries to establish two bamboo charcoal briquetting enterprise. The machinery and equipment needed for production of 1-ton-shift pillow block briquettes was procured. The NCPP model enterprise in Kenya and Uganda will be operational in Year-2.

Ethiopia: One NCPP model bamboo charcoal briquetting enterprise is operating in Bahirdar, Amhara region. The unit was established by INBAR-IFAD programme and was also supported by Dutch-Sino Phase II programme in developing market linkages, product branding and further capacity strengthening. Currently, 500 women are involved in waste charcoal collection, primary processing and making steady supply chain with the NCPP unit.

Kenya: The programme team undertook scoping and identified Bulemia village, Butula, Busia county for establishment of the briquetting unit as the location has established building infrastructure and currently the households are using wood for daily cooking. The machines and equipment's (pulveriser, mixer and briquetting machines) were already procured. Around 1000 were women mobilized to get hands on training on charcoal production, collection, and primary processing. The NCPP household charcoal enterprise establishment work, machine shipment from India to Kenya, training, cluster development and supply chain development will happen during year 2 of the programme. Furthermore, the women are organised into sub-cluster within the cluster for production efficiency and supply chain management. In addition to charcoal briquetting enterprise, two producing stoves enterprises were identified that include Stamp Clean-tech Ltd and Wisdom Jiko in Nairobi and Nyandarua respectively to replicate their models and operations.

Uganda: A suitable site for establishment of NCPP household charcoal briquetting enterprise has been identified in collaboration with National Forestry Authority(NFA) at Kampala. Around 1000 women are mobilised in cluster and awareness created on utility of bamboo charcoal briquetting, household level charcoal production, supply chain management, and overall health benefits from bamboo charcoal briquetting. A live demonstration was also given to the cluster women for developing the confidence on bamboo charcoal burning efficiency, time savings and protection of health. Moreover, Josa Green Enterprises has been contacted and handholding support extended for strengthening production capacity of the mould and stove in scientific way and supply to the cluster.

ACTIVITY 1.4: RESEARCH AND DEVELOPMENT OF NEW MARKET ORIENTED PRODUCTS

INDICATOR: Age-wise property test report of three bamboo species published; two bamboo bio-energy conversion technology + business model demonstrated; One new bamboo product composite developed; and LCA study on bamboo biomass conversion technology published.

The programme in collaboration with ICBR finalised the protocol for sample collection for undertaking the age-wise property-machine compatibility-product testing. Three predominant species in east Africa namely *Yushania alpina* or *Oldeania alpina*, *Oxytenanthera abyssinica*,

Dendrocalamus asper were finalised for sample collection. The samples of *Oldeania alpina* and *Oxytenanthera abyssinica* will be collected from Ethiopia and samples from *Dendrocalamus asper* will be collected from Kenya and a 20 feet container will be sent to China for age-wise property testing (physical, mechanical, chemical and anatomical) as well as for machine and product compatibility. The bamboo sample collection, processing, shipment and testing will be undertaken during year 2 of the programme.

Two bio-energy conservation technology including business model and LCA studies will be undertaken with biomass energy project of INBAR in Ethiopia. However, the project did not launch on account of COVID-19 pandemic. Moreover, the programme supported the Divine Bamboo Works and Ndejje University's Centre for research in energy and energy conversion on bamboo charcoal bamboo biomass conversion technology in Uganda.

The Wageningen Food and Bio based Research undertaken during the Phase I on the development of bamboo composites from Ethiopian bamboo was finalized. The final report is shared with SA Bamboo Plc., Addis Ababa, Ethiopia, for execution in their product line. Currently the industry in Ethiopia is producing bamboo panels and bamboo stick-based products – blinds, tooth picks, incense sticks. The study found that production of injection molded plastic composite panels could be a new option for bamboo products in Ethiopia and indicated that the composites of highland bamboo had slightly lower mechanical properties than lowland bamboo. The final report is attached as **Appendix III**.

3.3.2. OUTCOME 2: INCREASED BAMBOO RESTORATION, SUSTAINABLE MANAGEMENT IN FOREST AND FARMS PROVIDING CLIMATE CHANGE MITIGATION AND RESILIENCE BENEFITS

ACTIVITY 2.1: STRENGTHEN BAMBOO PLANTING MATERIAL PRODUCTION SYSTEMS

INDICATOR: 35 Government, NGO/CBO and private nurseries supported; 100 small scale community and private nurseries (youth and women) supported; Two bamboo tissue culture protocol and three tissue culture units producing bamboo plants; Taxonomic classification of highland bamboo and SNP marker for germplasm management, breeding and utilisation; 4 million bamboo plants produced and 1000 beneficiaries (250 M/750F)

S. No	Outputs	Overall Indicator	Achievement			Overall Achievement	Achievement (%)
			Ethiopia	Kenya	Uganda		
1.	Largescale nurseries	35	22	7	7	36	103
2.	Small scale nurseries	100	4	10	11	25	25
4.	Tissue culture protocol	2	-	1	1	2	In progress
5.	Taxonomic classification study	1 report	1	-	-	-	In progress
5.	DNA SNP marker identification study	1 paper	I	-	-	-	100 In progress under final review
6.	No of plants produced	4 Million	801972	501608	302426	1606006	40.15
7.	No of beneficiaries	1000 (250 M/750 W)	41(24M/17F)	113(47 M/66F)	95(21M/74F)	249(92M/157 F)	25

During Year 1, the programme strengthened 36 large scale nurseries against the overall programme of 35 nurseries. Moreover, 25 women and youth nurseries were established achieving 25 percent of the target. The programme procured around 1310.5 kilogram of bamboo seeds from China, India and Ethiopia. The seeds procured from China (*Dendrocalamus asper*, *D yunnanensis*, and *Bambusa longinternode*) and India (*Bambusa tulda*, *Bambusa polymorpha* and *D strictus*) belong to the sympodial bamboo species. The indigenous bamboo species: *Yushania alpina* or *Oldeania alpina* (Highland bamboo) and *Oxytenanthera abyssinica* (low land bamboo) were collected from Ethiopia. These seeds were distributed to the nurseries and portion of the indigenous bamboo species are stored in cold storage for further distribution. The large and small scale nurseries produced a total of 1,606,006 bamboo plant against the overall target of 4 million plants. Taxonomic classification study and DNA SNP marker identification study and tissue culture protocol development works are ongoing and the publication will be done in 2021. The details of the large scale nurseries, and the seedlings produced in Ethiopia, Kenya and Uganda and the photographs of the same are attached as **Annexure VIII and IX**. The details of the small-scale nurseries are shown as **Annexure X and XI**.

Two scientists from Uganda who were trained during phase-I on bamboo TC plants production and management were further supported virtually by tissue culture experts and the tissue culture protocol is streamlined to produce the bamboo plants of two species namely: *Dendrocalamus asper* and *Bambusa vulgaris*.

Overall, during year-1, the programme created employment for 249(92M/157F) beneficiaries, achieving 25 percent of overall programmes target indicators. The detail of the same is attached as **Annexure XII**. The employment opportunities created are related to skilled manpower in developing and management of nurseries and private small micro nurseries. The programme emphasised to encourage the women led bamboo nurseries. Moreover, for certain operations, additional staffs are engaged.

Ethiopia: EEFCCC and Bureau of Agriculture (BoA) has taken a prime lead to promote bamboo nurseries in six regions. The focus is to produce bamboo seedlings for large scale plantation and restore the Nile River basin and comply with the prime minister's plantation programme. Dutch-Sino phase-II programme provided technical assistance and input materials such as bamboo seeds, polytube, tools and equipment for establishing and upgrading bamboo nurseries. The seed germination is about 90 percent. Moreover, the bamboo seed and technical support was provided to Arbaminch University, Debramarcos University and Bahirdar University to establish nursery and plantation under the University Community Services Programme. The large scale bamboo nurseries produced a total of 762,129 bamboo plants. Besides, four micro nurseries were also supported, which produced a total of 39, 843 bamboo plants and created new employment for 41 young people (24M/17F).

Taxonomical classification of highland bamboo land races is being undertaken with the Ethiopia Environment Forest Research Institute(EEFRI). The research methodology and field data collection work is in progress. The report will be completed and published during Year 2 of the programmes.

Moreover, in collaboration with INBAR Intra-Africa project, a research on bamboo fodder and animal experimentation study with Holeta Agricultural Research Centre of the Ethiopian Institute of Agricultural Research (EIAR) is ongoing. This research will be instrumental in promoting usage of bamboo as suitable feed and fodder. The research will be completed during year 2 of the programme.

The programme in coordination with Intra-Africa project and Addis Ababa University is working to study DNA SNP and ISSR markers of two indigenous and 31 introduced bamboo species to develop recommendations for plant breeding and multiplication; and develop tissue culture protocol and training materials of *Oxytenanthera abyssinica*. This research continued from the previous grant, and a journal article was published: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7593185/>. The DNA SNP, ISSR marker and tissue culture protocol development work is going on and in 2021 journal paper and tissue culture protocol will be developed and shared with tissue culture units in beneficiary countries.

Kenya: The programme supported seven government and private large scale nurseries to produce quality bamboo planting materials for commercial plantation and land restoration. The large scale nurseries produced a total of 385,154 bamboo plants. Moreover, the private nurseries are coming very fast and taking interest to produce the bamboo planting materials for their own plantation and selling in the market. The major private nurseries include Green Pot Enterprises, Ojwang Yellow Enterprises, Delta Bamboo, Mama ViVi, Nyabera Farm, Tiriki Tropical Farm and Garden, and Sakiki Kinale Bamboo Grower.

The programme also supported 10 small community nurseries with a capacity to produce 20,000 plants per annum. During the reporting period, these nurseries produced a total of 116,454 bamboo plants and created new employment for 113 (21M/92F) youth and women. The programme supported these small scale community nurseries with equipment, tools and inputs for small nurseries and provided technical and handholding support.

Uganda: The programme supported six government and private nurseries, which produced a total of 150,339 bamboo plants. Moreover, the programme supported 11 small scale nurseries which produced a total of 152, 087 a bamboo plants, and created employment for 95 youth and women(21M/74F).

The programme supported the National Agricultural Research Laboratories (NARL), Kawanda, to develop tissue culture protocol for *Dendrocalamus giganteus* bamboo species. After the training of tissue culture experts in India during Phase I, the NARL scientists were working on three *in vitro* experiments) to develop tissue culture protocol and produce *Dendrocalamus giganteus* plantlets. However, they faced few challenges related to rooting and sterilization protocols. The programme team organised a virtual meeting with the Indian Scientists to resolve these problems. The physical trainings and handholding in Kenya and Uganda will happen in year 2 of the programme once the travel restrictions are eased.

ACTIVITY 2.2: LARGE SCALE AND SMALLHOLDER RESTORATION AND SUSTAINABLE MANAGEMENT OF BAMBOO FORESTS AND FARMS

INDICATOR: Three site species matching study; 5000 hectare planted; 10000 (7000 M/3000 W) smallholder planted bamboo; 5000 hectares of bamboo forests and farms under sustainable management benefiting 5000(50%) women smallholder farmer; three bamboo agro-forestry model validated.

S. No	Outputs	Overall Indicator	Achievement			Overall Achievement	Achievement (%)
			Ethiopia	Kenya	Uganda		
1.	Site species matching study	3 report	1	1	1	3	100 (In Progress)

2.	Plantation	5000 ha	355.48 hectare	449.32 hectare	491.16	1295.97	25.91
3.	Smallholder farmer planted bamboo	10000 farmers	150 (110M/40F)	1059 429M/630 F)	129 (56M/73F)	1338 (595M/743F)	13.38
4.	Sustainable management	5000 ha	32.2 hectare	135.50 hectare	300.75hectare	468.45 hectare	9.37
5.	Smallholder farmers	5000 farmers	168 (37M/131F)	416 (83M/333 F)	351 (50M/301 F)	935 (170M/765F)	19
6.	Agroforestry model	3	-	-	-	-	-

Three site-species matching studies are ongoing in collaboration with Ethiopia Environment Forest Research Institute(EEFRI), Kenya Forestry Research Institute(KEFRI) and National Forestry Resources Research Institute(NaFORRI). The objective of the research is to study and validate the growth and performance of indigenous bamboo species, introduced bamboo species both in theory and practice, shortlist and provide recommendation for expansion of selected species for different agro-climatic clusters and end uses. The research design, data collection methodology developed and field data collection is in progress.

During Year-1, the programme established 1295.97 hectare of new bamboo plantation accounting for 26 percent of the overall indicator. The bamboo plants were distributed to 1,338 smallholder farmer (595M/ 743F) achieving 13.38 percent of overall indicator. The sustainable management of forest and farms was initiated on 1,400 hectare of land in Ethiopia, Kenya and Uganda and out of which 468.45 hectare were brought under sustainable management regime with an overall achievement is 9.38 percent of the programme indicator. The sustainable management of bamboo has benefitted 935 (170M/765F) beneficiaries with an overall programme achievement of 19 per cent.

Ethiopia: The programme team is closely working with Ethiopia Environment Forests and Climate Change Commission(EEFCCC), Bureau of Agriculture (BoA), Universities, and research institutions for developing and implementation of restoration plan of the country. A total of 355.48 hectare of land has been restored with 355,295 bamboo plants in collaboration with Bureau of Agriculture (BoA), EEFCCC and Inter-Africa Bamboo Development Programme of INBAR. The EEFCCC has planned to plant 20,000 hectares of land with 8 million bamboo seedlings and that is included in the national action plan. In addition to large scale plantation, bamboo plants were provided to 150 (110M/40F) smallholder farmers for planting in their farmlands and homestead. Coupled with trainings, 32.2 hectares of existing smallholder farmer's bamboo plantation was brought under sustainable management benefiting 168 (37M/131F) smallholder farmers.

Kenya: A total of 449.32 hectare of bamboo plantation was established mostly in private land as commercial cultivation. The Government of Kenya has declared bamboo as a cash crops by issuing a presidential order to promote large scale plantation in public and private land aimed at economic and livelihood promotion. Bamboo plants were distributed to 1059 (429 M/630 F) smallholder farmers. The Green Pot Enterprise has brought 135.50 hectare out of 400 hectares' target of bamboo plantation in Narok, Transmara, Embu and Tharaka Nithi under sustainable management benefiting 416 (83M/333F) smallholder farmers.

Uganda: A total of 491.16 hectares of bamboo plantation was established in government and private lands. Bamboo seedlings were distributed to 129 smallholders (56 M and 73 F) for planting in farms and in households as block planting and as shelter belts. The programme team prioritised

to involve women to maintain the gender balance in every aspect of programme implementation. National Forestry Authority has been undertaking 1000 hectare of bamboo sustainable harvesting and management practices. Demarcated 1000 hectares of bamboo growing area in Echuya (500 ha), Otze (400 ha) and HaUru West (100 ha) and 300.75 hectare was brought under sustainable bamboo forest management regime benefiting 351 (50M/301F) smallholder farmers. Moreover, the programme has strengthened community forest management groups (CFMG) with 2000 members of forest dependent communities (50 % women) by means of awareness raising, supporting bamboo planting in farm lands surrounding CFR, and sustainable management and harvesting practices.

The locational details and area of bamboo plantation are shown as **Annexure XIII**. The details of bamboo distribution and planting in smallholder farms are attached as **Annexure XIV**. The photographs of bamboo planting are shown as **Annexure XV**. The details of the sustainable management and its photographs are shown as **Annexure XVI and XVII**.

ACTIVITY 2.3: CAPACITY BUILDING OF LINE DEPARTMENT, LOCAL COMMUNITIES ON BAMBOO NURSERY, ON-FARM PLANTING, RESTORATION AND SUSTAINABLE MANAGEMENT.

INDICATOR: 25 TOT trainings; 150 community training; capacities built for 7500 smallholders, extension workers and line department officials; 1 CIDCA/MOFCOM training: 30 participants (50 % women).

S. No	Outputs	Overall Indicator	Achievement			Overall Achievement	Overall Achievement (%)
			Ethiopia	Kenya	Uganda		
1.	ToT Training	25	2	2	2	6	24
2.	No of people trained	-	53(46M/7F)	53(44M/9F)	51(38M/13F)	157 (128M / 29 F)	-
3.	Community training	150	14	15	13	42	28
4.	No. of Trainees	-	808 (444M/364F)	416 (83M/333F)	351 (50M/301F)	1575 (577M/998)	-
5.	CIDCA / MoFCOM training	1course; 30participants	-	-	-	-	-
6.	No. of Trainees	7500	861 (490M/371F)	469 (127M/342F)	402 (88M/314F)	1732 (705M/1027F)	23

The programme organized six (two in each beneficiary country) training of trainers (TOT) capacity building training for line department officials and extension workers on bamboo resource development that include propagation techniques, nursery management, plantation establishment, maintenance, and sustainable management. A total of 157 (128M/29F) participants in the five days training programme achieving 24 percent of its overall indicators. Moreover, the programme organised 42 (achieving 28 percent of overall indicator) community training on nursery, plantation and sustainable management for 1575 (577M/998) programme beneficiaries (Ethiopia 14 trainings: 808(444M/364F) beneficiaries; Kenya: 15 trainings: 416 (83M/333F) beneficiaries; Uganda: 13 trainings: 351(50M/301F) beneficiaries). Overall, the programme has built the capacities of 1732 (705M/1027F) smallholders, extension workers and line department officials accomplishing 23 percent of the overall indicators.

The details of the TOT trainings and the photographs are attached as **Annexure XVIII and XIX**. The details of the community trainings on bamboo nursery, on-farm planting and sustainable management as well as the activity photographs are attached as **Annexure XX and Annexure XXI**.

On the other hand, CIDCA/MOFCOM training could not be possible due to COVID-19 international travel restriction and postponed to Year-2, it will be conducted either physical or virtual depending on the prevailing situation.

ACTIVITY 2.4: QUANTIFYING E. AFRICA REGION BAMBOO CARBON SINKS AND ECOSYSTEM SERVICES; AND ESTABLISHING MECHANISMS TO FINANCE CARBON PROJECTS IN EAST AFRICA

INDICATOR: Bamboo carbon credit project established; one environmental research plot; one report and journal paper; 2 capacity building training (50 researchers).

The programme team initiated the activities for setting up bamboo carbon credit project as well as setting up bamboo environmental metrics research plot. Several virtual meetings and discussions were held with Zhejiang Agriculture and Forestry University (ZAFU) and Face the Future on mechanisms to quantify the bamboo carbon sinks as well as carbon credit trading. Furthermore, a project identification note for establishing a bamboo carbon project site has been prepared based on field visits to Parabongo Sub County, Agago District in East Acholi Sub-Region, Uganda. The Eco-Ways(U)Ltd and Kalongo Integrated Environmental Protection Association (KIEPA) a community-based organization were identified as local partner to set up a bamboo carbon project.

The programme team is working closely with KEFRI to develop a Bamboo Allometric and Hydrology Research plot in Gede, Coast Region. The aim of the research was to assess the growth and performance of different bamboo species in the coastal agro-ecological zone in Kenya; determine the comparative rainfall water-use efficiencies of indigenous and exotic bamboo species in the research plot; investigate the long-term effects of growing different bamboo species on soil quality and carbon stocks; and evaluate the efficacy of bamboo plantations in conserving soil and water (runoff and sedimentation). The programme organised two virtual workshops with the participation of Indian Institute of Soil and Water Conservation (IISWC) scientists and KEFRI scientists to devise the methodology for RBD research plot in Kenya for bamboo soil water research.

The quantification of carbon sinks and field work and documentation for establishment of carbon credit project in Uganda and physical establishment of environmental research plot will happen in year 2 of the programme.

3.3.3. OUTCOME 3: STRENGTHENED VALUE- CHAIN GOVERNANCE AND INSTITUTIONAL MECHANISM FOR CREATING ENABLING ENVIRONMENT FOR INCREASED PUBLIC AND PRIVATE SECTOR INVESTMENT

ACTIVITY 3.1: MULTIPRODUCT SUPPLY-CHAINS FOR BAMBOO DEVELOPED TO MOVE SMES AND INDUSTRIES FROM LOW MARKET LEVEL PRODUCTION IN TO EFFICIENT AND INTEGRATED BAMBOO VALUE CHAIN:

INDICATOR: Six reliable supply chains developed with linkages to 30 primary and secondary association or cooperatives; 3000 (50 % women) beneficiaries.

S. No	Outputs	Overall Indicator	Achievement			Overall Achievement	Overall Achievement (%)
			Ethiopia	Kenya	Uganda		
1.	Supply Chains	6	1	1	1	3	In progress
2.	Primary and Secondary Association	30	2	3	3	8	27
3.	Local Market Infrastructure	6	1	1	1	3	50
4.	Beneficiary involved in supply –chain	3000	355	186	145	686	23
5.	Training	-	474	-	-	474	-

During Year-1, the programme focused on creating awareness among bamboo growers, suppliers, SME and industries for adopting multiproduct supply-chains approach. The foundation work mainly organisation and formulation of primary associations for the development of reliable supply chain coupled with primary processing and commoditization was undertaken. The programme has facilitated organising six primary associations (Ethiopia 1, Kenya3, and Uganda2), to developed three reliable supply chains one each per beneficiary country. Moreover, this activity is clubbed with activity 3.3(market infrastructure development) for improving efficiency and flow of the supply chains. Overall, 686(378 M/ and 308 F) beneficiaries have been mobilised to promote primary association in three programme beneficiary countries.

Ethiopia: The programme mobilised 116 bamboo farmers and harvesters at Dere Enchini in Oromia region and 239 farmers and harvesters at Chenchu in Southern Nations, Nationalities and Peoples’ Region to form primary association. Primarily, these two locations are dominating the supply chain of highland bamboo to the SME and existing industry based in Addis Ababa and adjacent sub-cities. The primary association will be graduated into secondary association to play active role in multi-supply chains. In addition, training and capacity building for 474 (332M/142F) smallholders on supply chain and market development was conducted in Amhara region. A critical infrastructure will be developed in year-2 within the surrounding of the secondary cooperative. Moreover, the programme is supporting Ethiopia Tourist Trading Enterprise (ETTE) to establish bamboo multi-supply chains at Hayat for bamboo SME based in Addis Ababa.

Kenya: Three primary associations have been mobilised in three bamboo growing locations (Busia, Migori and Muranga). The private bamboo growers were mobilised and primary association were formed (Busia 75 Farmers; Migori 63 farmers, and Muranga 48 farmers). The training and capacity building, registration, and establishment of primary processing unit for commoditization will be undertaken during year 2 of the programme.

Uganda: One secondary association has been registered: Mgahinga Bamboo Crafts Makers Association with 65 members at Mulamba Sub-county, Kisoro District. Moreover, two primary associations have been promoted: Olitiku Bamboo Harvesting Group located at Aya, Pajakiri Parish, Eremi Sub-county, Moyo District (35 farmers), and Golden Speed Bamboo Cutting Group at Eremi Sub-county, Moyo District: 45 farmers. The activities towards capacitating the association, federating them, developing market linkages and support in developing primary processing units will be undertaken during year 2 of the programme.

The details of the primary cooperative / associations and photographs are attached as **Annexure-XXII** and **XXIII**. The details training on supply chain for market development is attached as **Annexure-XXIV**.

ACTIVITY 3.2: STANDARDS AND CERTIFICATION MECHANISM DEVELOPED

INDICATOR: Ten product and process standards; one Voluntary Guideline Standard (VGS); one FSC certified bamboo forest (1000 hectare); Three workshops + one CIDCA/MOFCOM workshop: 100 people trained (70M/30W)

S. No	Outputs	Overall Indicator	Achievement			Overall Achievement	Overall Achievement (%)
			Ethiopia	Kenya	Uganda		
1.	Bamboo products and process standards	10	2	2	1	5	50
2.	Voluntary standard/guidelines	1 report	In progress			-	-
3.	FSC certified Bamboo forest	1000-2000 hectare	1000 (In progress)	-	-	1000	In progress
4.	Regional / National workshops	3	-	-	-	-	0
5.	CIDCA/MOFCOM workshop	-	-	-	-	-	0
6.	Trainees	100 (70M/30W)	-	-	-	-	0

In continuation of the Phase I of the programme, five national standards were developed by three national standard agencies. The Phase II of the programme is closely working with different working groups and technical committees to finalise the national standards. Under INBAR's Intra-Africa and SSTC grant, two (2) task forces have been established: Taskforce on Bamboo for Renewable Energy (TFB4RE) and Taskforce on Sustainable Bamboo Management (TFSBM).

Task Force on Sustainable Bamboo Management: A task force consisting of 30 (25M/5F) experts from 15 countries was established. A chairperson and manager were selected to lead. Two working agendas have been identified and accepted for the development of two Voluntary Guideline Standards (VGS) namely (1) Step by Step Guide on the use of Bamboo for FLR and (2) Guideline for certification of forest and planted bamboo. Routine virtual meeting and preparation of VGS are ongoing. Two calls for interested consultants to 1) develop VGS for the certification of natural and establishment of bamboo plantations, and 2) develop VGS Step-by-Step for Forest Landscape Restoration (FLR) with bamboo have also been drafted and pending action.

Task Force on Bamboo for Renewable Energy: A taskforce consisting of 21 (13/8F) experts from 12 countries including the selection of taskforce chairperson and manager has been finalised. The task force has identified three working items for the development of three VGS: (1) bamboo charcoal, (2) design of charcoal kiln and (3) bamboo bio-energy commoditization. Routine virtual meeting and preparation of VGS is ongoing. A draft of one VGS: design of charcoal kiln prepared and submitted to taskforce for review and finalisation.

FSC forest certification: The programme team is closely working with EEFCCC and identified 1000ha bamboo forest for FSC certification. A joint visit was done with the EEFCCC to identify the forest area, as a result 1000 ha of bamboo project area selected in Kafa zone, Adiyo, SNNPR.

Ethiopia: The National Council of Ethiopia Standards Agency (ESA) has approved two standards on bamboo namely (a) preservation of bamboo for structural purposes and (b) preservation of bamboo for non-structural purposes. Moreover, the associated three reference standards such as (a) preservation of timber-code of practice, (b) specification for water soluble type wood preservatives: Copper-Chrome-Boron (CCB) wood preservative and (c) specification for water soluble type wood preservatives: Copper-Chrome-Arsenic (CCA) wood preservative was published.

Moreover, 1000 natural bamboo forest area identified in Kafa zone, Adiyo, SNNPR for FSC certification. The project team has contacted the FSC certification agencies and two round virtual meetings have been organised to line up the activities. The FSC activities include developing Ethiopia Interim Standards, develop Chain of Custody, finalise the criteria, and finally auditing and certification.

Kenya: The programme supported Kenya Bureau of Standards(KEBS) to organise a working group for drafting two bamboo standards namely (a) General Technical Requirements for Bamboo-culm furniture and (b) general technical requirements for bamboo flooring. The draft version of the two standards were published for public review.

Uganda: The programme supported Uganda National Bureau of Standards (UNBS) for preparing five draft national standards namely (a) Methods of tests for bamboo, (b) structural design, (c) principals for grading bamboo, (d) bamboo as an alternative of timber, and (e) bamboo structures: grading of bamboo culms -basic principles and procedures. Out of these, one standard on bamboo structures: grading of bamboo culms: basic principles and procedures has been notified for public review.

ACTIVITY 3.3: INCLUSIVE MARKET DEVELOPMENT

INDICATOR: Six local market infrastructure established; 2 bamboo products included in public procurement system; three international and nine domestic trade fairs; three linkages with government run market outlet chain.

S. No	Outputs	Overall Indicator	Achievement			Overall Achievement	Overall Achievement (%)
			Ethiopia	Kenya	Uganda		
1.	Local market infrastructure	3	1	1	1	3	50
2.	International Fairs and Exhibitions	3Nos	-	-	-	-	-
3.	Domestic trade fairs and exhibitions	9 Nos	1	1	1	3	33.33
4.	Linkages with Government run market outlet chain	3 Nos	1	-	-	1	33.33
5.	Business model and cases	5 Nos	-	-	-	-	-
6.	Investor study tour	2 Nos	-	-	-	-	-

Local Market Infrastructure: The programme provided support in establishing three market infrastructures one each in three beneficiary countries. In Ethiopia, the local market infrastructure is established in ETTE premises in Haya. In Kenya, the local market infrastructure is established

at Busia and in Uganda, the local market infrastructure is located at Mgahinga and Mulamba Kisoro District. The market infrastructures are well equipped with bamboo cross cutter, micro shed (150 square feet) for storing and graded bamboo culm for different utility. The details of the market infrastructures and photographs are attached as **Annexure XXV and XXVI**.

Trade Fair and Exhibitions: The programme has also supported the organisation and/or participation in three local exhibitions. In Ethiopia an exhibition was organised in partnership with the Federal Small and Medium Manufacturing Industries Promotion Authority (FeSMMIPA) where 15 bamboo entrepreneurs participated. In Kenya, an exhibition was organised at Butula, Busia, in collaboration with KEFRI and Kenya Bamboo Association (KBA) alongside celebration of on World Bamboo Day where 50 bamboo entrepreneurs and bamboo farmers participated. Uganda exhibition was organised on World Bamboo Day at Buganda Kingdom where 35 entrepreneurs participated. The detail of the exhibition and photographs are shown as **Annexure XXVII and XXVIII**. Due to Covid-19 pandemic and international travel restrictions, participation in international exhibition and organising with support from China is postponed for Year- 2.

ACTIVITY 3.4: NATIONAL AWARENESS FOR MARKET DEVELOPMENT

INDICATOR: Six awareness workshops for banks and financial institution; six stakeholder workshop for product policy development; at least two product policy published; 21 awareness events; six video and 12 radio programmes; 20000 participants in awareness events.

S. No	Outputs	Overall Indicator	Achievement			Overall Achievement	Overall Achievement (%)
			Ethiopia	Kenya	Uganda		
1.	Awareness workshop for Banks and financial institution	6 Nos	-	-	-	-	-
2.	Stakeholder workshops	6	-	-	-	-	-
3.	Awareness events	21 Nos	5	2	2	9	42
4.	Video	6 Nos	-	1	-	2	16
5.	Radio	12 Nos	-	-	-	-	-
6.	Overall participant	20000 Nos	699	1225	725	2649	14

Awareness workshop for banks and financial institution as well as stakeholder workshop for product policy development was not organised on account of Covid-19 pandemic. As such, the activity is now shifted to year-2.

The programme organized 9 awareness events, achieving 42 percent of the overall indicators. The participant and location details of the awareness events are attached as **Annexure XXIX**; and the photographs of the awareness events are attached as **Annexure XXX**. Moreover, the programme organised three radio talk shows and facilitated the broadcasting of the video programme on bamboo. The links and /or the details of the video and radio programme is as shown below:

Video Programs:

The programme coordinated production of a video programme and broadcasting in national television during celebration of World Bamboo Day. The link of the same is shows as follows: <https://www.youtube.com/watch?v=uhK7-XvBKq4> . In addition, the programme developed nine short videos for awareness and sensitisation. The videos can be found in **Appendix XVII**.

Moreover, the programme developed the following IEC materials in local languages for public awareness building to encourage the investment in bamboo sector in the programme beneficiary countries. The details are shown in **Appendix-IV, Appendix-V, Appendix-VI, Appendix-VII, Appendix-VIII, Appendix-IX, and Appendix-X.**

- Bamboo as a Green Business Opportunity in Ethiopia;
- Pro-poor Bamboo Industry and SME Value Chains;
- Enhance Bamboo Business and Trade Environment;
- Sustainable Management of Bamboo Resources;
- Bamboo Homestead Farming System Development.
- Technical Bulletin: Bamboo Household Clean Energy Production
- Technical Bulletin: Bamboo Preservation and Treatment

ACTIVITY 3.4: INVESTMENT PROMOTION

INDICATOR: Five business model / cases for inclusion in respective investment commissions developed; Two investor study tour organized.

The programme team is closely working with the Ethiopian Investment Commission (EIC), KenInvest and Uganda Investment Authority (UIA) to include bamboo as a potential sector in their investment plan. In Ethiopia, the programme has prepared “portfolio for bamboo” to be included in their investment guide book. The new investment guidebook of the Ethiopia investment commission with inclusion of bamboo will be published soon. Similar efforts are in the pipeline for Kenya and Uganda.

Ethiopia: Apart from the three existing large scale bamboo industries (Adal Bamboo PLC, SA Bamboo Plc. and Abraham Gelatu Bamboo PLC), the programme team has been supporting two prospective investors (Abyssinia Bamboo PLC and Ethio-Japan Textile) for establishing bamboo industry for production of board based products, incense sticks and bamboo energy products.

Kenya: The programme is providing technical and handholding support for Green Pot Enterprises to set-up a bamboo factory in Kiambu Country with a planned investment of about USD 0.5 million, but due to Covid-19 pandemic the activities are stalled.

Uganda: The programme provided technical support and handholding for Konkiti Bamboo Works, which has invested about USD 0.5 million for setting up a bamboo industry for production of bamboo stick based products: blinds, bamboo sticks and tooth picks. The enterprise is now operational. Moreover, the programme is supporting to diversity the production line to product incense sticks. Further, Chinese Embassy has discussed with National Forestry Authority on fast-tracking industrialization of the bamboo sector in Uganda and formed an Adhoc committee to work with multi-stakeholders for investment, where the programme team member is also a member.

3.3.4. OUTCOME 4: FACILITATE ESTABLISHMENT OF MULTI-STAKEHOLDER PLATFORMS

ACTIVITY 4.1: SUPPORT TO ESTABLISH AND OPERATIONALISE BAMBOO UNITS

INDICATOR: Three bamboo units established and strengthened; three national level multi-stakeholder platforms and at least six regional level multi-stakeholder platforms established and operationalised.

The programme establishment of programme office in three programme beneficiary countries along with full strength of the programme team on the ground. Ethiopia programme office is functioning with INBAR East Africa Regional Office, Kenya programme office is operating in the premises of Kenya Forestry Research Institute (KEFRI) and Uganda programme office is in the premises of National Forestry Authority (NFA). All these offices are functioning with well-equipped furniture and communication facility. The programme teams in three project beneficiary countries are closely working with the INBAR Focal Point for liaising with government authority. The stakeholders group were identified for the establishing the multi-stakeholder platforms. Besides, three bamboo units have been established for knowledge dissemination, implementing bamboo strategic plan and networking and partnership building.

In Ethiopia the bamboo unit is operating at EEFCCE premises with a designated full-time staff from the commission. The EEFCCE approached to the national government to create a position for 'Bamboo Directorate'. In Kenya the bamboo unit is functioning at KEFRI premises with a designated staff. Similarly, Uganda bamboo unit is carrying out activity in the premises of National Forestry Authority (NFA) with a designated staff from NFA.

ACTIVITY 4.2: SUPPORT TO STRENGTHEN BAMBOO ASSOCIATION

INDICATOR: Three functional bamboo association; three strategic plans

The programme supported Bamboo Association of Kenya (BAK) and Uganda Bamboo Association (UBA) by providing equipment (computer and office furniture), support in website development and establishing bamboo libraries. Additionally, the work on the develop five years' strategic plans for these associations are underway. The strategy will help the associations to generate revenue and cover their operational expenses by themselves, and grow their influence over the bamboo sector of their respective countries. The bamboo association of Ethiopia is under re-formulation and it is expected to be launched by year 2 of the programme.

ACTIVITY 4.3: SOUTH SOUTH KNOWLEDGE TRANSFER AND CAPACITY BUILDING FOR POLICY MAKERS AND FUNCTIONARIES.

INDICATOR: China CIDCA/MoFCOM training workshops for policy makers and functionaries: 20 participants; Cross learning visits: East Africa - 30 participants; Community of practice - 3 Nos

Due to Covid-19 pandemic and international travel restrictions China CIDCA / MoFCOM training workshops for policy makers and cross learning study tour within east African beneficiary countries could not be possible and are postponed to Year-2.

The programme organised a virtual workshop on formation of community of practice (CoP) in partnership with the INBAR Latin America project team. Based on the discussion of the workshop, the programme team of Dutch-Sino took a lead to mobilise stakeholders to form the community of practice (CoP) platform. During year-1, the programme was able to achieve three community of practices one for each beneficiary country. The programme encouraged the CoP in bamboo furniture production groups including SMEs, farmers, consumers, academicians. Three meetings were organised through open invitation and members shared their experience on production system of bamboo round pole furniture, treatment mechanism, and diversified design. The CoP is also taking an active role to promote bamboo furniture as eco-friendly products for upper middle class community. The outcome of sharing knowledge through CoP will be published in local newspapers, and social media platform for involving larger section of the interested people. The CoP in Kenya is making regular dialogue with the county government on several issues related to bamboo transportation, harvesting and include bamboo products in government procurement system.

3.3.5. OUTCOME 5: MECHANISMS FOR CONTINUOUS MONITORING

ACTIVITY 5.1: MECHANISMS DEVELOPED FOR CONTINUOUS MONITORING

INDICATOR: Baseline and M&E framework established; online monitoring system established; 50 participatory stewards.

The baseline study and M&E framework was completed and the same is attached as **Appendix-XI and XII**. The cluster development report is attached as **Appendix-XIII**. The programme identified 22 bamboo clusters (Ethiopia 6, Kenya 8, and Uganda 8) and mobilised 10675 households (Ethiopia 3650, Kenya 3475, and Uganda 3550) for interventions. The location, number of households and other details is shown **Annexure-XXXI**. The development of online geographical project monitoring and evaluation system is in progress and is expected to be completed by mid of 2021.

The programme deployed 12 participatory stewards (PS) in different clusters for extension support and community mobilization and field data collection.

ACTIVITY 5.2: STEERING COMMITTEE MEETING, AUDIT AND EVALUATION.

INDICATOR: One programme level steering committee established; one gender analysis report; three steering committee meetings; three audit reports; one mid-term and one final evaluation report.

A steering committee comprising of members from all the beneficiary countries (Ethiopia, Kenya and Uganda), and knowledge provider (China and the Netherlands) was established during the beginning of the programme. The steering committee meets once a year to deliberate on the achievements, work plan and budget of the programme. Due to Covid-19 pandemic and international travel restrictions physical meeting could not be possible to organise. A virtual meeting (Microsoft Teams) was organised on 15 – 16 October 2020. Minutes of the meeting, and resolutions (work plan for year 1) is attached as **Appendix XIV**.

The gender analysis study was completed. Further, the gender mainstreaming strategy has been developed based on the recommendations of the gender study. The gender analysis study is attached as **Appendix-XV**.

4. CHALLENGES AND DIFFICULTIES ENCOUNTERED

COVID-19: Due to Covid -19 pandemic and subsequent travel and meeting restrictions imposed by national government, the programme could not achieve some of the planned activities of Year-1, such as international training, investor study tour, inter country visits, international trade fairs and CIDCA/MoFCOM supported capacity building initiatives, establishing carbon credit project, and bamboo soil water and hydrology research. In addition to the Covid-19, the internal political situation in Ethiopia also posed some constraints on programme implementation.

Ethiopia: The political unrest has been imposing an impact on the programme implementation. However, since the activities were always undertaken in collaboration with government counterpart agencies at national and local level the impact was limited as the beneficiary identification and coordination works was done by line department government staff. It is important to note that at many encounters the activities were not carried out as scheduled due to political unrest and Covid-19 restrictions.

Kenya: The country banned to use of plastic bags and it had resulted in lack/shortage of alternative polytubes for nursery operations. Alternatively, cloth bags, fertilizer and sand jute sack bags were customised like polytubes for transplanting. In addition, there are delays in approval and proclamation of bamboo policy. The programme is closely working with the Chief Administrative Secretary (CAS), Ministry of Environment and Forest (MoEF) to get activities approved at the earliest time possible. The country level lockdown on account of Covid-19 restricted movement imposing hindrances to implement the programme.

Uganda: Administrative delays and approvals with host and partner government agency had some impact in activity implementation. The programme has been harmonized with the government, non-government organisations, private sector and communities to achieve the best out of the objective. On account of Covid-19, though, the physical stakeholder training could not be organised.

5. INTERNATIONAL PUBLIC GOODS

During this reporting year, the programme was able to produce technical bulletins and IEC materials developed and translated into Amharic, Swahili and Madi. The details of the materials developed and published in English, Amharic, Swahili and Madi are shown below:

- Bamboo as a Green Business Opportunity in Ethiopia;
- Pro-poor Bamboo Industry and SME Value Chains;
- Enhance Bamboo Business and Trade Environment;
- Sustainable Management of Bamboo Resources;
- Bamboo Homestead Farming System Development.
- Technical Bulletin: Bamboo Household Clean Energy Production
- Technical Bulletin: Bamboo Preservation and Treatment

An online mapping system for collecting smallholder farm data and interactive map of bamboo in forest areas were improved and they are posted on INBAR website: On-farm Mobile Application Database -<http://bambooafrica.inbar.int/>; and Remote Sensing based Interactive map of forest area - <http://bamboomap.inbar.int/>.

6. GENDER ISSUES

The programme extensively engaged women during the project implementation. During Year 1, 49.05 percent of the beneficiaries are women, which could be demonstrated by programme activities and achievements, such as capacity development and technology transfer for value chain development, large scale restoration and smallholder restoration and sustainable management of bamboo forests and farms, capacity building on nursery management plantation restoration and sustainable management and NCPP enterprise development.

7. PARTNERSHIP, SCALING-UP AND CO-FUNDING

Key Partnerships in Beneficiary Countries	
Country	Partner NGO(s)/Institution(s)
China	International Centre for Bamboo and Rattan (ICBR); Zhejiang A & F University (ZAFU); National Forestry and Grassland Administration
Ethiopia	Environment Forest and Climate Change Commission (EFCCC); Amhara Bureau of Agriculture; Ethiopian Environment and Forest Research Institute (EEFRI); Arbaminch University, Debra Markos University Ethiopian Institute of Architecture, Construction and City Planning (EiABC), Inter- Africa Smallholder bamboo development programme; SNNPRS bureau of Environment and natural resources; SA bamboo PLC and ADAL Industries PLC
Kenya	Kenya Forest Research Institute (KEFRI), Kenya Forest Service (KFS), Ministry of Environment and Forests (MoEF), Green Pot Enterprises (GPE), Kenya Water Towers Agency (KwTA), Eco-green, and Kenya Bamboo Association
The Netherlands	Moso International BV, Wageningen University and Research (WUR) Existing linkages and will be engaging during year 2 of the programme
Uganda	National Forestry Authority (NFA), Ministry of Water and Environment (MoWE), Uganda Industrial Research Institute (UIRI), Divine Bamboo Ltd, Muni University, Uganda Bamboo Association

Ethiopia:

- Inter-Africa Smallholders Bamboo Development Programme: An INBAR project (US\$ 2.5 million) funded by the IFAD is in operation. This project is implemented in Cameroon, Ethiopia, Ghana and Madagascar. The project activities in Ethiopia are aligned with Dutch-Sino programme;
- EFCCC is the focal point ministry of INBAR and Dutch-Sino East Africa Bamboo Development Programme. The ministry provided support in operationalizing bamboo policy and/or strategy, and the programme leverage support of ministry's extension system to upscale bamboo development activities;
- EEFRI is supporting for Site Species Matching and bamboo taxonomic research in Ethiopia and supporting to produce bamboo planting materials;
- The programme through the Amhara Bureau of Agriculture, SNNPRS bureau of Environment and Natural Resources scaled up bamboo planting material production, restoration and sustainable management activities;

- The programme through Debratabor University and Arbaminch University supported establishment of nurseries, value-addition training and enterprise development in different geographical regions of the country;
- ADAL Bamboo PLC and SA Bamboo PLC are two successful bamboo industries in Ethiopia. The programme works with them to develop their capacities and provide technical support in sustainable management of bamboo resources, supply chain development, technical supports and exhibitions.

Kenya:

- Hosting agreement – KEFRI and INBAR entered into a hosting agreement that enabled KEFRI to host the INBAR staff with office space, office vehicle, staff support, infrastructure and logistics support;
- The programme collaborated with KEFRI to establish bamboo common production and training centre at Migori sub-station and scale up bamboo nurseries, plantation, exhibition and awareness activities and site-specific matching study and RBD bamboo research on soil and water;
- The programme collaborated with Green Pot Enterprises (GPE) in scaling up sustainable management of bamboo smallholder farms and to scale up bamboo plantations;
- INBAR and KEFRI through Dutch-Sino programme is providing capacity building to Kenya Forest Service (KFS) to undertake large scale planting, sustainably managing bamboo forests by developing guidelines for sustainable management and capacity building of line department staff members;
- The programme closely worked with Ministry of Environment and Forests for bamboo policy development.

Uganda:

- Hosting agreement – NFA and INBAR entered into a hosting agreement that enabled NFA to host the INBAR staff office, provide office, staff support and other local logistics support;
- The programme is closely working with NFA for scaling up bamboo planting material production in their nurseries, establish large scale plantation, and undertake sustainable management in forests and farms. NFA is also scaling up bamboo plantation with their own budget and resources;
- INBAR worked with Muni University and private sector players especially Divine Bamboo Ltd, Nile Ply Ltd, Talent agroforestry, Tree Trends, Friends of Bamboo Ltd, and Mgahinga Craft Centre scale up bamboo planting material production and plantation establishment;
- The programme facilitated allocated of 1000 hectares of NFA land to Uganda Bamboo Association. In addition, the programme is supporting to set up six nurseries and plantations, micro enterprise development and exhibition;
- The programme is closely working with Uganda Industrial Research Centre (UIRI) for scaling up bamboo value-chains with capacity building and enterprise development support.

China:

- **International Centre of Bamboo and Rattan:** ICBR and INBAR collaborate to conduct property testing (9 test+3 products trial) of three East African bamboo species. A joint work plan prepared to operationalise the BMB unit in Ethiopia under PIC through PPP model, and finalize the sample collection protocol for 3 bamboo species (Ethiopia2 and Kenya1). Moreover, ICBR will also provide machines and tools to establish two CPTC in Kenya and Uganda;

- **Zhejiang Agriculture and Forestry University (ZAFU):** ZAFU developed allometric equations/model for *Oldeania alpina* (highland bamboo), and provided technical support for establishing a carbon project in Ethiopia.

The Netherlands:

- **Wageningen University and Research (WUR):** INBAR and WUR will undertake to develop a new set of product vertical based on waste arising out of producing products currently at SME and industry level;
- **Moso International BV:** The programme will collaborate with Moso International BV to provide technical support and guidance to the existing industry depending on the need. Due to COVID19 pandemic and international travel restrictions the partnership could not line-up, and will be taken up once the COVID-19 situation improves.

The programme was successful in converging its activities with ongoing INBAR development projects, partner agencies in beneficiary countries and China. The outline details of parallel financing from counterpart projects and agencies during year 1 are shown below (**Appendix-XVI**).

N o	Counterpart Agency	Details	Amount (EUR)
1.	Inter-Africa Smallholder Bamboo Development Programme	Bamboo nursery, plantation, strategy and policy development, capacity building on resource development and value-chains	58,068.46
2.	Kenya Forestry Research Institute	Site Specific matching study +set-up bamboo units+ exhibitions	23,275.05
3.	EEFRI, Ethiopia	Site Specific matching study+ Taxonomy research	30,000.00
4.	EEFCCC, Ethiopia	Bamboo units+ nursery establishment	200,000.00
5.	NFA, Uganda	Bamboo nursery, bamboo planting and sustainable management, set-up bamboo unit	41,486.53
6.	China Contribution: INBAR Core fund	INBAR Core contribution – Director and Treasurer	108,560.00
		Total (EUR)	461,390.04

8. COMMUNICATION AND VISIBILITY ACTION

Key activities and events of the programme were published through blogs, video and radio programme and in national newspapers. Please find below links of communication and visibility actions:

- [Uganda now has a new 10-year National Bamboo Strategy and Action Plan - Forests, Trees and Agroforestry \(foreststreesagroforestry.org\)](https://www.inbar.int/world-bamboo-day-2020/)
- <https://www.inbar.int/world-bamboo-day-2020/>
- <https://www.inbar.int/kenya-classifies-bamboo-as-crop/>
- <https://www.inbar.int/building-bamboo-resilience-in-east-africa/>
- <https://www.inbar.int/ethiopia-tot-november-2020/>
- <https://www.foreststreesagroforestry.org/news-article/uganda-now-has-a-new-10-year-national-bamboo-strategy-and-action-plan/>
- <https://www.inbar.int/bamboo-farmers-and-furniture-makers-ethiopia/>
- <https://www.inbar.int/building-capacity-east-africa/>
- <https://www.youtube.com/watch?v=gEjpwctFdUA>
- <https://www.inbar.int/bamboo-standards-ethiopia/>

- <https://www.inbar.int/capacity-building-initiative-uganda/>
- <https://nimsportuganda.com/cycling-stop-chicken-fights-in-cycling-ssekabembe/>
- <https://chimpreports.com/buganda-cycling-association-ushers-in-new-leadership-committee/>

9. CONCLUSION

The programme is progressing well on a number of activities despite the COVID-19 pandemic and its associated constraints. The progress on technical and capacity building pillar of the programme both in value chain development and resource development are good. The programme have built the capacities of 1368 (847M/521F) beneficiaries on value chain and production. The support to the existing common production and training centers are been provided and the existing CPTC in Ethiopia were also gradually operationalised. Two clusters with 1000 beneficiaries each for the household charcoal collection developed, and infrastructure for the establishment of the industry finalised, in addition to placing orders for the procurement of the machinery for establishing a 1-ton production capacity per day. The activities towards operationalization of BMB industry and bamboo sample collection for age-wise property testing, development of product composite is lagging behind and will be accomplished during year 2 of the programme.

The activities on strengthening bamboo planting material production systems through established large-scale nurseries, micro nurseries, procurement of bamboo seeds, sustainable harvesting and community training on bamboo management achieved vigorously. The programme is also able to produce 1,606,006 bamboo plants, and establish 1296 hectares of new bamboo plantation, reaching out to 1338(595 M/ 743 F) beneficiaries to improve their resilience. Moreover, the programme also brought 468.45 hectares of bamboo farms under sustainable management regime benefiting 935 (170M/765F). Further, the programme capacitated 1732 (795M/1027F) smallholders, line department and extension workers by organising six training of trainers and 42 community level trainings. The work for developing a carbon project and setting up research plot for measuring environmental metrics has been initiated.

During the year 1, the programme established 8 association or cooperatives by mobilizing 686(378 M and 308 F) beneficiaries to strengthen supply chains with SME and industries. 1000-hectare of forest identified for FSC in Ethiopia and five products standards are published and/or under public review with ESA, KEBS and UNBS. Three local exhibitions were organised and nine awareness events including radio and YouTube talks completed and reached 2649 farmers, growers, consumers and SMEs. The programme is actively engaging with investment commissions in respective countries and support private entrepreneurs who want to invest in bamboo industry.

The programme facilitated setting up of three bamboo units at EEFCCC, KEFRI and NFA premises and two strategic plans for Bamboo Associations of Kenya and Uganda are in progress. Twelve participatory stewards were deployed in the respective clusters for frontline facilitation. Gender study and baseline survey completed and the development of online monitoring and evaluation systems is underway.

Due to Covid -19 pandemic and subsequent restrictions imposed by national governments at different point of time, the programme could not achieve some of the planned activities of Year-1, such as international training, investor study tour, inter country visits, international trade fairs and CIDCA/MoFCOM supported capacity building initiatives, establishing carbon credit project, and bamboo soil water and hydrology research. In addition to the COVID -19, the internal political

situation in Ethiopia also posed some constraints on programme implementation in the country. During the implementation the programme has been strictly following country specific Covid-19 protocols and maintained social distancing, hand washing and wearing mask to reduce the infection.

Finally, the Dutch-Sino Phase-II programme is actively contributing to transformational change in the lives of communities, bamboo SMEs, government policy and strategies across the three beneficiary countries in line with its theory of change (TC). Ensuring participation of the community and partners is the central focus of the programme and that is believed to guarantee the achievement the objectives. The initiated activity on sustainable management and harvesting of the bamboo in the programme beneficiary countries is enhancing climate change mitigation and resilience benefits to the actors involved at community and government level. The homestead bamboo farming system development is also contributing to resilience, household income and livelihoods of farmers and at same time led to increased climate change mitigation benefits. The women beneficiaries are taking active role in skill training to enhance their capacity to produce market driven products and participate in domestic and national market. The bamboo strategy and action plans are creating an enabling environment for the SME and private sector for investment in sector.

10. ANNEXURE

ANNEXURE-I: TECHNICAL/CAPACITY BUILDING TRAININGS ON BAMBOO VALUE CHAINS

S. No	Technical/Capacity Building Trainings	No of Participants	Date-Month	No of Days	Place/Country
1.	Bamboo furniture making	41 (26M/15F)	Apr 2020	4 days	Debratabor, Amhara
2.	Bamboo furniture and craft product improvement	64 (54M/10F)	April 2020	7 days	Woreta, Amhara,
3.	Bamboo furniture skill development	14 (8M/6F)	July 2020	4 days	Zengena, Injibara
4.	Bamboo Round Pole Furniture	30(30M/0F)	Sep/2020	15 days	Injibara/Ethiopia
5.	Bamboo Round Pole Furniture	30(30M/0F)	Sep/2020	15 days	Debramarcos
6.	Bamboo Round Pole Furniture	30(19M/11F)	Oct/2020	15 days	Senan/Ethiopia
7.	Bamboo Round Pole Furniture	30(17M/13F)	Oct/2020	15 days	Chencha, Ethiopia
8.	Bamboo Round Pole Furniture	30(23M/7F)	Oct/2020	15 days	Addis Ababa
9.	Bamboo Round Pole Furniture	30(13M/17F)	Nov/2020	15 days	Tafo/Ethiopia
10.	Bamboo Round Pole Furniture	30(30M/F)	Nov/2020	15 days	Jakros/Ethiopia
11.	Bamboo Bioplastic Utility Products	30(22M/8F)	Nov/2020	10days	Moksha/Ethiopia
12.	Bamboo Bioplastic Utility Products	30(24M/6F)	Dec/2020	10days	Urail/Ethiopia
13.	Bamboo Mat Based Utility Products	31(23M/8F)	Dec/2020	10days	Tillie, Injibara
14.	Bamboo Handicrafts	30(27M/3F)	Dec/2020	10days	Khanzanchis
15.	Bamboo furniture making	41 (26M/15F)	Apr 2020	4 days	Debratabor, Amhara
16.	Bamboo furniture and craft product improvement	64 (54M/10F)	April 2020	7 days	Woreta, Amhara,
17.	Bamboo furniture skill development	14 (8M/6F)	July 2020	4 days	Zengena, Injibara
	Ethiopia – Total:	569 (434 M/135F)			
18.	Furniture, weaving and handicrafts	30(17M/13F)	July/2020	15 days	Nguruinditu. Kiambu County
19.	Bio-energy (Charcoal-briquettes)	23(13M/10F)	July/2020	15 days	Bwaliro, Busia County
20.	Bio-energy(Charcoal-Briquettes)	36(20M/16F)	Aug/2020	15 days	Benga, Busia County
21.	Furniture, weaving and handicrafts	30(17M/13F)	Aug/2020	15 days	Busia Town, Busia County

22.	Construction(Gazebo)	30(17M/13F)	Sep/2020	15 days	Busia Town, Busia County
23.	Bio-energy(Charcoal-Briquettes)	29(16M/13F)	Sep/2020	15 days	Mt Elgon, Bungoma County
24.	Bio-energy(Charcoal-Briquettes)	32(18M/14F)	Oct/2020	10days	Difathas; Kirinyaga County
25.	Furniture, weaving and handicrafts	33(19M/14F)	Oct/2020	10days	Busia Town, Busia County
26.	Shoot preparation and preservation	31(17M/14F)	Oct/2020	10days	Ndakaini-Dam, Murang'a
27.	Shoot preparation and preservation	23(13M/10F)	Nov/2020	10days	Korosiot; Nandi County
28.	Shoot preparation and preservation	29(16M/13F)	Nov/2020	15 days	Bumala, Busia
29.	Furniture round pole furniture	32(18M/14F)	Nov/2020	15 days	Nguruinditu, Kiambu County
30.	Bamboo treatment and storing	30(17M/13F)	Dec/2020	10 days	Bwaliro, Busia County
31.	Bamboo treatment and storing	31(18M/13F)	Dec/2020	10 days	Benga, Busia County
	Kenya – Total:	419(236M/183 F)			
32.	Bamboo Crafts	30 (13M / 17F)	July/2020	10days	Kisoro
33.	Bamboo Jewellery	21(9M/12F)	Aug/2020	10days	Kisoro
34.	Bamboo treatment and storing	25 (11M/14F)	Sep/2020	10days	Kisoro
35.	Bamboo Crafts	23 (10M/13F)	Sep/2020	10days	Namisindwa Technical Institute
36.	Bamboo Charcoal Production	24 (10M/14F)	Oct/2020	10days	Namisindwa Technical Institute
37.	Bamboo Furniture	25 (11M/14F)	Oct/2020	10days	Namisindwa Technical Institute
38.	Bamboo treatment and storing	30 (13M/17F)	Oct/2020	10days	Koboko Technical Institute
39.	Bamboo furniture	30 (12M/18F)	Nov/2020	10days	Koboko Technical Institute
40.	Bamboo crafts	30 (11M/19F)	Nov/2020	15 days	Koboko Technical Institute
41.	Bamboo Shoots	21(12M/9F)	Dec/2020Dec/2020	15 days	Kisoro
	Uganda – Total:	259 (112M/147F)			

ANNEXURE-II: ACTIVITY PHOTOGRAPHS OF THE CAPACITY BUILDING TRAININGS ON BAMBOO VALUE CHAINS



ANNEXURE-III: DETAILS OF TRAINING ON ENTREPRENEURSHIP AND BUSINESS DEVELOPMENT

S.N o.	Entrepreneurship and Business Development Trainings	No of Participants	No of Days	Place/Country
1.	Injibara, Amhara	15(9M/6F)	3 days	Ethiopia
2.	Chencha	17(10M/7F)	3 days	Ethiopia
3.	Addis Ababa	13(10M/3F)	2 days	Ethiopia
	Ethiopia – Total:	45(29M/16F)		
4.	Bumala, Busia	15(8M/7F)	2 days	Kenya
5.	Ndakaini	16(8M/8F)	2 days	Kenya
	Kenya – Total:	31(16M/15F)		
6.	Kisoro	13(7M/6F)	2 days	Uganda
7.	Kokobo Technical Institute	19(10M/9F)	2 days	Uganda
8.	Namisindwa Technical Institute	13(3M/10F)	2 days	Uganda
	Uganda – Total:	45(20M/25F)		

ANNEXURE-IV: ACTIVITY PHOTOGRAPHS OF THE ENTREPRENEURSHIP AND BUSINESS DEVELOPMENT



ANNEXURE-V: DISTRIBUTION OF BASIC TOOLS AND EQUIPMENTS FOR ENTERPRISES

S.No.	Name of the Enterprise	Support Provided	Country
1.	Shemela Bamboo	One electrical Hand Drill machines, 2 Grinders, and 1 Sanding machine	Ethiopia
2.	Kidest Bamboo Basket	One electrical Hand Drill machines, 2 Grinders, and 1 Sanding machine	Ethiopia
3.	Berhanu Yetwale Bamboo	One electrical Hand Drill machines, 2 Grinders, and 1 Sanding machine	Ethiopia
4.	Abel Bamboo Bike and Wheelchair	One electrical Hand Drill machines, 2 Grinders, and 1 Sanding machine	Ethiopia
5.	Wonineshet and Friends Bamboo Works	One electrical Hand Drill machines, 2 Grinders, and 1 Sanding machine	Ethiopia
6.	Alex Bamboo Gift Articles	One electrical Hand Drill machines, 2 Grinders, and 1 Sanding machine	Ethiopia
7.	Biruk Bamboo Furniture	One electrical Hand Drill machines, 2 Grinders, and 1 Sanding machine	Ethiopia
	Ethiopia: Total	7	
8.	Butula Bamboo farmers' cooperative Society	Electrical Hand Drill machines, 2 Grinders, 1 Sanding machine, 1 Holding/Bench Vice, 2 Hand saws	Kenya
9.	Korosiot SHG, Korosiot, Nandi County	Electrical Hand Drill machines, 2 Grinders, 1 Sanding machine, 1 Holding/Bench Vice, 2 Hand saws	Kenya
10.	Maragua, Murang'a County	Electrical Hand Drill machines, 2 Grinders, 1 Sanding machine, 1 Holding/Bench Vice, 2 Hand saws	Kenya
11.	CFA Nyambene, Embu County	Electrical Hand Drill machines, 2 Grinders, 1 Sanding machine, 1 Holding/Bench Vice, 2 Hand saws	Kenya
12.	Chebasas Chapa Kazi Youth Group, Aldai, Nandi County	Electrical Hand Drill machines, 2 Grinders, 1 Sanding machine, 1 Holding/Bench Vice, 2 Hand saws	Kenya
	Kenya: Total	5	
13.	BACLO Enterprise, Kalangi Mukono	2 electrical Hand Drill machines, 2 Grinders, 1 Sanding machine, 1 Holding Vice, 3 Hand saws, 1 First Aid kit, 23 Safety Overcoats, 7 Pliers, 23 Safety Gloves and, 8 Rasp Files	Uganda
14.	Mgahinga Crafts and Cultural Centre, Kisoro	9 Tape Measure, 2 G-Clamps, 8 Scissors, 5 Hack Saws, 2 Hand Saws, 10 Knives, 9 Pliers, 1 Claw Hammer, 1 Secateurs	Uganda
15.	Bamasaba Bamboo Artisans Association, Namisindwa	3 disks, 5 hacksaws, beads,	Uganda
16.	Divine Bamboo	2 electrical Hand Drill machines, 2 Grinders, 1 Sanding machine, 1 Holding/Bench Vice	Uganda
	Uganda: Total	4	

ANNEXURE-VI: SUPPORT TO COMMON PRODUCTION AND TREATMENT CENTRE(CPTC)

S.No.	Name of the CPTC	Support Provided	Country
1.	Dire-Enchini	Spare parts and training	Ethiopia
2.	Injibara	Spare parts and training	Ethiopia
	Ethiopia: Total	2	
3.	Migori Model Bamboo Training and production Centre	Spare parts and materials	Kenya
	Kenya: Total	1	
4.	Friends of Bamboo Pvt. Ltd (FOB) ,Moyo, Uganda	Spare parts and materials	Uganda
	Uganda: Total	1	

ANNEXURE-VII: ACTIVITY PHOTOGRAPHS OF THE COMMON PRODUCTION AND TREATMENT CENTER AND TOOLS DISTRIBUTION



ANNEXURE-VIII: ESTABLISHED BAMBOO LARGE SCALE NURSERIES

S.No.	Nursery	Location	Number of Plants	Country
1.	West Gojjam (Dembecha, Bu Zuriya, Jebitena and Sekela)	Inter-Africa: BOA, Amhara	8845	Ethiopia
2.	South Wolo (Tenta, Mekidela, Tehulere, Qalu))	Inter-Africa: BOA, Amhara	33445	Ethiopia
3.	South Gonder (Dera, Libo, Simada, Ebinat, Sede, Farta, Este)	Inter-Africa: BOA, Amhara	11611	Ethiopia
4.	East Gojjam (Gozamin, Debreeliya)	Inter-Africa: BOA, Amhara	594	Ethiopia
5.	Awı (Fagita Lekoma, Banja, Guwanguashigudad, Zigem, Jawi, AhenuGuwagusa)	Inter-Africa: BOA, Amhara	222050	Ethiopia
6.	North Shoa (Efrata, Anitsokiya, Qewet)	Inter-Africa: BOA, Amhara	5070	Ethiopia
7.	North Wolo (Habru, Gubalafto)	Inter-Africa: BOA, Amhara	1720	Ethiopia
8.	Chagni (Matema, Quera)	Inter-Africa: BOA, Amhara	59670	Ethiopia
9.	North Gondar (Adi Arqa, Janamora, Beyede, Debarik)	Inter-Africa: BOA, Amhara	13783	Ethiopia
10.	Oromo (Arituma Faris and Dewa Chefa)	Inter-Africa: BOA, Amhara	4622	Ethiopia
11.	Central Gondar (West Belesa, East Belesa, Takusa and Tachio Amrachiho)	Inter-Africa: BOA, Amhara	33888	Ethiopia
12.	Wagmira(Sekota, Zaqola, Abergele, Gazibla, Sehala, Tsagibju)	Inter-Africa: BOA, Amhara	2803	Ethiopia
13.	BahirDar, Einkara, Injibara	Dutch Sino / EEFCCC-Amhara	56943	Ethiopia
14.	Arbeona, Chinko	Dutch Sino / EEFCCC-SNNPR	39443	Ethiopia
15.	Wonchi	Dutch Sino / EEFCCC-Oromia	47318	Ethiopia
16.	Bambati	Dutch Sino / EEFCCC-Benishangul	33323	Ethiopia
17.	Shebebito,	Dutch Sino/ EEFCCC-Sidama	49588	Ethiopia
18.	Haramaya	Dutch Sino / EEFCCC-DireDawa	30893	Ethiopia
19.	Gufa	Dutch Sino / EEFCCC-Addis Ababa	29443	Ethiopia
20.	Firltu	Dutch Sino / EEFCCC-Somali	26943	Ethiopia
21.	Harar	Dutch Sino / EEFCCC-Harare	25693	Ethiopia
22.	Semera	Dutch Sino / EEFCCC-Afar	24441	Ethiopia
	Ethiopia: Total		762129	
23.	CHERP-KEFRI Nderi	Muguga, Kiambu County	10,190	Kenya
24.	RVERP –KEFRI Londiani	Londiani, Kericho County	2,064	Kenya
25.	CERP – KEFRI Gede	Gede, Kilifi County	2,700	Kenya
26.	KFS	Embu County	4,200	Kenya

27.	ENSDA	Narok	200,000	Kenya
28.	GeenPot Enterprises	Narok, Nyeri	124,000	Kenya
29.	Tiriki Tropical Gardens and Farm	Shiamakhokho, Vihiga County	42,000	Kenya
	Kenya: Total		385,154	
30.	NFA – Namawe	Wakiso	31,313	Uganda
31.	NFA – Nandagi	Mukono	48,154	Uganda
32.	NFA – Mbale	Mbale	14,737	Uganda
33.	NFA- Zombo	Zombo	15,700	Uganda
34.	NFA- Bugongi	Kabale	13,796	Uganda
35.	NFA- Rukungiri	Rukungiri	11,650	Uganda
36.	Divine Bamboo	Kampala	14989	Uganda
	Uganda: Total		150,339	

**ANNEXURE-IX: ACTIVITY PHOTOGRAPHS OF ESTABLISHMENT OF BAMBOO
LARGE SCALE NURSERIES**



ANNEXURE-X: ESTABLISHMENT OF BAMBOO MICRO NURSERIES

S.No	Location of the Micro Nursery	Type of Nursery	Number of Plants	Country
1.	MIDCO, SIDAMA	Micro Nursery	13875	Ethiopia
2.	Shook Bamboo Nursery, Oromia	Micro Nursery	8950	Ethiopia
3.	Eyob AB Nursery, Addis Ababa	Micro Nursery	5643	Ethiopia
4.	Abyssinia Bamboo, SNNPR	Micro Nursery	11375	Ethiopia
	Ethiopia: Total	4	39,843	
5.	Eco Green	Busia Town, Busia County	25,213	Kenya
6.	Mama Vive Greens	Butula, Busia County	20,100	Kenya
7.	Kojwang Yellow Enterprises	Matayos, Busia County	8,000	Kenya
8.	Elden Life SHG	Kericho Town, Kericho County	25,000	Kenya
9.	Nyapera Farm	Lichota, Migori County	2,000	Kenya
10.	Delta Bamboo	Kiseriani, Kajiado County	4,200	Kenya
11.	Transform World	Litein, Kericho	7,100	Kenya
12.	Pan African Climate Justice Alliance	Embu County	6,000	Kenya
13.	Kibirong Koyo Wetland Conservation Group	Kibirong, Nandi County	15,149	Kenya
14.	Nyando WRUA	Ahero, Kisumu County	3,692	Kenya
	Kenya: Total	10	116,454	
15.	AW Bamboo Nursery	Manafwa	1,211	Uganda
16.	Chloroplast Investments	Mukono	18,956	Uganda
17.	Friends of Bamboo	Moyo	8,885	Uganda
18.	Uganda Bamboo Association	Kampala	25,000	Uganda
19.	Nile Ply Woods	Nakasongola	6,810	Uganda
20.	Mgahinga Craft Centre	Kisoro	2,006	Uganda
21.	Kontiki	Hoima	8950	Uganda
22.	Talent Agroforestry	Nakaseke	6,300	Uganda
23.	Teso Development Nursery	Soroti	5675	Uganda
24.	Bamboo Village Uganda	Entebbe	62,994	Uganda
25.	Manafwa Nursery	Manafwa	5300	Uganda
	Uganda: Total	11	152,087	

ANNEXURE-XI: ACTIVITY PHOTOGRAPHS OF ESTABLISHMENT OF BAMBOO MICRO NURSERIES



ANNEXURE XII: EMPLOYMENT GENERATED IN NURSERIES

S. No	Nursery Name	Location	No of people employed	Country
1.	MIDO Bamboo Nursery	Hawassa , Sidama	5(3M/2F)	Ethiopia
2.	Shook Bamboo Nursery	Herato, Oromia	3(0M/3F)	Ethiopia
3.	Eyob AB Nursery	Holeta, Oromia	7(5M/2F)	Ethiopia
4.	Abyssinia Bamboo,	Kambata Zone, Hadiya, SNNPR	6(5M/1F)	Ethiopia
5.	Kesha Bamboo Nursery	Injibara, Amhara	5(3M/2F)	Ethiopia
6.	Chawesa Bamboo Nursery	Injibara, Amhara	3(3M/0F)	Ethiopia
7.	Dinkara Bamboo Nursery	Injibara, Amhara	5(2M/3F)	Ethiopia
8.	Shebeebino Bamboo Nursery	Shebeebino, Sidama	3(2M/1F)	Ethiopia
9.	Leku Bamboo Nursery	Leku, Sidama	4(1M/3F)	Ethiopia
10.	Eco Green	Busia Town, Busia County	5(3M/2F)	Kenya
11.	Mama Vivi Greens	Butula, Busia County	7(3M/4F)	Kenya
12.	Onjwang Yellow Enterprises	Matayos, Busia County	4(2M/2F)	Kenya
13.	Elden Life SHG	Kericho Town, Kericho County	6(4M/2F)	Kenya
14.	Nyapera Farm	Lichota, Migori County	11(6M/5F)	Kenya
15.	Delta Bamboo	Kiseriani, Kajiado County	9(5M/4F)	Kenya
16.	Transform World	Litein, Kericho	5(1M/4F)	Kenya
17.	Pan African Climate Justice Alliance	Embu County	9(3M/6F)	Kenya
18.	Kibirong Koyo Wetland Conservation Group	Kibirong, Nandi County	8(4M/4F)	Kenya
19.	Nyando WRUA	Ahero, Kisumu County	6(2M/4F)	Kenya
20.	Light 4 Bamboo and Environment	Maragua, Murang'a County	10(3M/7F)	Kenya
21.	Dedan Kimathi University	Nyeri Town, Nyeri County	8(4M/4F)	Kenya
22.	Kimakia Eco-zone Community	Kiamakia, Murang'a County	9(5M/4F)	Kenya
23.	Chebasas Chapa Kazi Youth Group	Aldai, Nandi County	13(2M/11F)	Kenya
24.	Korosiot SHG	Korosiot, Nandi County	3(0M/3F)	Kenya
27.	AW Bamboo Nursery	Manafwa	3(0M/3F)	Uganda
28.	Chloroplast Investments	Mukono	7(2M/5F)	Uganda
29.	Friends of Bamboo	Moyo	5(0M/5F)	Uganda
30.	Uganda Bamboo Association	Kampala	15(3M/12F)	Uganda
31.	Nile Ply Woods	Nakasongola	14(2M/12F)	Uganda
32.	Mgahinga Craft Centre	Kisoro	8(5M/3F)	Uganda
33.	Kontiki	Hoima	11(3M/8F)	Uganda
34.	Talent Agroforestry	Nakaseke	10(2M/8F)	Uganda
35.	Bamboo Village Uganda	Entebbe	13(3M/10F)	Uganda
36.	Manafwa Nursery	Manafwa	9(1M/8F)	Uganda
	Total:		249(92M/157F)	

**ANNEXURE-XIII: ESTABLISHMENT OF BAMBOO PLANTATION FOR
DEMONSTRATION AND RESTORATION**

S. N o	Location / Region	Project	# Ha	# Plants	Planting Month	Agency
Ethiopia						
1.	Qurati, West Gojjam	Inter-Africa: BoA	11.85	7412	Jun/Jul 2020	Government Planting
2.	Dembecha, West Gojjam	Inter-Africa: BoA	0.52	326	Jun/Jul 2020	Government Planting
3.	Bu Zuriya, West Gojjam	Inter-Africa: BoA	1.953	1200	Jun/Jul 2020	Government Planting
4..	Jabi Tena, West Gojjam	Inter-Africa: BoA	8.4	5266	Jun/Jul 2020	Government Planting
5.	Sekela, West Gojjam	Inter-Africa: BoA	27.99	17247	Jun/Jul 2020	Government Planting
6.	Dega Damot, West Gojjam	Inter-Africa: BoA	35.51	21855	Jun/Jul 2020	Government Planting
7.	Tenta, South Wolo	Inter-Africa: BoA	6.2	18491	Jun/Jul 2020	Government Planting
8.	Mekidela, South Wolo	Inter-Africa: BoA	0.75	550	Jun/Jul 2020	Government Planting
9.	Tehulere, South Wolo	Inter-Africa: BoA	1	2000	Jun/Jul 2020	Government Planting
10.	Dera, South Gonder	Inter-Africa: BoA	4.9	2987	Jun/Jul 2020	Government Planting
11.	Farta, South Gonder	Inter-Africa: BoA	1.5	1450	Jun/Jul 2020	Government Planting
12.	Este, South Gonder	Inter-Africa: BoA	4.8	3000	Jun/Jul 2020	Government Planting
13.	Guna, South Gonder	Inter-Africa: BoA	5.5	4200	Jun/Jul 2020	Government Planting
14.	Bibugn, East Gojjam	Inter-Africa: BoA	4.5	2813	Jun/Jul 2020	Government Planting
15.	Sinan, East Gojjam	Inter-Africa: BoA	5.072	3300	Jun/Jul 2020	Government Planting
16.	Debay, East Gojjam	Inter-Africa: BoA	20	2000	Jun/Jul 2020	Government Planting
17.	Fagita Lekoma, Awi	Inter-Africa: BoA	2.33	1954	Jun/Jul 2020	Government Planting
18.	Guwagusa Shigudad, Awi	Inter-Africa: BoA	4.5	4992	Jun/Jul 2020	Government Planting
19.	Anikesh, Awi	Inter-Africa: .BoA	0.56	350	Jun/Jul 2020	Government Planting
20.	Guwangua, Awi	Inter-Africa: BoA	15.5	32500	Jun/Jul 2020	Government Planting
21.	Zigem, Awi	Inter-Africa: BoA	0.72	2323	Jun/Jul 2020	Government Planting
22.	Jawi, Awi	Inter-Africa: BoA	41.88	45150	Jun/Jul 2020	Government Planting

23..	Ensaro, North Shoa	Inter-Africa: BoA	2.75	1600	Jun/Jul 2020	Government Planting
24.	Anitsokiya, North Shoa	Inter-Africa: BoA	0.32	200	Jun/Jul 2020	Government Planting
25.	Gishe, North Shoa	Inter-Africa: BoA	1.92	1246	Jun/Jul 2020	Government Planting
26.	Rayakobo, North Wolo	Inter-Africa: BoA	1.667	1315	Jun/Jul 2020	Government Planting
27.	Habru, North Wolo	Inter-Africa: BoA	5.5	2100	Jun/Jul 2020	Government Planting
28.	Gubalafto, North Wolo	Inter-Africa: BoA	0.15	390	Jun/Jul 2020	Government Planting
29.	Metema, West Gojjam	Inter-Africa: BoA	47.22	53361	Jun/Jul 2020	Government Planting
30.	Qura, West Gojjam	Inter-Africa: BoA	0.3788	947	Jun/Jul 2020	Government Planting
31.	Adi Arqa, North Gonder	Inter-Africa: BoA	26.5	48054	Jun/Jul 2020	Government Planting
32.	Arituma Faris, Oromo	Inter-Africa: BoA	1.938	1112	Jun/Jul 2020	Government Planting
33.	Dewa Chefa, Oromo	Inter-Africa: BoA	2	2779	Jun/Jul 2020	Government Planting
34.	West Belesa, Central Gonder	Inter-Africa: BoA	5.21	4001	Jun/Jul 2020	Government Planting
35.	East Belesa, Central Gonder	Inter-Africa: BoA	0.5	300	Jun/Jul 2020	Government Planting
36.	Takusa, Central Gonder	Inter-Africa: BoA	8	29624	Jun/Jul 2020	Government Planting
37.	TachioArmachiho, Central Gonder	Inter-Africa: BoA	6.38	9320	Jun/Jul 2020	Government Planting
38.	TsegedeArmachiho, Central Gonder	Inter-Africa: BoA	2.59	2605	Jun/Jul 2020	Government Planting
39.	MehaArmachiho, Central Gonder	Inter-Africa: BoA	1.51	937	Jun/Jul 2020	Government Planting
40.	Gonder area, , Central Gonder	Inter-Africa: BoA	0.32	200	Jun/Jul 2020	Government Planting
41.	Sekota, Wagmira	Inter-Africa: BoA	2.5	301	Jun/Jul 2020	Government Planting
42.	Zaqola, Wagmira	Inter-Africa: BoA		218	Jun/Jul 2020	Government Planting
43.	Abergele, Wagmira	Inter-Africa: BoA		190	Jun/Jul 2020	Government Planting
44.	Ketema, Wagmira	Inter-Africa: BoA		26	Jun/Jul 2020	Government Planting
45.	Sehala, Wagmira	Inter-Africa: BoA		23	Jun/Jul 2020	Government Planting
46.	Tsagibju, Wagmira	Inter-Africa: BoA		200	Jun/Jul 2020	Government Planting
47.	East Gojjam, Amhara	Dutch-Sino- EFCCC	6.25	2500	Jun/Jul 2020	Government Planting
48.	Awı Zone, Amhara	Dutch-Sino- EFCCC	7.5	3000	Jun/Jul 2020	Government Planting

49.	Gedio Zone , SNNPRS	Dutch-Sino-EFCCC	5.25	2100	Jun/Jul 2020	Government Planting
50.	Chiko, Sidama	Dutch-Sino-EFCCC	8	3200	Jun/Jul 2020	Government Planting
51.	Bule, SNNPRS	Dutch-Sino-EFCCC	5.2	2080	Jun/Jul 2020	Government Planting
	Ethiopia: Total		355.48 ha	355295		
Kenya						
1.	Bomet – planted by Elden life	Dutch-Sino	8.75	3,500	Apr/May	Private
2.	Bungoma – 30 schools and HH	Dutch-Sino	1.50	600	Apr/May	Private
3.	Busia farmers (182)	Dutch-Sino	7.77	3107	Apr/May	Private
4.	Busia farmers (45)	Dutch-Sino	35.83	14,332	Apr/May	Private
5.	Busia medium scale farmers (14)	Dutch-Sino	10.64	4,257	Apr/May	Private
6.	Busia medium scale farmers (15)	Dutch-Sino	12.24	4,896	Apr/May	Private
7.	Busia small scale farmers (54)	Dutch-Sino	4.70	1,878	Apr/May	Private
8.	Dedan Kimathi University, Nyeri	Dutch-Sino	0.50	200	Apr/May	Private
9.	Kericho – 5 farmers	Dutch-Sino	0.30	120	Oct/Nov	Private
10.	Kericho – planted by Elden life	Dutch-Sino	5.00	2,000	Oct/Nov	Private
11.	Kiambu – planted by CCMI	Dutch-Sino	0.88	350	Oct/Nov	Private
12.	Kibirong & Korosoit, Nandi	Dutch-Sino	2.13	850	Oct/Nov	Private
13.	Kilifi – planted by Fuel wing energy	Dutch-Sino	16.25	6,500	Oct/Nov	Private
14.	Kilifi – planted by CCMI	Dutch-Sino	0.75	300	Oct/Nov	Private
15.	Kisii – planted by Elden life	Dutch-Sino	2.50	1,000	Oct/Nov	Private
16.	Kisumu – planted by Elden life	Dutch-Sino	6.25	2,500	Oct/Nov	Private
17.	Koitaleel Samoei University, Nandi	Dutch-Sino	3.38	1,350	Oct/Nov	Private
18.	Machakos – planted by CCMI	Dutch-Sino	1.00	400	Oct/Nov	Private
19.	Makueni – planted by CCMI	Dutch-Sino	0.50	200	Oct/Nov	Private
20.	Michuki Memorial Park, Nairobi	Dutch-Sino	1.25	500	Oct/Nov	Government
21.	Muguga, Kiambu – 15 farmers	Dutch-Sino	0.11	45	Oct/Nov	Private
22.	Muranga – planted by CCMI	Dutch-Sino	0.38	150	Oct/Nov	Private
23.	Nandi – planted by Elden life	Dutch-Sino	1.75	700	Oct/Nov	Private

24.	Nandi – planted by KWTA	Dutch-Sino	25.00	10,000	Oct/Nov	Government
25.	Nandi – planted by CCMI	Dutch-Sino	0.50	200	Oct/Nov	Private
26.	Nandi medium scale farmers (4)	Dutch-Sino	1.63	650	Oct/Nov	Private
27.	Narok – 300 farmers	Dutch-Sino	15.00	6,000	Oct/Nov	Private
28.	Nyando – Kisumu farmers (50)	Dutch-Sino	1.75	700	Oct/Nov	Private
29.	Yala Swamp, Siaya	Dutch-Sino	8.75	3,500	Oct/Nov	Government
30.	Busia – Wetland International	Dutch-Sino	17.5	7,000	Oct/Nov	Private
31.	Busia – County government	Dutch-Sino	50	20,000	Oct/Nov	Government
32.	KWTA- Mau	Dutch-Sino	12.5	5,000	Oct/Nov	Government
33.	Red Hill-St Paul	Dutch-Sino	5	2,000	Oct/Nov	Government
34.	CCMI short rains	Dutch-Sino	8.67	3,468	Oct/Nov	Private
35.	Base titanium – Kwale	Dutch-Sino	15	6,000	Oct/Nov	Private
36.	Kisumu- County Government	Dutch-Sino	25	10,000	Oct/Nov	Government
37.	KFS Busia	Dutch-Sino	2.5	1000	Oct/Nov	Government
38.	KFS Kericho	Dutch-Sino	0.5	200	Oct/Nov	Government
39.	Kericho – Kenya Climate Smart Agriculture	Dutch-Sino	0.8	320	May	Government
40.	KEFRI-ENBOIBUI	Dutch-Sino	1.58	630	May	Government
41.	Nature Conservancy – Nairobi Water Trust Upper Tana	Dutch-Sino	18.75	7500	May	Government
42.	Nature Conservancy- Nairobi Water Trust - Ndakaini Dam	Dutch-Sino	8.75	3500	May	Government
43.	Nature Conservancy- NTV Nyandarua	Dutch-Sino	17.5	7000	May	Government
44.	GPE Farmers- Nyeri	Dutch-Sino	18.09	7234	May/Oct	Private
45.	GPE Narok	Dutch-Sino	37.5	15000	May/Oct	Private
46.	Eco green conservancy- farmers Embu	Dutch-Sino	5.5	2200	May/Oct	Private
47.	Green Venture farms- Meru	Dutch-Sino	15.94	6376	May/Oct	Private
48.	Nyeri– county government	Dutch-Sino	8.75	3500	May/Oct	Government
49.	ADS North Rift	Dutch-Sino	2.5	1000	May	Private
	Kenya: Total		449.32 ha	179,713		
Uganda						
1.	Hoima, Kontiki Bamboo Works	Dutch-Sino	80.5	20,000	Sep/Oct	Private
2.	Kalangalo, Divine Bamboo Group	Dutch-Sino	5	2,000	Oct/Nov	Private
3.	Kikuube	Dutch-Sino	92.5	37,000	Oct/Nov	Government
4.	Hoima, Charles Magezi	Dutch-Sino	1.6	640	Oct/Nov	Private

5.	Masindi, Mbabazi Deborah	Dutch-Sino	4	644	Oct/Nov	Private
6.	Kalangalo (Wakiso,)	Dutch-Sino	36.6	14640	Sep/Oct	Government
7.	Nile Bank CFR (Jinja)	Dutch-Sino	23	9200	Oct/Nov	Government
8.	Nwoya District	Dutch-Sino	213.46	19,560	Oct/Nov	Government
9.	Kasagala, Mr.Muyamb	Dutch-Sino	15	6,000	Oct/Nov	Government
10.	Iganga	Dutch-Sino	0.4	100	Oct/Nov	Government
11.	Mukono, Chloroplast	Dutch-Sino	8.6	3,440	Oct/Nov	Government
12.	Tororo ,Alokit	Dutch-Sino	0.4	160	Oct/Nov	Government
13.	Kitgum, Kenneth	Dutch-Sino	0.1	40	Oct/Nov	Government
14.	Kisoro, Murora; Echuya Forest Conservation and Poverty Alleviation Association	Dutch-Sino	10	4,000	Oct/Nov	Government
Uganda: Total			491.16 ha	117,424		

ANNEXURE XIV: DETAILS OF SMALLHOLDER FARMERS PLANTING BAMBOO

S.No	Location / Region	No of Households (HH)	# Plants	Planting Month	Comment
1.	Debretabor, East Gonder, Amhara Region, Ethiopia	23	450	June/July	Farm boundary plantation
2.	Kessa Chewassa kebele Injibara, Amhara region, Ethiopia	45	500	June/July	Homestead plantation
3.	Chencha, Gamo zone, SNNPRS, Ethiopia	40	650	June/July	Homestead plantation
4.	Durame woreda, Hadiya zone, SNNPRS, Ethiopia	17	225	June/July	Farm boundary plantation
5.	Gashena, Akayta kebele, Injibara, Amhara region, Ethiopia	35	375	June/July	Farm boundary and homestead plantation
6.	Muguga, Kiambu County , Kenya	40	550	Oct/Nov	Farm boundary plantation
7.	Londiani, Kericho County, Kenya	34	350	Oct/Nov	Farm boundary and homestead plantation
8.	Korosito, Nandi County, Kenya	46	465	Oct/Nov	Farm boundary plantation
9.	Maragua, Murang'a County, Kenya	30	275	Oct/Nov	Farm boundary, homestead plantation
10.	Gede, Kilifi County, Kenya	33	350	Oct/Nov	Farm boundary plantation
11.	Maseno, Kisumu County, Kenya	62	550	Oct/Nov	Farm boundary plantation
12.	Narok, Nyeri County, Kenya	82	850	Oct/Nov	Private land and homestead

13.	Shiamakhokho, Vihiga County, Kenya	70	700	Oct/Nov	Homestead and private plantation
14.	Butula, Busia County ,Kenya	52	475	Oct/Nov	Farm boundary and homestead plantation
15.	Kericho Town, Kericho County ,Kenya	90	800	Oct/Nov	Private land and homestead plantation
16.	Lichota, Migori County, Kenya	60	480	Oct/Nov	Homestead plantation
17.	Kiseriani, Kajiado County, Kenya	44	400	Oct/Nov	Homestead plantation
18.	Litein, Kericho County, Kenya	72	725	Oct/Nov	Homestead plantation
19.	Onyunyuri, Busia County, Kenya	85	870	Oct/Nov	Farm boundary and homestead plantation
20.	Kibirong, Nandi County , Kenya	68	690	Oct/Nov	Farm boundary and homestead plantation
21.	Ahero, Kisumu County, Kenya	40	380	May	Farm boundary and homestead plantation
22.	Maragua, Murang'a County, Kenya	28	250	May	Farm boundary and homestead plantation
23.	Nyeri Town, Nyeri County, Kenya	34	350	May	Farm boundary and homestead plantation
24.	Kiamakia, Murang'a County, Kenya	45	50	May	Farm boundary and homestead plantation
25.	Aldai, Nandi County, Kenya	44	325	May	Homestead plantation
26.	Namanve, Wakiso district, Uganda	17	225	Oct/Nov	Homestead plantation
27.	Namawojolo, Mukono, Uganda	9	135	Oct/Nov	Homestead plantation
28.	Namatale CFR, Mbale, Uganda	11	165	Oct/Nov	Homestead plantation
29.	Ssakabusolo, Nakaseke District, Uganda	10	150	Oct/Nov	Homestead plantation
30.	Najjeera, Kampala, Uganda	10	135	Oct/Nov	Homestead plantation
31.	Kikwatamigo, Hoima, Uganda	22	265	Oct/Nov	Homestead plantation
32.	Murora, Kisoro, Uganda	8	120	Oct/Nov	Homestead plantation
33.	Kerekere, Moyo, Uganda	10	100	Oct/Nov	Homestead plantation
34.	Masindi town , Masindi, Uganda	12	180	Oct/Nov	Homestead plantation
35.	Nakisunga ,Mukono, Uganda	7	105	Oct/Nov	Homestead plantation
36.	Kimaka, Jinja, Uganda	13	195	Oct/Nov	Homestead plantation
	Total:	1334	13860		

ANNEXURE-XV: ACTIVITY PHOTOGRAPHS OF ESTABLISHMENT OF BAMBOO PLANTATION FOR DEMONSTRATION AND RESTORATION



**ANNEXURE XVI: DETAILS OF SUSTAINABLE MANAGEMENT AND
SMALLHOLDER FARMERS**

S.No	Details	Location	No – Farmers	No. of Hectares
1.	Small holder Sustainable Harvesting and Management	Wonchi Woreda, South West Shewa Zone Oromia Region, Ethiopia	34(10M/24F))	10.75
2.	Small holder Sustainable Harvesting and Management	Dire Enchini Woreda, West Shewa Zone Oromia Region, Ethiopia	47(9M/38F)	8.25
3.	Small holder Sustainable Harvesting and Management	Durame Woredas , Hadiya zone, SNNPRS, Ethiopia	37(11M/26F)	5.75
4.	Small holder Sustainable Harvesting and Management	Banja woreda, Awi Zone, Amhara Region, Ethiopia	50(7M/43F)	7.50
5.	Small holder Sustainable Harvesting and Management	Nguruinditu. Kiambu County	25(7M/18F)	5.75
6.	Small holder Sustainable Harvesting and Management	Bukhalalire, Busia County	25(3M/22F)	3.75
7	Small holder Sustainable Harvesting and Management	Amukura, Busia County	20(5M/15F)	8.25
8.	Small holder Sustainable Harvesting and Management	Nella, Busia County	20(7M/13F)	11.50
9.	Small holder Sustainable Harvesting and Management	Sisenye, Busia County	20(7M/13F)	11.00
10.	Small holder Sustainable Harvesting and Management	Ojera, Kisumu County	20(5M/15F)	9.00
11.	Small holder Sustainable Harvesting and Management	Litein, Kericho County	30(4M/26F)	9.25
12.	Small holder Sustainable Harvesting and Management	Katolo, Kisumu County	30(5M/25F)	6.25
13..	Small holder Sustainable Harvesting and Management	Agonget, Busia County	26(10M/16F)	7.50
14.	Small holder Sustainable Harvesting and Management	Kaptum, Nandi County	30(0M/30F)	9.50
15.	Small holder Sustainable Harvesting and Management	Koyo	35(6M/29F)	12.50
16.	Small holder Sustainable Harvesting and Management	Lumuke, West Pokot County	25(3M/22F)	7.25
17.	Small holder Sustainable Harvesting and Management	Korosiot, Nandi County	30(3M/27F)	9.20
18.	Small holder Sustainable Harvesting and Management	Onyunyuri, Busia County	35(6M/29F)	9.50
19.	Small holder Sustainable Harvesting and Management	Ndakaini Dam, Muranga'a County	21(5M/16F)	9.50
20.	Small holder Sustainable Harvesting and Management	Maram. Homa Bay County	24(7M/17F)	5.80
21.	Small holder Sustainable Harvesting and Management	Echuya CFR, Uganda	50(7M/43F)	215.75
22.	Small holder Sustainable Harvesting and Management	Luwamunda, Uganda	35(3M/32F)	11.00

23.	Small holder Sustainable Harvesting and Management	Manafwa, Uganda	53(10M/43F)	18.50
24.	Small holder Sustainable Harvesting and Management	Namanve, Wakiso district	45(5M/40F)	9.25
25.	Small holder Sustainable Harvesting and Management	Namawojolo, Mukono	40(7M/33F)	10.75
26.	Small holder Sustainable Harvesting and Management	Namatale CFR, Mbale	39(9M/30F)	7.50
27.	Small holder Sustainable Harvesting and Management	Ssakabusolo, Nakaseke District	48(4M/44F)	10.50
28.	Small holder Sustainable Harvesting and Management	Najjeera ,Kampala	41(5M/36F)	17.50
	Total:		935(170M/765F)	468.45 Hectares

ANNEXURE-XVII: ACTIVITY PHOTOGRAPHS OF THE SUSTAINABLE MANAGEMENT AND SMALLHOLDER FARMERS



ANNEXURE XVIII: DETAILS OF CAPACITY BUILDING TRAINING FOR LINE DEPARTMENTS

S.No	Location of the Capacity Building for ToTs	No of Participants	No of Days/Month	Place/Country
1.	Bishoftu	27(23M/4F)	5 days/ Nov.2020	Ethiopia
2.	Adama	26(23M/3F)	5 days/ Nov.2020	Ethiopia
	Ethiopia :Total	53(46M/7F)		
3.	Kibirong , Nandi County	26(21M/5F)	5 days/ Oct.2020	Kenya
4.	Busia Town, Busia County	27(23M/4F)	5 days/ Nov.2020	Kenya
	Kenya: Total	53(44M/9F)		
5.	National Tree Seed Centre	26(19M/7F)	5 days/ Sep.2020	Uganda
6.	Moyo town	25(19M/6F)	5 days/ Dec.2020	Uganda
	Uganda: Total	51(38M/13F)		

ANNEXURE-XIX: ACTIVITY PHOTOGRAPHS OF CAPACITY BUILDING TRAINING FOR THE LINE DEPARTMENTS



ANNEXURE-XX: CAPACITY BUILDING FOR COMMUNITY ON BAMBOO NURSERY, ON-FARM PLANTING, RESTORATION AND SUSTAINABLE MANAGEMENT

S.No.	Name of the Locations	No of Participants	No of Days/Month	Place/Country
1.	Injibara, Amhara	30(6M/24F)	3days/Sep.2020	Ethiopia
2.	Dere Inchini, Oromia	28(8M/20F)	3days/Oct.2020	Ethiopia
3.	Hawassa, Amhara	26(9M/17F)	3days/Oct.2020	Ethiopia
4.	Kesha, Amhara	32(7M/25F)	3days/Nov./2020	Ethiopia
5.	Wonchi Woreda, Oromia	25(5M/20F)	3days/Dec2020	Ethiopia
6.	Arbegona, SNNPR	27(2M/25F)	3days/Dec./2020	Ethiopia
7	Kessa and Zengena (Banja Woreda)	62 (17M/45F)	10-12 April	Ethiopia
8.	Akayta and Kesa (Banja Woreda)	50 (15M/35F)	13 -20 May	Ethiopia
9.	Kesa, Addis Kidam, Injibara	51 (23M/28F)	25-30 Jul.	Ethiopia
10.	South Gonder Zone (Kanta and sorate Kebele Farta Woreda	96 (38M/58F)	18-21 Oct.	Ethiopia
11.	Debretabor	27 (16M/6F)	25-26 Nov.	Ethiopia
12.	Debretabor and Este woreda agona Kebele	11 (8M/3F)	6-7 Dec.	Ethiopia
13.	Bahirdar, debretabor, Este, pico, sekela, injibara	23 (15M/8F)	8-10 Dec.	Ethiopia
14.	Injibara, Zengena	26 (15M/11F)	13 -15 Dec.	Ethiopia
15.	Ethiopia :Total	808 (444M/364F)		Ethiopia
16.	Nguruinditu, Kiambu County	30(9M/21F)	3days/Sep.2020	Kenya
17.	Bukhalalire , Busia County	28(9M/19F)	3days/Sep.2020	Kenya
18.	Amukura, Busia County	26(7M/19F)	3days/Sep.2020	Kenya
19.	Nella, Busia County	23(6M/17F)	3days/Oct.2020	Kenya
20.	Sisenye, Busia County	24(5M/19F)	3days/Oct.2020	Kenya
21.	Ojera, Kisumu County	30(10M/20F)	3days/Oct.2020	Kenya
22.	Litein, Kericho County	29(9M/20F)	3days/Oct.2020	Kenya
23.	Katolo, Kisumu County	21(7M/14F)	3days/Nov.2020	Kenya
24.	Agonget, Busia County	23(8M/15F)	3days/Nov.2020	Kenya
25.	Kaptum, Nandi County	24(3M/21F)	3days/Nov.2020	Kenya
26.	Koyo	32(0M/32F)	3days/Nov.2020	Kenya
27.	Lumuke, West Pokot County	30(7M/23F)	3days/Nov.2020	Kenya
28.	Korosiot, Nandi County	31(3M/28F)	3days/Nov.2020	Kenya
29.	Onyuniyuri, Busia County	30(0M/30F)	3days/Nov.2020	Kenya
30.	Ndakaini Dam, Muranga'a County	35(0M/35F)	3days/Dec.2020	Kenya
31.	Kenya: Total	416(83M/333F)	3days/Sep.2020	

32.	Echuya	32(9M/23F)	3days/Sep.2020	Uganda
33.	Metu	30(5M/25F)	3days/Sep.2020	Uganda
34.	Luwamunda	25(7M/18F)	3days/Sep.2020	Uganda
35.	Manafwa	23(3M/20F)	3days/Oct.2020	Uganda
36.	National Tree Seed Centre	23(3M/20F)	3days/Oct.2020	Uganda
37.	NFA Kabale	29(0M/29F)	3days/Oct.2020	Uganda
38.	Nakaseke	25(3M/22F)	3days/Oct.2020	Uganda
39.	Moyo town	24(5M/19F)	3days/Oct.2020	Uganda
40.	Mbale	31(2M/29F)	3days/Oct.2020	Uganda
41.	Metu	30(9M/21F)	3days/Nov.2020	Uganda
42.	Luwamunda	27(4M/23F)	3days/Nov.2020	Uganda
43.	Metu	27(0M/27F)	3days/Dec.2020	Uganda
44.	Nakaseke	25(0M/25F)	3days/Dec.2020	Uganda
Uganda: Total		351(50M/301F)		

ANNEXURE-XXI: ACTIVITY PHOTOGRAPHS OF CAPACITY BUILDING FOR COMMUNITY ON BAMBOO NURSERY, ON-FARM PLANTING, RESTORATION AND SUSTAINABLE MANAGEMENT





ANNEXURE XXII: DETAILS OF ASSOCIATION OR COOPERATIVES

S. No	Location	Cluster	No. of members	Country
1.	Deren-Inchiniin	Ambo Bamboo MSME Cluster for Sustainable Development	116(89M/27F)	Ethiopia
2.	Chencha	Arba Minch: Bamboo Livelihood Development Cluster	239(148M/91F)	Ethiopia
3.	Busia	Busia Bamboo Cluster	75(36M/39F)	Kenya
4.	Migori	Migori Bamboo Cluster	63(35M/28F)	Kenya
5.	Murunga	Murunga Bamboo Cluster	48(26M/22F)	Kenya
6.	Aya, Eremi Sub county, Moyo	Moyo Bamboo Cluster	35(15M/20F)	Uganda
7.	Golden Speed Bamboo Cutting Group	Moyo Bamboo Cluster	45(25M/20F)	Uganda
8.	Mgahinga Bamboo	South-west Paidha Bamboo Cluster	65(35M/30F)	Uganda
	Total		686(409M/277F)	

ANNEXURE-XXIII: ACTIVITY PHOTOGRAPHS OF ASSOCIATION OR COOPERATIVES





ANNEXURE XXIV: TRAINING ON SUPPLY CHAIN DEVELOPMENT

S.No.	Name of the Locations	No of Participants	No of Days/Month	Place/Country
1.	Farmers Training on supply chain development and market at Bahirdar, Debretabor, East, sekela, Injibara	91 (57M/ 34F)	23- 27 July	Amhara region, Ethiopia
2.	Farmers Training on supply chain development and market at South Gonder Zone (Debretabor and Este woreda, Agona Kebele)	91 (74M/17F)	29 – 31 July	Amhara region, Ethiopia
3.	Farmers Training on supply chain development and market at Kessa and Zengena(Banja Woreda)	113 (77M/36F)	8-11 Dec.	Amhara region, Ethiopia
4.	Farmers Training on supply chain development and market at Akayta and Kesa (Banja Woreda)	179 (124M/55F)	13-15 Dec.	Amhara region, Ethiopia
	Total	474(332M/142F)		

ANNEXURE XXV: DETAILS OF LOCAL MARKET INFRASTRUCTURE DEVELOPED

S.No	Location	Cluster	Country	Details of infrastructure and facilities
1.	EETE, Hyawalet, Addis Ababa	Addis Ababa Bamboo Economic and Industrial Development Cluster	Ethiopia	Site labelling work completed, shed construction in progress; meeting organized with Dere-Inchini in primary cooperative
2.	Busia	Busia Bamboo Cluster	Kenya	Shed construction in progress; basic machine and tools identified,

				registration, interaction meeting organized with SMEs.
3.	Mgahinga Bamboo Association	South-west Paidha Bamboo Cluster	Uganda	Site labelling and registration work completed, design of shed; meeting organized with primary cooperatives and SMEs for linkages.

ANNEXURE-XXVI: ACTIVITY PHOTOGRAPHS OF LOCAL MARKET INFRASTRUCTURE DEVELOPED



ANNEXURE-XXVII: DETAILS OF PARTICIPATION IN DOMESTIC TRADE FAIRS AND EXHIBITIONS

S.No.	Name of the Fairs and Exhibitions	No of Participants	Country
1.	FeSMMIDA	15	Ethiopia
2.	Exhibition held at Butula, Busia County on 11 Dec 2020/KEFRI/KBA	50	Kenya
3.	Exhibition at Buganda Kingdom's Buganda Cycling Association/ Dec.2020	35	Uganda
	Total:	100	

ANNEXURE-XXVIII: ACTIVITY PHOTOGRAPHS OF PARTICIPATION IN DOMESTIC TRADE FAIR AND EXHIBITIONS



ANNEXURE-XXIX: PUBLIC AWARENESS CAMPAIGN FOR SMALLHOLDER FARMERS, CONSUMERS, HOUSEHOLDS, GOVERNMENT AND ENTERPRISES

S.No.	Name of the Fairs and Exhibitions	No of participants	Country
1.	Bamboo economic, social and environmental relevance and management practices at Woreta, South Gonder Zone, Amhara region on 16 th July2020	250	Ethiopia
2.	Policy awareness creation, establishing bamboo plantations at Debretabor, Amhara region on 20 th July2020	65	Ethiopia
3.	Policy awareness creation, bamboo as resource for socio-economic livelihood at Injibara, Zengena, Amhara region on 4 th October2020	92	Ethiopia
4.	Policy awareness creation, bamboo as resource for socio-economic livelihood at Kanta and sorate Kebele Farta Woreda, Amhara region on 25 th November2020	116	Ethiopia
5.	International Day for the Elimination of Violence Against Women/25 th Nov.2020	175	Ethiopia
6.	UN International Day for Natural Disaster Reduction /13th, October2020	225	Kenya
7.	World Bamboo Day/18 th Sep.2020(five location with partners)	1000	Kenya
8.	Buganda Kingdom's Buganda Cycling Association/ Dec.2020	225	Uganda
9.	World Bamboo Day//18 th Sep.2020	500	Uganda
	Total	2649	

ANNEXURE-XXX: ACTIVITY PHOTOGRAPHS OF PUBLIC AWARENESS
CAMPAIGN FOR SMALLHOLDER FARMERS, CONSUMERS, HOUSEHOLDS,
GOVERNMENT AND ENTERPRISES



ANNEXURE-XXXI: IDENTIFIED BAMBOO CLUSTERS

S.No.	Name of the Cluster	No of Households	Product Verticals	Location/Country
1.	Addis Ababa Bamboo Economic and Industrial Development Cluster	475	Bamboo handicrafts and furniture enterprises	Addis Ababa/Ethiopia
2.	Debramarcos: Bamboo Enterprise Development Cluster	575	Bamboo handicrafts and furniture enterprises	Amhara/Ethiopia
3.	Assosa Bamboo Economic and Livelihood Development Cluster	650	Bamboo Pole-primary processing	Benishangul Gumuz/Ethiopia
4.	Ambo Bamboo MSME Cluster4 Sustainable Development	550	Bamboo handicrafts and furniture enterprises	Oromia/Ethiopia
5.	Arbaminch: Bamboo Livelihood Development Cluster	675	Bamboo handicrafts and furniture enterprises	SNNPRs/Ethiopia
6.	Hawassa : Bamboo Enterprise Development Cluster	725	Bamboo handicrafts and furniture enterprises	Sidama/Ethiopia
	Ethiopia: Total	3650		
7.	Busia Bamboo Cluster	1000	Furniture/Pole	Kenya
8.	Narok Bamboo Cluster	500	Seedlings	Kenya
9.	Homabay Bamboo Cluster	400	SME	Kenya
10.	Migori Bamboo Cluster	550	Handicrafts	Kenya
	Nyeri Bamboo Cluster	425	Seedlings	Kenya
12.	Muranga Bamboo Cluster	375	Weaving	Kenya
13.	Killifish Bamboo Cluster	225	Weaving	Kenya
	Kenya: Total	3475		
14.	Moyo Bamboo Cluster	475	Furniture and crafts	Uganda
15.	South-West Paidha Bamboo Cluster	350	Furniture and crafts	Uganda
16.	Bunyoro Bamboo Cluster	300	Furniture and crafts	Uganda
17.	Kampala Bamboo Cluster	1000	Charcoal	Uganda
18.	Elgon Bamboo Cluster	250	Bamboo shoots	Uganda
19.	Acholi-Lango, Bamboo Cluster	450	Furniture and crafts	Uganda
20.	Teso - Karamoja Bamboo Cluster	350	Furniture and crafts	Uganda
21.	Busoga-Kaliro Bamboo Cluster	375	Furniture and crafts	Uganda
	Uganda: Total	3550		

11. APPENDIX

Appendix I:	An Independent Auditor's Report for the year-1
Appendix II:	Expenditure and Transaction List of Expenditure
Appendix III:	Report of the Wageningen Food & Bio based Research on development of bamboo composites from Ethiopian bamboo.
Appendix IV:	Bamboo as a Green Business Opportunity in Ethiopia
Appendix V:	Pro-poor Bamboo Industry and SME Value Chains
Appendix VI:	Enhance Bamboo Business and Trade Environment
Appendix VII:	Sustainable Management of Bamboo Resources
Appendix VIII:	Bamboo Homestead Farming System Development
Appendix IX:	Technical Bulletin: Bamboo Household Clean Energy Production
Appendix X:	Technical Bulletin: Bamboo Preservation and Treatment
Appendix XI:	Baseline Study Report
Appendix XII:	M&E Framework
Appendix XIII:	Bamboo Cluster Development Report
Appendix XIV:	Minutes of the First Steering Committee
Appendix XV:	Gender Study report
Appendix XVI:	Co-funding Letters
Appendix XVII:	Short awareness and sensitisation videos