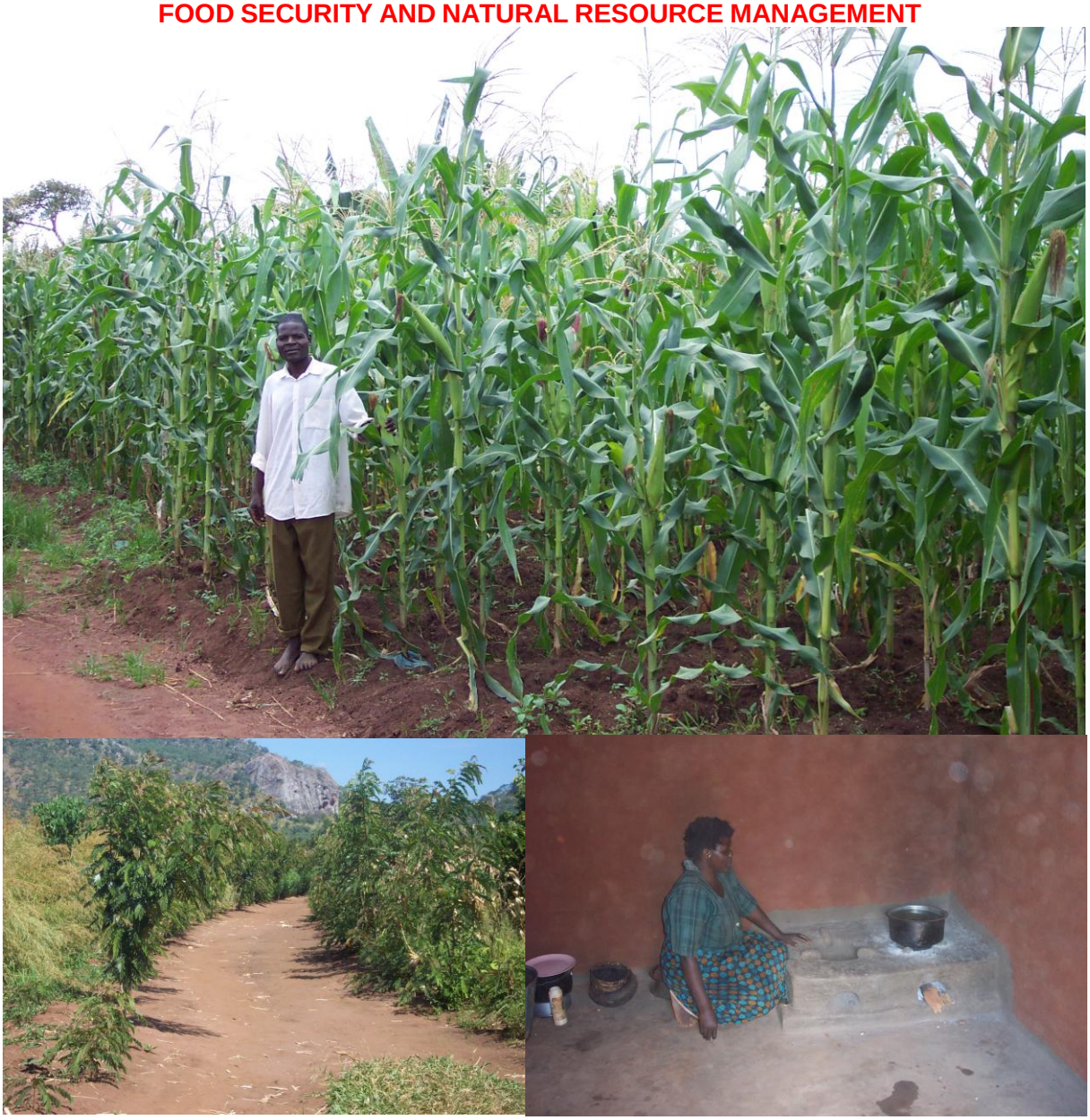
TOTAL LANDCARE, MALAWI

INTEGRATED CHILD LABOUR ELIMINATION PROJECT (ICLEP)

FOOD SECURITY AND NATURAL RESOURCE MANAGEMENT



ANNUAL REPORT FOR JULY 2004 TO JUNE 2005

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1.0 INTRODUCTION

The Integrated Child Labour Elimination Project (ICLEP) has completed its third year. It is being implemented by Together Ensuring Children's Security (TECS), Creative Centre for Community Mobilization (CRECCOM), Total LandCare Malawi (TLC) and Nkhoma/Livingstonia Synod under a Memorandum of Agreement with financial assistance from Elimination of Child Labour in Tobacco (ECLT). The goal of the project is to eliminate child labour in farm communities by addressing its underlying causes. CRECCOM is implementing the education component. TLC is implementing the food security and agro-forestry component; and Nkhoma/Livingstonia Synod is implementing the water and sanitation component.

Project coverage and results have been up-scaled with the extension of the activities to the second site at Dwangwa, Kasungu District where TLC placed one field technician at the end of the 1st quarter of 2003-04.

TLC is responsible for the food security and natural resource management component of the project. The primary objective of the component is to improve household food security, income levels and management of natural resources leading to sustainable increases in farm productivity and a better environment for the child through the following interventions:

- Small-scale irrigation of vegetables and legumes to improve food security, nutrition and incomes.
- Tree planting around homesteads and farms for fuel-wood, poles and other uses. Trees are planted in a variety of forms. These include woodlots, boundaries of homesteads and farms, and along stream-banks and roadsides. Trees planted involve a range of indigenous and exotic species, including fruit trees.
- Soil and water conservation through a range of practices including contour ridging, vetiver hedgerows and rehabilitation of gullies.
- Soil fertility enrichment with soil improving trees that can be planted with crops such as *Faidherbia albida* and *Tephrosia vogelii*.

This report presents results of the 2004/05 work-plan.

2.0 ACHIEVEMENTS

This section presents achievements of the food security and natural resource management component of ICLEP for period July 2004 – June 2005. Good progress has been made on most of the interventions, with results on beneficiary participation; small-scale irrigation and tree planting far exceeding the 4-year project targets (see **Annexes 1 and 2**).

2.1 Extension and Training

2.1.1 Village and Beneficiary Participation

220 villages participated in the program during the year, involving 9,904 farmers. The increased number of villages and participating farmers is more than the target due to the following factors:

- Interest by the community and strong leadership.
- Dedicated field staff based at the site who have won the confidence of the beneficiaries.
- Timely and unlimited support from TLC management.

- The interventions have been perceived as addressing the immediate needs of the communities which have given them a sense of ownership.
- TLC's flexibility to expand and respond to the demands by communities beyond the geographical boundary of the project.

2.1.2 Distribution of Extension and Training Materials

Table 1 shows the number of inputs and materials distributed to participating villages during the year. These included tree nursery inputs, posters and leaflets on agro-forestry and soil conservation. Additionally, each irrigation club member received a set of 7 leaflets on treadle pump irrigation, and a set of tools comprising a backpack sprayer, shovels and pick axes for each new irrigation club.

2.1.3 Farmer Training

Table 2 presents the number of farmers trained by subject matter during the year. This included direct training by TLC technicians to targeted households, as well as hands-on farmer to farmer training on nursery management, tree out-planting and management, small-scale irrigation, contour ridging, improved wood stoves and ecological sanitation.

Table 1. Extension and Other Materials Distributed 2004-05

Type of Material	Ngala	Dwangwa	Total
Extension Materials			
3 sets of nursery construction/management posters	87	35	**122**
3 sets of tree outplanting & management posters	87	35	**122**
5 sets of soil conservation posters	0	0	**0**
3 sets of soil fertility improvement posters	0	0	**0**
1 set of leaflet on contour ridging with line level	0	0	**0**
1 set of leaflet on vetiver grass hedgerow planting	0	0	**0**
1 set of leaflet on systematic interplanting of Msangu	0	0	**0**
7 sets of leaflet on treadle pump irrigation	0	80	**80**
Other Materials			**0**
Treadle pumps with accessories	170	56	**226**
Irrigation input packs	195	56	**251**
Backpack sprayer	10	5	**15**
Line levels	12	10	**22**
Polytubes	570,000	304,000	**874,000**
Seed - all species (kg)	154	188	**341.89**
Nail cutters (for seed treatment)	700	366	**1066**
Watering cans	280	80	**360**
Hoes	174	92	**266**
Shovels	180	98	**278**
Pangas	174	81	**255**
String (rolls)	140	20	**160**

2.2 Site Supervision and Field Trips

Regular supervisory trips were made by TLC management staff to the project sites during the year to provide technical support to field technicians and to evaluate progress. Some of these visits were made in the company of officials from ECLT, TECS Board and Philip Morris.

Table 2. Table 3: Number of Farmers Trained in 2004-05

Subject Matter	Male	Female	Total
Leadership & Management			
Annual program review and planning	688	372	1,060
Community-based action plan	923	464	1,387
Coordination of program activities	237	135	372
Book keeping	120	18	138
Community-based monitoring and evaluation	444	271	715
Cross-Cutting			
Child labour elimination sensitization	2,367	1,327	3,694
Agroforestry/Tree Planting			
Tree nursery site selection and fence construction	2,736	1,333	4,069
Pot filling, seed treatment & sowing	4,286	3,315	7,601
Weeding, thining, transplanting	823	940	1,763
Root pruning	823	940	1,763
Pitting for timely and proper tree outplanting	2,176	901	3,077
Tree outplanting & management	2,212	2,659	4,871
Bamboo propagation and management	92	7	99
Tephrosia undersowing & management	83	29	112
Fruit tree planting & management	73	35	108
Soil & Water Conservation			
Contour ridging	640	359	999
Vetiver grass nursery establishment & management	330	153	483
Contour grass hedgerow planting & management	47	34	81
Gully control	47	34	81
Small-Scale Irrigation			
Community sensitization & program review	2,201	1,028	3,229
Loan repayment and management of revolving funds	908	136	1,044
Dimba site selection	259	42	301
Treadle pump assembly, use & maintenance	255	63	318
Stream diversion/canal siting and construction	23	2	25
Plot layout for irrigation	533	160	693
Vegetable nursery management	210	56	266
Crop husbandry practices	638	236	874
Compost making and use	146	60	206
Integrated pest management	292	125	417
Live fencing	42	1	43
Improved Stoves			
Community sensitization	913	1,309	2,222
Kitchen mud stoves	493	762	1,255
Ceramic stoves	18	58	76
Kitchen management	441	798	1,239
Eco-sanitation			
Community sensitization	674	458	1,132
Sanplat construction	144	65	209
Digging pit latrine	144	65	209
Super structure construction	24	0	24

2.3 Field Results

Table 3 shows field results for 2004-05. A brief description of each intervention is given below. These results can be checked against project targets and cumulative results shown in **Annex 1**. Pictorial illustrations of these results are given in **Annex 2**.

2.3.1 Small-scale Irrigation

A total of 226 households each received a treadle pump and input pack bringing the total number of farmers participating in treadle pump irrigation to 499 in both project sites. More pumps were issued with support from the French Government through its embassy, with 4 pumps bought by farmers using revolving funds. In addition, MK2,500,000 was borrowed from the same funds by old farmers totaling 273 to buy inputs for the 2004-05 irrigation season.

During the year, TLC supported communities to establish two gravity-fed irrigation schemes through stream diversion at Khokholi and Jimu villages near Ngala where 25 farmers were involved covering an area of 3 hectares.

Several crops were grown in the 2004-05 irrigation season which included vegetables, green maize, beans and tomatoes. The area covered with these crops under both irrigation systems was approximately 59 hectares, bringing the total area irrigated since July 2002 to 85 hectares. Generally, households have experienced a great improvement in their food, nutrition and income security. Incomes per participating households averaged MK15,000, with one farmer in the Dwangwa site earning more than MK60,000.

Regarding loan recovery, MK3,356,925 was repaid from a total loan of MK4,917,200, which represents 68% recovery. The total loan value includes loans for the 226 new farmers and those provided through the revolving funds to buy the 4 pumps and inputs for 273 old farmers. It is expected that all farmers will fully repay their loans within the next 2-3 months from the 2005 winter season harvest and tobacco proceeds.

2.3.2 Tree Seedlings Raised

A total of 197 nurseries were established in 2004-05 raising 789,508 seedlings. Both number of nurseries established and number of seedlings raised were less than the target due to an acute shortage of water in the Dwangwa site where 47 nurseries were dropped after wells had dried up soon after pot filling. Although communities were advised on proper nursery siting, most of them still opted to locate these close to their homesteads to avoid theft even though water availability was not reliable.

2.3.3 Tree Out-planting and Management

A total of 789,508 trees were planted in 2004/05, representing 82% of the target and 100% of the number of seedlings raised. This brings the cumulative number of trees planted since July 2002 to 1,319,299, which is 133% of the 4-year project target.

Table 3. Field Results for 2004/05

	2004-05 Targets	2004-05 Results	% Achievement
OVERALL PROGRAM			
No. of Villages/Schools/Estates	229	220	96%
No. Villagers Participating	7,460	9,904	133%
% Female Participating	39	44.5	114%
Small-Scale Irrigation			
Villages (#)	30	19	63%
Clubs (#)	30	34	113%
Households (#)	350	226	65%
Treadle Pumps (#)	350	226	65%
No. HH Participating in Stream diversion	25	25	100%
Length of canal constructed (km)	1	0.87	87%
Area Irrigated (#)	36	58.62	162%
Loan Value (MK)	4,597,000	4,917,200	107%
2002-04 HH (273)	1,092,000	2,500,000	229%
2004-05 HH	3,505,000	2,417,200	69%
Loan Recoveries	4,597,000	3,356,925	
2002-04 HH (273)	1,092,000	1,845,200	
2004-05 HH	3,505,000	1,511,725	
Tree Nurseries			
# of Nurseries	229	197	86%
# of Tree Seedlings Raised	965,600	789,508	82%
Agroforestry/Tree Planting			
Trees Planted all Types (# total trees planted)	965,600	789,508	82%
Natural Tree Regeneration (ha)	7	15.4	220%
Fruit Trees Planted (# trees)	250	200	80%
Annual Undersowing with Tephrosia (ha)	51	2.1	4%
Improved Fallow with Tephrosia (ha)	5	0.1	2%
Bamboo Planting (# stations)	2,000	592	30%
Improved Wood Stoves			
# Households Involved	120	346	288%
# Wood Stoves Constructed & in Use	120	346	288%
Soil & Water Conservation			
Contour Ridging (ha)	356	153.4	43%
Gully Control (#)	44	27	61%
Vetiver Grass Nurseries (No.)	23	7	30%
Vetiver Grass Nurseries (ha)	4	1.33	34%
Vetiver Grass Hedgerows (ha)	128	36	28%
Ecological Sanitation			
No. Villages Participating	6	8	133%
No. HH Participating	60	45	75%
No. Masons Involved in Construction/Promotion	4	2	50%
No. Latrines in Use	60	12	20%
No. Fruit Trees Planted	45	0	0%

Note: Shaded boxes indicate non-applicability

2.3.4 Soil and Water Conservation

Some progress has been made on soil and water conservation activities although more needs to be done. Generally, results have been affected by the following factors:

- Land tenure system especially where it involves renting out tends to de-motivate tenants from participation in soil and water conservation practices.
- Need for more effort to make people understand the importance of the relationship between land conservation and land productivity.
- More time and labour are needed to carry out soil conservation activities. However, this has been constrained by the fact that farmers have been engaged in other development activities being promoted by partners, especially those that coincide with soil conservation activities.

2.3.5 Soil Fertility Improvement

A total of 2.1 hectares were planted with *Tephrosia vogelii*. The achievement is far below the target of 51 hectares and the actual area of 20 hectares planted due to poor rains and accidental weeding by ganyu labourers. A few farmers who had undersown *Tephrosia vogelii*, left it under fallow for a year and then grew maize have realized a bumper harvest as demonstrated by Mr. Chatsalira of Zozo village in the Ngala site. As such, most of the farmers are now showing their intentions to adopt the practice in the coming season.

2.3.6 Improved stoves

346 households against a target of 120 were using kitchen mud stoves by the end of June 2005. Kitchen mud stoves are on high demand in the target villages, especially among women. As previously reported, these stoves have a fuel saving efficiency of up to 70%, a scenario that is important for reducing child labour as the technology increases both time and labour use efficiency.

2.3.7 Bamboo Planting

592 bamboo rhizomes were planted against a target of 2,000. TLC has been using rhizomes for propagation of bamboo which is collected from Salima. This approach has proved both cumbersome and expensive as only 400 rhizomes can be transported on a 7-ton truck per trip. In this regard, TLC will evaluate the use of seed for propagating bamboo. If successful, the number of bamboos planted will increase tremendously as 1 kg of seed with husk would provide over 4,500 seedlings or 6,000 when seeds are sown without husks.

2.3.8 Ecological Sanitation

A total of 12 eco-sanitation latrines in 8 villages were in use by the end of June 2005. The aim of the technology is to improve sanitation in the target villages, apart from other benefits of providing decomposed faecal matter as manure and reducing deforestation.

2.3.9 Dam Construction

TLC was approached by Group Village Head Mnduka to assist in the construction of a dam at Nkhunthwa village in the Dwangwa site. A total of 48 households are involved in the construction, covering three villages. TLC's support included technical design of the dam and spillway, regular supervision and provision of tools such as hoes and wheel barrows, while farmers contributed labour. Once completed, the dam will provide water for household use, irrigation, tree and tobacco nurseries.

3.0 CONCLUSION

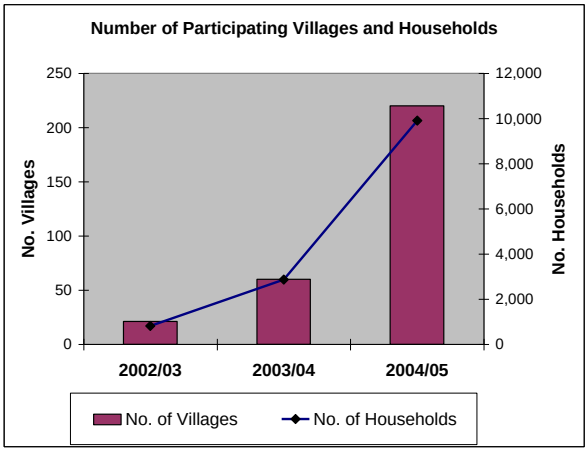
Tremendous achievements have made in meeting the project results as shown in Table 4 and Annexes 1 and 2. The greatest achievement has been in demonstrating how small-scale irrigation can positively impact the livelihoods of households in the shortest period possible. This has also shown that improvements in household food, nutrition and income security combined with labour saving technologies can greatly contribute towards improving the condition of the child leading to better education and health.

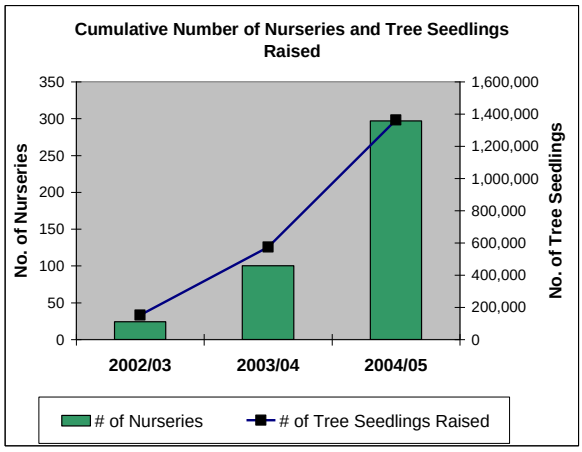
Results of case studies done by the TECS Secretariat and its partners give interesting testimonies by farmers on how the project has improved their status and changed their perception about child labour. These testimonies have been well documented by the TECS Secretariat and need not be repeated here.

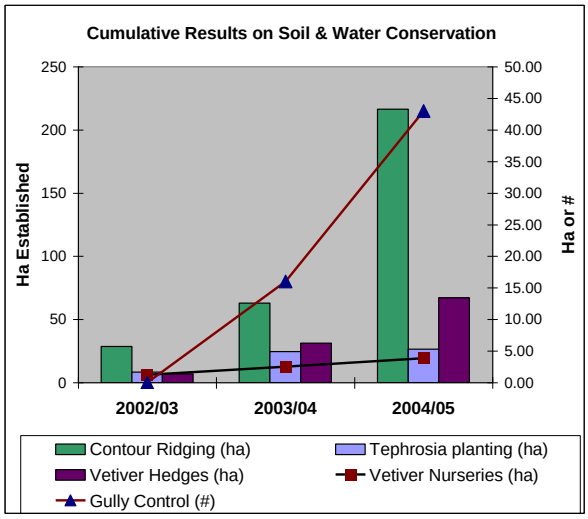
Annex 1: ICLEP Targets with Cumulative Results to June 2005

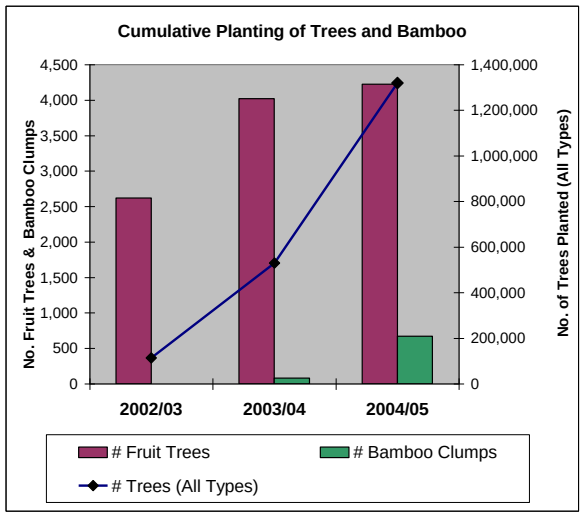
	2002-06 Targets	July 02 - June 04 Results	July 04 - June 05 Results	Cumul Results July 02 - June 05	Cumul Results as % of Project Targets
OVERALL PROGRAM					
No. of Villages/Schools/Estates	130	60	220	220	169%
No. Villagers Participating	5200	2,872	9,904	9,904	190%
% Female Participating		0	45	45	
Small-Scale Irrigation					
Villages (#)	64	23	19	42	66%
Clubs (#)	64	24	34	54	84%
Households (#)	429	273	226	499	116%
Treadle Pumps (#)	429	273	226	499	116%
No. HH Participating in Stream diversion			25	25	
Length of canal constructed (km)			1	0.87	
Area Irrigated (ha)	60	35	83	118	197%
Loan Value (MK)	4,047,600	2,518,800	4,917,200	4,917,200	121%
2002-04 HH			2,500,000	2,500,000	
2004-05 HH			2,417,200	2,417,200	
Loan Recoveries	4,047,600		3,356,925	3,356,925	83%
2002-04 HH			1,845,200	1,845,200	
2004-05 HH			1,511,725	1,511,725	
Tree Nurseries					
# of Nurseries	225	100	197	297	132%
# of Tree Seedlings Raised	1,610,000	572,971	789,508	1,362,479	85%
Agroforestry/Tree Planting					
Trees Planted all Types (#)	990,000	529,791	789,508	1,319,299	133%
Natural Tree Regeneration (ha)			15	15	
Fruit Trees Planted (# trees)		4,022	200	4,222	
Annual Undersowing with Tephrosia (ha)	260	24	2	27	10%
Improved Fallow with Tephrosia (ha)		0	0	0	
Bamboo Planting (# stations)		80	592	672	
Improved Wood Stoves					
# Households Involved			346	346	
# Wood Stoves Constructed & in Use			346	346	
Soil & Water Conservation					
Contour Ridging (ha)	260	63	153	216	83%
Gully Control (#)	130	16	27	43	33%
Vetiver Grass Nurseries (No.)	130	15	7	22	17%
Vetiver Grass Nurseries (ha)	40	3	1	4	10%
Vetiver Grass Hedgerows (ha)	120	31	36	67	56%
Ecological Sanitation					
No. Villages Participating			8	8	
No. HH Participating			45	45	
No. Masons Involved in Construction/Promotion			2	2	
No. Latrines in Use			12	12	
No. Fruit Trees Planted			0	0	

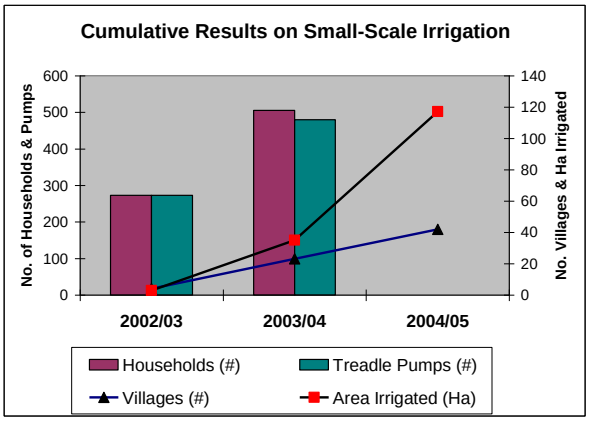
Annex 2: Graphic Representation of Cumulative Results July 2002 – June 2005

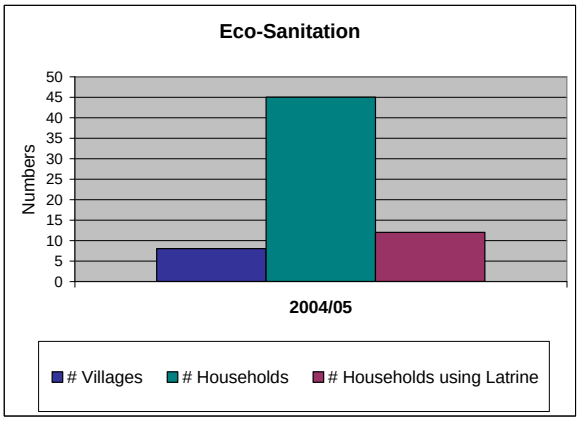












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