

# LAND RESOURCE CENTER

## ANNUAL REPORT, OCTOBER 2003 - SEPTEMBER, 2004

### BACKGROUND

The LRC (LRC) is a product of the Malawi Agroforestry Extension (MAFE) Project under the Department of Land Resources Conservation in the Ministry of Agriculture and Food Security. Funding was supplied by the United States Agency for International Development (USAID) through a cooperative agreement with Washington State University.

During the 10 year life of MAFE (1992 to 2002), the project carried out research and extension to promote soil and water conservation, agroforestry and smallscale irrigation through a partner support arrangement with government agencies, donor projects, non-government organizations (NGOs), community-based organizations (CBOs) and the private sector. Support from MAFE included technical and training services, monitoring and evaluation, germplasm, extension materials and nursery and irrigation supplies. These services were granted either free of charge or at nominal subsidized prices depending on the recipient.

Since August 2002, the concept has been to transform the LRC into a self-sustaining entity that is administratively and financially independent of Government and donor support. To make this a reality, USAID provided bridging funds to enable a smooth transition from a donor-funded, government project into an autonomous, financially self-sufficient enterprise. The aim was for the LRC to cover its operating and capital costs by charging fair market fees for its goods and services.

The 2 year support offered by USAID recognized the time needed to make this transition, a process which required implementing the following measures:

- adjustments by LRC to increase and diversify its operations, and to expand the market opportunities available,
- actions to alert clients and patrons that the customary low fees charged were no longer sustainable, requiring significant price increases to meet real costs, and
- a switch in the mindset of LRC staff - from the security of a steady wage under a donor project, to a business operation where the livelihoods of employees depend on generating revenues through their own initiative, business sense, and creativity.

### MISSION

To support efforts to improve rural livelihoods by providing practical and affordable agricultural and NRM goods and services to meet the needs of small scale farmers through a broad range of service providers: government agencies, NGOs, CBOs and the private sector efficiently and in a financially self-sufficient manner.

### OBJECTIVES

The LRC aims to provide affordable seeds, tools and other inputs, as well as instruction and training on how best to use them, and to encourage agroforestry, soil conservation, small scale irrigation and other sound farm practices by small farmers to:

- Raise crop yields to ensure food security with marketable surpluses
- Increase wood supplies for fuel and construction
- Improve the conservation and efficient use of soil, vegetation and water resources
- Reduce burdens on family labor

The LRC took over these functions from MAFE Project with the distinction that it aims to become financially self-sufficient, an unusual if not unique goal for a donor-funded government project whose primary clientele are resource poor farmers. USAID had the foresight to provide the bridging funds needed over a two year period to make this a reality.

### **LRC's PARTNERSHIP APPROACH**

Since its inception in 2002, the LRC has offered materials and services to farm communities through collaborative partnerships with the government agencies, donor projects, NGOs, CBOs and the private sector. Currently, over 50 organizations are working with the LRC. The goods and services are provided on a commercial basis to meet real market demands and to build capacity for sustaining services. This approach will help the LRC to achieve financial self sufficiency. The greatest challenge facing the LRC is to keep prices low to encourage adoption of technologies among farmers who have limited resources, while at the same time achieving financial independence, a feat that will require considerable skill and creativity.

### **QUANTITIES OF TREE SEEDS AND OTHER INPUTS SOLD TO PARTNERS**

Table 1 shows quantities of goods sold this year. Given the LRC's mandate, the supply of quality tree seed and related supplies represents a major responsibility, which accounts for most of the revenues generated. The LRC also sells tools and other inputs necessary for good farming (e.g. line levels, hoes, fertilizers, and crop seed etc). The strategy is to make the LRC a one-stop shop to meet all or most needs of farmers.

This year, LRC sold 31.9 tons of tree seed, which represents a 48% increase over last year. Specifically, 21.2 tons of general tree seeds, 8.8 tons of *Tephrosia vogellii* and 1.9 tons of *Faidherbia albida* were sold to partners during the year. The LRC also sold over 19 million polythene tubes during the same period, representing a 9% increase over last year.

Sales of line levels, an important tool in soil and water conservation, were lower this year (2,007) compared to last year (4,149). The drop in sales is at least partly due to the use of purchased levels by partners in previous years. Note that materials like maize and vegetable seeds, fertilizers and hoes were mostly bought by CBOs and individuals (other).

In an effort to expand small-scale irrigation, LRC sold 210 treadle pumps, representing a 21% increase over last year's sales. Substantial quantities of treadle pump accessories were also sold, such as foot valves, flap valves and delivery hoses.

**Table 1: Goods Sold to Partners, October, 2003 to September, 2004**

	Type of Organization						Total
	MAI/ADDs	Forest Dept	NGOs	Projects	CBOs	Other	
<b>Germplasm</b>							
General tree seed (kg)	2,896	609	10,013	7,029	231	427	21,205
<i>Tephrosia vogelii</i> (kg)	2,125	740	2,029	3,835	40	53	8,822
<i>Faidherbia albida</i> (kg)	513	25	885	414	19	18	1,874
<b>SubTotals</b>	<b>5,534</b>	<b>1,374</b>	<b>12,927</b>	<b>11,278</b>	<b>290</b>	<b>498</b>	<b>31,991</b>
<b>Other inputs</b>							
Polytubes ('000) -4x6	2,588	964	4,383	2,586	91	152	10,764
Polytubes ('000) -6x8	142	0	8,152	23	2	9	8,328
Treadle pumps (#)	0	0	188	2	14	6	210
Foot valves (#)	0	0	1	0	0	910	911
Delivery hoses (m)	0	0	400	50	0	225	675
Flap valves (#)	0	0	0	0	0	12	12
Pangas (#)	6	0	0	6	6	15	33
Line levels (#)	666	0	906	270	160	5	2,007
Maize seed (kg)	0	0	0	0	150	13,533	13,683
Vegetable seed (pkt)	0	0	524	17	42	1,362	1,945
Fertilizer (23:21:0, kg)	0	0	0	0	0	5,027	5,027
Fertilizer (CAN, kg)	0	0	0	0	0	2,096	2,096
Fertilizer (UREA, kg)	0	0	0	0	0	4,376	4,376
Azodrin (1ltr bottle)	0	0	1	0	2	4	7
Hoes (#)	8	0	0	0	6	62	76
Backpack sprayers (#)	0	0	1	1	0	0	2
Shovels (#)	32	0	1	0	7	2	42
Measuring tapes (#)	0	0	19	4	2	3	28
Water cans (#)	86	0	187	30	2	3	308
Pick Axes (#)	0	0	0	0	0	1	1
Wheel Barrows(#)	38	0	0	0	0	0	38

### TRAINING AND EXTENSION MATERIALS

An important role of the LRC is to provide high quality extension and training materials to facilitate adoption of the various technologies. These are supplied in the form of posters, leaflets, booklets, manuals and training kits. Sales for the year are shown in Table 2, including 12,316 posters, 4,325 booklets, 450 manuals and 51 training kits. Sales of leaflets and training kits have dropped by 55% and 29%, respectively, compared with last year. Reasons for this decline are probably due to the fact that many of our clients and patrons have already satisfied their needs for these materials. However, sales of posters, booklets and manuals are much higher compared with last year. This trend shows movement in the right direction for increasing sales volume.

**Table 2: Extension Materials Sold to Partners, October, 2003 to September 2004**

<b>Type of Organization</b>	<b>Posters</b>	<b>Leaflets</b>	<b>Booklets</b>	<b>Manuals</b>	<b>Training Kits</b>
MoAI/ADDs	1738	340	196	24	1
Forestry Dept.	0	0	0	0	0
NGOs	8,519	3,917	318	180	19
DFPs	1,802	4	4	7	0
CBOs	13	0	22	98	4
Others	244	64	13	141	27
<b>TOTAL</b>	<b>12,316</b>	<b>4,325</b>	<b>553</b>	<b>450</b>	<b>51</b>

### **TRAINING SUPPORT**

Training efforts focus on trainers to maximize impacts at the field level. However, there are times when farmers are trained due to requests for assistance. Currently, training covers areas of small scale treadle pump irrigation and agroforestry and soil conservation. Plans are underway to include training in monitoring and evaluation of the technologies and in the use of participatory rural appraisals (PRA) due to high demands among partners.

During the year, a total of 161 people were trained as trainers in small-scale treadle pump irrigation and 132 people were trained in Agroforestry and Soil Conservation (Table 3), giving a total of 293 people trained. Of these, 70 were smallholder farmers. This shows that the LRC is having direct impact at the farm level.

**Table 3: Training Courses Conducted from October, 2003 to September, 2004**

<b>Type of Organization</b>	<b>Treadle Pump Irrigation</b>		<b>Agroforestry and Soil Conservation</b>	
	<b>Audience</b>	<b>No</b>	<b>Audience</b>	<b>No</b>
NGOs	Supervisors	3	Supervisors	35
	Frontline	60	Frontline	14
	Farmers	58	Farmers	12
Projects	Supervisors	0	Supervisors	23
	Frontline	4	Frontline	20
CBOs	Supervisors	0	Supervisors	0
	Frontline	36	Frontline	16
Others	Supervisors	0	Supervisors	2
	Frontline	0	Frontline	10
<b>TOTAL</b>		<b>161</b>		<b>132</b>

### **REVENUES GENERATED FROM SALES OF GOODS AND SERVICES**

During the year, LRC generated over MK 26.9 million from sales of goods and services (Table 4). This represents a 187% increase in revenues compared to last year. Sales of tree seeds generated MK 8.5 million compared to MK 2.7 million realized last year. This shows that the LRC has more than trebled income from seed sales this year. The biggest income earner this year was "other inputs" which generated over MK 16.5 million compared to MK 5.0 million last year. This could be a result of the diversified range of products which include polythene tubes, the largest money maker. There was no major difference in income generated from sales of extension and training materials between the current year (MK 1.7 million) and last year (MK 1.6). This is an area that needs improvement if the LRC is to

increase its profit margin. Major customers were NGOs and Donor Funded Projects. CBOs understandably bought the least amount of goods and services from LRC during the year.

**Table 4: Breakdown of LRC Revenue, October, 2003 to September, 2004**

ITEM	INCOME (MK)						TOTAL
	MAVADD	FOREST	NGOs	PROJECTS	CBOs	OTHER	
<b>Germplasm</b>							
General tree seed	900,180	210,375	3,588,600	2,251,089	95,673	163,814	7,219,731
<i>Tephrosia vogelii</i>	283,668	63,000	241,570	270,559	5,645	4,295	848,737
<i>Faidherbia albida</i>	114,875	6,250	215,550	93,275	4,588	2,963	437,481
<b>Sub-Total</b>	<b>1,278,723</b>	<b>279,625</b>	<b>4,055,720</b>	<b>2,614,923</b>	<b>105,886</b>	<b>171,072</b>	<b>8,585,949</b>
<b>Other Inputs</b>							
Polytubes (000) 4" x 6"	1,018,824	216,000	2,213,675	700,630	27,840	53,300	4,230,469
Polytubes (000) 6" x 8"	142,000	0	8,151,780	23,000	1,550	8,500	8,326,830
Treadle pumps	0	0	1,676,500	25,000	126,000	61,000	1,888,500
Foot valves	0	0	400	0	0	319,000	319,400
Panges	980	0	0	980	980	2,280	5,140
Line levels	200,500	0	267,100	188,150	58,000	1,550	713,300
Maize seed	0	0	0	0	22,500	15,250	37,750
Vegetable seed	0	0	35,360	1,105	2,730	5,330	44,525
Fertilizers	0	0	0	0	0	440,480	440,480
Azodrin	0	0	500	0	1,000	2,500	4,000
Hoes	1,400	0	0	0	1,050	9,950	12,400
Delivery hoses	0	0	46,000	5,750	0	38,180	89,930
Backpack sprayers	0	0	6,000	6,500	0	0	12,500
Flap valves	0	0	0	0	0	2,000	2,000
Shovels	14,400	0	450	0	3,150	900	18,900
Pick axes	0	0	0	0	0	475	475
Measuring tapes	0	0	5,225	1,100	0	1,345	7,670
Water cans	30,100	0	65,450	9,500	600	1,000	106,650
Wheel barrows	247,000	0	0	0	0	0	247,000
<b>Sub-Total</b>	<b>1,655,184</b>	<b>216,000</b>	<b>12,488,440</b>	<b>961,895</b>	<b>243,380</b>	<b>983,080</b>	<b>16,587,889</b>
<b>Extension &amp; Training Materials</b>							
Manuals	36,000	0	246,000	9,000	39,000	90,000	420,000
Training Kits	6,000	0	114,000	0	24,000	18,000	162,000
Booklets	90,000	0	119,400	1,800	13,200	7,800	232,200
Posters	96,480	0	500,720	91,370	780	14,580	703,910
Leaflets	10,200	0	129,080	160	0	1,930	141,370
<b>Sub-Total</b>	<b>238,680</b>	<b>0</b>	<b>1,109,200</b>	<b>102,330</b>	<b>76,980</b>	<b>132,310</b>	<b>1,659,480</b>
<b>Training</b>	<b>0</b>	<b>0</b>	<b>199,900</b>	<b>37,600</b>	<b>23,100</b>	<b>9,000</b>	<b>269,600</b>
<b>Grand Total</b>	<b>3,172,587</b>	<b>485,625</b>	<b>17,833,260</b>	<b>3,716,948</b>	<b>448,346</b>	<b>1,275,362</b>	<b>26,943,128</b>

## EXPENDITURES AND REVENUES OF THE LRC

Table 5 shows a summary of expenditures and revenues in the 2003-2004 year. Total income (MK 26,943,128) exceeded total expenditure (MK 23,985,144) by a margin of MK 2,954,484. This margin is a result of the increased volume of sales. By comparison, the LRC registered a loss of over MK 6 million (see Sustainability Report) between October 2002 and June, 2004. This shows that the profit margin was mostly from the last quarter of 2004 (July-September), where volume of sales increased tremendously (see Quarterly Report). The analysis takes into consideration all costs except equipment depreciation and

office rent. The latter is not paid because the LRC is housed in the Departmental of Land Resources Conservation. Efforts should now be focused on how to maintain or increase the margin achieved this year.

**Table 5: LRC Expenditures and Revenues, October 2003 to September, 2004**

<b>EXPENDITURE</b>	<b>MKwacha</b>	<b>US\$</b>
Vehicle fuel and maintenance	885,216	8,083
Office operations, equipment & stationery	1,501,077	13,721
Office Equipment (Computers etc)	438,000	4,018
Printing and Training Costs	1,031,200	9,461
Renovations to LRC	10,000	92
Purchase of Generator	1,347,947	12,254
Installation of Generator	87,910	799
Cold Room Maintenance	39,876	363
Warehouse Rent	558,000	5,103
Farm Inputs	975,051	8,940
Treadle Pumps & Accessories	1,896,240	17,315
Nursery Tools	259,090	2,355
Tree Seed	3,195,779	29,160
Polythene tubes	3,157,175	28,858
Salaries & Benefits	8,026,233	73,247
Staff Leave Grant	20,000	184
Field & Other Allowances	518,050	4,725
Bank Fees/Charges	18,300	166
<b>TOTAL EXPENDITURE</b>	<b>23,965,144</b>	<b>218,844</b>
<b>INCOME</b>		
Germplasm	8,505,949	77,469
Other inputs (including treadle pumps)	16,507,899	150,373
Extension and Training Materials	1,659,480	15,116
Training	269,800	2,464
<b>TOTAL INCOME</b>	<b>26,943,128</b>	<b>245,422</b>

## **SUSTAINABILITY PLAN**

Dr Peter Wyeth of Washington State University finalized his work on sustainability plan of LRC for the period ending June 2004 (i.e., excludes the final 3 months of the project). His major conclusion was that financial self-sufficiency is a realistic goal given that there is continued growth in demand for tree seed and other products and creativity and energy in expanding LRC sales. However the report said more time would be needed to achieve financial self sufficiency.

Main findings of the study were as follows:

- After 24 months of operation, the LRC had not yet reached financial self-sufficiency but it was making good progress.
- Compared with the first year, revenues from 2<sup>nd</sup> year sales had increased 79% in kwacha terms, while costs had risen less; this meant that so the deficit remained at about MK6 million, but it had fallen in relative terms from 42% to 28% of total costs.
- Further increases in sales, particularly tree seed, would improve the situation. While these are likely, the LRC should take the initiative to improve its net income situation.

The report suggested some points to be experimented with on a small scale to assess which ones will make the greatest difference. The report was quick, however, to point out that no single remedy is available and overall progress will be made through the accumulation of several small changes. The suggested areas were as follows:

- Providing salary bonuses to LRC employees if the deficit is eliminated and kept that way.
- Expanding the product line, for example by including bamboo seeds, fruit tree seedlings or inputs for organic and horticultural farmers.
- Reducing purchase costs of some items such as treadle pumps and fertilizer by importing them directly, making it possible to lower prices, increase margins or both.
- Increasing promotion by sharpening the image that the LRC projects, continuing to set up stands at trade shows, informing the news media of LRC activities, increasing advertising, contacting potential new clients, further developing relations with existing customers, making the LRC premises attractive to visit, and soliciting more business from surrounding countries.
- Increasing the LRC's geographical reach by developing a network of agents outside Lilongwe who sell on commission.
- Developing proposals for further donor assistance based on LRC sales performance and increased demands for its services.

## **ANNUAL PARTNER REVIEW MEETING**

LRC convened a meeting of its partners to review progress made in the year, discuss partner needs and demands and map out the way forward. The meeting was at Sunbird Lilongwe Hotel from 2<sup>nd</sup>-3<sup>rd</sup> September, 2004. 30 partners were represented at the meeting. At the meeting, it was unanimously agreed that LRC should become an independent entity in the form a Trust.

Major recommendations were as follows:

- LRC must strengthen support and training to her partners in monitoring and evaluation systems for agroforestry and soil conservation practices and small scale irrigation.
- LRC should conduct periodic review seminars and make spot visits to some partners to check how goods and services from LRC are being utilized.
- LRC should develop training kits and extend training services in fruit tree propagation, community based monitoring and evaluation, remote sensing, participatory rural appraisal (PRA) and rain water harvesting.
- Where expertise is lacking, LRC should hire assistance from her partners and should strengthen linkages with research institutions.
- LRC should open 2 satellite centers in the north and south to help market and distribute LRC products. This would minimize transport and other costs.
- There is need for LRC to broaden the product range to increase revenue.  
Suggestions are as follows:
  - a) Offer technical field support in the form of consultancies
  - b) Include mucuna, sun hemp and other legumes in the range of germplasm available
  - c) Include other irrigation equipment e.g. drip systems plus accessories
  - d) Engage in the multiplication of winter legume seed
  - e) Promote and provide information on conservation farming
  - f) Promote and provide information on rain-water harvesting
- LRC should improve marketing of its products by:
  - a) Improved packaging by size
  - b) Advertise through internet, stickers, T-shirts, billboards and agricultural shows
  - c) Quality control certification
  - d) Attend local agriculture shows and give prizes to farmers who are doing well

## **LRC SWOT ANALYSIS**

A SWOT analysis of the LRC was done at the review meeting, with the following results:

### **STRENGTHS**

- Good reputation with partners
- Accessibility in terms of communication
- Strong technical expertise
- Appropriate facilities (cold room, cool room, conference room, library etc)
- Broad range of products available

### **WEAKNESSES**

- Lack of decentralization (centralized services)

### **OPPORTUNITIES**

- Room for expansion
- Increasing demand for products
- Donor willingness to support the initiative
- Partners' good will

### **THREATS**

- Political will to promote soil conservation measures
- HIV/AIDS