

THE NATURE AND ROLE OF
LOCAL BENEFITS IN GEF
PROGRAMME
AREAS

PILOT CASE STUDY

***KENYA:
LEWA WILDLIFE
CONSERVANCY***

GLOBAL ENVIRONMENT FACILITY
OFFICE OF MONITORING
AND EVALUATION

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Executive Summary

This report describes the outcomes of a pilot case study designed to understand the relationship between the local livelihoods benefits and the attainment of global environmental benefits resulting from the Global Environment Facility's (GEF) support to the Lewa Wildlife Conservancy (LWC) in northern Kenya. The study is part of a broader series of case studies supported by the GEF Monitoring and Evaluation Unit to assess the linkages between local and global benefits in GEF programme areas.

LWC was selected as a case study because of the potential for demonstrating strong linkages between improvements in local livelihoods and the attainment and sustainability of global environmental benefits. Therefore, implementation experience has the potential to yield important findings, lessons and recommendations.

The study team for implementing the case study comprised locally-based conservation and development specialists from the Conservation Development Centre, Nairobi, supported by technical staff from the GEF M&E Unit in Washington D.C. and from UNDP/GEF in New York.

The team employed three distinct and mutually supporting analytical approaches to understanding the livelihoods and environmental impacts of the GEF Lewa project. The first approach was a **Project Performance Assessment**, which aimed at measuring the project's achievements and challenges in implementing activities and in delivering project objectives and outputs. To underpin this assessment, the study team and LWC staff first developed a comprehensive "retrospective project logical framework", designed to tease out and organise the various intervention strategies employed by the project and to identify any missed opportunities in achieving the project goals.

The second analytical approach was a **Local Livelihoods Capitals Assessment**, which aimed at measuring the project's impacts on improving the livelihoods of local communities. To underpin this assessment, the team developed a "livelihoods assessment framework" which detailed specific livelihoods impact indicators and the means of verification to be used in the study fieldwork to assess achievement of the indicator. The livelihoods framework was organised according to natural, financial, social & institutional, physical and human capitals, and also took into account gender considerations.

The final approach was a **local-global linkages assessment**, which aimed at evaluating the relationship, or linkages, between the project's local livelihoods impacts and the anticipated indirect global environmental benefits. To underpin this assessment, the team developed a "local-global linkages model" that describes the expected linkages between local and global benefits. This model also identified the crucial assumptions that need to be satisfied if the linkages are to hold true.

The outcome of the study team's investigations according to each of the above three analytical approaches are summarised below.

Project Performance Assessment

Overall, the GEF Lewa project has been especially successful in increasing LWC's institutional capacity (Result 1), and in the protection and management of biodiversity (Result 2). These two results are at the heart of the project's overall goal. A strong foundation has also been laid with the project's work on improving community livelihoods (Result 3-5); however this is the area that will need additional attention in future if the project's initial gains in this area are to be consolidated.

Result 1 - LWC Institutional Capacity. The key achievements made in strengthening the long-term capacity of LWC to provide global and local benefits from wildlife conservation have been in the areas of increasing LWC's human resources capacity and consolidating and upgrading LWC's management systems. Another area of significant accomplishment has been in upgrading LWC equipment and infrastructure to enable LWC to more effectively conduct its wildlife protection and, to a lesser extent, its community conservation operations. However, as a result of all these improvements, LWC's operational costs have been increasing at a faster rate than revenues, which has made LWC more dependent on donor funding. The Community Development Department, which was established at the start of the project, requires a great deal more resources and personnel to support the existing and developing community conservation and development initiatives.

Result 2 - Biodiversity Protection & Management. Much has been achieved in the protection and management of endangered wildlife species in the wider ecosystem and, as LWC's core strength, this result has been the main beneficiary of the institutional strengthening activities of Result 1. During the project, LWC has developed new capacity in reaching its goal of re-establishing the region's wildlife within its natural rangelands. In particular, LWC has developed a cost-effective capacity for the translocation of excess wildlife to restock other rangelands of northern Kenya, and has supported pastoralist communities to protect endangered species (e.g., three rhinos successfully introduced and protected at Il Ngwesi Group Ranch in 2002/3 and Grevy's zebra radio-collar monitoring programme within LWC and three pastoralist areas established in 2002). The major challenge faced relates to the high costs of wildlife security (e.g. US\$4,625 to protect one rhino), which currently relies on donor support. Also, although monitoring was a responsibility identified for LWC in the project proposal, there are still no biological (or socio-economic) baselines established for the target community areas.

Result 3 – Local Economic Benefits. The project has made significant progress in improving economic benefits to local communities from the sustainable use of wildlife and natural resources. This has mainly been achieved by strengthening the existing community tourism initiatives and wildlife operations, through capacity building in business, wildlife management and tourism, and by encouraging and supporting new initiatives such as the Kalama Community Wildlife Conservation Project and the Ngare Ndare Forest Trust. The challenges to the project have been in the management of heightened community expectations as to the level and nature of benefits from tourism, and the lack of progress in developing any income-generating activities outside of tourism.

Result 4 – Community NRM Capacity. Partial success has been achieved in enhancing pastoralist institutions through support and capacity building of the pastoralist group ranch governance and educational support through the Lewa Education Trust, which was established in 2001. However, the major missed opportunity during the project was the lack of attention and strategies aimed at improving community pastoralist NRM practices.

Result 5 – Policy Environment. LWC did not make strengthening local and national policies supporting wildlife conservation and community livelihoods a priority action during the implementation of the project. Rather, LWC has chosen to tackle these politically sensitive issues indirectly and informally, firstly at the district level through the Community Development Manager and area chiefs, and secondly at the national level by involving and working with senior government officials who endorse and personally support LWC's community conservation initiatives. However, national wildlife and land-use policies remain unaltered and continue to limit the potential sustainable benefits that wildlife could generate in the region, which in turn would strengthen long-term biodiversity conservation support. For example, the prohibition of carefully monitored consumptive wildlife utilization prevents income-generating activities such as wildlife cropping, processing and sale of wildlife products, and sport hunting. Although LWC disseminates information widely for fundraising and attracting tourists, it has yet to make a concerted effort to disseminate its

experience and lessons learnt to local and national government and other communities in the region.

Local Livelihoods Capital Assessment

The study team used a “Livelihoods Assessment Framework” to evaluate the project’s impacts on local livelihoods capitals achieved through Results 3, 4 and 5, the project results that directly address community livelihoods. The team employed a simple rating system in which the achievement of each individual livelihood indicator is scored, based on the field observations and community consultations, on a scale of 5 (very high achievement of livelihood indicator, with all interviewees specifically identifying it as an important benefit) to 1 (negligible achievement of indicator, with no interviewees identifying any impact). In the main body of this report, each of the three results is considered independently. In this summary, the team’s findings have been consolidated and simply presented according to the five livelihood capital categories.

Natural Capital – moderate (R4) to high (R3) impact. For all three of the group ranches included in this case study (see table below), all the community groups consulted identified significant natural capital improvements within the community conservation areas they have established, resulting from the project’s technical and financial support in wildlife management and security operations. This has led to increased wildlife numbers and the regeneration of vegetation within the conservation areas². The communities valued the increased wildlife numbers as important attractions for their ecotourism initiatives, and the conservation areas themselves because of their role in helping to protect natural spring water and provide emergency drought season fodder reserves.

Location	Total GR Area (hectares)	Ecotourism enterprises & associated conservation areas	Armed community wildlife guards (KPR)	Community scouts
Il Ngwesi GR	9,741	Il Ngwesi Lodge	7	3
Namunyak Wildlife Conservation Trust	73,850	Sarara Tented Camp	13	4
Lekurruki GR	11,953	Tassia Lodge	7	3

However, outside of the conservation areas, there was little evidence that the project has made an impact on decreasing the pressure on natural resources, whether through supporting alternative income generating activities or through better natural resource and rangeland management, especially related to livestock. One positive impact outside of the conservation areas has been the Grevy’s zebra community monitoring programme (started in 2002), which has increased support and awareness for conservation in the local schools and through the community members who are employed.

Financial capital – moderate (R3 & 4) impact. The project has had an impact on financial capital as a result of the jobs created and income generated from the protection and management of the group ranch conservation areas and lodges (see above table). Although the total number employed is only about 0.5% of the total GR populations, this was still considered significant by communities due to the scarcity of jobs opportunities in the area. The profits from the ecotourism enterprises have been allocated to improving local primary school infrastructure and secondary school bursaries, which were widely identified

² This is widely observed by all communities consulted and LWC management, although there are no base-lines established yet to quantify this change

as a priority social need during the community consultations. However, few other income-generating activities have been initiated outside of tourism, and those that have been established (around the Ngare Ndare Forest and LWC) have had limited success so far. Finally livestock marketing and productivity were not addressed by the project, although it still represents the principal livelihood strategy.

Social capital – moderate (R5) to high (R3 & 4) impact. One of the most cited beneficial livelihood impacts of the project related to the improvements in cooperation and communication between group ranches and other neighbours. This has been possible through the project's provision of Motorola radios linked up with the LWC-operated radio network and to a lesser extent by the GEF Committee, which was formed of representatives from all the LWC-supported communities to oversee allocation of GEF money earmarked for community development. The group ranch governance has also been strengthened by the project's support in legally registering GR institutions and providing training on leadership roles and responsibilities.

Physical capital – low (R4) to moderate (R3). The project did not focus on this aspect of livelihoods, although GR members interviewed greatly valued the improvements made in communication systems, through the purchasing of Motorola radios, and in transportation, with controlled access to lodge vehicles. Additional funding was obtained during the project to improve the road from Il Ngwesi Lodge to LWC and to improve the water supply at Rugusu Springs and Mutunyi in the more agricultural areas to the south.

Human capital – moderate (R3) to high (R4). Community capacity building was the main focus of the GEF funds allocated to the communities with over 700³ community members attending various training courses and seminars. As a result, the confidence and capacity of community members to manage and run the GR ecotourism lodges and conservation areas have been significantly strengthened, although community leaders still recognise the need to build community capacity further. However, the confidence and capacity to initiate new income-generating activities outside of tourism is still low, especially in the pastoralist areas.

Gender aspects. The project's local community livelihoods impacts have been chiefly biased towards men, and there has been low impact with regard both women and disadvantaged community members. In particular:

- ▶ Decision-making in the patriarchal group ranches has remained with the elders, with women and minority groups generally disempowered
- ▶ Representation of women within community governance and institutions is very limited
- ▶ No gender criteria have been established for the Lewa Education Trust support for bursaries, nor any strategy for girl child education
- ▶ Employment of women in the lodges is minimal, and there are no women working in the security operations

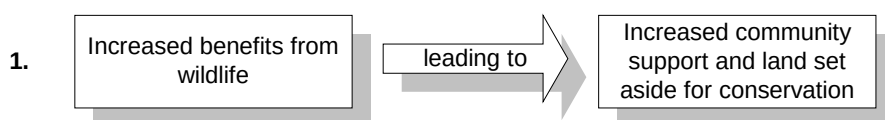
However, more work has been done to involve women in the more agricultural communities around Lewa, e.g. Ngare Ndare Forest Trust, where one third of the Board and CBO committee members are women.

Local-Global Linkages Assessment

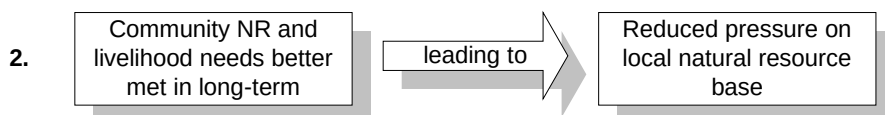
The Study Team used a "Local-Global Linkages Model" to describe the expected relationships between local livelihoods and global environmental benefits, and the assumptions underlying these relationships. In the subsequent analysis, the team focussed on four key

³ 714 participants were recorded to have attended training courses funded by the GEF, however some members may have attended more than one course (Kamweti & Oginga Obara, 2003)

linkages between local livelihood impacts and the anticipated resulting global environmental benefit impacts of the project. Considering the project only started in late 1999, it is very early to expect significant livelihood benefits let alone global environmental impacts to be occurring, so these assessments were necessarily highly subjective and must be treated with due caution. However, there was some preliminary evidence that two linkages appear to be functioning as anticipated.



During the community consultations in the Group Ranches of Il Ngwesi and Lekurruki, there was strong support to confirm that this global environmental benefit has been achieved, both through the setting aside of conservation areas (associated with ecotourism enterprises) and the support that the community has clearly articulated for these areas (largely resulting from the various wildlife-generated benefits). The communities stated that they would not consider returning these areas back to livestock grazing. The five assumptions underlying this linkage at the present seem to hold true, however, in the long-term, communities may not be willing to set aside land for conservation if opportunity costs increase.



There was anecdotal evidence for reduced pressure on natural resources in the group ranch community conservation areas, although the achievement of this global environmental benefit did not appear to extend to the other areas. The underlying assumptions that appear to be particularly relevant are that the resource exploiters (in this case the young warriors) are the targeted members, and that the natural resources are sufficient to meet the demand. Again in the long-term there are questions as to whether the resources will be sufficient.

Conclusions and recommendations

The study has synthesized its conclusions and recommendations emanating from these findings under three sections: *Lewa project performance and impact conclusions*; *Lessons learnt and recommendations to the GEF*; and finally, *Specific implementation recommendations to LWC*. Below are summarised the conclusions from the first two of these sections.

Lewa project performance and impact conclusions

LWC has been especially successful in increasing LWC's institutional capacity (Result 1), and the protection and management of biodiversity (Result 2), which has been the main thrust of the GEF support. Although not a major feature of the original GEF proposal, LWC has also made good progress in laying a foundation for enhancing community livelihoods and bringing about sustainable natural resource use practices (Results 3-5). This reorientation of the project towards community livelihoods aspects has been due to LWC's recognition of the importance of community support and participation in achieving their long-term conservation objectives.

However, if this foundation is to result in significant and sustainable livelihood improvements in the long-term, this area of improving local livelihoods needs to be consolidated in future and new opportunities developed that have to date been missed. Firstly, other conservation compatible IGAs, besides nature-based tourism, need to be identified, promoted and supported to further enforce the linkages with the realisation of global conservation benefits. Secondly, the project has not yet significantly addressed traditional pastoralist activities. Implementing activities designed to strengthen community natural resource management systems and to identify realistic and low cost ways of improving livestock productivity and rangeland management will provide alternative ways to reduce local natural resource pressure. This is an area that LWC is now turning to through its support and involvement with the development of the Northern Rangelands Trust initiative, which it is suggested should develop a strategic approach to broader ecosystem management.

This case study has demonstrated that the livelihood improvements delivered by the project are in turn ultimately likely to lead to additional global environmental benefits, as described above for the *Local-Global Linkages Assessment*. However, while these linkages between local and global benefits generally appear sound, the absence of baseline data and the short timespan that the project has been operating makes it difficult to confirm tangible indirect global environmental benefits with hard data from the field. In addition some opportunities have been missed to maximise these indirect global benefit through promoting income generation from the sustainable use of natural resources other than wildlife, and through advocating for more enabling national wildlife and land use policy.

Lessons learnt and recommendations to the GEF

This case study has conclusively shown that the GEF support to Lewa Wildlife Conservancy has been effectively and efficiently used to develop the long-term capacity of the Conservancy to contribute towards the conservation and management of Kenya's biological diversity, thereby generating a significant direct global environmental benefit.

In addition, an important conclusion of the study team is that the integrated conservation and development approach adopted by LWC has led to the achievement of rare "win-win" benefits for both conservation and development. Experience with integrated conservation and development approaches around the world has proven that such win-win scenarios are unusually difficult to achieve in practice. Only time will tell whether LWC's successes in this regard are ephemeral, since population increases or changing economics between conservation compatible and conservation incompatible land uses may undermine them.

The study team has identified eight specific lessons relevant to the future design and implementation of similar GEF projects that have emerged from this case study, as listed below:

1. A high degree of community ownership over project design and implementation is vital to success
2. Effective and sustainable local institutions are crucial for project success and sustainability
3. Locally-based project implementers with a long-term commitment to the area are more likely to succeed
4. Monitoring systems incorporating baseline data collection are needed
5. Long-term external financing may be essential
6. Win-win scenarios between conservation and development are most easily attained where populations are homogenous, conservation-compatible land uses are attractive, and population pressure is low
7. Non-cash benefits may be more important to communities than cash benefits
8. Successful ICD projects need to be tailor-made to local needs, involve multiple strategies, and adopt a wider ecosystem approach.

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Acronyms

ACC	African Conservation Centre
AGM	Annual General Meeting
ASALs	Arid and Semi-Arid Lands
AWF	African Wildlife Foundation
BAM	Budget Allocation Mechanism
BCP	Biodiversity Conservation Programme
CAS	Country Assistance Strategy (World Bank)
CBO	Community-based organisation
CDC	Conservation Development Centre
CDO	Community Development Office (LWC)
CDM	Community Development Manager (LWC)
CDTF	Community Development Trust Fund
CETRAD	Centre for Training and Integrated Research in Arid and Semi-arid Lands Development
DDC	District Development Committee
EU	European Union
EWI	Earthwatch Institute
FD	Forest Department
FGD	Focal Group discussions
GEF	Global Environment Facility
GIS	Geographical Information System
GR	Group Ranch
HVU	Homogenous vegetation units
ICDP	Integrated Conservation and Development Project
IGA	Income-generating activity
IPRSP	Interim-Poverty Reduction Strategy Paper
IUCN	International Union for Conservation of Nature and Natural Resources (World Conservation Union)
KPR	Kenya Police Reservist
KWS	Kenya Wildlife Service
LAF	Livelihoods Assessment Framework
LET	Lewa Education Trust
LWC	Lewa Wildlife Conservancy
LWF	Laikipia Wildlife Forum
M&E	Monitoring and evaluation
NEMA	National Environment Management Authority
NDP	National Development Plan
NGO	Non-Governmental Organisation
NNFT	Ngare Ndare Forest Trust
NP	National Park
NR	Natural resources
NRM	Natural Resources Management
NWCT	Namunyak Wildlife Conservation Trust
PA	Protected Areas
RRA	Rapid Rural Appraisal
TOR	Terms of Reference
UNDP	United Nations Development Programme
WWF	World Wildlife Foundation

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A. BACKGROUND

A.1 The GEF Local Benefits Study

The GEF is presently conducting a portfolio wide study designed to explore and understand better the interrelationship between local livelihoods benefits of GEF-supported interventions and the attainment of global environmental benefits. The GEF mandate incorporates the role of local benefits through its emphasis on sustainable development: *“The GEF shall fund programmes and projects which are country-driven and based on national priorities designed to support sustainable development”*. Furthermore, both the UNDP and the World Bank, as GEF Implementing Agencies, have policies that formally link their environmental activities to poverty reduction. In this study, local benefits are defined as:

“Project outcomes, which directly or indirectly have positive impacts upon people and ecosystems within or adjacent to project areas, and which provide tangible gains in the livelihoods of communities and the integrity of ecosystems.”

The study is designed to explore the following dimensions of selected projects in the GEF portfolio:

- ▶ The nature of links between attaining **global environmental benefits and generating local benefits**. This is based on an analysis of how global environmental benefits can affect benefit streams at the level of project area communities and how the generation of local benefits can affect the attainment and sustainability of global environmental goals. **Global environmental benefits** of the projects are assessed in relation to specific project design objectives.
- ▶ The types and scale of **local (livelihoods) benefits and of any negative impacts**, intended or unintended, which have resulted from GEF projects, including local perceptions of these impacts.
- ▶ The extent to which project design and the environmental management options selected in the project **can maximize opportunities** to generate greater levels of local benefits, or can **miss** or not sufficiently exploit such opportunities.

The justification for examining these issues is to assist in increasing the long-term sustainability of global benefits in sensitive areas by enhancing the level of direct and tangible gains accruing to local communities and actors in future GEF policy, strategies and programmes, within the requirements of the GEF mandate. Specifically, the overall **purpose** of the study is to contribute towards:

- | ➔ Enhancing GEF **policies, strategies and project design and implementation**, in order to fully realize the potential for local gains in global environmental programmes, to mobilize local actors for long term support to sound environmental management, to reduce local costs incurred by local communities for supplying global environmental goods, and to ameliorate possible negative impacts.
- | ➔ Strengthening GEF **M&E policies and processes** to identify indicators for and strengthen the tracking of local benefits and negative impacts.

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- ➔ Expanding the body of existing **operational knowledge** about **good practices** and experiences germane to pursuing global environmental issues, and of constraints or fallacies to be avoided in operations.

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The study has a multi-phased **methodology**. In its preparatory phase, a detailed desk review of 127 GEF projects was completed, as well as a review of international donor and NGO experiences of local livelihood benefits in sectors covered by the GEF portfolio. In the second phase, field-based case studies of 18 GEF projects are being undertaken in ten countries and a further 30 projects are being examined through existing project documents, evaluations and external studies.

The Lewa Wildlife Conservancy (LWC) in Kenya has been selected as a pilot case study because of the anticipated strong potential for demonstrating linkages between improvements in local livelihoods and the attainment and sustainability of global environmental benefits, and therefore for providing important findings, lessons and recommendations both for GEF and LWC. The **Conservation Development Centre (CDC)**, Nairobi, has been enlisted as the Local Consultant to work with the GEF Study Team in conducting this pilot case study.

A.3A.2 Overview of GEF support to LWC

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Project Name:	Lewa Wildlife Conservancy
Project Type:	Medium Sized Project
GEF Implementing Agency (IA):	World Bank
Project Proposer (Executing Organisation):	Lewa Wildlife Conservancy
GEF Focal Area:	Biodiversity
Total Cost:	\$3.943M (US)
GEF Financing:	\$0.750M
Co-Financing (from private donors):	\$3.193M
GEF Operational Programme:	OP1 – Arid and Semi-Arid Ecosystems / OP3 – Forest Ecosystems

Lewa Wildlife Conservancy Medium-Sized Project, as described in the Project Appraisal Document (GEF 1998), supports and further develops the activities of a private Kenyan wildlife conservation company, LWC. The LWC is located in Meru District and operates on 16,000 hectares of the Laikipia plains and northern foothills of Mount Kenya. The LWC is a registered 'Not for Profit Company'.

The objective of the project is to further the conservation of the habitats of endangered Black rhino and Grevy's zebra through the strengthening the capacity of communities to conserve wildlife and through the introduction of incentives for sustainable wildlife management. The objectives of the project, as outlined in the original proposal (GEF 1998), are:

- ▶ To enable LWC to continue and further strengthen its conservation of endangered species
 - ▶ To enable LWC to implement its strategic and financial development plan, making it more viable in the long term and increasing the sustainability of its conservation activities and benefits
 - ▶ To extend conservation benefits to biologically important community-controlled land and slow down environmentally negative land use patterns by:
- ➔ Increasing LWC's capacity to support and promote community-based conservation

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- Encouraging and assisting communities in high priority conservation areas to initiate sustainable conservation-orientated enterprises
- ▶ To facilitate the development of other community-based conservation initiatives as well as private NGO support of such initiatives in Kenya and elsewhere, by serving as a model and by providing training opportunities on a modest scale.

Local communities (Samburu and Masai ethnic groups) are significant participants and intended to be beneficiaries of the project. At the start of the project, LWC provided direct employment for 190 people and approximately 80 more are employed by income-generating activities associated with it. LWC also supports schools and clinics through an established Outreach Programme to its immediate community neighbours. The community initiatives supported by LWC benefit at least 1,100 people and as LWC's capacity is increased this number is expected to increase over the life of the project and beyond (GEF 1998).

Assistance to communities is expected to produce the following benefits:

- ▶ Development of a sustainable source of income in an environment where it is relatively difficult to develop income-generating activities
- ▶ Creation of a limited number of jobs, in an environment where jobs are scarce
- ▶ A slowing down of negative social trends, involving the breakdown of large land units into small holdings which are not viable for support of local livelihoods; degradation of the environment and the migration of young people to the cities in search of income.

The cost of these initiatives to the communities is expected to be:

- ▶ Commitment of land, labour and possibly limited amounts of capital
- ▶ In certain cases they may have to forgo prior income stemming from other uses of resources.

No negative gender impacts are expected. Increased income-generating activities on both the core conservancy and community initiatives are expected to generate as many employment opportunities for women as for men.

GEF supported activities are focused on upgrading equipment and vehicles, infrastructure, capacity building for business development, training, and community support activities.

A.4.A.3 Context of GEF support to LWC

This section provides a brief overview of the national context and strategies relevant to the LWC GEF grant.

A.4.1A.3.1 National context

Kenya is a country of rich biodiversity. The country has about 35,000 known species of animals, plants and micro-organisms. However, the present exploitation rates of many of Kenya's biological resource, on which the country's economic development depends, is unsustainable⁴, and wildlife resources have declined by about 50% since the mid-1970s. The decline is largely attributed to poaching, increased human demand for settlement, agricultural and livestock, within major wildlife dispersal areas and corridors. This is compounded by the fact that only eight percent of Kenya's land is set aside for biodiversity

⁴ Republic of Kenya (1998)

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conservation in fifty-six national parks and reserves. The protected areas (PAs) include representative examples of most Kenya habitat types as well as key areas of scenic, biodiversity and aesthetic value. The PAs also form the main foundation of Kenya's tourism industry.

Lands lying outside the PA network also harbour considerable wildlife resources, particularly in the Arid and Semi-Arid Lands (ASALs). However, over the last 20 years, wildlife numbers and suitable habitat has declined on land outside of PAs. At the same time, an increasing recognition of the biodiversity and economic value of wildlife resources has led to the formation of conservancies such as LWC by private and community landowners (particularly in pastoral areas such as Laikipia and the Mara).

Wildlife-related tourism provides a major contribution to Kenya's export earnings. Kenya receives approximately 700,000 visitors per year and receives over \$US500M in foreign exchange earnings. The tourism sector has significant multiple links to other areas of the economy (e.g. service industry and construction), generating income, employment and government revenue. Wildlife tourism also plays an important land use role in the ASALs in terms of providing opportunities to supplement, secure and diversify pastoral livelihoods. In recent years the tourism industry has been in decline because of increased competition from other East African countries, negative internal security concerns, and more recently global terrorism impacts⁵ effecting Kenya.

A.4.2A.3.2 Institutions and policy

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The several institutions that are currently involved in biodiversity conservation, utilization and management include the National Environment Management Authority (NEMA), Kenya Wildlife Service (KWS), Forestry Department, Fisheries Department, Kenya Agricultural Research Institute, National Museums of Kenya and the Department of Resource Surveys and Remote Sensing. Furthermore, several NGOs such as the African Wildlife Foundation (AWF), World Wildlife Fund (WWF), and the World Conservation Union (IUCN) are also involved.

KWS has primary responsibility for wildlife both inside and outside the PA network. It has sole jurisdiction of national parks, assists local authorities in managing game reserves, and plays a oversight / regulatory role in the management of private wildlife sanctuaries / conservancies such as LWC.

Obviously, the limited financial and human resources are concentrated on managing the PAs. KWS is under increasing pressure to maintain an adequate presence outside PAs⁶. This has provided an entry for the Kenyan Government and KWS to encourage the private sector (and quasi-private sector such as community conservation trusts) in the management of wildlife outside PAs.

KWS has no direct control over land use outside the PA network, hence working with private landowners, trusts, companies such as LWC, and community partners has become increasingly necessary to maintain land uses compatible with wildlife conservation beyond PAs. However, the Kenyan wildlife sector faces a number of challenges relating to the policy framework. In particular, the wildlife policy dates from 1975 and, although it has since been revised, is currently outdated. Some of the key challenges that have been identified for the revision of wildlife policy (and in the broader context land-use policy) are as follows (Republic of Kenya 1998):

⁵ The downturn in tourism has severely effected the earnings of LWC and the community lodges of Il Ngwesi, Tassia and Namunyak (LWC financial statements; discussions with GEF Committee)

⁶ Pers comm. KWS and LWC Staff

1. Inadequate legal mechanisms for management of wildlife outside Protected Areas, particularly in relation to wildlife ownership and use rights.
2. Land subdivision in wildlife dispersal areas that has led to the destruction and / or disruption of wildlife habitats.
3. Inadequate incentives for wildlife conservation by communities in wildlife dispersal areas and corridors.
4. Inadequate land-use policies, especially in the control of land use changes and human activities.
5. Absence of a comprehensive policy for the resolution of conflicts between wildlife, pastoralism and other land uses.

Wildlife policy is still to be reviewed and amended and this is a significant barrier to establishing clarity in terms of community and private landowner rights to wildlife, and importantly livelihood benefits. Both LWC and other community and private landowner stakeholders are operating without clear policy guidelines from the Kenyan Government.

A.4.3A.3.3 National and donor strategy

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The LWC GEF grant was congruent with both the Interim Poverty Reduction Strategy Paper (IPRSP, 2002) and the World Bank Country Assistance Strategy (CAS, 1998). The Kenyan Government's IPRSP strategy comprises five elements to: (i) facilitate sustained economic growth, (ii) improve governance and security, (iii) increase the ability of the poor to raise their incomes, (iv) improve quality of life for the poor, (v) improve equity and participation. These elements are focused in six broad sectors of which three are relevant to LWC:

- Human Resource Development including labour and employment and education
- Agriculture and Rural Development including forestry, environment and lands
- Tourism and Trade and Industry including the wildlife sector

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The IPRSP also puts emphasis on private sector and Community Based Organization (CBO) participation in all sectors. Specifically in the agricultural and rural development sector, the IPRSP encourages promotion and development of non-timber forest products; measures to protect and enhance water and biodiversity conservation; and development of frameworks for partnerships between government, private sector and other stakeholders. The IPRSP aims to increase Kenya's market share of the world tourism industry through government and private sector initiatives to improve security, infrastructure and diversification of tourism products.

The Kenya Government has supported sustainable development in ASALs and also the conservation of biodiversity. Approximately 80% of Kenya lands are classified as ASALs including LWC and community Group Ranches (GRs) that it works with. The development and protection of ASALs has been highlighted both in the IPRSP and in the National Environmental Action Plan and the National Development Plan (2002 – 2008) (NDP). The NDP focuses development within ASALs on several areas of relevance to LWC activities and its community partners: (i) increased livestock production, (ii) improved educational facilities, (iii) conservation of biodiversity, (iv) reduction of land degradation and (v) strengthening of local institutions, including user groups, to manage community-based resources.

The World Bank Country Assistance Strategy places emphasis on both conservation of threatened species and the development of community-based commercial conservation activities, which produce economic benefits and therefore provide incentives for conservation. The LWC project was congruent with the 1998 CAS.

B. CASE STUDY APPROACH AND METHODOLOGY

B.1 Case Study Conceptual Model

This case study aims to understand the relationships, both positive and negative, between local benefits and the attainment of global environmental benefits resulting from GEF support to the Lewa Wildlife Conservancy (LWC). The full Terms of Reference for the study are given in Annex 1.

To achieve this aim and fulfil the study TOR, CDC has developed a “conceptual model” of GEF support to LWC that illustrates the relationships between the intervention strategies employed by the project, the expected project results (direct impacts) of these interventions, and the project’s anticipated indirect global environmental impacts. The conceptual model is shown in Figure 1 overpage. The model takes into account the Livelihoods Model provided in the TOR for the study (see Figure 6), but simplifies it to show the key aspects that this study needs to examine, plus the relationships with the interventions that the project has supported.

The conceptual model pinpoints **three main approaches** to assessing and analysing the relevance of the Lewa project in achieving local livelihoods and global environmental benefits. These are by examining:

- ▶ The performance of the Lewa project in delivering project interventions
- ▶ The achievements of the project in delivering tangible impacts on local livelihoods capitals
- ▶ The linkages between the project’s delivery of local livelihoods benefits and the achievement of global environmental benefits

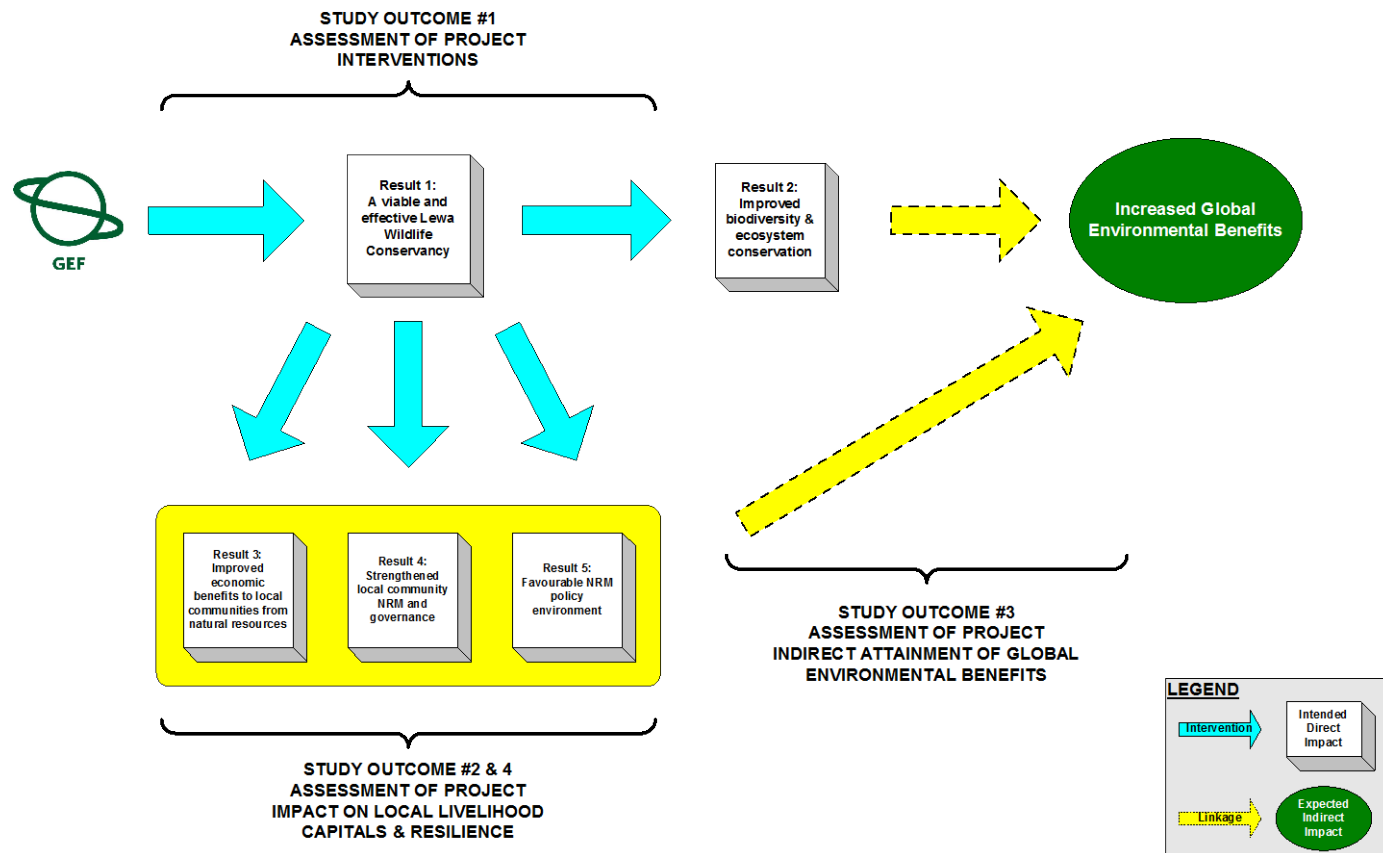
These three approaches form the three main pillars of this case study, and generate the study’s findings in response to the study TOR. The key features of the three approaches are briefly introduced in the following sections, while the comprehensive findings and recommendations of the case study with regard each approach are provided in sections C, D and E of this report respectively.

B.1.1 Project Performance Assessment

Working together with LWC staff, the study team developed a comprehensive logical framework for the GEF Lewa Project, detailing the **outputs and activities** that have been carried out in order to produce the anticipated project results, and also identifying possible missing outputs and/or activities that would have been beneficial. This logical framework was subsequently used as a basis for an assessment of project performance in accomplishing activities and in delivering its anticipated outputs.

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Figure 2: Figure 1: Conceptual model for GEF Support to Lewa Wildlife Conservancy



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B.1.2 Local Livelihoods Capitals Assessment

The study team developed a livelihoods assessment framework to evaluate the project's impacts on the livelihoods of local communities. The framework details the specific livelihoods impact indicators expected to be achieved through project outputs, plus the means of verification that were used in the main fieldwork phase to assess achievement (positive or negative) of the indicator. The livelihoods assessment framework is segmented according to the different forms of livelihood capital (natural, financial, social & institutional, physical, human), and included a consideration of how individual indicators are relevant to different economic segments of the community, and by gender. The framework provided the basis for developing the agenda for the community consultation exercises that were subsequently carried out in the main fieldwork phase (see Methodology below).

B.1.3 Local-Global Linkages Assessment

In order to evaluate the relationship, or linkages, between the project's delivery of local livelihoods benefits and the anticipated attainment of indirect global environmental benefits, the study team established a "local-global linkages" model that describes the expected linkages between local and global benefits. The model also describes the **crucial assumptions** that need to be satisfied if the linkages are to hold true. The model, and specifically the identified assumptions that need to be confirmed, also provided a foundation for the community consultation exercises carried out in the main fieldwork phase.

B.2 Methodology

This section describes the methodologies used during the Main Fieldwork Phase. The information collected during this phase was combined with that collected during the Fieldwork Initiation Phase as well as from the review of existing literature and reports.

B.2.1 Data Collection

The seven days allocated for the Main Fieldwork Phase (including travel to/from Nairobi) was focussed on gathering information from a broad and representative cross section of the community in Lekurruki and Il Ngwesi Group Ranches, where LWC has principally been providing support. Because no ecological or socio-economic baselines are available from these areas, the neighbouring Kuri Kuri Group Ranch was selected as a 'control', to provide comparative information on an area that has received no support from the Lewa project.

Il Ngwesi and Lekurruki Group Ranches were chosen for several reasons. Firstly, on a practical level, they border each other and are relatively easy to access from LWC Headquarters. This was an important consideration given the significant time constraints associated with the fieldwork. Secondly, there is more documented information available for these Group Ranches (especially Il Ngwesi), which was used to triangulate the data collected in the field. Thirdly, the two group ranches make an interesting comparison; with Il Ngwesi being the most developed LWC-supported Group Ranch established prior to GEF funding, and Lekurruki was established after GEF funding commenced.

On arrival at a targeted community, the first activity was to conduct a brief stakeholder mapping exercise with key informants to better understand the socio-political spectrum of the community. For meetings not organised in advance, this information formed the basis for deciding what groups and individuals to target for focus groups and semi-structured interviews.

In consultation with James Munyugi (LWC Community Development Manager), Max Graham (PhD researcher), Michael Dyer (Borana Ranch) and Jonathon Moss (LWF), five representative areas were selected to visit on the five full days of fieldwork, as listed in the fieldwork itinerary in Annex 3.

At each locality, the fieldwork investigators (Robert Craig and Elizabeth Kamau) worked together during the interviewing, but separated on two occasions to conduct separate interviews with men and women groups. The aim was to maximise the investigators' exposure to the range of perspectives from the different stakeholder groups. In addition to collecting information from the communities, further discussions were held during the Main Fieldwork Phase with LWC staff and, after the production of the draft final report, in a series of stakeholder presentations (see Annex 9).

B.2.2 Community consultations technique

The main techniques used were individual interviews, focus group discussions (FGD) and direct observations. The focus groups were specific groups of stakeholders including elders, morans and women.

A semi-structured interview framework was designed for these community consultations. It consisted of a series of 'entry questions' to guide the discussion, followed by follow-up questions that acted as a checklist for ensuring that the required information was gathered. The framework was structured so as to first gather information on the household, second about the NRM practices and governance in the group ranches, and lastly the respondents' attitudes towards conservation. As noted at the Lewa Downs Stakeholder Presentation, the framework did not focus or pick up on the broader livestock issues, although in a larger study this would have been an important issue to tackle.

The questions sought quantitative data where possible in order to gain an insight into the averages and ranges involved. This quantitative data was backed up with anecdotal evidence, representative of the community view. See the table in Annex 6 for the semi-structured interview framework.

In addition, some generic questions were devised as a guide for soliciting information about the benefits that community members have received. These are set out below:

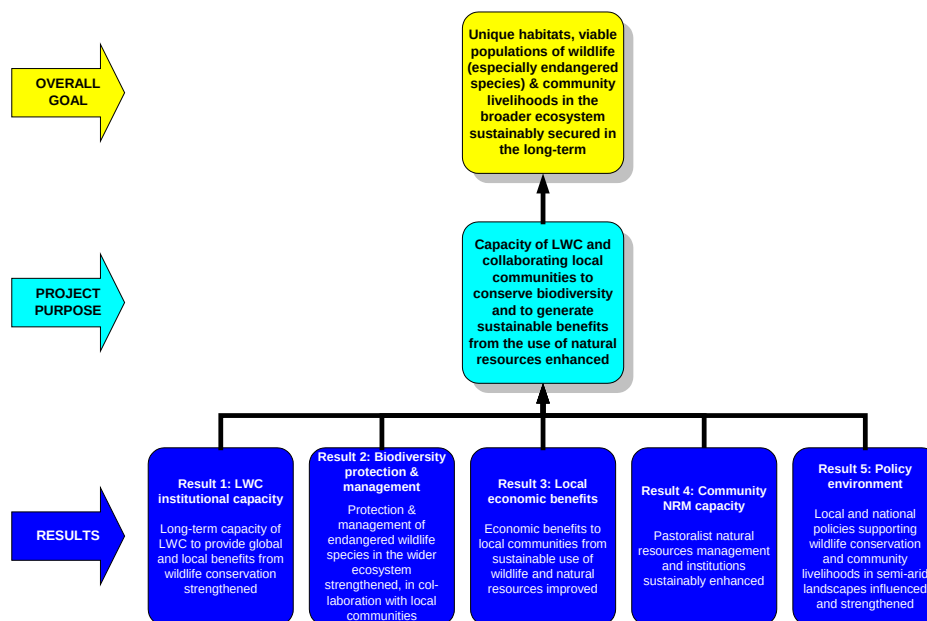
GENERIC QUESTIONS	DETAILS
Who has benefited/ participated?	Stakeholders: Male/ female/ child/ group / elite/ rich hh ^s / poor hh ^s
What has been the benefit (quality) & how much (quantity)?	
How has it impacted on their lives?	
Why did they get that benefit?	Where was the source of the benefit? Did they choose this benefit/ arrangement or was it pushed onto them?

C. PROJECT PERFORMANCE ASSESSMENT

The study team employed a logical framework approach to identify the major project intervention strategies delivered by LWC with support from the GEF. The diagram below (Figure 2) shows the retrospective logframe developed by the study team, comprising an **overall goal**, **project purpose**, and **five main project results**⁷.

For each project result, a series of “outputs” were also identified, which the study team believed needed to be delivered if each result was to be successfully achieved. Most of these outputs were based on the group exercise with LWC staff carried out in the Fieldwork Initiation Phase. However, certain outputs were added in where the study team has thought that they are necessary to ensure achievement of the result in question. In addition, the study team identified the major activities needed to achieve each output, also based on the group exercise with LWC staff.

Figure 2: Objectives framework for the GEF support to Lewa Wildlife Conservancy, showing the five major Intervention Strategies employed by the project.



⁷ The GEF study team initially brainstormed the retrospective logframe after a few days at Lewa. It was later refined in a group exercise with LWC staff, which started in the late afternoon of 2 October and concluded the following morning. The LWC staff that participated were: Ian Craig (Executive Director), James Munyugi (Community Development Manager), Pat Goss (member of LWC Board of Directors), and Belinda Low (Research Coordinator).

The study team's definition of project outputs is given in Table 1 below. The full set of outputs and activities identified are given in Annex 4.

Table 1: Study Team's Identification of outputs of GEF Support to LWC

Result 1: Long-term capacity of LWC to provide global and local benefits from wildlife conservation strengthened
Output 1.1 Tourism revenues enhanced Output 1.2 Management capacity of LWC strengthened Output 1.3 LWC capacity to collaborate with and support local communities strengthened Output 1.4 Robust financial management established Output 1.5 Donor/ funding base strengthened Output 1.6 Attitudes/ behaviours changed to support the realisation of financial sustainability Output 1.7 Strategic plans and partnerships developed to improve effectiveness
Result 2: Protection & management of endangered wildlife species in the wider ecosystem strengthened, in collaboration with local communities
Output 2.1 Security of endangered species (Grevy's zebras, rhinos, etc.) increased Output 2.2 Research & monitoring of wildlife and habitats increased Output 2.3 Awareness Creation/ human capacity strengthened in communities
Result 3: Economic benefits to local communities from sustainable use of wildlife and natural resources improved
Output 3.1 Community tourism strengthened and promoted Output 3.2 Community skills and roles developed to optimise wildlife benefits Output 3.3 GR cooperation in benefiting from wildlife developed Output 3.4 Capacity of local communities to undertake conservation-compatible income-generating activities strengthened
Result 4: Pastoralist natural resources management and institutions sustainably enhanced
Output 4.1 Community institutions and governance strengthened Output 4.2 Community management systems improved Output 4.3 Security systems and capacity improved Output 4.4 Community natural resources management systems and structures enhanced Output 4.5 Conservation awareness and education improved
Result 5: Local and national policies supporting wildlife conservation and community livelihoods in semi-arid landscapes influenced and strengthened
Output 5.1 Politicians, especially at District level, influenced to support community wildlife initiatives Output 5.2 Networks and partnership developed to strengthen influence Output 5.3 Wider awareness about the Lewa model promoted

During the main fieldwork phase, these outputs and activities were assessed against the reality that the study team observed on the ground. The team then carried out a Project Performance Assessment exercise aimed at synthesising their field findings according to the project's five main results. The exercise has four main components:

- ▶ **Major achievements.** This was the team's assessment of the project's main successes in achieving its outputs and activities.
- ▶ **Challenges.** This was the team's assessment of the project's weaknesses and setbacks in achieving its outputs and activities.
- ▶ **LWC Recommendations.** These are the team's suggestions for the future, which are designed to build on project strengths and to address the identified challenges (section F.1).
- ▶ **GEF Recommendations.** These are the team's suggestion to GEF for the future design and implementation of projects (section F.2).

The results of the Performance Assessment exercise are given in the following sections. It should be noted that the study team *was not carrying out a formal evaluation of project performance* (this was recently carried out in a separate exercise, c.f. Kamweti & Oginga Obara, 2003), but rather attempting to pinpoint the highlights of project performance in accordance with the case study Terms of Reference.

C.1 Result 1: Long-term capacity of LWC to provide global and local benefits from wildlife conservation strengthened

As illustrated in the conceptual model in Figure 1, the GEF support to LWC was chiefly focused on increasing LWC's own internal capacity, delivered through Result 1. Therefore the bulk of this Performance Assessment examines the success in achieving this result. The community aspects of the GEF project proposal (c.f. Results 3-5) were directed towards increasing LWC's capability to carry out community facilitation work, not to providing direct assistance to the communities.

In assessing the achievement of Result 1, the major achievement and challenges are discussed by each of the seven outputs. The main information sources used by the study team in developing their findings came from interviews with LWC staff, direct observations during the fieldwork, and LWC's internal reports and promotional material.

C.1.1 Output 1.1: Tourism revenues enhanced

Much progress has been made during the project in developing Lewa Conservancy as a unique tourism destination, and in improving the organisation's capacity to increase its revenues from tourism. However, over the past two years a number of external factors have impacted on LWC's ability to achieve this output, in particular the terrorist attacks / threats and the associated travel advisories issued by Western Governments against visiting Kenya.

The accommodation options offered for tourists in Lewa Conservancy include Wilderness Trails (sleeping 16 guests), Lewa Safari Camp (sleeping 24 guests), Lewa House (sleeping 12 guests) and Abercrombie and Kent camping concession (sleeping 16 guests). Lewa House, previously used to house supporters of the Conservancy, was opened for tourists in 2003. The operators for these tourism operations on LWC pay a substantial fee per client, which usually is sufficient to cover the basic costs of running LWC. However the security and community projects of LWC still require donor support (*pers.comm.* LWC Management).

Through GEF support, LWC has taken over the direct management of Lewa Safari Camp (LSC) during the project period, and LWC has been upgrading its 12 luxury tents to provide better quality and increased capacity (nine twins, two triples and one double). With the help of a Ford Foundation grant, a more integrated tourism strategy has been developed and adopted, with revenues increasing from US\$174,019 in 1998/9 to US\$304,919 in 2001/2 (LWC Concept Paper, 2002). A World Bank Project Status Report reported LSC had 100% occupancy during the high season and 60% in the low season. In addition, the Managers from the LSC are also actively involved in promoting the LSC as a tourist destination; for example, in October 2003 they went on a promotional visit to the USA.

The tourist activities offered at LWC, as promoted on the Lewa website⁸ and through Nairobi tour operators and other websites (e.g. Laikipia Wildlife Forum's⁹), include:

⁸ www.lewa.org

⁹ www.laikipia.org

- ▶ Day and night game drives, on which guests are accompanied by experienced guides
- ▶ Guided walks, especially bird watching
- ▶ Horse riding
- ▶ Camel safaris
- ▶ Visits to an ancient Acheulian archaeological site
- ▶ Game watching up close from secluded game blinds
- ▶ Excursions to the Il Ngwesi Maasai cultural boma
- ▶ Educational lectures on the history, development and day-to-day operations of the Conservancy
- ▶ Flights to Lake Rutundu on Mount Kenya, which offers trout fishing and with accommodation for up to ten

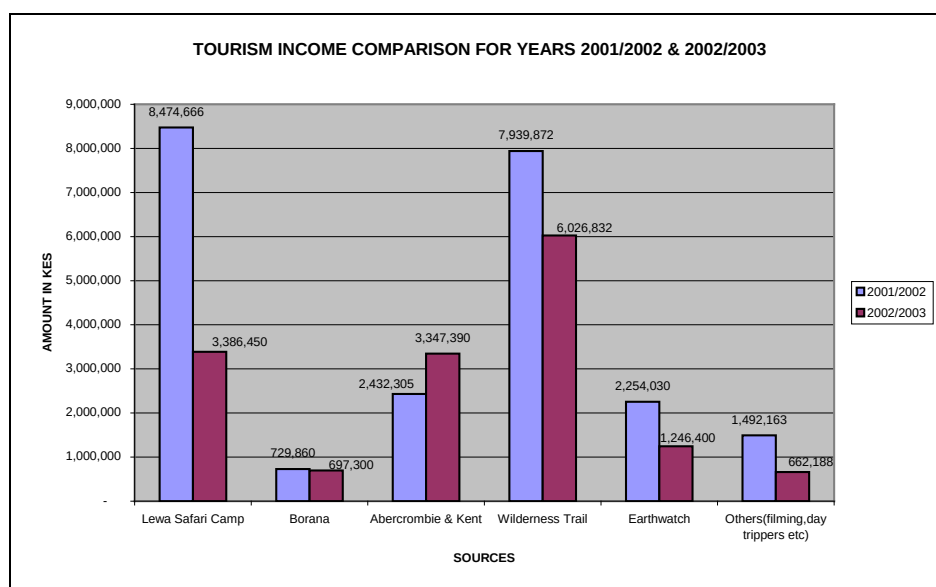
One unique aspect that LWC offers its visitors has been through developing activities whereby tourists can experience the conservation-orientated work of LWC, including:

- ▶ Visits to Lewa-supported schools and other community development activities (e.g. Mutunyi Irrigation Project)
- ▶ Day or half day excursions with the research department to learn about Lewa's Rhino and Grevy's Zebra projects
- ▶ Accompanying the tracker dogs on daily training/ exercises
- ▶ Accompanying the lion trackers to get data on Lewa's resident lions
- ▶ Trips to the adjoining Ngare Ndare Forest Reserve to learn about the indigenous flora and its local uses

However, superimposed on all the successes in improving the quality and diversity of the tourist products being offered, there has been the devastating effect on the Kenyan tourism industry over the past two years of global terrorism and the associated travel warnings. This has resulted in a dramatic reduction in the visitor numbers between 2001/2 and 2002/3. Figure 3 below shows a chart from the LWC Accounting Department comparing tourist income for 2001/2 and 2002/3. In 2002, tourism provided 27% of LWC's income;

Figure 4: Figure 3: Tourism income for 2001/2 and 2002/3

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Source: LWC Accounts

however, based on 2003, the expected income from tourism in 2004 is only 13%. The financial accounts for Lewa Safari Camp showed a loss for the financial year ending June 30, 2003. This does highlight the challenge presented by the unreliable and unpredictable nature of tourism as a long-term income earner, and the risk of depending too heavily upon it.

Identifying realistic options/ alternatives that can be pursued by LWC to absorb such shocks represents a major challenge, especially in order to maintain local livelihoods benefits, which have been developed and are based on tourism (see section D.1)

C.1.2 Output 1.2: Management capacity of LWC strengthened

The number of staff at Lewa has grown to ensure high standards are maintained with the increased number of activities, with an estimated 282 staff working for LWC in 2003, compared with only 190 staff directly employed in 1999. During the GEF project a Human Resource Manager was hired, as well as a new Deputy Director, Finance Manager, PR Officer and Education Officer. In May 2003, the 'Lewa Standard' was produced and displayed on the LWC office noticeboards (LWC, 2003c). It provides a useful framework that sets out the guiding philosophy of LWC and its management approach for a wildlife conservancy. LWC's guiding philosophy is described in a *Mission Statement* (see box below).

LWC Mission Statement

The Lewa Wildlife Conservancy works as a catalyst for the conservation of wildlife and its habitat. It does this through the protection and management of species, the initiation and support of community conservation and development programmes, and the education of neighbouring areas in the value of wildlife

By clearly setting out LWC's management approach, the Lewa Standard is designed to ensure:

1. The quality of the tourism product and its associated operations with the LWC
2. The quality of the environment standard both within the LWC and within its spheres of influence
3. The full contribution of all functions and departments within the LWC to the achievement of the above

LWC Management expects the Lewa Standard to act as powerful management tool for stimulating effective teamwork, motivation and performance across the organisation. It is also expected that the Standard will in future facilitate a smooth transition when there are any changes in LWC management. However, increased revenues do not match the increased costs of this improved management capacity and this issue poses one of the greatest long-term challenges to LWC (see section C.1.5 below).

A major allocation (80%) of the GEF funds was spent on improving LWC's infrastructure and purchasing machinery and equipment (as summarised in Table 2 below and detailed in Annex 7: GEF Fund Allocation and Expenditure). The building work has provided new offices, junior staff housing, a guesthouse, community hall, houses for Works Manager and Community Development Managers, as well as upgrading other senior staff housing. The purchase of office equipment, new vehicles and handheld radios, in addition to the

building work, has facilitated the LWC staff to work more effectively. In addition, this improvement in LWC's working and living conditions has had a positive effect on staff morale, and has been important in allowing LWC to recruit and retain competent senior staff.

Table 2: Summary of the allocation of GEF Funds

Expenditure	Total Spent US\$	Percentage, %
LWC infrastructure	604,694	80
▶ Works	145,969	19
▶ Machinery & equipment	362,971	48
▶ Community conservation operations	95,754	13
Community conservation capacity	770,80	10
Other (e.g., consultancies, research, tourism development and unallocated)	73,467	10
TOTAL	755,241	100

Good and easy access is important for the efficient running of LWC operations, such as tourism, security and wildlife management. The all-weather, resurfaced airstrip (completed in 2000) has allowed a higher volume of air access, and by larger aircraft. However, the road network, although improved, still has many sections that are difficult to negotiate, especially the road sections with black cotton soil, which are impassable during the wet season.

C.1.3 Output 1.3: LWC capacity to collaborate with and support local communities strengthened

The Community Development Office (CDO) was established in 1999, with the employment of a full time Community Development Manager (CDM). The CDM brought to LWC a great deal of experience of community conservation¹⁰, and understanding of the communities that Lewa is supporting. In 2002, a qualified teacher was employed as an Education Officer to coordinate the work of the recently established Lewa Education Trust and its support to the neighbouring primary schools. Finally in 2003, a social science graduate volunteer was taken on board to act as an assistant to the CDM whilst building up his experience and knowledge. With GEF funding, a house has been built for the CDM and a vehicle and radio provided, which has been crucial for working with the communities (*pers.comm.* CDM).

However, this department is still very under-resourced and overstretched if it is to provide the support that is being requested from the communities. In addition to the assistance that LWC offers to Il Ngwesi and Namunyak, there are other communities that have requested support and with which LWC is developing ideas (e.g. with Kalama Community Wildlife Conservation Project in Gir Gir GR and the Sera Project). The CDM stated that he spends the majority of his time running these various projects and visiting these communities, when what he should be doing is more strategic planning, "filling in the gaps" and overseeing the work. At the moment a great deal of institutional knowledge would be lost if the CDM were to leave LWC. This is compounded due to the lack of written material on community management and strategy, meaning that much of knowledge is currently held informally by the CDM.

According to the CDO, funding is being sought in 2004 to increase the capacity of the department with three new positions, an Assistant Community Development Manager, an Assistant Education Officer and an Office Manager. In the Strategic Management Framework for 2002-2012 (LWC Concept Paper), the proposed Action Plan stated that LWC will

¹⁰ The CDM had many years of experience with KWS in community conservation and outreach.

prepare a detailed community conservation plan in participation with communities. This is something that the CDO is still planning to do.

The creation and development of LWC's Community Development Office and its capacity to effectively work in the neighbouring communities is central to realising the potential for local community livelihood benefits and establishing the linkages with the broad biodiversity conservation goals of LWC.

C.1.4 Output 1.4: Robust financial management established

A number of achievements have been made in improving the financial management at LWC. A fully qualified and experienced accountant was hired as Finance Manager in September 2001 to lead the nine-strong Accounting Department. During this period the transition was completed from a manual to a fully computerised Sage accounting system.

In order to better meet the needs of LWC, in particular with regard to accessing donor funding, the accounting approach has been modified. This has included adopting the Budget Allocation Mechanism (BAM) accounting for annual expenditure on an activity basis. It is now possible to identify and monitor the precise individual costs of every conservation and community development activity. To illustrate, some statistics presented on the LWC website are shown in the box below.

Activity	Cost (US\$/ year)
Looking after one rhino	4,625
Maintaining one Km of game fence	325
Security on LWC per acre	4.70

The Accounting Department is run very professionally with a vigorous budgetary process including the establishment of monthly performance reviews and expenditure controls. In 2002, the KPMG Organisation Review suggested improving payroll management and computer systems for grant accounts. However, funding never materialised for KPMG to return to finalise and implement the recommendations.

C.1.5 Output 1.5: Donor/ funding base strengthened

Lewa relies on the support of private donors and international financial bodies for its operations. In 2004, the Accounting Department estimated that 80% of LWC's income will come from donations. This figure is higher than previous years, and considering that the overall costs of LWC are increasing, this represents a significant increase in the donor support required for 2004. In October 2003, Lewa's estimates of income versus expenditure for 2004 showed an anticipated shortfall of approximately US\$1 million. This shortfall will need to be met through securing further donations¹¹.

To meet this growing need for donor support, LWC-UK and LWC-USA have been strengthened to broaden the base of individual donors. An Overseas Director has been appointed, with responsibility for improving donor relationship and accountability. In addition, the Executive Director and other senior staff and representatives go on a promotional and fundraising trip to Europe and America at least once a year, giving lectures and presentations. This is vital for keeping existing donors informed and ensuring their continued support, as well as soliciting new funding sources.

¹¹ LWC's Deputy Director reported that the funding gap had been greatly reduced by private donor commitments made during the last fundraising tour of the US and UK in October – November 2003.

During the project, a comprehensive website (www.lewa.org) has been established, which is periodically updated with the latest news, events and downloadable documents. At the bottom of each page of this website it is possible to donate money electronically, and a link to further information concerning supporting LWC.

Promotional and other material has been produced with a revamped twice-yearly newsletter, distributed to supporters. In 2001, a 23-page brochure was produced describing in greater detail the history, vision and operations of LWC. This good information tool requires updating.

Specific fundraising events are also organised at LWC, most notably the Safaricom Marathon, which has proven very successful in generating publicity and money for LWC and the communities it supports. The marathon has been held every year since 2000 and, according to the LWC records, 450 runners competed in the 2003 marathon. Over the four years it has developed into a large-scale international event, which in 2003 cost around US\$110,000 to host, with organisational and logistical support provided from the Tusk Trust in the UK and the British Army in Kenya. The event has generated much positive national and international publicity, with Trans World Sports TV filming the event and Safaricom, a Kenyan mobile phone company, being the major sponsor, which in 2003 provided Kshs 5,000,000 (~US\$ 67,570) sponsorship. Overall, the 2003 marathon generated profits of US\$102,200, which were distributed as follows:

- ▶ 35% - Lewa Wildlife Conservancy
- ▶ 20% - Lewa supported schools
- ▶ 12.5% - Namunyak Wildlife Conservation Trust
- ▶ 12.5% - Il Ngwesi Group Ranch
- ▶ 10% - Bill Woodley Mt. Kenya Trust
- ▶ 10% - Nanyuki Cottage Hospital

According to the Lewa's Finance Manager, the GEF funding has given LWC credibility in leveraging further funding for other donors for their wildlife research & monitoring (e.g. US Fish and Wildlife Service and St Louis Zoo as detailed in section C.2.2) and community conservation activities as described in Table 3 overpage. In addition, other organisations have since worked to link the Lewa supported communities with donor funding. In 2001, the African Conservation Centre sourced US\$52,000 from the Liz Claiborne & Art Ortenberg Foundation for renovating the Il Ngwesi Lodge and Borana Ranch (Michael & Nicky Dyer) assisted Lekurruki Group Ranch write a funding proposal, which successfully obtained Kshs 14 million (~US\$ 180,000) from CHK Charity (UK) to build the Tassia Lodge. Finally plans are currently underway to set up a major endowment fund to cover the LWC income shortfalls. Lewa Management estimates that a LWC trust fund would require between US\$17 and 50 million in order to generate sufficient money.

C.1.6 Output 1.6: Attitudes/ behaviours changed to support the realisation of financial sustainability

In October 2003, LWC estimated that 80% of its 2004 income budget would be through donations (c.f. section C.1.5). Therefore, LWC's financial sustainability is currently interpreted by management, in at least the medium term, as establishing secure donor funding sources, rather than being profitable on the basis of its commercial activities.

Management awareness of the importance of financial sustainability has been increased through the more rigorous accounting and monthly performance reviews (see section C.1.4). Additionally, LWC has started raising awareness in the partner communities of the real costs of operating. An example is the planned women's micro-credit loan scheme due to start in 2004 together with the Jikoni and Jane Women's Groups. To access a loan,

strict guidelines have to be met and a 5% interest is charged on the loan. This is in contrast to the previous situation where tourists at Lewa have made donations to the groups with no conditions attached (*pers.comm.* LWC Education Officer and Overseas Director).

Table 3: Donor funding obtained since the GEF grant for Lewa supported community conservation

Donor	Amount (Million Kshs)	Amount (US\$)	Date	Project support	Period
Ford Foundation	7.8	100,000	2001	Ngare Ndare Forest Trust. Paying the salaries of NNFT Forest Manager and 11 scouts	18 months
CDTF (EU)	16	200,000	2000	Kalama Community Wildlife Conservation Project. Road building, water supply, office buildings, staff housing and salaries for Manager, scouts and accountant	3 years
CDTF (EU)	14	180,000	2000	Mutunyi Sprinkler Irrigation Scheme. Recurrent costs	3 years
CDTF (EU)	2.8	35,000	2001	Il Ngwesi Lodge. Housing and improving the road from the Lodge to LWC	3 years
Tusk Trust (UK)	No fixed amount	~50,000	2000	Namunyak Wildlife Conservation Trust. Half of recurrent annual costs	2000 and ongoing since
PACT Kenya	2.5	30,000	2001	Tassia and Il Ngwesi Lodge. Security operations	2 years
USAID	~46	600,000	2004	Sera Project. To develop a community conservancy	3 years
St Louis Zoo	~35	450,000	2004	Kalama Community Wildlife Conservation Project. To develop Grevy's zebra conservation project with components for water provision and increasing scout capacity	3 years
Safaricom Kenya	8	100,000	2004	Ngare Ndare Forest Trust. Enrichment within the forests and agroforestry	Proposed

Source: LWC Community Development Office

From the Focus Group Discussions in Il Ngwesi and Lekurruki it was apparent that communities have gained ownership of the Lewa concept and, through the development of the community initiatives and in running the tourism lodges, have received training and hands-on experience in proper financial management. This sense of ownership has also been enhanced by their contribution of land, personnel and time to the community conservation areas and lodges (see section D.1.3).

However, a few community members interviewed still express the attitude that LWC should give them money and assistance without any strings attached. This attitude is not compatible with the concept of financial sustainability. This view was expressed during a consultation with elders concerning the development of the user groups within the Ngare

Ndare CBO, when they stated that they had established the user groups as requested and were now waiting for donor funding and technical assistance to move them forward.

C.1.7 Output 1.7: Strategic plans and partnerships developed to improve effectiveness

An internal concept paper was written in 2001 proposing a strategic planning framework for LWC for 2002 – 2012. It was originally prepared under the auspices of the GEF following a two-day monitoring and review workshop in July 2001, attended by senior LWC management and five Board members. Within this strategic framework, there is an action plan giving suggested targets and completion dates (LWC, 2001b).

LWC has developed a range of effective partnerships, both formal and informal, with various local community groups, government institutions, universities, and regional, national and international NGOs. A number of these are listed in Annex 8.

Since 1995, LWC has been formerly working with the Il Ngwesi GR and NWCT, and in the past few years has also been developing relationships with several new community groups, including Ngare Ndare Forest Trust, Lekurruki GR, Kalama, and Sera, although there was not time for the study team to visit the latter two younger initiatives.

Table 4: Summary of study performance findings, Result 1

Result 1: LWC Institutional Capacity		
Long-term capacity of LWC to provide global and local benefits from wildlife conservation strengthened		
OUTPUT	MAJOR ACHIEVEMENTS	CHALLENGES
1.1 Tourism revenues enhanced	✓ Lewa Safari Camp bought ✓ Lewa House opened to tourists ✓ Lewa's tourism product diversified (Lewa House, Lewa Safari Camp, Wilderness Trails, Camel Safaris, camping on A&K Concession) and marketed through websites (LWC, LWF, etc.) and Nairobi based tour operators ✓ Unique tourism experiences provided	! External factors, including global terrorism, travel warning, contributed to reduced tourism numbers (see Figure 3) ! Revenues from tourism are only expected to bring in 13% of LWC's income for 2004, down from 27% in 2002 ! Tourism development is only budgeted 1% of expenditure for year 2004
1.2 Management capacity of LWC strengthened	✓ Human Resource Manager hired ✓ The Lewa Standard ✓ Airstrip resurfaced in 2000 ✓ New offices and staff accommodation built (GEF funds, Annex 7) ✓ Equipment purchased (see Annex 7) ✓ Radio equipment purchased for improved communication network	! Road access is still difficult ! Increased staff capacity has increased LWC level of operations and costs to a greater extent than its revenue ! Prepare detailed community conservation plan in participation with the communities
1.3 LWC capacity to collaborate with and support local communities strengthened	✓ LWC Community Development Office (CDO) and staff housing built (see Annex 5) ✓ CDO vehicle and office equipment purchased (see Annex 7) ✓ Education Officer employed in 2002 ✓ Volunteer intern assisting the Community Development Manager and at the same time being trained	! Limited human capacity. Only two employed in the Community Development Officers (Community Development Manager, CDM, and Education Officer). ! Limited resources ! CDM is having to spend most of his time running the various community projects, rather than strategically planning

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OUTPUT	MAJOR ACHIEVEMENTS	CHALLENGES
1.4 Robust financial management established	✓ Improved financial management capacity with qualified accountant hired in 2001 as Finance Manager, with 8 other staff ✓ Transition to fully computerized Sage accounting package ✓ Budget Allocation Mechanism (BAM) accounting for annual expenditure on an activity basis (facilitating fundraising efforts) ✓ Organisational review undertaken by KPMG in 2002 ✓ More transparent accounting systems established with monthly performance reviews and expenditure controls ✓ Accountability & transparency in project finances strengthened, with monthly and annual financial reports	! Recommendations of the KPMG organizational review not implemented yet to lack of funding
1.5 Donor/ funding base strengthened	✓ Overseas Director appointed to improve donor relationships and accountability ✓ Public Relation Officer employed at LWC ✓ Website improved and regularly updated ✓ Twice-yearly newsletter format improved and brochure produced ✓ LWC fundraising liaison offices overseas established ✓ Fundraising effort in USA/ UK increased, with senior management undertaking a fundraising tour in November 2002 and 2003 ✓ Donor targeting/ strategy for NGO, private and multilaterals to diversify funding sources developed ✓ Fundraising/ outreach programme organized ✓ GEF funding, used to attract further support	! In October 2003, there was a US\$1 million budget deficit for 2004 ! 80% of income for 2004 is expected to come from donations
1.6 Attitudes/ behaviours changed to support the realisation of financial sustainability	✓ Management awareness of importance of financial sustainability increased ✓ The Women's micro credit loaning scheme to start in 2004, requires 5% interest to be paid ✓ Community ownership of the Lewa concept strengthened ✓ Community contributions (land, security and time)	! With 80% LWC projected income for 2004 coming from donor support, it is more donor sustainability that is being achieved ! Attitudes from some community members is still for money and assistance to be given freely
1.7 Strategic plans and partnerships developed to improve effectiveness	✓ LWC strategic Planning Framework 2002-2012 ✓ Partnerships developed with communities, both existing (Il Ngwesi & Namunyak) and new (Lekurruki, Kalama, Sera & West Gate) ✓ Working with international, national and regional organisations	! Lack of scientific partners to work in the community areas ! Difficult to reach agreement with other neighbouring private ranches

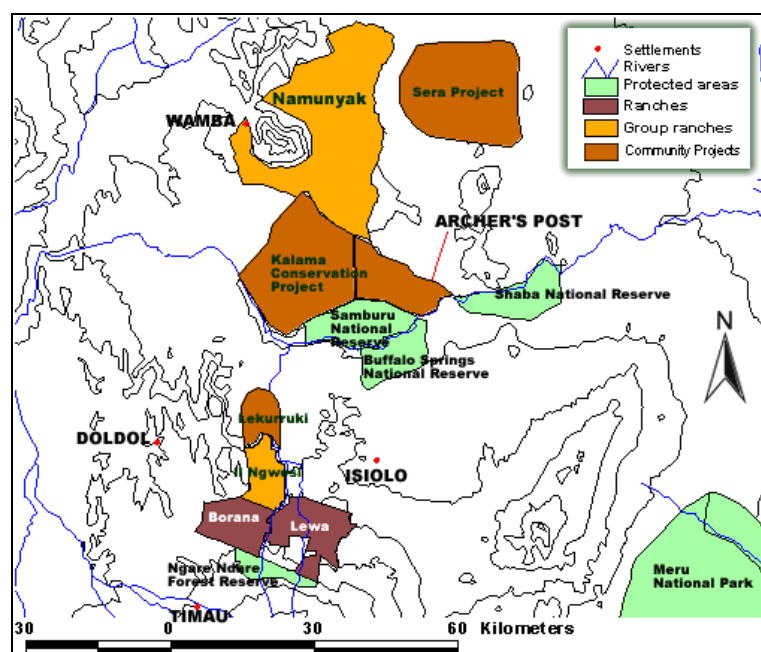
C.2 Result 2: Protection & management of endangered wildlife species in the wider ecosystem strengthened, in collaboration with local communities

LWC's vision is to re-establish the region's wildlife within its natural rangelands and with the traditional migration routes intact. LWC has recognised from the start that the support and participation of the local communities is essential to achieve this ecosystem conservation objective in the long term. During the project, progress has been made in gaining this community support through the achievement of Results 3-5 (see sections C.3-5) and in providing interested communities with training in wildlife management and monitoring as described under this result. The network of community projects and group ranches where conservation initiatives are developed to varying degrees is shown in Figure 4 below.

The operations within LWC itself have been successful in maintaining stable populations of wildlife, especially with regard endangered species. Through the success of the protection and management of wildlife within LWC, a number of wildlife species are now exceeding the carrying capacity of the Conservancy. This, in conjunction with a well-trained and experienced capture team, has meant that LWC has been able to start restocking parts of these species' former range (see section C.2.4 below) in nearby PAs where stocks have been depleted, provided they have sufficient capacity to manage the wildlife. This development has moved LWC a step closer to achieving its vision for the wider ecosystem.

The findings for this Result are primarily based on interviews with Lewa staff and data provided by the LWC Research Department, especially the 'Research & Monitoring Annual Report 2003' (LWC, 2003b).

Figure 4: Locations of LWC and LWC-supported community conservation areas in relation to the Government protected areas



Source: LWC

C.2.1 Output 2.1: Security of endangered species (Grevy's zebras, black rhinos, etc.) increased

The internationally endangered species at LWC are the Black rhino, which were re-introduced to Lewa in 1983, and Grevy's zebra. Within Kenya, the sitatunga is also endangered. Table 5 below lists the wildlife species counted in the yearly census taken between 1990 and 2003. Over this period the *species diversity appears to have increased and populations have remained stable*. Even though some population numbers have decreased over time, the populations are considered to be stable because this variation appears to be within the natural population fluctuations to be expected due to seasonal movements and migrations of wildlife, local climatic variations, and the active management of wildlife by LWC (for example through its translocation programme). In addition, population counts are subject to errors and the estimates given will be subject to certain confidence limits within which the true population is expected to fall. The only species that appears to be declining is the Jackson's hartebeest, for unknown reasons.

Table 5: LWC wildlife census data

Species	May 1990	April 1991	May 1992	Feb 1993	Jun 1994	Feb 1995	Mar 1996	Mar 1997	Mar 1998	Feb 1999	Feb 2000	Jan 2001	Jan 2002	Feb 2003
Beisa oryx	68	80	68	74	57	100	65	165	127	141	126	84	86	62
Buffalo	71	128	197	37	74	113	203	236	159	245	238	125	161	203
Bushbuck	+	+	17	7	10	3	6	3	+	6	+	+	+	~20
Cheetah	+	1	+	2	+	+	4	7	7	10	4	21	10	7
Eland	260	274	135	435	128	190	146	273	227	299	228	151	121	108
Elephant	102	10	220	149	15	199	178	110	247	170	193	150	28	157
Gerenuk	31	36	77	35	37	42	50	55	5	16	4	17	15	11
Giraffe	440	367	588	361	229	334	196	202	186	240	237	236	245	215
Grant's gazelle	322	332	274	583	174	159	133	327	181	176	132	162	192	167
Greater kudu	14	40	34	25	27	19	30	53	22	30	13	38	37	33
Hippo	+	+	+	+	+	+	+	+	+	+	+	1	2	2**
Jackson's hartebeest	63	106	45	40	46	60	35	50	58	45	28	9	7	4
Impala	379	501	475	486	729	594	508	821	698	825	733	627	749	760
Jackal (silver backed)	+	+	+	+	2	2	2	+	8	+	+	+	+	>15
Klipspringer	+	+	+	+	+	+	+	12	4	8	+	+	+	>8
Leopard	+	+	+	+	3	+	+	1	1	10	+	1	7	>8
Lion	+	+	+	2	+	5	+	7	2	11	+	8	20	18
Ostrich	40	34	38	48	37	73	45	75	66	85	84	119	98	65
Rhino, Black	17	14	15	19	21	21	21	21	20	25	26	29	29	32
Rhino, White	+	+	5	11	+	19	23	23	25	28	32	30	31	32
Sitatunga	+	+	+	+	+	+	10	11	+	12	+	21	21	16
Warthog	124	142	230	310	110	213	147	272	233	367	304	88	194	136
Waterbuck	147	326	223	408	171	104	226	300	242	220	474	149	170	64*
Zebra, Burchell's	1,291	1,452	1,375	1,302	1,372	1,387	1,428	1,647	1,552	1,756	1,467	1,264	1,039*	1,025
Zebra, Grevy's	287	259	380	262	236	140	387	470	517	632	497	556	487	462*

Source: LWC Research Department

Key:

* - census after individuals translocated *out* of LWC

** - census after individuals translocated *into* LWC

+ – species present but not seen during count

B - Species listed in bold are endangered

The above wildlife figures are indicative of the high standards achieved by the well-trained and equipped security operation within LWC.¹² However, to run such a large operation incurs extensive costs, particularly in protecting the rhinos. The cost of looking after one rhino is estimated by the Accounts Department at US\$ 4,625 per year. Lewa is divided into fifteen blocks, which are each patrolled daily by one security team. The primary purpose of this is to ensure that all rhinos are sighted on a regular basis, and to act as a poaching deterrent. If a rhino cannot be accounted for after a period of ten days, an alarm is raised and searches conducted.

As a result of this high level of protection and management, the rhino population is healthy and stable. The inclusion of Ngare Ndare Forest Reserve within LWC's perimeter electric fence has been important in increasing the range for the Black rhinos, with 42% of breeding males and 33% of breeding females now having their home range within the Forest Reserve. The female breeding performance for black rhinos is improving with a continued reduction in the inter-calving interval of breeding cows (LWC, 2003b). As can be seen in Table 5, LWC has become increasingly successful at breeding and protecting the rhino population since 1999. As of December 2003, the LWC black rhino population was 36, showing an increase of 11.5% since the February 2003 census. In order not to over-populate LWC, the surpluses of rhinos is being translocated elsewhere. The translocation of rhinos in 2003 included one black rhino (to Meru NP) and three white rhinos (to Il Ngwesi and Mugie Ranch).

Grevy's zebras are an endangered species on the CITES Appendix 1 species list. The population in LWC has risen from around 100 in 1977 (LWC research department data) to a peak of 632 in 1999 (see Table 5 above). Over the past few years this population has stabilised and now accounts for about 25% of the global population. The sitatunga were introduced to Lewa swamps in 1989, with six brought from Kisumu. Now the population is estimated at around 25 (although only 16 were counted in 2003), which is significant proportion of the total population found in Kenya where the species are endangered.

C.2.2 Output 2.2: Research & monitoring of wildlife and habitats increased

LWC's Research Department was established in 1995, although some baseline ecological data was already being collected, including rainfall and wildlife numbers, as far back as the 1970s. Initially the department concentrated on monitoring LWC's rhino and associated habitat, but it has now grown to a department of four staff, each responsible for different research areas. The purpose is to record the spatial and temporal ecological changes within LWC and to gather key data for use in adaptive management. The areas of work, as identified in the Department's Annual Report for 2003, include:

- ▶ Annual general wildlife species survey and informal monitoring
- ▶ Specific projects monitoring endangered species (Grevy's zebra, black rhino)
- ▶ Predator Project, established in October 2003, to determine the impact of predators on zebras populations in LWC
- ▶ Developing research proposals (especially relating to endangered species)
- ▶ Training in wildlife monitoring techniques for LWC rangers and members of community supported initiatives
- ▶ Ecological/ vegetation monitoring, with the annual assessment of range conditions and woody vegetation monitoring

¹² Of the 282 staff employed at LWC in 2003, 158 worked within the Wildlife/ Security Department. There are 17 armed security who are trained and qualified Kenyan Police Reservists (KPR), which gives them a mandate to make arrests and authorises them to use automatic rifles. 15 of these armed personnel have been on a two-week training course at the KWS Field Training School at Manyani. These operations are greatly assisted by excellent radio communications coordinated by a 24-hour Operations Room, two ex-British army tracker dogs, and a light aircraft. Finally 21 members of the Wildlife/ Security Department are employed to maintain the electric fence surrounding LWC.

- ▶ Monitoring the impact of tourism and other development activities
- ▶ Liaison and collaboration with other research & conservation institutions

Wildlife

Much progress has been made in improving the collection and analysis of wildlife data within LWC, particularly regarding the two endangered species (Black rhino and Grevy's zebra), which is the main focus¹³. In addition the security team patrols, mentioned under Output 2.1 for rhino protection, also report daily sightings of eleven further species; cheetah, leopard, lion, buffalo, elephant, oryx, eland, giraffe, kudu, gerenuk, and Grevy's zebra. This data is now analysed in the GIS software ArcView, which provides GIS map layers illustrating spatial distributions and densities of these species within LWC.

The seasonal movements of species, in particular elephants and Grevy's zebras, are being monitored as they pass through the LWC northern game gap. Currently work is being done to establish two cameras at the single entrance on LWC's northern boundary to monitor these seasonal movements.

Further monitoring of LWC's Grevy's zebra and rhino populations are organised by the Research Department, with more detailed information collected about their ecology; in particular, population dynamics and breeding, individual home ranges and animal health. In 2003, the US Fish and Wildlife Service funded the ear-notching of ten Black rhino in LWC, to help in identifying 'clean' rhinos (i.e. those rhinos with no distinguishing features). Being able to identify individuals is critical for their protection and for research on breeding performance and consequently overall population trends. All this information is processed/analysed with GIS software and fed into the decision-making process regarding rhino management. In 2002, the Research Department launched radio-collaring of twelve Grevy's zebras within LWC and nine in the surrounding community areas (see Output 2.3 for details of latter).

Since the GEF grant was awarded new funding and partnerships have been established for research and monitoring wildlife. Firstly the Earthwatch Institute (EWI) has been partnering LWC in conducting Grevy's zebra research since 2000 at Lewa, with three-week expeditions of young people coming to assist in research throughout the year. The joint research work has been focusing on the ecology of Grevy's zebra and in particular, its competitive relationship with the Burchell's zebra. In October 2003 the Predator Project was launched with funding from the St Louis Zoo.

Habitats

Whereas monitoring and research of wildlife species in LWC is very strong, the research regarding the habitats is not so comprehensive, and only a couple of small initiatives were launched during the project. However, LWC recognises the importance of a good understanding of the habitat resources for wildlife management and, prior to this project, there has been in place a simple and functional programme for monitoring vegetation, in particular for grasses. Monitoring has been carried out on an annual basis since the establishment of LWC in 1995.

However, in addition to the ongoing activities, there have been two new activities initiated during the project to improve the understanding and management of the habitat.

¹³ Since 2000, the methodology for the annual census of wildlife within LWC has been standardized allowing for more accuracy in making comparisons between years and greater confidence when inferring trends and patterns in population dynamics.

- ▶ The Tree Protection Programme was launched in 2000 with the aim of protecting the *Acacia tortilis* trees against debarking by elephants.
- ▶ A KWS-Manchester Metropolitan University Vegetation Monitoring Project was initiated in March 2003

Although monitoring of the impact of tourism and other development activities was reported in the Research Department's Annual Report 2003, little evidence was found of such activities during the study team's visit.

In 1998, a Scientific Advisory Committee was established with members from LWC, KWS and other collaborating scientists. This initiative was an important step for providing technical support and guidance to the Research Department in collecting and analysing relevant data to better inform wildlife management decision-making. This is especially relevant considering there are not senior scientists within the Research Department itself. However, this Scientific Advisory Committee was subsequently disbanded and no replacement seems to have been provided so far.

Within the Research Department there is no socio-economic baselines or data available concerning human habitation or activities around LWC. In the communities where LWC is active, there are as yet no wildlife, habitat or socio-economic baselines established. Without this data it will not be possible to quantitatively and objectively measure the success of these community conservation initiatives. Also there are no systematic monitoring programmes in operation in the communities.

C.2.3 Output 2.3: Awareness creation/ human capacity strengthened in communities

A great deal of work has been done by the Community Development Manager during the project to increase awareness and human capacity regarding establishing and successfully running community conservation initiatives, with a vigorous diary spent visiting the communities and providing advice.

One of the main mechanisms for increasing capacity in the communities for wildlife management has been through the GEF Committee, which was established to oversee the distribution of GEF funds earmarked for community support activities. This committee was formed at the grassroots level, with each participating community selecting its representatives. The committee discusses all the prioritised proposals submitted by each community and then decides which to allocate money to. A list of some of the training courses funded is given in Table 6 overpage. Many of the courses supported with this GEF funding are also relevant in particular to improving local livelihood under Result 3 and 4.

Courses specifically relevant to this Result 2 include training of community scouts working for Namunyak, Sera and Ngare Ndare Forest Trust, and courses in Ornithology and Forest Management and Tending for Il Ngwesi and NNFT respectively. In addition the GEF money was used to fund a cross visit for Il Ngwesi members to learn from other conservation initiatives in Group Ranches elsewhere in Kenya.

The work of the community scouts in protecting the established conservation areas has been facilitated by the provision of hand-held Motorola radios with GEF funding. These have allowed the scouts to link up with the LWC-operated radio network and request assistance for serious security problems. The security operations have led to more positive community attitudes to conservation, as communities begin to realise the commercial

Table 6: Training courses funded through GEF Committee

Type of Course	Course duration	Number of participants	Course location
Il Ngwesi Group Ranch (US\$ 18,000)			
Computer Training	2 Weeks	6	Nanyuki
Driving	7 Days	2	Nanyuki
Accounting Course	2 Weeks	3	Isiolo and Nyeri
Hotel Services	2 Weeks	12	Mombasa, South Coast and Jadini.
Ornithology Training	3 Weeks	1	Naivasha
Training of Directors	7 Days	7	Isiolo
Management Committee Training	7 Days	21	Il Ngwesi
Namunyak Wildlife Conservation Trust (US\$ 18,000)			
Outreach programme	1 Week	16	Mombasa
Staff Management	2 Weeks	12	In the Community Conservancy
Proposal Writing	5 Days	1 (Project Manager)	Kenya Institute of Administration
Village community Seminar, knowing roles and responsibilities of members & officials	2 Days	60	Locally, Wamba
Moran Workshop	2 Days	365	Locally, Wamba
Sage Accounting Package.	2 Weeks	1	Strathmore College Nairobi
Hotel Accounting Technique	2 Weeks	1	Mombasa, South Coast and Jadini
Community Scout Training	10 Days	20	Locally, Wamba
Computer Training	2 Weeks	3	Isiolo
Ngare Ndare Forest Trust (US\$ 5,000)			
Community Forest Scouts	12 Days	11	Ngare Ndare Forest
Forest Management and Tending.	12 Days	10	Ngare Ndare Forest
Lekurruki Group Ranch (US\$ 8,800)			
Seminar	6 Days	12	Locally
Driving	7 Days	3	AA Driving School Nanyuki.
Seminar/Workshop	6 Days	15	Locally
Seminar	2 Days	12	Nanyuki
Sera Project (US\$ 4,600)			
Community Wildlife Scouts	1 Month	6	Locally
Kalama Community Wildlife Conservation Project (US\$ 8,800)			
Members Seminar on roles and responsibilities.	2 Days	14	Locally
Committees and Directors Workshop	3 Days	12	Locally
Directors and Moran Seminar	3 Days	40	Locally
Seminar for Community	3 Days	18	Locally
Committees Seminar	1 Day	30	Locally

Adapted from: Kamweti, D. & A. Oginga Obara (2003).

value of wildlife (e.g. through their tourism operations) as well as the benefits of general security. The community conservation areas in Il Ngwesi and Namunyak have seen an elimination/ significant reduction in poaching. Although no hard data on wildlife numbers is available, this opinion given by community members and LWC is backed up by the data from the monitoring of elephant movements in the region by the NGO, Save the Elephants. The results show elephants moving to seek refuge in the community conservation areas of Il Ngwesi and Namunyak as well as the established protected areas such as Samburu Game Reserve.

The radio collaring of nine Grevy's zebras (with GEF funding) to the north of LWC also provided an entry point to involve the community in monitoring. In 2002, a workshop was held in the three communities of Ngaroni, Laibelibeli and Sereolipi to launch this initiative. This culminated in three scouts from each community being employed to monitor their particular sub-population on a part-time basis. Two women and one man from each community were chosen and given training for one week. This monitoring was also backed up by conservation education regarding Grevy's zebras to the school children in each community.

In addition to the nine community members employed on a part-time basis, two further full-time community scouts from Laibelibeli were employed and trained to follow one collared Grevy's zebra each with radio tracking equipment. This has increased the profile of wildlife in the areas and people have started to see the potential benefits to them of wildlife.

Finally a number of activities have been initiated through the Lewa Education Trust on conservation education, which is summarised in section C.4.5.

C.2.4 Output 2.4: Wildlife management improved

Translocation has become an important management tool developed and mastered at LWC over the past few years. It is important for two reasons: firstly, to maintain optimal levels of key large mammal species so that LWC does not become populated above its carrying capacity, and secondly to enable the gradual restocking of protected areas in the 250,000 km² expanse of northern Kenya in order to reinvigorate depleted stocks lost to poaching and to ensure genetic diversity.

The LWC Capture Team is made up of general security rangers, who have been especially trained. Some examples of the translocations done are included in Table 7 below.

Table 7: Examples of wildlife translocations organised by LWC

Species translocated	Number	Date	Destination
Reticulated giraffe	15	1999 (June)	Namunyak
Grevy's zebra	20	2002 (March)	Meru National Park
Black rhino	1	2002	Il Ngwesi
Black rhino	1	2002	Meru NP
White rhino	2	2002	Meru NP
Burchell's zebra	500	2003 (July)	Meru NP
Impala	400		
Reticulated giraffe	50		
White rhino	2	2003 (Sept)	Il Ngwesi
White rhino	1	2003	Mugie Ranch

Source: LWC promotional material and LWC staff

One of the first translocations was in June 1999 when LWC translocated 15 of their giraffe to Namunyak. This helped to reduce the pressure and damage caused to LWC's *Acacia tortilis* population by the large giraffe population within LWC, and to build up Namunyak's stock of wildlife, which is important for attracting tourism.

In July 2003 Kenya's first mass wildlife translocation was conducted by LWC at the request of KWS. 500 Burchell's zebra, 400 impala and 50 Reticulated giraffe were successfully moved over a period of 20 days. Moving wildlife in large numbers, and cost effectively, is becoming a speciality of LWC, and a service they would like to extend within East Africa.

Kenyan wildlife law and policy currently prohibits many forms of consumptive wildlife utilisation, e.g. for meat, skins, and sports hunting. This limits LWC's scope to non-consumptive use for tourism, which in turn restricts LWC's ability to achieve financial sustainability in the near future without significant ongoing donor support.

Table 8: Summary of study performance findings, Result 2

Result 2: Biodiversity protection and management		
Protection & management of endangered wildlife species in the wider ecosystem strengthened, in collaboration with local communities		
OUTPUT	MAJOR ACHIEVEMENTS	CHALLENGES
2.1 Security of endangered species (Grevy's zebras, rhinos, etc.) increased	✓ Healthy and secure rhino populations with falling inter-calving intervals in breeding cows and gradually increasing population ✓ 158 strong wildlife/ security department, with 17 trained KPRs, doing daily patrol ✓ Improved radio communications	! High operational costs for the protection of rhinos at US\$4,625/ rhino/ year
2.2 Research & monitoring of wildlife and habitats increased	✓ Radio collaring of Grevy's zebra in LWC and communities (2002) ✓ Ear-notching of ten rhinos (2003) ✓ Collaboration with research institutions such as Earth-watch Institute (since 2000) ✓ Standardised methods adopted for the animal census and the use of GIS software for research analysis ✓ Tree protection programme initiated in 2000 ✓ KWS-MMU Vegetation Monitoring Project launched in March 2003	! Research has received only 2% of budgeted expenditure for year 2004 ! No baselines established for wildlife in community areas ! No socio-economic baselines/ data For LWC or the wider ecosystem ! No evidence for monitoring of the impacts of tourism and development projects ! Scientific Advisory Committee no longer functioning
2.3 Awareness Creation/ human capacity strengthened in communities	✓ Communities empowered to handle wildlife conflicts through training of scouts and provision of radio equipment (GEF funding) ✓ Grevy's zebra community monitoring project ✓ Advice and support given to communities trying to establish conservation initiatives	! More capacity still needed in communities to assist them manage their wildlife, especially the new projects

OUTPUT	MAJOR ACHIEVEMENTS	CHALLENGES
	(Sera, Kalama) ✓ Conservation education through the Lewa Education Trust (see Output 4.5)	
2.4 Wildlife management improved	✓ Translocation of surplus wildlife from LWC to restock other areas	Profitable forms of wildlife utilization of wildlife for meat, skins, sports hunting is not permitted under Kenya law

C.3 Result 3: Economic benefits to local communities from sustainable use of wildlife and natural resources improved

In reaching its findings for this result, the Study Team drew on the individual interviews and focus group discussions held in the communities of Il Ngwesi, Lekurruki and Namunyak. Where possible the findings have been crosschecked with LWC staff (in particular the CDM) and LWC reports. Overall, the Study Team concluded that a considerable amount of progress has been made under the four outputs identified, as described below.

C.3.1 Output 3.1: Community tourism strengthened and promoted

During the Study Teams visits to Il Ngwesi Lodge, Tassia Lodge (Lekurruki GR) and Sarara Tented Camp (NWCT) and the discussions with the lodge Management/ staff and GR elders, it was evident that substantial work had been done in building and improving their ecotourism infrastructures during the course of the project.

Il Ngwesi Lodge (built in 1996) underwent an extensive overhaul between November 2001 and January 2002, with funding from the Liz Claiborne & Art Ortenberg Foundation (US\$52,000, channelled through the African Conservation Centre). The renovation included relaying the thatch roofing, building two new cottages, tiling the swimming pool, and improving the water heating, lighting and plumbing systems.

Il Ngwesi Lodge has won a number of awards for its innovative work to reduce local poverty and conserve biodiversity, through the promotion of ecotourism and the establishment of mechanisms for local land and resource management. For example, in 2002, the lodge won an Equator Initiative Award at the World Summit for Sustainable Development held in Johannesburg¹⁴.

In Lekurruki GR, the Minister of Tourism, Hon. Kilonzo Musyoka, officially opened Tassia Lodge on June 21, 2002. This community received support from Borana Ranch in developing a proposal to access funding for this ecotourism initiative, which was provided by the British charity CHK (KShs14 million to build the lodge), as well as funds from local ranches and the Laikipia Wildlife Forum (LWF). During the construction, around 100 community members were employed, of which 16 stayed on to join the Lodge staff (*pers.comm.* Tassia Lodge Manager).

Much work has been done to develop the tourist experience at these lodges during the project. Tassia Lodge has started horse riding along the Kisima Road, and provides camel walking and camping activities. In Namunyak, bird shooting is being developed and adventure activities such as mountaineering in the Matthews Range are being investigated. Most of Il Ngwesi's tourist activities were developed before the project, such as the Cultural Boma (opened in 1997). However, there is now the added attraction of a rhino sanc-

¹⁴ Other prizes have included the British Airways Award for eco / community tourism in 1997

tuary established in 2002. In addition, attempts are being made to reduce the bush cover, so as to improve wildlife viewing opportunities for visitors.

The study team also learnt from the LWC Community Development Manager that LWC is working with other group ranches, such as Gir Gir Group Ranch, where support is being given to develop options for their Kalama Community Wildlife Conservation (KCWC) project. After the initial feasibility study in 2000 to explore the potential for wildlife and tourism, the community successfully obtained Kshs 16 million from the Community Development Trust Fund/ Biodiversity Conservation Programme (CDTF/ BCP) to develop the project (see Table 3). This involves establishing campsites, camel safaris and a cultural manyatta. LWC and KWS have been invited to participate in the project implementing committee to provide advice and to ensure implementation of the project. The project has employed 14 members of staff, a project manager, accounts clerk and 12 game scouts.

Training has been provided to staff of these community tourism lodges during the project. The GEF Committee (described in Section C.2.3) has allocated money for building capacity through courses in driving, cooking, hotel accounting, hotel services, staff management, ornithology and computers (c.f. Table 6). However, as identified by the both community members and leaders and LWC Management, greater capacity is still needed to manage the wildlife and lodge enterprises in the long term. Further training is required to ensure that the quality of the product is maintained and adapted to meet the expectations of the guests. For example at Tassia Lodge, a number of recent visitors (*pers.comm.* LWC Deputy Director & Nairobi-based visitors), although extremely happy with the friendly staff and stunning setting, have complained of poor management and maintenance, with holes in the mosquito nets, lights not working, laundry lost, etc. In addition there was personal anecdotal evidence from a Nairobi-based visitor that security guards have proven to be insufficiently trained in wildlife management.

The same external challenges of terrorism and travel advisories that impact on LWC's tourism numbers (see Section C.1.1) also affects these communities. To compound this, accessibility of these areas is difficult with very poor roads, as experienced by the Study Team during its community visits. However, there are airstrips at Sarara Tented Camp (Namunyak), Il Ngwesi and Tassia Lodge, for visitors who can afford to fly.

One issue that was highlighted on a number of occasions by GR elders and the GEF Committee and also emerged from the focus group discussions with morans and women was the raised expectations concerning the level and nature of benefits that can be generated for the members (i.e. the shareholders) from these tourism ventures. The GEF Committee explained that both seasonality and downturns in tourism revenues have been identified as issues that need to be explained to the community, and they informed the Study Team that meetings have been organised in all the villages to explain why there were fewer visitors and therefore less revenue.

Another area of unrealistic expectations is over the few direct individual benefits that come through employment. There is often heated competition for employment at the lodges and great disappointment/ bitterness in certain families whose children are not selected. This issue was highlighted by the LWC Executive Director and CDM as well as the GEF Committee and during the community consultations. This problem of expectations and the need to manage them better was articulated by Kipsoi Kinyaga, a Director of Il Ngwesi and GEF Committee member, whose comments are paraphrased below:

"We thought that the Lodge and security would provide everything. Then we had a car and then we thought we had everything. Later we received Kshs 300,000 for school bursaries and we thought we had enough, but no ("bado"). Then people were employed at Il Ngwesi and we thought that enough, but no ("bado").

GEF has opened our eyes, so now we see how badly off we are, and we see we are naked. Are GEF going to leave us now?"

The perception from other communities who do not yet have tourism operations was that tourism was the best new opportunity for generating income in this area. The women's groups around LWC and Ngare Ndare as well as the members interviewed at Kuri Kuri GR both saw establishing their own community tourism enterprise as an excellent economic earner and a panacea to their difficulties, assuming financial and technical support could be provided. Kuri Kuri has already tried unsuccessfully with ACC and Borana Ranch to find funding to develop a proposed site. However, there was no evidence that studies have been carried out to assess how many community lodges and tourism ventures this area can support.

C.3.2 Output 3.2: Community skills and roles developed to optimise wildlife benefits

The greatest progress in increasing the community capacity to optimise wildlife benefits has been at Il Ngwesi, which is held up by the communities interviewed and LWC Management as the standard by which to judge other initiatives. In March 2000, the group ranch held a strategic planning workshop, and in 2003 an outside consultant prepared a business plan. Due to the translocation of the Black rhino to Il Ngwesi, it was necessary to develop a Black Rhino Management Plan (2002), which was prepared by the LWC biologist. Many of the staff have received a good level of training, with the head of security receiving further wildlife management training in South Africa. NWCT is guided by a five-year management and development plan created with financial support from the EU (although the study team did not see a copy of this). The other group ranches are in earlier stages of development and haven't yet developed a business plan.

The dividends from community tourism are spent on community development, which is generally considered by all stakeholders interviewed as the best way to ensure the widest and fairest distribution of benefits. However, with regard to individual benefits, it is mainly the men who benefit from the jobs in the Lodge and on the management committees.

As mentioned in Section C.2.4, Kenya law does not allow wildlife utilisation for meat, skins and sports hunting, which prevents the communities from realising the full potential of wildlife. However, bird shooting is being seriously considered by the Namunyak, where it is estimated that it can bring in US\$1,000 per day per party of six. Bird shooting is also being considered for the Sera project, to be managed by the Rendille members (*pers. comm.* James Munyugi & NWCT Board).

C.3.3 Output 3.3: GR cooperation in benefiting from wildlife developed

The cooperation between the LWC-supported Group Ranches is very good. This has been a particularly valuable benefit of the GEF Committee, which is composed of elected members from the five operating community initiatives. The meetings provide opportunities to share knowledge and experiences, which is the reason GEF Committee members gave in explaining why they are still together even though the GEF funds have been exhausted.

The elders of Lekurruki GR highlighted the support and advice that has been provided by Il Ngwesi in helping them to decide and develop their own tourism lodge and conservation area. Now that Tassia Lodge is operating, they collaborate closely together and the provision of hand-held radios has greatly increased the sharing of information. The Head of Security from Il Ngwesi is providing support and direction to Lekurruki's new scouts.

However, these new lodges have not benefited or pleased all members in the communities. In all the communities there have been internally bitter disputes and competition to obtain leadership positions (*pers. comm.* Ian Craig), and it is generally the elites from the GR who obtain the top positions. This was highlighted in a meeting held at Kuri Kuri Group Ranch offices, where half of the group were Lekurruki GR members and the other half from Kuri Kuri GR. This group felt wrongfully excluded from the Tassia Lodge development, and felt that there was a lack of transparency and accountability. For example, it was alleged that the employees of Tassia Lodge were hand picked by the Chief, with the benefits not being shared to the majority of the GR members who lived away from the Andanguru Plains. This issue is related to the concerns of raised expectations discussed in Section C.3.1.

C.3.4 Output 3.4: Capacity of local communities to undertake conservation-compatible income-generating activities strengthened

The most progress that has been made with initiating IGAs is outside of the pastoralist group ranches, around LWC and the Ngare Ndare Forest Reserve. Since the formation of the Ngare Ndare Forest Trust in 2002, community-based organisations and user groups have been formed in the five communities bordering the community reserve. However, the user groups have made little progress in generating income at this early stage. A number of the groups are awaiting or seeking funding and technical assistance in order to develop further. This sense of dependency on outside assistance was strongest during the FGD with the elders at Ngare Ndare, who stated that they had not received any benefits from conservation and that their vision for the next 10 years was for strengthened resource user groups funded by donors/ NGOs. This raises concerns about sustainability of the Ngare Ndare Forest Trust initiatives and community dependency.

Around LWC boundary and at Archers Post, three women's groups are to start benefiting from LWC's Women's Micro Credit Loaning Scheme, which will be launched in 2004. Funding has been obtained by the LWC Overseas Director to develop this initiative and loans will be awarded for proposals submitted for starting up enterprises and businesses. In 2003, the Hay Bailing Project started on LWC, with Kshs 39,000 loan given to a group of youths to buy a hand bailer. As of October 2003 they had produced 1,500 bails¹⁵.

In the more pastoralist-dependent communities to the north of LWC, limited income-generating opportunities have been developed in an organised manner. A number of the community members in the Group Ranches had suggestions and ideas for establishing IGAs, especially at Namunyak, however that was as far as they had developed. There was also the problem of accessing markets for their products, as well as needing funding and technical assistance to develop them. A pastoralist metaphor to illustrate this situation was given by an elder on the GEF Committee as follows:

"We need more cows; at the moment we only have one cow (i.e. tourism); one cow with little milk."

During the Lewa Downs Stakeholder Presentation there was discussion about what the "other cows" might signify. One economic activity could be consumptive utilisation of wildlife, which as stated in Section C.2.4 is prohibited under Kenyan law. Secondly, there is improving the economic revenues in a conservation-compatible manner from the "real cow"; through better livestock marketing and increased productivity. This latter issue is discussed in section C.4.4. Diversifying conservation-compatible economic activities is seen as important to counter the potential future increase in the opportunity costs for community land.

¹⁵ LWC Newsletter October 2003

Table 9: Summary of study performance findings, Result 3

Result 3: Local economic benefits		
Economic benefits to local communities from sustainable use of wildlife and natural resources improved		
OUTPUT	MAJOR ACHIEVEMENTS	CHALLENGES
3.1 Community tourism strengthened and promoted	✓ Il Ngwesi awarded an Equator Initiative Award 2002 ✓ Refurbishment of Il Ngwesi from November 2001 – January 2002 ✓ Tassia Lodge officially opened in June 2002 ✓ Lodges promoted through website and accommodation booking made through Nairobi based tour operators. ✓ Tourist experience developed for Lodges ✓ New areas being investigated for tourism options, e.g. Kalamama Community Wildlife Conservation (KCWC) Project	! Capacity to manage the wildlife and lodge enterprise ! External factors, including global terrorism, travel warning, contributed to reduced tourism numbers ! Accessibility of lodges by road across difficult roads ! High expectations in the community can lead to conflicts and demoralisation ! What is the carrying capacity for community tourism operations in this region?
3.2 Community skills and roles developed to optimise wildlife benefits	✓ Strategic & Business Plan developed at Il Ngwesi Lodge (2000-2003) ✓ Black Rhino Management Plan (2002) ✓ Business training ✓ The dividends from community tourism are spent on community development	! Profitable forms of wildlife utilization of wildlife for meat, skins, sports hunting is not permitted under Kenya law ! Different communities are at different levels in this process ! The majority of the tourism jobs are going to men
3.3 GR cooperation in benefiting from wildlife developed	✓ GR sharing security and information informally ✓ Elders at Lekurruki decided to start Tassia Lodge after discussing and learning from Il Ngwesi's experience ✓ Il Ngwesi and Tassia Lodges share guests ✓ GEF Committee has brought communities together to share experiences	! A few accusations of community tourism employment and benefits being high-jacked by a few elite families in GR
3.4 Capacity of local communities to undertake conservation-compatible income-generating activities strengthened	✓ CBOs and User Groups formed around Ngare Ndare Forest from 2002 ✓ Ideas for establishing IGAs (especially in Namunyak) ✓ Women's Micro Credit Loaning Scheme to start in 2004 to provide loans for starting up businesses ✓ Hay bailing project started with youth group in 2003	! Few IGAs are implemented or earning money ! Lack of technical skills and funding to develop IGAs ! No readily accessible market for products

C.4 Result 4: Pastoralist natural resources management and institutions sustainably enhanced

In the original project document, this Result was not specifically mentioned as an objective to be accomplished. However, the study team felt that, in line with modern integrated conservation and development thinking, this new result is critical in the broader ecosystem conservation objectives of LWC. As it happens, much has been done under this Result as is outlined under the following five outputs. As with Result 3, the principle source of information for these findings was the community consultations, cross-checked with the LWC Community Development Manager and relevant LWC literature.

C.4.1 Output 4.1: Community institutions and governance strengthened

The institutional structures are quite different for the different community initiatives, with each being explained by the respective Project Managers and the Lewa CDM. Il Ngwesi is a single GR with a very homogeneous population, and with respect for traditional leadership. It has the most developed system, which has drawn on its traditional governance structure, and there has been significant progress in strengthening it during this project. In addition to the Board of Directors (overseeing the Lodge operations) and an NRM Committee (overseeing resource management), an Il Ngwesi Community Trust is in the process of being developed. There are two further groups above these three in the institutional hierarchy. These are the Elders Advisory Council and, at the highest level, the Group Ranch Committee.

The Namunyak Wildlife Conservation Trust (NWCT) formed in 1995, comprises of two GRs (Sarara and Sabache) and consequently the governance structure has to be quite different to Il Ngwesi. In the absence of a single group ranch structure, it was decided that a trust was the best legal mechanism to allow the community to retain overall control. The NWCT has been divided into nine focal point areas, which in turn have five Village (Environment) Committees and five Grass Management Committees. Oversight for the developments of the NWCT and decision-making is the responsibility of an elected Board of Trustees, which comprises of a member from each focal point as well as non-members co-opted to give advice and guidance (e.g. from KWS and LWC).

During the project, further steps have been taken to form new legal entities to promote institutional sustainability. Ngare Ndare Forest Trust has been legally established (Nov 2001), and the associated CBOs and user groups have all been registered with the Social Services Department. Legal documents establishing the Namunyak Wildlife Conservation Trust and the constitution of the Il Ngwesi GR were already in place before the project; however, further additions/ supplements have been made to account for changes in trustees/ directors. A draft deed has been prepared to establish Il Ngwesi Community Trust, in order to assist them in sourcing funding and to provide a buffer for absorbing the fluctuations in tourism numbers. No legal constitutions/ documents were obtained for the newer initiatives, such as at Lekurruki or Kalama.

As prescribed in the constitutions, elections are conducted at AGMs where all members are invited and can vote on the leadership positions. Elections for the Il Ngwesi Board of Directors were held at the last AGM in October 2003, where experts, who are not GR members, were elected/ re-elected onto the Board (*pers comm.* Il Ngwesi Project Manager). The need is still recognised for outside support to provide the necessary skills to develop Il Ngwesi over the next few years. However, so as to build up capacity within the group ranch, each Board member has a trainee from the community, who it is expected will eventually assume that position on the Board of Directors.

Sensitisation on institutional arrangements and governance has been done through the LWC Community Development Office. Competition for leadership positions is intense, as with jobs at the lodges (c.f. Section C.3.1), which can have a damaging effect on the strength of the GR/ Trust as an institution (*pers.comm.*, James Munyugi). The positions on these boards are almost exclusively men (e.g. there are only two women in the NRM Committee at Il Ngwesi).

Further work is needed to develop the institutional capacity of the newer operations. In Kalama Community Wildlife Conservation Project, which borders the Samburu Game Reserve, there is huge potential to develop, however, it lacks institutional capacity to raise funds. Without sourcing funds of US\$25,000 p.a., it will not be able to function (*pers.comm.*, Ian Craig).

C.4.2 Output 4.2: Community management systems improved

Progress in this area again has been provided through training and seminars (in part supported through GEF funds, see Table 6). In Namunyak, training courses were attended for proposal writing and village community seminars on knowing roles and responsibilities of members and officials. Courses that Il Ngwesi members attended included training of the management committee and Directors and accounting. In Ngare Ndare Forest Trust a course was attended on Forest Management. Finally in Kalama Community Wildlife Conservation Project, a members' seminar was attended on roles and responsibilities and a workshop held on Committees and Directors.

In Il Ngwesi, a Project Manager has been hired, from outside the GR, to help establish more comprehensive management systems. However, this is an ongoing process and more is needed in developing community management systems, especially in the newer initiatives. Financial management is an area where the community enterprises are still very dependent on the support provided by LWC (in the case of Il Ngwesi) and Borana Ranch (in the case of Lekurruki GR). The operations in Namunyak in this respect are assisted by Acacia Trails.

C.4.3 Output 4.3: Security systems and capacity improved

The security problems faced by communities include: Somali poachers/ cattle rustlers with packs of dogs, road banditry, inter-tribe conflicts, and rhino-horn poaching, as identified in the Lewa Wildlife Conservancy Security Occurrences for 2002 (LWC, 2002b). The establishment of the conservation areas and tourism enterprises has involved security operations being established, which all the community members interviewed stated has had a significant impact on wildlife poaching and cattle rustling, and indirectly on improving community well-being (securing livelihoods). The resulting benefits to local livelihood capitals, especially natural, financial and social, as described in Section D.1 and D.2. One comment from GEF Committee member from Kalama regarding the introduced security systems is that now they "can get information from every corner of the area".

LWC, working with KWS, has provided much assistance in establishing and supporting the community security operations. In 2002, the LWC Security Department had 44 armed security follow-ups in the communities (one every 8.3 days), in which eight poachers were arrested, four bandits killed, 27 poacher dogs killed, and 92 head of cattle and 95 shoats recovered. The support of the LWC light aircraft (Super Cub) and tracker dogs has been very important for stopping stock theft in the communities.

In the established operations in Namunyak and Il Ngwesi the security operations have been strengthened during the project with the provision of more hand-held radios. In the new initiatives such as Lekurruki, a six-strong security team has been established with

four hand-held radios provided through GEF funds. However, further training and capacity building of these security teams is required, especially in the newer initiatives such as at Lekurruki.

The contribution of the project to the improvement in security was generally considered to be the most important community benefit, according to the community members interviewed.

C.4.4 Output 4.4: Community natural resources management systems and structures enhanced

In Namunyak the Grass Management Committees in each of the focal point areas decides and designates the grazing areas for its members. Within Il Ngwesi, the NRM Committee is charged with the daily management of the resources within the GR. This NRM Committee controls the grazing of livestock within the GR area and determines the grazing patterns. It imposed fines on members who breach the NRM rules as outlined in the constitution.

Since the establishment of land-use zoning and the conservation areas in Il Ngwesi and Lekurruki, the community members said that the land is better managed and utilised. The restricted areas have resulted in the regeneration of grasses and dry season emergency fodder. The NRM committees have enabled GRs to better monitor grazing patterns and coordinate NRM with neighbouring group ranches. However, during the community consultations, NRM was the one area where the respondents said that they receive no or very little outside assistance and that it was the elders of the community alone who took responsibility for NRM decision-making.

One exception to this is the support that Il Ngwesi receives from LWC in starting an experimental burning programme to improve range conditions in the conservation area in October 2003. The Il Ngwesi elders explained that the controlled burning can increase open areas and encourage more graze for wildlife and easier viewing for tourists.

Regarding the management of wildlife, there has been significant capacity built at Il Ngwesi, which has led to the establishment of the rhino sanctuary in 2002. This is provided with 24-hour surveillance for the one Black and two White rhinos that are currently enclosed. However, apart from this successfully managed operation, much work is still needed to increase the general capacity to manage and monitor wildlife in the community areas.

The conservation areas, although delimited by landmarks in the Il Ngwesi constitution, are not clearly demarcated on the ground and it was difficult to ascertain a consistent figure for the size of any of the conservation areas in the group ranches.

Presently there are few **opportunity costs** for the members of these group ranches to set up these conservation areas, as they can freely access alternative pasture elsewhere, for example on abandoned land in Laikipia, which also has higher rainfall and better pasture. The conservation areas have been chosen in areas of higher shrub vegetation, which were not considered suitable or heavily depended upon for grazing livestock. The elders at Il Ngwesi categorically stated that they would not have designated the current conservation area around the lodge if it had been good, pristine pasture for livestock. However, this raised the uncertainty about the long-term support for these conservation areas if access is denied to these alternative pastures that they depend on. However, this is not something that will happen in the near future and, if it does, it will depend very much on how successful the GRs have been in developing conservation-compatible income generating activities that depend on the conservation areas.

At the Lewa Downs Stakeholder Presentation, the LWC Management acknowledged that livestock and NRM is a crucial issue for the long-term success of wildlife conservation in the region. While wildlife conservation activities are likely to remain LWCs core strength and focus, it is also actively seeking ways to better contribute to regional initiatives to improving NRM practices.

In this regard, LWC was involved in the establishment of the Northern Rangelands Trust in December 2003. This comprises of regional community-based and private wildlife conservancies, the Kenyan Government (KWS and the Samburu/ Isiolo County Council) and other regional NGOs. The overall objective of the Trust is *“to conserve biodiversity and to improve the livelihoods of communities who share their land with wildlife through the management and sustainable use of natural resources”* (Northern Rangelands Trust, 2004). Some of the aims of the Trust are specific to livestock issues, such as:

- ▶ Improved and collective approach to livestock marketing
- ▶ Establish rangeland management and environmental rehabilitation schemes¹⁶

C.4.5 Output 4.5: Conservation awareness and education improved

The LWC Community Development Manager and Education Officer outlined a number of steps taken by LWC during this project to increase conservation awareness and the level of education in the communities. In 2001, education was identified as important to the conservation work of LWC and the Lewa Education Trust (LET) was registered in 2001. The main aim of LET is “to improve the livelihood of the neighbouring communities through better education for their children” (LWC, undated 2). This is to be achieved by giving the targeted children access to “the best possible education and to create an awareness of the importance of conservation” (ibid.). There are about 12 people on the Board, which meets once every four to six weeks.

The vision of LET is to work in schools in all the communities where LWC is involved. However, due to lack of funds, they have only been working in the five LWC-supported primary schools, all within a one-mile radius of the LWC boundary. These are:

- ▶ Lewa Downs Primary School, Meru District
- ▶ Leparua Primary School, Isiolo District
- ▶ Mutunyi Primary School, Meru District
- ▶ Munanda Primary School, Meru District
- ▶ Ntugi Primary School, Meru District

Ninety percent of the money for this programme is raised from the proceeds of the Lewa Safaricom Marathon, which in 2003 amounted to slightly over Kshs 1 million (LWC Accounts Department). The programme gives 20% of the money to sponsoring the best pupil from each school through secondary school (as well as the best from the LWC staff). The remaining 80% goes to improving the five schools.

The Lewa Supported School Committee decides how best to spend the money allocated to improving each school, according to their needs and priorities. The committee consists of the Headmaster and Chairman from each school and meets twice per term. The money has been spent on mainly infrastructure, including:

- ▶ Building classrooms, teacher’s houses and ablution blocks
- ▶ Buying textbooks, desks and writing materials
- ▶ Facilitating training and refresher courses for teachers

¹⁶ Northern Rangelands Trust (2004). Concept Note

- ▶ Improving the communication systems of the school, e.g. buying mobile telephones
- ▶ Equipping the schools with computers so that they are able to maintain their own databases and train pupils in basic computer skills
- ▶ Providing lunch and/ or porridge for the pupils
- ▶ Providing well equipped playgrounds
- ▶ Providing transport
- ▶ Facilitating end of term exams for Standard eight and seven¹⁷

Since 2001, six secondary school bursaries have been awarded annually; five to the best performing pupils in the LWC-supported primary schools and the sixth to the best performing pupil of the Lewa staff. Selection is done purely on performance (no gender criteria). It is not possible to apply for a bursary, as the LET select the pupils. LET pays all tuition and boarding fees and also assists the student to purchase uniforms and books. According to the LET records they are currently supporting:

- ▶ 46 secondary pupils (15 female; 31 male)
- ▶ Eight college students (four female; four male)
- ▶ Two university students
- ▶ Four primary school students¹⁸

In order to increase conservation awareness, the LET sensitises parents, staff and pupils about the link between the support to the schools and conservation. The Education Officer at LWC sees a clear understanding among the LWC-supported schools that the money they receive comes from wildlife. This opinion was backed up by conversations with the woman's group in Leparua community, where two mothers in the group had received educational support for their children.

In addition, every Friday there is an opportunity for schools from the wider Meru District to come to Lewa for a safari to see wildlife and listen to a talk. LET intends to show videos on conservation activities in the future. The schools have to organise their own transport and lunch and LWC provides the rest.

Finally, from 2003 'Roots and Shoots Clubs' have been introduced to the Lewa-supported schools. This is part of an international initiative started in 1991 by the Jane Goodall Institute and the purpose of these clubs is to encourage young people to address one or more of its three theme areas, which are:

- ▶ Care and concern for the environment
- ▶ Care and concern for wildlife
- ▶ Care and concern for the human community¹⁹

Activities include beautifying their schools by planting trees, and planting vegetables/beans to generate income to fund other activities. Activities can include wildlife visits and talks. At Leparua Primary School the Roots & Shoots Club now has about 60 members and has been partnered with an R&S group in Maryland (USA), who will help fundraise for the Leparua group.

It is not yet possible to gauge the impact of this education work. According to the Education Officer, only one person has gone through the bursary scheme and into employment (as Office Manager in the LWC office in Nairobi). There is no gender consideration given to the allocation of bursaries, nor is there any policy/ strategy on how to address girl child

¹⁷ LWC (2003d). Lewa supported School's Report.

¹⁸ The four primary pupils are selected not on performance but on being disadvantaged and needy (e.g. orphaned).

¹⁹ www.rootsandshoots.org

education in the communities. Finally, the infrastructure improvements do not require any contribution from the parents/ children in the school, which is a missed opportunity in creating greater ownership and commitment to the scheme.

Table 10: Summary of study performance findings, Result 4

Result 4: Community NRM capacity		
Pastoralist natural resources management and institutions sustainably enhanced		
OUTPUT	MAJOR ACHIEVEMENTS	CHALLENGES
4.1 Community institutions and governance strengthened	✓ Ngare Ndare Forest Trust legally established (Nov 2001) ✓ Draft deed establishing Il Ngwesi Community Trust ✓ AGMs held for democratic elections for leadership positions in Il Ngwesi, Namunyak, Lekurruki ✓ Sensitisation on institutional arrangement and governance by CDO	! Representation of women within these structures is very limited. Currently virtually just men in positions of leadership ! Financing is needed to establish and operate new initiatives ! Further work is needed to build institutional capacity, especially on newer initiatives ! Rivalry for leadership positions
4.2 Community management systems improved	✓ Training given on community management roles, responsibilities and accountability mechanisms ✓ Project management systems enhanced at Il Ngwesi ✓ Training in management and accounts	! Community management systems still to be consolidated in more established GRs and firmly established in new ones ! Financial management is still heavily dependent on the support from LWC and Borana Ranch
4.3 Security systems and capacity improved	✓ LWC providing support and assistance to security operation in community areas ✓ Security team strengthened and established ✓ Radios provided and linked with LWC radio network	! Further capacity building of community security teams needed
4.4 Community natural resources management systems and structures enhanced	✓ Institutions established for the management & conservation of NR ✓ GR members fined who break the NRM bylaws in GRs ✓ Establishment of a conservation area zone in Lekurruki ✓ Rhino sanctuary established in Il Ngwesi (2002) with three rhinos successfully managed ✓ Cooperation and coordination on grazing between GRs ✓ Fire ecology project established on Il Ngwesi with support from the LWC Research Department ✓ Northern Rangelands Trust initiative started Dec 2003	! Limited support in developing community NRM provided ! Land use planning is not written down, just in the heads of elders ! Uncertainty about the sizes of the conservation areas and not clearly demarcated on the ground ! Community-based monitoring is not well established and no documentation available on the status of the natural resources ! Livestock issues not addressed by the project
4.5 Conservation awareness and education improved	✓ School visits to LWC on Fridays ✓ Root & Shoots Clubs established in the Lewa supported schools (since 2003) ✓ School infrastructure improved ✓ Secondary school bursaries (around 50)	! No contributions from school parents, which is a missed opportunity for generating ownership/ commitment to the LET scheme ! No gender focus to the education support

C.5 Result 5: Local and national policies supporting wildlife conservation and community livelihoods in semi-arid landscapes influenced and strengthened

This final result was, like Result 4, not part of the original project document, but again the study team felt that it was important in taking a holistic and long-term view to achieving the overall goals of LWC. The evidence for this result has been principally drawn from interviews with the LWC staff and regional/ national stakeholders and the LWC literature.

C.5.1 Output 5.1: Politicians, especially at District level, influenced to support community wildlife initiatives

The support of two senior Government officials has been especially crucial in ensuring that LWC has received political support for its community wildlife and other initiatives - Hon. Francis Ole Kaparo MP (Speaker of the National Assembly) who is Chairman of Il Ngwesi and Lekurruki Group Ranches, and Hon. Sammy Leshore MP (Samburu East Constituency), who is Chairman of NWCT. The involvement of these senior MPs has helped to informally influence at the national level to reform of wildlife and land policy.

However, the literature from LWC focuses on the tourist and donor, and there does not appear to be literature specifically produced for the communities, local, district and national government. In addition there is the potential risk of LWC becoming too political, as land-use and wildlife policy issues are very politically sensitive issues.

There was insufficient time to collect information during the fieldwork as to the work of LWC at the District level. This is an area that needs further clarification.

C.5.2 Output 5.2: Networks and partnership developed to strengthen influence

LWC is an active member of the Laikipia Wildlife Forum, which provides a network of large-scale ranches, 47 community groups (including 13 Group Ranches) and 50 tour operators. LWC has a representative on the Board of Directors of LWF²⁰. The LWF is trying to influence Kenyan land-use policy to prevent the further sub-divisions of land and is currently helping to prepare the Laikipia section of the State of the Environment Report for NEMA (*pers.comm.* Jonathon Moss). Annex 8 lists some of the institutions working in varying capacities with LWC.

The Community Development Manager at LWC has been establishing a dialogue with local and district authorities, albeit not according to any strategic plan aimed at influencing wildlife and land-use policy.

C.5.3 Output 5.3: Wider awareness about the Lewa model promoted

LWC is a very high profile operation, which has been increased through events such as the Safaricom Marathon (see Section C.1.5) and the mass translocation of wildlife to Meru NP in 2003 (see Section C.2.4). Progress has been made through the establishment and significant upgrading of the LWC website and LWC's Newsletters to provide more detail about its operations. Also, a wider audience overseas in Europe and North America is be-

²⁰ LWF (2003). Newsletter

ing reached through regular lecture and promotional trips by senior management and through the work of Lewa USA/ UK/ Hong Kong and the Tusk Trust (see C.1.5).

LWC has a reputation in the region for being a highly professional wildlife management operation, with success in offering quality ecotourism products and in supporting community conservation initiatives. A number of study tours from within Kenya and the region have visited to learn from the successful experiences of LWC. For example in July 2002 community representative from Magadi (a pastoralist area in southern Kenya) visited Il Ngwesi and NWCT to identify key lessons for adapting to their area. In December 2003 a study tour of Ethiopian wildlife managers and decision makers visited LWC, Lekurruki and Il Ngwesi to learn about wildlife-based community enterprises outside of protected areas.

However as mentioned in Output 5.1, the information being disseminated from LWC is more aimed at donors/ tourists and does not generally tackle issues such as land-use and wildlife policy. In addition, there are no reports or articles being produced for more critical scrutiny in academic journals.

Table 11: Summary of study performance findings, Result 5

Result 5: Policy environment		
Local and national policies supporting wildlife conservation and community livelihoods in semi-arid landscapes influenced and strengthened		
OUTPUT	MAJOR ACHIEVEMENTS	CHALLENGES
5.1 Politicians, especially at District level, influenced to support community wildlife initiatives	✓ Senior politicians on the Board of Directors and Trustees for Il Ngwesi, Tassia and Namunyak	! Land-use and wildlife issues are politically sensitive issues
5.2 Networks and partnership developed to strengthen influence	✓ LWC active member of LWF ✓ CDM liaising with local and district authorities	! No strategic plan for identifying and collaborating with partner to influence for change
5.3 Wider awareness about the Lewa model promoted	✓ Website providing detailed information about LWC ✓ Visibility through events (translocation/ marathon) ✓ Regular trips to North America and Europe giving lectures and presentations ✓ LWC USA, UK and Hong Kong further disseminating the 'Lewa model' ✓ TV media filming in LWC and community projects (Survivor II series, BBC) ✓ Study tours from region to learn from LWC successful experiences	! Publications of Lewa model in more rigorous academic journals ! Dissemination of information on LWC does not address policy issues

D. LOCAL LIVELIHOODS CAPITAL ASSESSMENT

This section describes the study team's findings from the local livelihoods capital assessment, the second major approach taken by this case study, which analyses the project's impact on local livelihood capitals for the three livelihood results (Results 3-5). The study team used the **Livelihoods Assessment Framework (LAF)** as the principal means of assessing the project's livelihood impacts, gathering information through the field survey work and community consultations (see Annex 5) on the various indicators of livelihood capitals developed as part of the framework.

The LAF was segmented according to the broader GEF Benefits Study generic categories of improvement to livelihood capital²¹:

- ▶ Improved access to **natural capital**, including plants and animals harvested from the local resource base, surface and ground water, fuelwood, and environmental services such as safe waste disposal and tourism and recreation values.
- ▶ Increased livelihood opportunities, **income and financial capital**, including increases to the productivity of existing and opportunities for new livelihood activities such as farming, fishing or tourism, increases in cash income and improvements to the ability to save or availability of capital.
- ▶ Improved **social capital**, equity and institutional capacities in local communities, including the enhancement of community-level institutional capacities and contact networks and the improved ability in local communities to deal with outside agencies. It also includes improvements to gender and social equity at the local level, especially through the empowerment of women and minority groups in decision-making.
- ▶ Improvements to **physical capital**, including investments in tools and machinery, access to or the ownership of land and buildings and access to infrastructure such as transport, telecommunications or water supply and irrigation.
- ▶ Improvements to **human capital**: the skills, knowledge, work ability and management capabilities of local community members. There is typically a need for a gender focus in this that emphasises issues such as functional literacy and management skills of women.

The livelihood indicators shown in the tables in Annex 5 that are linked to the community consultations (semi-structured interviews and focus groups – see Means of Verification columns) were subsequently incorporated into a series of entry questions and follow-up questions that were used as an interview framework for conducting the community discussions. This interview framework is given in Annex 6.

Clearly, with the relatively short time available for the field studies and community consultations, much of the information gathered on the livelihoods indicators was necessarily of a qualitative nature. Nonetheless, the study team made strong efforts to enrich and justify

²¹ See Annex 2.2 for full details

such observations with firm data wherever possible, as can be seen in the following sections.

In order to distil its field data collection on livelihood indicators into a form which facilitates rapid and transparent assessment of the projects main impacts on local livelihood capitals, the study team has employed a simple rating system in which the achievement of each individual livelihood indicator is rated by the team, based on the field observations and community consultations, on a scale of 5 (very high achievement of livelihood indicator) to 1 (negligible achievement of indicator). For an indicator to be rated at level 5 requires all individuals/ groups interviewed to have identified it as a benefit, whereas a rating of level 1 means that the indicator was not identified by any respondents as a benefit.

Level	Livelihood Indicator Achievement
5	Very high
4	High
3	Moderate
2	Low
1	Negligible

An important caveat is that, although the intention of this methodology is to analyse the contributions of the LWC project towards local livelihood capitals, in reality it has been difficult in the field investigation and analysis time available to properly disaggregate the contributions of other organisations and projects that have been working in these areas. For example, the Borana Ranch has been actively involved in the more recent Tassia Lodge development at Lekurruki Group Ranch. Around Ngare Ndare, although LWC has been taking a lead in fencing the area in 1992, establishing the Ngare Ndare Forest Trust and securing funding from the Ford Foundation, a number of other stakeholders have been playing a very active part including Kisima Farm, Borana Ranch, the Forest Department and KWS.

D.1 Result 3: Economic benefits to local communities from sustainable use of wildlife and natural resources improved

D.1.1 Natural capital

The overall assessment of the impact of the project on natural capital under Result 3 was high, based on the study teams observations during the field visits and the views expressed by the majority of interviews. The breakdown according to the livelihood indicators established for this capital in the livelihoods assessment framework is described below. See Table 13 for a summary of the study team's rating of indicator achievement for both this and following livelihood capitals.

Achievement of the impact indicator "*introduction of wildlife species for community tourism*" was rated as high (level 4). The most important activity contributing to the introduction of wildlife species has been the establishment of the community conservation areas around the tourist lodges in Il Ngwesi, Lekurruki and Namunyak, which are patrolled daily by community scouts and where livestock are prohibited from entering. This has led to an increase in wildlife numbers in these conservation areas (according to community consultations, although no firm data was available to back this up). Table 12 below gives the total areas for the Group Ranches visited by the study team where LWC-supported community tourism initiatives are operating. In addition, the size of the conservation areas and number of community guards employed to patrol the conservation area is given. There

does not seem to be a firm consensus on the size of these conservation areas within these group ranches²².

Table 12: Group Ranch sizes and security

Location	Total GR Area (hectares)	Conservation Area (hectares)	Armed community wildlife guards (KPR)	Community scouts
Il Ngwesi GR	9,741	~7,650	7	3
Namunyak Wildlife Conservation Trust	73,850	~30,000	13	4
Lekurruki GR	11,953	~850	7	3

Source LWC Community Development Office

Efforts are being made to link the conservation areas detailed in Table 12 with other regional protected areas to allow for the migration of wildlife, which will allow all these conservation areas to support more wildlife in the long term. Figure 4 in section C.2 shows the three group ranches in which the conservation areas are located. LWC and Ngare Ndare Forest, since 1992, have been protected by an electric fence with a small gap to the north to allow wildlife to migrate in and out. The other community areas of Sera and Kalama are in the early stages of collaborating with LWC to establish and protect conservation areas. For practical reasons of time and resources, these communities were not visited during the fieldwork component of the study.

Around the tourism lodges in Il Ngwesi, Namunyak and Lekurruki, the community management described efforts that have been made to promote wildlife viewing for tourists. For example, close to these lodges are wildlife watering holes and in Il Ngwesi a guarded rhino enclosure, as mentioned in section C.3.1. Il Ngwesi has also started to experiment with burning to increase the amount of grassland for easier wildlife viewing (see section C.4.4).

However, at this early stage in the initiative, there is no rigorous system for monitoring and managing the wildlife in these conservation areas. Also, due to the high concentration of shrubs and trees in the conservation areas of Il Ngwesi and Lekurruki, wildlife is not that easy to view. Consequently the visitors to Il Ngwesi and Lekurruki Group Ranches are taken on wildlife game drives in LWC.

Achievement of the impact indicator “*decreased pressure on natural resources through the provision of alternative IGAs*” was rated as moderate (3). Tourism, as an alternative income earner, has led to reduced pressure on the natural resources within the designated conservation areas of Il Ngwesi, Lekurruki and Namunyak. Although the study team observed that the conservation areas were visibly more vegetated to the surrounding areas, without any ecological baselines it is not possible to quantify this impact. However, there is no evidence that the establishment of these conservation areas has reduced the number of livestock owned by the community or the need for pasture and water. During the community consultations, elders in Il Ngwesi and Lekurruki stated that since the establishment of the conservation areas they graze their livestock in alternative areas. Therefore, the establishment of the conservation areas is perhaps shifting the pressure on natural resources rather than reducing it. This relates to the argument presented in section C.4.4 for the low opportunity costs of setting aside the community land for conservation and the missed opportunity during the GEF project for not addressing livestock issues.

²² For example, some members of the NWCT Board of Trustees defined the conservation area as only 13 acres.

Table 13: Assessment of Project Impacts on Local Livelihood Capitals under Result 3: Local Economic Benefits

CAPITAL	IMPACT INDICATOR	Magnitude of impact					Gender		
		5	4	3	2	1	M	M/F	F
NATURAL	Introduction of wildlife species for tourism								
	Decreased pressure on natural resources through the provision of alternative IGAs								
	Improved utilisation of local resource base								
	Increase biodiversity values								
	OVERALL FOR NATURAL CAPITAL								
FINANCIAL	Jobs provided with LWC & community enterprises (from tourism)								
	Dividends provided to GR members from tourism								
	Business plan developed for Lodges								
	Increased availability of capital and the ability to save from IGAs								
	Increased income opportunities (IGAs) for disadvantaged members of society								
	More constant income flows year round								
	Maintained / improved income from livestock (due to increase in security)								
SOCIAL	OVERALL FOR FINANCIAL CAPITAL								
	Increased security from Lodge presence								
	Improved networks and communication channels with outside agencies								
	Improved cooperation with LWC/ Borana Ranch								
	Improved social cohesion 'sense of community'								
	Enhanced capacity to address priority social needs equitably								
	Enhanced cooperation & conflict resolution between Group Ranches								
	Increased experience sharing between Group Ranches								
	Stronger community-based organisations in implementing & supporting IGAs								
	Improved knowledge and increased access to markets for IGAs								
PHYSICAL	OVERALL FOR SOCIAL & INSTITUTIONAL CAPITAL								
	Improved roads and access								
	Improved health infrastructure								
	Improved access to transport								
	Improved water supply - for human & livestock consumption??								
HUMAN	OVERALL FOR PHYSICAL CAPITAL								
	Improved skills and training for tourism activities and lodge management								
	Improved business management capability								
	Enhanced wildlife related management capacity								
	Improved capacity to undertake income generating activities								
	Enhanced motivation & confidence in undertaking enterprises								
	OVERALL FOR HUMAN CAPITAL								

Other than tourism, few conservation-compatible IGAs have been supported at Il Ngwesi, Lekurruki or Namunyak. In Namunyak, community members collect the dead wood from the conservation area and then sell it by the lorry load. In 2002, this generated around Kshs 360,000. Table 14 below lists the IGAs that the member interviewed at Namunyak Group Ranch and the Ngare Ndare CBO identified as being considered in the future, if support and funding is provided (c.f. C.3.2).

Table 14: Potential IGAs in Group Ranches and Ngare Ndare CBO

Location	IGA
Namunyak	Bottling spring water
	Bird shooting
	Rock climbing (tourism)
	Honey production
	Tree products
	Butterfly farming
Ngare Ndare Forest	Honey
	Medicinal products from indigenous trees/ plant

Community Based Organisations (CBOs) have been established in each of the five bordering communities surrounding the Ngare Ndare Forest. Each CBO has in turn supported the establishment of approximately 10 independently operating resource user groups, with the main purpose of developing conservation-compatible IGAs (*pers. comm.* NNFT Manager). Table 15 overpage provides information on the 11 resource user groups that the Ngare Ndare CBO has helped to establish and register, which were described to the study team by the CBO Chairman and Secretary. The study team were also able to interview the Chairlady and an ordinary member of the Women Fuel Collectors group.

Many of these user groups described above for Ngare Ndare CBO are recently formed and have yet to start generating income from their activities. Most of the activities operate outside of the protected forest area, with the effect of providing substitutes for the forest resources (e.g. Zero Grazing group and Tumaini Tree Nursery). Only the Women Fuel Collectors and the Beekeeping group would require sustainable utilisation of the forest products (if/ when controlled access is permitted again, as discussed below).

Achievement of the impact indicator for “*improved utilisation of local resource base*” was rated as high, because the establishment of the conservation areas have widely been considered (by community members as well as regional stakeholders interviewed) to have resulted in better management of the natural resources, with the apparent regeneration of vegetation in the conservation area, which in drought seasons can be used as emergency graze. Also the conservation areas are supporting the protection of natural water springs (as identified by both the morans and women at Lekurruki GR).

However, improved utilisation of the local resource base in the communities around the Ngare Ndare Forest is still something to be achieved. In the Ngare Ndare CBO, the user groups, as listed in Table 15, have been established to better utilise the local resource base, however these groups are not functioning well and many are waiting for funding to commence operations as highlighted by the Ngare Ndare CBO Chairman and elders. The NNFT Manager and LWC Management also identified clashes between the various ethnic groups as a major reason for progress being hindered. To compound this situation the Government's total ban on any form of exploitation of state forests in October 2003 has also prevented a few of the user groups from sustainably harvesting/ utilising the forest products as they proposed. One elder at Ngare Ndare stated that although they see the importance of conserving the forest, the current situation means that they are struggling to

meet their resource needs, for example the lack of accessible firewood has led some households to burn wooden chairs for fuel.

Table 15: User Groups in Ngare Ndare CBO

Group name/ purpose	~Members numbers	~ Date started	Description
1) Zero Grazing , animal husbandry	30	Dec 2002	With government restrictions it is not safe/ possible to graze in the forest. Therefore they cut grass and bail indigenous (Napier) grass for cattle fodder.
2) Women Fuel Collectors	90	April 2003	The original idea was to sustainably harvest fuel wood from the forest but the Government closed all forest access in October 2003. Also planning to sell fuel-efficient cookers (jikos) with support from NNFT Manager. In order to generate income they are raising hybrid dairy goat for milk (assistance from Borana Ranch).
3) Munyonyoko , soil conservation	30	Dec 2002	Have tree nursery to conserve soil on farms. Also dig 2 ft by 2ft trenches along contours and plant trees inside. Between these trenches they plant food crops.
4) Tumaini Tree Nursery	40	Dec 2000	Harvest seeds from forest and are also given some by NNFT and Borana
5) Ngare Ndare Water Project	450	1973	Every farmer in Ngare Ndare is a member. Before the project water ran in furrows but the government requires water to be transported through piping. So far 50% of work is done but piping very expensive and requires technical support to install.
6) Pole Pole Water	30	June 2003	This village group is working to ensure a supply of water
7) Thamana , horticulture	40	Dec 2002	Horticulture, growing onions, garlic, tomato to sell to urban market as far away as Mombasa
8) Mwiteithia , agriculture	50	Dec 2001	Agriculture. Growing maize and beans for subsistence
9) Muguna , Bee keeping	30	June 2002	Bee keeping group. Using traditional system they put beehives in the trees and sell honey to the local community. Once they obtain technical advice they want to convert to modern hives
10) Matangi , Water harvesting	30	Dec 2002	Construct black plastic tanks in each household to collect rainwater, waiting for funding
11) Naningoi , Women's small business	18	Dec 1999	They have a plot for a posho (maize) mill. Set up as a Merry-go-round (revolving credit), with a vote taken to decide which women to give the money to.

Achievement of the impact indicator for “*increased biodiversity values*” was also rated as high (4). The wide cross-section of communities interviewed in Il Ngwesi and Lekurruki all stated that they appreciate the conservation areas established in their group ranches and due to the benefits they receive they would not consider returning to live and graze there. This attitude seems to have been a direct result of the establishment of the lodge because many community members interviewed stated that when their elders first suggested vacating the area for a tourism lodge and wildlife, they were very reluctant and sceptical.

In the Ngare Ndare community bordering the state forest, there was a high level of awareness amongst the community members interviewed about the importance of the forest and its preservation. The Ngare Ndare Forest Trust and its associated promoters (Forestry Department, LWC, Borana and others) have done a great deal of work sensitising

the communities there, through a series of workshops. However, the elders in Ngare Ndare had clear expectations that they will receive benefits from conservation, but they do not consider these to have materialised yet.

D.1.2 Financial capital

The overall assessment of the impact of the project on financial capital under Result 3 was high. The breakdown according to the indicators was as follows.

Achievement of the impact indicator for “jobs provided with LWC & community enterprises (tourism)” was rated as high (level 4). At the tourism lodges in Il Ngwesi, Lekurruki and Namunyak, there are a small number of permanent employees on the payroll, as described in the three tables below. Although the number of permanent positions provided amounts to only 0.5% of the total population of the Group Ranches, it is still regarded as an important earner by the vast majority of GR members interviewed, especially considering the scarcity of employment opportunities and the large size of the households that benefit from these salaries.

Table 16: Il Ngwesi Lodge employment

Employment	Numbers	
	m	f
Total staff (on lodge payroll)	20	1
Security (not on lodge payroll)	10	-
Population of GR	~6,000 (448 households)	
Percentage employed	0.5%	

Data was not available during the main fieldwork on the Il Ngwesi lodge salaries by position. However, the total staff on the payroll was 21, with only one of these being a woman (and she was also the only employee not a member of the GR). The security, as with at Tassia described below, are not on the payroll of the Lodge operations.

Table 17: Tassia Lodge employment

Employment	Numbers		Salaries October 2003 Kshs/ day
	m	f	
Manager	1	-	195
Deputy Manager	1	-	184
Tour Guide (Samburu)	1	-	214
Plumber/ Pool attendant	1	-	152
Store man	1	-	147
Chef (Meru)	1	-	328
Assistant chef	1	-	136
Senior waiter	1	-	147
Waiter	1	-	136
Room Stewards	4	-	138
Laundry	-	2	136
Night watchmen	2	-	136
Armed security	6	-	Not on Lodge payroll
Driver	1	-	Not on Lodge payroll
GR Secretary	1	-	5,000 (per month)
TOTAL	23	2	104,001 (net, for month)
Population of GR	~6,000 (~500 households)		
Percentage employed	0.4%		

The above table for Tassia Lodge in Lekurruki GR shows the number of employees on the payroll in October 2003. The armed security and driver are not on the payroll, but have been included because they work at the Lodge and escort the Lodge visitors on excursions within the conservation areas. A high proportion of the 25 employees are members of the Group Ranch with just the Tour Guide and Head Chef from outside, due to the lack of a suitably trained GR member to do these tasks.

Table 18: Sarara Tented Camp employment

Employment	Numbers
Project Manager	1
Lodge	14
Game Scouts	18 (13 KPR)
Guards, Wamba town HQ	3
Radio operators	2
Driver	1
TOTAL	39
Population of the two GRs	~8,500 (~1,300 households)
Percentage employed	0.46%

It was not possible to get a detailed breakdown on the salaries or gender of the employees at Sarara Tented Camp during the main fieldwork phase. However, the number employed presents a similar percentage of the total number of NWCT members registered as in the other group ranches.

In addition to the permanent employees, there are other associated employment opportunities arising from the Lodges. For example, during the discussion with the young women from Lekurruki GR, several said that they occasionally go to dance for the Lodge visitors. There is also the general construction and maintenance that is required to upkeep the Lodge. For example, in the payroll for Tassia Lodge in October, five workers were employed for the construction of staff accommodation. In Il Ngwesi, there is the Cultural Boma, which brings in US\$20 per visitor, where a number of community members demonstrate cultural practices and other members make local handicrafts to sell to the tourists.

Achievement of the impact indicator for “*dividends provided to GR members from tourism*” was rated as negligible (level 1), with little evidence of individual dividends being given to group ranch members. After the expenses of the lodge operations have been covered, the lodge profits are spent on agreed-upon community development activities. Although from this spending individuals may benefit through education bursaries. Also an individual may benefit from the sale of handicrafts at the Cultural Boma.

Achievement of the impact indicator for “*business plan developed for Lodges*” was rated as high (level 4), although different Lodges were at different stages in this process. Il Ngwesi Lodge is widely considered to be at the most advanced stage. In March 2000, Improve Your Business-Kenya facilitated a Strategic Planning Workshop for Il Ngwesi GR, which developed two strategies to firstly improve marketing and secondly to enhance management capacity (Il Ngwesi, 2000). In 2003, a voluntary independent consultant, Jane Bromley, spent several months at Il Ngwesi and from this was produced the 2003-2007 Business Plan (Il Ngwesi, 2003). Sarara Tented Camp also has a business plan, although the study team did not get an opportunity to see it.

Achievement of the impact indicator for “*increased availability of capital and the ability to save from IGAs*” was rated low (level 2). In Lekurruki, Il Ngwesi and Namunyak, income at the household level chiefly comes from the sale of livestock when required. The study team was told of very few income-generating activities being practiced outside of the Lodge operations. One example was collecting dead wood in Namunyak, with the profits being spent by the NWCT on community projects (section D.1.1). Agriculture is practised on a very small scale, mainly for subsistence purposes only. From the consultations with members of Il Ngwesi only one respondent (Irrngaruan village) stated that he sells onions, which his family grown on the riverside.

Outside of the group ranches, there has been more progress in establishing groups to undertake IGAs. A few women's groups have been supported by LWC, including the Jane and Jikoni Women's Group around the borders of LWC and Umoja Uwaso Women's Group around Archer's Post (see Table 19 below). However, on speaking to the Jane and Jikoni Women's Group, their activities to date have not generated much income and most of their money in the bank was received from *each member's regular contributions or donations from visiting tourists at LWC*. The money that each woman contributes to the group is mainly generated from practicing agriculture on their individual plots of land. Depending on the harvest, they contribute between 5 and 10% of the income earned from the sale of these crops (e.g. wheat, potatoes, maize and beans).

Table 19: LWC supported Women's Groups

Women Group	Jane	Jikoni	Umoja Uwaso
Location	Around LWC (members are wives of LWC staff)	Members live between 2 and 5 kms of the LWC border	Archer's Post
Formed	1992	1997	Early 1990s
Members	28	26	48
Contribution (Kshs)	20 (per meeting)	150 (per meeting)	?

Achievement of the impact indicator for “*maintained/ improved income from livestock*” was rated as high (level 4). In Namunyak, Il Ngwesi and Lekurruki communities reported that security situation had improved dramatically since the beginning of the project. Although security is primarily to assist wildlife protection and prevent poaching, the socio-economic benefit has been realised through the elimination of livestock rustling by Somali 'shiftas'. This has allowed people to accumulate / maintain livestock (money on the hoof) to meet household needs more effectively.

Achievement of the impact indicator for “*Increased income opportunities (IGAs) for disadvantaged members of society*” was rated as low (level 2). From the community meetings the study team held with the IGA women's groups mentioned in Table 20, the representatives all owned individual plots of land where they practiced agriculture and the level of education of their children was high, with most of their children having been through secondary school. Most of those interviewed also had a good level of English. However, in the group ranches where pastoralism is the main livelihood strategy, the tourism lodge operations were really the only income-generating activity. However, these operations generally picked the more able and educated members of the group ranch and all the senior positions were for men (see Tables 16-18). As identified in section C.4.4, there is a missed opportunity in the GEF project of improving pastoralism activities in these areas. During conversations with women's group in Il Ngwesi and Lekurruki, there was no evidence of organised IGAs that they were involved in.

Table 20: Income generated by women's groups

Name	Activity	Estimated income (kshs)	Comment
Jane	Safaricom Marathon catering	10,000	Every year since marathon started
Jane	Honey	500 (per 5 kgs)	Have two bee-hives, since 2001, although failed to get a harvest yet
Jane	Second Hand Clothes Shop	Sales have been low	Initial capital came from a Kshs 20,000 donation from LWC tourist
Jane	Clothes shop (clothes to be made by hired tailor on Machine they have bought)	Not started	Initial capital came from a Kshs 70,000 donation from LWC tourist
Jikoni	Honey	500 (per 5 kgs). First harvest produced 15-20 Kgs, which sold to Charlie Wheeler in November 2003, but waiting for money	They have five bee-hives, four paid by group contributions and one from LWC
Fuel Collectors (Ngare Ndare)	He-goat for breeding	Kshs 150 per time	So popular they have to limit his use!

Achievement of the impact indicator for "*more constant income flows year round*" was rated moderate. Again the lodges are providing income throughout the year. However, numbers are very low in the wet season months of November, April and May, and tourism is unpredictable and sensitive to outside factors such as travel advisories from Europe and USA against visiting Kenya (see section C.3.1).

D.1.3 Social and institutional capital

The overall assessment of the impact of the project on social and institutional capital under Result 3 was high. The breakdown according to the indicators was as follows.

Achievement of the impact indicator for "*increased security from Lodge presence*" was rated as high (level 4). The number of security guards for the conservation areas is given in Table 12. These security operations are very much linked with the Lodge and ensuring the security of the visitors. In the community consultations in Lekurruki and Il Ngwesi, one of the main benefits of the Lodge and surrounding conservation area has been the improvement in security. However, the improved security is a result of a number of factors, which include the support provided by LWC with the radio network (with KWS and others), and the quick response time from LWC security (with aircraft and tracker dogs where required) in the case of problems.

Achievement of the impact indicator for "*improved networks and communication channels with outside agencies*" was rated as high (level 4), as even though the lodges are in very remote places, the levels of communication with LWC and the Nairobi-based tour operators is very efficient. However, a great deal of the communications is done through LWC, especially with the donor community, rather than directly with the outside agencies themselves. This has been a widely held complaint concerning the GEF funding, where communities did not feel that they have been consulted sufficiently in the project design and consequently lacked ownership of the process. During a focus group discussion at

Sereolipi (Namunyak), some members stated that they would certainly want to be more involved in the design of any future proposal by LWC for GEF funds, whilst others felt that they would prefer NWCT to apply independently of LWC.

Achievement of the impact indicator for “*improved cooperation with LWC/ Borana Ranch*” was given a high rating (level 4), with all respondents in the community consultations speaking positively about the cooperation with LWC and Borana. The cooperation on issues of security was universally highlighted in the community consultations, with LWC providing and manning the 24-hour radio network support, providing training, as well as assistance from their own security force in the case of serious security issues.

Senior staff members from both LWC and Borana have been instrumental in providing advice and technical support to the various group ranches in developing the tourism and conservation initiatives. The value that the community give to this support is attested by their request that these staff members remain on a number of GR Committees, despite their offers to resign. Table 21 below lists a few of these participations.

Table 21: LWC/ Borana participation on GR Committees

Position	Committees/ Boards
Executive Director, LWC	Il Ngwesi Board of Directors Tassia Lodge, Lekurruki GR NWCT Board of Trustees
Community Development Manager, LWC	Ngare Ndare Forest Board of Trustees
Director, Borana Ranch	Ngare Ndare Forest Board of Trustees Tassia Lodge, Lekurruki GR

Achievement of the impact indicator for “*improved social cohesion 'sense of community'*” was rated high (level 4). The establishment of the lodges in the group ranches has required a large involvement of the community, and has become a focus point for the GR's identity. To start with the elders had to call the community together to gain their consent to set aside GR land for a lodge and wildlife area. In the case of Il Ngwesi, it was fortunate that the GR is comparatively homogeneous with strong traditional leadership, as otherwise it would have been difficult to persuade the community to give up grazing land, without any local success stories to justify the venture.

Every GR member is a shareholder in the lodges and has a degree of ownership. This sense of ownership has been increased with the active participation of many members in establishing the Lodges. Whilst building the lodges a majority of the labour was provided by the young men of the GRs, fed and supported by the community. Now that Il Ngwesi, Tassia Lodge and Sarara are established less than one percent of the GR are directly employed, however, in the community consultations there was still a high level of identity with the Lodge and appreciation for the benefits it generates to the community.

One example of the high level of social cohesion related to the Lodge establishment is when the community from Lekurruki GR approached Borana Ranch for support in writing a proposal for securing funds for the building of a Lodge on the lines of Il Ngwesi. Borana Ranch put a condition that the community build a road from the Andanguru Plains down to the proposed site for the lodge. Borana Ranch provided a large number of hand hoes, and young men from the community (estimated at 100 by the Tassia Manager) provided their labour freely to build this road and were fed by the community.

Achievement of the impact indicator for “*enhanced capacity to address priority social needs equitably*” was given a moderate rating (level 3). The spending of the Lodge profits

on community development activities is probably the best and only way to distribute the profits of the lodge equitably. Much of the Lodge profits have been spent on primary school infrastructure and secondary school bursaries, which was generally regarded as a priority issue for the communities, as the importance of education was stressed in virtually all of the community consultations, by both elders, warriors and women.

However, little had been done to address the principal livelihood strategy of pastoralism and ways of marketing livestock. In the FGDs with women, it was consistently stated that the men are the only ones involved in the management of the Lodges and Group Ranches and that they as women have no influence in decision-making. In the Leparua community FGD, the women mentioned that they wanted to form self-help groups, but the men did not allow them to participate in such groups, because their men believe that they might be badly influenced or even become unmanageable. This calls into question how adequately the male leadership and decision-makers consider the women's needs and voice.

Achievement of the impact indicator for *“enhanced cooperation & conflict resolution between Group Ranches”* was given a high rating (level 4). The four neighbouring group ranches of Kuri Kuri, Lekurruki, Il Ngwesi and Makurian, which border the Mukogodo Forest, have had a history of working and cooperating together. According to the women's focus group at Lekurruki, morans from each of these GRs would work together as a team to provide security against cattle rustlers from Samburu and further afield. However, since the LWC project has been operating, the community have Motorola radios and have linked up to the LWC radio system. This has led to better and more efficient sharing of knowledge between the GRs on security matters and helped with conflict resolution. But it has meant that the morans do not need to spend time on security, which the young women felt was good as it meant that the morans could go to school.

Achievement of the impact indicator for *“increased experience sharing between Group Ranches”* was given a high rating (level 4). At the initiation of Il Ngwesi, Namunyak and Lekurruki tourism initiatives, one of the first steps in the process were cross visits to already established GR community tourism initiatives elsewhere in Kenya (around the Ma-sai Mara and near Mombasa). The elders in all three communities specified that these cross-visits were very important in deciding to initiate a lodge/ conservation area on their GRs. According to the Director of CETRAD (Boniface Kiteme), Il Ngwesi Lodge has become a model in Laikipia and further afield for taking GR communities considering starting similar initiatives. This was backed up by the meeting with the elders from Lekurruki GR, who stated that a key influence in deciding to undertake setting up a conservation area and lodge was through Il Ngwesi sharing their experience and visiting their Lodge.

Achievement of the impact indicator for *“stronger community-based organisations in implementing & supporting income generating schemes”* was given a low rating (level 2). The only success in this respect was around Ngare Ndare Forest Reserve, where CBOs have been established in five bordering communities to oversee a number of resource user groups, whose focus is IGAs around forest products, water and agriculture (see Table 10). However further technical assistance and funding is required to make these groups fully functional. In the group ranches there were no examples of CBOs acting in such a capacity.

Achievement of the impact indicator for *“improved knowledge and increased access to markets for IGAs”* was given a low rating (level 2). The lack of readily accessible markets seems to be a major stumbling block to the development of IGAs in the difficult to access and remote group ranches. There has been some awareness created of potential products that could be marketed outside, such as bottled spring water in Namunyak, but no knowledge on the next steps to marketing this idea. The only products that were being sold in the GRs, notably honey and livestock, were being sold locally.

D.1.4 Physical capital

The overall assessment of the impact of the project on physical capital under Result 3 was high. The breakdown according to the indicators is described below.

Achievement of the impact indicator for *“improved roads and access”* was given a moderate rating. All the group ranch tourist lodges are located along dirt road and require good 4WD vehicles to be reached, as experienced by the study team. There are a few steep sections that are susceptible to damage during the rainy seasons.

However, the community have made efforts to maintain these roads. On the road up to the Andanguru Plains from Il Ngwesi, it was observed by the study team that the community members had done extensive work to fill in a section destroyed by the rains. Also before starting Tassia Lodge the community mobilised themselves to renovate an old colonial road up onto the Andanguru Plains, as stated in section D.1.3 (although the study team would not volunteer to drive it again!).

Achievement of the impact indicator for *“improved health infrastructure”* was given a low rating (level 2). The only work in this respect has been the Lewa Clinic, which was established prior to the project in 1996 and according to the Community Development Office is very basic with no electricity (although the study team did not visit it). It provides services to staff of LWC and their families, with care also being extended to the Lewa supported schools and nearby communities that Lewa supports, such as Il Ngwesi, Leparua and Ngare Ndare. The total number of community beneficiaries is estimated at 4,150 (LWC promotional material), however none of the communities interviewed mentioned the Lewa Clinic as a place where they access services.

Achievement of the impact indicator for *“improved access to transport”* was given a moderate rating (level 3). All the lodges visited by the study team have at least one vehicle, which when it is not being used for the lodge purposes, provides services to the communities. Many of the communities mentioned the benefits of the lodge vehicle in case of serious illnesses, whereby transport can be provided to the nearest clinic or hospital in Isiolo or Timau. A fee is usually charged, which can be paid later through the sale of livestock.

Achievement of the impact indicator for *“improved water supply - for human & livestock consumption”* was given a low rating (level 2) with no initiatives being implemented in the group ranches visited. However, in the more agricultural areas around Lewa a couple of water projects have been initiated. Firstly in Rugusu Springs Project, which was located at a site where livestock used to water directly from the springs source, causing communities downstream to suffer from water borne diseases. The project, completed in 2003, successfully separated the cattle watering from domestic use and created a washing area and toilet. The second project is the Mutunyi Irrigation Scheme (funding from CDTF/BCP), which has involved the digging a 17 km trench for piping to bring irrigation water to the farms. Both these projects were not visited by the study team but outlined by the Lewa CDM and in the LWC Newsletters and website.

D.1.5 Human capital

The overall assessment of the impact of the project on human capital under Result 3 was high. The breakdown according to the indicators is described below.

Achievement of the impact indicator for *“improved skills and training for tourism activities and lodge management”* was given a high rating (level 4), with many of the lodge management receiving short training courses on issues ranging from driving, cooking, hotel management, accounting, pool management, security and wildlife management (see Ta-

ble 6 for details of some of the training sponsored by GEF funds). However, both the Lewa CDM and GEF Committee identified that there is still a requirement for further training to improve the service offered to guests, if visitors are to continue to come in the long term. Most of the positions in the day to day running of the lodges are from the community, however there are a few positions that require skills not yet present. At Tassia Lodge the Head Chef is Meru and the Tour Guide is Samburu (see Table 17).

At Il Ngwesi, the skills are increasing in the lodge and now there is only one non-member on the staff (Table 16). As a result, Il Ngwesi is now able to offer fully catered accommodation, which brings in significantly higher revenues than self-catering accommodation (see Table 22 below).

Table 22: Non-residents rates for staying at Il Ngwesi Lodge

Self Catering	Fully Catered
Fully staffed with exclusive use of lodge	Non-exclusive. Rate per person
US\$ 385 for whole lodge/ night	US\$ 190 per person per night (min. 2 persons)
	US\$ 95 per child (2-12) per night

Source: Il Ngwesi (2003) – Business Plan

Achievement of the impact indicator for “*improved business management capability*” was also given a high rating (level 4) with capacity improved through training courses. At Il Ngwesi they have conducted a strategic planning workshop (2000) and with the assistance of an outside consultant developed a business plan for 2003-2007 (see section D.1.2). However, although capacity is improved, there is still a long way to go before the group ranches will be able to stand apart from the support of LWC and other supporting groups.

Achievement of the impact indicator for “*enhanced wildlife related management capacity*” was given a moderate rating (level 3). The head of security at Il Ngwesi has received training both in South Africa and by LWC. The good level of management capacity reached is demonstrated by the fact that one Black rhino (2002) and two White rhino (2003) have been translocated from LWC to a rhino sanctuary, which is located next to the lodge. However, the management capacity in the newer initiative of Lekurruki was not so high, as identified by previous visitors (see section C.3.1) and from the study team’s conversations with the Management. The obtaining of KPR status, which provides a mandate to arrest poachers and carry firearms, and radio equipment for communications, has helped to increase the capacity of the community to provide security for the wildlife.

The Grevy’s zebra monitoring programme has built capacity in wildlife monitoring and built understanding of their ecology. According to the LWC Research Department, six women and three men have been employed to work on a part-time basis to monitor three separate sub-populations. In addition to this, two men have been employed full-time to track two separate Grevy’s zebras, provided with training and equipment. (c.f. section C.2.2)

Achievement of the impact indicator for “*improved capacity to undertake income generating activities*” was given a low rating (level 2), as communities in the group ranches have not started any significant IGAs. In the FGDs in Lekurruki and Il Ngwesi, money was raised through selling either livestock or honey on an ad hoc basis, to meet their immediate need. In the more agricultural areas around LWC, two women’s groups have been supported to start income generating activities, however these have not been successful in generating much income from their activities. The main income source for these groups has been through the individual members regular contributions, which have been pooled to buy resources (see Tables 19 & 20). The hay-bailing project recently started at LWC in

late 2003, involves support to a young group of men living beside LWC, however it is too early to assess how successful in generating income this IGA will be.

Achievement of the impact indicator for “*enhanced motivation & confidence in undertaking enterprises*” concern was rated as high (level 4). The effect of the tourism development through the lodges and associated activities has greatly increased the motivation of the communities and confidence in their abilities to undertake enterprises. This was especially the case in Namunyak. However, there were still sections of the community (especially women) who did not have the confidence or approval by the men of the household to develop any IGAs or such (household and women interviews at Leparua, Il Ngwesi). Also the Ngare Ndare CBO Chairman identified that a number of their user groups were still looking to outside assistance to develop and move the IGAs forward, rather than taking the initiatives themselves.

D.1.6 Equity & gender aspects

As can be seen from the above analysis, many of the livelihood impacts of this result are benefiting the men in the community rather than the women. In Il Ngwesi Lodge only one out of the 21 staff are women, and in Tassia Lodge it is only two woman out of 25 staff (see Table 16 and 17).

There has however been more female participation in the more agricultural areas surrounding Lewa, where a number of women's groups have been established in the Ngare Ndare CBO (Table 15), and secondly woman participation has been high in the Grevy's zebra monitoring project (see section D.1.5), which has been initiated by LWC. Out of the eleven employed, six are women from the communities. Also a number of women's groups have been supported around the border of LWC (Jane and Jikoni women groups) and in Ngare Ndare CBO.

D.2 Result 4: Pastoralist natural resources management and institutions sustainably enhanced

The following measures of the impacts on pastoralist NRM practices and institutions, unless otherwise stated are based on the fieldwork carried out in Lekurruki and Il Ngwesi Group Ranches.

D.2.1 Natural capital

The overall assessment of the impact of the project on natural capital under Result 4 was moderate (see Table 23). The breakdown according to the indicators is described below.

Achievement of the impact indicator for “*increased/ stabilised plant and wildlife populations through security*” was rated as high (level 4). Evidence for this impact came through opinions stated by communities and other local stakeholders. The perceptions by all interviewed were that wildlife had moved into the established conservation areas and the security guards questioned noted that they were sighting more wildlife. In addition, both the GR elders and LWC reported that poaching incidences were no longer occurring in Il Ngwesi and Lekurruki. Although there was no documented evidence from the group ranch records available to back up these claims, the radio collaring of elephants by the NGO Save the Elephants does show that Il Ngwesi, Lekurruki and Namunyak have become

Table 23: Assessment of Project Impacts on Local Livelihood Capitals under Result 4: Community NRM capacity

CAPITAL	IMPACT INDICATOR	Magnitude of impact					Gender		
		5	4	3	2	1	M	M/F	F
NATURAL	Increased/ stabilised plant and wildlife populations through security								
	Stable populations of livestock through increased security								
	Increased availability of dry season (emergency) pasture for livestock (goats & cattle) in conservancy areas								
	Establishment of land use management plans indicating lesser conflict between wildlife, livestock and agricultural motivations								
	Improved conservation of key natural resources								
	Differences in flora and fauna between areas with land use plans and those without								
	Decreased degradation of natural resources through livestock overstocking and poor animal husbandry practices								
	Increased livestock productivity								
	Increased key wildlife populations								
FINANCIAL	OVERALL FOR NATURAL CAPITAL								
	Improved equitability & transparency in distributions of benefits								
	Increased income flows from livestock husbandry								
	Employment opportunities from security activities								
	More stable/ enhanced income streams from livestock management								
	Increased earning capacity of community from education								
SOCIAL	OVERALL FOR FINANCIAL CAPITAL								
	Improved governance & management of community institutions								
	Enhanced access to governance for grassroots levels								
	Equitable access to governance for men, women and disadvantaged groups								
	Improved definitions of institutional roles & responsibilities								
	Stronger legal foundation for community-based NRM								
	Improved facilitation of social interactions through radio networks and Group Ranch administration								
	Enhanced institutional capacity to manage natural resources								
	Enhanced community capacity to identify community resource management needs and constraints								
	Enhanced community capacity to prescribe & enforce NRM requirements (bylaws)								
	Enhanced community capacity to monitor natural resource uses								

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CAPITAL	IMPACT INDICATOR	Magnitude of impact					Gender		
		5	4	3	2	1	M	M/F	F
	Increased cooperation between communities over land use								
	OVERALL FOR SOCIAL & INSTITUTIONAL CAPITAL								
PHYSICAL	Improved community offices and supporting infrastructure								
	Improved telecommunication systems								
	Clear demarcation of Group Ranches and different land use areas on the ground								
	Improved school infrastructure								
	OVERALL FOR PHYSICAL CAPITAL								
HUMAN	Strengthened capacity to participate in community government structures								
	Strengthened understanding and capacity to participate in democratic institutions								
	Enhanced management & accounting capacity								
	Increased confidence and capacity of community members in law enforcement								
	Increased capacity of grassroots members to participate in NRM								
	Increased awareness of the complementarity between wildlife conservation and pastoralism								
	OVERALL FOR HUMAN CAPITAL								

havens for elephant populations. Regarding vegetation it was generally considered that bush cover has increased in the conservation areas. The observations made by the study team in the conservation areas seemed to support these views.

Achievement of the impact indicator for *“stable populations of livestock through increased security”* was rated as high (level 4). According to the elders, male GR members and LWC Security Department, the increased security has dramatically reduced the incidences of cattle rustling and this has allowed for stable populations of livestock.

Achievement of the impact indicator for *“Increased availability of dry season (emergency) pasture for livestock (goats & cattle) in conservancy areas”* was rated as high (level 4). Both in Lekurruki and Il Ngwesi, elders stated that during droughts, parts of the conservation area furthest from the lodges were opened up for use. Many of the men and women interviewed in the communities considered the conservation area as an important bank or reserve of fodder.

Achievement of the impact indicator for *“establishment of land-use management plans indicating lesser conflict between wildlife, livestock and agricultural motivations”* was rated as moderate (level 3). The elders make the decisions about grazing patterns for livestock and the areas for wildlife have been designated in the GR constitutions. However, there are no written land-use management plans, and when the study team enquired about land use planning the usual response was “it is just in the elders’ heads”. Regarding the small-scale subsistence agriculture practices by some members of Il Ngwesi and Lekurruki, there did not appear to be any planned or regulated system in place. At a household in Irngaruan village an elder mentioned that there were no constraints on him growing onions along the riverbank and extracting water for irrigation.

Achievement of the impact indicator for *“improved conservation of key natural resources”* was rated as high (level 4). In Lekurruki and Il Ngwesi, the establishment of the conservation areas have assisted in the protection of water springs in the Mukogodo Forest (as identified in the FGDs in Lekurruki), the forest itself and graze for both wildlife and livestock.

Achievement of the impact indicator for *“differences in flora and fauna between areas with land use plans and those without”* was rated as moderate (level 3). It was difficult to assess the impact of this indicator during the study visit, however there was noticeably thicker woody vegetation cover in the conservation areas of Il Ngwesi and Lekurruki. Without previous baselines to compare with it is impossible to verify if this is a result of better land use planning, however, all the people interviewed in the communities stated that vegetation had thickened in the conservation areas and that wildlife was starting to naturally concentrate there.

Achievement of the impact indicator for *“decreased degradation of natural resources through livestock overstocking and poor animal husbandry practices”* was rated as low (level 2). Again this indicator was difficult to measure during the fieldwork. Although the degradation of natural resources has been reduced in the conservation areas, there was no examples given of how animal husbandry had been improved or livestock number controlled. As mentioned above (Section C.4.4), this was not addressed by the project.

Achievement of the impact indicator for *“increased livestock productivity”* was rated as low (level 2). There was no evidence during the fieldwork that livestock productivity had increased, nor were there strategies to increase marketing of livestock (which would provide the incentives from increased productivity).

Achievement of the impact indicator for *“increased key wildlife populations”* was rated as moderate (level 3). This indicator was difficult to measure, with no baselines and no

documented records of wildlife in the group ranches/ conservation areas. However, the experimental introduction of rhino to Il Ngwesi was one very positive step to achieving this indicator in the long term.

D.2.2 Financial capital

The overall assessment of the impact of the project on financial capital under Result 4 was moderate. The breakdown according to the indicators is described below.

Achievement of the impact indicator for *“improved equitability & transparency in distributions of benefits”* was rated as moderate (level 3). The profits from the lodges are generally spent on community development and education, which is the only practical means for distributing relatively small benefits across such a large area shareholder base (this point was confirmed by community members, GR Management and LWC management). However, the decision-making process for deciding on what these benefits should be spent on was not so clear. During the community consultations it seemed that the elected committees made executive decisions, which were open for scrutiny at the AGMs. However, there was no evidence or strategy by the leadership for equitability in the selection of lodge employees, gender balance in the composition of the decision-making committees, and in targeting the poorest or marginalized in the society.

Achievement of the impact indicator for *“increased income flows from livestock husbandry”* was rated as low (level 2). There was no evidence that any progress had been made in better animal husbandry to increase this income.

Achievement of the impact indicator for *“employment opportunities from security activities”* was rated as high (level 4). As listed in Table 12, there was a number of community men employed as security guards in Il Ngwesi, Lekurruki and Namunyak.

Achievement of the impact indicator for *“more stable/ enhanced income streams from livestock management”* was rated as low (level 2). There was no evidence from LWC Management or the GR elders of any improvement in this area.

Achievement of the impact indicator for *“increased earning capacity of community from education”* was rated as low (level 2). It will take a number of years before the benefits from the project’s support for education will lead to increased earning capacity.

D.2.3 Social and institutional capital

The overall assessment of the impact of the project on social and institutional capital under Result 4 was high. The breakdown according to the indicators is described below.

Achievement of the impact indicator for *“improved governance & management of community institutions”* was rated as high (level 4). The establishment of the community projects as legal entities with constitutions and management committees has provided a solid foundation and framework for building capacity and competencies, which have been supported through training courses funded by the GEF (see Table 6).

Achievement of the impact indicator for *“enhanced access to governance for grassroots levels”* was rated as moderate (level 3). In these patriarchal pastoralist communities, the balance of power has remained with the traditional leadership of the elders. The involvement of the rest of the community has been improved through AGMs and workshops that have taken place on roles and responsibilities of GR members.

Achievement of the impact indicator for “*equitable access to governance for men, women and disadvantaged groups*” was rated as low (level 2). In the household interviews in Leparua and Irngaruan (Il Ngwesi), the women did not have knowledge or access to the decision-making process.

Achievement of the impact indicator for “*improved definitions of institutional roles & responsibilities*” was rated as high (level 4). A great deal of work has been done through seminars, courses and training to better understand roles and responsibilities for the new institutions being established, see Table 6.

Achievement of the impact indicator for “*stronger legal foundation for community-based NRM*” was rated as high (level 4). Constitutions and trusts have been established for the group ranches as shown in Table 24 below.

Table 24: Legal documents supporting community NRM

Legal Documents	Date
Ngare Ndare Forest Trust declaration	1 November 2001
Namunyak Wildlife Conservation Trust declaration	1995
Il Ngwesi Community Trust draft deed	No date
Il Ngwesi Group Ranch Constitution	No date

Achievement of the impact indicator for “*improved facilitation of social interactions through radio networks and Group Ranch administration*” was rated as very high (level 5). The hand-held Motorola radios provided and the linkage into the LWC operated radio network has greatly improved community mobilisation and interaction in areas which otherwise are very remote and inaccessible. This was consistently identified in all the community interviews as an important benefit.

Achievement of the impact indicator for “*enhanced institutional capacity to manage natural resources*” was rated as high (level 4). The formation of the NRM Committee in Il Ngwesi and the Environmental and Grass Management Committees of Namunyak in all the nine focal areas has provided a strong framework for developing NRM systems.

Achievement of the impact indicator for “*enhanced community capacity to identify community resource management needs and constraints*” was rated as moderate (level 3). In Il Ngwesi, the NRM Committee has identified the need for better rangeland management and has initiated an experimental burning programme in the group ranch conservation area (c.f. Lewa Research Department quarterly reports). However, there has not been any formal, documented participatory exercise to map out the resources and resource needs of the community. This would help in the development of a more comprehensive and rigorous approach to NRM.

Achievement of the impact indicator for “*enhanced community capacity to prescribe & enforce NRM requirements (bylaws)*” was rated as high (level 4). This has been possible through the security operations now established, in combination with an effective system for reporting to community members with radios. Communities are more aware of their rights, articulated in the legal documents, and are seeing the benefits of the conservation areas. These factors in combination have helped to bolster support from the wider community for their security operations. However, there is little evidence that the group ranches have developed specific natural resources management bylaws, other than the overall and more general prescriptions included in the group ranch constitutions²³.

²³ Il Ngwesi (undated)

Achievement of the impact indicator for “*enhanced community capacity to monitor natural resource uses*” was rated as low (level 2). As stated earlier in section C.4.4, there is very little capacity to monitor the natural resources at the moment. The only exception is the rhino sanctuary in Il Ngwesi, which has 24-hour surveillance.

Achievement of the impact indicator for “*increased cooperation between communities over land use*” was rated as high (level 4). A number of the FGDs in Il Ngwesi and Lekurruki highlighted the level of cooperation between their GR. For example if one GR is experience drought the other will share its pasture. In the Andanguru Plains the GRs agree together over areas set aside from grazing (Lekurruki FGD with morans and young women)

D.2.4 Physical capital

The overall assessment of the impact of the project on physical capital under Result 4 was moderate. The breakdown according to the indicators is described below.

Achievement of the impact indicator for “*improved community offices and supporting infrastructure*” was rated as moderate (level 3). Apart from the community lodges and the offices at Wamba for NWCT, little infrastructure has been built for the GR initiatives. One crucial infrastructure improvement was the building of an access road to the Tassia Lodge, which Lekurruki paid the British Army Kshs 600,000 to carry out (*pers.comm.* Michael Dyer & Tassia Manager) and improvement of the road between Il Ngwesi Lodge and LWC with funding from CDTF (see Table 3)

Achievement of the impact indicator for “*improved telecommunication systems*” was rated as high (level 4). The use of mobile phones has become more common in these areas (especially by men in leadership positions), which are used alongside the radios. However, there is no landline telecommunication system to these GRs.

Achievement of the impact indicator for “*clear demarcation of Group Ranches and different land use areas on the ground*” was rated as low (level 2). No physical demarcation has been made for the conservation areas, which are instead demarcated by agreed natural landmarks as articulated in the constitution (e.g., the Il Ngwesi GR Constitution).

Achievement of the impact indicator for “*improved school infrastructure*” was rated as high (level 4). In addition to the Lewa supported school, some of the community schools have been given money to build classrooms from the profits of the Lodges. For example, the profits from Il Ngwesi Lodge have been spent on school infrastructure, with Lokusero Primary School receiving Kshs 100,000 in 2002 to build some permanent classrooms, according to the Headmaster. Likewise Lekurruki GR gave Kshs100,000 to the girls secondary school in Dol Dol, from the profits of Tassia Lodge (*pers.comm.* Lodge Manager and Chief Moile).

D.2.5 Human capital

The overall assessment of the impact of the project on human capital under Result 4 was high. The breakdown according to the indicators is described below.

Achievement of the impact indicators for “*strengthened capacity to participate in community government structures*”, “*enhanced management & accounting capacity*” and “*strengthened understanding and capacity to participate in democratic institutions*” were rated as high (level 4). This has been mainly achieved through the seminar, workshop and training courses that have been attended (Table 6).

Achievement of the impact indicator for “*increased confidence and capacity of community members in law enforcement*” was rated as very high (level 5) as was “*increased awareness of the complementarity between wildlife conservation and pastoralism*”. These are two strengths that the communities articulated very clearly in the community consultations.

Achievement of the impact indicator for “*increased capacity of grassroots members to participate in NRM*” was rated as moderate (level 3), as many of the poorer households visited by the study team, and especially the women within them, did not have any influence in the natural resources management of the group ranch. A number of the young women spoken to at Lekurruki stated that they would like to be consulted in regard to NRM in their communities.

D.2.6 Equity & gender aspects

The women’s education levels were generally low in the Leparua community and they are very much disempowered. In one household in Leparua the women’s FGD was not able to provide basic household information and knew nothing about the GR management. The study team was informed that only the men of the house knew the number of livestock, the prices gained for their sale, and the operations of the Group Ranch.

This is reflected in the composition and make-up of the committees. There were no women on the group ranch committees, and the Il Ngwesi Lodge Board of Directors elected in October 2003 is all male. On all the legal documents establishing the group ranches and trusts, all the signatories were male. In the GEF Committee meeting together with the study team, there was only one woman representative from Namunyak, out of a total of thirteen members.

The training of women in leadership has great potential in empowering them to develop a voice, but cultural barriers hinder their participation especially in the pastoralist communities where respected elders, all of whom are men, are culturally expected to make the decisions on behalf of the community.

The only area where women were obtaining positions of influence was within the more agricultural Meru and Kikuyu groups around Ngare Ndare Forest. The recently established Ngare Ndare Forest Trust (November 2001) has a board of 16 trustees with representatives from the community as well as one representative from LWC (James Munyugi), Kisima Farm (Charlie Dyer) and Borana Ranch (Michael Dyer). *Ex officio* members include the KWS Warden and FD officer for Meru District. Daniel Kamau as Manager of NNFT acts as the Secretary to the Board. Of the 16 trustees, six of them are women (see Table 25).

The CBOs and User Groups each have a committee of nine people, which includes a Chairman, Vice-Chairman, Secretary, Vice-Secretary, Treasurer and four members. The CBO committees’ role is to steer the development projects in the community, to raise and allocate funds and prioritise the needs/ problems at the user group level. As can be seen in Table 25, about one third of these committees are female.

During the study team’s visit to Ngare Ndare, it was not possible to obtain a clear picture of either the representation of youth or that the participation of the various ethnic groups within the Ngare Ndare Forest Trust. However, from the community meetings, the conflict between the Kikuyu and the Maasai seems to be a great stumbling block to progressing with this initiative. The Maasai/ Borana that attended the elders’ FGD did not contribute, choosing to remain silent whilst the Kikuyu/ Meru contingent spoke. Over the past few years these ethnic difference and conflicts have resulted in a number of deaths and in 2003 resulted in the Maasai trustees quitting the Trust (*pers.comm.* NNFT Manager).

Table 25: Gender distribution within the Ngare Ndare Forest Trust

Category	Female	Male	Total
Board of Trustees	6	10	16
Ngare Ndare CBO	3	6	9
Suboiga CBO	4	5	9
Kisima CBO	2	7	9
Mbuja CBO	3	6	9
Ethi village forest conservation committee	3	6	9
Staff (manager & scouts)	0	12	12

Source: Ngare Ndare Forest Trust records

D.3 Result 5: Local and national policies supporting wildlife conservation and community livelihoods in semi-arid landscapes influenced and strengthened

D.3.1 Social and institutional capital

Achievement of the impact indicator for “*enhanced cooperation between Group Ranches and District Authorities in NRM and wildlife activities*” and “*strengthened and influenced support for the development of environment and district policies*” was rated as moderate (level 3). According to the Lewa CDM, the area chiefs or councillors represent their group ranches at the District Development Councils (DDC). This is the main link that has been established for cooperating between the group ranches and District Authorities. However, the level of influence that this representation achieves was not possible to assess during the field visits.

Achievement of the impact indicator for “*enhanced local/ political support for wildlife conservation*” was rated as high (level 4). The successes of Il Ngwesi have created a changed attitude towards conservation in the region, which was evident from the study team’s meeting with other individuals and organisations that were not involved or benefiting from the project. The Maasai human rights group OSILGI see the Il Ngwesi model as a new approach to conserving the environment, which has changed pastoralist’s attitudes to view wildlife in a more productive way. Evidence of this can be seen by the replication of Il Ngwesi-type lodges in other group ranches (*pers.comm.* James Legei). In the meeting with the ‘control’ group ranch of Kuri Kuri, the members were also keen to start similar conservation enterprises, for which a number of plans had been formulated (see section C.3.1)

Achievement of the impact indicator for “*enhanced community grassroots participation in District forums*” was rated as moderate (level 3). The group ranches in Laikipia (Il Ngwesi and Lekurruki) are members of the Laikipia Wildlife Forum, which provides support these community conservation initiatives. In addition there is the representation of the area’s chiefs at the DDCs.

Table 26: Assessment of Project Impacts on Local Livelihood Capitals under Result 5: Policy environment

CAPITAL	IMPACT INDICATOR	Magnitude of impact					Gender		
		5	4	3	2	1	M	M/F	F
SOCIAL	Enhanced cooperation between Group Ranches and District Authorities in NRM and wildlife activities								
	Enhanced local/ political support for wildlife conservation								
	Enhanced community grassroots participation in District forums								
	Strengthened and influenced support for the development of environment and district policies								
	OVERALL FOR SOCIAL & INSTITUTIONAL CAPITAL								

E. LOCAL-GLOBAL LINKAGES ASSESSMENT

This section describes the study team's findings for local-global linkages assessment, the third and final major approach taken by this case study, which analyses the relationships (linkages) between the local livelihoods benefits delivered by the project and the anticipated global environmental benefits that have been generated as a result of these livelihoods improvements.

As a framework for this assessment, the study team developed the local-global linkages model shown in Figure 5 below. The model shows the three main project intervention strategies (Results) that are related to local community livelihoods on the left-hand side (Results 3, 4 and 5). Next to these three interventions is shown the direct livelihood impacts that it is expected the project will achieve, and that are being assessed through the Livelihoods Assessment Framework described in the previous section. The linkages between the intended direct impacts of the project and the expected indirect impacts that lead to global environmental benefits are mapped out in the remainder of the model. Each linkage is associated with certain critical assumptions. If the assumption is correct, then the linkage will, the study team argues, hold, if not, then the linkage is probably not valid.

In the very limited time available for the Main Fieldwork Phase of this study, it was not possible to test the model's assumptions through thorough quantitative field investigation. However, the study team posed relevant questions concerning the various assumptions to the community during the community consultations exercise. These questions are included in the consultation framework given in Annex 6. As a result of the community consultations, the study team believes that it was able to gain some subjective information on many of the assumptions.

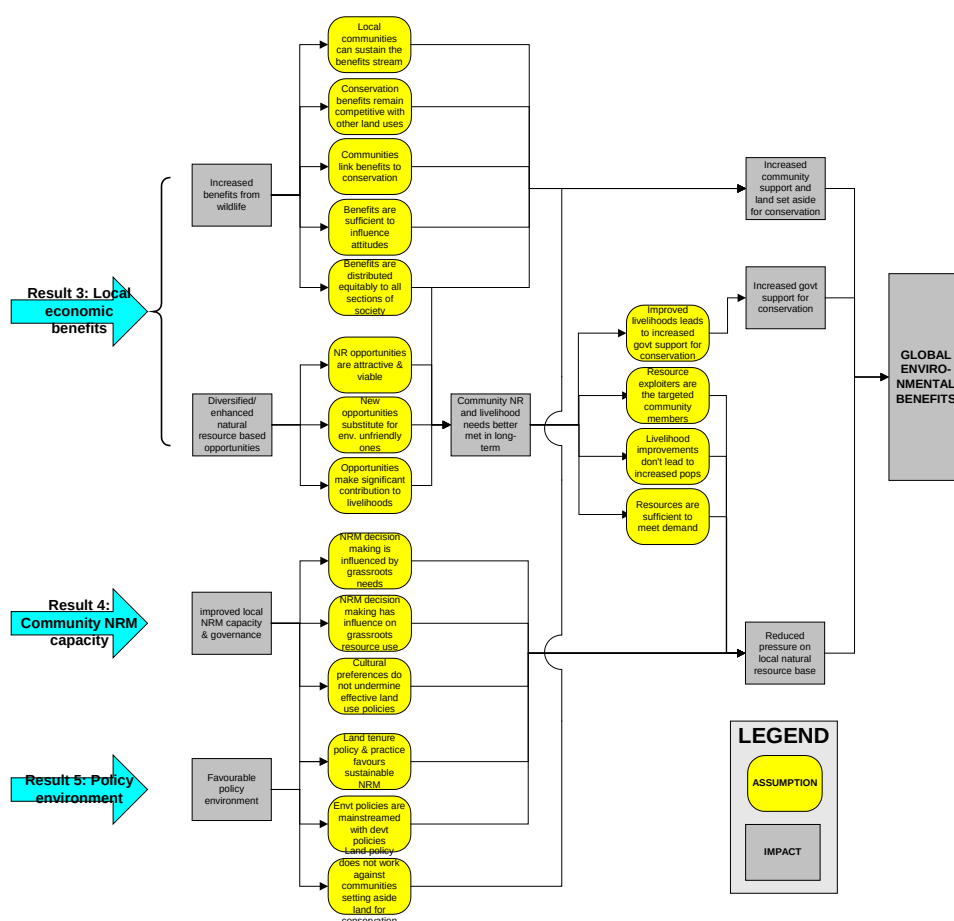
The team identified the following key linkages for further testing (>>> means "leading to"):

- ▶ Increased benefits from wildlife >>> Increased community support and land set aside for conservation
- ▶ Diversified/ enhanced natural resource based opportunities >>> Community NR and livelihood needs better met in long-term
- ▶ Community NR and livelihood needs better met in long-term >>> Reduced pressure on local natural resource base
- ▶ Improved local NRM capacity & governance >>> Reduced pressure on local natural resource base
- ▶ Favourable policy environment >>> Reduced pressure on local natural resource base

The team identified two main ways of testing the validity of these presumed linkages:

1. ***Directly assessing whether the anticipated indirect global environmental impact has been achieved***, through observations in the field or other means of verification. For example, is there any direct evidence that there have been reductions in pressure on the local natural resource base? The problem here is that, even if such changes have occurred, it is difficult to attribute them to the anticipated cause. For example,

Figure 3: Figure 5: Lewa Local-Global Linkages Model



where there have been reductions in pressure on the local natural resource base, it is difficult to attribute these to community natural resource and livelihood needs having been better met, as opposed to improved NRM capacity and governance, or even to another cause outside the scope of the Lewa project.

2. **Examining whether the assumptions underlying the linkages hold true.** By examining the validity of the assumptions, it should be possible to draw conclusions about the validity of the linkage itself. For example, if the project has had an impact on meeting community NRM and livelihood needs in the long-term, and the assumptions underlying the relationship between this livelihoods impact and the anticipated indirect impacts on reducing pressures on the natural resource base are held to be valid, then the indirect impact on reducing NR pressures can be assumed to have occurred. Coupled with evidence under the first testing method, a convincing case can be made that the presumed linkage is indeed correct.

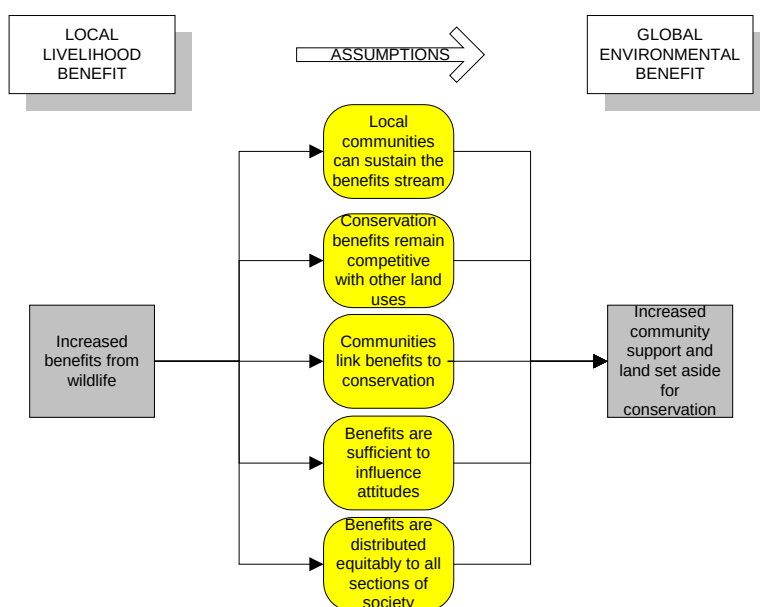
These two testing methods are applied to each of the five selected relationships identified above in the following sections: The last two relationships dealing with the linkages between improved local NRM capacity and governance and a favourable policy environment in bringing about a reduction in pressure on the local natural resource base are dealt with together, since they are, as Figure 5 shows, closely inter-related.

E.1 Linkage #1: Increased benefits from wildlife >>> Increased community support and land set aside for conservation

The link between the Lewa Project's livelihoods capital impact of increased benefits from wildlife (see section D.1 above) and an anticipated increase in community support and land set aside for conservation is a crucial one in the overall local-global benefits equation as modelled in Figure 5. The expectation of increased community support for conservation as a result of increased livelihood benefits derived from wildlife is in fact central to most integrated conservation and development projects being implemented around the world. The study team has identified five main assumptions underlying this presumed relationship, as illustrated in the diagram below. These are:

1. Local communities are able to sustain the benefits stream from wildlife that the project has helped create
2. Benefits derived from conservation land-uses are competitive from alternative benefits from other forms of land-use
3. The communities actually link wildlife-based benefits to conservation actions
4. Wildlife benefits are sufficient to influence community attitudes towards conservation
5. Wildlife-based benefits are distributed equitably to all sections of society

The study team makes the case that if all these assumptions hold true, then the project's impacts on increasing benefits from wildlife will indeed lead to an increase in community support for land set aside for conservation, which represents an important dimension of the global conservation benefits potentially produced by the GEF Lewa project. In the sections below, the study team reports back on its findings in assessing this linkage.



E.1.1 Evidence of increased community support and land set aside for conservation

As a first test of Linkage #1, the study team initially assessed whether there is any direct evidence in the field that the anticipated indirect global environmental benefit, "*Increased community support and land set aside for conservation*" has actually taken place. In this regard there was a great deal of evidence collected that the communities were committed to the areas already set aside for conservation. All those interviewed stated that they would not consider degazetting the conservation areas for other uses such as grazing, due to the benefits that the GR was receiving. This view was given, even if the respondent and his family were not individually benefiting (e.g. through employment or education bursaries). Four community level benefits that were critical in gaining the support for the conservation areas:

- ▶ The associated broader livelihood security that has resulted from the wildlife security operations established to police the conservation areas (c.f. C.4.3)
- ▶ Small number of employment opportunities from the security and tourism operations (c.f. Table 16-18)
- ▶ Community development work that has been funded through lodge profits (c.f. C.3.2 and C.4.5)
- ▶ The function of the conservation areas as emergency drought season graze, which acts as a bank (c.f. C.4.4 & D.1.1)

The final issue was that there seemed to be little opportunity cost to the community in setting aside the conservation areas (see section C.4.4). The conservation areas firstly do not provide very good graze and secondly it is possible to graze their cattle on better pasture elsewhere.

The study team then went on to look for evidence that any of the assumptions underlying Linkage #1 are either true or false, as described in the following sections.

E.1.2 Assumption #1: Local communities are able to sustain the benefits stream from wildlife that the project has helped create

This assumption currently holds true. The conservation areas established are patrolled by trained community scouts (Table 12), with radios and backup support from LWC/ KWS and there is plenty of anecdotal evidence from the communities and LWC indicating that wildlife is returning to seek refuge in these areas. The community support for the wildlife security operations is very strong not only because of the benefits that are received through the associated tourism operations but also due to the wider livelihood security that it provides (see C.4.3). As wildlife numbers increase in these community conservation areas, the attraction to tourists should increase, sustaining this benefit stream in the long term.

Efforts have been taken by the communities to proactively seek ways to increase wildlife numbers, which will attract tourists. At Namunyak, 15 giraffe were translocated by LWC to help with the restocking of their conservation area. At Il Ngwesi, efforts have been made to restock its conservation area with wildlife through the regeneration of its range conditions. In 1999, 250 hectares of *Acacia senegalensis* were cut down in the conservation area and reseeded with *Chloris* grass species. In 2003, technical assistance has been provided through LWC to develop long-term measures to monitor and improve the range in the core conservation area. Burning has been selected as the most appropriate, reliable and inexpensive method for regenerating the range with palatable grasses and in September 2003 an experimental block of dense vegetation was burnt (LWC 2003b). These efforts at Il Ngwesi, along with the introduction and management of three rhinos since

2002 into a small enclosure, is a strong indicator that the local communities will be able to support wildlife and the associated benefits from them.

There are two factors that could risk the chances of sustaining these benefits. Firstly the unpredictable nature of tourism and external events that reduce tourist numbers to Kenya. Secondly, continued support is needed to provide and build capacity in the community management of these operations, so that the tourism standard is maintained and the product remains competitive with other tourism options.

E.1.3 Assumption #2: Benefits derived from conservation land-uses are competitive from alternative benefits from other forms of land-use

This assumption at the moment holds true. The opportunity cost of the land currently set aside for conservation is negligible at the moment (see C.4.4). From conversations with the elders and morans at Il Ngwesi and Lekurruki, the land set aside for conservation was not very good and it is possible to access better graze elsewhere. In addition, livestock marketing has not been profitable since the collapse of the Kenya Meat Commission in 1987, compounded by ineffective policy support and antiquated quarantine laws (*pers.comm.* Michael Dyer).

However, competition for alternative land uses of the conservation areas could increase if access to the present alternative pasture sources is denied or livestock marketing is developed to make livestock more profitable.

E.1.4 Assumption #3: The communities actually link wildlife-based benefits to conservation actions

This assumption was generally held to be true. During the FGDs, wildlife was often cited as the reason why tourists come to the lodges and in turn the benefits thereof. As the Community Development Manager for LWC expressed, through these tourism operations the communities are learning to *milk elephants* and to be *educated by lions*. Also in the community discussion in Chumvi and Lekurruki, it was stated that as a result of actively conserving the wildlife in the conservation areas, human-wildlife conflict had reduced in their community areas.

E.1.5 Assumption #4: Wildlife benefits are sufficient to influence community attitudes towards conservation

This assumption was held to be true. One comment that was given during the young women FGD in Lekurruki was that the Tassia Lodge was the “most productive and profitable thing that has happened”. In conversation with other groups in Il Ngwesi and Lekurruki a similar positive sentiment was given. Whilst these benefit streams last, conservation is seen in a positive light as a way to generate income, alongside their pastoralist activities.

E.1.6 Assumption #5: Wildlife-based benefits are distributed equitably to all sections of society

This assumption was partly true in that the community development work, such as the access road built by the British Army to Tassia Lodge (c.f. D.2.4), benefit the whole community. However, it is not the case that all wildlife benefits were distributed equitably, as many of the benefits of employment only go to a few people (see Tables 16-18 on employment at community lodges). These people are generally the most educated and better-connected people in the community. It was not the case that the marginalized or

women members of the community were being included in these direct benefits. As can be seen in Tables 16 and 17, only two women out of 26 are employed at Tassia Lodge and one woman out of 21 in Il Ngwesi.

E.1.7 Conclusions

The link between the Lewa Project's livelihoods capital impact of increased benefits from wildlife leading to an increase in community support and land set aside for conservation seems to be strong. The indirect global environmental benefit of increased conservation support already seems to have been achieved and the assumptions underlying the link appear to hold true. However, in the long-term, communities may not be willing to set aside land for conservation if opportunity costs increase.

E.2 Linkage #2: Diversified/ enhanced natural resource based opportunities >>> Community NR and livelihood needs better met in long-term

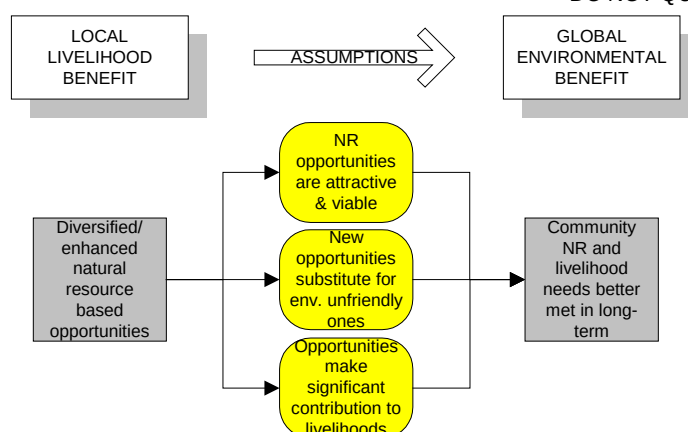
The diversification and enhancement of natural resource-based livelihood opportunities is another key component of many integrated conservation and development projects, with the ultimate aim of ensuring that community natural resource and livelihood needs are better met in the long-term. As can be seen from Figure 5, the long-term fulfilment of community natural resources and livelihoods needs is not itself a global environmental benefit. However, through a further set of assumptions, this impact potentially leads to a reduction in pressure on the local natural resource base, which does represent a global environmental benefit. The long-term fulfilment of community natural resource and livelihood needs is therefore an important component of the overall local-global benefits equation, and testing the validity of the relationship is therefore an important aspect of this study.

The study team have identified three key assumptions underlying this presumed relationship, as illustrated in the diagram below. These are:

1. Natural resource opportunities established with support from the project are attractive and viable to the community
2. New opportunities substitute for existing environmentally unfriendly ones
3. New opportunities make a significant contribution to livelihoods

E.2.1 Evidence that community NR and livelihood needs are better met in long-term

Integrated conservation and development projects often include an objective relating to enhancing natural resource income generating opportunities, in addition to the wildlife-based tourism activities discussed in linkage #1 above. However, the LWC project design and implementation did not focus nor make much progress on the local livelihood capital impact "*diversified/ enhanced natural resource-based opportunities*". The Ngare Ndare Forest Trust and associated CBOs have user groups formed, however; they are yet to start generating incomes and LWC is not providing support in this aspect of NNFT. In the pastoral group ranches, there was no progress made on this front, although a number of ideas were suggested such as bottling spring water in Namunyak (see Table 14).



E.2.2 Conclusions

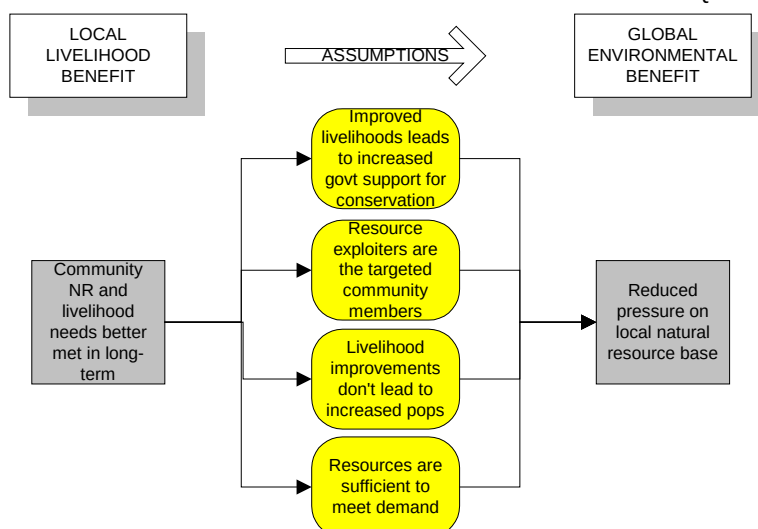
In the absence of any evidence of significant project impact on diversified/enhanced natural resource based opportunities, it was not possible for the study team to make comments on this section of the local and global benefits model, nor to test the underlying assumptions of this linkage. However, there was evidence that the increased benefits from wildlife (through the tourism lodges and associated activities) have made contributions to the achievement of the anticipated indirect benefit, “community NR and livelihood needs are better met in long-term”, which is discussed in connection with the third linkage described below.

E.3 Linkage #3: Community NR and livelihood needs better met in long-term >>> Reduced pressure on local natural resource base

Any reductions in pressure on the local natural resource base that are indirectly brought about by the GEF project intervention constitute a significant contribution towards the global environmental benefits indirectly generated by the project. As explained in the previous section, such reductions are likely to occur if the project is successful in bringing about improvements in the fulfilment of community natural resource and livelihood needs in the long-term, provided that the assumptions underlying this linkage are met. In this regard, the study team has identified four main assumptions behind the linkage, as follows:

1. Improved livelihoods leads to increased government support for conservation
2. Resource exploiters are the targeted community members
3. Livelihood improvements don't lead to increased populations
4. Resources are sufficient to meet demand

In the sections below, the study team reports back on its findings in assessing this linkage.



E.3.1 Evidence that there is reduced pressure on the local natural resource base

The study team assessed whether there is any direct evidence in the field that the anticipated indirect global environmental benefit, “*reduced pressure on local natural resource base*” has taken place. There was evidence for this only within the conservation areas within the group ranches, which had experienced reductions in the pressure on the local natural resource base (according to anecdotal evidence from the communities and LWC, although without baselines this has not been possible to quantify). The security around these conservation areas is high and the rules regarding NR use enforced. At Il Ngwesi, the constitution lists the activities that are prohibited within the conservation area including: starting fires, poaching wildlife, felling trees and settlements (Il Ngwesi, undated). This has helped in the protection of the Mukogodo Forest as well as the areas around the Lodge. These rules are enforced with fines of between Kshs 7,000 and 10,000 for cattle that are brought into the conservation area. The fine for starting a fire within the conservation area is Kshs 10,000. (*pers.comm.* Il Ngwesi Director, Kipsoi Kinyaga)

The elders at Il Ngwesi stated that, due to the increased pressure on the resources in the GR non-conservation area, the GR has purchased new land for GR members to move to, such as in Ngare Ndare and Chumvi. Outside of these conservation areas, however, there was no evidence of any improvements in the natural resource use systems being practiced.

E.3.2 Assumption #1: Improved livelihoods leads to increased government support for conservation

This assumption was generally held to be false. There was no evidence that the government has increased its support for conservation on account of the improvements in livelihoods. However, the support of the project has facilitated the involvement of government at the District level and parastatals (KWS support in security and with its initial support to

financing the setting up of Il Ngwesi²⁴). The support of KWS and the Police Department has been greatly helped in the training and authorising of community game scouts.

E.3.3 Assumption #2: Resource exploiters are the targeted community members

This assumption was found to be true. Within the community, it is the morans (young men) who pose the greatest threat to the natural resource base. It is the morans who graze livestock, provide security to the community and are the most likely to kill wildlife (for security and status reasons). They have been targeted through seminars and training workshops by the project and they have been the main beneficiaries of employment at the lodge. At Lekurruki, it was morans who built the road to the location of the lodge and who provided labour for its construction (see section D.1.3)

The leadership in the communities have also been taking a lead in changing the behaviour of the morans. One example is of 14 Samburu morans (in Namunyak) who killed a giraffe. As a result, the community decided that the fathers of each of the morans must pay for this by giving the best cow from their herd. Since this incident, no member of the community has been reported to have poached or killed any wildlife (*pers.comm.* Hon. S. Leshore & J. Munyugi).

E.3.4 Assumption #3: Livelihood improvements don't lead to increased populations

Although no data was available on population sizes and changes over the past few years, this assumption appears to hold true for two reasons. Firstly immigration is prevented into these group ranches for any outsider due to the fact that only registered members can live there. Secondly, one of the benefits mentioned by communities about the project has been the educational support provided through the Lewa Education Trust and by the profits from the community lodges. It is generally the case that improved education leads to a decrease in family sizes.

E.3.5 Assumption #4: Resources are sufficient to meet demand

This assumption seems to hold true for the present, with members able to travel outside of their group ranches to access resources if required. During dry seasons many of the cattle are grazed on abandoned land within Laikipia and elsewhere (comments from elders of Lekurruki and Il Ngwesi). However, in the long-term access to other land for grazing may not be possible due to changes in land-ownership. If this were to be the case, then the resources contained within the group ranches would not be sufficient (c.f. section C.4.4)

E.3.6 Conclusions

The link between the Lewa Project's impact of community NR and livelihood needs better met in long-term and reduced pressure on the local natural resource base seems to hold true. There was evidence for reduced pressure on natural resources in the community conservation areas, however, there did not appear to be any change to the other areas. Therefore, future work is needed to consolidate and extend the coverage of natural resources to include the community non-conservation areas and their livestock. Although the Assumption #1 did not appear to hold true, the remaining three did.

²⁴ Through the support of the KWS COBRA (Conservation of Biodiversity Resource Areas) Project (with USAID funding)

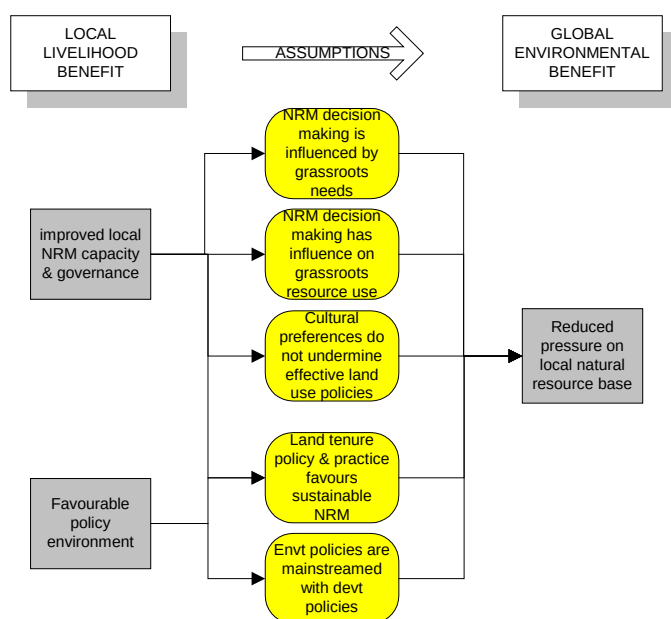
E.4 Linkage #4&5: Improved local NRM capacity & governance

**>>> Reduced pressure on local natural resource base;
Favourable policy environment >>> Reduced pressure on
local natural resource base**

The project local livelihood impacts “Improved local NRM capacity and governance” and “Favourable policy environment” are closely inter-related in generating the global environmental benefit of reduced pressure on the local natural resource base, as illustrated in Figure 5 and in the diagram below. These two sets of linkages are therefore dealt with together. The assumptions identified by the study team underlying these linkages are:

1. Natural resource management decision making is influenced by grassroots needs
2. Natural resource management decision making has an influence on grassroots resource use
3. Cultural preferences do not undermine effective land-use policies
4. Land-tenure policy and practice favours sustainable natural resource management
5. Environmental policies are mainstreamed with development policies

In the sections below, the study team reports back on its findings in assessing these linkages.



E.4.1 Evidence that there is reduced pressure on the local natural resource base

This indirect global environmental benefit was discussed in section E.3.1 above, where it was concluded that there has been reduced pressure in the designated conservation areas of the local natural resource base, but that there was no evidence of a similar trend outside of these community-protected areas.

E.4.2 Assumption #1: Natural resource management decision making is influenced by grassroots needs

The group ranches are a strongly patriarchal society, with the elders making most decisions impacting on wider community welfare, including natural resource decisions. The assumption “*NRM decision making is influenced by grassroots needs*” therefore depends on elders either consulting with the wider community before making NRM decisions, or at least taking into account grassroots interests.

It was not possible to assess whether this assumption was true during the fieldwork phase. However, on speaking with the women’s group it was clear that the women are not consulted in the NRM decision-making process, but entrust their elders to make decisions in the best interest of the community (c.f. D.2.6). The women’s FGD at Leparua was with older women who seemed to be very accepting of this situation, however, the younger women interviewed at Lekurruki felt that they should have a voice in the decision-making.

E.4.3 Assumption #2: Natural resource management decision-making has an influence on grassroots resource use

This assumption was held to be true in the group ranches. All those interviewed in the communities stated that the elders make decisions on NRM, which are then communicated to the rest of the community. The young women in Lekurruki and the young men in Leparua were the only FGDs that stated that they felt they should be consulted more about NRM decisions. However, with this in mind, there was still respect and compliance for the decisions made by the elders across from all the community members consulted during the field visits, which is further enforced by the effective security operations that have been established. The high level of influence that the elders have regarding NRM is further supported by the fact that they were able to convince the GR members to set aside community land for a conservation area and lodge development. To convince the members to vacate land for wildlife and tourism would have been particularly difficult at Il Ngwesi, which was taking a huge risk in experimenting with an untested idea in the region.

E.4.4 Assumption #3: Cultural preferences do not undermine effective land-use policies

This assumption was held to be only partially true. Although pastoralism is specifically adapted to these semi-arid ecosystems, the cultural preference for large numbers of livestock is still prevalent and putting great pressure on the natural resource base. This GEF Project has not addressed the issue of livestock practices, although LWC is now looking to seek ways to tackle this through the Northern Rangelands Trust mechanisms being established (c.f. C.4.4).

E.4.5 Assumption #4: Land-tenure policy and practice favours sustainable natural resource management

This assumption was held to be true. The group ranch land-tenure arrangement is the most suitable for the sustainable and responsible management of these semi-arid lands. The over-exploitation of resources that often occurs when there is open-access is avoided here with a legal register of all the GR members who are permitted access to the GR resources. The establishing of a constitution at Il Ngwesi and the inclusion of bylaws governing NRM use has further strengthened sustainable NRM practices (c.f. Il Ngwesi, undated)

E.4.6 Assumption #5: Environmental policies are mainstreamed with development policies

This assumption was held to be false, with the GEF project not designed to tackle this issue and there are no staff at LWC with a specific role to work in this area.

E.4.7 Conclusions

Although there was evidence for reduced pressure on the local natural resource base in certain areas (see section E.3.1) the linkages were not so strong between improved local NRM capacity & governance and favourable policy environment leading to reduced pressure on local natural resource base. Two of the assumptions, “NRM decision making has influence on grassroots resource use” and “land tenure policy and practice favours sustainable NRM” were held to be correct based on evidence collected through the community consultations. However, there was less evidence to support the assumptions that “NRM decision making is influenced by grassroots needs” or “cultural preferences do not undermine effective land use policies”. The GEF project and LWC itself did not tackle the final assumption of “environmental policies are mainstreamed with development policies”.

F. CONCLUSIONS & RECOMMENDATIONS

This final section of the report sets out the study team's main conclusions arising out of the three analytical approaches adopted during the implementation of the case study. The section also provides a series of key lessons learnt to assist GEF in designing and implementing similar integrated conservation and development projects in future, with the aim of maximising both community livelihoods and global environmental benefits. Finally, the section provides a series of specific recommendations for areas that LWC might consider making adjustments to, or undertaking new activities in future, in order to further enhance its long-term biodiversity conservation and community livelihoods impacts.

F.1 Lewa project performance and impact conclusions

As illustrated diagrammatically in the conceptual model in Figure 1, increasing LWC's institutional capacity (Result 1), and the protection and management of biodiversity (Result 2) has been the main thrust of the GEF support to LWC, with 80% of the funds having been allocated in this area. It is perhaps not surprising therefore that the project has been especially successful in achieving impact in these two results.

Although not a major feature of the original proposal to GEF, LWC has also reoriented its activities during the project lifespan to implement a variety of initiatives aimed at improving the livelihoods of the communities living around LWC, on the principle that the well-being and cooperation of these communities, and the implementation of sustainable natural resource use practices, is vital to achieving the long-term conservation objectives of LWC. The livelihoods assessment carried out by the study and described in section D of this report shows that LWC has made good progress in laying a foundation for enhancing community livelihoods and bringing about sustainable natural resource use practices.

However, if this foundation is to lead to significant and sustainable livelihood improvements in the long-term, this area of improving local livelihoods needs to be consolidated in future, and new opportunities developed that have to date been missed. For example, LWC has placed emphasis on nature-based tourism as its main income-generating activity both within the conservancy and for the community initiatives. Although ecotourism has proven to be one of the most economically viable and sustainable land-use options in such semi-arid areas, it is not in itself sufficient to secure significant improvements in community livelihoods, and it also very vulnerable to outside influences beyond the control of LWC and the communities themselves. Other conservation compatible IGAs need to be identified and promoted to further enforce the linkages with the realisation of global conservation benefits. To support these new IGAs, capacity building of community groups will be vital.

Traditional pastoralist activities have not been significantly addressed by the project. Instead, community interventions have chiefly focused on achieving LWC's biodiversity conservation objectives. Strengthening community natural resource management systems and identifying realistic and low cost ways of improving livestock productivity and rangeland management will provide alternative ways to reduce local natural resource pressure. This is an area that LWC is now turning to through its support and involvement with the

development of the Northern Rangelands Trust initiative, which it is suggested should develop a strategic approach to broader ecosystem management (see section F.2.8 below).

Although the achievement of a favourable NRM policy environment (Result 5) has not been a strong focus of the project, there has nonetheless been an impact in this area because of LWC's high profile nationally, as well as its reputation for excellence in wildlife management, community support and ecotourism. However, more emphasis could be placed on developing promotional material on the experience and lessons learnt at LWC that is targeted to communities, local and national government.

This case study has also demonstrated that the livelihood improvements delivered by the project are in turn ultimately likely to lead to additional global environmental benefits. For example, there is good evidence of progress being made towards the achievement of the indirect global benefits of *"increased community support and land set aside for conservation"*, resulting from the increased wildlife-generated local livelihoods benefits associated with the group ranch ecotourism enterprises. There was also anecdotal evidence for achievement of the indirect global benefit *"reduced pressure on the local natural resource base"* in the community conservation areas, which appears to be linked to the improved NRM capacity and governance as well as improved livelihoods resulting from the group ranch wildlife-associated initiatives. While these linkages between local and global benefits generally appear sound, the absence of baseline data and the short timespan that the project has been operating makes it difficult to confirm tangible indirect global environmental benefits with hard data from the field. In addition some opportunities have been missed to maximise these indirect global benefit through promoting income generation from the sustainable use of natural resources other than wildlife, and through advocating for more enabling national wildlife and land use policy.

F.2 Lessons learnt and recommendations to the GEF

This case study has conclusively shown that the GEF support to Lewa Wildlife Conservancy has been effectively and efficiently used to develop the long-term capacity of the Conservancy to contribute towards the conservation and management of Kenya's biological diversity, thereby generating a significant direct global environmental benefit.

In addition, an important conclusion of the study team is that the integrated conservation and development approach adopted by LWC has led to the achievement of rare "win-win" benefits for both conservation and development. That is, improvements in community livelihoods have occurred synergistically with enhancements in biodiversity conservation and wise use of natural resources, which is ultimately likely to lead to additional global environmental benefits. Experience with integrated conservation and development approaches around the world has proven that such win-win scenarios are unusually difficult to achieve in practice. Only time will tell whether LWC's successes in this regard are ephemeral. For example, increasing population pressures in the area could in future undermine the current win-win situation. Another potential future threat is that alternative non-conservation compatible land uses become economically more attractive than conservation-compatible land uses.

The study team has identified eight specific lessons relevant to the future design and implementation of similar GEF projects that have emerged from this case study. These are discussed below.

F.2.1 Lesson #1: A high degree of community ownership over project design and implementation is vital to success

In order to succeed, integrated conservation and development projects rely heavily on empowering stakeholders, and especially local communities, in environmental management. The role of the project itself should be to *facilitate* stakeholders to first understand and then exercise their rights and responsibilities over their environment, rather than acting as a substitute for these efforts, or providing a prop that must inevitably be removed at a later stage. Achieving this degree of empowerment means that stakeholders need to assume real *ownership over project design and implementation* from the very outset, not as an afterthought, or token.

In this regard, one consistent criticism by the communities concerning the GEF grant to LWC was the lack of input they had into the original design of the project (see section D.1.3). Despite this weak beginning, the project has nevertheless made significant strides in creating a sense of community ownership over project activities as well as in empowering communities in the management of natural resources. Particularly noteworthy were:

- ▶ The establishment of a representative and self-regulated community committee to review and choose which community proposals to fund according to their priority needs (i.e. the GEF Committee, section C.2.3). Both the GEF Committee and the LWC Management stated that being given the freedom to allocate the GEF funds as they felt appropriate, enabled them to make good progress in achieving *their* conservation and development targets and priorities. Although, during the Lewa Downs Stakeholder Presentation, community elders stated that in the future there should be a greater emphasis on GEF directly funding *community* training and capacity building, rather than on building LWC's capacity (where 80% of the GEF were allocated).
- ▶ The introduction of a requirement for a personal commitment/ contribution from all the individuals involved in a project activity, whether through contributions of land, time or money. A cross section of GR members at Il Ngwesi and Lekurruki had a very strong sense of pride and ownership of their tourism lodges, in part because they had all contributed land, time, labour in its establishment (see C.1.6 & D.1.3). However, there was not this sense of ownership and commitment in activities which had not required such contributions from the participants, such as the women's groups visited around LWC who had been given donations from visiting tourists (see D.1.2) and the Lewa supported schools (see C.4.5).

F.2.2 Lesson #2: Effective and sustainable local institutions are crucial for project success and sustainability

Linked to the ownership issues described above, there is a need to focus projects on establishing and supporting institutional arrangements and capacity building within the local institutions. This is an area where LWC has made an excellent start with the strengthening of existing community institutions in the Group Ranches (section C.4.1) and the registration and formation of new ones such as the Ngare Ndare Forest Trust (section C.3.4). The establishment of a long-term (i.e. not project-dependent) Community Development Office within LWC itself, with an ambitious objective to support existing community enterprises as well as assist in the establishment of new ones, such as the Sera and Kalama Community Wildlife Conservation projects (see section C.1.3), is another very important development in ensuring sustainable project outcomes.

F.2.3 Lesson #3: Locally-based project implementers with a long-term commitment to the area are more likely to succeed

Projects implementing organisations that have a long and positive history and commitment to the targeted area and that have already built up the trust and confidence of the neighbouring communities are best positioned to successfully introduce new community conservation initiatives and to utilise GEF funds to generate both sustainable local livelihood as well as global conservation benefits.

In the case of LWC, its long history in the region and previous assistance to the communities laid the foundation for obtaining the trust from the elders (and broader GR membership) of Il Ngwesi and Namunyak to initially commit to LWC's proposal of setting aside part of their communal land for conservation and ecotourism. Previous assistance cited include Lewa's interventions against livestock theft in Il Ngwesi and Lewa's involvement in obtaining RAF aircraft and health provision during a cholera outbreak in Namunyak (*pers. comm.* Richard Moller). The community trust and confidence that LWC has earned is important for the impartial mediating role that LWC continues to play in the communities.

F.2.4 Lesson #4: Monitoring systems incorporating baseline data collection are needed

The Lewa project lacked both a comprehensive logical framework (the study team had to establish this retrospectively) as a basis for monitoring project performance and impact, as well as any socio-economic or ecological monitoring in the targeted community areas. The lack of any baseline socio-economic or ecological data or subsequent monitoring of trends has meant that it has not been possible in the present study to back up the good anecdotal evidence that was provided through the community consultations with any quantitative statistical analysis.

In the case of an initiative such as Lewa, strong monitoring systems can be important for two main reasons:

- ▶ **Adaptive management.** This is important as a learning process aimed at adapting methodologies and practices to better respond to the complexities, variability and uncertainties of ecosystem processes and functions, as well as the socio-economic systems that they interact with.
- ▶ **Future funding.** In order to successfully access funds to develop and support initiatives after existing funding is finished, it is helpful and persuasive if there are hard facts and figures with which to objectively demonstrate previous project success.

A participatory monitoring system that involves the target communities in the design of relevant socio-economic and ecological indicators and in collecting and analysis of the data is the most appropriate approach, since this builds community ownership of the project (see section F.2.1) and leads to sustainability of monitoring beyond the project life-span. The joint local and global benefits of this approach are highlighted by the community participation in the Grevy's zebra monitoring programme (Section C.2.3), where the target community benefited from employment, the project obtained more useful and comprehensive information than would otherwise have been possible, and greater community awareness and support for conservation was achieved.

With regard to the implementing agency's evaluation reports (for project implementation and completion), there should be a more rigorous and standardized format established (for World Bank, UNEP or UNDP) to provide more constructive feedback to the project implementers *and* target communities.

F.2.5 Lesson #5: Long-term external financing may be essential

The case study has shown that the generation of income by both LWC itself and by local community ecotourism enterprises is insufficient to meet the maintenance costs of these operations and at the same time to maintain production of their global environmental and local livelihood benefits, both now and in the future. LWC's endangered species protection and management activities (see section C.2.1) and community support initiatives (see section C.3) are especially high cost, and it is unrealistic to believe that they will ever be able to be financed entirely from locally-generated income from tourism, even though these efforts have been very successful. The study has also shown that tourism revenues are very vulnerable to external conditions outside the control of local stakeholders, such as global terrorism threats. Therefore, some form of ongoing external financial subsidy for these activities is likely to be needed to underwrite the true costs of these activities, and in particular to maintain high quality management and monitoring. A combination of local income generation with continuing access to external financing – be it in the form of further donor supported projects, grants from individuals or foundations, or endowment funds – seems to be the most appropriate and currently the only realistic form of financial sustainability that can be achieved by LWC and its partner community conservation enterprises.

F.2.6 Lesson #6: Win-win scenarios between conservation and development are most easily attained where populations are homogenous, conservation-compatible land uses are attractive, and population pressure is low

It is easier to achieve conservation objectives with more homogenous groups that have a degree of land tenure ownership, such as the pastoralist Group Ranches of Il Ngwesi and Lekurruki, and which have the ability to enforce these rights against both internal and external threats. Integrating conservation with development is more difficult where the surrounding communities are heterogeneous and there is a high degree of conflict between factions of the community and resource access rights are controlled by outside parties (as is the case around Ngare Ndare Forest Reserve).

An important contributing factor to the success of the community ecotourism enterprises in the Group Ranches of Il Ngwesi, Lekurruki and within the NWCT has been the fact that there are presently no other economically viable or attractive alternatives and the population pressures are relatively low. This has meant that the opportunity costs for setting up the ecotourism initiatives were very low (see section C.4.4). This is especially important when compared to the considerable benefits that have arisen, which have included the ability to attract outside investment, the creation of jobs and the improved security from being linked to the LWC security network. This point regarding community benefits is further elaborated in the next lesson below (F.2.7).

F.2.7 Lesson #7: Non-cash benefits may be more important to communities than cash benefits

In the LWC project, the non-cash livelihood security benefits generated through the establishment and policing of community conservation areas, and the provision of effective radio communication systems and security back-up, were the most cited and appreciated community benefits (see section C.4.3, D.1 and D.2). In addition, it appears that these non-cash benefits are more important to winning support for conservation than are monetary benefits, which are often small, especially when divided between large communities.

F.2.8 Lesson #8: Successful ICD projects need to be tailor-made to local needs, involve multiple strategies, and adopt a wider ecosystem approach

One conservation strategy will not work by itself; a project needs to have an appropriate mixture of strategies tailored to meet local needs and conditions. At LWC, there are a number of complementary strategies that have emerged to achieve long term biodiversity conservation and community livelihood goals, as illustrated by the five intervention strategies (results) in this study's conceptual model (Figure 1).

The ecosystem approach is a recent adaptation of classical integrated and conservation development project thinking, and involves scaling up conservation and development interventions in both space and time to take account of the entire ecosystem within which a project is operating, as well as the long-term nature of conservation and development conflicts and synergies. A typical ecosystem approach involves five main thrusts:

1. **Stakeholder collaboration:** The establishment of decentralised and cross-sectoral institutional mechanisms to enable effective collaboration between diverse stakeholders in ecosystem management
2. **Understanding the ecosystem:** Developing a comprehensive understanding of ecosystem structure, function, services, and management needs
3. **Institutional capacity:** Strengthening institutional capacity for management of ecosystem natural resources strengthened, especially with regard local communities
4. **Community benefits and incentives:** Developing incentives for local communities to be responsible custodians of ecosystem resources
5. **Adaptive management:** Establishing adaptive management systems based on monitoring of ecosystem health

LWC has already made significant progress in several of these areas, in particular Items #3 and #4, and to an extent, Items #1 and #2. With its recent involvement in establishing and supporting the Northern Rangelands Trust (see section C.4.4), LWC has now recognised the need to adopt a wider ecosystem approach in order to achieve its long-term conservation goals, with the NRT itself directly addressing Item #1 above. It will also be crucial that LWC at the same time works to improve its understanding of ecosystem structure and function (Item #2) and, in combination with this, its efforts to monitor ecosystem health, including both biodiversity conservation and socio-economic indicators (Item #5 – see section F.2.4 above). With expanded activities in all these areas, LWC will have set the scene to make an even greater contribution to the conservation and sustainable use of Kenya's northern rangeland ecosystem than it has already achieved through GEF support to date.

Some of the more specific ways in which LWC can seek to enhance its conservation and development impacts are described in the next section.

F.3 Specific implementation recommendations to LWC

This section details the study team's specific recommendations to LWC aimed at enhancing impact and sustainability. The recommendations are arranged according to the five project results, as described in section C.

F.3.1 LWC institutional capacity

- In order to meet the increasing management and security costs for running LWC and its community programmes, LWC needs to develop new financing strategies/ mechanisms.

- ▶ The Community Development Office requires more qualified staff to provide the support that is being requested from the communities in initiating and developing community conservation initiatives. If staff were employed to help support the community conservation initiatives on the ground, it would free up the Community Development Manager to work more strategically and to prioritise operational activities.
- ▶ The work of the Community Development Office needs to be more systematically documented. For example, it would be beneficial to produce an overarching community development strategy that is also articulated through annual work-plans and goal setting.

F.3.2 Biodiversity protection & management

- ▶ There is great potential to make more use of GIS / remote sensing technology in conducting scientific and social research within LWC. Further GIS layers could usefully be produced, including a base-map and socio-economic data from the surrounding communities.
- ▶ Funding and technical support should be identified to extend the research and monitoring activities into the community conservation areas in order to collect baseline socio-economic data. This would be invaluable in building up the capacity and support of communities to manage their wildlife.
- ▶ Various individuals and institutions working on Lewa over the years have collected much information, but it is difficult to access and digest. For example, the first and only classification of the vegetation in LWC was done for an MSc dissertation (Botha 1999) for which there is only a hard copy available in the Research Department. Creating a **Resource Base Information** inventory could help to consolidate and collate the various information in digital format. It would also be good to start publishing LWC's research findings in academic journals.
- ▶ Consideration should be given to establishing further collaborations with universities or other research organisations to work on research at LWC in areas where expertise is lacking. In the early 1990s, Pretoria University initiated the monitoring of biomass and species composition of grass and woody vegetation.
- ▶ LWC should begin monitoring the impact of tourism and other development activities on the ecosystem, particularly the endangered species, with environmental impact assessments being done for these activities.

F.3.3 Local economic benefits

- ▶ LWC's work with the communities has only been allocated four percent of budgeted expenditure for the year 2004. This lack of resources does restrict the level of support that they can give the expanding number of community initiatives. Further funding sources and partnerships with conservation and development organisations with pertinent technical expertise could be established to help meet this shortfall in human and financial resources.
- ▶ Options and strategies should be pursued to diversifying other forms of sustainable wildlife utilisation and conservation economic activities that complement but are not dependent on ecotourism.

F.3.4 Community NRM capacity

A key area where the communities would most benefit from increased technical support is for the development of their NRM systems and structures. Areas of support could include:

- ▶ Establishing community-based monitoring and reporting systems and develop participatory land-use maps to determine and document community resource usage and needs.
- ▶ Developing management tools to improve range conditions and elaborate NRM by-laws that support more sustainable practices, based on the monitoring and mapping exercises and in collaboration with the Districts.
- ▶ Assisting in the improvement of livestock productivity and marketing in ways which complement the community conservation initiatives, perhaps in partnership with other organisations and institutions active locally, such as the recently-established Northern Rangeland Trust.

F.3.5 Policy environment

- ▶ A more strategic and proactive approach to influencing policy could be developed and adopted. In the LWC Strategic Planning Framework 2002-2012, influencing local and national policies is not included as a stand-alone issue to address in the Action Plan, apart from under Wildlife Monitoring and Management where it states, "LWC will continue to work with Laikipia Wildlife Forum and others to promote increased user rights as a matter of national policy".
- ▶ Targeting communities, local and national government with specific information on the experience and lessons learnt at LWC, could be a low key, non-confrontational way to influence stakeholders.

Annex 1 Case Study Terms of Reference

1.1 Background Information

The Global Environment Facility (GEF) is a financial mechanism that provides grant and concessional funding to projects and activities to protect the global environment in developing countries and countries in economies in transition. The GEF Secretariat services the GEF Assembly and the GEF Council and cooperates closely with global environmental conventions dealing with climate change, biodiversity, international waters, land degradation and persistent organic pollutants. Project financed by the GEF are mainly managed by its three Implementing Agencies - The United Nations Development Programme, the United Nations Environment Programme, and the World Bank. The GEF Secretariat is located and is administratively supported by the World Bank.

1.2 Objectives of the Case Study

The objective of the case studies is to understand the relationship / linkage between local benefits (and/or negative impacts) and the attainment of global environmental benefits of the GEF supported project: Lewa Wildlife Conservancy.

The Local Consultant will be hired to conduct the case study. Time allocation will be flexible and will take account of the range of issues to be studied and of logistics.

1.3 Overview of Investment

Project Name: Lewa Wildlife Conservancy
Project Type: Medium Sized Project
GEF Implementing Agency (IA): World Bank
Project Proposer (Executing Organization): Lewa Conservancy
GEF Focal Area: Biodiversity
Total Cost: \$3.943m (US)
GEF Financing: \$0.750m
Operational Program: OP1 – Arid and Semi-Arid Ecosystems / OP3 – Forest Ecosystems

Lewa Wildlife Conservancy Medium-Sized Project will support and further develop the activities of a private Kenya wildlife conservation agency – the Lewa Wildlife Conservancy (LWC). The LWC is located and operates on 16,000 hectares of the Laikipia plains and Northern foothills of Mount Kenya. The LWC is a registered 'Not for profit company'. The aim of the project is to further the conservation of the habitats of endangered Black Rhino and Grevy's zebra through the strengthening the capacity of communities to conserve wildlife and through the introduction of incentives for sustainable wildlife management. The objectives of the project are:

- To enable LWC to continue and further strengthen its conservation of endangered species
- To enable LWC to implement its strategic and financial development plan, making it more viable in the long term and increasing the sustainability of its conservation activities and benefits
- To extend conservation benefits to biologically important community-controlled land and slow down environmentally negative land use patterns by:
 - o Increasing LWC's capacity to support and promote community-based conservation and

- o Encouraging and assisting communities in high priority conservation areas to initiate sustainable conservation orientated enterprises
- To facilitate the development of other community based conservation initiatives and for private NGO support of such initiatives in Kenya and elsewhere by serving as a model and by providing training opportunities on a modest scale.

Local communities (Samburu and Masai ethnic groups) are significant participants and beneficiaries of the project. LWC currently provides direct employment for 190 people and approximately 80 more are employed by income generating activities associated with it. LWC also supports schools and clinics through an established outreach programme to its immediate community neighbours. The community initiatives currently supported by LWC benefit at least 1,100 people and as LWC's capacity is increased this number is expected to increase over the life of the project and beyond. Assistance to communities is expected to produce the following benefits:

- Development of a sustainable source of income in an environment where it is relatively difficult to develop income generating activities
- Creation of a limited number of jobs, in an environment where jobs are scarce
- A slowing down of negative social trends, involving the breakdown of large land units into small holdings which are not viable for support of local livelihoods; degradation of the environment and the migration of young people to the cities in search of income.

The cost of these initiatives to the communities is expected to be: Commitment of land, labour and possibly limited amounts of capital. In certain cases they may have to forgo prior income stemming from other uses of resources.

No negative gender impacts have been reported as resulting from the project. Increased income generating activities on both the core conservancy and community initiatives are expected to generate as many employment opportunities for women as for men.

The total investment for the project is \$3.943m (US) over 4 years. GEF financing totals \$0.750M with other donors providing \$1.432m and LWC \$1.761m. The project was expected to reach full disbursement by the end of 2003. GEF supported activities are focused on upgrading equipment and vehicles, infrastructure, capacity building for business development, training, and community support activities.

1.4 Scope of Fieldwork Investigation for the Project

The Local consultant will report on progress in achieving results relating to project objectives, outputs and outcomes, within the specific context of:

- Assessment and description of the types and scale of local benefits and negative impacts, intended or unintended, which have resulted from the GEF project, including local perceptions of the benefits and impacts.
- Examination and description of the nature of the links between local benefits and the attainment of global environmental benefits (according to project environmental indicators). This will be based on an analysis of linkages in terms of how global environmental benefits can affect local benefit / negative impacts and how the generation of local benefits / negative impacts can affect global environmental benefits.
- Assessment and description of the extent to which the strategy and environmental management options in the project design and implementation properly incorpo-

rated the opportunities to generate greater levels of local benefits: essentially looking at what the projects did not do, as well as what they did do.

1.5 Analysis Framework and Expected Outcome

The case study will address the following questions:

1. What are the overall objectives and outcomes of the project?

Overview of the investment: a brief profile of the project being evaluated, which describes the project policy and institutional context, structure, objectives and anticipated results (outputs, outcomes, impacts) and relates this to the host country's development context. Specifies intended local benefits and target groups. Based on existing documents and on interviews with stakeholders.

2. What are the Global Environmental objectives and achievements of the project?

This overview will be done based on existing documents and interviews with expert stakeholders. It will include an assessment of the accomplishments of GEF funded activities in supporting institutions, policies and activities that contribute to the improvement in biodiversity conservation. It will include a review of the environmental resource characteristics of the area.

3. What have been the local impacts (human and environmental) of the project?

4. What are the types and scale of local benefits and negative impacts?

The study will assess the project's positive and negative impacts using a livelihoods approach focusing on livelihood capitals, including natural, financial, social and institutional, physical and human capitals. This analysis will be differentiated by gender within each stakeholder group. Attention will be paid to indigenous / ethnically distinct people and other disadvantaged stakeholders where they constitute a distinct group.

5. What are the impacts of the GEF project in the relationship of local level processes to wider social (including gender), economic and environmental processes?

The study will examine how impacts on the various capitals have affected resilience and vulnerability of local communities to shocks from external factors that are normally beyond their control. Stronger or weaker livelihood capitals are assumed to lead to higher or lower resiliency respectively. The study should try to assess the extent to which this assumed relationship is actually taking place or at least should provide evidence that the impact on capitals is resulting in higher or lower resiliency. This assessment can be done by looking at processes that: occur at different levels but have a direct impact on local populations, two examples are: Processes at the local level such as better-organized communities (social capital) that are more capable to respond to food insecurity and natural resource variations (e.g., drought). Changes in external institutions such as laws and regulations that might result in benefits or costs at the local level.

6. What are the contributions or detriments of the project's local impacts (positive or negative) to the attainment of global environmental benefits?

The study will identify the links (positive and/or negative) between local benefits and the global environment. The following are four examples of possible patterns that the study might consider to assess these links:

- Changes in production and consumption patterns that reduce or exacerbate global environmental stresses (e.g., substitution of poultry for game meat).

- Cumulative local environmental changes that over large areas can have positive or negative global environmental consequences (e.g. deforestation or reforestation).
 - Reduction of vulnerabilities that can contribute to changes to the balance in policy priorities (e.g. moving from the urgency of poverty reduction to improved environmental management).
 - Changes in the external institutional environment, (e.g. the development of better governance as a consequence of local level empowerment and greater public awareness and national political support for environmental issues)
7. Considering the projects objectives, did the overall strategies and environmental management options selected in the projects effectively incorporate the opportunities to generate local benefits?

Specific attention will be paid to opportunities for women, the poor and minority groups, as these are more likely to be overlooked in project design and implementation.

8. What are the key findings and lessons to be learned and recommendations from the project²⁵?

1.6 Stakeholder Involvement

The Local Consultant should use appropriate participatory methods, to ensure active and meaningful involvement by investment partners, beneficiaries and other interested parties. Stakeholder participation will be integrated in fieldwork design and planning; information collection; development of findings; evaluation reporting and verifying findings.

1.7 Methodologies

The Local consultant will develop methodological tools for data collection based on the project contexts. The methods may include quantitative and qualitative approaches, such as survey questionnaires, Rapid Rural Appraisal (RRA), focus groups and formal and informal semi-structured interviews. Identification of the suite of methods will be context dependent and take place during the fieldwork initiation phase and be agreed by the Team Leader and other Study Team members.

1.8 Case Study Process

The case study will be carried out in conformity with the principles, standards and practices set out by GEF M&E (including the Code of Ethics).

The case study process is split into three phases:

Fieldwork 'Initiation' Phase: The Local Consultant will be integrated into the 'Study Team'²⁶. Firstly, the Team Leader will brief the Local Consultant on case study; discuss terms, and request that the Local Consultant prepare a draft workplan based on the fieldwork initiation period. The Local Consultant will develop a case study workplan²⁷ to:

²⁵ Including any relevant accountability issues, such as elements of approved project plan, which were not implemented?

²⁶ This will include GEF M&E Specialist (Team Leader), Implementing Agency representatives and Local Consultants.

²⁷ The workplan will address the following reporting elements: Overview of Investment; Expectations of the Case Study; Roles and Responsibilities; Methodology; Case Study Framework; Information Collection and Analysis; Reporting; Work Schedule.

- Develop and direct the appropriate methods, data collection, analysis and reporting during the main fieldwork phase.
- Describe how the case study will be carried out, bringing refinements, specificity and elaboration to the terms of reference.

Secondly, the Study Team will conduct: national-level stakeholder interviews; an initial scoping exercise of the Lewa case study field site to carry out interviews with key local stakeholders and to conduct pilot community consultations / interviews that go beyond those individuals and groups nominated by the project managers.

These activities will further establish the main issues of relevance to the study, enable the selection specific field sites, application of appropriate data collection methods and therefore, allow the Local Consultant to develop, and finalize a case study work-plan. This work-plan will act as the agreement between the Local Consultant and the GEF M&E Unit for how the study will be conducted. The Team Leader will 'sign off' on the agreed case study work-plan, which the Local Consultant will execute. The Initiation phase is expected to last approximately 10 person workdays.

Main Fieldwork Phase: The Local consultant will conduct fieldwork at the case study site and write-up a draft report. The draft report will contain key findings and lessons learned, together with the evidence on which these are based. The report will be submitted to the Team Leader for preliminary comments. Main fieldwork is expected to be 12 - 14 person workdays.

Stakeholder Presentation and Final Report: The Local Consultant and Team Leader will organize a brief presentation of the fieldwork results to national and local stakeholders (held at or near the project site) for comment. Following any revisions prompted by this presentation, the final report will be submitted to the Team Leader. Presentation and final report production are expected to be 5 – 10 person workdays.

1.9 Deliverables

The Local Consultant will prepare:

- ▶ Case Study Workplan (to be completed by end of fieldwork initiation)
- ▶ Case Study Report

These deliverables are to be: Prepared in English only, except for the final evaluation abstract / executive summary that will be submitted in both English and Swahili for the benefit of local stakeholders. Submitted to GEF M&E Unit electronically via e-mail and / or on diskette in MS Word. Submitted in hard copy format direct to:

Monitoring and Evaluation Unit
Global Environment Facility Secretariat
1818H Street NW, Washington DC 20433. USA

1.10 Case Study Workplan

The work-plan will be submitted to the Team Leader at the close of the Initiation fieldwork. The work-plan will be submitted electronically, together with 3 copies in hard copy format.

1.11 Draft Case Study Reports

The first draft of the report will be electronically submitted to the Team Leader on or before January 21st 2004. The Team Leader will provide initial comments within 5 working

days of receiving the report and these will be incorporated into a stakeholder presentation (scheduled for late January 2004) and summary of key findings (for those unable to attend). Stakeholders (including those unable to attend) will be given 5 working days to provide written comments on the key findings.

1.12 Final Case Study Reports

The Local Consultant will electronically submit the Final Report (including an abstract / executive summary in English) within two weeks after the deadline for receipt of final comments from stakeholders. Five hard copies will also be sent by courier. An abstract/executive summary in Swahili will be prepared within ten working days of submission of the English version.

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Annex 2

Annex 2 GEF Benefits Study conceptual framework

2.1 Lewa Wildlife Conservancy: Global Environmental Benefit Indicators

Objective	Indicators	Verification
Impact (final goal): Conservation of threatened Black Rhino and Grevy's Zebra populations		
Effects (intermediate goals): 1. Protection of endangered species will be made more effective and efficient enabling the conservancy to continue to provide protection to endangered species on a sustainable basis.	➤ Increase in populations of threatened species (Black Rhino and Grevy's Zebra) within the conservancy and increased availability for relocation ➤ Increased land area maintained as high quality wildlife habitat and maintenance of key wildlife corridors ➤ Effective wildlife protection	▶ Baseline population surveys and regular monitoring ▶ Baseline vegetation surveys and regular monitoring ▶ Patrol records

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2.2 The GEF Benefits Study Conceptual Framework

The main elements of this framework are a typology of local benefits, an identification of the ways that local benefits can enhance global environmental benefits and a model that links both local and global benefits to the dynamics of local people's livelihoods. The framework is depicted in Figure 7 below.

The typology identifies five generic categories of improvement to livelihood capital, which can be seen as the core of local benefits in global environmental projects:

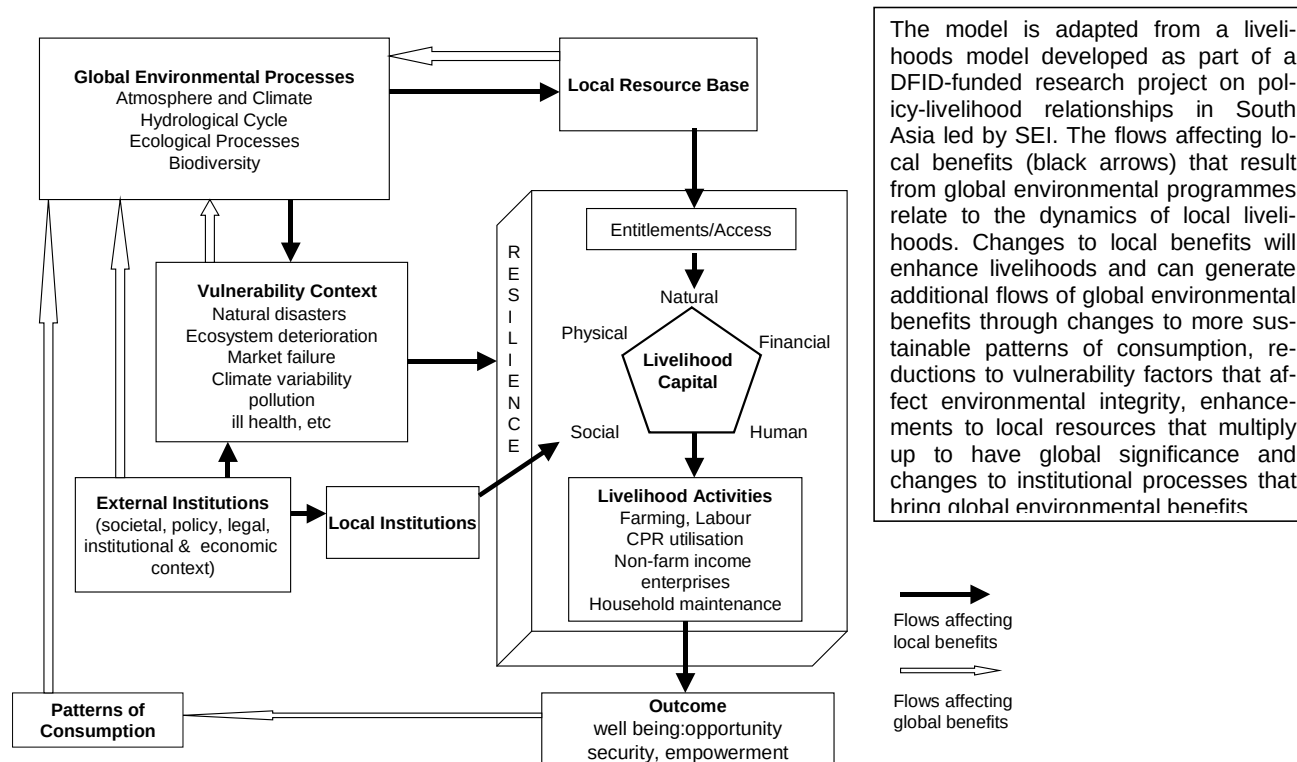
- ▶ Improved access to **natural capital**, including plants and animals harvested from the local resource base, surface and ground water, fuelwood and environmental services such as safe waste disposal and tourism and recreation values. Such changes will increase the sustainability of **resource management**, reflected in factors such as the reversal of ecosystems deterioration, retained biodiversity values, the regeneration of forests, rangelands and wetlands and improvements to water quality.
- ▶ Increased **livelihood opportunities, income and financial capital**. This includes increases to the productivity of existing and opportunities for new livelihood activities such as farming, fishing or tourism, increases in cash income and improvements to the ability to save or availability of capital.
- ▶ Improved **social capital, equity and institutional capacities** in local communities. This reflects the enhancement of community-level institutional capacities and contact networks and the improved ability in local communities to deal with outside agencies. It also reflects improvements to gender and social equity at the local level, especially through the empowerment of women and minority groups in decision-making.

- ▶ Improvements to **physical capital**, including investments in tools and machinery, access to or the ownership of land and buildings and access to infrastructure such as transport, telecommunications or water supply and irrigation.
- ▶ Improvements to **human capital**: the skills, knowledge, work ability and management capabilities of local community members. There is typically a need for a gender focus in this that emphasises issues such as functional literacy and management skills of women.

Increases in the livelihood capitals available to communities will promote improved **health** and **food security**, including improvements to key indicators such as child and infant mortality, reduced morbidity from diseases that reflect poor environmental conditions and improvements to both the absolute level of nutrition and a balanced diet.

Strengthened livelihood capitals and improved health and food security will, in turn increase the **resilience** of local communities to withstand shocks from external factors that are beyond their effective control. Increased resilience in turn promotes reduced **vulnerability** to, for example, natural disasters such as floods, droughts and cyclones, environmental degradation, loss of ecosystem integrity, deforestation and climate change and variability as well as to such forces as social, political and market disruption.

Figure 6: GEF Model of Livelihoods and Benefits Flows in Global Environmental Programs



Annex 3 Fieldwork Itinerary

3.1 Fieldwork Initiation Phase

The itinerary of the Initiation Phase aimed at maximizing the time available for national consultations and complete interviews with key LWC staff and scope communities for the Main Fieldwork Phase.

Tuesday 4 Sept: Meeting with Dr. Richard Kaguamba (TTL) World Bank for LWC to discuss project implementation problems and issues particularly on community aspects.

Thursday 18 Sept: Lee Risby (GEFM&E) 7.30pm Arrive Nairobi

Friday 19 Sept: 8.30am Meeting with Dr. Nyambura Githigui (Senior Social Specialist) World Bank about LWC design and implementation. 10.00am courtesy call to Makhtar Diop (Country Director) World Bank to inform him of the Local Benefits Study and the LWC case study. 11.00am Meeting with Dr. Richard Leakey (Former Director and Trustee of KWS) to discuss wildlife policy and development in Kenya and community initiatives.

Sunday 21 Sept: 7.00pm Dinner meeting with Dr. Robert Malpas of CDC to discuss TORs and LWC case study. 9.30pm Jyotsna Puri (UNDP) arrives to join the GEF / CDC Team.

Monday 22 Sept: 10.00am Meeting with Prof Ratemo Michieka (Director of NEMA and GEF Focal Point) to discuss the Local Benefits Study and gather information on environmental and wildlife policy. 2.00pm Meeting with Dr. Robert Malpas and Mr. Robert Craig to discuss LWC case study approach, methods and workplan.

Tuesday 23 Sept: 10.00am Meeting with Dr. David Kamweti and Mr. Alex Oginga Obara (World Bank Consultants) to discuss the results of the LWC Implementation Completion Report. 2.00pm Meeting with Hon Sammy Leshore (MP Samburu East) to discuss Local Benefits Study and LWC activities / benefits in the Namunyak community.

Wednesday 24 Sept: 9.00am Meeting with Dr. J.M. Mutie KWS Director and Mr. Joachim Kagiri (Assistant Director) to discuss LWC case study, conservation on private lands, wildlife and land use policy. 11.00am Meeting with Dr. Helen Gichohi (AWF) to discuss 'Heartlands' initiative in Samburu and AWF study of Il Ngwesi lodge benefits. Meeting with Dr. Sam Kanyambiwa (WWF) to introduce the Local Benefits Study to discuss WWF project and programme experiences in linking livelihoods and conservation. Meeting with Dr. Eldad Tukahirwa (Representative IUCN) to introduce the Local Benefits Study and collect data on IUCN experiences in linking livelihoods and conservation.

Thursday 25 Sept: Leave Nairobi 10.30 and drive to Lewa. 5.00pm Initial meeting and introduction to LWC by Mr. Ian Craig (Executive Director), Mr. David Parkinson (Deputy Director) and Mr. James Munyugi (Community Development Manager).

Friday 26 Sept: Individual briefings from LWC staff. 8.00am Richard Moller (Security); 10.00am Ms. Belinda Low (Research); 11.00am Isaac Njagi (Finance); 11.45am David Parkinson (Deputy Director); 2.00pm James Munyugi (Community Development Manager)

Saturday 27 Sept: 9.00am Survey of LWC project files. 2.30pm Meeting with GEF Committee

Sunday 28 Sept: 9.00am CDC/GEF reconstruction of LWC logframe. 12.00pm Lunch with LWC Staff. 2.30pm Meeting with Michael Dyer to discuss LWC impacts and livestock industry / land use in the area.

Monday 29 Sept: 8.00am Fly to Namunyak (Sarara Tented Camp). 10.00am Meeting with NWCT Manager and members of the Board of Trustees to discuss benefits of GEF LWC project. 2.00pm Meeting with Sereolipi Environmental Committee to discuss benefits of GEF LWC project and negative impacts. 5.00pm Return to Sarara Tented Camp and fly to LWC.

Tuesday 30 Sept: 9.00am Meeting with Dr. Jonathan Moss (Laikipia Wildlife Forum) to discuss LWC benefits and context of wildlife management (land subdivision, policy, water management); 11.00pm Collect Elizabeth Kamau (CDC Gender Specialist) from Nanyuki. 1.00pm meeting with Max Graham (Cambridge University) to discuss land policy and water management and general context of wildlife management in region. 3.00pm drive to Il Ngwesi Lodge (via LWC). 6.30pm Arrive Il Ngwesi Lodge.

Wednesday 1 Oct: 10.00am Meeting with Il Ngwesi elders to discuss benefits / negative impacts of LWC GEF project and local NRM. 1.00pm Lunch with elders. 4.30pm Imngaruan Village men and women meeting to discuss benefits / negative impacts of LWC GEF project and local NRM. 8.00pm Dinner with Max Graham (Cambridge University) at Il Ngwesi Lodge.

Thursday 2 Oct: 9.30am Leave Il Ngwesi and return via Mukogodo Forest. 10.30am visit LWC funded school and interview school teachers (Lokusero Primary School). 1pm Lunch at Laragai House (Borana). 3pm return to Lewa Safari Camp. 4.00pm reconstructive logframe exercise with LWC (Craig, Parkinson, Low, Munyugi) and LWC Chairman of Board (Pat Goss). 7.30pm Dinner at Lewa Safari Camp hosted by GEF/CDC.

Friday 3 Oct: 8.00am completion of reconstructive logframe exercise to identify key objectives, activities and impacts of LWC. 10.30am Leave for Nanyuki. 11.00am Meeting and lunch with CETRAD (Mr. Boniface Kiteme) to discuss land use policy, subdivision and water management issues impacting NRM in Laikipia and Ewaso basin. 4.00pm Leave for Nairobi.

Saturday 4 Oct: 5.30am Lee Risby and Jyotsna Puri Leave Nairobi.

3.2 Main Fieldwork Phase

The itinerary of the Main Fieldwork Phase aimed at maximising the limited time available for community consultations:

Tuesday 16 Dec: Drive to Nanyuki in the morning and meet with Boniface Kiteme at CETRAD. Travel to Lewa and meet with David Parkinson to discuss fieldwork itinerary. Interview Anne Ruhui (Lewa Community Department, Education Officer) about the environmental educational work of Lewa; and Daniel Kamau (Manager of Ngare Ndare Forest Trust). Finalise fieldwork itinerary and logistics with John Kinoti. Telephone conversations with Jonathon Moss and Michael Dyer.

Wednesday 17 Dec: Leparua (Il Ngwesi). Early morning interview with Anne Ruhui about the Women's micro-credit loaning scheme. Travel to Leparua (Il Ngwesi GR), meet with the elder Kitonga and inspect the Roots and Shoots Club tree nursery (education programme recently started by LWC with inputs from Jane Goodall). Focus group discussion with women (EK), and discussions with morans (warriors) (RC). PM: Interview with a group of women at a household in Leparua.

Thursday 18 Dec: Ngare Ndare. AM: Interview with the Chairman and Secretary of the Ngare

Ndare CBO, followed by a group discussion with both Kikuyu, Meru & Maasai elders. PM: Meeting with the Chairlady and an ordinary member of the Ngare Ndare Fuel Collectors User Group.

Friday 19 Dec: Andanguru Plains (Lekurruki). Interview with a group of young women, followed by a group of morans (Chief John Moile's homestead).

Saturday 20 Dec: Chumvi (Il Ngwesi members). Interview with a group of Il Ngwesi GR men together with David Masere (Community Liaison Officer of Laikipia Wildlife Forum & Director of Il Ngwesi). Evening: Interview with the Manager of Tassia Lodge (Lekurruki) and his Deputy.

Sunday 21 Dec: Kuri Kuri GR and Dol Dol. Discussions with Tassia Lodge Manager, head of security and Max Graham, en route. Meeting at the Kuri Kuri GR offices with a mix of men and women. Meeting with James Legei (the Manager of OSILGI - Organisation for Survival of Il-Laikipiak Indigenous Maasai Group Initiatives).

Monday 22 Dec: LWC. AM: Meeting with Ian Craig. Discussions with the Jane and Jikoni Women's Groups. PM: Visit to CETRAD - Boniface Kiteme and Simon Mumuli (GIS Specialist).

3.3 Stakeholder Presentation of Draft Report

Sunday 25 Jan: LWC. GEFM&E and UNDP-GEF staff arrive from Washington DC and New York. GEF / CDC Drive to Lewa (AM / PM). Meeting with LWC senior management in evening.

Monday 26 Jan: LWC. 10am – 2pm Presentation and discussion of draft report to LWC senior management and local communities

Tuesday 27 Jan: Nairobi. 6.30 – 9.00pm (Norfolk Hotel, Nairobi) Presentation and discussion of draft report to National stakeholders.

Annex 4 Project Logframe: Detailed outputs and activities

Result 1: LWC institutional capacity	
Long-term capacity of LWC to provide global and local benefits from wildlife conservation strengthened	
1.1 LWC tourism and other revenues enhanced	▶ Market LWC as a unique tourism destination ▶ Diversify Lea's tourism product ▶ Establish enabling environment for sale of surplus wildlife
1.2 Management capacity of LWC strengthened	▶ Make Improvements to offices, accommodation, equipment ▶ Purchase vehicles ▶ Set up radio communications network
1.3 LWC capacity to collaborate with and support local communities strengthened	▶ Improve capacity within LWC, with specific focus on the community office
1.4 Robust financial management established	▶ Establish better, more transparent accounting systems to improve efficiency/ monitor cost/ revenue, etc. ▶ Establish vigorous budgetary process together with monthly performance review ▶ Improve financial management capacity (expenditure controls) ▶ Strengthen accountability & transparency in project finances, etc.
1.5 Donor/ funding base strengthened	▶ Establish donor liaison office (with website, newsletter) ▶ Enhance fundraising effort in US/ UK ▶ Establish LWC fundraising liaison offices overseas ▶ Develop donor targeting/ strategy for NGO, private and multilaterals to diversify funding sources ▶ Organise fundraising/ outreach programme
1.6 Attitudes/ behaviours changed to support the realisation of financial sustainability	▶ Develop management awareness of importance of financial sustainability ▶ Promote community contributions (land, security) ▶ Strengthen community ownership of the Lewa concept
1.7 Strategic plans and partnerships developed to improve effectiveness	▶ Develop LWC strategic and business plans ▶ Develop partnerships with communities ▶ Empower communities to handle wildlife conflicts through capacity development
Result 2: Biodiversity protection and management	
Protection & management of endangered wildlife species in the wider ecosystem strengthened, in collaboration with local communities	
2.1 Security of endangered species (Grevy's zebras, rhinos, etc.) increased	▶ Establish and train security patrols ▶ Recruit community game guards/ scouts ▶ Improve surveillance aircraft and communications ▶ Involve Kenyan Police Reservists (KPR) in security activities
2.2 Research & monitoring of wildlife and habitats increased	▶ Monitor elephants & Grevy's zebra populations (incl. radio-collaring and tracking) ▶ Provide opportunities for research through training and employing local research students ▶ Train & employ community members in monitoring wildlife
2.3 Awareness Creation/ human capacity strengthened in communities	▶ Raise awareness on wildlife protection ▶ Encourage neighbours to set aside protected/ wildlife areas (livestock/ human activity free) ▶ Implement social/ wildlife responsibility programme in schools ▶ Establish community structures to manage wildlife/ environment

Result 3: Local economic benefits	
Economic benefits to local communities from sustainable use of wildlife and natural resources improved	
3.1 Community tourism strengthened and promoted	▶ Improve GR lodges ▶ Establish activities to increase tourist numbers ▶ Investigate alternative tourist activities & community areas for their potential ▶ Provide training/ skills transfer for lodge management (income/ employment retention)
3.2 Community skills and roles developed to optimise wildlife benefit	▶ Provide skills development for men & women to manage conservation related activities ▶ Improve accountability/ transparency/ empowerment among LWC community partners in management of wildlife resources and local benefits arising thereof ▶ Develop business skills and improve business planning/ practices ▶ Develop mechanisms to ensure equitable distribution of benefits (women, men, youths)
3.3 GR cooperation in benefiting from wildlife developed	▶ Establish mechanisms for benefit sharing between GRs formalised ▶ Disseminate lessons learnt between GRs through a process of peer assessment and review ▶ Establish benchmarks, levels of excellence/ achievement & long-term goals
3.4 Capacity of local communities to undertake conservation-compatible income-generating activities strengthened	▶ Identify and support alternative IGAs that benefit women & men in the community ▶ Encourage local communities to diversify IGAs e.g. beekeeping ▶ Strengthen community-based organisations ▶ Recruit and train community-based trainers ▶ Improve community knowledge for income generating activities (e.g. honey/ bird shooting) ▶ Establish micro-finance opportunities
Result 4: Community NRM capacity	
Pastoralist natural resources management and institutions sustainably enhanced	
4.1 Community institutions and governance strengthened	▶ Raise awareness within communities of importance of governance ▶ Establish new group ranches ▶ Design and agree Group Ranch constitutions ▶ Carry out legal registration of community structures ▶ Incorporate men & women with diverse skills within governance structure ▶ Carry out democratic elections on project leadership (tenure of office) ▶ Carry out capacity building at the community level to establish structures with equal representation of men & women
4.2 Community management systems improved	▶ Establish community management committees ▶ Identify and strengthen community management roles and responsibilities and accountability mechanisms ▶ Establish and provide training in simple community management systems ▶ Provide training to community members in management/ accounts ▶ Develop skills in project/ financial management, etc
4.3 Security systems and capacity improved	▶ Enhance area security through LWC operations ▶ Identify and appoint head of security in each community area ▶ Establish reliable communication network both for security & administration ▶ Provide communication devices along with training to LWC personnel and surrounding communities

4.4	Community natural resources management systems and structures enhanced
▶	Raise awareness of complementarity between wildlife conservation & livestock
▶	Establish community institutions for management and conservation of natural resources (esp. wildlife)
▶	Support District Development Committees and district officers to facilitate community-based NRM and NRM planning initiatives
▶	Develop participatory land-use maps to determine community resource usage/needs
▶	Provide support to community management committees in the development of land use management plans
▶	Provide support for land use zonation including conservation areas
▶	Demarcate and establish clear boundaries of conservation and other zones on the ground
▶	Provide support for communities in developing local byelaws for NR use within and outside conservation areas
▶	Provide practical training and support for community NRM institutions and land-use plan implementation
▶	Establish community-based monitoring systems
4.5	Conservation awareness and education improved
▶	Establish conservation awareness activities in local schools
▶	Improve school infrastructure
▶	Provide secondary school bursaries to promising students
Result 5: Policy environment	
Local and national policies supporting wildlife conservation and community livelihoods in semi-arid landscapes influenced and strengthened	
5.1	Politicians, especially at District level, influenced to support community wildlife initiatives
▶	Facilitate approval of District Development Committees for development of wildlife projects
▶	Develop relationships with local politicians to create a mandate
▶	Promote acceptance by district administration of advantages of supporting community wildlife programmes & in turn LWC
▶	Promote community representation in District forums
5.2	Networks and partnership developed to strengthen influence
▶	Establish/ strengthen linkages with networks to influence policies (local & national)
▶	Develop links within communities/ districts (and others, e.g. LWF) to influence local/ district policy (e.g. land use/ wildlife conservation)
▶	Establish a dialogue between LWC community liaison officer and local/ district authorities to facilitate change
5.3	Wider awareness about the Lewa model promoted
▶	Carry out informal lobbying/ influence of district/ national stakeholders of the need to change/ develop policy
▶	Create visibility for LWC via translocations, marathons, etc.
▶	Disseminate experience and lessons learnt to other communities, local and national government

Annex 5 Livelihoods Assessment Framework Indicators

5.1 Result 3: Economic benefits to local communities from sustainable use of wildlife and natural resources improved

Output 3.1: Community tourism strengthened and promoted

LIVELIHOOD CAPITAL	IMPACT INDICATOR	MEANS OF VERIFICATION
NATURAL	Introduction of wildlife species for tourism	▶ Lewa reports ▶ LWC research department ▶ Group ranch records ▶ Semi-structured interviews
FINANCIAL	Jobs provided with LWC & community enterprises	▶ Semi-structured interviews ▶ LWC & Group Ranch records ▶ Existing studies & reports
	Dividends provided to GR members??	
	Business plan developed	
SOCIAL & INSTITUTIONAL	Increased security from Lodge presence	▶ Semi-structured interviews ▶ Focus groups ▶ Existing studies and reports
	Improved networks and communication channels with outside agencies	
	Improved cooperation with LWC/ Borana Ranch	
PHYSICAL	Improved roads and access	▶ Observations ▶ Semi-structured Interviews ▶ Focus groups
	Improved health infrastructure??	
	Improved access to transport	
	Improved water supply - for human & livestock consumption??	
HUMAN	Improved skills and training for tourism activities and lodge management	▶ Observations ▶ Semi-structured interviews ▶ Group ranch records

Output 3.2: Community skills and roles developed to optimise wildlife benefit

LIVELIHOOD CAPITAL	IMPACT INDICATOR	MEANS OF VERIFICATION
SOCIAL & INSTITUTIONAL	Improved social cohesion 'sense of community'	▶ Semi-structured interviews ▶ Focus groups ▶ Existing studies and reports
	Enhanced capacity to address priority social needs equitably (leaders more responsive)	
HUMAN	Improved business management capability	▶ Observations ▶ Semi-structured interviews ▶ Group ranch records
	Enhanced wildlife related management capacity	

Output 3.3: GR cooperation in benefiting from wildlife developed

LIVELIHOOD CAPITAL	IMPACT INDICATOR	MEANS OF VERIFICATION
SOCIAL & INSTITUTIONAL	Enhanced cooperation & conflict resolution between Group Ranches	▶ Semi-structured interviews ▶ Focus groups ▶ Existing studies and reports
	Increased experience sharing between Group Ranches	

Output 3.4: Capacity of local communities to undertake conservation-compatible income-generating activities strengthened

LIVELIHOOD CAPITAL	IMPACT INDICATOR	MEANS OF VERIFICATION
NATURAL	Decreased pressure on natural resources through the provision of alternatives	▶ Lewa reports ▶ LWC research department ▶ Group ranch records ▶ Semi-structured interviews
	Improved utilisation of local resource base	
	Increase biodiversity values	
FINANCIAL	Increased availability of capital and the ability to save	▶ Semi-structured interviews ▶ LWC & Group Ranch records ▶ Existing studies & reports
	Increased income opportunities for disadvantaged members of society	
	More constant income flows year round	
SOCIAL & INSTITUTIONAL	Stronger community-based organisations in implementing & supporting income generating schemes	▶ Semi-structured interviews ▶ Focus groups ▶ Existing studies and reports
	Improved knowledge and increased access to markets	
HUMAN	Improved capacity to undertake income generating activities	▶ Observations ▶ Semi-structured interviews ▶ Group ranch records
	Enhanced motivation & confidence in undertaking enterprises	

5.2 Result 4: Pastoralist natural resources management and institutions sustainably enhanced

Output 4.1: Community institution and governance strengthened

Output 4.2: Community management systems improved

LIVELIHOOD CAPITAL	IMPACT INDICATOR	MEANS OF VERIFICATION
FINANCIAL	Improved equitability & transparency in distributions of benefits	▶ Semi-structured interviews ▶ LWC & Group Ranch records ▶ Existing studies & reports
SOCIAL & INSTITUTIONAL	Improved governance & management of community institutions	▶ Semi-structured interviews ▶ Focus groups

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LIVELIHOOD CAPITAL	IMPACT INDICATOR	MEANS OF VERIFICATION
	Enhanced access to governance for grassroots levels	Existing studies and reports
	Equitable access to governance for men, women and disadvantaged groups	
	Improved definitions of institutional roles & responsibilities	
	Stronger legal foundation for community-based NRM	
PHYSICAL	Improved community offices and supporting infrastructure	- Observations - Semi-structured Interviews - Focus groups
HUMAN	Strengthened capacity to participate in community government structures	- Observations - Semi-structured interviews - Group ranch records
	Strengthened understanding and capacity to participate in democratic institutions	
	Enhanced management & accounting capacity	

Output 4.3: Security systems and capacity improved

LIVELIHOOD CAPITAL	IMPACT INDICATOR	MEANS OF VERIFICATION
NATURAL	Increased/ stabilised plant and wildlife populations through security	- Lewa reports - LWC research department - Group ranch records - Semi-structured interviews
	Stable populations of livestock through increased security	
FINANCIAL	Increased income flows from livestock husbandry	- Semi-structured interviews - LWC & Group Ranch records - Existing studies & reports
	Employment opportunities from security activities	
SOCIAL & INSTITUTIONAL	Improved facilitation of social interactions through radio networks and Group Ranch administration	- Semi-structured interviews - Focus groups - Existing studies and reports
PHYSICAL	Improved telecommunication systems	- Observations - Semi-structured Interviews - Focus groups
HUMAN	Increased confidence and capacity of community members in law enforcement	- Observations - Semi-structured interviews - Group ranch records

Output 4.4: Community natural resources management systems and structures enhanced

LIVELIHOOD CAPITAL	IMPACT INDICATOR	MEANS OF VERIFICATION
NATURAL	Increased availability of dry season (emergency) pasture for livestock (goats & cattle) in conservancy areas	▶ Lewa reports ▶ LWC research department ▶ Group ranch records ▶ Semi-structured interviews
	Establishment of land use management plans indicating lesser conflict between wildlife, livestock and agricultural motivations	
	Improved conservation of key natural resources	
	Differences in flora and fauna between areas with land use plans and those without	
	Decreased degradation of natural resources through livestock overstocking and poor animal husbandry practises	
	Increased livestock productivity	
	Increased key wildlife populations	
FINANCIAL	More stable/ enhanced income streams from livestock management	▶ Semi-structured interviews ▶ LWC & Group Ranch records ▶ Existing studies & reports
SOCIAL & INSTITUTIONAL	Enhanced institutional capacity to manage natural resources	▶ Semi-structured interviews ▶ Focus groups ▶ Existing studies and reports
	Enhanced community capacity to identify community resource management needs and constraints	
	Enhanced community capacity to prescribe & enforce NRM requirements (bylaws)	
	Enhanced community capacity to monitor natural resource uses	
	Increased cooperation between communities over land use	
PHYSICAL	Clear demarcation of Group Ranches and different land use areas on the ground	▶ Observations ▶ Semi-structured Interviews ▶ Focus groups
HUMAN	Increased capacity of grassroots members to participate in NRM	▶ Observations ▶ Semi-structured interviews ▶ Group ranch records

Output 4.5: Education systems and infrastructure enhanced

LIVELIHOOD CAPITAL	IMPACT INDICATOR	MEANS OF VERIFICATION
FINANCIAL	Increased earning capacity of community from education	▶ Semi-structured interviews ▶ LWC & Group Ranch records ▶ Existing studies & reports
PHYSICAL	Improved school infrastructure	▶ Observations ▶ Semi-structured Interviews ▶ Focus groups
HUMAN	Increased awareness of the complementarity between wildlife conservation and pastoralism	▶ Observations ▶ Semi-structured interviews ▶ Group ranch records

5.3 Result 5: Local and national policies supporting wildlife conservation and community livelihoods in semi-arid landscapes influenced and strengthened

Output 5.1: Politicians, especially at District level, influenced to support community wildlife initiatives

Output 5.2: Networks and partnership developed to strengthen influence

Output 5.3: Wider awareness about the Lewa model promoted

LIVELIHOOD CAPITAL	IMPACT INDICATOR	MEANS OF VERIFICATION
SOCIAL & INSTITUTIONAL	Enhanced cooperation between Group Ranches and District Authorities in NRM and wildlife activities	▶ Semi-structured interviews ▶ Focus groups ▶ Existing studies and reports
	Enhanced local/ political support for wildlife conservation	
	Enhanced community grassroots participation in District forums	
	Strengthened and influenced support for the development of environment and district policies	

Annex 6 Community Consultations Interview Framework

ENTRY QUESTIONS	FOLLOW-UP QUESTIONS/ CHECKLIST
Personal/ Group Histories	
1. Introduction: Can you tell us how long you have lived here and about the members of your household(s)?	▶ Name, approximate age, gender, born here/ moved here? ▶ Any leadership position held in community ▶ Number of wives, children in household(s) ▶ Number of children at school (by gender)? ▶ Amount of land owned, if any
2. Health: Can you tell us about the general well-being of your household(s)?	▶ If illnesses in household, how and where do they receive treatment?
3. Wealth: What are your main daily activities for feeding and supporting your household(s)?	▶ Pastoralism, agriculture, trade, tourism ▶ How many livestock are owned by your household(s) (by type)? ▶ Selling price for livestock? ▶ Livestock diseases?
Natural Resource Management practices and governance	
4. What is the status of the natural resources in your area? (Output 4.4)	▶ <i>Natural:</i> What natural resources are important for your daily living (e.g. water, pasture, etc.)? ▶ <i>Natural:</i> Where are these resources and are they sufficient to meet your needs (Assumption 16)? ▶ What resources are declining in your area and why? (who is responsible for their exploitation) ▶ Are groups/ projects working here to support the community in better managing the natural resources [e.g. by the GEF-Lewa project (Assumption 14)]? ▶ If yes, are they successful in targeting the people responsible for degrading the natural resources? ▶ Has the status of the natural environment changed in the last few years?
5. What approaches have you adopted to managing the natural resources?	▶ <i>Social:</i> What are the challenges to managing your natural resources and what should be done? ▶ <i>Social:</i> which areas do they graze and when ▶ <i>Social:</i> What local bylaws govern natural resource use and are these laws enforced (e.g. fines for grazing in the conservation areas?)
6. What is the security situation in the area? (Output 4.3)	▶ Has the security improved in the area and how?
7. What is the current status of your relationship with the neighbouring communities/ group ranches?	▶ How has the relationship changed in the last few years ▶ How is information/ experience shared between communities? (Output 3.3)
8. How is the Group Ranch managed?	▶ What benefits does GR membership bring?
9. Do you have a role in the decisions that are made on behalf of the Group Ranch? (Output 4.1 & 4.2, Result 5)	▶ <i>Social:</i> Do you have access and influence in the GR institutions and what do you understand are the roles and responsibilities for the leaders and yourselves? ▶ <i>Social:</i> Do you participate in District Forums? ▶ <i>Human:</i> When did you last elect the GR leaders, how were they elected and how did you participate in the elections?
Knowledge, attitudes and practice towards conservation (linkages)	
10. Are there any areas in the Group Ranch where you are restricted from grazing?	▶ Why was the conservation area set up? ▶ Has the establishment of the GR Conservation Area been of benefit to you? ▶ What do you feel about the presence of wildlife in this area? ▶ Has livestock loss or crop damage increased as a result of the conservation area?

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11. Can you tell us about the Lodge that has been built on this Group Ranch? (Assumption 2 & 3) What is it that makes the lodge successful?	▶ What was the reason for building this Lodge? ▶ How was it paid for? What do you think is making the Lodge work (<i>Assumption 2</i>) ▶ [i.e. Do they see these benefits as coming from wildlife/ conservation]	
12. Do you feel that you have benefited from the Community Lodge/ tourism operations at all? (Output 3.1)	▶ <i>Financial</i>: Are there any direct cash benefits (e.g. handicrafts made for tourists) or are all the benefits pooled? ▶ <i>Social</i>: Is there increased security from the Lodge? ▶ <i>Physical</i>: Is there improved roads, access, health, transport, water supply ▶ <i>Human</i>: Have you received any training from the Lodge?	
13. Have you received any support to educate your children? (Output 4.5)	▶ What support and from who? ▶ Why is this support being given? (i.e. do they link this with conservation?)	
14. Have you been provided with support from the Lodge or outside in developing new income generating activities? (Output 4.5 & 3.4)	▶ What support and from who? ▶ <i>Financial</i>: Who is benefiting? Are they making money and is there enough to save? ▶ <i>Social</i>: How are IGA organized and how/ where are products sold? ▶ <i>Assumption 5</i>: Is it just you or is anyone else starting up these IGAs (replicability/ viability)	
15. How do these conservation benefits compare with other economic/ livelihood activities such as pastoralism? (Assumption 1)	▶ Does the Lodge/ conservation assist your livelihoods, for example in the dry season? ▶ Would you prefer to use the lodge/ conservation area for livestock? ▶ Do you think this preference might change in the future and why? ▶ Is livestock/ wildlife more important or equally needed?	
16. What is your vision for your group ranch/ area?	▶ Imagine we return in ten years time, describe what you hope will have been the major successes and changes to the group ranch.	
17. Do you have any questions/ comments for us?		

Annex 7 GEF funds allocation & expenditure

Category of expenditure		Total allocation (US\$)	Total spent to date (US\$)	Balances (US\$)
1	WORKS			
	Roads and Airfields			
1.1	Surfacing Key roads	18,000	19,604	(1,604)
1.2	Up-grading Airfield	10,100	9,825	275
1.3	Water Development	26,300	19,221	7,079
1.4	General Up-Grade	10,000	9,825	175
	Buildings			
1.5	Office extension	12,882	17,521	(4,639)
1.6	Senior Staff Housing Upgrade	9,624	11,328	(1,704)
1.7	Junior Staff Houses	22,358	23,236	(878)
1.8	Guest house	9,775	9,825	(50)
1.9	Community hall	5,613	11,129	(5,516)
1.10	Works Manager House	15,872	14,455	1,417
	Sub-total, Works	140,524	145,969	(5,445)
2	MACHINERY & EQUIPMENT			
2.1	Office Equipment	5,664	25,748	
2.2	Motorcycles	12,283	10,216	2,067
2.3	2 Pick-ups	67,451	58,378	9,073
2.4	Mazda truck	22,747	22,747	-
2.5	Tractors 125 h.p	100,000	90,704	9,296
2.6	TLB (loader)	68,450	60,130	8,320
2.7	Tow grader 5,000	25,000	25,832	(832)
2.8	6-8 Ton Roller	7,453	11,624	(4,171)
2.9	10 Ton Tipping trailer	10,555	10,907	(352)
2.10	Power Ripper	5,555	-	5,555
2.11	Generator	17,887	17,255	632
2.12	Truck 7-ton (Overhaul)	7,000	7,999	(999)
2.13	Hand-held radios	19,199	20,148	(949)
2.14	Solar Chargers	2,414	1,283	1,131
2.15	HF Radio	2,536	-	2,536
	Sub-total, Machinery & equipment	374,194	362,971	11,223
3	COMMUNITY CONSERVATION SUPPORT			
3.1	LWC capacity		-	-
3.2	General Operations	18,000	22,579	(4,579)
3.3	CDO Vehicle	33,725	29,189	4,536
3.4	Office construction	5,000	17,521	(12,521)
3.5	Office equipment	5,000	5,006	(6)
3.6	CDO assistant housing	5,019	7,004	(1,985)
3.7	CDO housing	15,872	14,455	1,417
	Sub-total, to LWC	82,616	95,754	(13,138)
3.8	Direct support to communities			-
3.9	Capacity building for new groups	18,000	16,792	1,208
3.10	Community fund	48,000	45,806	2,194
3.11	Additional community fund	16,000	14,482	1,518
	Sub-total, direct to community	82,000	77,080	4,920
3.12	Consultancies	5,000	1,975	3,025
3.13	Research		15,231	(15,231)
3.14	Tourism development	21,850	35,499	(13,649)
3.15	Unallocated	43,816	20,762	23,054
	Subtotal community conservation	235,282	246,301	(11,019)
	TOTAL	750,000	755,241	(5,241)

Source: Kamweti, D. & A. Oginga Obara (2003).

Annex 8 Institutional partners

Institutions	Function	Collaboration with Lewa	Capacity
Government Institutions			
Kenya Wildlife Service	Protection and management of wildlife in the country	Collaborates in wildlife translocation and security. Also Kenya Wildlife Research Division on issues of research on animals and habitat balancing.	Nationwide network of wildlife conservation and well trained personnel security
Forest Department	In-charge of gazetted forests and rural forestry extension	Collaborates in management and utilization of Ngare Ndare Forest.	Countrywide network but weak in participatory community forestry conservation.
Kenya Police	Overall in-charge of country security.	Support security operations of LWC and training skills.	Thinly spread and rather difficult to control poaching.
Ministry of Water	In-charge of water resources.	Conservation of Ngare Ndare forest and overall water use in LWC/Communities is an important issue technically under the ministry's portfolio	Activities of ministry not strongly felt in the field.
Ministry of Education	Responsible for nationwide education portfolio	Ministry interacts with the LWC school support programmes. Currently LWC supporting five schools.	Nationwide network with limited budget.
Administration (DCs)	Responsible for security coordination	LWC in particular depends on DCs of Samburu, Laikipia, Meru and Isiolo in law maintenance and conflict resolution.	Nationwide network down to sub locations
Ministry of Tourism and Information	Responsible for tourism promotion	Training of communities by Utalii College and tourism marketing support by Kenya Tourist Board	Big potential to support community ecotourism initiatives.
Parliament	Making the necessary laws for the country	Speaker of National Assembly and MP Samburu East chair conservation groups.	Instrumental in winning support for community wildlife conservation and influencing wildlife conservation-friendly policies.
Non-Governmental Organizations (NGOs)			
Tusk Trust	Undertakes charitable works. Dedicated to conservation of endangered wildlife in Africa.	Supported LWC rhino and elephant programme and organising the Safaricom Marathon	International activities
Wildlife Clubs of Kenya	Deals with non-formal environmental education and training of tour guides	Has opened a regional office in Meru. LWC hires some of staff trained by the club.	National club, covering all parts of Kenya
Laikipia Wildlife Forum	Focuses on wildlife conservation and research in Laikipia.	Wildlife conservation experience of Laikipia Wildlife Forum has been useful to LWC and community initiatives, and also in training.	Localized activities but useful in view of many wild animals in Laikipia District
Earth Watch	Wildlife Research	Undertaking research in monitoring Grevy's zebra as well as the habitat.	Useful international experience on wildlife conservation.
Impala Research			
Community Based Organizations (CBO)			
Il Ngwesi Ranch Group	Responsible for wildlife conservation among Il Ngwesi communities. Has 16,500 acres re-	The first community to collaborate with LWC on wildlife conservation. Now a role model for other community	However the CBO is still weak in capacity to professionally manage ecotourism. Group's

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Institutions	Function	Collaboration with Lewa	Capacity
	served for wildlife.	initiatives. Has a six rooms tourist lodge.	chairman is also the speaker of Parliament.
Namunyak Wildlife Conservation Trust	Responsible for wildlife conservation initiatives in Namunyak and has set aside approximately 75,000 acres for conservation.	The second organized community to collaborate with LWC on wildlife conservation and ecotourism development. Has tented camp for tourists.	Has strong political support, the chairman of the group being the local MP and very keen on conservation efforts.
Lekurruki Group Ranch	Already has a tourist lodge (Tassia Lodge). And about 15,000 acres group ranch.	The community has been supported on small scale on education tour by LWC. It is interacting and learning from the LWC and existing communities.	Has low capacity to conserve wildlife and run ecotourism business.
Ngare Ndare Forest Trust	The Trust supplements the Forest Department efforts in conserving the gazetted dry forest.	Immediate neighbour of LWC and important dispersal area of animals in LWC. Ngare Ndare Forest Trust benefited from scout training using GEF funds. LWC is a member of the Trust.	Forest very important for biodiversity conservation but seriously burdened by the five adjacent community village needs for grazing firewood, wood material and water.
Kalama and Sera	Upcoming communities on conservation initiatives. Kalama has 22,000 ha and Sera's over 140,000 ha.	Some training extended to Kalama and preliminary survey of Sera done by LWC. Marking of Kalama boundary using GEF funds.	Big potential in increasing wildlife in Northern Kenya.

Adapted from: Kamweti, D. & A. Oginga Obara (2003).

Annex 9 Stakeholder Presentation participants

Lewa Downs Stakeholder Presentation 26th January 2004

Name	Representation
Ian Craig	LWC
David Parkinson	LWC
James Munyugi	LWC
Simon Dugdale	LWC
Belinda Low	LWC
Richard Moller	LWC
Anne Ruhu	LWC
Jonathan Moss	LWF
Wanjohi Thairu	II Ngwesi
David Masere	II Ngwesi
Simon Kinyaga	II Ngwesi
Titus Letaapo	Namunyak
Julieta Lekieuele	Namunyak
Wilson Lekiliyo	Namunyak
Simon Nantiri	Lekurruki
John Moile	Lekurruki
Daniel Lolosoli	Kalama
Peter Lesharkwet	Kalama
William Ngatia	Ngare Ndare
Daniel Kamau	Ngare Ndare
Robert Malpas	CDC
Robert Craig	CDC
Elizabeth Kamau	CDC
Jyotsna Puri	UNDP-GEF
Lee Risby	GEF M&E

Nairobi Stakeholder Presentation 27th January 2004

Phil Franks	CARE International (ICD Coordinator)
Liz Macfie	International Gorilla Conservation Programme
Julius Arinaitwe	Birdlife International
Alex Oginga Obara	Biodiversity Consultant
Holly Dublin	GEF Consultant / IUCN Chair of Elephant Specialist Group
Shelia Aggrawal-Khan	UNEP-GEF
Yoshiyuki Yoichi	UNEP-GEF
Anna-Karen Lange-Regenass	UNEP-GEF
Nigel Sandys-Lumsdaine	LWC (Board Member)
Robert Malpas	CDC
Robert Craig	CDC
Elizabeth Kamau	CDC
Jyotsna Puri	UNDP-GEF
Lee Risby	GEF M&E

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