

# PROJECT PROFILE: ENHANCING RURAL LIVELIHOODS

## 1. INTRODUCTION AND BACKGROUND

### 1.1 History of Funding from PMI

This grant proposal builds on the successes and experiences of several projects funded by Philip Morris International and PM USA. These include APP (Agroforestry Partnership Project), COBAF (Community Based Forestry), and ENRL (Enhancing Rural Livelihoods). More specifically, it proposes to merge COBAF and the new Schools Project under the umbrella of PMI's larger and more diverse ENRL project. The objective is to create synergies for increased effectiveness, efficiency and impact over a larger geographic area.

### 1.2 Problem Analysis

Facts and statistics on Malawi, Tanzania and Mozambique in **Table 1** illustrate the challenges faced by the rural population. The analysis below elucidates the situation.

**Table 1: Facts and Statistics on Malawi, Tanzania and Mozambique <sup>1</sup>**

Features	Malawi	Tanzania	Mozambique
Total Area (km <sup>2</sup> )	127,000	942,643	771,000
Forest Area 2005 (km <sup>2</sup> ) <sup>2</sup>	34,000	352,600	192,600
% Annual Forest Change 1990-2005	-0.8	-1.0	-0.2
Population 2005 (millions)	13.2	38.5	20.5
% Pop Rural	82.8	75.8	Unknown
% Growth (1975-2005)	3.1	2.9	2.2
% Pop under 15 years	47.1	44.4	44.2
% Dependent on Wood Energy	90	92	85
<b>Education (2005)</b>			
% Adult Literacy (15 & older)	64.1	69.4	38.7
% Primary Enrolment	95	91	77
% Secondary Enrolment	24	Unknown	7
% Children Reaching Grade 5	42	84	62
<b>Health Factors (2005)</b>			
Life Expectancy at Birth	45	49.7	44
Infant Mortality (# per 1000 births)	79	76	100
Under 5 Mortality	125	122	145
% Pop with Improved Sanitation	61	47	32
% Pop with Improved Water	73	62	43
% Pop Undernourished	35	44	44
% Children Underweight	22	22	33
% HIV/AIDS (15-49 yrs)	14.1	6.5	16.1
<b>GDP and Per Capita Income (2005)</b>			
\$Billions 2005	2.1	12.1	6.6
Per Capita Income (\$)	667	744	1242
Growth (1975-2005)	-0.2	1.4	2.3
% Pop below Poverty Line	65.3	35.7	69.4
<b>Human Poverty/Development Ranking out of 177 Countries</b>	<b>164</b>	<b>159</b>	<b>172</b>

<sup>1</sup> Data extracted from UNDP (2007): Human Development Report 2007/08

<sup>2</sup> Analyses by Bunderson based on data from MFNR (1993) indicate that the forest cover in Malawi in 1990 was 26,428 km<sup>2</sup> and that by 2005, this decreased by 15% at an average rate of 1% per annum. Ministry of Forestry and Natural Resources. (1993). Forest resources mapping and biomass assessment for Malawi. Satellitbild, Kiruna Sweden in cooperation with the Department of Forestry, Lilongwe.

The Human Development and Poverty Index ranks Malawi 164 out of 177 countries, Tanzania 159 and Mozambique 172. Agriculture is the mainstay of their people and the backbone of their economies. Its future depends on the ability to support a growing population, which demands sound management of the natural resource base. Under present land and population pressures, escalating rates of environmental degradation and food insecurity have exacerbated the challenge. For many communities, land holdings are shrinking in size and becoming more fragmented. Traditional practices that preserved the integrity of the natural resource base are dying out and marginal areas have been brought under cultivation. Continuous cropping is now the norm, often in monocultures with little or no fallowing and few inputs. Trees impact people and agriculture directly by maintaining and improving the soil, water, and vegetation base, and by providing multiple products and uses to meet basic domestic and farm needs. As a result, the loss of tree cover has serious social, farm, and environmental impacts. It also forces women and girls to walk greater distances in search of firewood and water at the expense of more productive activities such as farming, child care, and education. Female-headed households are particularly vulnerable because these tasks limit time to produce food for their families.

### **The Growing Reality of Climate Change:**

Climate change is the greatest challenge of the 21<sup>st</sup> Century, perhaps unprecedented in the history of civilization. The facts presented above must recognize the increased risks and vulnerability that people face under this imminent threat. Indisputable scientific evidence shows that we are rapidly approaching a point when ecological disaster is unavoidable without urgent and collective action. As an ecologically inter-dependent world, no country, however wealthy or powerful, will escape the impact of climate change. But the poorest populations in the least developed countries will be the first to suffer and will bear the brunt of the impact, despite contributing least to the problem.

Severe droughts, floods and storms have already become commonplace across the globe, affecting millions people every year. Projections paint a bleak picture for Africa's future with rural populations facing the greatest risks because they are the most vulnerable with the least resources to address the problem. Over the decades ahead, incidents of extreme weather will become more frequent, less predictable and more intense. The results are destroying livelihoods, reinforcing inequalities, and reducing opportunities for recovery.

Although the situation is grim, a window of opportunity exists to limit the damage by taking action now. The resources and technology are available, but they must be organized with global solidarity to tackle the challenge head-on with commitment and urgency. It implores nations and people from all walks of life to acknowledge responsibility for the problems, to reflect on their social obligations for future generations across the globe, and to initiate swift and tough actions under a shared vision - or our planet will suffer the consequences.

Today, farmers across southern Africa face many inter-related constraints: (a) overdependence on rainfed crops like maize, a drought-sensitive, nutrient-demanding crop; (b) declining crop yields and soil fertility; (c) limited credit and capital, (d) acute shortages of energy and water; (e) poor knowledge and skills; (f) inadequate support services; and (h) weak market linkages. Under the weight of population growth, demands are increasing for land, food, water, shelter, energy and other basic necessities, yet little is being done to care for the natural resource base – the source for these essential needs.

Collectively, these problems are leading to a vicious cycle of increasing poverty that is eroding the productive capacity of agriculture and the natural resource base. Alleviating these growing challenges requires a long term commitment of resources under a strategy that tackles the root causes of the problems in an integrated holistic manner.

## 2. PROJECT DESCRIPTION

### 2.1 Concept and Goal

It is clear from the foregoing that Southern Africa faces complex social, economic and environmental problems that resist swift and simple solutions. In their struggle to survive, people are unable to balance immediate short-term needs with sound resource use. Under the growing threat of climate change, there is an urgent need to reverse the situation.

In light of the historical partnership between PMI, WSU and TLC, the **overall goal** is to improve the livelihoods of rural communities in Malawi, Tanzania and Mozambique while simultaneously securing the sustainability of tobacco production in the region. The vision is to build a platform for rural communities to thrive and prosper. Central to this focus is a strategic framework that incorporates mechanisms for adaptation to climate change that are self-sufficient and sustainable. The basic principles of this goal and strategy are closely aligned with TLC's mission (see **Section I**). The challenge is to produce results on a scale and timeframe that is truly meaningful for the region as a whole.

The proposed model entails an approach comprising 5 inter-related themes:

1. Diversification of farming with a wide range of well-adapted crops and varieties to increase productivity, nutrition and incomes.
2. Introduction of low cost systems of irrigation that require low investments of capital, energy and labor for impact and sustainability. Irrigation will greatly enhance food security in times of scarcity, with surpluses for sale in years of abundance.
3. Incorporation of environmental stewardship in all land and water management practices with a focus on forestry, conservation agriculture, agroforestry, use of organic manures, crop rotations and intercropping with annual and perennial legumes.
4. Integration of basic health measures, to reduce the debilitating effects of common water-borne diseases, combined with better education opportunities for children to raise prospects for growth and development.
5. Transformation of livelihoods from basic subsistence to a business mindset driven by market forces and awareness about inter-dependencies with the natural resource base.

The premise to achieve the overall goal is predicated on the fact that most smallholder farmers live a hand to mouth existence. Few have opportunity to evaluate the environmental consequences of their actions, or to engage in the market place due to a lack of awareness and limited support services in the value chain. The strategy envisioned will secure resources and expertise to make the intended changes and adaptations a reality.

### 2.2 Strategy and Objectives

The strategy to achieve results involves an integrated approach that combines diversification, irrigation and conservation with simple interventions on health and education to generate sustainable improvements in rural livelihoods with reduced vulnerability at lower cost and with less labor.

*The underlying philosophy is to tackle the challenges from an integrated perspective to produce synergies that will transform livelihoods from aid-dependent subsistence to sustainable enterprises resilient to climate change.*

Specific objectives are outlined below:

### 1. Increase Food Security, Nutrition, and Incomes:

- ➔ Diversify farm productivity with low inputs of capital and labor through sound land and water management practices, emphasizing interventions and crops adapted to the local agro-ecology to reduce risk and vulnerability to climate change.
- ➔ Introduce low-cost, sustainable systems of irrigation that require no external sources of energy with production linked to good markets.

### 2. Promote Environmental Stewardship:

- ➔ Integrate sound conservation measures with farming practices to improve soils and crop yields at low cost.
- ➔ Plant trees and bamboo to meet village and household needs for fuel and building materials, and to reduce pressures on natural woodlands.
- ➔ Manage natural trees and woodlands to restore the biodiversity of the local landscape for sustainable use and harvesting of forest products.
- ➔ Introduce fuel-efficient stoves and tobacco barns to reduce deforestation and to save labor among women and girls for cooking and collecting wood.

### 3. Provide Basic Services to Improve Health and Education Standards:

- ➔ Create awareness on measures to improve health while lowering risks.
- ➔ Support access to clean water by installing covered wells with hand-pumps.
- ➔ Improve nutrition with balanced diets from crop diversification.
- ➔ Improve hygiene standards by introducing low-cost eco-friendly pit latrines.
- ➔ Provide opportunities for education through the construction of school blocks with latrines and clean water under a collaborative program with the Ministry of Education and others to provide quality staff and services for administration, teaching, and maintenance of the facilities.

## **Project Rationale – Why Should PMI be Involved?**

Smallholder farmers in Southern Africa face immense challenges to meet basic needs for survival. Given the investment in tobacco as a lucrative crop for both the African smallholder and large tobacco companies, support to improve the welfare and future of these rural communities is critical from both a business and humanitarian perspective.

The structure for providing this support is the crucial issue. Approaches that offer free or subsidized hand-outs of food, inputs, and equipment are short-lived and will ultimately fail for 2 key reasons: 1) the huge costs involved limit the scale and timeframe of impact to a small geographic area, and 2) no capacity or ownership is built at the local level to sustain or expand the changes needed. The result is inevitable - a collapse in the very fabric of the community with disastrous consequences on their capabilities, dignity, independence, viability, and environment. Such approaches have been repeated many times, the hard lessons strangely ignored. But the urgency for effective action is clear and pressing.

This grant proposal offers an opportunity for PMI to participate in a program that will transform people's lives from subsistence survival to sustainable self-sufficiency with reduced vulnerability and dependence on external assistance.

## 2.3 Geographic and Demographic Scope

The project will support resource poor, smallholder farmers in key tobacco growing areas of each country, which are representative of the rural demographics portrayed in **Table 1**:

### Malawi:

- ◇ North: Rumphu & Mzimba
- ◇ Central: Lilongwe, Dowa, Kasungu, Mchinji, Salima & Dedza
- ◇ South: Machinga & Blantyre

**Tanzania (all sites in Tabora Region):** Urambo, Tabora, Nzega, and Uyui.

**Mozambique:** Tsangano, Angonia and Macanga Districts of Tete Province.

### Criteria for Site Selection in Each Country:

- ➔ Sites where tobacco is a major crop for smallholders.
- ➔ Sites where deforestation is serious but not to the extent that rehabilitation is impossible.
- ➔ Communities with strong leadership and interest in participation.
- ➔ Potential for adoption of proposed interventions.
- ➔ Logistically accessibility year-round for extension and market support.
- ➔ Low risk of conflict with other programs – sites not targeted by other initiatives that could lead to conflicts in terms of objectives and approach with TLC's programs.

## 3. IMPLEMENTATION PLAN

### 3.1 TLC's Approach (see TLC Profile, Main Menu)

Total LandCare uses an integrated community-based approach of intensive dialogue, training and extension support implemented through the traditional leadership structure in Malawi. TLC has extensive experience working with communities to promote tried and tested technologies that are affordable, adapted to the local climate, and in high demand among rural communities. Sustainability is achieved when adoption has proved productive, profitable and environmentally friendly with no further need for external (technical) support.

A sound foundation has been established for continuing and expanding impacts over a larger area based on strong relationships established with communities and high demands for TLC services. Considerable capacity has already been built at the District and community levels to sustain growth with good potential for scaling up in terms of a) broader participation by villages and households, b) increasing the quantity and quality of production, and c) expanding the geographic coverage to adjacent districts,

Key features of TLC's approach to promote sustainability:

- ➔ Empower people to become self sufficient in managing their natural resources through participation and education using existing structures and legal frameworks. TLC's mode of operation is demand-driven with a focus on transferring knowledge, skills and tools to improve increase food security, nutrition, health and incomes of rural communities.
- ➔ Build on local knowledge to identify points of impact through experience-based interventions to ensure sustainability with reduced dependence on external support.

- ➔ Provide equipment, materials and inputs on a cost-recovery basis under the premise that free handouts or heavy subsidies are not valued and are not sustainable.
- ➔ Promote the transition from aid-dependent subsistence to market-based livelihoods by building capacity for vertical integration in the market. Livelihoods will be improved by incorporating business and marketing skills to support adoption and sustainability of environmentally sound resource management and production practices.
- ➔ Facilitate positive change by leveraging the strengths and capabilities of different partners to transfer skills, knowledge and resources to communities.

Emphasis will be placed on decentralization and capacity building at the District and local levels with a focus on the following activities:

1. Provide training in the relevant technical disciplines, business and financial management, and marketing, with linkages to relevant support groups and information centers.
2. Produce/upgrade user-friendly extension and training materials as needed on all components of the project based on results and lessons learned. These materials will provide the tools and knowledge for strengthening extension delivery and training.
3. Implement an extension strategy to expand outreach efforts by leveraging the limited human, financial and physical resources available:
  - ◇ TLC will position field coordinators in central locations to work with District staff and communities to support key components of the project.
  - ◇ Targeted villages in each site will be organized in clustered concentrations to facilitate logistics, training and extension support services.
  - ◇ Intensive support will be provided for 1-2 years per village, which will be scaled down thereafter as communities become self-sufficient in maintaining the program.
4. Enhance impacts from the synergistic effects of involving collaboration of many villages and traditional leaders under a coordinated program with common goals.
5. Provide access to improved seed, inputs, materials and equipment through direct cash payments or signed loan agreements with TLC or finance institutions under the policy to instill a sense of ownership and value for the goods and services offered to ensure sustainability and impact (i.e., no free hand-outs).
6. Support marketing initiatives as follows:
  - ◇ Evaluate existing markets and potentials for specific crops and products.
  - ◇ Facilitate linkages between producers, processors, traders and consumers.
  - ◇ Expand opportunities for agro-dealerships and value-added processing of products
  - ◇ Organize promotional campaigns to popularize new crops and products.
7. Target selected communities to improve access to clean water, sanitation and basic primary education to address cross-cutting health and social issues.

Results generated from the integrated nature of the program will attract interest in participation from other service providers as well as neighboring communities.

### 3.2 Project Organizational Structure

The overall project in all 3 countries will be administered and managed under the direction of WT Bunderson and ZD Jere. Technical, financial, and logistical support will be provided to each district and country from specialists at TLC headquarters to assist with field operations, technical issues, training, accounting, reporting, monitoring and evaluation. Field offices will be established in central locations within each country and district to assure efficient and effective implementation of field operations.

### 3.3 Project Staffing Structure

TLC will use its existing infrastructure of specialists to coordinate and support field programs, which will be implemented at the Country level by recruiting the following staff:

1. **Project Manager** with responsibility to coordinate, supervise and monitor the day-to-day activities of the project and its staff, including collaboration with District Government authorities and other key stakeholders.
2. **Accountant** with responsibility for a) procurement, b) accounting of expenditures in accordance with approved TLC procedures, c) inter-office communications, d) logistical support for field programs, and e) managing 3<sup>rd</sup> parties and visitors.
3. **Field Operations Manager** – Management and coordination of field programs, including responsibility to quantify results for each component of the program.
4. **Field Coordinators** - Coordination of all field programs with farmers/clubs and tobacco companies, including responsibility for training and extension support for implementing all components of the program – forestry, sustainable agriculture, irrigation, improved wood stoves, water and sanitation. Support will also be directed for schools in areas where these are targeted for construction. Field Coordinators include 17 for Malawi, 6 for Tanzania, and 4 for Mozambique.
5. **Support Staff:** Office assistants; community workers; drivers; security guards.

### 3.4 Field Offices and Procurement of Equipment

Field offices, storage facilities and bank accounts are now in place for each country, with basic support needs for sound administration, management, communications and reporting. In Malawi, this has entailed adding offices to the existing TLC headquarters for the project. In Tanzania, the TLC Office premises include a Guest House to provide convenience and cost savings for management staff visiting from WSU and TLC Malawi.

Vehicles, equipment and supplies will be ordered and purchased in good time for the each Procurement included the following:

- 4x4 Toyota Landcruiser Pickups and Yamaha motor cycles to support field programs
- Improved telecom, fax and email facilities for each country office.
- Seed, nursery and irrigation supplies to meet the annual forestry targets.
- Irrigation equipment for treadle pump irrigation and water harvesting/stream diversion.
- Hand pumps for installing covered shallow wells.
- Input packs for irrigation, conservation agriculture, draft oxen and other interventions.
- Materials to construct kitchen stoves and san-plats for pit latrines.
- Extension and training materials for extension staff and farmers. This includes new posters written in Swahili to meet the needs of farmers in Tanzania.

### 3.5 Annual Targets by Intervention and Country

Targets for each year are shown by program component for each country in **Table 2**.

A brief description of targeted practices and interventions is provided under [Interventions](#) in the main menu which includes illustrations in the **photo gallery**.

Planning and implementation needs are outlined below:

#### Planning Needs:

- Secure funds by August each year to meet needs for a) purchasing equipment and supplies for forestry, irrigation, water and sanitation programs, and b) staff and operational costs.
- Develop formal memoranda of agreement to collaborate with partners from Government and the Tobacco Industry in each country.
- Identify and select suitable areas and village communities for each country.
- Sensitize and train the selected communities in each component of the project.

#### Implementation Needs:

- Develop village-based action plans for implementation.
- Supply villages with resources to implement the agreed plan of action.
- Provide extension support to the villagers on the interventions being extended.
- Monitor, evaluate and document results for each component
- Produce semi-annual technical and financial reports (i.e., June and December)
- Develop annual workplans and budgets for each country in July.

#### **Targeted Outputs Over 5 Years Summed Across Countries**

- ➔ 15,000+ villages in Malawi and Mozambique, and 34 Primary Societies in Tanzania
- ➔ 300,000+ households adopting sustainable forestry and agricultural practices
- ➔ 72 million trees established in villages for fuel and building materials
- ➔ 3750 ha of natural woodland under sustainable management for diverse forest products
- ➔ 30,000 wood stoves constructed and in use
- ➔ 7500 households adopting conservation agriculture
- ➔ 9500 households adopting systems of low cost irrigation
- ➔ 500 households adopting draft oxen to improve farming efficiency and labor
- ➔ 800 villages and 28,000 households provided with safe water
- ➔ 7000 households equipped with eco-pit latrines
- ➔ 320 rocket barns to promote rapid scale up by farmers and the tobacco industry



**Table 2: Annual and 5 Year Targets by Country for Each Intervention for 2008/09 to 2012/13**

OVERALL PROGRAM	ANNUAL TARGETS (EACH OF 5 YEARS)				5 YEAR TARGETS			
	MALAWI	MOZAMBIQUE	TANZANIA <sup>1</sup>	TOTAL	MALAWI	MOZAMBIQUE	TANZANIA <sup>1</sup>	TOTAL
<b>Districts</b>	<b>10</b>	<b>3</b>	<b>2</b>	<b>15</b>	<b>10</b>	<b>3</b>	<b>2</b>	<b>15</b>
Villages / Clubs (#)	3,000	250		3,250	15,000	250		15,250
Primary Societies (#)			34	34			34	34
Participating Households (#)	50,000	6,250	6,250	62,500	250,000	31,250	31,250	312,500
Participating Beneficiaries (#)	300,000	37,500	37,500	375,000	1,500,000	187,500	187,500	1,875,000
% Female Participation	35%	35%	35%	35%	35%	35%	35%	35%
<b>Forestry Program</b>								
Tree Planting (#)	10,000,000	1,450,000	3,000,000	14,450,000	50,000,000	7,250,000	15,000,000	72,250,000
Natural Woodland Management (ha)	400	50	300	750	2,000	250	1,500	3,750
Improved Stoves								
Villages (#)	500	50	50	600	2,500	250	250	3,000
Mud stoves Installed (#)	5,000	500	500	6,000	25,000	2,500	2,500	30,000
Households with Mud Stoves (#)	5,000	500	500	6,000	25,000	2,500	2,500	30,000
<b>Sustainable Agricultural Practices</b>								
Conservation Agriculture (# Households)	1,000	250	250	1,500	5,000	1,250	1,250	7,500
Draft Oxen Equipment (pairs) <sup>2</sup>	40	0	60	100	200	0	300	500
Winter Irrigation								
Villages (#)	120	40	40	200	600	200	200	1,000
Treadle Pump / Drip Households (#)	800	300	300	1,400	4,000	1,500	1,500	7,000
Stream Diversion Households (#)	400	100	0	500	2,000	500	0	2,500
<b>Water and Eco-Sanitation</b>								
Shallow Wells with Hand Pumps								
Villages (#)	80	40	40	160	400	200	200	800
Shallow Wells Installed (#)	80	40	40	160	400	200	200	800
Beneficiary Households (#)	2,800	1,400	1,400	5,600	14,000	7,000	7,000	28,000
Eco-Sanitation Pit Latrines								
Villages (#)	40	30	30	100	200	150	150	500
Pit Latrines Installed (#)	600	400	400	1,400	3,000	2,000	2,000	7,000
Households with Pits (#)	600	400	400	1,400	3,000	2,000	2,000	7,000
<b>Schools Project</b>								
School Blocks with Water & Latrines (#)	20	0	0	20	80	0	0	80
<b>Rocket Barn &amp; Lime Programs <sup>3</sup></b>								
Rocket Barns	300	0	20	320	300	0	20	320
Lime Application (# Households)	900	0	0	900	900	0	0	900

<sup>1</sup> Targeted households belong to Primary Societies comprising one or more villages. On average, each farmer grows 1 ha of tobacco, which under the new Govt policy requires the establishment of 500 trees annually in the form of planted or regenerating trees.

<sup>2</sup> Promotion of draft oxen will be undertaken by TLC among farmers who have livestock and the demonstrated ability to incorporate oxen into their farming practices.

<sup>3</sup> Field testing of rocket barn and lime programs under AOI and ULT will continue only for 2008/09; thereafter these programs should be commercialized by AOI/ULT with farmers.

### 3.6 Expected Milestones and Benefits for Improving Livelihoods

Unique features of this grant agreement include 1) conservation agriculture which has potential to dramatically transform smallholder farming (see **Annex 1**), 2) increased opportunities for primary education, and 3) a strong focus to build capacity to reduce the vulnerability of communities to climate change.

Collectively, the interventions proposed will have positive impacts on the livelihoods of the communities by increasing food security and wood supplies with opportunities to earn income from surplus production. Measures will incorporate a diverse range of crops with sound conservation practices to reduce costs and labor as well as risks of environmental degradation, drought, pest and disease problems. These practices are both ameliorative and sustainable.

#### Key milestones include:

- Capacity among targeted communities to address their own problems and needs; to harness their own resources and capabilities; and to formulate bye-laws to better regulate, use and manage their natural resources with the following benefits:
  - ◇ Improved access to wood through tree planting, conservation initiatives, and alternative or more efficient methods of wood use.
  - ◇ Increased household food security and nutrition.
  - ◇ Increased numbers of children attending primary school, which will serve as a springboard for their future growth and development.
  - ◇ Improved health with reduced disease incidents from better access to safe water and sanitation.
- Reduced soil and forest degradation from enhanced skills and knowledge among participating communities to sustainably manage their natural resources - increased tree planting, increased protection and management of natural woodlands, increased wood-use efficiency; and increased use of alternative materials for construction and fuel.
- Reduced vulnerability of households to climate change, demonstrated by greater food security and resilience to droughts, floods, and outbreaks of disease and pests.
- Increased disposable income from rural enterprises linked to the production, processing and marketing of agricultural and natural resource products. Visible benefits include increased purchasing power for many basic needs e.g., farm inputs and equipment; farm expansion/diversification; upgrading homestead buildings; household needs for food, furniture, kitchen ware, farm tools, transport, shoes, clothing, radios, music boxes, etc.
- Documented experiences and successes to develop models for replication, expansion, and adaptation to other areas in each country as well as to neighboring countries.
- Reduced incidence of child labor and increased school attendance by children.
- Development of case studies illustrating successes and benefits of the program.
- Emergence of spin-off programs that address issues of mutual interest to all partners (e.g., introduction of irrigation and other technologies to increase food security and income; development of improved curricula for primary education; cross-over programs that address the inter-related elements of nutrition and health, especially HIV-AIDS).
- Investment from other stakeholders to expand, strengthen or diversify the program.

By collaborating with partners from Government and the Tobacco Industry, the project will evaluate progress and perceptions to document important benefits to each partner. Defining real "win-wins" in the specific context of the region as well as each country will capitalize on this increased understanding to improve and replicate programs on a broader scale.

### 3.7 Multiplier Effects and Program Sustainability

Based on the experience of TLC and its partners from past projects, there is significant likelihood of replicating and scaling up outcomes as follows:

- The interventions proposed have undergone several years of testing with farmers and have proved highly attractive. In this regard, public awareness campaigns, on-farm demonstrations and farmer-to-farmer extension will result in broad-based adoption of the proposed practices both within the impact areas and in neighboring villages.
- Seed multiplication programs of food and high value crops will increase the availability of planting material and as well as numbers of farmers benefiting. Crops that have proved successful under similar initiatives include beans, sugar beans, rice, paprika, cassava, sweet potato and bananas. TLC is also working with other partners to evaluate low cost multiplication of high yielding/disease resistant varieties of other trees crops such as coffee, macadamia, mango, citrus and avocado. The experience gained will be used to promote multiplication of these crops. At the local level, there is a tradition for farmers to share these resources. Some level of commercialization will be encouraged to sustain these programs.
- Commercialization of services through the value chain will allow extension of services to other interested farmers and communities within and beyond the project impact areas. Since greater value is attached to a commercial service, farmers show more interest in such services as long as they can afford it. Therefore, a shift from free handouts to private payment is the best way to scale up the activities planned by the project.
- Leveraging resources / Buy-in from other NGOs, donors and government: Given the nature and impact of proposed interventions and approach, there is a high probability to scale-up activities beyond the project impact areas through buy-in from government, NGOs and other donors.
- Based on successes of approaches that do not offer “free handouts”, the project may influence other NGOs (with Government support) to adopt sustainable and capacity enhancing practices.

#### Financial Sustainability

In view of the extreme poverty of the targeted beneficiaries in the district sites, financial sustainability is a crucial consideration. For this reason, the project will leverage partner and community contributions to sustain the implementation of the planned activities. In addition, sustainability of the activities can be assured as follows:

- **Loans:** Payment for goods and services by farmers, instead of free handouts creates the groundwork for the project exit strategy that helps to assure sustainability. Farmers receive goods and services such as treadle pumps, agro-processing equipment, etc in kind and pay back in cash into a revolving fund. Based on the successful model of TLC which has been implemented since 1999, a community-based revolving fund scheme will be introduced to each of the participating village/club to sustain and expand activities beyond the life of the project. With a community-managed revolving fund, the program can expand on its own 8-fold over a period of 10 years. Because of its success, TLC’s approach has been adopted by several projects and NGOs.
- **Micro-finance linkages:** Resources to be made available through the project are not adequate to support all communities. In this regard, TLC will establish linkages with micro-financing institutions to provide soft loans to those able to implement certain interventions. The intention is to establish long term solutions to provide micro-finance for smallholder farmers. Institutions with which negotiations have started with TLC

include the Micro-Loan Foundation, Opportunity International Bank of Malawi, New Building Society Bank and Malawi Rural Finance Company (MRFC).

- **Involvement of the private sector supply chains:** Agro-dealers or suppliers of equipment and inputs will play an important role in the provision of services to the communities targeted during and after the life of the project. The main purpose is to promote and support the establishment of a private sector supply chain system that is able to take responsibility for all aspects of purchase, shipment, delivery of equipment and inputs down to district and community level, installation and maintenance. Of significance, is the establishment of a network of agro-dealers located in strategic areas within the target sites. It is our belief that once this is put in place, farmers will have freedom to access items of their choice at a fee.
- **Markets:** Presence of reliable markets for farmer commodities will include linkages to organizations like NASFAM, IDEAA and the Agriculture Commodity Exchange (ACE).

### **Institutional Sustainability**

Sustainability within the institutional framework can be assured in two areas as follows:

- TLC will support communities to organize groups according to common interests. These groups will be trained to master skills in leadership, group dynamics, finance and business administration, business management, marketing and product development. As the groups mature into self-sustaining entities, they will form associations that will be registered with the Registrar General as Trusts, or with the Ministry of Industry, Trade and Private Sector Development as business entities. These bodies will have the powers and responsibilities to manage the affairs of their members with minimum support or interference from outside. In addition, they will have gained the confidence in consolidating and scaling up the technologies promoted under the action. TLC has extensive experience in forming associations, and will collaborate with NASFAM, Farmers' Union of Malawi (FUM) and others to use their expertise to institute strong community ownership of the proposed activities.
- Apart from project staff, TLC will engage village extension agents/volunteers who will reside within the target villages. These agents will be trained in all aspects of the project and will be provided with basic resources and tangible acknowledgement of their training to help them deliver services to the community in which they live. It is the intention of this approach to make these agents take full responsibility for providing technical backstopping to their surrounding villages after the project end. TLC is currently using 42 village extension agents across various projects.
- TLC and its partners will establish linkages through memoranda of understanding with other partners involved in providing services for the proposed activities relating to micro-financing, germplasm multiplication, equipment/input supply, etc. These relationships, which are modeled on current TLC projects, will last for many years.

## 4. MONITORING AND EVALUATION PLAN

### 4.1 Management Information System

Regular monitoring and evaluation of project activities, results and impacts is integral to the project's management information system. The M&E plan is outlined in **Table 3** below:

**Table 3: Monitoring and Evaluation Plan**

Program Component	Survey Method	Indicator	Frequency
Forestry	Community Based Monitoring & Evaluation - with verification sample surveys of clubs and households	<b>Tree Planting Program</b> 1. No. of participating clubs and households 2. No. of nurseries established 3. No. of tree and bamboo seedlings raised 4. No. of tree and bamboo seedlings outplanted 5. No. of tree and bamboo seedlings surviving	Once/year
		<b>Sustainable Management of Natural Woodlands</b> 1. Cultivated Lands a. No. of mature trees retained on farms b. No. of regenerating trees on farms 2. Natural Woodland Conservation a. Area of mature woodlands b. Area of regenerating woodlands	Once/year
Reduced Wood Use	Results of trials and household surveys.	<b>Improved Kitchen Stoves / Tobacco Curing Barns</b> 1. Trials conducted on efficiency 2. No. of improved stoves/barns built and in use 3. No. of participating households 4. Savings in wood used and labor	Trials: Once No. of barns and stoves: Once/year
Irrigation	Sample Household Surveys	<b>Tobacco Seed Beds and Tree Nurseries</b> 1. No. of clubs/households using improved irrigation technologies for a) seedbeds and b) nurseries 2. No. of households growing different crops during the dry season under irrigation 3. Yields of produce per household a. Quantity for home consumption b. Quantity sold with prices/revenues	Seasonal – 3 times/ year
Health & Education	Village & Household Surveys	1. Assessing status & potential of water resources 2. No. of covered wells built with handpumps 3. No. of eco-pit latrines built and in use 4. No. of school blocks completed with attendance numbers of children	Once/year
Program Impacts	Sample household surveys	<b>Improved Livelihoods</b> 1. Average income/year 2. % Households food secure year-round 3. % Households self-sufficient in wood 4. Incidence of disease vs. past statistics 5. Children attending school	Bench line in Year 1; thereafter every 2 years

### 4.2 Reporting

Technical and financial expenditure reports will be produced in July and December of each year based on standard reporting procedures of WSU and TLC. Use of information from these reports for PMI's internal and external reports is perfectly acceptable, but WSU and TLC request the opportunity to review all externally presented material to ensure accuracy of all statements and results.