

PROJECT DESIGN DOCUMENT FOR THE

TREES OF HOPE PLAN VIVO PROJECT



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LIST OF ACRONYMS

ACU	Area Control Unit.
CDI	Clinton Development Initiative.
CHDI	Clinton Hunter Development Initiative.
DADO	District Agricultural Development Office(r).
DFO	District Forestry Office(r).
DSI	Dispersed Systematic Inter-planting.
EAD	Environmental Affairs Department.
EPA	Extension Planning Area.
GHG	Green House Gases.
LPM	Local Program Monitor.
MNLP	Malawi National Land Policy.
MoU	Memorandum of Understanding.
NTFPs	Non Timber Forest Products.
PES	Payment for Ecosystem Services.
РНС	Population and Housing Census.
ΡΙΑ	Participatory Impact Assessment.
UNFCCC	United Nations Framework Convention on Climate Change.

1.0 EXECUTIVE SUMMARY

Climate change is now widely recognized as a defining human development issue of our generation that not only undermines world economies but also threatens to consign people, especially the poorest, to a future of diminished opportunities. Build-up of Green House Gases (GHGs) including carbon dioxide in the atmosphere, largely due to human activity, is being blamed for climate change. Global efforts have since been underway to reduce emissions through various initiatives including the Kyoto Protocol of 1997 where countries agreed to reduce their emissions to pre-industrial levels. Climate change has injected renewed importance in regulating the utilization of ecosystem services noting that services are being degraded faster than they can recover. This has led to the principle of "Payment for Ecosystem Services" (PES), which attaches financial value to a quantifiable and conditionally-delivered ecosystem service. Projects emerge dealing in ecosystem services and the Trees of Hope project is one such project delivering ecosystem services and livelihood benefits through its carbon offset activities.

The Trees of Hope project is being implemented in two districts (Dowa and Neno) of central and southern Malawi respectively where rural smallholders voluntarily engage in the establishment of forestry and agroforestry land-use systems for generation of carbon credits and other livelihood benefits. Besides carbon sequestration, communities will benefit from the provision of fuel-wood, food (fruits), medicines, construction materials (poles, timber etc), water conservation and soil fertility improvement. The project is coordinated by the Clinton Development Initiative (CDI) with its head office in Lilongwe and field offices in the target districts. The project maintains its close community presence through a network of Local Program Monitors (LPMs), farmer volunteers chosen by the communities to serve as local project leaders. Monitors provide general extension to all producers managing five technical specifications namely, boundary planting, woodlots, dispersed systematic interplanting (DSI), citrus and mango orchards. Currently (2011) the project engages over 1290 smallholder producers, managing an area of over 488 hectares and 5743 (100m units) of

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boundary planting. These areas will collectively sequester 99,228 tCO₂e over the project crediting period.

2.0 DESCRIPTION OF PROJECT AIMS AND ACTIVITIES.

The project involves the establishment and management of forestry and agro-forestry land-use systems on household or community-owned land in Neno and Dowa districts in southern and central Malawi respectively, following the Plan Vivo Standard. Through these activities, the project aims to contribute towards the effort to address the problem of climate change through carbon sequestration and improving livelihood resilience. The Trees of Hope project further aims at facilitating access to carbon finance for participating producers through marketing their carbon credits on the voluntary carbon market. The project expects to improve the livelihoods of the participating communities through other ecosystem services derived from the chosen land-use systems. The project is pursuing the following objectives:

3.0 MAJOR OBJECTIVE.

The major objective of the project is to contribute towards climate change management efforts through carbon sequestration and to improve community livelihoods through access to carbon finance and other co-benefits.

3.1 Specific objectives.

- Sensitize the targeted communities and stakeholders on climate change, its impact on livelihoods and highlight mitigation and adaptation strategies.
- Initiate and promote awareness of the *Plan Vivo* System among communities and other stakeholders as a tool for governing carbon offset programs.
- Coordinate community-led effort in the establishment and management of forestry and agro-forestry systems for carbon sequestration and livelihood improvement.
- Facilitate producers' access to carbon finance through marketing and selling of Plan
 Vivo Certificates for their carbon credits approved under the Plan Vivo System.

4.0 PROJECT PARTICIPANTS.

The Trees of Hope project was initiated by the then Clinton Hunter Development Initiative (CHDI) an entity that resulted from a partnership for joint developmental efforts in Malawi between the Clinton Foundation of the United States of America (USA) and the Hunter Foundation of Scotland. The Clinton Development Initiative (CDI) is the current functional entity serving as the project coordinator with overall responsibility for the delivery of the project and ensuring that the Plan Vivo Standard is met. In the course of implementing the project, CDI works with both local and international partners. The main local partners include government departments of Forestry and Agriculture operating under the ministries of Natural Resources and the Environment and Agriculture and Food Security respectively.

These ministries have established extension systems (structures and personnel) in each district extending to the villages to ensure effective extension on agricultural, forestry and other environmental programs. For instance, each village has a Village Natural Resources Management Committee (VNRMC) recognized by the Malawi government. The VNRMC works closely with agriculture and forestry staff stationed at an Extension Planning Area (EPA) which covers a number of villages. A number of EPAs constitute an Area Control Unit (ACU), a number of which form the District Agricultural Development Office (DADO) or the District Forestry Office (DFO). The project utilizes these existing extension structures in its extension as summarized in Table 1 below. Where these government structures are non-functional, the project will facilitate revamping them. To ensure clarity of each party's roles in the partnership, Memoranda of Understanding (MoU) will be developed with each partner that will detail the terms of collaboration. The project, however, does not anticipate paying any financial compensation to partners for their contribution to the work beyond contributing to their relevant running costs where applicable.

Table 1:	Project's	participants	profile and roles.

Participant	Type of	Nationality	Roles
	organization		
Dowa District	Ministry of	Malawian.	Support in community
Agricultural	Agriculture and		extension.
Development	Food Security		Participation in
Office.	district office		planning of project
	(Government		activities.
	office).		Participation in field
			monitoring.
			Participation in farmer
			mobilization.
Dowa District	Ministry of	Malawian.	Support in community
Forestry	Natural		extension.
Office.	Resources and		Participation in
	Energy district		planning of project
	office		activities.
	(Government		Participation in field
	office).		monitoring.
			Participation in farmer
			mobilization.
Neno District	Ministry of	Malawian.	Support of community
Agricultural	Agriculture and		extension.
Development	Food Security		Participation in
Office.	district office		planning of project
	(Government		activities.
	office).		Participation in field
			monitoring.
			4 Farmer mobilization.

Participant	Type of	Nationality	Roles
	organization		
Neno District	Ministry of	Malawian	Support in community
Forestry	Natural		extension.
Office.	Resources and		Participation in
	Energy district		planning of project
	office		activities.
	(Government		Participation in field
	office).		monitoring.
			Participation in farmer
			mobilization.
Department of	Department in	Malawian	General project
Environmental	the Ministry		information sharing
Affairs	of Natural		including relevant
	Resources and		policy updates.
	Energy		
Energy for	International	International	Technical consultants
Sustainable	organization		who helped in carbon
Development	based in		modeling and
in Africa	Kenya.		development of
(ESDA)			technical
			specifications and
			preliminary training
			on the Plan Vivo
			Standard.

5.0 DESCRIPTION OF PROJECT AREAS.

The project will be implemented in two districts of Malawi namely Dowa in the Central region and Neno in the Southern region of the country as pilot sites. A brief description of each district is provided below:

5.1 Brief description for Dowa district.

5.1.1 Location

Dowa district lies between 33° 20' East and 34° 10' East and between 13° 20' South and 13° 40' South in central Malawi. It is bordered by Lilongwe, Kasungu, Ntchisi, and Salima in the south, north, north east, and east respectively. The total land area is 3041 km² with a population density of 183¹ persons per square kilometer. The location is shown in Figure 1 below.

¹ Malawi Population and Housing Census (PHC) 2008.



Figure 1: Map of Malawi showing Dowa district

5.1.2 Climate of Dowa

The climate is tropical and falls into two main seasons: wet and dry. The wet season starts in November and ends in May while the dry season runs from May to October. However, rain showers are also experienced during the months of June, and July in some parts of the district. The temperature ranges from 15 to 35 Degrees Celsius, while annual rainfall ranges from 500 mm to 2000 mm.

5.1.3 Topography and soils.

The district is topographically divided into two zones. The eastern part is predominantly hilly while the western part is low and open to agriculture. The eastern part is also well drained by rivers most of which originate from the hills. The hilly part of the district is suitable for crops such as bananas, beans, vegetables, sugar cane, and citrus fruits while the west is open to extensive maize, tobacco, and groundnuts growing and animal farming.

The soils on the hilly east are sticky laterite, and erosion is noticeable. On the western plain, the soils are a mixture of sand and clay and thus erosion is minimal. The highest point in the district is Dowa Hills which lies at 1698 meters above sea level. The district is further divided into two climatic zones – the cold high east and the warm, low west. The east, however, influences most of the district's weather, so that Dowa is generally a cold district, the peak cold months being May, June, and July. The normal rainy season is from mid November to mid March with high average falls in February.

5.1.4 Environmental issues in Dowa district

Dowa district just like many other districts of the country has many environmental problems that affect people's livelihoods. These environmental concerns include declining soil fertility as a result of continuous mono-cropping of various arable crops but predominantly maize coupled with unsustainable soil management practices resulting in soil erosion and nutrient mining. The effects of deforestation are also a common feature in the district especially in its western part where tree cover has been progressively lost to fuel wood (for household energy needs), curing of bricks, opening up of new fields for cultivation and construction of burley tobacco curing structures. Most water sources are now at risk of being reduced to seasonal flows as opposed to perennial water bodies that they have always been as a result of catchment area degradation. Generally the vegetation in Dowa falls under the miombo woodland with common tree species being *Bauhemia thorningii, Cordyla africana, Tamarindus indica, Uapaca kirkiana, Ziziphus macronata,*

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Acacia polycantha and *Annona senegalensis*. The district also has three gazetted hence protected forest reserves covering 2.1% of its total land area though encroachment is a challenge. Figure 2 below shows one of the deforested hills in the project area.



Figure 2: Deforested hill in Dowa district

5.2 Brief description of Neno district.

5.2.1 Location.

Neno district is located in Southern Malawi with a total land area of about 1469 km² with a population density of 74² persons per square kilometer. The district shares boundaries with Ntcheu district to the North, Balaka and Zomba districts to the Northeast, Blantyre district to the East, Chikwawa to the South, Mwanza district and the Republic of Mozambique to the Southwest and west respectively. The location of the district is shown in Figure 3 below.

² Malawi Population and Housing Census (PHC) 2008.



Figure 3: Map of Malawi showing the position of Neno district

5.2.2 Climate of Neno district

The climate of Neno is subtropical characterized by two main seasons: wet and dry. The wet season starts in November and ends in March when rainfall ranging from 500mm to 1200mm is received with January being the wettest month. The dry season runs from April to October. Mean annual temperatures vary widely over the district from 8° C in the high altitude areas to 32° C in the low lying areas in the Shire valley.

5.2.3 Topography and soils

The topography of the district is largely mountainous and hilly with several areas having slopes of more than 12 degrees with elevations exceeding 1200m above sea level. However, the district also has low-lying areas in the Shire valley with altitude ranging from 250 to 500 meters above sea level creating a stark contrast in agro-ecological conditions within the district. The high altitude areas of the district are largely rocky with shallow highly weathered kaolinitic clay soils while the low-lying areas along the Shire valley have sandy clay loam soils with alluvial deposits and higher soil organic matter.

5.2.4 Environmental issues in Neno district

Neno district is not spared from the common environmental problems facing other districts in the country. The main environmental concern is the high rate at which forest cover is lost in the district, particularly on customary land, and increasing incidences of encroachment on gazetted forest areas. Forest cover is under threat due to increasing pressure from agricultural expansion as a result of increasing population coupled with unsustainable crop production practices which result in attempts to increase food production by increasing area brought under cultivation. Community-energy needs also contribute to loss of tree cover as trees are felled for fuel-wood and charcoal. The high demand for these energy products particularly charcoal from the country's biggest city of Blantyre, located less than 150km away and other urban centers, has turned charcoal production in Neno into a community livelihood. Unsustainable production of charcoal is the single biggest threat to tree permanence in the district as Figure 4 below shows:

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Figure 4: Charcoal trade in Neno district.

6.0 DESCRIPTION OF SOCIO-ECONOMIC CONTEXT AND LAND TENURE

6.1 Socio-economic profile of Dowa district.

Dowa district is one of the most populated districts of the central region with a total population of 556678 people with a population density of 183 persons per square kilometer³. The population of the district grew from 411,387 in 1998 to 556,676 in 2008 (PHC 2008). The predominant ethnic group of the district is Chewa with a small proportion of Ngoni. Chewa is the language spoken in the district with Christianity being the main form of religion. Over 80% of the population derives its livelihood from agriculture done primarily on customary land (allocated to individual households and overseen by local chiefs). The average household size is 4.6 (Population and Housing Census 2008) with an

³ National Statistical Office. 2008. Population and Housing Census. Zomba, Malawi.

average land holding size of 0.8ha⁴ where food crops including maize, cassava, sweet potatoes, groundnuts, beans, soya beans, fruits and vegetables are grown. Traditionally, agriculture in the district falls under two categories: estate cultivation (covering about 14% of cultivable land) and predominantly rain-fed subsistence agriculture (covering about 86% of cultivable land) practiced by the majority poor, 53% of whom live below the poverty line of \$1 per day⁵. The main cash crops in the district are tobacco, paprika, and legumes. Maize, cassava and sweet potatoes as well as vegetables such as onions, Chinese cabbage, mustard and tomatoes and fruits like bananas, oranges, tangerines are sometimes used as supplementary cash crops.

6.2 Socio-economic profile of Neno district.

Neno district has a total population of 108,897 according to the 2008 population and housing census with a population density of 74 persons per square kilometer. This population has grown from 74,795 in 1998⁶. The predominant ethnic groups of the district are the Ngoni and Mang'anja amongst other smaller tribes like the Ambos but Chewa language remains the predominant medium of communication in the district with Christianity being the main form of religion. Islam also exists in some pockets of the district. Agriculture is the main livelihood in the district engaging over 90% of the population largely on customary land (allocated to individual households and overseen by local chiefs). The average household size is 4.3 (PHC 2008) holding an average of 1.05 ha. The district has two distinct agro-ecologies referred to as upper Neno and lower Neno with the former more productive agriculturally, allowing a diversity of crops to be grown due to higher and more dependable rainfall received than in lower Neno. The main crops grown in upper Neno are maize, irish potatoes, wheat, pigeon peas, vegetables, millet and also fruit and tree crops like macadamia, mangoes and citrus.

⁴ Dowa District Assembly. 2006. Dowa District Socio-Economic Profile. Dowa, Malawi.

⁵ Dowa District Assembly. 2006. Dowa District Socio-Economic Profile. Dowa, Malawi.

⁶ National Statistical Office. 2008. Population and Housing Census (PHC 2008); National Statistical Office, Zomba, Malawi.

Lower Neno, on the other hand, is low lying, hotter and often receives little rainfall hence is not as productive as upper Neno though it has huge irrigation potential as major rivers pass through it. Maize is nevertheless grown as the main staple food crop while cotton, which tolerates drier conditions, is widely grown as the chief cash crop for this area. About 56% of the population lives below the poverty line of \$1 per day with about 20% well below⁷.

7.0 DESCRIPTION OF ACTIVITIES AND *PLAN VIVO* TECHNICAL SPECIFICATIONS.

There are five technical specifications in the Trees of Hope project as described in Table 2 below. Technical specifications describe the-land use systems to be implemented, tree species used, management system, and methodology used to measure and monitor the carbon benefit of the project activities. Producers in the project design *plan vivos* (management plans) adopting a mix of the below land-use systems that suit their circumstances.

⁷ Neno District Assembly. 2007. Neno District Socio-Economic Profile. Neno, Malawi.

Title of technical	Type of activity	Objectives	Brief description	Target
specification				areas/groups
Woodlot	Afforestation,	Timber, fuelwood,	The species include Senna siamea,	Established on
	forest	medicines, poles, soil	S. spectabilis, Acacia polyacantha,	bare neglected,
	management.	and water conservation,	Khaya anthotheca and Melia	non arable land by
		biodiversity promotion	azederach. Management operations	individuals and
		and protection.	include weeding, fire and animal	communities.
			damage protection, pest and	
			disease control and pruning.	
Boundary planting	Afforestation and	Timber, fuelwood, poles	Acacia polyacantha, Albizia lebbeck,	Along perimeters
	Agroforestry	shade and boundary	Faidherbia albida and Senna	of farmers'
		delineation	spectabilis. Management operations	property mostly
			include weeding, pruning, fire and	fields.
			animal protection, pest and disease	
			management.	

Table 2:Description of the project's technical specifications.

Table 2: Description	of the project's tec	hnical specifications	(continued)
	or the project of tee	innear speerneations	(continueu)

Title of technical	Type of activity	Objectives	Brief description	Target areas/groups
specification				
Dispersed	Agroforestry.	Improved soil fertility,	The main species is Faidherbia	Planted on arable land,
Systematic Inter-		increased crop	albida with management	inter-planted with arable
planting (DSI).		production, timber,	operations including, weeding,	crops like maize, cotton etc
		shade, animal fodder.	pruning, fire and animal	on individual farmer's fields.
			protection.	
Mango orchard	Mango orchard	Production of high value	The main species is Mangifera	Established by individual
	management.	mango fruits, timber and	indica with varieties including	farmers on under-utilized
		fuel wood.	Kent, Keitt, Tommy Atkins and	land.
			Erwin. Management operations	
			include weeding, fire and animal	
			protection, pruning, manuring and	
			pest and disease management.	
Citrus orchard	Citrus orchard	Production of high value	The main species is Citrus sinensis	Established by individual
	management.	citrus fruits and fuel	with management as described	farmers on under-utilized
		wood.	for mango orchard.	land.

8.0 LAND TENURE AND CARBON SERVICE PROVISION.

In Malawi, three land tenure systems exist namely: customary, private and public land tenure. Customary land covers all land in the villages traditionally implying it belongs to that community, although an individual has the right to cultivate it or dispose of it within the limits set up by the customary law of the tribe or clan. It is recognized as such in the Malawi National Land Policy (MNLP) of 2002. Traditional chiefs and village headmen oversee the allocation of such land to individuals in the community and have a duty to protect the land from outsiders. Traditionally, an individual using a piece of land with the chief's consent virtually owns that land. Public land refers to land occupied, used, or acquired by the Government or any land that is neither customary nor private. Private land refers to land owned, held, used, or occupied under a freehold title, a leasehold title, or a certificate of claim which is registered as private.

Customary land is by far the most common form of tenure in Malawi and this is the system that exists in the project areas where producers on average own about 1.0 hectare. Much as land holding size might be a factor in determining the type of land-use system a farmer engages in, it does not largely limit participation in the project because of the wider selection of land use systems open to the producers to suit particular scenarios. To ensure legitimate ownership of land by all producers registered in the program, the concerned village chiefs provide consent to the claimed land ownership by signing on the registered *plan vivo*, a sample of which appears in Annex 24.4.

9.0 PROJECT ORGANIZATIONAL STRUCTURE, GOVERNANCE AND COMMUNITY PARTICIPATION.

The project is run by personnel at different levels but well coordinated to ensure better control and efficient flow of program information from the central administration to the producer. Throughout the development of the project, the community has actively participated through various meetings and trainings where key project issues are

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discussed and joint resolutions made. Figure 5 below shows a cross section of participants to such sessions:



Figure 5: Community meeting in Neno district (left) and Dowa district (right).

Such community consultative meetings will be an on-going activity throughout the life of the project so that communities constantly contribute to shaping the outcomes of their project. As such, a special form has been designed (see Annex 24.3) to help track such meetings and the resolutions made on the way forward on important issues in the project. The management system responds not only to administrative needs of the program but also technical and community outreach requirements as described in Table 3 below:

Table 3:Project's operational structure showing CDI and partners' roles.

Key function	Organization/	Type of	Brief description of activities in relation	
	group(s)	group/organization	to project governance	
	involved	and legal status		
General project	CDI with its	International NGO	4	General administration of the
administration and	top	recognized by the		program and handling of all policy
delivery.	management.	Malawi government.		matters.
Key project	CDI with its	International NGO	4	Community mobilization,
technical	staff including	recognized by the		sensitization, approval and
operations	Field Officers	Government of		registration of plan vivos (CDI).
	and the Local	Malawi.	4	Development of sale agreements
	Program			and management of payments
	Monitors.	The Forestry and		(CDI).
		Agriculture	4	Database management, record
	Malawi	departments fall		keeping and annual reporting
	government's	under ministries of		(CDI).
	Forestry	the government of	4	Monitoring (CDI, FD and AD).
	Department	Malawi.	4	General community organization,
	(FD) and			motivation, extension and
	Agriculture			leadership (CDI largely through
	Department			LPMs).
	(AD) as		4	Capacity building trainings (CDI,
	partners ⁸			FD and AD).

⁸ Where partners are involved like in monitoring, CDI will ascertain to the quality of their work by ensuring that the partners are aware of the set standards governing a particular activity and that the same will be used to measure quality of their work.

The internal administrative structure for the Trees of Hope project that governs the program and relates with external stakeholders is shown in Figure 6 below:



Figure 6: CDI Trees of Hope organizational chart.

10.0 GENERATION AND MANAGEMENT OF PROJECT INFORMATION.

Efficient flow of project management information though the hierarchy outlined above and its eventual storage in the central database is critical for project success. To ensure common understanding of project activities and the range of information expected among the key internal players, joint work planning meetings are held involving LPMs, technicians and the Program Director. These meetings outline scope of work for a given period of time often on quarterly basis with monthly reviews. The activity outline dictates the type of information to be collected by the LPMs and in many cases, specific data collection forms are designed to assist in collecting specific data relating to a particular activity. The LPMs facilitate the implementation of the planned activities among the producers and document progress and the resultant information is presented to the Field Officers who arrange such meetings twice a month. The officers scrutinize the received information and submit it to the Program Director at the head office for further scrutiny, filing and storage in the central database.

11.0 PROJECT RELATIONSHIP TO NATIONAL ORGANISATIONS.

The project recognizes the existence and importance of key stakeholder organizations in the country with which the project relates at various levels of policy, planning and implementation. These national organizations include the Ministry of Agriculture and Food Security, Department of Forestry, Malawi Environmental Endowment Trust (MEET), Ministry of Local Government and other technical stakeholders. These stakeholders have been involved with the project to varying extents; the Forestry Department and the Ministry of Agriculture and Food Security have been the most significantly engaged partners. Their involvement began with the feasibility study and development of the project concept and continues with active participation in the implementation process. The Ministry of Natural Resources and Energy through its Environmental Affairs Department (EAD) is also another important stakeholder. Information relevant to national policy development and project work is regularly shared between CDI and EAD.

12.0 TECHNOLOGY TRANSFER AND TRAINING.

In order to ensure proper understanding of the project processes and build capacity among producers and other stakeholders, CDI conducts regular training sessions. These training sessions are conducted largely by project's technical staff but external consultants are engaged when need arises. Potential producers receive training on climate change issues, its impacts on livelihoods and local adaptation and mitigation processes. This is aimed at increasing understanding among the communities of climate change issues which is at the core of the project to enable them to appreciate its importance to their livelihoods. Furthermore the producers are also trained in silvicultural techniques that emphasize indigenous or naturalized tree nomenclature (identification), tree nursery establishment and the management of trees in the field. The objective of this module is to enable producers to understand the tree species they are dealing with, be able to successfully establish tree (fruit and non-fruit) nurseries and effectively manage their land use systems.

The producers also undergo detailed training in the *Plan Vivo* system which illustrates the concept of carbon trading so they understand the systems and standards governing their work. Training is also conducted covering group dynamics stressing group formation, group cohesion and trust building. It is the intention of CDI to not only gradually build adequate capacity enable communities to take increasing responsibilities in project management but also instill a sense of ownership of the program. As such, a community-based program monitoring system has been established through the election of Local Program Monitors (LPMs), who have been chosen by the producers and traditional leaders to lead the program in their communities on voluntary basis. The local program monitoring system is largely responsible for all program extension activities in the communities with guidance and supervision from CDI project staff.

The LPMs form a local management entity for the program in addition to acting as a bridge between the program at community level and all external players. Each LPM is currently responsible for about 30 producers on average. Although producers receive training for their capacity building, more training is also provided to LPMs to enhance their capacity in leading the program at community level. The local program monitoring system is also linked to government structures primarily the Department of Forestry and Ministry of Agriculture who have permanent presence in communities to ensure continuity of extension services.

CDI's intention is to gradually build the capacity of local groups and transfer most project management and operational roles to the community. The local program monitoring system will be the main local structure through which the responsibility handover process will be completed. In the medium-term many responsibilities will be passed on to the LPMs including farmer registration, development of *plan vivos*, distribution of seedlings, the establishment and monitoring of land-use systems and all extension activities. Another key activity that has already been transferred to the community is the production of seedlings by community groups as opposed to the initial situation where seedlings were produced by CDI in central nurseries and distributed to producers. Capacity continues to be built in communities through training to enable them to handle these roles. Table 4 below shows the tentative timeline for transfer of some responsibilities to the communities.

Table 4:	Expected timeline for trai	nsfer of responsibili	ties to the community.
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Activity	Expected timeline				
	2007/2008	2008/2009	2009/2010	2010/2011	2011/2012
Seedling production	CDI only	CDI only	CDI and	CDI and	Community ⁹
			community	community	largely.
Community mobilization	CDI only	CDI only	CDI and	CDI and	Community
			community.	community	largely.
Development of plan vivos	CDI only	CDI only	CDI and	LPMs and	LPMs and
			community	CDI.	CDI
			(LPMs)		
Monitoring	CDI	CDI	CDI and	LPMs and	LPMs and
			LPMs	CDI.	CDI.

⁹ Where community or LPM is mentioned first implies more responsibility than CDI and vice versa.

13.0 THE PROJECT FINANCIAL STRUCTURE.

The project is expected to be run on carbon finance that will be received through sales of *Plan Vivo* certificates but in the event of market problems affecting the project's cash flow, bridge finance will have to be identified from other sources to take care of any arising gap. Meanwhile the program is fully financed by the Clinton Foundation. The total amount that will be received by the project after all external levies will be used to support program field operations and administration, farmer payments and support for the farmer-owned monitoring mechanism proposed to be 40%, 55% and 5% respectively. This, however, is open for review from time to time through a consultative process with the producers depending on financial circumstances within the project. The financial allocation is illustrated in Figure 7 below:



Figure 7: Allocation of carbon finance within the project

14.0 CARBON BENEFITS

The technical specifications being used in the project have been modeled to assess their carbon offset potential against a calculated baseline. Table 5 below shows the carbon offset potential for each land use system.

Table 5:Long-term (50 year crediting period) carbon offset potential for theproject's land-use systems (technical specifications).

Title of technical	Baseline	Long-term	Net long	Risk buffer	Net tradable
specification	carbon	total carbon	term carbon	calculated at	carbon
	stock	uptake with	uptake	20%	benefit
	(tCO₂e/ha)	management	(tCO ₂ e/ha)	(tCO ₂ e/ha)	(tCO₂e/ha)
		(tCO₂e/ha)			
Woodlot	5.41	192.78	187	37	150
Dispersed	4.30	94.50	90	18	72
Systematic Inter-					
planting (DSI)					
Boundary	0.02	10.30	10.28	2.06	8
planting (<i>per</i>					
100m length) ¹⁰					
Mango orchard	4.30	110.4	106	21.20	85
Citrus orchard	4.30	73.2	69	13	56

¹⁰ Carbon offset values for boundary planting, are calculated linearly per 100m length as opposed to per hectare basis in the other land-use systems.

15.0 CURRENT PROJECTED NET AMOUNT OF ANTHROPOGENIC GHG (CO₂e).

The project was started in the 2007/2008 season and, over the years, producers have been recruited into the project and continue managing their respective land use systems. The Trees of Hope project is expected to be a long-term undertaking with financial support from the Clinton Foundation, which is later expected to be supplemented or replaced with carbon finance through sales of Plan Vivo Certificates. The program currently has about 1290 registered producers, and this number is expected to grow with time through new admissions into the program tied to the program's capacity. The quantity of carbon credits from the program is also expected to grow with recruitment of additional producers. The present profile of carbon credits and area coverage for the program is shown in Table 6 below: **Table 6:**Area coverage and net carbon offset potential (tCO2) pet technical specification per season.

		Technical specifications, area coverage and net carbon benefit (tCO2)								
Season	Wood	dlot	Boundary	planting	D	51	Citrus o	rchard	Mango o	rchard
	Area (ha)	tCO ₂	100m units	tCO ₂	Area (ha)	tCO ₂	Area (ha)	tCO ₂	Area (ha)	tCO ₂
2007 to 2008	70	10500	392	3136	8	576	0	0	0	0
2008 to 2009	49	7350	815	6520	43	3096	14	784	6	510
2009 to 2010	33	4950	786	6288	56	4032	12	672	6	510
2010 to 2011	86	12900	3750	30010	91	6552	12	672	2	170
Cumulative										
totals	238	35700	5743	45954	198	14256	38	2128	14	1190
Project total					·				·	
(tCO ₂)	99228									

16.0 PERMANENCE OF PROJECT ACTIVITIES AND RISK MANAGEMENT

The project recognizes the importance of permanence of its activities so that they are not only initiated but also grow to become part of community livelihoods. To succeed in this direction, it requires identifying risks that could threaten sustainability and these risks have been foreseen and risk management measures put in place to minimize their effects. One of the threats to sustainability of project activities is the mere lack of sense of ownership of the project by the targeted communities. To minimize this threat, the project ensures that communities are actively involved in project management processes affecting them while on the other hand, building their management capacity through training. Other risks to permanence are also foreseen and are presented in Table 7 below along with their management measures.

Permanence risk	Level of risk	Management measure		
Forest fires	High	4 Adoption of recommended fire protection		
		measures including establishment of fire breaks		
		around plantations and incorporating all weeds and		
		dry trash from within the plantation.		
		igstarrow Civic education to communities and their leaders		
		on the dangers of bush fires to the environment		
		and their livelihoods.		
		4 Formation of community-based fire monitoring		
		committees in the villages.		
Pests and	Low	4 Selection of indigenous tree species which are		
diseases (largely		hardy to most known pathological problems.		
fungal infections		Recommended pest and disease management		
and leaf-eaters		silvicultural practices both in the nursery and in the		
and damping-off		field following an integrated approach to pest and		
disease in the		disease management.		
nursery).		Implement an effective pest and disease		
Termites in some		surveillance system led by Local Program Monitors		
sections cause		(LPMs).		
damage soon				
after planting				
out.				
Drought	Medium	Early planting of strong healthy seedlings.		
		igstarrow Good silvicultural practices like deep pitting and		
		use of organic manure for increased soil moisture		
		retention.		
		Promotion of irrigation where applicable.		

Table 7: Management of risks to permanence of project activities

 Table 7:
 Management of risks to permanence of project activities (continued)

Permanence risk	Level of risk	Management measure
Livestock damage.	Medium	Education of communities on recommended
		livestock management practices like tethering and
		zero grazing during periods when trees are
		vulnerable to livestock damage.
		Placement of protective structures (normally
		thorny fences) around plantations or individual
		trees, where feasible.
		4 Enforcement of community by laws by traditional
		leaders that regulate movement of livestock in
		communities.
		Establishment of tree species not vulnerable to
		livestock damage through browsing.
Overreliance on	Low	4 Capacity building on all technical aspects of tree
external support.		establishment and management including
		community based seedling production.
		Broadening income streams to producers over and
		above carbon finance through additional activities
		besides payment for ecosystem services.

Based on the risks outlined above, the project will withhold 20% of carbon services generated from sale to form a carbon buffer (reserve of unsold carbon).

17.0 LEAKAGE RISK MANAGEMENT

Since it is recognized that tree planting has a potential risk of displacing other crops from the farm land, extreme care is being taken to prevent such displacement that would lead to loss of carbon stocks outside the project boundaries (leakage). To strike a balance between not having too many producers with very small plots and ensuring that tree planting does not displace other crops on farm hence risking leakage, each potential producer will be appraised on case-by-case basis and advised accordingly. However, the project recommends an area of 0.1ha as a minimum available to a producer for tree planting to be considered for registration. The main leakage risk associated with the project is shown in Table 8 below.

Table 8: Leakage risk management measures

Leakage risk	Management measures
Displacement	Ensuring farmers still have sufficient land for crop production for
of crop	sustainable yields even with tree planting by proper matching of the
production.	land holding size of the farmer and the intended land use system. For
	instance, producers with limited land could be recommended DSI or BP
	technical specifications which do not displace crops from farm land.

18.0 MONITORING AND TECHNICAL SUPPORT PLAN.

18.1 Carbon monitoring indicators and verification.

The technical specifications being used in the project, among other aspects, spell out monitoring indicators which form the basis of assessment of progress and achievement of the set targets by producers. These indicators assess general carbon sequestration progress and take into account planting density, survival rates and measurement of tree growth following a set monitoring schedule as shown in the sale agreement template in Annex 24.2. Monitoring is done by Local Program Monitors (LPMs) who constitute a community-led project monitoring and management system. The monitors are trained in monitoring processes and record keeping by CDI staff.

Depending on the nature of data being collected at a particular time, specific data collection forms will be designed to suit the type of data to be collected. Such forms will be used by monitors for data collection to ensure a standardized process and to

minimize errors. CDI staff based in the field directly supervise and guide the monitors in data collection. It is recommended that data collection should be done in the presence of the producer for consent to the data being collected.

18.2 Technical support

For most technical requirements, the project largely relies on its staff and the local program monitors but other experts might be consulted when need arises. Production of tree seedlings was initially done by CDI in central nurseries and later distributed to registered producers for planting. However, this approach has since given way to community-based nurseries where producers form groups to produce their own seedlings with direct support from CDI field staff. CDI will continue leading in all extension activities while capacity continue being built in the communities to gradually take over such responsibilities.

19.3 Administrative support

Administratively, the Trees of Hope project is managed by the central administration section in Lilongwe which also foresees other projects implemented by CDI in the country. At community level, the program is managed and led by local program monitors under supervision and guidance of Field Officers.

19.0 EXPECTED ENVIRONMENTAL IMPACTS OF PROJECT ACTIVITIES.

The tree species used in the land-use systems of the project have been chosen by the producers and are all native or naturalized species that the producers are familiar with. These tree species and the land use systems in which they are established have no-known negative impacts on the ecosystem. Environmental impacts associated with the land-use systems are expected and these are shown in Table 9 below.

Table 9:

Expected environmental impacts of project activities.

Title of	Biodiversity impacts	Water availability impacts	Soil conservation impacts	Air quality impacts
technical				
specification				
Woodlot,	Establishment	Reduction of run-off	Reduced soil erosion through	General
Mango	and protection	through stem and root	binding effect of tree roots.	improvement in
orchards,	of wildlife	effects on soils	Reduced soil erosion through	microclimate
Citrus	habitat for	Reduction of water loss	improved structure due to	associated with
orchards,	diverse flora and	through reduced	increased organic matter	trees including
Boundary	fauna.	evaporation due to	content.	shade provision
planting and		canopy cover.	Improved soil fertility through	
DSI (see		Improvement of ground	biological nitrogen fixation and	
technical		water recharge systems	addition of nitrogen-rich	
specifications		through enhanced water	organic residues and through	
for full list of		infiltration due to	nutrient cycling in the case of	
species)		increased residence	DSI.	
		time.		

20.0 MONITORING OF PROJECT ENVIRONMENTAL IMPACTS.

The environmental impacts associated with the project as outlined in Table 9 will be monitored on yearly basis in a participatory manner with the communities by recording simple data on the indicators in Table 10 below. Baseline data for these indicators for the project sites as is the case generally in the country, is currently unavailable but CDI intends to gather this baseline information in due course.

Environmental impact	Assessment indicators
Biodiversity impact	Land area (ha) planted and maintained with trees and other
	vegetation according to the technical specifications.
	Number of effective village forest management committees
	managing village forest areas.
Water availability	Size (ha) of water body catchment area planted and
impacts	maintained with trees.
	Severity of surface run-off events from sites planted and
	maintained with trees.
Soil conservation impacts	Reduction in frequency of surface run-off events from sites
	planted and maintained with trees.
	4 Reduction in number of soil washaways from areas planted
	and maintained with trees.
Air quality impacts	Reduction in unsustainable cutting down of trees.
	4 Reduction in number of uncontrolled forest fires per year in
	the community.
	Increase in area planted and maintained with trees.

 Table 10:
 Methods of monitoring environmental impacts of proposed activities

21.0 EXPECTED SOCIO-ECONOMIC IMPACTS OF PROJECT ACTIVITIES

The activities of the project will generate socio-economic impacts that will accrue to the community and some of these socio-economic benefits are outlined below.

21.1 Improved local incomes and other social benefits.

Income of the producers will increase through a variety of ways including payment for ecosystem services, income from sale of tree products including timber and poles through controlled harvesting and at the end of each rotation (see technical specifications for more detail), income from sale of fruits and fruit products from mango and citrus orchards. Other Non Timber Forest Products (NTFPs) like medicines (*Azadrachta indica* for instance is remedy for many ailments including skin infections, malaria, sore throats and eye infections besides being a pesticide; *Senna siamea* roots are used to cure stomach-ache while paste from pounded leaves of *Acacia polyacantha* mixed with water is a remedy for open wounds; soaked bark of *Faidherbia albida* is known to stop nausea), mushrooms and beekeeping will also provide extra income to the participating farmers. The participating farmers will have the opportunity of improving the nutritional status of their households through consumption of fruit products from the fruit-based land-use systems.

Women in particular will be helped by accessing fuel-wood and other tree products easily and cheaply saving them time that can be devoted to other developmental activities. This will be a positive departure from the current situation where women travel long distances spending hours in search of fuel wood for household energy needs. The project design is inclusive to give chance of participation to even households with limited land (below the national average of 0.9ha) who would choose the Dispersed Systematic Inter-planting (DSI) land use system. This system does not displace arable farming but rather positively complements it through soil fertility improvement for increased crop yields.

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It is considered important to track the progress of change overtime by assessing changes to livelihoods attributable to project activity. The process will involve a Participatory Impact Assessment (PIA) where the project's contribution to livelihood improvement over time will be tracked through an assessment of selected indicators at the beginning of the program and at defined points in the future. The PIA approach requires the beneficiaries of the project to quantify any changes in the indicators against a recalled baseline. The areas of expected impact and the corresponding proposed indicators that will be tracked are shown in Table 11 below:

Area of impact	Assessment indicators
Local income	Payment for ecosystem services.
	Income realized from sale of fruit products.
	Income realized from sale of other tree products.
	4 Income realized from sale of products from any
	additional activities.
Local food production	Quantity of fruits produced from fruit-based technical
	specifications.
	igstarrow Increased crop yields attributable to improved soil
	fertility and better soil and water conservation.
Families with limited	Number of families with limited land registered with
land	the project through appropriate technical
	specifications and accessing its benefits.
Women	Number of women registered with the project and
	enjoying its benefits.

Table 11:Socio-economic impact areas and assessment indicators.

22.0 ADDITIONAL ACTIVITIES TO BE SUPPORTED BY THE PROJECT.

In the medium term, the project will actively engage the participating communities and explore, using participatory methods, other livelihood improvement activities that could be done to complement the current project's effort. Possible activities might include beekeeping, sustainable charcoal production and improved soybean production and marketing. The execution of any of these activities will stress on community involvement at all stages including planning, implementation, monitoring, evaluation and redesigning in the interest of community ownership and sustainability. Detailed plans for these potential activities will be developed in due course.

23.0 ANNEXES

23.1 Profiles of responsible staff for the Trees of Hope project.

Name of staff member	Position, contact information and brief profile
Mr Walker Morris	The Country Executive
	Clinton Development Initiative
	Private Bag 68, Lilongwe, Malawi.
	Tel: +265-1-925-188
	Cell: +265 888 963 584
	Email: wmorris@clintonfoundation.org
Mr Commodious Nyirenda	The Program Director
	Plan Vivo Carbon Sequestration Program
	Clinton Development Initiative
	Private Bag 68, Lilongwe, Malawi.
	Tel: +265-1-925-188; +265-1-794-149
	Cell: +265 888 134 936
	Email: cnyirenda@clintonfoundation.org
	Skype: Commodious.Nyirenda
	Holder of a Diploma in Agriculture, a BSc Degree in
	Agriculture and a Master of Science Degree in Agro-
	forestry with over 10 years experience in agriculture and
	forestry work in Malawi.
Mr Joseph Lukhere	Field Officer based in Dowa district, holder of a Certificate
	in Forestry from Malawi College of Forestry with 21 years
	experience in forestry and community development work.

Annex 23.1 continued

Ms Esmay Kamowa	Field Officer based in Dowa district, holder of a Certificate
	in Forestry from Malawi College of Forestry with 16 years
	experience in forestry and community development work.
Ms Iness Sosola	Field Officer based in lower Neno district, holder of a
	Certificate in Forestry from Malawi College of Forestry
	with 24 years experience in forestry and community
	development work.
Mr Wilson Chigwiya	Field Officer based in lower Neno district, holder of a
	Diploma in Forestry from Malawi College of Forestry with
	31 years experience in forestry and community
	development work.
Mr Bizret Chimkwita	Field Officer based in upper Neno district, holder of a
	Diploma in Forestry from Malawi College of Forestry with
	21 years experience in forestry and community
	development work.
Mr Rhodrick Kanzondeni	Field Officer based in upper Neno district, holder of a
	Certificate in Agriculture from Cobbe College with 23 years
	experience in agriculture, forestry and community
	development work.
Mr Henry Maulidi	Field Officer based in lower Neno district, holder of
	Diploma in Forestry from Malawi College of Forestry with
	29 years experience in forestry and community
	development work.
Mr Albert Chakuda	Field Officer based in upper Neno district, holder of
	Certificate in Agriculture from Cobbe College with 28 years
	experience in agriculture, forestry and community
	development work.

23 2: Producer sale agreement template

"TREES OF HOPE"-THE CLINTON DEVELOPMENT INITIATIVE, PLAN VIVO Payment for Ecosystem Services (PES) PROJECT IN MALAWI

PLAN VIVO CERTIFICATES SALE AGREEMENT

It provides terms and conditions **agreed** upon by the above parties including their respective successors in title and assignees for the sale of carbon credits under the Plan Vivo system in the **Trees of Hope project**.

WHEREAS the Project Coordinator has agreed to facilitate marketing and sale of carbon credits on behalf of the Producer to <u>(particulars of a-yet-to-be-identified buyer)</u> hereinafter referred to as the "Buyer" who has agreed to buy (<u>indicate quantity of credits</u>) at (<u>indicate price</u>) on conditions set out in this agreement.

WHEREAS the Producer is the owner of the piece of land described in TABLE A of this agreement with the approved attached *Plan Vivo* number...... and **agrees** to sell carbon credits to <u>(particulars of buyer identified above)</u> facilitated by CDI, generated through implementing the land-use system described in the attached *Plan Vivo* for the period stipulated herein.

IT IS FURTHER AGREED AS FOLLOWS:

 The agreement shall remain in force for the period set out in **Table B** but the Producer shall continue to maintain the land-use system described in the attached *plan vivo* for a minimum of 50 years.

The Project Coordinator agrees:

- 1. To supply seedlings to the Producer at a token price of **MK**..... each as a contribution towards the costs incurred by CDI in supporting seedling production.
- To provide organizational and/or technical support to community nurseries as necessary to enable establishment of the land-use system described in the plan vivo and Table C.
- To monitor and advise the Producer on land-use management to ensure the targets laid out in Table B, are met but the producer remains responsible for meeting the targets.
- 4. To coordinate the purchase of carbon credits as demanded by the buyer from the Producer at a price agreed with the buyer and to pay the resultant amount to the Producer in installments set out in **Table B** where results of monitoring show that the corresponding targets have been met.

The Producer agrees:

- To implement activities (summarized in Table C) and carry out management actions as set out in the attached plan vivo number.....and to implement any corrective actions prescribed during the monitoring process.
- To deposit 20% of his/her/its credits as stipulated in Table A in a risk buffer maintained by the Project Coordinator.
- To pay any outstanding cost of seedlings by authorizing the Project Coordinator to deduct and retain an equivalent amount (shown in Table A) from the first payment due to the Producer.

Plan Vivo registration

Your Plan Vivo was assessed by the CDI on.....and approved for registration with the Program Coordinator with the following summary details:

Name of Producer.	
Village Head.	
Group Village Head.	
Traditional Authority.	
District.	
Producer's ID number.	
Total Carbon dioxide tons (tCO ₂ e)	
tCO2 withheld as buffer (20% of total)	
Total saleable tCO ₂	
Total tCO_2 to be bought by the buyer	
Total unsold tCO ₂	
Price per tCO₂e (MK)	
Total amount for saleable tons of CO ₂ e (MK)	
Contribution to cost of seedlings (MK)	
Total amount to be paid to the Producer (MK)	
Producer's bank name and branch	
Producer's bank account name	
Producer's bank account number	

TABLE "A": Summary details.

The total amount for saleable tons of CO_2e quoted in **Table A** above will be paid out to the Producer according to the protocol described in **Table B** below **UPON** verification that the corresponding monitoring targets are met.

TABLE B: Monitoring and payment protocol

Year of	Monitoring target	Percentage (%) of total	Amount to be
Monitoring		payment to be made.	paid (MK)
Year 1	50% of plot established		
	as described in Table C	20	
Year 2	75% of plot planted as		
	described in Table C .	20	
Year 3	Whole plot established		
	with stand survival not	20	
	less than 85%		
Year 4	Whole plot established	10	
	with at least 90%		
	survival.		
Year 5	Average DBH not less	10	
	than 4cm		
Year 7	Average DBH not less		
	than 8cm	10	
Year 10	Average DBH not less		
	than 15cm	10	

The **agreed** key technical aspects and activities related to this sale agreement are presented in **Table C** below:

 TABLE C:
 Technical aspects and activities

Land use	Tree species used (in	Planting	Area	Date of	Number of	Plot location	Rotation period
system	any combination) ¹¹	density per	planted	planting	trees	(GPS	
		hectare	(ha)	(month &	planted	coordinates)	
				year)			
Woodlot	S. siamea, S.						
	spectabilis and A.	2500					20years
	polyacantha.						
Dispersed	Faidhelbia albida,						Thinning starts at Year
Systematic	Acacia polyacantha,	200					10 progressively to
Interplantin	Acacia galpini and						attain 25 trees/ha at
g (DSI)	Albizia lebbeck.						Year 50.
Boundary	A. polyacantha, S.	34					25 years
planting	spectabilis	trees/100m					
Mango	Mangifera indica	7m by 7m					50 years
orchard							
Citrus	Citrus sinensis	5m by 5m					50 years.
orchard							

¹¹ Full list of species appears in the respective technical specifications.

The **Project Coordinator** and the **Producer** signed hereunder hereby undertake to have fully understood and **agree** to abide by the terms and conditions of this agreement:

FOR THE PROJECT COORDINATOR	FOR THE PRODUCER
Name:	Name:
Signature:	Signature:
Position:	Position:
Date:	Date:
WITNESSED BY:	WITNESSED BY:
WITNESSED BY: Name:	WITNESSED BY:
WITNESSED BY: Name:	WITNESSED BY: Name:
WITNESSED BY: Name: Signature:	WITNESSED BY: Name: Signature:

23 3: Training/meeting report form



William J. Clinton Foundation Private Bag 68 · Lilongwe· Malawi Tel: (265) 01 794 149; 01 925 188 Fax: (265) 01 794 114 Trees of hope training/meeting report form

Training/meeting objective (s)

Name (s) of facilitator (s) and their designations

Description of target audience

Venue of training/meeting

Date of training or meeting

Appraisal of training/meeting {for trainings indicate the level of success based on perceived level of understanding of material by attendants; if it is a meeting, indicate the minutes (main resolutions) below}:



Attendance register

Number	Name of attendant	Gender (M/F) Signa		

23.4: Sample Plan Vivo



23.5: Memorandum of Understanding between the Malawi Government and the

CDI.



based solutions in the fields of agriculture, health, water and sanitation, and education in the districts of Chitipa, Dowa and Neno and in other districts to be hereafter identified and agreed by the Government and the Clinton Foundation.

ARTICLE 2 PREVIOUS ARRANGEMENT

The Memorandum of Understanding date 3 December, 2004 between the Government and the Clinton Foundation HIV/AIDS Initiative is hereby terminated. Anything done under or pursuant to that Memorandum of Understanding by either the Government or the Clinton Foundation HIV/AIDS Initiative shall be deemed to have done under or pursuant to the present Memorandum of Understanding. The provisions of the original Memorandum of Understanding remain in effect and are hereby incorporated into this agreement.

ARTICLE 3 AMENDMENTS

This Memorandum of Understanding may be amended at any time in writing by mutual agreement of the Parties.

ARTICLE 4 COMMENCEMENT, DURATION

This Memorandum of Understanding will enter into force on the date of signature and, subject to Article 4, shall remain in force indefinitely.

ARTICLE 5 TERMINATION

1. Either Party may terminate this Memorandum of Understanding by giving 6 months' notice in writing to the other Party.

2. In the event of termination pursuant to this article, none of the Parties may claim compensation, reimbursement, nor damages as a result of or arising from the termination.

ARTICLE 6 SETTLEMENT OF DISPUTES

The Parties agree to resolve amicably and by negotiation any differences or disputes between them arising from or in connection with the interpretation or the execution of of this Memorandum of Understanding.

2

IN WITNESS WHEREOF the Parties hereto have by their duly authorized representatives signed this Memorandum of Understanding at Lilongwe in the Republic of Malawi on the day and year first above written.

R

For and on behalf of the Government of the Republic of Malawi

Hon. Minister Joyce Banda

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For and on behalf of the William J. Clinton Foundation

President William J. Clinton

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