# ケニア共和国 半乾燥地社会林業強化計画 プロジェクト 中間評価調査報告書

平成18年8月 (2006年)

独立行政法人 国際協力機構

ケニア事務所

## 序 文

日本国政府はケニア国政府からの技術協力要請に基づき、平成 16 年 3 月 29 日から 5 ヵ 年にわたる技術協力プロジェクト「ケニア共和国半乾燥地社会林業強化計画プロジェクト」 を開始しました。

独立行政法人国際協力機構は本プロジェクトの協力開始後 3 年目にあたり、本計画の進 捗状況や現状を把握し、同国のプロジェクト関係者や派遣専門家に対し、必要な提言を行 うと共に、必要に応じて活動計画の見直しを行うために、平成 18 年 7 月 12 日から 7 月 18 日まで JICA ケニア事務所長 狩野良昭を団長として、ケニア側と合同でプロジェクト の中間評価を行いました。

調査団は、ケニア政府関係者との協議及びプロジェクト・サイトでの現地調査を実施し、 プロジェクトの運営や事業内容等を検討し、必要な助言を行いました。

本報告書は、同調査団の調査・評価結果を取りまとめたものであり、今後のプロジェクト の展開に広く活用されることを期待いたします。

終わりに、本調査に対してご協力とご支援を賜りました両国関係者の皆様に心から感謝 の意を表しますと共に、引き続き一層のご支援をお願いする次第です。

平成 18 年 8 月 31 日

独立行政法人 国際協力機構 ケニア事務所長 狩野 良昭 プロジェクト位置図





環境天然資源省(MENR)表敬



写



森林局本部におけるワークショップ



第一世代 Farmer Field School 卒業グルー プ視察 (ムベレ): 定植苗・作物生育観察



第一世代 Farmer Field School 卒業グルー プ視察 (ムベレ): スペシャルトピックと してマンゴー接木の実演



第一世代 Farmer Field School 卒業グループ 視察 (ムベレ): グループダイナミクス



第二世代 Farmer Field School 実施中グルー プ視察 (キツイ): 定植苗・作物生育観察



第二世代 Farmer Field School 実施中グルー プ視察 (キツイ): 定植苗・作物生育観察の 結果発表



第二世代 Farmer Field School グループ (キツイ): 生計向上活動としての苗木生産



KEFRI Tiva Demonstration Forest 視察 (キツイ): *Melia Volkensii* 成木



KEFRI Tiva Demonstration Forest 視察 (キツイ): Water Catchmentの展示



環境天然資源省(MENR)ミニッツ署名

# 評価調査結果要約表

1. 案件の	概要	
国名:ケニア共和国		案件名:半乾燥地社会林業強化計画
分野:自然環境保全-森林資源管理 / 植林		援助形態:技術協力プロジェクト
所轄部署:ケニア事務所		協力金額(評価時点):約243百万円
	2004年3月29日-2009年3月28日	先方関係機関:環境天然資源省森林局
協力期間	(R/D 締結日:2004 年 3 月 29 日)	(支援機関:ケニア林業研究所)
		日本側協力機関:林野庁
		他の関連協力:

#### 1-1 協力の背景と概要

ケニア国政府(ケ国政府)は乾燥地および半乾燥地(ASALs: Arid and Semi-Arid Lands) における農地林業の普及による国民の生計の向上に力を入れている。JICA は半乾燥地のキ イツ県の3郡を対象として、林業研究所(KEFRI)を主な C/P 機関として、1985 年から 17 年間にも及ぶ技術協力を実施し、苗畑・造林技術の確立及び社会林業(注:農民自らが自 家消費や生計向上のために植林を行うこと)の促進を行ってきた。

本件は、これまでの成果を生かし、普及を担当する環境天然資源野生生物省\*森林局(FD) を主な C/P 機関として、最終的には ASALs 他地域への面的な拡大を目指すものである。

まず、(1)FD の社会林業普及に対する組織面・制度面の強化及びスタッフの技術能力を 強化し、これらスタッフにより、(2)ASALs に位置する対象 3県(キツイ、ムベレ、タラカ) において、農家(グループ)間での社会林業普及活動を促進し、実践的な知識や技術を与 える。これらの成果により、農家グループ及びその他関係機関による半乾燥地での社会林 業活動が強化されることを目指すものである。

また、上位目標であるケ国 ASALs 全体に対する環境保全及び生計向上の達成のために、 (3)社会林業普及に関連する諸情報を関係者間で共有する活動も合わせて行うこととす る。

(注:事前評価当時、現在は環境天然資源省)

1-2 協力内容

(1) 上位目標

持続的な環境保全を高めつつ、半乾燥地の住民の生活水準を向上させる。

(2) プロジェクト目標

個人農家、農民グループ及びその他関係者が、半乾燥地において社会林業活動を強化する。

(3) 成果

1. FD の社会林業普及に対する制度的・技術的能力が強化される。

2. 個人農家及び農家グループの間で社会林業普及活動が促進される。

3. 農民及びその他関係者が十分な実践的な知識や技術を習得する。

4. 社会林業普及及び関連する諸課題に関する情報が、関係者間で共有される。

(4) 投入(評価時点)

日本側	:	長期専門家派遣	4名	機材供与	約 64 百万円
		短期専門家派遣	2名	ローカルコスト負担	約 76 百万円
		研修員受入	8名		
ケニア側	]:	カウンターパート配置	43 名	ローカルコスト負担	約 4.9 百万 Ksh
		土地・施設提供			(約3.1百万円)

## 2. 評価調査団の概要

調査者	総括 / 事業評価	JICA ケニア事務所	所長	狩野	良昭
	技術分野(社会林業普及)	林野庁森林整備部計	·画課 課長補佐	宮薗	浩樹
	評価分析	JICA 東南部アフリス	力地域支援事務所		
			広域企画調査員	古市	信吾
	評価分析( 補佐 )JICA ケニ	ア事務所 Senior Adn	ninistration Officer	John N	. Ngugi
	協力計画	JICA <b>ケニア</b> 事務所	所員	江崎	千絵
調査期間	2006年7月12日~2006年	<b>7月</b> 18日	評価種類:中間	評価	

## 3. 評価結果の概要

3-1 実績の確認

成果毎に実績をまとめる。

(1) 成果1

プロジェクトはセクターリフォームにより FD の受け皿となるケニア森林サービス(KFS)の第一次戦略計画策定を支援。また、ISFP の普及事業ガイドラインも準備できた。

社会林業普及実施計画は準備段階であるが、キツイ、ムベレ、タラカ県ではすでに第一次 案を策定。FD 職員の技術能力を強化するために、研修、セミナー、ワークショップなどを 開催した。結果、FD が社会林業普及の計画・実施に関する機能を備えるための能力が強化 されている。

(2) 成果 2

普及員によってキツイ、ムベレ、タラカ県の 70 農民グループに対して社会林業普及事業 が行われた。対象農民や農民グループは Farmer Field School (以下 FFS)手法を深く理解し 受容している。農家は自ら社会林業活動を実践に移すことが可能となった。普及員による 指導を受けた 48 グループが 175 の FFS セッション(フィールドディ、グループ間相互訪問、 学習発表や終了式などを含む)を遂行した。また、104 名の FFS 農家ファシリテーターが誕 生した。

(3) 成果3

48 農家グループが第1世代 FFS 修了グループとして認められ、現在、74 グループが郡 森林普及員と農民ファシリテーターにより社会林業の普及指導を受けている。農家は苗木 生産、植林、果樹栽培、農業活動、小規模収入向上活動などの社会林業活動に関し多くの 知見を得、プロジェクトの対象農家以外のコミュニティメンバーにも伝承している。

(4) 成果 4

ワークショップ、セミナー、フォーラムなどを通じ、FD とケニア森林研究所(KEFRI) をはじめ、その他省庁、国際機関、開発パートナーの間で社会林業に関する情報が共有さ れた。インターネットのウェブを活用し、約 2,200 名がプロジェクトのホームページにアク セスしている。

#### 【プロジェクト目標の達成度】

目標を達成するための技術支援や FFS のアプローチが導入され、またモニタリングと評価活動が開発された。結果、社会林業普及活動は強化 3 県を中心に比較的順調に展開されてきている。また、社会林業普及事業に関する経験が FD に蓄積され、対象農家及び周辺農家の技能と知識等の向上が見られる。農家は、苗木生産、農林地、果樹木の植え付け、フォダーバンク、農業技術、間作、小規模生計向上活動などを徐々に実践に移している。

プロジェクト目標で掲げる社会林業活動の強化の進捗度合いが、特に社会林業強化3県に おいて、中間評価時点で期待されるレベルに到達していることが確認できた。

#### **3-2 評価結果の要約**

(1) 妥当性

以下のような理由からプロジェクト実施の妥当性は高い。他方、モニタリング手法に改善 が必要である。

国家計画「経済再生戦略」(2003年6月)は、国民の生活水準の向上及び国家の近代化を 図るため、重点分野に「林業を含む生産セクターの政策とその実施の復活」「乾燥地・半乾 燥地での可能性の発見」を掲げる。「ケニア林業マスタープラン 1995-2020」が森林セクタ ーの重要計画であるが、「乾燥地・半乾燥地の林業」「農地林業」「普及」を課題として取り 組むとしており、プロジェクトの方向性はケニア共和国の政府開発政策と合致している。 我が国外務省のケニア共和国に対する国別援助計画(2000年)は、開発分野の一つに「環 境分野」を掲げ、人口圧や都市化による乾燥・半乾燥地の拡大を緩和するために、森林保 護、植林、農地の保護の重要性を強調している。JICA国別事業実施計画(2006年)は、森 林保全・造成を開発課題の一つと捉え、取組みとして前プロジェクトの半乾燥地社会林業 普及モデル開発計画(SOFEM)の成果の普及による森林の保全・造成等を掲げている。

半乾燥地農家は、土地の肥沃度の低下、環境の悪化、不規則な降雨パターンの影響を受け、 低農業生産を余儀なくされている。結果、農民の生計水準は低く、世帯レベルの食料安全 保障が改善されないままである。林業を農業生産に取り込んだ生産形態は、不規則な降雨 パターンの影響を受けにくく、農地の生産力を維持し、自然環境の保全に寄与している。 換言すれば、半乾燥地の農民は植林、苗木生産、等の社会林業技術の実践を望んでいる。

FD は組織全体の能力強化が求められている。FD はプロジェクトが開始されるまでは能力 強化の機会が少なかった。社会林業普及事業について、普及計画と普及手法、農民への研 修、小規模生計向上活動、資源及びマーケティングアセスメント、農林地における商業化 活動と管理、費用対効果の分析、基本的な農業知識・技能などの能力向上が求められてい る。

プロジェクト関係者はプロジェクトが採用する FFS を社会林業普及手法として、その適 正さを認識している。FFS は社会林業活動を長期的にモニタリング可能であり、集中的な学 習プロセスにより理解が進み実践的、参加型でかつ農民を中心に据えた普及手法、と捉え られアプローチとして適正である。

カウンターパートと専門家間で情報を共有し、プロジェクトの活動を改善していくために モニタリングは必要であると認識されている。しかし、報告書提出の遅れ、データの整理・ 分析が十分に行われていない、分析と FFS 現場へのフィードバックの不備などが指摘され ており、実質的にモニタリングが機能していない。社会林業普及活動のモニタリングには 改善が必要である。

プロジェクトが推奨する Melia Volkensii は半乾燥地に適した商業木である。FFS 活動で取 り上げられ、プロジェクト関係者はその普及に努めている。農家はこの商業木の経済的価 値を次のような理由で認識している。飼料木としての利用、土壌肥沃度の改善、建築材・ 家具材として経済性が高い、苗期及び成長期の耐シロアリ性、耐乾燥性、燃料としての利 便性、効率的な成長などの理由である。

プロジェクトが開始されて以来、急激な政策、社会・経済の変化は見られない。他方、新 しい森林法のもとセクターリフォームが進行中。社会林業等の重要性について何ら国の方 針等が変わるものではないことを FD 側は強調しているものの、セクターリフォームの方向 性と公社化への支援も視野に入れ、引き続き注視していかなければならない。

(2) 有効性(予測)

現状の成果からプロジェクト目標の達成は高い。個人農家や農家グループはキツイ、ムベレ、タラカ県において社会林業の活動を始めており、他の半乾燥地域への波及が期待され

る。すでに FFS の農家ファシリテーターが育成され、彼らによるいくつかの FFS セッションが開始されている。

一方で、中間評価時点であることから、プロジェクト側からの投入も豊富で、農民の関心 及び意欲も保たれているが、今後、農民の FFS に費やす労力と時間に見合った具体的な成 果が得られない場合に、農民の「ヤル気」が萎んでくることが懸念される。プロジェクト 側は、モニタリングも含めた効率的かつ効果的な FFS 実施について、柔軟に取り組んでい くことが望まれる。

モニタリングを核とした FD と普及現場との連携は形作られており、相乗効果としてプロ ジェクト目標を達成することが期待されている。各種技術開発、調査、マニュアル作成な どの活動が実際の林業普及現場に応用できるよう、より緊密な調整が必要である。

(3) 効率性

資源の投入が質・量・タイミングの観点から概ね計画通り投入されている。他方、今後プロジェクト終了に向け、ケニア側予算規模に合わせた活動の計画と実行が望まれる。

日本人専門家の数、分野は適正であった。機材調達と県森林署の整備など、活動計画を遂 行するにあたり投入予算は計画通り執行された。

社会林業普及分野において、プロジェクトの開始当初から適正な普及手法の検討と試行を 経て、FD 関係者と農民に受容される手法を見出したことで、その後の普及活動の技術的継 続性に繋がった。一方、普及活動にかかる費用のほとんどを日本側が負担しており、面的 拡大を目指す場合、今後どのようにケニア側の予算規模に合わせた支出をしなければなら ないかを十分考慮すべきである。

各種の調査、セミナー、ワークショプ、現場での専門家の指導を通じて、FD 及び県森林 署員、郡森林普及員の能力開発が進み、社会林業を推し進める組織としての能力が向上し ている。しかし、調査などの結果が現場の FFS に反映されていない、多大な時間をモニタ リングに費やしているものの情報の分析とフィードバックが機能しないなどの問題が露呈 している。より効率的な活動のために改善点があることも事実であった。

ケニア側は、数多くの FD スタッフ、県森林署スタッフ及び郡森林普及員をカウンターパ ートとして配置し、活動のスムーズな運営に寄与している。

現場の森林普及員は、プロジェクトの活動に惜しみないエネルギーを費やし、計画通りの 活動を遂行している。短期間において 48 グループの FFS 第1世代が卒業し、104 名の FFS 農家ファシリテーターが誕生したことは画期的である。

今後、ケニア側予算投入量の改善について絶えず申し入れていくことも必要であるが、ケ ニア側の投入量を見越した活動計画を双方で見直し、再立案することも重要である。また、 農民ファシリテーターを活用した社会林業普及事業を拡大させるために、ケニア側の予算 項目に即した支出を促すべきである。 (4) インパクト(予測)

プロジェクト目標の発現が他の半乾燥地域へ波及すれば、社会林業強化3県(キツイ、ムベレ、タラカ)のプロジェクト目標の指標を見る限りにおいて、上位目標の達成見込みはあると考えられる。

他方、半乾燥地の農民世帯レベルの食料安全保障を改善し貧困を解決するという意味にお いては、あらゆるリスクを避けなければならない脆弱な農民の投資先と意識の方向は他の 生産部門(農業部門など)と比較すると、林業への意識は低いのが事実である。

適正な技術を備えファーマーランを実施しその対価を支払うに値する農民ファシリテー ターによる FFS の仕組みと農民グループのネットワーキングの構築は、今後上位目標を達 成する上で必要なものである。また、プロジェクトで醸成した農民の林業への意識を維持 するためにも、苗木の入手可能性(場所、値段など)農村金融、KEFRIの有する技術・情 報等(*Melia Volkensii*) その他小規模生計向上活動に関する情報を、農民グループのネット ワーキングでどのように半乾燥地域で還流させるのかが一つの課題である。

エンパワーメントの観点から、FFS を実施した普及員と農民たちに正のインパクトが認め られた。普及員と農民自らが認める彼らの変化は次の通りである。時間管理と時間に対す る意識の芽生え、自信の芽生え、コミュニケーション能力と発表能力の改善、グループ管 理の意識向上、共同意識の向上等があげられる。

(5) 自立発展性(予測)

FD から KFS に移行するにあたり、FFS 手法を制度化することで、社会林業普及事業を 他の半乾燥地へ持続的に波及させる可能性が高くなる。セクターリフォームについては、 プロジェクト側から引き続き積極的に支援していくことが重要である。

プロジェクト運営にかかる費用について、日本側の多大な負担割合が明らかになってい る。このままの負担割合で活動を継続するようでは終了後の自立発展性は望めない。ケニ ア側関係者がケニア側予算の負担割合の低さについて認識しているものの、今後増えると 言い切ることは困難である。そのため、プロジェクトの効果を維持させるためには予算に 見合った活動内容に改めることが肝要である。日本側の投入予算に沿って活動計画を作成 するのではなく、ケニア側の予算量を見越して、足りない部分を日本側が補う形に徐々に 移行すべきである。

費用を見直す事項としては、いくつか例が挙げられる。現行の郡森林普及員がファシリテ ーションする FFS の頻度、内容と費やす時間、FFS セッションに費やされる文具、モニタ リングに掛かる報告書の内容と作成頻度、文具や費用等である。

社会林業事業に対する対象農民の理解も高く、FFS の手法としての技術的優位性が発揮された。すでに農民ファシリテーターが活動を始めており、手法の農民による受容性が高いと認められ、手法の技術面での視点では自立発展性は高い。

## 3-3 効果発現に貢献した要因

- 計画内容に関すること
   特記事項なし。
- (2) 実施プロセスに関すること

プロジェクト開始当初から短期コンサルタントを雇用し、適正な社会林業普及手法について検討、試行したことにより FFS が適正であると関係者から認識され、プロジェクトのスムーズな実施に貢献した。

#### 3-4 問題点及び問題を惹起した要因

- 計画内容に関すること
   特記事項なし
- (2) 実施プロセスに関すること

モニタリングの頻度と報告書類の多さ、データの整理・分析不足などにより、モニタリン グが機能していない。

#### 3-5 結論

プロジェクトはケニア側 43 名のカウンターパートと都合 4 名の日本人専門家の不断の努力と献身で、当初の活動計画を概ね実施してきた。活動を通じて、FD 本部スタッフ、県森林署署員、郡森林普及員の能力レベル、特に現場において効果的な FFS 手法を核とした社会林業普及事業を実施する職員の能力は強化されてきたと判断する。

対象農家と周辺農家は社会林業に関する知識と技能を備え、生計の向上と環境保全への第 一歩を踏み出そうとしている。農家は知識・技能ばかりではなく、FFS の実践を通じてプロ ジェクトの活動に参加し、自ら強化(エンパワー)されていると気づく。この短期間にお いて、104 名もの農民ファシリテーターが育成されたことは画期的である。

FD の予算の負担割合は日本側のそれに比べて確かに少ないが、プロジェクトの自立発展 性を確実にするためにケニア側はその克服の重要性を認識しており、予算支弁の努力を今 後も惜しまないことが確認できた。 3-6 提言(当該プロジェクトに関する具体的な措置、提案、助言)

(1) ケニア側予算量と支弁の確実性の改善

日本側の予算負担割合を漸減し、ケニア側予算での自立を促すべきである。FD が公社に 組織変更したとしても、プロジェクトの目標を達成し効果を持続させるために、ケニア側 は予算増と支弁タイミングの遅れを改善する努力をはらわなければならない。また、FFS の内容の精査と同時に農民ファシリテーターの活用を促進するために予算費目を確保しな ければならない。

(2) 日本側の投入

FD、県森林署員、郡森林普及員の社会林業普及能力が向上するにしたがい、日本人側の 長期派遣専門家数を2名にすべきである。それには、対象地域でのプロジェクトのインパ クト、他半乾燥地域への事業の試行と拡大、FFSネットワーク形成、農民ファシリテーター によるFFSの実施、普及ガイドラインの完成を見極めながら、専門家の漸減を考慮する。

(3) FFS の合理化

FFS を社会林業普及手法として制度化するためには、かかる費用と内容を検討し、現スタ ッフの人数で持続的に実践可能な、費用対効果の高い手法に改善させるべきである。見直 すべき点はいくつか挙げられる。FFS セッションの頻度、郡森林普及員の訪問回数、農業セ クターとの連携、農民ファシリテーターの活用等。

さらに、プロジェクトのモニタリング手法も、各階層でのモニタリング内容、手段、頻度 などを精査し、各レベルで負担とならない、かつ情報の整理・分析とフィードバックがで きる合理的なモニタリングシステムを構築すべきである。

(4) 農民ファシリテーターの強化

セクターリフォームにおいて、普及員の人数が増える見込みが低い中で、限られた資源(カ ネ、モノ、ヒト)でプロジェクトの効果を面的に広げるには農民ファシリテーターの活用 は不可避である。彼/彼女らの人数を増やし、かつ質の高いファシリテーターを今後も育成 すべきである。また、郡森林普及員はファシリテーターの支援に備えるべきである。

(5) 4 つのプロジェクトコンポーネントの連携強化

4 つのアウトプットの連携強化を図るため、定期的な会議を開催し、それぞれの成果の発 現程度を共有しなければならない。例えば、林業製品の市場調査の結果を現場の FFS 活動 の中に取り込むことで、農民にとってより効果的な手法となる。

## 3-7 教訓(当該プロジェクトから導き出された類似プロジェクトの発掘・形成、実施、運 営管理に参考となる事柄)

(1) 既存アプローチの活用

本プロジェクトでは、社会林業普及を強化していくにあたり、プロジェクト独自で新しい 手法を開発するのではなく、既に農業セクターを中心に 1990 年代にケニア共和国に導入さ れ、かつ他ドナーも導入を図ってきた FFS を採用することにより、先方政府からも受け入 れやすく、更に他案件へ応用しうる可能性が高いものなっている。既に、アフリカ開発銀 行も本プロジェクトのアプローチを取りいれたパイロット事業を今後実施予定のプロジェ クトに組み込む予定としており、今後類似案件においても当該国、当該セクター、関連セ クターにおける既存アプローチを調査し、プロジェクトの実施に取り入れることは有用で ある。

他方、既存のアプローチをそのまま適用するのではなく、プロジェクトの開始当初から 外部コンサルタントを雇用した適正な普及手法の検討と試行を経て、FD 関係者と農民に受 け入れられる手法を見出したことは、プロジェクト開始当初のパイロットステージの重要 性を示唆している。

(2) グループアプローチの有効性

本プロジェクトの前身である社会林業普及モデル開発計画(SOFEM)における社会林業 普及活動では、中核農家が地域の拠点として育成され、周辺農家へ普及していく手法が取 られ一定の成果を収めた。他方、この手法は農家対農家であることからおのずと面的広が りには時間を要するものであり、かつ選ばれなかった農家の間での不公平感、中核農家へ の過度の負担などが指摘されていた。

これらの教訓を活かし、本プロジェクトでは組織化された農民を対象とし、グループで 活動を行う方法を取り入れ、結果として面的な広がりが改善され、不公平感の解消、グル ープでの活動を通じた結束の強化により、更なる活動の発展が期待できる状況が生まれつ つある。

よって、特に普及を視野に入れたプロジェクトにおいては、グループアプローチの有効 性を今後更に検証していくことが期待される。

(3) 先方政府予算措置を把握する必要性

プロジェクトの円滑な実施及びプロジェクト後の持続性を考える場合、先方政府の予算 措置及び実際の支出状況を把握することは非常に重要である。しかしながら、プロジェク ト計画段階ではこれらの調査をあまり実施することなくプロジェクトが開始されるケース が多い。 本プロジェクトもプロジェクト形成、計画段階では先方の予算措置にかかる調査は実施 されてこなかったが、プロジェクトを遂行する中、JICAによる負担及び先方政府による負 担の現状把握を行い、プロジェクト中盤からプロジェクト終了後を見据えて、これらの調 査結果に基づき先方政府に対する予算措置の申し入れをおこなってきている。

よって、提言にも述べているように日本側の投入予算ありきで活動計画を作成するのでは なく、ケニア側の予算量を先に見越して、足りない部分を日本側が補う形を取るという形 のプロジェクト形成を行うことが今後求められる。

3-8 フォローアップ状況

特記事項なし

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## 第一章 評価調査の概要

#### 1-1 調査団派遣の経緯と目的

ケニア国は、国土の8割が半乾燥地または乾燥地であり、森林面積は国土の3%以下である。他方、国内総エネルギーの7割以上を薪炭に依存しているなど、森林資源の持続的確保・造成が不可欠となっている。近年では、人口増加に伴う薪炭・木材の需要増加に加え、耕地の拡大、過放牧、旱魃などの条件が相まって、森林資源の荒廃、土地生産力低下、自然環境の悪化が進んでいる。

我が国は、貧困層が多い半乾燥地(キツイ県)に対する支援に焦点を絞り、主にケニア 林業研究所(KEFRI)を通じて、林業分野における協力を17年間に渡って実施してきた。 この結果、半乾燥地における基礎的育苗・植栽技術が開発・検証されるとともに、普及 モデル開発の過程でキツイ県内4郡に76軒の中核農家が地域の普及拠点として育成され た。今後、当地域において社会林業をさらに面的に拡大していくためには、この中核農家 から周辺の農家に自発的な働きかけが行われていくような普及システムを確立する必要が あり、これらキツイで開発された技術・モデルがさらに発展し、全国的に普及していくた めには、実際の林業普及実施機関であるケニア森林局(FD)による普及活動の拡大が不可 欠である。しかし、現状の森林局の普及体制は人的にも制度的にも脆弱であり、この点を 強化していく必要があった。そこで、ケニア国政府は半乾燥地における社会林業普及と林 業普及行政の強化を要件とした協力を我が国に要請し、2003年10月に事前評価調査団が派 遣された。

その結果、本プロジェクトにおいては、これまでの協力の成果を生かし、普及を担当す る環境天然資源野生生物省(事前評価調査当時)森林局を主な C/P 機関として、最終的に は半乾燥地の他地域への面的な拡大を目標に、2004 年 3 月、環境天然資源野生生物省、JICA ケニア事務所との間でプロジェクト実施にかかる討議議事録(R/D)の署名が取りかわされ た。

今年は本プロジェクト開始後3年目にあたり、中間評価調査団を派遣し、JPCM(JICAプロジェクト・サイクル・マネジメント)手法に基づいて、ケニア側と合同でプロジェクトの計画達成度等について中間評価を行い、必要な提言を行うと共に、必要に応じて活動計画の見直しを行うものである。

# 1-2 調査団の構成と調査期間

# (1) 調査団構成

1) 日本側

	担当分野	名前		現 職
(1)	総括 / 事業評価	狩野 良昭		JICA ケニア事務所 所長
(2)	技術分野(社会林業普及)	宮薗浩樹	ġ	林野庁森林整備部計画課
				海外林業協力室 課長補佐
(3)	評価分析	古市信吾		JICA 東南部アフリカ地域支援事務所
				広域企画調査員
(4)	評価分析(補佐)	John N. Ngu	gi	JICA ケニア事務所
				Senior Programme Officer
(5)	協力計画	江崎千約	27	JICA ケニア事務所 所員

## 2) ケニア側

	担当分野	名前	現職
(1)	総括	Mr. D.K. Mbugua	森林局長代行
(2)	-	Mr. Anthony M. Maina	森林局乾燥林業課長 シニア森林保護官
(3)	-	Mr. S.K. Mureithi	森林局計画課 森林保護官

## (2) 調査期間

2006年7月12日~2006年7月18日

日順	月日	曜日	移動及び業務	場所
1	7/10	月	宮薗団員 成田発	
2	7/11	火	宮薗団員 ナイロビ着	ナイロビ
			16:30 団内打ち合わせ	
3	7/12	水	<ul> <li>09:00 環境天然資源省表敬</li> <li>10:00 森林局表敬</li> <li>11:00-15:00 森林局本部ワークショップ</li> <li>・ ローカルコンサルタントによる調査結果の発表及び発表に基づくワークショップ及びグループディスカッション</li> </ul>	ナイロビ

日順	月日	曜日	移動及び業務	場所
4	7/13	木	現地調査	ムベレ
			6:00 ナイロビ発	/ キツイ
			9:00 ムベレ着	宿泊:
			第一世代 FFS 修了グループ視察	KEFRI キツ
			12:00 ムベレ発	イセンター
			16:00 キツイ着	
5	7/14	金	現地調査	キツイ
			7:30 キツイ発	
			8:30 視察対象 FFS グループ農地着	
			12:00 視察対象 FFS グループ農地着発	
			13:30TIVA デモンストレーションフォレスト着視	
			察	
			14:30TIVA デモンストレーションフォレスト発	
			17:30 ナイロビ着	
6	7/15	±	資料整理	ナイロビ
7	7/16	日	資料整理	ナイロビ
8	7/17	月	評価協議、資料整理	ナイロビ
9	7/18	火	9:30 評価協議	ナイロビ
			14:30 合同評価、合同評価報告、M/M 署名	
11	7/19	水	宮薗団員 ナイロビ発	ナイロビ
12	7/20	木	宮薗団員 成田着	

#### 1-3 団長所感

協力が開始されて以来2年4ヶ月が経過したが、その間、ケニア、日本の双方が協力計 画に基づく適切な取り組みを行っており、ほぼ計画どおり順調に実施されていることが確 認された。

また、本プロジェクトの普及手法として、FAO が実施してきた FFS(Farmer Field School) の手法が採用され、第一世代48 グループの研修が終了した。今回の調査では2つのグルー プを訪問しただけだが、この訪問時における農民グループの実施現場からの印象及びロー カルコンサルタントの報告書からも、本 FFS の普及方法が半乾燥地帯での社会林業振興に あたって、農民から好感を持って受け入れられていることを知ることが出来た。又、本 FFS を担う3 県の森林普及員、さらに、それらを統括する森林局関係者においても、従来社会 林業の普及方法について試行錯誤していた中で、本 FFS の普及方法が農民から広く受け入 れられていることから、他の半乾燥地帯を対象とした社会林業の推進にあたって適用可能 な普及方法であると自信を深めている。以上のことから、FFS の普及方法が他の半乾燥地域 への社会林業の推進にあたって有効で、本プロジェクトの取り組み方法がモデルなること が確認された。

FFS の普及方法が他の半乾燥地域へ展開されていくためには、ケニアの人材の能力開発だ けでなく他の半乾燥地域へ推進するための新たな予算確保が並行して行われなければなら ない。本プロジェクトの実施にあたっては、普及に係る経費(例えば、農民のワークショ ップ参加費用、普及員の出張手当、ガソリン代、グループ活動の Seed Money など)の大部 分は日本側の支出によって賄われているが。協力の中間段階の現時点において 2 年半後の 協力終了を見据え、協力の持続性の観点から専門家からの問題提起を受け、ケニア側が FFS の普及方法に必要となる予算の増額が必要であることを認識し、財務省に予算要求しよう とするようになっていることは評価される。

今後の活動計画の作成にあたり、まず、JICA 側の投入量を先に見越して計画を作成するのでなく、ケニア側の投入量を先に見越して、不足部分を JICA 側が補う形にすべきである。

今まで行われた FFS の普及方法は、毎週半日間、定期的に行われる集会に、必ず普及員 が参加してファシリテーションをするという、グループごとに共通なかなり手厚い取り組 みになっている。今後は、活動の内容及びグループの成熟度、季節などを勘案し、より効 率的でかつケニアの財政など投下能力に応じた取り組みのためのさまざまな方法を試行し ていくべきであろう。具体的には、活動の内容、グループの成熟度、季節に応じた集会の 頻度の弾力化、FFS 期間の柔軟化、農業 FFS と連携し農業と林業の重複する期間を相互に 分担することを通して社会林業部分の短縮化さらにグループ活動を通して成長した農民を、 ファシリテーターとして活用するファーマーラン FFS の増加などが考えられる。

森林政策、計画の基本となる新森林法案が2005年7月に国会を通過、2007年1月には、 森林局は独立行政法人に移行することになっている。現在評議員の人選にあたっている最 中であり、新組織において本プロジェクトが取り扱っている環境森林がどのような位置を 占め、予算が配分されるのか不明な状態である。森林伐採権の譲渡など利益が上がる森林 経営の部分と異なり、長期的な視点でしか評価が難しい環境植林部門については、森林局 は基本的方針の変更はないと発言しているものの、方針の変更によってはプロジェクト運 営に大きな支障が生じる恐れがあり、今後とも十分に注意が必要である。

4

# 1-4 主要面談者

# 【ケニア側】

(1) 環境天然資源省 (Ministry of ]	Environment and Natural Resources: MENR)
Prof. George O. Krhoda	Permanent Secretary
Mr. Swaleh As lim Khalil	Senior Deputy Secretary
Mr. A.M. Jabane	Senior Assistant Secretary
森林局 (Forestry Department: FD	)
Mr. D.K. Mbugua	Chief Conservator of Forests, Forest Department HQs
	Project Director, ISFP
Patrick M. Kariuki	Project Manager, ISFP
Jane N. Ndeti	Assistant Project Manager, ISFP/Forest Department
James R. Chomba	DFO, Tharaka, Forest Department
Paul N. Karanja	DFO, Mbeere, Forest Department
Keneth M. Riungu	Acting DFO, Kitui, Forest Department
Mr. Anthony M. Maina	Head Dryland F Programme, Forest Department
Mr. Samuel K. Muriithi	Planning Officer, Forest Department
Ms.Mary Mwai	Farm Forestry Branch, Forest Department
(2) ケニア林業研究所 (Kenya Fo	restry Research Institute: KEFRI )
Prof. P.K.A. Konuche	Director, Kenya Forestry Research Institute (KEFRI)

	Project Co-Director, ISFP
Dr. Ebby Chagalo-OderaAsst. Dir	rector, KEFRI
James Kimondo	Centre Director, KEFRI Kitui,
	Project Co-Manager, ISFP
Michael Mukolwe	Training Manager, KEFRI

# 【日本側】

(1)	在ケ	ニア日本大使館	
	宮村	智	特命全権大使
	増山	寿政	二等書記官
	(注:	:調査開始前に実施)	

(2) プロジェクト

佐藤	雄一	専門家	(チーフアドバイザー/森林政策)
小川	慎司	専門家	(社会林業普及)
阿部	真士	専門家	(普及事業マネジメント / 業務調整)

## 第二章 評価の方法

#### 2-1 評価法

本調査は、評価の手法として JICA プロジェクト・サイクル・マネジメント (JICA Project Cycle Management、以下 JPCM)を採用した。JPCM 手法を用いた評価は、中間評価調査の 目的と評価の視点<sup>1</sup>に即して、

- プロジェクト・デザイン・マトリックス<sup>2</sup> (Project Design Matrix、以下 PDM)に基づいた計画達成度の把握(投入実績、成果の達成度、プロジェクト目標の達成度など)
- •「妥当性」「有効性」「効率性」「インパクト」「自立発展性」の 5 つの評価<sup>3</sup>の観点に基づいた収集データの分析
- 分析結果からの提言と教訓のまとめ

の3点で構成されている。

#### 2-2 **評価のプロセス**

(1) 関連資料のレビュー

Project Documents、PDM Ver. 2 (添付資料-1 ミニッツの Annex-2)、プロジェクト半期報告書、専門家報告書、3<sup>rd</sup> Joint Coordination Committee (JCC) 資料、その他プロジェクト関連文書のレビューを行った。

#### (2) 評価項目の設定

関連資料のレビューに基づいて、中間評価の評価項目を設定し、設問に従って評価グリッド<sup>4</sup>(添付資料-2)を作成した。計画の達成度を測るために指標の採集が必要であるが、短期ローカルコンサルタントを雇用し、評価グリッドの項目に従い調査を依頼した。また、 調査項目と情報収集方法は、プロジェクト側関係者、ケニア事務所担当所員、合同評価団 員(ケニア及び JICA 側)との協議を経て確定された。

(3) 関係者への質問票調査と聞き取り

情報収集のために、プロジェクト関係者への質問票と付加的な聞き取りを通じ関係者の意見を把握した。聞き取り調査の農家グループと農家リストは添付資料-7 ローカルコンサル タントレポートを参照のこと。

(4) 社会林業普及現場の視察

<sup>&</sup>lt;sup>1</sup> 国際協力出版会出版のプロジェクト評価の実践的手法(JICA 事業評価ガイドライン改定版、2004 年 3 月)の147 ページに詳しい

<sup>2</sup> プロジェクトの諸要素を論理的に配置した表

<sup>&</sup>lt;sup>3</sup>今般の中間評価ではとくに「妥当性」、「効率性」、「自立発展性」に焦点を絞る

<sup>4</sup> 評価調査の計画をまとめた評価調査を実施するためのツール

プロジェクト活動の効果を実際に確認することと、今後のプロジェクト活動や方向性の確 認の参考情報を得るために、キツイ県とムベレ県の農民、農民グループを対象とした社会 林業普及事業の一手法(農民圃場学校 Farmer Field School、以下 FFS)の活動現場を視察し た。また、展示圃場の観察、FFS セッションへの参加と郡森林普及員と農民グループに対す るインタビューを実施した。視察した農民グループの FFS 活動と成果については添付資料 -4<sup>5</sup>を参照のこと。

(5) ワークショップの実施

プロジェクト関係者がプロジェクト評価の途中結果について共通認識する必要があると 判断し、参加型ワークショップを以下の概要で開催、関係者のコメント・意見を集約し、 今後のプロジェクトの方向性を確認した。ワークショップの記録は添付資料-5 を参照。

目的	(1) プロジェクトの実績を確認する					
	(2)「プロジェクト目標」と「成果」の達成についてプロジェクト関係者間					
	で共通認識を持つ					
	(3) 問題点の整理と今後のプロジェクトの方向性を見出す					
日時	2006年7月12日、午前11時~午後4時					
場所	環境省森林局内大会議室					
参加者	25 名 ( 森林局カウンターパート、プロジェクト専門家、県森林署署長、ケ					
	ニア森林研究所所員、ローカルコンサルタント、評価調査団)					
ディスカッ	FFS の主流化について(セクターリフォーム、費用対効果、活動の効					
ション項目	率性を踏まえて)					
	能力向上達成度合いと今後改善すべき能力について					
	効果的なモニタリングシステムについて					

表 2-1 ワークショップの概要

(7) 評価結果ミニッツの作成と署名

以上の評価プロセスを経て、合同評価団メンバーによる評価報告書とミニッツを作成、森 林局カウンターパート及び日本人専門家への説明後、2006 年 7 月 18 日環境天然資源省次官 へ評価結果を報告し、評価調査団総括と次官による署名に至った。

<sup>5</sup> この資料は視察時のプロジェクトチーム側からの提供資料。

## 2-3 評価調査の制約

PDM Ver.2に従った指標の採集はローカルコンサルタントを通じて実施されたが、調査期間の制約(3週間)から以下のようなサンプリング数が提案され、合同評価団との協議を経て了承を受けた。基準年との比較ができるように質問票の内容に工夫が施され、かつプロジェクトチームからの資料提供を受け、中間評価時における指標達成レベルを確定した。

対象県 サンプリング対象	キツイ県	ムベレ県	タラカ県
対象農民グループ	6	3	3
対象農民 <sup>6</sup>	18	9	9
周辺農民	36	18	18

表 2-2 プロジェクト目標の指標に関するサンプリング数

18 2-3 7 71							
対象県	キツイ	ムベレ	タラカ				
サンプリング対象							
一般住民	60	30	30				

表 2-3 アウトプット 4 の指標に関するサンプリング数

<sup>6</sup> 対象農民は各対象農民グループから3名のサンプリング

<sup>7</sup> 周辺農家は各対象農民グループの周辺で6名のサンプリング

# 第三章 プロジェクトの実績

## 3-1 投入実績<sup>8</sup>

(1) 日本側の投入実績

プロジェクト開始の 2004 年 3 月から中間評価時点までの日本側投入は、長・短期専門家、 研修員受け入れ、資機材・設備供与、インフラ整備、現地業務費であった。

長期・短期専門家

表 3-1 長期専門家

分野	派遣期間	人数
チーフアドバイザー/森林政策	2004年1年18日~2007年1月17日	1
	(任期1年延長手続き了)	
社会林業普及	2004年3月26日~2007年3月25日	1
	(任期1年延長手続き了)	
普及事業マネジメント/業務調整	2004年3月17日~2006年3月16日	1
普及事業マネジメント/業務調整	2006年3月2日~2008年3月1日	1

表 3-2 短期専門家

分野	派遣期間	人数
生態資源	2004年1月9日~2004年1月30日	1
林木育種	2005年7月16日~2005年7月30日	1

2) 研修員受け入れ

表 3-3 研修員受け入れ

コース名	本邦/第3国	期間	人数
森林政策	本邦	2004年8月22日~2004年9月3日	1
普及政策/普及	本邦	2004年8月10日~2004年9月25日	1
手法			
森林普及手法	本邦	2005年7月7日~2005年8月12日	1
森林普及手法	本邦	2005年7月7日~2005年8月12日	1
森林管理	本邦	2005年8月23日~2005年10月8日	1
森林普及手法	本邦	2006年7月6日~2006年8月11日	1
森林普及手法	本邦	2006年7月6日~2006年8月11日	1
森林普及手法	本邦	2006年7月16日~2006年8月11日	1

 <sup>&</sup>lt;sup>8</sup> 各投入に提示されている数値等の出所は、2006年5月16日に開催された 3rd Joint Coordinating Committee (JCC) Meeting の配布資料、専門家最終報告書(普及マネジメント/業務調整、2004年3月17日~2006年3月16日派遣) 技術協力プロジェクト実施運営総括表(半期毎の提出、2004年3月~2006年3月までの分)、プロジェクトチームからの提供資料。

 3) 資機材・設備供与とインフラ整備

資機材・設備の投入及びインフラの整備は、供与、専門家携行機材、現地業務費で賄われ た。資機材・設備では、車両でステーションワゴン、ピックアップ、ミニバスなど合計 9 台、バイク 17 台、自転車 30 台。また、パソコン、コピー機、デジタルカメラなどの事務 機器、無線施設、など主要機材の整備がほぼ完了した。2 県の森林事務署建設、それにかか る付帯工事などは 2003 年度から 2004 年度にかけて主に現地業務費で賄われた。資機材・ 設備供与、インフラ整備には合計 41,226,278.00 ケニアシリング"が拠出された。表 3-4 にそ れぞれの項目の年度別支出額を示す。機材リストは添付資料-1 ミニッツの Annex-7 を参照 のこと。

	(単位:ksh)			
年度	資機材・設備供与額	専門家携行機材費	現地業務費	合計
2003	18,785,335.00	762,203.00	2,508,442.00	22,055,980.00
2004	7,646,600.00	0.00	4,254,298	11,900,898.00
2005	6,239,496.00	0.00	1,029,904.00	7,269,400.00
合計	32,671,431.00	762,203.00	7,792,644	41,226,278.00

表 3-4 資機材・設備供与とインフラ整備費の詳細

4) 現地業務費

プロジェクト経常経費として支出された現地業務費は、主に普及事業とそのモニタリング 活動に分配され、内訳は、日常普及費、普及員活動巡回指導<sup>10</sup>、特別普及活動費、調査・モ ニタリング、プロジェクト日常運営費、コンサルタント調査雇用費、事務所維持費である。 表 3-5 に、2003 年度~2005 年度の各年度別実績をまとめる。現地業務費は合計 48,324,867.80 ケニアシリングが投入された。

	18 5-5	がで未切員の叶油		
年度	2003	2004	2005	合計
費目				
日常普及費	0.00	3,241,262.70	4,493,000.00	7,734,262.70
普及補強指導費	0.00	0.00	2,568,000.00	2,568,000.00
特別普及活動費	0.00	1,437,838.00	8,419,000.00	9,856,838.00
調査・モニタリング費	0.00	1,398,469.20	2,730,000.00	4,128,469.20
プロジェクト日常運営費	0.00	8,593,965.30	4,413,000.00	13,006,965.30
コンサルタント契約調査費	0.00	6,929,157.60	0.00	6,929,157.60
森林局県事務署施設整備費	0.00	3,525,175.00	576,000.00	4,101,175.00

ま 35 現地業務費の詳細

(単位・ksh)

<sup>9 2006</sup> 年 5 月 1 日 ~ 末日に適用の JICA 公式為替レートでは、1 米ドル = 114.58 円、1 米ドル = 70.86 ケ ニアシリング。

<sup>10</sup> 普及員活動巡回指導はプロジェクト日常運営費から支出されていたが 2005 年度から独立した費目とし て分離された。(出所:専門家最終報告書、普及マネジメント/業務調整、2004年3月17日~2006年3月 16 日派遣)

|--|

(2) ケニア側投入

1) カウンターパートの配置

森林局及びケニア森林研究所におけるカウンターパートは合計 43 名。支援人員を含んだ ケニア側の人材投入の詳細は添付資料-1 ミニッツの Annex-8 を参照。

2) 土地及び設備

森林局本局プロジェクト事務所の土地、設備、3 県の事務署の土地、設備、ケニア林業研 究所の研修施設、展示林、苗畑、などが提供された。

3) プロジェクト管理費

ケニア側より拠出された 2003~2005 年度におけるプロジェクト管理費は表 3-6 の通り合 計 5,936,519.40 ケニアシリングとなっている。実際の拠出額把握に困難を生じたため、計画 額を示した。表 3-7 は 2005 年度における計画額と実際の拠出額を比較したものである。

	(単位:ksh)			
拠出元	合計			
森林局	0.00	1,833,519.40	3,112,000.00	4,945,519.40
林業研究所	0.00	491,000.00	500,000.00	991,000.00
合計	0.00	2,324,519.40	3,612,000.00	5,936,519.40

ま 36 ケーマ側のプロジェクト管理費の詳細

表 3-7 ケニア側の 2005 年度プロジェクト管理費拠出額 (単位:ksh)

拠出元	計画	計画額の改定	実際の拠出額
森林局	3,112,000.00	2,931,000.00	2,200,000.00

#### 3-2 成果の実績

成果毎に実績をまとめる。

(1) 成果1 森林局の社会林業普及に対する制度的・技術的能力が強化される

プロジェクトはセクターリフォームにより森林局の受け皿となる新組織ケニア森林サー ビス(Kenya Forest Service、以下 KFS)の戦略計画策定を支援、その結果第一次案が作成さ れた。また、ISFP の普及事業ガイドラインも準備することができた。このガイドラインに 従い、キツイとムベレ県では現場で普及事業を実践するための普及ガイドラインを策定中 である。

社会林業普及実施計画は準備段階であるが、プロジェクトを集中的に実施しているキツイ、

ムベレ、タラカ県ではすでに第1次案を策定。また、ISFPの普及事業が普及員によって試 験的にマリンディ、キリフィ、ライキピア、西ポコット、メルー南、クワレ、ラチュオニ ョ県で実施することができた。

FD 職員の技術能力を強化するために、研修、セミナー、ワークショップなどを開催した。 また、県森林署長と郡森林普及員を対象に、FFS の指導者研修及び農業の基礎と現金収入 活動の研修を、そして FD 職員と県森林署長を対象に、森林政策や森林管理及び森林普及手 法に関する本邦研修を実施した。また、森林局の乾燥地課と農林地課の課長も研修を通じ て、FFS に理解を深め、それにより森林局が社会林業普及の計画、モニタリング、評価に 関する機能を備えるための第一歩を踏み出している。

(2) 成果 2 キツイ県、ムベレ県、タラカ県で、個人農民及び農民グループの間で社会林 業普及活動が促進される

FD の普及員によってキツイ、ムベレ、タラカ 3 県の 70 農民グループに対して社会林業 普及事業が行われた。対象農民や農民グループは FFS 手法を深く理解、認知している。こ の手法を通じ、農家は自ら社会林業活動を実践に移すことが可能であった。プロジェクト 開始から郡森林普及員による指導を受けた 48 グループが 175 の FFS セッション(フィー ルドディ、グループ間相互訪問、学習発表や終了式などを含む)を遂行した。

一方、FFS を習得した普及員以外に 104 名の FFS 農家ファシリテーターが誕生。郡森林 普及員の技術支援を受けながらこの農民ファシリテーターによって今後 FFS の面的拡大が 期待される。

(3) 成果 3 キツイ県、ムベレ県、タラカ県で農民及びその他関係者が十分な実践的な知識や技術を習得する。

48 農家グループがすでにプロジェクトの第1世代 FFS 修了グループとして認められたが、 現在、74 グループが郡森林普及員と農民ファシリテーターにより社会林業の普及指導を受 けている。

農家は苗木生産、植林、果樹栽培開始、農業活動、収入向上活動などの社会林業活動に関し多くの知見を得ている。また、FFS で習得したことを農家の農林地で実践し、プロジェクトの対象農家以外のコミュニティメンバーにも伝承している。

(4) 成果 4 社会林業普及及び関連する諸課題に関する情報が、半乾燥地における関係者 間で共有される

プロジェクトの開催した会議、ワークショップ、セミナー、フォーラムなどを通じ、森林 局とケニア森林研究所をはじめ、ケニア政府のその他省庁、国際機関、開発パートナーの 間で社会林業に関する情報が共有された。

インターネットのウェブを活用し、現在まで約 2,200 名がプロジェクトのホームページに アクセスしている。

#### 3-3 プロジェクト目標の達成度

プロジェクト目標は、『個人農民、農民グループ及びその他関係者が、半乾燥地において 社会林業活動を強化する』である。

目標を達成するための技術支援や FFS のアプローチが導入され、またモニタリングと評価活動が開発、継続され、その結果社会林業普及活動は社会林業強化 3 県を中心に比較的順調に展開されてきている。

社会林業普及事業に関する経験が FD に蓄積されつつあり、対象農家及び周辺農家の技能 と知識等の向上が見られる。結果、農家は、苗木生産、農林地、果樹木の植え付け、フォ ダーバンク<sup>11</sup>、農業技術、間作、収入向上活動などを徐々に実践に移している。

このように各アウトプットの実績を踏まえ、プロジェクト目標で掲げる社会林業活動の強 化の進捗度合いが、特に社会林業強化 3 県において、中間評価時点で期待されるレベルに 到達していることが確認できた。

#### 3-4 実施プロセスの検証

(1) PDM の変遷

中間評価に到るまでの期間に PDM の変更が 2 回行われた。なお、PDM のアウトプットから上位目標までの要約部分の変更はない。活動と指標の変更、変更理由等<sup>12</sup>は添付資料-3 を 参照のこと。

(2) 活動計画と実績

プロジェクトの活動はほぼ計画通り実行された(詳細な活動計画と実績については、添付 資料-1 ミニッツの Annex-3 を参照)。特に、プロジェクトの中心的活動である社会林業普 及に関する活動は、ケニア側カウンターパート予算の拠出が多少遅れたが、プロジェクト 開始当初からの FFS 手法の検討と試行作業を踏まえた結果、順調に実施された。

(3) プロジェクトの管理体制

1) 会議

添付資料-6のプロジェクト運営図にあるように、プロジェクトの全体管理について、合同 調整委員会(Joint Coordination Committee、以下 JCC)会議が年一回(合計3回)半期プロ ジェクト会議(Semiannual Meeting)が年2回、森林局、JICA ケニア事務所、プロジェクト カウンターパート及び専門家の参加で開催されて来た。また、社会林業強化3 県における 月例会議が、プロジェクトチームと森林署署長及び郡森林普及員を交えて行われてきた。

<sup>11</sup> アグロフォレストリー用語。飼料木を畑に密に植えて、刈り取って家畜の餌にするもの。

<sup>&</sup>lt;sup>12</sup> 出所は Project Document (December 2003) に添付されている PDM Version 0、その後の Version 1、 Version 2、プロジェクトチーム側作成の中間評価仮評価表、半期毎の実施運営総括表。

2) モニタリング

プロジェクトの各活動レベル(森林局、県森林署、郡森林普及員、農民グループ)で定型 化された報告書を活用し、社会林業普及事業のモニタリングが実施されて来た。モニタリ ングに使用された報告書の種類とモニタリングフローについては添付資料-1 ミニッツの Annex-11 を参照。

(4) 農民のプロジェクトに対する認識

対象農民グループは、プロジェクト開始当初に基準を設け選抜された。これらの農民グル ープは週毎に FFS セッションに参加し、農民自身による FFS 活動報告を継続してきた。各 対象農民は結果的に FFS を通じて得た技能と情報などを、他の住民へ伝えることを始めて いる。また、対象農民グループからプロジェクト外のグループへ対する FFS の実施も任意 で行われている。

(5) 実施機関のプロジェクトに対する認識

1) 適切なカウンターパートの配置

すでに述べたようにカウンターパートは 43 名配置され、内 35 名は FD、8 名は KEFRI の 人材である。社会林業強化 3 県は、スムーズな活動の実施体制を築くために郡森林普及員 の不在などに対処するため、副森林署署員を配置した。ケニア側のプロジェクトに対する 高い当事者意識が窺える。そして、FFS の優位性が FD に認識されケニア側と JICA 側の具 体的な取り組みの結果、カウンターパートの能力強化が進んでおり、カウンターパートの プロジェクトに対する献身的姿勢<sup>13</sup>が見受けられた。

2) 予算措置

社会林業普及事業に係わる予算配分は投入の実績で明らかなように、ケニア側の負担が少 なく、また時に、支出行為のタイミングも遅れがちであった。

図 3-1 にプロジェクト全体経費のケニア側と JICA 側の負担割合を、図 3-2 に 2005 年度 の社会林業普及活動に関わるケニア側と JICA 側予算の負担割合<sup>14</sup>を示す。

<sup>&</sup>lt;sup>13</sup> FFS 活動現場で数名の郡森林普及員に聞き取りを行ったところ、通常業務や他プログラムの業務にも従 事しているものの、全体の業務時間の 60~80%を ISFP プロジェクトの活動に費やしており、プロジェクト が開始されてから有給休暇を取得していないという発言があった。

<sup>&</sup>lt;sup>14</sup> 2 つの図とも 3rd Joint Coordinating Committee (JCC) Meeting の配布資料と専門家最終報告書(普及マネジ メント/業務調整、2004 年 3 月 17 日 ~ 2006 年 3 月 16 日派遣)を参考に作成。



図 3-1 プロジェクト全体経費のケニア側と JICA 側の負担割合



図 3-2 2005 年度の社会林業普及活動に関わるケニア側と JICA 側予算の負担割合

## 第四章 評価結果

#### 4-1 5項目ごとの評価

(1) 妥当性

本プロジェクトは次のような事由から妥当性が高いと判断する。

1) ケニア共和国開発政策との整合性

プロジェクトの方向性はケニア共和国の政府開発政策と合致している。

ケニア共和国の貧困削減ペーパーに位置づけられている最上位の国家計画「経済再生戦略 (the Economic Recovery Strategy for Wealth and Employment Creation、以下 ERS)」(2003 年 6 月)は、ケニア国民の生活水準の向上及び国家の近代化を図るため、6 つの重点分野を掲げ る。その中に「林業を含む生産セクターの政策とその実施の復活」「乾燥地・半乾燥地での 可能性の発見」が含まれている。

森林セクターにおいては、1994年に作成された「ケニア林業マスタープラン 1995-2020」 が最重要計画であり、10の重点プログラムの中には、「乾燥地・半乾燥地の林業」「農地林 業」「普及」が含まれている。

2007 年 1 月から設立予定の公社 KFS は、コミュニティ参加型による社会林業普及事業もひとつの核となる事業として備える予定<sup>15</sup>であり、プロジェクトが促進する FFS の普及手法はその事業を現場から支えるアプローチである。

2) 日本の援助政策との整合性と比較優位

プロジェクトの方向性は日本のケニア共和国に対する援助政策に沿うものである。 我が国外務省の作成したケニア共和国に対する国別援助計画(2000年)は、開発分野のひ とつとして環境分野を掲げている。その中で、人口圧や都市化による乾燥・半乾燥地の拡 大を緩和するために、森林保護、植林、農地の保護の重要性を強調している。

さらに、JICA 国別事業実施計画(2006 年 4 月)は、森林保全・造成を開発課題のひと つと捉え、具体的な取組として半乾燥地社会林業普及モデル開発計画(SOFEM)の成果の普 及による森林の保全・造成等を掲げている。

日本政府のケニア共和国に対する森林分野への支援は 1980 年代に遡る。無償資金協力に よる『林業育苗訓練センター建設計画』と『同拡充計画』、JICA の技術協力で支援された『林 業育苗訓練技術協力計画(準備フェーズ)』、『社会林業訓練計画プロジェクト(SFTP)フェー ズ 1.2』、そして『半乾燥地社会林業普及モデル開発計画(SOFEM)』である。これら日本の 支援により、苗生産、植林、社会林業に関する技術が成熟し、今まさにこれら技術の面的 な普及段階に移り、日本の技術的比較優位がプロジェクトを通じ発揮されようとしている。

ターゲットグループのニーズとの整合性
 半乾燥地の農民、農民グループへの支援は不可欠である。

<sup>15 2006</sup>年7月12日環境天然資源省森林局森林局局長のコメント。

半乾燥地の農家は、土地の肥沃度の低下、環境の悪化、不規則な降雨パターンの影響を受け、低農業生産を余儀なくされている。結果、農民の生計水準は低く、世帯レベルの食料 安全保障が改善されないままである<sup>16</sup>

林業を農業生産に取り込んだ生産形態は不規則な降雨パターンの影響を受けにくく、農地 の生産力を維持し、自然環境の保全に寄与する。よって、対象農民は植林、苗木生産、な どの社会林業技術の実践を望んでいる。

森林局は社会林業普及の担当局であるため、プロジェクトを通じた組織全体の能力強化が 求められている。社会林業普及事業についてプロジェクトが開始されるまでは能力強化の 機会が少なかった。具体的に森林局側が必要と考えている森林普及事業に関係する能力強 化項目は次の通り<sup>17</sup>。

- 社会林業普及計画と社会林業普及手法、農民への普及研修
- 収入向上活動の管理
- 資源及びマーケティングアセスメント
- 農林地における商業化活動と管理、費用対効果の分析
- 基本的な農業知識・技能など
- 4) アプローチの適切性

プロジェクトの採用する FFS は社会林業普及手法としてプロジェクトの関係者にその適 切さを理解されている。対象農民は FFS を通じ、苗木生産と植栽などを実践し始め、キツ イ、ムベレ、タラカ県の普及事業に係わる職員の普及能力は向上した。また、農業省の普 及員との現場での協働は、森林普及員の知識と技能をより豊富にしている。

FFS 手法に費やす労力や時間が懸念されている事<sup>18</sup>は今後の課題である一方、次のような 手法の優位性が指摘されている。

- 1990年代にケニア共和国に導入され多くのアフリカ諸国でも実践されている
- 他のドナーも導入を図って来た
- 社会林業の活動を長期にモニタリングできる
- 集中的な学習プロセスにより理解が進む、実践的普及法である
- 参加型でかつ農民を中心に据えた普及手法
- 5) モニタリング手法の適切性

プロジェクトで採用されている社会林業普及活動のモニタリングは改善が必要である。 カウンターパートと専門家間で情報を共有し、プロジェクトの活動を改善していくために モニタリングは必要であると認識されている。

しかしながら、報告書提出の遅れ、データの整理・分析が十分に行われていない、分析と

<sup>&</sup>lt;sup>16</sup> ケニア食料安全調整グループ(Kenya Food Security Steering Group、2006 年 6 月)のデータによると半乾燥地県内(この場合半乾燥地県を 18 県とした)人口の約 32%が緊急食糧援助を受けている。

<sup>17</sup> 出所は質問票による回答。

<sup>&</sup>lt;sup>18</sup> 郡森林普及員による毎週のセッション、1 サイクルの長さ、午前中の時間を費やす、多くのモニタリン グ用報告書とその提出頻度など。

FFS 現場へのフィードバックの不備などが指摘されており、実質的にモニタリングが機能していない。添付資料-1ミニッツの Annex-11 にある提出報告書<sup>19</sup>の多さやフローの煩雑さが、 一原因である。

#### 6) Melia Volkensii の優位性

*Melia Volkensii* は半乾燥地に適した商業木として認識されており、プロジェクトもこれを FFS 活動で取り上げ、普及に努めている。農家はこの種木の経済的価値<sup>20</sup>を次のように認め ている。

- 乾燥時期の飼料木
- 土壌肥沃度を改善できる
- 建築材、家具材として経済性<sup>21</sup>が高い
- 苗期及び成長期の耐シロアリ性
- 耐乾燥性
- 燃料としての利便性
- 効率的な成長
- 7) 政策、社会・経済の変化

プロジェクトが開始されて以来、急激な政策、社会・経済の変化は見られない。他方、新 しい森林法の元セクターリフォームが進行中である。社会林業等の重要性について何ら国 の方針等が変わるものではないことを森林局側は強調しているものの、セクターリフォー ムの方向性と KFS 公社化への支援も視野に入れ、引き続き注視していかなければならない。

(2) 有効性(予測)

1) プロジェクト目標の達成予測

現状の成果からプロジェクト目標の達成は高い。

個人農家や農家グループはキツイ、ムベレ、タラカ県において社会林業の活動を始めてお り、他の半乾燥地域への波及が期待される。すでに FFS の農家ファシリテーターが育成さ れ、彼らによるいくつかの FFS セッションが開始されている。

一方で、中間評価時点であることから、プロジェクト側からの投入も豊富で、農民の関心 及び意欲も保たれているが、今後、農民の FFS に費やす労力と時間に見合った具体的な成 果が得られない場合に、農民の「ヤル気」が萎んでくることが懸念される。プロジェクト 側は、モニタリングも含めた効率的かつ効果的な FFS 実施について、高い意識を持ち、柔 軟に取り組んでいくことが臨まれる。

<sup>&</sup>lt;sup>19</sup> 郡森林普及員によると、プロジェクト指定の報告書以外にも、県森林署署長、郡森林普及員は通常業務の報告書も定期的に提出することになっている。

<sup>&</sup>lt;sup>20</sup> *Melia Volkensi の*経済的価値は多くの資料に見られ、例えば Management and utilization of dryland forest in Sub-Saharan Africa: the role of agroforestry (Bashir et. al., World Forestry Center, Nairobi, 2003) や Agroforestry Tree Database (World Forestry Center) に詳しい。

<sup>&</sup>lt;sup>21</sup> African Review Business and Technology (2004 年 10 月)によると、ケニアでは 6~10m 長、25cm 径の 成木は、7.60~12.60 米ドルで取引される。

2) 4 つのアウトプットの連携

モニタリングを核とした森林局と普及現場との連携は形作られており、相乗効果としてプロジェクト目標を達成することが期待されている。各種技術開発、調査、マニュアル作成などの活動が実際の林業普及現場に応用できるよう、より緊密な調整が必要である。

3) プロジェクト達成の制約要因

すでにケニア側のカウンターパート予算の量と支出タイミングの不適正さは指摘しているが、とくに普及現場においてケニア側予算規模に見合った FFS の検討が必要である。

(3) 効率性

中間評価の時点で予定されている、人・モノ・金の資源の投入が質・量・タイミングの観 点から概ね効率よく投入されており、「3-2 成果の実績」で示された成果の発現に貢献して いることが確認された。以下に、日本側の投入とケニア側投入について述べる。

1) 日本側投入

日本側投入はプロジェクトの活動計画をスムーズに実行に移すため十分な投入を行った。 日本人専門家の数、分野は適正であった。また、若干の購入遅れはあったものの、機材調 達と森林署の整備など、活動計画を遂行するにあたり日本側の貢献が大きいことはケニア 側も理解している。

社会林業普及分野においては、プロジェクトの開始当初から外部コンサルタントを雇用した適正な普及手法の検討と試行を経て、森林局関係者と農民に受け入れられる手法を見出し、担当分野専門家の多大な貢献により、その後の普及活動の技術的継続性に繋がった。 他方、前出の図 3-2 に見られるように普及活動にかかる費用のほとんどを日本側が負担している。現場では郡森林普及員のガソリン代、昼食代などをプロジェクトが支弁<sup>22</sup>していることは、面的拡大を目指す場合、今後どのようにケニア側の予算規模に合わせた支出を行っていくかを十分考慮すべきである。

各種の調査、セミナー、ワークショプ、現場での専門家の指導を通じて、森林局及び県森 林署員、郡森林普及員の能力開発が進み、社会林業を推し進める組織としての能力が向上 している。一方で、調査などの結果が現場の FFS に反映されていない、多大な時間をモニ タリングに費やしているものの情報の分析とフィードバックが機能していないなどの問題 が露呈している。より効率的な活動のために改善点があることも事実であった。

2) ケニア側投入

数多くの森林局スタッフ、県森林署スタッフ及び郡森林普及員をカウンターパートとして 配置、活動のスムーズな運営に寄与している。

<sup>&</sup>lt;sup>22</sup> 農民の週報告書によると一回の FFS ワークショップでガソリン代 120Ksh、昼食代 200Ksh という記録が ある。

森林局のカウンターパートのみならず現場の森林普及員は、通常業務や他の森林プログラムの活動に従事しているにもかかわらず、ISFP プロジェクトの活動に惜しみないエネルギーを費やし、計画通りの活動を遂行している。短期間において 48 グループの FFS 第1世代が卒業し、FFS を習得した普及員以外に 104 名の FFS 農家ファシリテーターが誕生したことは画期的である。

プロジェクト活動の実施におけるケニア側の予算措置の不十分さと支出の遅れはある程 度プロジェクト開始当初から予見されていたことであろう。予算投入量の改善につき絶え ずケニア側に申し入れていくことも必要であるが、ケニア側の投入量を見越した活動計画 になるよう双方で見直し、再立案することも重要である。また、農民ファシリテーターを 活用した社会林業普及事業を拡大させるために、ケニア側の予算項目<sup>23</sup>に即した支出を促す べきである。

(4) インパクト(予測)

中間評価時点ではあるが、プロジェクト目標の発現が他の半乾燥地域へ波及すれば、社会 林業強化 3 県(キツイ、ムベレ、タラカ)の指標を見る限りにおいて、上位目標の達成見 込みはあると考えられる。

他方、半乾燥地の農民世帯レベルの食料安全保障を改善し貧困を解決するという意味にお いては、あらゆるリスクを避けなければならない脆弱な農民の投資先と意識の方向は他の 生産部門(農業部門など)と比較すると、林業への意識は低いのが事実である。

適正な技術を備えファーマーランを実施しその対価を支払うに値する農民ファシリテー ターによる FFS の仕組みと農民グループのネットワーキングの構築は、今後上位目標を達 成する上で必要なものである。また、プロジェクトで醸成した農民の林業への意識を維持 するためにも、苗木の入手可能性(場所、値段など)農村金融、KEFRI の有する技術・ 情報等(*Melia Volkensii*) その他小規模生計向上活動に関する情報を、農民グループのネッ トワーキングでどのように半乾燥地域で還流させるのかが、一つの課題である。

エンパワーメントの観点から、FFS を実施した普及員と農民たちに正のインパクトが認められた。普及員と農民自らが認める彼らの変化は次の通り<sup>24</sup>。

- 時間管理と時間に対する意識の芽生え
- 自信の芽生え
- コミュニケーション能力と発表能力の改善
- グループ管理の意識向上
- 共同意識の向上 など

これらの意識変化は、FFS が参加型のアプローチであり、農民が圃場の観察、観察の記録、 考え、発表、報告の機会を得、これを繰り返し実践していることの結実である<sup>25</sup>。

<sup>&</sup>lt;sup>23</sup> 支出項目の Casual labor cost の利用など。

<sup>24</sup> 森林局のワークショップや視察先の農民からの聞き取りによる。

<sup>&</sup>lt;sup>25</sup> 専門家最終報告書(普及マネジメント/業務調整、2004年3月17日~2006年3月16日派遣)による と、FFS 手法の起源が農地の害虫、益虫の観察・調査を通じた農薬無使用を目指した手法であるため、FFS は頻繁な観察を重視していることが特徴である。
(5) 自立発展性

1) 組織・制度の視点

FD から KFS に移行するにあたり、プロジェクトの導入した FFS 手法を制度化すること で、社会林業普及事業を他の半乾燥地へ持続的に波及させる可能性が高くなる。そして、 当該分野の重要性を認知させるためにも、セクターリフォームについては、プロジェクト 側から引き続き積極的に支援していくことが重要である。他方、KFS 移行後も社会林業普 及事業の重要性について国の方針等が変わるものではないことをケニア側は強調してはい るが、森林セクター全体のアジェンダの中でプロジェクトの位置づけを今後も継続して注 視していかなければならない。

2) 予算の視点

プロジェクト全体にかかる費用について、日本側の多大な負担割合が明らかになっている ことはすでに述べてきた。日本側がこのままの負担割合でプロジェクトの活動を継続する ようではプロジェクト終了後の自立発展性は望めない。

中間評価調査中においてもケニア側関係者にケニア側予算の負担割合の低さについては 認識されているものの、今後増えると言い切ることは困難な状況である。

一方で、プロジェクトの効果を維持させるためには予算に見合った活動内容に改めること が肝要である。換言すれば、日本側の投入予算を先に見越して活動計画を作成するのでは なく、ケニア側の予算量を先に見越して、不足部分を日本側が補う形に徐々に移行すべき であろう。少なくともそのような考え方を双方で共有すべきである。

かかる費用を見直す事項としては、いくつかの例が挙げられる。現行の郡森林普及員がフ ァシリテーションする FFS の頻度<sup>26</sup>、内容と費やす時間、FFS セッションに費やされる文具 代、モニタリングに掛かる報告書の内容と作成頻度などである。見直しには普及員のモチ ベーションや農民の関心と「ヤル気」を損ねないで現状の投入量を減じていくことは言う までもない。

3) 技術の視点

中間評価時点で社会林業事業に対する対象農民の理解も高く、FFS の手法としての技術的 優位性が発揮された。また、すでに農民ファシリテーターが活動を始めており、この手法 の農民による受容性の高さが認められているため、手法の技術面の視点では自立発展性は 高い。

農民が求めている具体的な要望に対し、KEFRIの有する、*Melia Volkensii*の繁殖技術の開発、適正な種子、苗木、挿し木などの技術情報を取り入れていくことで技術的持続性もより高まる。

<sup>&</sup>lt;sup>26</sup> 郡森林普及員の聞き取りでは、FFS セッションは週1回から月2回に減らし、農家ファシリテーターであっても同様に月2回に留めるべきであるという意見があった。

#### 4-2 結論

5項目評価から次のように中間評価結果をまとめる。

プロジェクトはケニア側 43 名のカウンターパートと優秀な 3 名 (累計 4 名)の日本人専 門家の不断の努力と献身で、プロジェクト目標に向かい、当初の活動計画を概ね実施して きた。それらの活動を通じて、森林局本部スタッフ、県森林署署員、郡森林普及員の能力 レベル、特に現場において効果的な FFS 手法を核とした社会林業普及事業を実施する彼/彼 女らの能力は強化されてきたと判断する。

半乾燥地の対象農家と周辺農家は社会林業に関する知識と技能を備え、生計の向上と環境 保全への第一歩を踏み出そうとしている。農家は知識・技能ばかりではなく、FFSの実践を 通じてプロジェクトの活動に参加し、自ら強化(エンパワー)されていることに気づく。 この短期間において、104名もの農民ファシリテーターが育成されたことは画期的である。

森林局の予算の負担割合は日本側のそれに比べて確かに少ないが、プロジェクトの自立発 展性を確実にするためにケニア側はその克服の重要性を認識しており、予算支弁の努力を 今後も惜しまないことが確認できた。

## 第五章 提言

#### 5-1 提言

中間評価の結果、ケニアと日本側関係者に対し、プロジェクト目標の達成と、日本側のス ムーズなプロジェクトからの撤退と、ケニア側による無理のない効果の継続をプロジェク ト終了後からケニア側が実践できるために以下の事項を提言する。

(1) ケニア側予算量と支弁の確実性の改善(長期的アクション)

日本側の予算負担割合を漸減し、ケニア側予算での自立を促すべきである。

森林局がケニア森林サービス公社に組織変更したとしても、プロジェクトの目標を達成し 効果を持続させるために、ケニア側はカウンターパートの予算増と支弁タイミングの遅れ を改善する努力をはらわなければならない。

また、普及事業の予算については FFS の内容の精査と同時に農民ファシリテーターの活 用を促進するために予算費目を確保しなければならない。

(2) 日本側の投入(中・長期的アクション)

森林局、県森林署員、郡森林普及員の社会林業普及能力の向上に伴い、日本人側の長期派 遣専門家数を2名にすべきである<sup>27</sup>。

それには、対象地域でのプロジェクトのインパクト、他半乾燥地域への事業の試行と拡大、 FFS ネットワーク形成、農民ファシリテーターによる FFS の実施、普及ガイドラインの完 成の度合いを見極めながら、専門家の漸減を考慮する。

(3) FFS の合理化(中期的アクション)

FFS を森林局または将来のケニア森林サービス公社の社会林業普及手法として制度化す るためには、現在のかかる費用と内容を検討し、現有するスタッフの人数で持続的に実践 可能な、費用対効果の高い手法に改善させるべきである。

具体的に見直すべき点はいくつか挙げられる。FFS セッションの頻度、郡森林普及員の訪 問回数、農業セクターとの連携、農民ファシリテーターの活用等である。

さらに、現在採用されているプロジェクトのモニタリングの手法も、各レベル(森林局、 県森林署、郡森林普及員、農民グループ)で、内容、手段、頻度などを精査し、各レベル で負担とならない、かつ情報の整理・分析とフィードバックができる合理的なモニタリン グシステムを構築すべきである。

(4) 農民ファシリテーターの強化(中期的アクション)

セクターリフォームにおいて、普及員の人数が増える見込みが低い中で、限られた資源(カ

<sup>27</sup> 半乾燥地社会林業強化計画事前評価報告書(平成16年3月)の9ページで検討事項として記載されてお り、今次中間評価調査結果を踏まえての提言に至った。

ネ、モノ、ヒト)でプロジェクトの効果を面的に広げるには農民ファシリテーターの活用 が必要である。彼/彼女らの人数を増やし、かつ質の高いファシリテーターを今後も育成す べきである。また、郡森林普及員はファシリテーターの支援に備えるべきである。

(5) 4 つのプロジェクトコンポーネントの連携強化(短期的アクション)

4 つのプロジェクトコンポーネント(4 つのアウトプット)の連携強化を図り、定期的な 会議を開催<sup>28</sup>し、それぞれの成果の発現程度を共有しなければならない。例えば、林業製品 の市場調査の結果を現場の FFS 活動の中に取り込むことで、農民にとってより効果的な手 法となる。

#### 5-2 教訓

(1) 既存アプローチの活用

本プロジェクトでは、社会林業普及を強化していくにあたり、プロジェクト独自で新しい 手法を開発するのではなく、既に農業セクターを中心に 1990 年代にケニア共和国に導入さ れ、かつ他ドナーも導入を図ってきた FFS を採用することにより、先方政府からも受け入 れやすく、更に他案件へ応用しうる可能性が高いものになっている。既に、アフリカ開発 銀行も本プロジェクトのアプローチを取りいれたパイロット事業を今後実施予定のプロジ ェクトに組み込む予定としており、今後類似案件においても当該国、当該セクター、関連 セクターにおける既存アプローチを調査し、プロジェクトの実施に取り入れることは有用 である。

他方、既存のアプローチをそのまま適用するのではなく、プロジェクトの開始当初から 外部コンサルタントを雇用した適正な普及手法の検討と試行を経て、森林局関係者と農民 に受け入れられる手法を見出したことは、プロジェクト開始当初のパイロットステージの 重要性を示唆している。

(2) グループアプローチの有効性

本プロジェクトの前身である社会林業普及モデル開発計画(SOFEM)における社会林業 普及活動では、中核農家が地域の拠点として育成され、周辺農家へ普及していく手法が取 られ一定の成果を収めた。他方、右手法は農家対農家であることからおのずと面的広がり には時間を要するものであり、かつ選ばれなかった農家の間での不公平感、中核農家への 過度の負担などが指摘されていた。

これらの教訓を活かし、本プロジェクトでは組織化された農民を対象とし、グループで 活動を行う方法を取り入れ、結果として面的な広がりが改善され、不公平感の解消、グル ープでの活動を通じた結束の強化により、更なる活動の発展が期待できる状況が生まれつ つある。

よって、特に普及を視野に入れたプロジェクトにおいては、グループアプローチの有効 性について今後更に検証していくことが期待される。

<sup>&</sup>lt;sup>28</sup> すでにプロジェト会議開催は JICA ケニア事務所より申し入れてあるが、皆が揃うための改善が肝要。

(3) 先方政府予算措置を把握する必要性

プロジェクトの円滑な実施及びプロジェクト後の持続性を考える場合、先方政府の予算 措置及び実際の支出状況を把握することは非常に重要である。しかしながら、プロジェク ト計画段階ではこれらの調査をあまり実施することなくプロジェクトが開始されるケース が多い。

本プロジェクトもプロジェクト形成、計画段階では先方の予算措置にかかる調査は実施 されてこなかったが、プロジェクトを遂行する中、JICA 及び先方政府による負担額の現状 を把握し、プロジェクト中盤からプロジェクト終了後を見据えて、これら調査結果に基づ き先方政府に対する予算措置の申し入れを行ってきている。

よって、提言にも述べているように日本側の投入予算ありきで活動計画を作成するので はなく、ケニア側の予算量を先に見越して、足りない部分を日本側が補う形を取るという 形のプロジェクト形成を行うことが今後求められる。

## 付属資料

#### 1. ミニッツ

(Annex 1: Detailed Schedule of Mid-term Evaluation)

(Annex 2: PDM Ver. 2)

(Annex 3: Plan of Operation Plan and Actual)

(Annex 4: Evaluation Grid with Study Results)

(Annex 5: List of Japanese Experts)

(Annex 6: List of Kenyan Counterparts Personnel Trained in Japan)

(Annex 7: List of Equipment Provision and Facilities Constructed by Japanese Side)

(Annex 8: List of Kenyan Counterpart Personnel)

(Annex 9: Project Cost Sharing by Kenyan Side and Japanese Side)

(Annex 10: Development Plan and Strategies and Forestry

Plans/Strategies/Guidelines)

(Annex 11: Current Reports for Monitoring for FFS)

- 2. 評価グリッド(調査結果含む)
- 3. PDM 変更の経緯
- 4. 視察 FFS 農民グループ概要
- 5. 2006年7月12日ワークショプ記録(於:森林局)
- 6. ISFP プロジェクト運営図
- 7. ローカルコンサルタントレポート (Annex1-9 については電子データ参照のこと)

## MINUTES OF MEETINGS BETWEEN THE JAPANESE MID-TERM EVALUATION TEAM AND THE AUTHORITIES CONCERNED OF THE GOVERNMENT OF THE REPUBLIC OF KENYA ON JAPANESE TECHNICAL COOPERATION ON THE INTENSIFIED SOCIAL FORESTRY PROJECT IN SEMI-ARID AREAS (ISFP)

The Japanese Mid-term Evaluation Team (hereinafter referred to as "the Japanese Team"), organized by the Japan International Cooperation Agency (hereinafter referred to as "JICA"), headed by Mr. Yoshiaki Kano, and the Kenyan Mid-term Evaluation Team (hereinafter referred to as "the Kenyan Team") headed by Mr. D.K. Mbugua conducted a mid-term evaluation of the Intensified Social Forestry Project in Semi-arid Areas (ISFP) (hereinafter referred to as "the Project") from 12<sup>th</sup> July, to 18<sup>th</sup> July, 2006 having consultations with the Project personnel and other relevant parties on the implementation of the Japanese Technical Cooperation for the Project.

As a result of a series of surveys and discussions, both sides, the Ministry of Environment and Natural Resources (hereinafter referred to as "MENR") and Joint Evaluation Team came to the understanding concerning the matters referred to in the report of the Joint Mid-term Evaluation, which is attached hereto.

Nairobi, July 18, 2006

Mr. Yoshiaki Kano Leader, Japanese Mid-term Evaluation Team, Japan International Cooperation Agency

Prof. George O. Krhoda Permanent Secretary Ministry of Environment and Natural Resources Republic of Kenya

## REPORT OF THE JOINT MID-TERM EVALUATION ON JAPANESE TECHNICAL COOPERATION ON THE INTENSIFIED SOCIAL FORESTRY PROJECT IN SEMI-ARID AREAS (ISFP)

The Japanese Mid-term Evaluation Team (hereinafter referred to as "the Japanese Team"), organized by the Japan International Cooperation Agency (hereinafter referred to as "JICA"), headed by Mr. Yoshiaki Kano, and the Kenyan Mid-term Evaluation Team (hereinafter referred to as "the Kenyan Team") headed by Mr. D.K. Mbugua conducted a mid-term evaluation of the Intensified Social Forestry Project in Semi-arid Areas (ISFP) (hereinafter referred to as "the Project") from 12<sup>th</sup> July, to 18<sup>th</sup> July, 2006.

For this purpose, the Japanese Team and the Kenyan Team formed the Joint Evaluation Team (hereinafter referred to as "the Team"). The Team evaluated performance and achievements of the Project through field visits, interviews and had a series of discussions in respect of desirable measures to be taken by the both Governments for the successful implementation of the Project.

The Team agreed on the contents of the Evaluation Report attached. As a result of the discussions, the Team agreed to recommend to their respective Governments the matters referred to in the attached Evaluation Report.

Nairobi, July 18, 2006

Mr. Yoshiaki Kano Leader, Japanese Mid-term Evaluation Team, Japan International Cooperation Agency

Mr. D.K. Mbugua

Leader AG. Chief Conservator of Forests Forest Department Headquarters

## 1. Introduction

The cooperation on Intensified Social Forestry Project in Semi-arid areas (ISFP) (hereinafter referred to as "the Project") started in March 2004, and Japan International Cooperation Agency (hereinafter referred to as "JICA") will cooperate with the Ministry of Environment and Natural Resources (hereinafter referred to as "MENR") until March 2009. After two (2) years and three (3) months of the implementation, the Joint Evaluation Team (hereinafter referred to as "the Team") was formed for this mid-term evaluation.

## 1.1 Objective of the Evaluation

The evaluation activities were performed with the objectives:

- to conduct a comprehensive evaluation of the achievements of the Project in accordance with the original plan described in the Record of Discussion (hereinafter referred to as "R/D"), the current Project Design Matrix (hereinafter referred to as "PDM") and the Plan of Operation (hereinafter referred to as "PO");
- (2) to make recommendations on the Project for future project activities; and
- (3) to review and revise the PDM for the remaining cooperation period, if necessary.

## **1.2** Members of the Joint Evaluation Team

The Team consists of the following members.

- (1) Japanese members
  - a) Mr. Yoshiaki KANO, (Leader) Resident Representative, JICA Kenya Office.
  - b) Mr. Hiroki MIYAZONO, (Social Forestry Extension) Deputy Director, Planning Division, Private Forest Department, Forestry Agency, Ministry of Agriculture, Forestry and Fisheries.
  - c) Mr. Shingo FURUICHI, (Evaluation Analysis) Project Formulation Advisor, JICA Regional Support Office for Eastern and Southern Africa.
  - d) Mr. John N. Ngugi, (Evaluation Analysis (Assistant)) Senior Programme Officer, JICA Kenya Office.
  - e) Ms. Chie EZAKI, (Cooperation Planning) Assistant Resident Representative, JICA Kenya Office.

(2) Kenyan members

- a) Mr. D.K. Mbugua, (Leader) AG. Chief Conservator of Forests, Forest Department HQs.
- b) Anthony M. Maina Senior Conservator of Forests Head, Dryland Forestry Branch
- c) Mr. S.K. Mureithi Conservator of Forests, Planning Branch, Forest Department HQs.

## **1.3** Schedule of the Study

The Joint Mid-term Evaluation was conducted from July 12<sup>th</sup> to July 18<sup>th</sup> in 2006. The detailed schedule of the mid-term evaluation study is attached in Annex 1.

## 2. Outline of the Project

## 2.1 Background of the Project

Kenya's closed canopy forest cover which mainly falls in the category of state forests is low and is estimated at 1.7 % (or 1.4 million hectares) of the total land area. Outside this category of forests, there are numerous woodlands, bushlands and wooded grasslands, which primarily occur in the arid and semi-arid areas of the country. The arid and semi-arid lands (ASALs) cover about 80% of the total land surface and are home for about 25% of the human population. Under the prevailing low technology production systems, coupled with the unreliable rainfall regimes, the ASALs are characterised with high incidences of poverty. The threat to the livelihoods of the inhabitants of the ASALs is thus real which calls for practical interventions so as to improve on the livelihood conditions of the people in these areas.

The involvement in assistance of the Government of Japan (GOJ) in the forestry sector dates back to the middle 1980's. The initial assistance was through the Social Forestry Training Project (SFTP), which was implemented from 1985 to 1997. SFTP's main focus was on technology development on tree nursery establishment and tree planting in the semi-arid areas and to provide training in social forestry. The Social Forestry Extension Model Development Project (SOFEM) followed SFTP and was implemented for five years. The main output of SOFEM was the development of a model through the establishment of farm forests by the local residents. During the terminal evaluation in 2002, the review mission recommended the necessity to give further support to the extension component so that more impact could be created in the development of farm forestry in the semi-arid areas.

Meanwhile, in 1994, the Ministry of Environment and Natural Resources (MENR) of the Kenya Government completed preparation of the Kenya Forestry Master Plan 1995-2020 (KFMP). KFMP as well as the revised Kenya Forestry Development Policy identifies farm forestry, which is one of the social forestry practices as an important model of forestry development in Kenya. In addition, the Economic Recovery Strategy for Wealth and Employment Creation (2003 - 2007), which is the current national development plan, identifies the development of the ASALs as a key area for accelerated development to offset pressure from state forests located in high and medium rainfall areas.

In this context, Government of Kenya (GOK) requested a technical cooperation for the sector, and in response to the request, JICA accepted the implementation of the project entitled as "Intensified Social Forestry Project in Semi-arid Areas" (hereinafter referred to as "the Project") in accordance with the results of discussions with the authorities concerned of GOK.

JICA conducted the Ex-ante evaluation of the project in October 2003 that resulted in the preparation of the Project Document and Project Design Matrix (PDM). The Record of Discussions (R/D) that constitutes the agreement of the project was signed between JICA and the Ministry of Environment and Natural Resources on 29<sup>th</sup> March 2004. Upon this agreement, JICA commenced the five - year technical cooperation project with the Forest Department (FD) as the implementing agency and Kenya Forestry Research Institute(KEFRI) as the collaborating implemention agency.

## 2.2 Summary of the Project

As indicated in the current PDM attached as Annex 2, the Project purpose is that "Individual farmers, farmer groups and other stakeholders intensify social forestry practices in semi-arid areas."

The outputs of the Project confirmed in the current PDM are:

- (1) Institutional and technical capacities for social forestry extension in Forest Department are strengthened.
- (2) Social forestry extension activities among individual farmers and farmer groups are promoted
- (3) Farmers and other stakeholders obtain enough practical knowledge and techniques.
- (4) Information on social forestry extension and related issues is shared among stakeholders.

## **3.** Methodology of Evaluation

The mid-term evaluation was carried out by the Joint Evaluation Team consisting of members from both the Japanese and Kenyan sides as described in 1.2. In the first step of the evaluation, the Team reviewed the progress and achievements of the Project referring to the PDM and PO attached in Annex 3. In the next step, the Team analyzed and evaluated the Project from the viewpoints of 'Relevance', 'Effectiveness', 'Efficiency', 'Impact' and 'Sustainability'. Finally, the Team made recommendations on the Project for the improved implementation of the Project and for expected achievements of the Project purpose by the end of the Project period.

## **3.1** Evaluation Questions and Indicators

The study items for evaluation are indicated in the Evaluation Grid, as a grand design of detailed study, attached in Annex 4.

## **3.2 Data Collection Method and Analysis**

## **3.2.1** Data Collection Method

The Team (1) collected relevant documents (2) collected information through questionnaires from farmers, government officials, officials from concerned institutions, the public, and the Japanese experts (3) carried out field surveys at the Project sites, and (4) held a workshop with the Kenyan counterpart personnel, Japanese experts and others concerned.

## **3.2.2** Criteria of Evaluation for Analysis

## (1) Relevance:

Relevance of the Project was reviewed as the validity of the Project purpose and overall goal in connection with the development policy of the Government of Kenya (hereinafter referred to as GOK) and needs of the beneficiaries, and also by the logical consistency of the Project plan. Simultaneously, correlation with the JICA policies was also confirmed in the process.

## (2) Effectiveness:

Effectiveness was assessed by evaluating the extent to which the Project has achieved outputs by the time of the mid-term evaluation as well as the probability to attain the project purpose by the end of the Project term. Furthermore, validity of the project design was also evaluated.

## (3) Efficiency:

Efficiency of the Project implementation was analyzed by reviewing correlation between inputs and outputs. In the process, timing, quality and quantity of inputs, linkage and/or duplication between the Project and other activities of other organizations in similar fields were reviewed.

## (4) Impact:

Impacts of the Project activities were identified by focusing both on positive and negative, direct and indirect impacts caused or likely to be caused by the Project, These impacts included the impacts that had not been originally expected in the Project plan. In addition, the probability of attaining the overall goal and the contribution of the Project were evaluated.

## (5) Sustainability:

Sustainability of the Project was evaluated on organizational, financial, technical, and social/environmental aspects with consideration of the extent to which the achievement of the Project will be sustained or expanded after the assistance period.

## 4. **Project Performance and Implementation Process**

## 4.1 Accomplishment of the Project

Accomplishment of the Project was measured in terms of Inputs, Activities, Outputs and Project purpose, all of which accord with the R/D, PDM and PO.

## 4.2 Inputs

- (1) Japanese Side
  - (a) Experts

## Long-term experts

Four (4) long-term experts in total have been dispatched. These are Chief Advisor, Coordinator, and Expert. Their fields are Forest Policy, Social Forestry Extension and Extension Implementation Management, as attached in Annex 5.

## Short-term experts

Two (2) short-term experts have been dispatched, and their fields are Management of Ecological Resources in Farm Forestry, and Tree Improvement, as attached in Annex 5.

(b) Training of Kenyan Counterpart Personnel in Japan.

Five (5) counterpart personnel were trained in Japan and Three (3) counterpart personnel are currently being trained in Japan. The subjects of the training courses were/are, Forest Policy (1), Forest Management (1), Forestry Extension Method (5) and Extension Policy/Extension Method (1) as attached in Annex 6.

## (d) Equipment and facility construction

For the effective and smooth implementation of the Project, a total amount of Kshs. (Kenya Shillings) 41,226,278 (approximately equivalent to USD581,799 at the exchange rate of USD1=Kshs.70.86 according to the JICA official exchange rate in May 2006) has been allocated to procure equipment and construct facilities which are necessary in the process of

technical transfer from Japanese experts to Kenyan counterpart personnel in the Project by the end of June,2006, as attached in Annex 7.

## (e) Local cost borne by Japanese side

For the effective and smooth implementation of the Project, a total amount of Kshs. 48,707,629 (approximately equivalent to USD687,378 at the exchange rate of USD1=Kshs.70.86 according to the JICA official exchange rate in May 2006) has been allocated to supplement a portion of local cost by the end of June, 2006, as attached in Annex 9.

## (2) Kenyan Side

(a) Assignment of Counterpart Personnel

Forty-three (43) counterpart personnel in total have been assigned for the Project from the Forest Department of MENR (hereinafter referred to as "FD"), and the Kenya Forestry Research Institute (hereinafter referred to as "KEFRI"). Other supporting staff such as administrative staff, drivers and secretaries, have also been assigned for the project. List of Kenyan counterpart personnel assigned to the Project is attached in Annex 8.

(b) Budgetary allocation by Kenyan side

Approximately Ksh 4.9 million in total by the end of June, 2006 has been allocated as cost for the Project as attached in Annex 9.

(c) Provision of land, office spaces and facilities

The following facilities have been provided for the Project:

- Land, office space and necessary facilities for project head office at FD headquarters.
- Land, office space and necessary facilities for project field offices in Kitui, Mbeere and Tharaka Districts.
- Training facilities at KEFRI headquarters.
- Training activities at KEFRI Kitui Centre.
- Land for demonstration plot in KEFRI Tiva Pilot Forest, Kitui.
- Nursery facilities in KEFRI Kitui Tiva Pilot Forest and Kitui Center
- FD field nurseries in Kitui, Mbeere and Tharaka Districts.
- Rooms and space necessary for installation and storage of equipment.
- Electricity, water supply and necessary telecommunication services.

## 4.3 Activities

Activities are divided into four (4) components as shown on the PDM. The activities carried out by the time of this evaluation are as follows:

## (1) Strengthen institutional capacity for forest extension at the FD headquarters.

- 1.1. Assist institutional strengthening in FD
- 1.2. Carry out baseline survey for situation analysis.
- 1.3. Prepare practical guidelines for planning, implementation, monitoring and evaluation.
- 1.4. Conduct training for FD staff
- 1.5. Monitor extent of institutional and technical strengthening.

(2) Promote social forestry extension activities among individual farmers and farmer groups in Kitui, Mbeere and Tharaka districts

- 2.1. Carry out baseline survey for situation analysis.
- 2.2. Improve extension staff's activities.
- 2.3. Facilitate planning, implementation and evaluation of social forestry and related activities with individual farmers and farmer groups initiatives.
- 2.4. Facilitate farmer to farmer extension.
- 2.5. Facilitate network among farmer groups.
- 2.6. Monitor extent of the promotion of social forestry extension activities.

(3) Disseminate practical knowledge and techniques to farmers and other stakeholders.

- 3.1. Carry out baseline survey for situation analysis.
- 3.2. Identify useful local forestry related knowledge and develop farmers friendly techniques.
- 3.3. Develop the technical manuals.
- 3.4. Provide technical assistance for diverse needs of individual farmers, farmer groups and other stakeholders.
- 3.5. Maintain and improve Tiva demonstration plot.
- 3.6. Identify and assess usefull social forestry related techniques and establish/identify field demonstration site.
- 3.7. Undertake cross visits among individual farmers and farmer groups.
- 3.8. Monitor the extent of adoption of practical knowledge and techniques.

(4) Share information on social forestry extension and related issues among stakeholders in semi-arid areas.

- 4.1. Carry out baseline survey for situation analysis.
- 4.2. Diversify methods for information sharing.
- 4.3. Hold workshops and seminars.
- 4.4. Identify potential marketing incentives for social forestry products and services.
- 4.5. Monitor extent of information sharing.

## 4.4 Outputs

Accomplishments of each output are as follows:

(1) Output 1: Institutional and technical capacities for social forest extension are strengthened.

ISFP assisted to formulate the strategic plan for the envisaged Kenya Forest Service (KFS), prepared the 1st Draft of the strategic plan, and have also prepared Extension Operational Guidelines for ISFP. Based upon these guidelines, district extension guidelines for field operation are being prepared, and drafts are ready for Kitui and Mbeere.

An implementation plan on social forestry extension is in the preparation process and drafts are ready in Kitui, Mbeere and Tharaka (3 districts of intensive areas). Piloting of outputs for ISFP have been initiated by selected foresters from Malindi, Kilifi, Laikipia, West

Pokot, Meru South, Kwale and Rachuonyo.

Several training courses, seminars and workshops have been held to strengthen the technical capacities of the FD staff. Some of these include ToT training in Farmer Field School (FFS) methodology, basic agronomy and Income Generation Activities (IGAs) locally for District Forest Officers (DFOs) and Divisional Forest Extension Officers (DFEOs), and overseas training (Japan) in Forest Policy, Forest Management and Forestry Extension Methods of Japan for senior FD staff and some DFOs.

Institutional strengthening of the district staff has been achieved through deployment of Assistant DFOs in 3 districts of intensive areas, to assist the DFOs with the implementation of the project activities.

Heads of Drylands and Farm Forestry Branch have been trained in FFS methodology and fully understand the functioning of the ISFP FFS extension method. This is considered a first step in paving way for the establishment of a functional planning, monitoring and evaluation unit at FD.

(2) Output 2. Social forestry extension activities among individual farmers and farmer groups are promoted.

70 farmers groups are facilitated by FD extension staff in 3 districts of intensive areas. Participating farmers and farmer groups showed great appreciation of the FFS extension method, and have widely accepted it. Through this extension method, the farmers are able to practice social forestry activities among themselves and among their groups through such fora as field days, exchange visits and graduation days. So far, 175 such functions have been conducted by the first cycle of 48 FFS groups run by FD extension staff, with an average attendance of about 90 persons.

Apart from FD extension staff, 104 farmers have been trained and have qualified as farmer facilitators, with each group having at least 2 farmer facilitators. Farmer Facilitators are supported to establish and facilitate a total of 52 Farmer-Run FFS between them with monthly backstopping from the DFEOs.

(3) Output 3. Farmers and other stakeholders obtain enough practical knowledge and technique.

Forty eight (48) FFS groups have already graduated from FFS. Another 74 are ongoing with the facilitation of the DFEOs and the Farmer Facilitators. They have introduced many social forestry activities such as establishment and management of tree nurseries, establishment of woodlots and fruit orchards, basic agronomy and IGAs among others. The group members have replicated what they have learnt on their own farms and shared the knowledge and skills with other community members such as family members, neighbors, friends, groups, etc. The survey showed that all target farmers are group member in varying degrees of implementing the knowledge and skills they learnt during FFS. Some positive influence was also observed among surrounding farmers and family members.

(4) Output 4. Information on social forestry and related issues is shared among the stakeholders.

ISFP holds regular meetings, workshops, seminars and other information sharing and exchange fora at various levels to share information on social forestry and related issues. Some of the stakeholders include FD, KEFRI, the Ministry of Environment and Natural Resources, other government ministries, international organizations and other development partners. And also various participants from other African states share the information on social forestry through the Third Country Training called "Enhancing Adoption of Social Forestry in Africa" implemented by KEFRI.

The other system of information sharing established by the ISFP project is a project website. By the time of the survey, 2,161 people had visited the website.

## 4.5 **Project Purpose**

The Project Purpose is that individual farmers, farmer groups and other stakeholders intensify social forestry practices in semi-arid areas. To achieve this, a series of techniques and approaches have been introduced to farmers. Also, methods of monitoring and evaluation of activities have been developed in order to get feedback to be used for the improvement of the project activities. Farmer groups were seen to have intensified social forestry activities in their areas, and are practicing several enterprises such as tree nurseries, woodlots, fruit orchards, fodder banks, cropping with improved techniques, intercropping and IGAs. The farmers/members of these groups are also in varying degrees replicating what they have learnt in the groups onto their own individual land.

# **4.5.1** Indicator 1: Data noted below shows the increase by 2006 compared to 2004 in Kitui, Mbeere and Tharaka District among target group

As the result of the sampling survey, data noted below shows the increase by 2006 compared to 2004 in Kitui, Mbeere and Tharaka.

- Number of tree seedlings annually produced on Individual farm: Kitui 180.2%, Mbeere 366.4%, Tharaka 27.7%
- Number of trees annually planted on Individual farm: Kitui 99.0%, Mbeere 39.6%, Tharaka 47.7%

All the groups interviewed introduced at least one species eg. *Melia Vokensii* (mukau), eucalyptus, neem and all groups interviewed have newly implemented social forestry activities such as woodlot for timber, woodlot for poles and firewood, fruit orchard, mukau (or other) intercropping, fodder bank and special activities including IGAs.

# **4.5.2** Indicator 2: Data noted below shows the increase by 2006 compared to 2004 in Kitui, Mbeere and Tharaka District in surrounding area of target group.

As the result of the sampling survey, data noted below shows the increase by 2006 compared to 2004 in surrounding area of target group.

- Number of tree seedlings annually produced on Individual farm: Kitui 497.3%, Mbeere -43.5%, Tharaka -53.7%.
- Number of trees annually planted on Individual farm.: Kitui -22.3%, Mbeere -66.9%, Tharaka -61.9%.

Decrease in number of tree seedlings and trees annually planted was caused by the drought from late last year to early this year.

Many of the target farmers introduced seedlings and planted trees of Melia, Eucalyptus and Neem as highly marketable tree species and generally there was an increased in number of the target farmers who newly practiced social forestry activities such as cropping with improved techniques, fruit orchard and tree nursery.

# 4.5.3 Indicator 3: Planning on social forestry extension is promoted in 10 districts in semi-arid areas.

Planning of social forestry extension in Malindi, Kilifi, Laikipia, West Pokot, Meru South, Kwale and Rachuonyo has started and implementation plan of the extension has been drafted in 3 districts of intensive areas (Kitui, Mbeere and Tharaka).

## **4.6 Implementation Process**

## 4.6.1 **Progress of the Activities**

The Project has mostly been carried out as planned owing to the examination and trial of the FFS method at earlier stage of the Project in spite of some delays in counterpart budget allocation and disbursement

## 4.6.2 Management of the Project

## (1) Meetings

Joint Coordination Committee meeting (hereinafter referred to as JCC) and Project Semiannual Meeting are to be held annually and biannually respectively for project monitoring among experts, Counterparts, JICA office and FD's staff. A monthly meeting is also held in FD's district offices in the three districts.

## (2) Monitoring

Monitoring is done at all levels from the farmers' weekly reports, the DFEO's and DFO's Monitoring Sheets up to FD headquarters. This is for purposes of identification of the projects' strength and weakness and incorporating the lessons learnt in project implementation.

## 4.6.3 Involvement of beneficiaries in the Project

Farmers and farmers' groups were selected on the strength of their capacity to properly participate in extension activities of the Project. The target groups therefore have been actively participating in FFS on a weekly basis. Individual farmers are implementing the techniques learnt in the FFS groups on their own farms, and in some cases they have shared

information with family members and surrounding farmers. Some groups have also voluntarily implemented FFS for other farmers groups.

## 4.6.4 Ownership of the Project by Executing Institution

(1) Assignment of Counterparts

A total of forty-three (43) counterparts has been provided; thirty-five (35) of whom are from FD and eight (8) from KEFRI. Allocation of Assistant District Forest Officers (ADFO's) in each 3 district of intensive areas fosters the smooth implementation of extension activities in the absence of the DFEO. Contingency measures were also taken to facilitate the continuation of project activities using available staff in cases where the position of DFEO fell vacant. The consciousness of the Kenyan side to the Project is therefore high.

## (2) Capacity of Counterparts

Abilities of counterparts have been improving because of comparative advantages of FFS and concrete implementation of activities supported by GOK and JICA.

## (3) Budget

Both Kenyan and Japanese sides have allocated the budget to run the Project. However, most of the extension activities are covered by JICA and occasionally, disbursement of the budget from Kenyan side tend to be delayed.

## **5. Evaluation Results**

## 5.1 Relevance

## **5.1.1** Consistency with the development policy of Kenya

The overall goal of the Project is consistent with the Poverty Reduction Strategy, specific District Development Plans, and the Economic Recovery Strategy for Wealth and Employment Creation (which is the current development plan) documents which address issues of improved living standards for the rural communities. The project purpose is also in line with the development policy, in particular the draft of new Forest Policy and the Forest Act 2005. Relevance of some development documents of the Government of Kenya with the Project is summarized in Annex 10.

## 5.1.2 Consistency with the aid policy of Japan

The Project meets the aid policy of the Government of Japan (GoJ). The Aid Guidelines for Priority Areas and Challenges of the Country Assistance Programme compiled by the Ministry of Foreign Affair of The Government of Japan in 2000 emphasizes importance of intervention in the filed of environment among other sectors. It recognizes also forest protection, afforestation and the agricultural land protection in order to prevent the future expansion of the arid and semi-arid regions due to population growth and urbanization. Moreover, the Project is accepted in Conservation of Forest and Afforestation as one of the Development Issues slotted into the JICA's Country Assistance Implementation Plan proposed in April 2006.

Furthermore the involvement of GoJ in the forestry sector in Kenya dates back to the middle 1980's. It had been supporting social forestry activities in semi-arid lands where

incidence of poverty is high for the past about 20 years through some interventions. These are: grant aid to KEFRI, the Social Forestry Training Project (SFTP) and the Social Forestry Extension Model Development (SOFEM). Those projects have contributed to the promotion of technology for establishment of tree nurseries , afforestation, and social forestry in the nation. Thus, JICA and the government of Japan have comparative advantage in the field of social forestry in Kenya.

## 5.1.3 Needs of target groups

Supporting of the target farmers is indispensable. The target groups are among the rural poor in the semi-arid areas and their standard living should be increased together with preservation of environment. They reside under such climatic condition that makes agricultural production unstable. At the same time, the forestry based production system is more resilient and is not likely to be affected by the erratic climate therefore the forestry should be combined with the farmers' agricultural production so as to secure their income and conserve the natural environment. However, the farmers are lacking knowledge of and do not have experience in forestation and raising of trees nurseries therefore, the target groups need to learn about social forestry.

FD is in charge of social forestry dissemination. It is therefore required that FD improves the abilities of its staff through the Project. There had been few FD staff have been trained on social forestry dissemination method by other donors before the commencement of this Project. According to the questionnaires and interviewing FD staff, there is still a great need for capacity development for the FD forest officers and the extension officers in 3 districts of intensive areas. The general indication is that the following areas require capacity development for the project. These include;

- Management of income generating activities
- Extension planning, resource assessment and marketing
- Forestry extension methodology, regular refresher training exploring FFS
- Business development for farmers to commercialize farm forestry activities
- Basic agronomy
- Farm activity planning
- Enterprise development management, cost benefit analysis and cost accounting, and
- Training of farmers to do extension

## **5.1.4** Appropriateness of strategy/approach

The strategy and approach of the Project, that employs FFS as a method of social forestry dissemination, is well accepted among stakeholders of the Project. The farmers have been practicing nursery raising and planting technology since the Project started. In addition, ability of FD staff, DFOs and DFEOs in 3 districts of intensive areas has been improved through training on forestry in semi-arid areas and basic agronomy. Their knowledge and experiences were also widened by interaction with other ministries' staff, e.g., the Ministry of

Agriculture, during the Project. It especially made the FD extension officers capable of responding to the farmers' needs.

Although it was pointed out that FFS method is rather time consuming approach, some advantages of FFS were addressed and confirmed during the Mid-term evaluation. These are;

- It was introduced in Kenya 1990s and is still sustained in other African countries,
- Other donors such as UNDP, DFID and DANIDA introduced the FFS as well,
- It is appropriate to monitor forestry activities in the long term,
- It is an intensive learning process by practice; therefore, it can be easily understood and adopted by the stakeholders,
- It is easy to replicate and very practical in nature, and
- The method is participatory and farmer centered.

## **5.1.5** Monitoring

JCC (Joint Coordination Committee) and Project Semiannual Meeting are to be held annually and semiannually respectively among experts, Counterparts, JICA office and FD staff for monitoring the Project.

Meanwhile, monitoring of FFS activities requires improvement. It was pointed out that the monitoring reports are useful for project management through sharing of information among Counterparts and experts, and to enhance the skills of FD extension officers. However, submission of the reports is sometimes delayed and collating and analysis are not conducted. Therefore, substantial benefits from the monitoring reports are not reaped. Annex 11 shows the current reports and flow for monitoring at different levels in FD.

## 5.1.6 Economic advantages of Melia Volkensii

In this project, *Melia Volkensii* (mukau) is introduced as suitable tree for planting in semi-arid areas. The target farmers have been well recognizing it as high value on farms and are willing to continue planting due to the various advantages listed below.

- The species provide fodder during dry season,
- It improves soil fertility,
- Its timber can be material for construction and furniture,
- It is termite resistant both at seedling and tree growth level,
- It is also drought resistant,
- It provides wood fuel, and
- The tree grows faster.

## 5.1.7 Changing of policy and socio-economic situation

There has not been any drastic change in the socio-economic situation, but policy is undergoing a transformation with the enactment of the forest bill and assent of the Forest Act 2005. However, this is not expected to change the project direction and purpose since the Project itself is well harmonized with the framework of new Forest Act.

#### **5.2 Effectiveness**

## 5.2.1 Possibility of realization of the Project purpose

Possibility of realization of the Project purpose is positive. Individual farmers and farmer groups in 3 districts of intensive areas are already intensifying social forestry activities in their group and on individual farms and therefore, the FFS experience should be replicated in other semi-arid districts in order to achieve similar results.

Intensification of social forestry activities by target farmers and farmer groups is strongly agreed. Already non-FFS members are being trained by FFS farmer facilitators. They are able to teach other community members of the various techniques acquired during FFS lessons.

#### 5.2.2 Constraints for achieving the Project Purpose

The major constraint cited for realization of the project purpose is inadequate counterpart budget allocation and timeliness of disbursement. Establishment of KFS from FD through the forestry sector reform should be carefully observed to institutionalize and mainstream FFS method in the KFS.

#### 5.2.3 Coordination of the 4 outputs to realize the project purpose

Although some feedback mechanism for piloting of outputs for the ISFP have been initiated, further coordination is needed among the outputs in order to provide a link between the activities of technology development, survey and study, manual making and field extension.

#### **5.3 Efficiency**

#### 5.3.1 Degree of achievement of outputs

Degree of achievement of each output is good to some extent.

#### **(1) Output 1**

Capacity building at FD H/Qs level has been carried out through training, workshop, seminar and surveys. As a result, the institutional and technical capacities for social forestry extension were efficiently and remarkably improved over the past 2 years.

#### (2) Output 2

Some achievements of the output were cited in 4.4 and they showed substantial success of the FFS method in 3 districts of intensive areas for such a short period.

#### (3) Output 3

Majority of the target farmers acquired knowledge and applied it to practice since the FFS method has been introduced efficiently. The number of techniques that were employed by the farmers is about 40 since FFS method was introduced.

#### (4) **Output 4**

According to the total number of survey respondents of 200 in 3 districts of intensive areas, awareness of social forestry was remarkably increased since the Project started.

Number of stakeholders who are aware of information on social forestry extension is also increased by 7% in Kitui, 14% in Mbeere and 32% in Tharaka respectively. Moreover, number of visitors to the website of 2,161 by 2006 showed efficient recognition of social forestry in public.

#### 5.3.2 Adequacy of activities and inputs to realize the outputs

Current level of activities and inputs to realize the outputs is appropriate, however, for better efficiency, it will be necessary to harmonize the number of activities with commensurate timing and scheduling.

In future, for further development of the outputs, to the involvement of Farmer Facilitators as key players to disseminate FFS activities is expected.

# **5.3.3** Appropriateness of number of Japanese experts, their fields, timing of placement and terms

Number of Japanese experts and their specialized fields were found to be appropriate, as they have been deployed as per the initial project plan and the reduction of Japanese experts is feasible in consideration of the degree of realization of the outputs.

#### 5.3.4 Appropriateness of kinds of equipment, their quantities and timing of supply

The kinds of equipment, their quantities and timing were considered appropriate at current levels, though, procurement of some item was delayed.

#### 5.3.5 Effect of the important assumptions on achievement of project outputs

There was no effect of the important assumptions on the project outputs though drought occurred in 2005.

## 5.4 Impact

## 5.4.1 Possibility to realize the Overall goal

The Objectively Verifiable Indicators for the overall goal are positive in 3 districts of intensive areas. Therefore, the Overall Goal would be the proper direction of the Project as long as the current progress is sustained.

By achieving the Project Purpose and sustaining it, food self-sufficiency and living standards will be improved. In the long term, farmers can afford to carry out enterprises leading to improved land utilization in environmental conservation.

Networking including information on availability of seedlings and other resources among farmers after FFS will ensure they promote IGAs leading to realization of the Overall Goal.

#### 5.4.2 Ripple effect

There has been positive change among FD extension staff, the farmers groups and the farmers, mainly in view of empowerment such as better time management and consciousness, self-confidence, communication and presentation skill, group management, cohesiveness of group and so forth.

#### 5.5 Sustainability

## **5.5.1 Institution and Organization**

The Government of Kenya has been maintaining social forestry policy for a long time with consistency. Social forest extension method, FFS, should be institutionalized and mainstreamed in the KFS in order to sustain the outcome of the Project and disseminate social forestry in other semi-arid areas.

#### 5.5.2 Finance

At present, JICA bears most of the shared cost in the Project . It is needed that Kenyan side will increase the budget to sustain the outcome of the project,.

#### 5.5.3 Technology

FFS has been well accepted by the target groups. Moreover, FD extension staff implement it well with full understanding of the method. The Farmers-Run FFS will be continued since the technology introduced is applicable.

KEFRI further develops and simplifies the propagation method of *Melia Volkensii*, as well as identifies appropriate germplasm and seed sources, and continuously elaborates silviculture management. In addition, KEFRI continues using the information generated by the farmers groups to evaluate and refine the various technologies and enterprises across different sites.

#### 6. Conclusion

From the evaluation results, it is worth mentioning that most of the Project activities have been implemented on schedule and are progressing towards the Project Purpose through the efforts of Kenyan counterparts and Japanese experts. It is also found that capability of FD personnel at Headquarters, District and Divisional levels in implementing project activities has been surely strengthened and the introduction of FFS in social forestry is quite effective.

Target farmers and surrounding farmers have been acquiring practical knowledge on social forestry leading to improvement of their livelihood and sustainable environment. Furthermore, it is notable that farmers have been empowered through participating in the project activities by means of FFS, especially since 104 farmers have already been trained as Facilitators to run the Farmer Run FFS.

Even though it is appreciated that FD has made efforts to allocate counterpart budget for the project activities, more appropriate budget allocation and actual disbursement from Kenyan side for the project activities is indispensable to secure the sustainability of the Project.

#### 7. Recommendations

#### 7.1. For the Achievement of the Project Purpose

#### 7.1.1 Regarding the Overall Project

## 7.1.1.1 Securing Budgets

In order to achieve the Project purpose and the sustainability of the Project, it is strongly recommended that counterpart budgets be secured and appropriate disbursement of the budget be done to ensure the smooth and effective implementation of the project activities even as FD transforms to KFS.

#### 7.1.1.2 Strengthening Coordination among the Components

In order to further strengthen the linkage among the components, it is recommended to institutionalize and set aside a time for regular meeting to discuss and share progress of each component activities; for example, further work on marketing of agroforestry products and dissemination of marketing survey information to farmers for effective FFS extension.

#### 7.1.1.3 Support of Farmer's investment in Farm Forestry

In order to break the vicious cycle of poverty in Arid and Semi-arid Areas, farmers should be supported to invest in forestry-based micro-enterprises through networking, market linkages and direct investments.

#### 7.1.2 Regarding Each Component

#### 7.1.2.1 Mainstreaming of FFS Method in Social Forestry

In order to mainstream FFS method as an extension method in social forestry which will contribute to the development of an extension strategy, it is recommended that a cost-effective way of implementing FFS method should be sought such as gradual reduction of frequency of visits by FD extension staff and the collaboration with Agriculture sector at the field level, in order for FD to continue its work within its capacity. Along with the progress of the project activities, the workload for monitoring and evaluation is bound to increase. It is therefore desirable to review and streamline the existing monitoring and evaluation system.

It is necessary that FD and ISFP monitoring systems should be harmonized to improve the efficiency.

#### 7.1.2.2 Strengthening of Farmer Facilitators

In order to further develop the social forestry activities in semi-arid areas, Farmer Facilitators should be increased and their capacity be strengthened while DFEOs should continuously undertake backstoppings to enhance Farmer-Run implementation.

## 7.1.3 Input from both Kenyan side and Japanese side

## 7.1.3.1 Input for the Project from Kenyan side

It is strongly recommended that the Kenyan side provides additional funds for extension costs to sustain present and future activities in order to enable smooth transition after the termination of the Project. In particular, it is necessary to provide an adequate budget for running Farmer-Run FFS. The provision of this budget should be entrenched in FD's policy framework and constitute a part of FD's reform agenda. This should be addressed so that the budget can be secured while FD transforms to KFS.

## 7.1.3.2 Input for the Project from Japanese Side

Considering the capacity of FD staff has increased, it is recommended to allocate two (2) Japanese long-term experts in order to ensure the smooth transition of the Project activities.

However, the extension duties are very important in view of creating project impact in the project area, expansion/piloting of activities outside project area, formation of FFS network, promotion of Farmer-Run activities and finalization of extension guidelines. The deployment of Japanese experts should take full recognition of this.

## Attachments

- Annex 1: Detailed Schedule of Mid-term Evaluation
- Annex 2: Current PDM (Ver.2)
- Annex 3: PO (Plan and Actual)
- Annex 4: Evaluation Grid for Mid-term Evaluation Study
- Annex 5: List of Japanese Experts
- Annex 6: List of Kenyan Counterpart Personnel Trained in Japan
- Annex 7: List of Equipment provision and Facilities construction by Japanese side
- Annex 8: List of Kenya Counterpart Personnel
- Annex 9: Project Cost sharing by Kenyan side and Japanese Side
- Annex 10: Development plan and strategies and Forestry Plans/Strategies/Guidelines
- Annex 11: Current Reports for monitoring for FFS

## Annex 1: Detailed Schedule of Mid-term Evaluation

DATE	TIME	SCHEDULE	ACCOMODATION		
Tuesday,		Mr. Miyazono's arrival at			
11 <sup>th</sup> of July		Nairobi by EK719			
Wednesday,	9:00 a.m.	Courtesy Call to MENR			
12 <sup>th</sup> July	10:00 a.m.	Courtesy Call to FD	Nairobi		
	AM-PM	Workshop at FD			
Thursday,		Field Survey			
13 <sup>th</sup> July	9:00 a.m.	Observation of Graduated			
		FFS Activities in Mbeere	V:4:		
		(1 <sup>st</sup> Generation)	KILUI		
	12:00 noon	Move to Kitui			
		(Stay at KEFRI Kitui Center)			
Friday,		Field Survey			
14 <sup>th</sup> July	8:30 a.m.	Observation of Current FFS			
	Activities in Kitui				
	12:00 noon	Visit to TIVA demonstration	INairodi		
		forest			
	14:30 p.m.	Move to Nairobi			
Saturday,		Arrangement of survey	Noirahi		
15 <sup>th</sup> July		materials	Inalfool		
Sunday,		Arrangement of survey	Noirahi		
16 <sup>th</sup> July		materials	Inalioui		
Monday,	15:30 p.m.	Discussion on joint	Noirahi		
17 <sup>th</sup> July		evaluation	Inalioui		
Tuesday,	2:30 p.m.	Joint Evaluation	Nairobi		
18 <sup>th</sup> July		Reporting of Joint Evaluation			
		M/M Signing			
Wednesday,		Mr. Miyazono's departure at	Nairobi		
19 <sup>th</sup> July		Nairobi by EK720			

#### Annex2: Current PDM (Ver.2)

#### **Project Design Matrix (PDM)**

Project Title: Intensified Social Forestry Project in Semi-arid Areas Target Groups: FD extension staff, Farmers in Kitui, Mbeere and Tharaka Districts. Target Area:Kitui, Mbeere and Tharaka Districts as the intensive areas of field activities and the other semi-arid areas.

Duration: 29 March 2004 - 28 March 2009

**Narrative Summary Objectively Verifiable Indicators** Means of Verification Important Assumptions Overall Goal For 2014 1.1. By 2014, agricultural contribution to household income in semi-arid Kenva Forestry Master Plan, District Development No drastic negative Living standards of the people in semi-arid areas are improved while areas is improved by 1 % through the use and sale of social forestry products Plans or equivalent report. changes in Kenya's enhancing sustainable environmental conservation. compared to year 2004 level. socio-economic condition occur. 1.2. By 2014, accessible sustainable wood production related to farmlands is predicted to increase by 3 % compared to year 2004 level. Project Purpose Bv Mar. 2009 . Data noted below shows the increase by 2009 compared to 2004 in Kitui, No drastic price Individual farmers, farmer groups and other stakeholders intensify social Mbeere and Tharaka District among target group. reduction in social Project Monitoring and Evaluation Report forestry practices in semi-arid areas. i ) Number of tree seedlings annually produced on farm. : 50% forestry products ii ) Number of trees annually planted on farm. : 50% occur. iii) Number of individual farmers and farmer groups who introduced highly marketable tree species for seedling production or tree planting on farm at least one species: 50% iv)Number of individual farmers and farmer groups who newly implement social forestry activities. : 70% 2. Data noted below shows the increase by 2009 compared to 2004 in Kitui, Mbeere and Tharaka District in surrounding area of target group. i ) Number of tree seedlings annually produced on farm. : 5% ii ) Number of trees annually planted on farm. : 5% iii) Number of individual farmers and farmer groups who introduced highly marketable tree species for seedling production or tree planting on farm at least one species: 5% iv) Number of individual farmers and farmer groups who newly implement social forestry activities. : 5% 3. Planning on social forestry extension is promoted in 10 districts in semiarid areas.

Ver. No. 2 Date: 16th May 2006

# Annex2: Current PDM (Ver.2)

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
Autnute			Assumptions
At the headquarters level	. At the headquarters level		- No catastrophic
<ol> <li>Institutional and technical capacities for social forestry extension in Forest Department are strengthened.</li> </ol>	<ul><li>1.1. By March 2009, Policy and planning for forestry development is elaborated.</li><li>1.2. By March 2009, Implementation plan on social forestry extension is prepared, piloted and improved in 10 districts in semi-arid area.</li></ul>	Project Monitoring and Evaluation Report	climatic condition occur. - Kenyan governmental forestry development policyand plans remain
	1.3. By March 2009, a functional unit for social forestry extention planning, monitoring and evaluation is established at FD.		consistently positive.
In Kitui Mhoore and Thoraka districts	In Kitui Mhoore and Tharaka districts		
III KIUI, MDEETE ahu Thataka uistricis	2.1 By March 2009, 60 % of individual farmers who participated in the		4
<ol> <li>Social forestry extension activities among individual farmers and farmer groups are promoted.</li> </ol>	project apply social forestry practiced by groups to their own farms.	Project Monitoring and Evaluation Report	
	2.2. By March 2009, 120 farmer groups are involved in social forestry related group network.		
	2.3. By March 2009, 150 farmers groups are facilitated by farmers in the area.		
	2.4. By March 2009, 7,500 farmers attend field days conducted by farmer groups participated in the project.		
	2.5. By March 2009, 70 % of farmers who participated in the project appreciate the project extension model.		
	2.6. By March 2009, 60 % of FD extension staff involved in the project implementation are recognized as qualified farm forestry FFS facilitators.		
	2.7 By March 2009, 120 farmers groups are facilitated by FD extension staff in the area.		
3. Farmers and other stakeholders obtain enough practical knowledge	3.1. By March 2009, 50% of farmers who participated in the project implemented new techniques learned through the project in their own farms.		
and techniques.	3.2. By March 2009, 70% of farmers who participated in the project appreciate knowledge and techniques provided by the project.		
In semi-arid areas	In semi-arid areas		
4. Information on social forestry extension and related issues is shared among the stakeholders.	4.1. By March 2009, number of stakeholders, who are aware of information on social forestry extension, is increased by 5 % compared to 2004 level.	Project Monitoring and Evaluation Report	
	4.2. By March 2009, 4,000 people visit the project website.		

# Annex2: Current PDM (Ver.2)

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important
			Assumptions
Activities	Inputs		
[	<kenya side=""></kenya>	<japanese side=""></japanese>	- Road condition in
0.1 Hold joint steering committee meetings.	1. Counterpart/Adoministrative personnel	1. Personnel	Kitui, Mbeere and
0.2 Carry out baseline survey for project purpose.	1.1. Project Director: Chief Conservator of Forests, FD	1.1. Long-term experts	Tharaka districts
0.3 Monitor project purpose.	1.2. Project Co-Director: Director, KEFRI	1.1.1. Chief Advisor/Forest Policy	remains motorable.
At the headquarters level	1.3. Project Manager: Project Coordinator, FD	1.1.2. Coordinator/Monitoring & Evaluation	
1.1. Assist institutional strengthening in FD	1.4. Project Co-Manager: Kitui Centre Director, KEFRI	1.1.3. Social Forestry Extension	- Trained staff remain
1.2. Carry out baseline survey for situation analysis.	1.5. FD headquarters	* Number and fields of the long-term experts may	available.
1.3. Prepare practical guidelines for planning, implementation,	1.5.1. Assistant Project Manager-Extension: an official, FD	be reviced after the Mid-term Review.	
monitoring and evaluation.	1.6. Kitui District	1.2. Short-term Experts	- No catastrophic
1.4. Conduct training for FD staff	1.6.1. Field Manager: District Forest Officer (DFO), FD	* Short-term experts will be dispatched upon the	climatic condition occur.
1.5. Monitor extent of institutional and technical strengthening.	1.6.2. Field Extension Officers: District Forest Extension Officers (DFEOs),	necessity.	
	FD		
	1.6.3. Field/Nursery Assistants, FD	2. Counterpart Training	
	1.6.4. Project Research Assistant: Research officer, Kitui Centre, KEFRI	* Training opportunities in Japan and/or the third	
In Kitai Mhanna and Thamka districts	1.7. Mbeere District	countries for 1 to 2 counterpart(s) will be provided	
In Kitui, Mibeere and Tharaka districts	1.7.1. Field Manager: DFO, FD	every year.	
2.1. Carry out baseline survey for situation analysis.	1.7.2. Field Extension Officers: DFEOs, FD		
2.2. Improve extension staff's activities.	1.7.3. Field/Nursery Assistants, FD	3. Machinery, Equipment and Materials	
2.3. Facilitate planning, implementation and evaluation of social forestry	1.8. Tharaka District	3.1. Equipment for social forestry extension	
and related activities with individual farmers and farmer groups	1.8.1. Field Manager: DFO, FD	3.2. Equipment for social forestry training	
initiatives.	1.8.2. Field Extension Officers: DFEOs, FD	3.3. Equipment for social forestry research	
2.4. Facilitate farmer to farmer extension.	1.8.3. Field/Nursery Assistants, FD	3.4. Equipment for information sharing	
2.5. Facilitate network among farmer groups.	1.9. Supporting Staff:	3.5. Vehicles	
2.6. Monitor extent of the promotion of social forestry extension	1.9.1. Administrative Staff	3.6. Other necessary machinery, equipment and	
activities.	1.9.2. Secretaries	materials for the implementation of the project	
3.1. Carry out baseline survey for situation analysis.	1.9.3. Drivers		Pre-Condition
3.2. Identify useful local forestry related knowledge and develop farmers		4. Infrastructures	
friendly techniques.	2. Land and Facilities	4.1. Renovation of project head office space in FD	- Farmers in Kitui,
3.3. Develop the technical manuals.	2.1. Land and office facilities for project head office in FD headquarters	headquarters	Mbeere and Tharaka
3.4. Provide technical assistance for diverse needs of individual farmers,	2.2. Land and office facilities for project field office in Kitui	4.2. Expansion of project field office in Kitui	districts are willing to
farmer groups and other stakeholders.	2.3. Land and office facilities for project field office in Mbeere	4.3. Expansion of project field office in Mbeere	participate in social
3.5. Maintain and improve Tiva demonstration plot.	2.4. Land and office facilities for project field office in Tharaka	4.4. Expansion of project field office in Tharaka	forestry activities.
3.6. Identify and assess usefull social forestry related techniques and	2.5. Training facilities in KEFRI headquarters	4.5. Rehabilitation of field nurseries in Kitui,	
establish/identify field demonstration site.	2.6. Training facilities in KEFRI Kitui Centre	Mbeere, Tharaka districts	
3.7. Undertake cross visits among individual farmers and farmer groups.	2.7. Land for demonstration plot in Tiva Pilot Forest, Kitui		
3.8. Monitor the extent of adoption of practical knowledge and	2.8. Nursery facilities in KEFRI Tiva Pilot Forest and Kitui Centre	<ol><li>Supplementary budget for local expenditure</li></ol>	
techniques.	2.9. FD field nurseries in Kitui, Mbeere and Tharaka districts.		
In semi-arid areas	3. Administrative and Operational Cost		
4.1. Carry out baseline survey for situation analysis.			
4.2. Diversify methods for information sharing.			
4.3. Hold workshops and seminars.			
4.4. Identify potential marketing incentives for social forestry products			
and services.			
4.5. Monitor extent of information sharing.			
, and the second s			1

# Annex3: Plan of Operation Plan and Actual

Annex 3

	Outputs	Activities			Ye	ar 1	Ye	ar 2	Year		Year 4		4 Year 5		Staff in charge
	outputs		Teu mes		1	2	1	2	1	2	1	2	1	2	Stair in charge
	0	0.1	Hold joint coordinating committee meetings.	Plan	þ							0			CCF,Director(KEFRI),CA
				Actual											
		0.2	Carry out baseline survey for project purpose.	Plan											EMO,HDL,PM,DFO,CCF,C
				Actual					i						A, CO,Local Consultant
		0.3	Monitor project purpose	Dian		<u>і</u> п п		П		п	п	П	П	п	HDL PM FMO CCE CA
		0.5	Nomor project purpose.	Plan	-	<u>                                     </u>			-				-		CO,Local Consultant
-	1 Institutional and technical	1.1	Assist institutional strengthening in FD	Dlan	-		-	<u>i</u> —				ļ			CCE HEE HDL PM CA
	capacities for social	1.1	Assist institutonal suchguching in LD.	Plan				-						 	CCI ,III I ,IIDE,I W,CA
	forestry extension in	1.2	Carry out baseline survey for situation analysis	Actual		-			-					1	CCE DM HEE
	Forest Department are	1.2	Carry out baseline survey for situation analysis.	Plan	E			_							HDL,CA,CO
	strengtnened.	1.2	Proper practical midelines for planning implementation	Actual				·							HEE HDL DM
		1.5	monitoring and evaluation.	Plan				, L J _				1		 	APM,DFOs,EX(CO),CA,Int
				Actual		:		4 <b>-</b>						1	ernational(Local)Consultant
		1.4	Conduct training for ED staff		_	<u> </u>									HEE HDL DM ADM CA(CC
		1.4	Conduct training for FD start	Plan							U		-		).Local Consultant
				Actual		¦ 🗖		<b>!</b>				 			,,
		1.5	Monitor extent of institutional and technical strengthening.	Plan			]								CCF,HFF,HDL,EMO,PM,C
				Actual				i 🛛	;			1			A, CO(EX),Local Consultant
F	2 Social forestry extension	2.1	Carry out baseline survey for situation analysis.	Plan	F										HFF,HDL,PM,DFO,APM,C
	activities among			Tian				<u> </u>					_	<u> </u>	A, CO(EX),Local
	individual farmers and			Actual											Consultant
	farmer groups are	2.2	Improve extension staff's activities.	Plan		!		-							APM, DFOs, DFEOs, Field
	promoted.							ļ							(CA, CO)Research
				Actual											Ass.Technical
					L_										Organizations
		2.3	Facilitate planning, implementation and evaluation of social forestry and related activities with individual farmers and farmer	Plan		-									APM,DFOs,DFEOs,EX(CO ) Local Consultant
			groups.	Actual		<b>i</b> •		þ							),Local Consultant
		2.4	Facilitate farmer to farmer extension.	Plan		<u> </u>		0		_					APM.DFOs.DFEOs.Co-PM
				1 Iuli			Ē	-						F	,EX(CO),Local Consultant
				Actual											
		2.5	Facilitate network among farmer groups.	Plan			0								PM,APM,DFOs,DFEOs,EX
				Actual											(CO),Local Consultant
		2.6	Monitor extent of the promotion of social forestry extension	Dian	-	<u> </u>	_	<u> </u>		_				<u>.</u>	PM APM EMO CA
			activities.	Actual	-	<u> </u>				_				<u>r'</u>	CO(EX),Local Consultant
┝	3 Farmers and other	3.1	Carry out baseline survey for situation analysis	Dlon	╘	<u> </u>		<u> </u>	-						РМ АРМ СА
	stakeholders obtain	5.1	Carry out baseline survey for situation analysis.	Pian	E			-							CO(EX),Local Consultant
	enough practical	3.2	Davalon formers friendly techniques	Actual				I T						I I	PM APM EMO Co
	knowledge and	5.2	Develop faillers menury techniques.	Plan	_		Γ_	, " 						I	PM,Research Ass.CA,
	tecnniques.			Actual				į.	1						CO(EX),Local
		33	Identify useful local forestry related knowledge	DI		<u>;</u>									(INternational)Consultant
		5.5	identify useful local locsity related knowledge.	Plan	Ľ.		_	;						1 1	Director(KEFRI),Co-
				Actual	1.	:		1	!						PM,Research Ass.CA,
						<u> </u>		<u>i</u>	i						CO(EX),Local
		3.4	Develop the technical manuals.	Plan		1	1	1					Þ	1	HFF,HDL,PM,APM,EMO,
				1		1									CO(EX),International
				Actual		į		į.	i						(Local)Consultant
		3.5	Provide technical assistance for diverse needs of individual	Plan											PM,APM,DFOs,DFEOs,Co-
			farmers, farmer groups and other stakeholders.			ļ		6				1		1	PM,Research Ass.,
				Actual				!							EX(CO),Local Consultant Short Exp
		3.6	Maintain and improve Tiva demonstration plot		-	<u>.</u>	1			_				<u> </u>	Co-PM Research Ass CO
		5.0	internation protective and a second stration protection	Plan	<u> </u>					_		-			(EX),Local Consultant
				Actual				1						1	
		3.7	Identify and assess practical field demonstration sites and the	Plan			] [				1			1	PM,APM,DFOs,DFEOs,EX
			needs for promotion.	Actual		i		İ	i			l		i	(CO),Local Consultant
		3.8	Undertake cross visits among individual farmers and farmer	Plan										<u> </u>	PM,APM,DFOs,DFEOs,EX
			groups.	1 mil	-		<u> </u>							-	(CO),Local Consultant
				Actual		. •	<u> </u>	-						I	
		3.9	Organize open days of project activities and demonstration plots	Plan	L	i	L	i							PM,APM,DFOs,DFEOs,EX
		1	ior farmers and other stakenoluers.	Actual		1		r I				1		1	(CO),Local Consultant
		3.10	Monitor the extent of adoption of practical knowledge and	Plan	1	i –	i	;		1				-	HFF,HDL,PM,APM,DFOs,
		1	techniques.	A	-			<u> </u>	<u> </u>	-					DFEOs,Co-
F	4 7 6 1 1 1			Actual	L	' I			$\square$						PM,EX(CO),Local
	4 Information on social forestry extension and	4.1	Carry out baseline survey for situation analysis.	Plan		 						l I			HFF,HDL,PM,CA, CO Local Consultant
	related issues is shared	1		Actual				 	!						- 5,200 Consultant
	among the stakeholders.	4.2	Diversify methods for information sharing.	Plan			1	i	i						HDL,APM,DFO,PM,IT
1	I	1					1				L /		1	•	1

	Outputs		Activities		Ye	ar 1	Ye	ar 2	Yea	ar 3	Ye	ar 4	Ye	ar 5	Staff in charge	
	•				1	2	1	2	1	2	1	2	1	2	Ŭ	
				Actual											Expert,CA(EX, CO),Local Consultant(IT)	
		4.3	Hold workshops and seminars.	Plan						]					PM,APM,CA(CO),Internati	
				Actual											onar Consultant	
		4.4	Identify potential marketing incentives for social forestry products	Plan		 								1	HDL,PM,APM,DFOs,DFE	
			and services.	Actual				Þ		1				-	Ass.CA	
		4.5	Monitor extent of information sharing.	Plan			1								PM,APM,CA, CO,Local	
				Actual		i .		i -						i -	Consultant	
E	equipment and Machinery			Plan										i	PM,CO(EX),	
				Actual				1						1		
Р	repare designs for infrastructu	res.		Plan		1		i I		1		i I		I	PM,DFOs,CO(EX)	
				Actual				!		1				!		
C	Construct the infrastructures in	accore	lance with the designs.	Plan								i		i	PM,DFOs,CO	
				Actual								i		i	]	

JICA CA: Chief Adviser CO: Coodinator EX: Expert

\*Abreviation FD CCF: Chief Conservator of Forest HFF: Head of Farm Forest & Extension Branch HDL: Head of Dryland Forestry Branch EMO: Extension Monitoring Officer

PM: Project Managere

APM: Assistant Project Manager

KEFRI Co-PM: Center Director-Kitui

Note: This PO is based on the PDM ver.0. Under the revision of PDM from ver.0 to ver.1, following amendment was made. -Activity 3.2 and 3.3 were merged to 1 actitivy -Activity 3.9 was integrated into 3.5 -Activity 3.7 was changed to more concrete discription as 'Identify and assess usefull social forestryrelated techniques and establish/identify field demonstration site.'

Annex 4: Evaluation Grid with Study Results for Mid-term Evaluation on Intensified Social Forestry Project in Semi-arid Areas

Implementation Process Grid

Evaluation criteria	Study Items	No.	Detailed Study Items	Rating
	Degree of achievement of the Project Purpose	1	* Degree of achievement of the Project Purpose at mid-term of the Project and possibility of the achievement it at this point.	А
Verification of Performance	Degree of achievement of the Outputs	2	* Have the Outputs been being generated as had been planned?	А
	Actual inputs	3	Inputs from Japanese side * Long and short term experts, their terms and specialized field * Counterparts' training in Japan or other countries, their numbers and periods * Name of provided equipment, quantities and cost of each * Rehabilitation/construction of infrastructures and their cost * Other cost spent	-
			Inputs from Kenyan Side * Detailed project management cost, except labor cost * Number of the counterparts * Building and equipments * Any other cost incurred by Kenyan side for the Project and their detail	-
	Progress of the Activities (Has the Project been being implemented as had been planned?)	5	<ul> <li>* Has the Project been being implemented as had been planned?</li> <li>* Are there any gap between actual implementation and plan. If any, what? And why?</li> <li>* What countermeasures were taken to compensate delays? What were results?</li> </ul>	А
ation		6	<ul><li>* Who, how, how often has monitoring of the Project been conducted?</li><li>* How is it utilized to improve the Project's implementation? (Mechanism of Project management)</li></ul>	В
lement	Appropriateness of management of the Project	7	* Are there any problematic issues on communication in the Project?	B/C
of Impl rocess	5	8	* How and how often has communication and exchange between Japanese experts and the Counterparts been taken placed?	В
cation F		9	* How were countermeasures to solve problems implemented with counterparts?	A/B
Verifio	Involvement of beneficiaries (target groups) in the project	beneficiaries (target 10 * Do target groups such as individual farmers and farmers groups properly participate in the Project?		А
		11	* Are proper counterparts allocated for the Project?	А
	Ownership of the Project by the executing institution of Kenya	12	* Is degree of counterparts' consciousness of participation in the Project high?	А
			* Is budget allocation for extension of social-forestry activities enough or appropriate?	С

Annex 4: Evaluation Grid with Study	y Results for Mid-term Evaluation on In	itensified Social Forestry Project in Semi-arid Areas
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## **Evaluation Grid**

Evaluation criteria	Study Items	No.	Detailed Study Items	Rating
	Does the Overall Goal match Kenya's	14	* Are the Overall Goal and the Project Purpose consistent with the development policy of Kenya? (Priority)	А
	development policy?	15	* Is the Project meeting the Aid Policy of Ministry of Foreign Affair of Japanese Government to Kenya and the JICA Country Assistance Implementation Plan (the Republic of )?	А
	Does the Project Purpose meet the	16	* Are Individual farmers and farmers groups in Kitui, Mbeere and Tharaka districts needed to be supported in the field of social-forestry?	А
	Kenya's needs?	17	* Are staff of FD, Forestry Officers of 3 districts and Field Extension Officers needed to develop their ability on social-forestry development?	А
vance		18	* Have target groups been received benefit from the Project since it had started?	А
Rele		19	* Has ability of staff of FD, Forestry Officers of 3 districts and Field Extension Officers been developed during the Project implementation?	А
	Appropriateness of strategy/approach	20	* Has capacity of individual farmers and farmers groups in Kitui, Mbeere and Tharaka districts been empowered?	А
		21	* Is the FFS appropriate method for dissemination of social-forestry extension activities?	А
		22	* Does Japan have comparative advantage in the field of social-forestry and are there any example of relevant projects in the past implemented by JICA in Africa?	А
	Others	23	* After Ex-ante Evaluation Study, are there any change of policy, socio-economic situation and so forth, influencing over the Project?	-
		24	* Can individual farmers and farmers group and other stakeholders intensify social-forestry practices in semi-arid areas?	А
	Possibility of realization of the	25	Are there any changes in two important assumptions, "No catastrophic climatic condition occur" and "Kenyan government forestry development policy and plans remain consistently positive"	
ess	Project Purpose	26	* Are there any constraints for achieving the Project Purpose?	В
tiven		27	Are the 4 outputs closely coordinated to realize the project purpose?	B/C
Effec		28	* Is strengthening of institution and technical capacities for social forestry extension in Forest Department progressing? (Output 1)	В
	Are the Output proper enough to	enough to rogressing? (Output 2) * Are social-forestry extension activities among individual farmers and farmers groups in 3 districts are		
	realize the radject rulpose?	30 * Are farmers and other stakeholders obtaining enough practical knowledge and technique? (Output 3)		В
			* Is information on social forestry extension and related issues being shared among stakeholders? (Output 4)	А

Evaluation criteria	Study Items	No.	Detailed Study Items	Rating
	Degree of achievement of the	32	* Is degree of achievement of the Outputs appropriate?	В
	Outputs		* Are there any constraints for achieving the Outputs?	В
		34	* Are there any excess and deficiency of the Activities to generate the Outputs?	В
ıcy		35	* Are number of Japanese experts, their fields, timing of placement and terms appropriate?	А
Efficien	Are the Activities and Inputs enough	36	* Are kinds of equipment, their quantities and timing of their supply appropriate? Are rehabilitation/improvement of project offices in FD and other districts appropriate?	A/B
	to realize the Outputs?	37	* Is counterpart training provided by JICA proper in terms of contents, period and numbers of participants?	А
		38	* Is budget from both Japanese and Kenyan sides for the Project appropriate for Activities?	С
		39	* Are there any effect of the Important Assumptions after activities on realizing the Outputs?	-
	Possibility to achieve the Overall Goal		* Can the Overall Goal be realized 3 to 5 years after termination of the Project, considering current situation of the Activities and the Outputs?	A/B
			* Are there any constraints for achieving the Overall Goal?	В
Impact	Proper logical casual relationship between the Project Purpose and the Overall Goal	42	* Are there big gap between the Overall Goal as ultimate direction of the Project and the Project Purpose?	A/B
	Pipple offect	43	* Are there any change of consciousness and activities of target groups in 3 districts?	А
	Ripple effect	44	* Are there any impact be expected other than the Overall Goal?	А
		45	* Can policy of social forestry can be continued after the Project?	А
lity	Policy and Institution	46	* Is institutional support established to continuously practice FFS method at this moment? Or, will it be established from now on?	B/C
stainabil		47	* Does FD have capacity to maintain activities of the Project as an organization such considering staff allocation and decision making process for further dissemination for other semi-arid areas? Or, will it have from now on?	В
Sus	Organization and Finance	48	* Is budget allocation enough to maintain activities for social forestry? Or, is there possibility to increase such budget in the future?	С
			* What actions should be taken to sustain the farmers extension system after the Project terminates?	-

Annex 4: Evaluation Grid with Study Results for Mid-term Evaluation on Intensified Social Forestry Project	in Semi-arid Areas
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Evaluation criteria	Study Items	No.	Detailed Study Items	Rating
	Tashnalagu		* Is extension method, FFS, being accepted by target groups?	В
ability	rechnology	51	* Do Forest Extension Officers have ability to implement FFS method? Or, will they have it in the future?	А
Sustain	Others		* As planned during the Ex-ante evaluation study in 2004, have any necessary measures already taken to hand over the Project activities to Kenyan side during the next 2 years? Or, will they effectively work?	В
		53	* Are there any other constraints for sustainability, other than the above mentioned?	-
ns		54	* Can the Project Purpose be realized considering current situation of the Activities and the Outputs?	В
rrectic		55	* Is it needed to correct any Inputs, Activities, Outputs?	В
ssity co	Any recommendations for correction of the Project, based on the above	56	* Are there any new Important Assumptions to effect on the Project?	-
ny neces	evaluation results	57	* How have the problems and issues that were raised during the Ex-Ante Evaluation Study in 2004 been changed during the implementation of the Project? (Especially, issue of handing over the Project activities to Kenyan side)	В
¥			* Are there any items that the Project has to pay attention to?	-

# Annex 4: Evaluation Grid with Study Results for Mid-term Evaluation on Intensified Social Forestry Project in Semi-arid Areas

## Annex5: List of Japanese Experts Project inputs ⟨Japanese side⟩

## Expert dispatch

Name	Assignment	Period	Office affiliated		
[Long-term]					
Yuichi SATO	Chief advisor / Forest Policy	2004.1.18-2007.1.17	Forestry Agency, Japan		
Shinji OGAWA	Social Forestry Extension	2004.3.26-2007.3.25	N/A		
Takanobu NAWASHIRO	Extension Implementation Management / Project co-ordinator	2004.3.17-2006.3.16	JATACO Co.,Ltd		
Shinji ABE	Extension Implementation Management / Project co-ordinator	2006.3.2-2008.3.1	Insitute for International Cooperation, JICA		
[Short-term]					
Isamu YAMADA	Management of Ecological resources in Farm Forestry	2005.1.9-2005.1.30	Centre for South-east Asian Studies,Kyoto University		
Naoei ITAHANA	Tree Improvement	2005.7.16-2005.7.30	Kansai Regional Breeding Office		
	Name	Course Title	Duration	Post	Organization /Department
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1	Mr. David Kahuria	Forest Policy	2004/08/22 ~	AG. Chief	Forest
	MBUGUA		2004/9/3	Conservator of	Department
2	Ms. Elizabeth W.	Extension Policy/	2004/08/10-	Conservator of	Forest
	Wambugu	Extension Method	2004/09/25	Forests 1	Department
3	Mr. Paul Ndung'u	Forestry Extension	2005/07/07 ~	Conservator of	Forest
	KARANJA	Method	2005/8/12	Forests 1	Department
4	Mr. James Chomba	Forestry Extension	2005/07/07 ~	Conservator of	Forest
	RUKUNGU	Method	2005/8/12	Forests 1	Department
5	Ms. Jane Nzilani	Forest Management	2005/08/23 ~	Assistant Project	Forest
	NDETI		2005/10/8	Manager	Department
6	Mr. Joseph Muthike	Forestry Extension	2006/07/06 ~	Conservator of	Forest
	NJIGOYA	Method	2006/8/11	Forests 1	Department
7	Ms. Monica Nekoye	Forestry Extension	2006/07/06 ~	Conservator of	Forest
	KALENDA	Method	2006/8/11	Forests	Department
8	Ms. Esther Muringo	Forestry Extension	2006/07/16 ~	Conservator of	Forest
	MATHENGE	Method	2006/8/11	Forests	Department

### Annex6: List of Kenyan Counterpart Personnel Trained in Japan

#### Annex7: List of Equipment provision and Facilities construction by Japanese side

No.	Item	Price	Budget type (P.Y.)	Purchase/ Delivery date	unit	Manufacturer	Model type	management inchaarge (section/place/person)
	F.Y.2003							
1	Laser printer	108,000	2003, Equipment donation	30/03/2004	4	HP	Laser Jet 1300	Project office (3), DFO-Kitui (1)
2	Laser printer	164,000	2003, Equipment donation	30/03/2004	2	HP	Laser Jet 2300N	Project office (2)
4	Scanner	114.750	2003, Equipment donation	31/03/2004	1	Epson	GT-15000	Project office
5	Projector	291,500	2003, Equipment donation	30/03/2004	1	Canon	LV7345	Project office
6	Inkjet Plotter	1,011,375	2003, Equipment donation	30/03/2004	1	HP	DesignJet500	Project office
8	Digital Copiers AR-M450N	1.120.000	2003, Equipment donation 2003, Equipment donation	30/03/2004	2	Sharp	AR450	F.DTharaka(1), Mberre(1)
9	Personal Computer	480,000	2003, Equipment donation	30/03/2004	6	IBM	NetVista	Project office (5), DFO-Kitui (1)
10	TA Copier DC 2063	1,007,000	2003, Equipment donation	31/03/2004	1	Kyosera	KM6330	Project office
11	Facsmile AvA Station Wagon	2 550 643	2003, Equipment donation	31/03/2004	4	Canon	L220 Landcruiser	F D H O
13	4x4 Pick Up	5,926,221	2003, Equipment donation	01/09/2004	3	Toyota	Landcruiser	F.DKitui(1), Tharaka(1), Mberre(1)
14	4x4 Station Wagon Y 61	4,164,952	2003, Equipment donation	16/06/2004	2	Nissan	Patrol	F.D.H.Q.
15	Motor Cycle	1,558,550	2003, Equipment donation	06/07/2004	7	Suzuki	TF-125	F.DTharaka(3), Mberre(4)
16	Sub-total of 2003, Equipment of Digital still camera	donation 69 386	18,785,555 2003 Expert equipment	16/04/2004	1	Olimpus	C-5060 Widezoom	Project office
17	Compactflash memory card	21,897	2003, Expert equipment	16/04/2004	1	Buffalo	RCF-XX512M	Project office
18	Digital video camera	117,852	2003, Expert equipment	16/04/2004	1	Sony	DCR-PC330E	Project office
19	GPS World man	46,722	2003, Expert equipment	16/04/2004	1	Garmin	eTREX VISTA	Project office
20	Lap top computer	150.628	2003, Expert equipment	16/04/2004	1	Fuiitsu	FMVLT50E	Project office
22	Lap top computer & soft ware	225,941	2003, Expert equipment	26/04/2004	1	Hitachi	Prius note	Project office
23	Color printer	26,499	2003, Expert equipment	26/04/2004	1	Canon	Pixus 80i	Project office
24	Digital camera GPS	62,762	2003, Expert equipment	26/04/2004	1	Olimpus	Camedia C-5060 Sportrak 27i-3812	Project office
	Sub-total of 2003, Expert equi	pment	762,203	_0, 0 1/ 200T	Ľ			
26	Office renovation	144,470	2003, Local activity cost	30/03/2004		Patu Constructions		Project office
27	Office furniture	777,572	2003, Local activity cost	29/03/2004		Victoria Furnitures		Project office
28	Generator	1.415.800	2003, Local activity cost 2003, Local activity cost	30/03/2004	1	Olympian	GEP 110	F.D.H.O.
30	Project Pamphlet	65,000	2003, Local activity cost	30/03/2004	500	Penguin Business Sy	stems	Project office
	Sub-total of 2003, Local activi	ty cost	2,508,442					
	Total	22,055,980						
	F.Y.2004							
1	VHF/HF Radio Equipment	1,730,000	2004, Equipment donation	23/02/2005	1	Beamspot Communi	cations	Project office & DFO-
2	Mini Bus	3 300 600	2004 Equipment donation	28/02/2005	2	Tovota	HiAce(I H114)	Kitui, Mberre, Tharaka Project office
3	Motor Cycle	1,225,000	2004, Equipment donation	23/03/2005	5	Honda	XL200	DFO-Kitui
4	Laptop Computer	297,000	2004, Equipment donation	25/11/2004	2	Toshiba	A70-S256	Project office
5	Bicycle	134,000	2004, Equipment donation	24/11/2004	30	Phonex E C Wilson	26inch	DFO-Kitui, Mberre, Tharaka
0	Sub-total of 2004 Equipment (	960,000 donation	2004, Equipment donation 7 646 600	51/05/2005	1	F.G. WIISON	APSUEI	DFO-Inaraka
7	Office construction Mbeere	1,593,918	2004, Local activity cost	14/03/2005	1	Mwanja General Co	ntructers	DFO-Mberre
8	Office construction Tharaka	1,658,890	2004, Local activity cost	14/03/2005	1	Mukasi Builders& C	eneral Suppliers	DFO-Tharaka
9	Software B/Bar winch & Air con fitted	267,600	2004, Local activity cost	13/04/2004	6	MS Toyota/Nissan	Office 2003 Pro OEM	Project office Accessory for 3 station wagon car
10	Drawer Fireproof filing	100,201	2004, Local activity cost	27/07/2004	1	TA		
11	Cabinet	100,201	2004, Local activity cost	27/07/2004	1	IA		Project office
12	Fridge Contransmission look	24,595	2004, Local activity cost	27/07/2004	1	Toshiba Multi high acqurity a	vatama	Project office
15		49,175	2004, Local activity cost	00/07/2004		Multi high security s	ystems	Accessory for 5 station wagon car
14	Binding machine, Typewriter	42,500	2004, Local activity cost	02/06/2004	1	Office Technologies		office
15	Cable installation for	144,536	2004, Local activity cost	25/05/2004	1	Mantrac		F.D.H.Q.
16	Generator White board	14 735	2004 Local activity cost	02/05/2004	1	Victoria Furnitures		Project office
17	Finishen	221.050	2004, Local activity cost	27/08/2004	1	Office Technologies		
17	Finisher	221,950	2004, Local activity cost	27/08/2004	1	Office Technologies		Project office
	Sub-total of 2004, Local activi	ty cost	4,254,298				l	I
	1 otal	11,900,898						
	r.1.2005							Dryland forestry bronch
1	Lap-top computer	405,900	2005, Equipment donation	22/07/2005	3	TOSHIBA	Satellite A60	Farm forestry & exten. Branch KEFRI-Kitui office(Stolen Nov.2005)
2	LCD Projector	390,000	2005, Equipment donation	22/07/2005	3	Epson	EMP-SIH LCD	Project office, KEFRI HQ training office,
3	Color laser printer	375.000	2005, Equipment donation	22/07/2005	1	Epson	C9100	Project office
4	Copier	381,400	2005, Equipment donation	22/07/2005	2	Kyocera Mita	KM 2050, Digital copier	FD.HQ, KEFRI-Kitui
5	4WD Station Wagon	2,377,796	2005, Equipment donation	27/10/2005	1	Toyota	Land Cruiser Hardtop	Project office
6	wotordike	1,309,500	2005, Equipment donation	08/11/2005	5	1 amana	AG200, 4stroke	(Project office) DFO-Kitui Mbere DFEO-
7	VHF/HF Radio Equipment	999,900	2005, Equipment donation	29/10/2005		BEAMSPOT COM	MUNICATIONS	Mtomo, Mtitu, Mwea
_	Sub-total of 2005, Equipment	donation	6,239,496	10.02.22				
8	Software	17,800.00	2005, Local activity cost	18/05/2005	1	Windows	Power point 2003	Project office coordinator room
9	training	127,600.00	2005, Local activity cost	24/05/2005	1	Toshiba	Satellite M40X-S168	KEFRI HQ training office
10	Accessories instauration for computer	68,380.00	2005, Local activity cost	24/05/2005	1	Office technologies Ltd.	Floppy drive, USB-OEM, Software	KEFRI HQ training office
11	Database server	68,500.00	2005, Local activity cost	02/06/2005	1	Kaiza computers	OUGB HD, 256MB Ram, Pentium 3 processor	Project office PM room
12	Digital camera & accessories	79,350.00	2005, Local activity cost	07/06/2005	3	Olympus	Camedia 160	Dryland forestry branch, Farm forestry & exten. branch, KEFRI-Kitui director
13	Office networking	40,600.00	2005, Local activity cost	24/06/2005	1	Kaiza computers services	Network switch & instauration	Extension & partnership division office
14	Adaptor	23,200.00	2005, Local activity cost	13/07/2005	1	Toshiba	AC type for computer	Dryland forestry branch
15	Glass book shelf	28,000.00	2005, Local activity cost	18/08/2005	2	Furniture palace	DT3015, DT3017	Project office PM room
10	Sub-total of 2005. Local activity	ty cost	2000, Local activity cost 1.029.904	07/03/2000	1	rsyamooo oununig c		
	Total	7,269,400	1,027,704					
	Grand Total	41,226,277			•			•

#### Annex 8: List of Kenyan couterpart Personnel Project inputs ⟨Input by Kenyan side⟩

Administrative Personnel         AG. Chief         Project Director         April 2004 todate           2         Paul K. Konuche         Director, KEFRI         Project Co-Director         April 2004 todate           3         Jennifer W. Njige         1. Senior Conservator of Porests         Extension Branch;         2006           3         Jennifer W. Njige         1. Senior Conservator of Porests         Extension Branch;         2006           4         P. M. Kariuki         Senior Conservator of Porests Assistant Project Manager         April 2004 to date           5         Jane N. Ndeti         Conservator of Forests Head Farm Forestry & May 2006 to date         Conservator of Forests Head Farm Forestry & May 2006 to date           6         Monicah N. Kalenda         I         Extension Branch         May 2006 to date           7         Anthony M. Maina         Forests         District Forest Officer, Kitui         April 2004 to June 2005           8         Elizabeth W. Wambugu         I         Conservator of Forests         District Forest Officer, Kitui         April 2004 to June 2005           9         Joseph N. Njigoya         I         Conservator of Forests         District Forest Officer, Kitui         April 2004 to June 2005           11         Cyrus Nduku         Forester         Assistant District Forest May, 2005         May 200		Name	Post	Assignment	Period
International data conservation of Forests       Project Director       April 2004 todate         2 Paul K. Konuche       Director, KEFRI       Project Co-Director       April 2004 todate         3       Innifer W. Njige       I. Senior Conservator of Forests       Project Co-Director       April 2004 to April         3       Innifer W. Njige       I. Senior Conservator of Forests       Extension Branch;       2006         4       P. M. Kariuki       Senior Conservator of Forests       Assistant Project Manager       April 2004 to date         5       Jane N. Ndeti       I       Conservator of Forests       Assistant Project Manager       July 2004 to Date         6       Monicah N. Kalenda       I       Extension Branch;       May 2006 to date         7       Anthony M. Maina       Forests       Assistant Project Manager       July 2004 to Date         6       Monicah N. Kalenda       I       Extension Branch;       April 2004 to date         7       Anthony M. Maina       Forests       Branch       April 2004 to June 2005         8       Elizabeth W. Wambugu       Conservator of Forests       District Forest Officer, Kitui       April 2004 to June 2005         10       Kenneth M. Riungu       Forester       Divisional Forest Extension       April 2004 - May 2006		Administrative Personnel			
1       D. K. Mbugua       Conservator of Forests       Project Co-Director       April 2004 todate         2       Paul K. Konuche       Director, KEFRI       Project Co-Director       April 2004 todate         3       Jennifer W. Njige       1. Senior Conservator       Head, Farm Forestry & April 2004 to April         4       P. M. Kariuki       Senior Conservator of Partneships Division       May 2006 to date         5       Jane N. Ndeti       I       Conservator of Porests       April 2004 to date         5       Jane N. Ndeti       I       Conservator of Forests       Assistant Project Manager       April 2004 to date         6       Monicah N. Kalenda       I       Extension Branch       May 2006 to date         7       Anthony M. Maina       Forests       Branch       Head Dryland Forestry       April 2004 to date         7       Anthony M. Maina       Forests       Branch       April 2004 to date       Extension Branch         8       Elizabeth W. Wambugu       Conservator of Forests       District Forest Officer, Kitui       April 2004 to June 2005         9       I       Conservator of Forests       District Forest Officer, Kitui       July 2005 to date         9       Seeph N. Njigoya       I       Forester       Divisional Forest Extension			AG Chief	Project Director	April 2004 todate
2 Paul K. Konuche       Director, KEFRI       Project Co-Director       April 2004 todate         3       Jennifer W. Njige       1. Senior Conservator       Head, Farm Forestry & April 2004 to April         3       Jennifer W. Njige       1. Senior Conservator of Project Manager       April 2004 to April         4       P. M. Kariuki       Senior Conservator of Project Manager       April 2004 to date         5       Jane N. Ndeti       Conservator of Forests       Assistant Project Manager       April 2004 to date         6       Monicah N. Kalenda       Conservator of Forests       Head Forestry       April 2004 to date         7       Anthony M. Maina       Forests       Branch       May 2006 to date         8       Elizabeth W. Wambugu       Conservator of Forests       District Forest Officer, Kitui       April 2004 to June 2005         9       Joseph N. Njigoya       I       Conservator of Forests       District Forest Officer, Kitui       April 2004 - May 2006         11       Cyrus Nduku       Forester       Assistant District Forest       May 2006 todate         9       Joseph N. Njigoya       I       Proseter       Divisional Forest Extension       April 2004 - May 2006         11       Cyrus Nduku       Forester       Divisional Forest Extension       April 2004 - May 2006	1	D K Mbugua	Conservator of Forests		ripin 2004 totate
Instrument         I. Senior Conservator         Head, Farm Forestry & Of Forests         April 2004 to April 2006           3         Jennifer W. Njige         I. Senior Conservator of Protests         Extension Branch; Partneships Division         2006           4         P. M. Kariuki         Senior Conservator of Forests         Project Manager         April 2004 to date           5         Jane N. Ndeti         Conservator of Forests         Assistant Project Manager         April 2004 to date           6         Monicah N. Kalenda         Conservator of Forests         Head Forestry         May 2006 to date           7         Anthony M. Maina         Senior Conservator of Forests         Head Dryland Forestry         April 2004 to date           8         Elizabeth W. Wambugu         Conservator of Forests         District Forest Officer, Kitui         July 2005 to date           9         Joseph N. Njigoya         I         Conservator of Forests         District Forest Officer, Kitui         July 2005 to date           10         Kenneth M. Riungu         Forester         Assistant District Forest         May 2006 todate           11         Cyrus Nduku         Forester         Divisional Forest Extension         May 2006 todate           12         Kapula Ali         Forester         Divisional Forest Extension         May 2006 todate<	2	Paul K. Konuche	Director, KEFRI	Project Co-Director	April 2004 todate
3     Jennifer W. Njige     In Front Forests     Extension Haran Charanch; 2006     2006       3     2. Acting Deputy Chief Conservator of Partneships Division     May 2006 to date       4     P. M. Kariuki     Senior Conservator of Project Manager     April 2004 to date       5     Jane N. Ndeti     1     Conservator of Forests     Assistant Project Manager     July 2004 to date       6     Monicah N. Kalenda     1     Conservator of Forests     Head Farm Forestry & Extension Branch     May 2006 to date       7     Anthony M. Maina     Senior Conservator of Forests     Head Dryland Forestry Branch     April 2004 to date       8     Elizabeth W. Wambugu     Conservator of Forests     District Forest Officer, Kitui     April 2004 to June 2005       9     Joseph N. Njigoya     I     Conservator of Forests     District Forest Officer, Kitui     April 2004 - May 2006       10     Kenneth M. Riungu     Forester     Assistant District Forest     May 2006 to date       11     Cyrus Nduku     Forester     Divisional Forest Extension     April 2004 - May 2006       11     Cyrus Nduku     Forester     Divisional Forest Extension     April 2004 - May 2006       12     Kapula Ali     Forester     Divisional Forest Extension     April 2004 - May 2006       13     Peter Kyenze     Forester     Divis			1 Senior Conservator	Head Farm Forestry &	April 2004 to April
3       Intervention       Protection       Protection       May 2006 to date         2. Acting Deputy Chief Conservator of       Partneships Division       May 2006 to date         4       P. M. Kariuki       Senior Conservator of       Project Manager       April 2004 to date         5       Jane N. Ndeti       Conservator of Forests       Assistant Project Manager       May 2006 to date         6       Monicah N. Kalenda       Conservator of Forests       Head Farm Forestry       May 2006 to date         7       Anthony M. Maina       Forests       Branch       May 2006 to date         7       Anthony M. Maina       Forests       Branch       May 2006 to date         8       Elizabeth W. Wambugu       Conservator of Forests       District Forest Officer, Kitui       April 2004 to June 2005         9       Joseph N. Njigoya       I       Conservator of Forests       District Forest Officer, Kitui       July 2005 to date         9       Joseph N. Njigoya       I       Forester       Assistant District Forest       May, 2006         10       Kenneth M. Riungu       Forester       Divisional Forest Extension       April 2004 - May 2006         11       Cyrus Nduku       Forester       Divisional Forest Extension       April 2004 - May 2006         12 </td <td></td> <td>Jennifer W Niige</td> <td>of Forests</td> <td>Extension Branch:</td> <td>2006</td>		Jennifer W Niige	of Forests	Extension Branch:	2006
Chief Conservator of         Partneships Division         Partneships Division           FD Headquarters         Senior Conservator of         Project Manager         April 2004 to date           4         P. M. Kariuki         Senior Conservator of Forests         Assistant Project Manager         July 2004 to date           5         Jane N. Ndeti         Conservator of Forests         Head Farm Forestry & May 2006 to date         April 2004 to date           6         Monicah N. Kalenda         I         Extension Branch         April 2004 to date           7         Anthony M. Maina         Forests         District Forest Officer, Kitui         April 2004 to date           8         Elizabeth W. Wambugu         Conservator of Forests         District Forest Officer, Kitui         April 2004 to June 2005           9         Joseph N. Njigoya         I         July 2005 to date         Iuly 2005           10         Kenneth M. Riungu         Forester         Divisional Forest Extension         April 2004 - May 2006           11         Cyrus Nduku         Forester         Divisional Forest Extension         May 2006 todate           12         Kapula Ali         Forester         Divisional Forest Extension         May 2006 todate           13         Peter Kyenze         Forester         Divisional Forest Extension <td>3</td> <td>venimer (() Tyjrge</td> <td>2. Acting Deputy</td> <td>Head. Forestry Extension and</td> <td>May 2006 to date</td>	3	venimer (() Tyjrge	2. Acting Deputy	Head. Forestry Extension and	May 2006 to date
FD Headquarters         Senior Conservator of Project Manager         April 2004 to date           4         P. M. Kariuki         Forests         Assistant Project Manager         July 2004 to Date           5         Jane N. Ndeti         Conservator of Forests         Assistant Project Manager         July 2004 to Date           6         Monicah N. Kalenda         Conservator of Forests         Head Farm Forestry & May 2006 to date         May 2006 to date           7         Anthony M. Maina         Forests         District Forest Officer, Kitui         April 2004 to June 2005           8         Elizabeth W. Wambugu         Conservator of Forests         District Forest Officer, Kitui         July 2005 to date           9         Joseph N. Njigoya         I         Conservator of Forests         District Forest Officer, Kitui         May 2006 todate           10         Kenneth M. Riungu         Forester         Assistant District Forest Officer, Kitui         May 2006 todate           11         Cyrus Nduku         Forester         Divisional Forest Extension         May 2006 todate           12         Kapula Ali         Forester         Divisional Forest Extension         May 2006 todate           13         Peter Kyenze         Forester         Divisional Forest Extension         April 2004 todate           14			Chief Conservator of	Partneships Division	
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22     Remmy Manzi     Officer, Central Div.     April 2004 todate       23     Sammy Mbuko     Snr. Subordinate Staff     Divisional Extension Worker, Mutha Div.     April 2004 todate		Denedier 111. Munigu	Forester	Divisional Forest Extension	April 2004 todate
23 Sammy Mbuko Snr. Subordinate Staff Divisional Extension Worker, April 2004 todate Mutha Div.	22.	Remmy Manzi		Officer Central Div	April 2004 iOuale
23 Sammy Mbuko Mutha Div.			Snr. Subordinate Staff	Divisional Extension Worker.	April 2004 todate
	23	Sammy Mbuko		Mutha Div.	r

	Name	Post	Assignment	Period
	Mbeere District			
		Conservator of Forests	District Forest Officer,	April 2004 to date
24	P. N. Karanja	Ι	Mbeere	
25	25 Wellington Ndaka Forester		Assistant District Forest	March 2005 todate
		Forester	Divisional Forest Extension	April 2004 todate
26	Elvis K. Fondo		Officer, Siakago Div.	
		Senior Forester	Divisional Forest Extension	April 2004 todate
27	Chritopher Maina		Officer, Gachoka Div.	
20	Deter O Alan	Forester	Divisional Forest Extension	April 2004 todate
- 28	Peter U. Aloo	<u> </u>	Officer, Mwea Div.	
20	Deter Vinglag	Forester	Divisional Forest Extension	November, 2004 -
- 29	Peter King oo	<u> </u>	Officer, Evurore Div.	August 2005
20	771	Forester	Divisional Forest Extension	August 2005 to date
- 30	Theophilus Muasya		Officer, Evurore Div.	
	Tharaka District	_		
		Conservator of Forests	District Forest Officer	April 2004 todate
31	James R. Chomba	Ι		
		Forester	Assistant District Forest	March 2005 todate
32	George K. Nduati		Officer	March 2005 todate
		Forester	Divisional Forest Extension	April 2004 todate
33	Phineas Rewa		Officer Tharaka North Div	ripin 200 rissante
		Forester	Divisional Forest Extension	April 2004 todate
34	Silas Mutea		Officer Tharaka South Div	- p
		Forester	Divisional Forest Extension	April 2004 todate
35	Samuel M. Gachagua		Officer, Tharaka Central Div.	· · · · · · · · · · · · · · · · · · ·
		Forester	Forester, Tharaka District Hq.	April 2005 todate
36	Peter Nyabuti		Office	r
	Kenya Forestry Research	Institute, Kitui		
37	E Chagala Odera	Assistant Director	Service Programme	April 2004 to date
<u> </u>	D. Chuguna O acta	Centre Director	Project Co-Manager	April 2004 todate
38	James M. Kimondo	KEFRI-Kitui	1 lojeet eo-wanager	
39	Ezekiel Kyalo	Technologist	Tiva Tree nursery manager	April 2004 todate
				April 2004 - December
40	Ali Atanas (Deceased)	Technologist	Technology transfer	2005
41	Samuel Auka	Forester	Pilot Forest	April 2004 todate
42	Bernard Kigwa	Research Officer	Technology development	June 2006 todate
42				
43	Akula Mwamburi	Research Officer	Technology transfer	April 2004 todate

	Name	Post	Assignment	Period		
No.	Support Staff					
	1. FD Headquarters					
1	John M. Kamau	Driver	FD. Hq Office	April 2004 todate		
2	Paul K. Muthaki	Driver	FD. Hq Office	August 2004 todate		
3	Titus M. Kyosi	Driver	FD. Hq Office	February 2006 todate		
4	Lucy Wangeci	Secretary	FD. Hq Office	June 2004 todate		
5	Rachel Wambui	Surbordinate staff	FD. Hq Office	May 2004 todate		
	2. Kitui District					
6	Mary Nganza	Typist / Receptionist	Kitui District Office	April 2004 todate		
7	Bosco Wambua	Driver	Kitui District Office	April 2004 todate		
	Jason Kioko	Driver	Kitui District Office	April 2004 todate		
9		Nursery Headman	Mutitu Tree Nursery	April 2004 todate		
10-13	Nursery Workers	4 Nursery workers	Mutitu Tree Nursery	April 2004 todate		
	3. Tharaka District					
14		Driver	Tharaka District Office	April 2004 - January		
	Ignatius Mutaku			2005		
15	Raphael Nkanya	Driver	Tharaka District Office	February 2005 todate		
16	Grace Mucee	Typist / Receptionist	Tharaka District Office	April 2005 todate		
17.2		2 Nursery workers	Mutonga Ttree Nursery	April 2004 todate		
	4. Mbeere District					
19	Cyrus Njiru	Driver	Mbeere District Office	April 2004 todate		
20	Mary Njoki	Typist / Receptionist	Mbeere District Office	April 2004 todate		
			Mbeere District Office Tree	April 2004 todate		
21	Joseph Mugo	Nursery Headman	Nursery			
22-24		3 Nursery workers	Mbeere District Office Tree	April 2004 todate		
		-	Nursery			
	Kenya Forestry Research	Institute, Kitui				
25-28		4 Nursery workers	Tiva Tree nursery	April 2004 todate		

### Annex 9: Project Cost sharing by Kenyan side and Japanese Side

⟨Japanese Side⟩			(Unit : Ksh)				
Items of Expenditure	<b>JY2003</b> (Result)	<b>JY2004</b> (Result)	<b>JY2005</b> (Result)	JY2006 (Plan)	Total	JY2006 (Result by the end of June)	
(1)Extention routine activity cost	0.00	3,241,262.70	4,493,000.00	5,143,000.00	12,877,262.70	1,346,287.50	
(2)Extention backstopping cost	0.00	0.00	2,568,000.00	1,275,000.00	3,843,000.00	477,280.00	
(3)Extension special activity cost	0.00	1,437,838.00	8,419,000.00	4,700,000.00	14,556,838.00	1,559,475.00	
(4)Research & Monitoring cost	0.00	1,398,469.20	2,730,000.00	2,118,000.00	6,246,469.20	464,768.00	
(5)General routine cost	0.00	8,593,965.30	4,413,000.00	4,804,000.00	17,810,965.30	1,819,153.20	
(6)Consultation survey cost	0.00	6,929,157.60	0.00		6,929,157.60	0.00	
(7)Extension office maintenance cost	0.00	3,525,175.00	576,000.00		4,101,175.00	0.00	
Local activity cost Total	0.00	25,125,867.80	23,199,000.00	18,040,000.00	66,364,867.80	5,666,963.70	
Equipment	22,055,980.00	7,646,600.00	6,239,496.00	531,250.00	36,473,326.00	0.00	
Total of JICA	22,055,980.00	32,772,467.80	29,438,496.00	18,571,250.00	102,838,193.80	5,666,963.70	

# ⟨Kenyan Side⟩ 1)Plan

Items of Expenditure	<b>KY2003</b> (Plan)	<b>KY2004</b> (Plan)	<b>KY2005</b> (Plan)	<b>KY2006</b> (Plan)	Total
FD	0.00	1,833,519.40	3,112,000.00	6,200,000.00	11,145,519.40
KEFRI	0.00	491,000.00	500,000.00	500,000.00	1,491,000.00
Total of GOK	0.00	2,324,519.40	3,612,000.00	6,700,000.00	12,636,519.40
Project cost grand Total	0.00	2,324,519.40	3,612,000.00	6,700,000.00	12,636,519.40

#### 2)Actual Disbursement for KY2005

	KY2005				
Items of Expenditure	(Plan)	(Revised Plan)	(Result)		
FD	3,112,000.00	2,931,000.00	2,200,000.00		

#### Annex 10: Development plan and strategies

#### and Forestry Plans/Strategies/Guidelines

Document Title	Level	Relevance
National Development Plan (2002-2008)	National	<ul> <li>Biodiversity conservation</li> <li>Sustainable forestry development and management</li> <li>Recognition and institutionalization of conventions, etc. relating to sustainable indigenous forest management</li> <li>Valuation of forest resources</li> </ul>
District Development Plans (2002-2008)	District	<ul> <li>Protection and conservation of forest areas</li> <li>Promotion of agro forestry/farm forestry</li> <li>Environmental management; farmer training; soil and water conservation</li> </ul>
Economic Recovery Strategy for Wealth and Employment Creation (2003)	National	<ul> <li>Promotion of agro-forestry</li> <li>Community participation in efficient management of forests</li> <li>Alternative and affordable energy sources</li> <li>Afforestation</li> </ul>

#### Development plan and strategies

#### **Forestry Plans/Strategies/Guidelines**

Document Title	Level	Year	Relevance
Kenya Forestry Master Plan	Department	1994	• Enhance the role of the forestry sector in the socio-economic development of Kenya by strengthening the capabilities of the forestry-related agencies, the private sector, the rural people and the NGO's to manage and develop forest resources; contribute to environmental conservation
Technical Orders	Department	1996	• Technical instructions/guidelines on organization and administration of forests, management of natural forests, management of forest plantations, research and information
Forest Department General Orders	Department		• General instructions/guidelines on forest management e.g. review of forest products royalties

MENR Strategic Plan	Ministerial	2002	• Development, conservation, protection and sustainable management of environmental and natural resources
FD Strategic Plan	Department	2002	<ul> <li>Management of natural forests and water catchments areas</li> <li>Development and management of industrial forest plantations</li> <li>Promotion of farm forestry</li> <li>Forest protection</li> <li>Conservation and management of dry-land forests</li> <li>forest policy and legislation</li> </ul>
District Annual Work Plans	District	Every year	• Planning, implementation and monitoring of forestry activities in the districts
Kenya Forest Act	National	2005	Establishment of Kenya Forest Service; ownership of forests and right to forest produce; creation and management of forests; community participation; enforcement of the Forest Act.
Kenya Forest Service Draft Strategic Plan (2006 – 2011)	Department	2005	<ul> <li>Guide to efficient forest management and administration</li> <li>Sets out KFS vision, mission, goals and objectives for the period 2006 – 2011 to ensure achievement of positive outcomes for the forestry sector.</li> </ul>

Person(s) Responsible	Type of Report			
Farmers	1. Group weekly report			
	2. Group Fund Management Sheet			
DFEOs	1. Farmer Facilitator Evaluation Report			
	2. Monthly Implementation Plan/Report			
	3. Monthly Report			
	4. Monthly Problem Report			
	5. Monthly Backstopping Report			
	6. Other reports			
DFOs	1. Monthly Report			
	2. Monthly Implementation Sheet			
	3. Other Reports			
Headquarters	1. Monthly Activity and Problem Summary			
Officer	2. Tree Planting Report Summary			
	3. Seedling Production Report Summary			
	4. Activity Evaluation Questionnaire Summary			
	5. Group Visiting Roster Summary			
	6. Other Reports Summary			

#### Annex 11: Current Reports for monitoring for FFS



Evaluation Criteria	Study Items	No.	Detailed Study Items	Study Result	Rating
	Degree of achievement of the Project Purpose	1	* Degree of achievement of the Project Purpose at mid-term of the Project and possibility of the achievement at this point	A total of 70 groups are already participating in FFS. Each of the groups has at least 2 farmer facilitators, who are currently involved in establishment of newly established FFS schools and also networking with other groups. All the target farmers have applied farm forestry activities taught in the groups to their own farms, but to varying degrees.	A
	Degree of achievement of the Outputs	2	* Have the Outputs been generated as had been planned?	For most part, the actual activities have been carried out as planned for all outputs both at FD HQs and in the field. This is shown in the progress of activities reports for each output In some cases, however, there have been some delays, but this is not common.	A
Verification of Performance	Actual inputs	3	Inputs from Japanese side * Long and short term experts, their terms and specialized field * Counterparts' training in Japan or other countries, their numbers and periods * Name of provided equipment, quantities and cost of each * Rehabilitation/ construction of infrastructures and their cost * Other cost spent	<ol> <li>Long term experts: Total is 4 (76 Man-month). Chief Advisor/ Forest Policy (1), Socia Forestry Extension (1), and Coordinator/ Monitoring &amp; Evaluation (Extension managemen (2).</li> <li>Short term experts: Total is 2 (1.5 MM). Management of Ecological Resources in Farm Forest (1) and Tree Improvement (1).</li> <li>Counterparts' training: Forest Policy (1), Forest Management (1), Forestry Extension Method (5) and Extension Policy/ Extension Method (1)</li> <li>Provided equipment, quantities and cost: The total cost for equipment, facilities and modification of infrastructures was 41,226,278.00 Ksh (disclosed in the documents of the 3rd JCC). As for equipment and facilities, they are such as totally 9 units of station wagons pick-ups and mini buses, 17 units of motor bikes, 30 units of bicycles, personal computers, photocopy machines, digital cameras, wireless radio equipment and fields offices in Kitui, Mbeere and Tharaka districts were also cared.</li> <li>Equipment provided: Computer equipment, telephone and radio equipment, motor vehicles, motor cycles, office furniture, generators, video cameras and GPS.</li> <li>Office renovation was also done at HQs and the districts.</li> <li>Total cost of equipment alone is Kshs 32,671,431 for the period 2003 – 2006 (part).</li> <li>Office renovation at Karura was done at a cost of Kshs 1,658,890 respectively.</li> <li>Office extension in Kitui cost Kshs 576, 473.</li> <li>Total GoJ allocation by the end of June, 2006 is Kshs 48,707,629 (approximately equivalent to USD687,378 with the rate of USD1=JPY70.86</li> </ol>	- -
		4	Inputs from Kenyan Side * Detailed project management cost, except labour cost * Number of the counterparts * Building and equipment * Any other cost incurred by Kenyan side for the Project and their detail	<ol> <li>Number of C/Ps is 70 including supporting staff from both FD and KEFRI. Main CPs are 4 from FD and 1 from KEFRI.</li> <li>Total GoK counterpart budget by the end of June, 2006 was Kshs 4.9 million. Crucial expenditure items for ISFP include Daily Subsistence Allowance (DSA) for the staff and fuel for the vehicles.</li> </ol>	-

#### **Implementation Process Grid**

Evaluation Criteria	Study Items	No.	Detailed Study Items	Study Result	Rating	
Verification of Implementation Process	Progress of the Activities (Has the Project been implemented as had been planned?)	5	<ul> <li>* Has the Project been implemented as had been planned?</li> <li>* Are there any gap between actual implementation and plan. If any, what? And why?</li> <li>* What countermeasures were taken to compensate delays? What were results?</li> </ul>	Although there were some delays in extension due to budget reduction, implementation of the Project has mostly been carried out as planned especially examination of extension method of FFS and its trial. This is because the activities were implemented from the beginning of the project. Some other activities were performed based on outputs of initial stages' achievements. The few cases where gaps between planned and actual activities were occasioned by delay in the release and expenditure of the counterpart budget (achievement of outputs Oct. 2005 - Mar. 2006).	А	
	Appropriateness of management of the Project	6	<ul> <li>* Who, how, how often has monitoring of the Project been conducted?</li> <li>* How is it utilized to improve the Project's implementation? (Mechanism of Project management)</li> </ul>	<ol> <li>JCC (Joint Coordination Committee) and Project Semiannual Meeting are to be held annually and biannually respectively for project monitoring among experts, CPs, JICA office and FD's staff members.</li> <li>DFEOs visit the FFS groups once a week, while the DFO visit once monthly.</li> <li>Reports for monitoring are based on farmers' weekly reports.</li> <li>A Monthly meeting is held at the forest management office in 3 districts.</li> <li>The monitoring reports are useful for project management to share information among CPs and experts and skill up for extension officers; however, submission of the reports is sometimes delayed and collating and analysis are not practiced. Therefore, substantial benefits from the monitoring reports are not tangible.</li> <li>Some of reasons for the above are, 1) existence of many farmers' groups 2) many types of monitoring sheets, 3) no information on indicators of PDM in the sheets and 4) no time to analyze them.</li> <li>Direct interview and observation are made as supplemental tools for written information.</li> <li>The monitoring process is used to improve project implementation by identifying the strengths and weaknesses, and incorporating lessons learnt.</li> </ol>	В	
			7 * Are tl	* Are there any problematic issues on communication in the Project?	<ol> <li>Although 3 Japanese experts and CPs hold regular meetings (e.g. every 2 weeks with CPs and every week among Japanese experts), arrangement to meet each other sometimes faces difficulties due to official trips, other official duties and physical distances among FD HQs, KEFRI and District Forest Management Offices.</li> <li>As for communication among the Japanese experts, official trip reports and activities' reports submitted by an expert help other Japanese experts understand progress of activities of forestry extension.</li> </ol>	B/C
		8	* How and how often has communication and exchange between Japanese experts and the Counterparts been taken placed?	Same as the above	В	
		9	* How were countermeasures to solve problems implemented with counterparts?	In case of any problems between Japanese experts and counterparts, the project management team is supposed to create a forum for discussing the issue(s) that may arise during the course of the project implementation. However, such a scenario has not yet been experienced.	A/B	

**Implementation Process Grid** 

Evaluation Criteria	Study Items	No.	Detailed Study Items	Study Result	Rating	
Verification of Implementation Process	Involvement of beneficiaries (target groups) in the project	10	* Do target groups such as individual farmers and farmers groups properly participate in the Project?	<ol> <li>Farmers and farmers' groups were selected with the criteria of properly participating in extension activities of the Project.</li> <li>The target groups have been actively participating in FFS weekly because the FFS content inspire their self-discipline activities.</li> <li>Change of farmers' consciousness and improvement of their ability were observed.</li> <li>Moreover, some groups voluntarily implemented FFS for other farmers groups. This is an impact of the FFS.</li> <li>Individual farmers are already implementing the techniques learnt in the FFS groups on their own farms, and in some cases they have shared information with surrounding farmers family members and other groups.</li> </ol>	Α	
	Ownership of the Project by the executing institution of kenya	11	* Are proper counterparts allocated for the Project?	<ol> <li>A total of 4 main counterparts at FD is allocated. KEFRI also provides 1 CP to support the Project.</li> <li>CPs for "Extension Management" should be considered to be allocated from the view that managemental and technical activities of the first term of the Project have to be gradually transferred to the FD during the rest of the Project's period.</li> <li>Allocation of ADFO in each district helps in smooth implementation of the extension in the absence of the DFEO.</li> <li>Moreover, even when there were vacant posts of DFOs, contingency measures were taken to facilitate continuation of project activities using the available staff; therefore, consciousness of Kenyan side to the Project is high.</li> </ol>	А	
		Ownership of the Project by the executing astitution of kenya	12	* Is degree of counterparts' consciousness of participation in the Project high?	<ol> <li>Abilities of CPs have been improving because of comparative advantages of FFS and concrete implementation of activities supported by JICA.</li> <li>Other donors utilize monetary method to maintain incentives of CPs such as top-up but JICA does not; meanwhile, the extension method and careful support through official trip, fuel, per diem and making report increase consciousness of CPs on the Project.</li> <li>As for DFOs, their responsibilities and duties should be increased to develop a higher sense of ownership.</li> </ol>	А
		13	* Is budget allocation for extension of social-forestry activities enough or appropriate?	<ol> <li>Most of the activities budget for FFS was provided by JICA. Although counterpart budget is allocated during the Project, it cannot cover current level of the extension in the 3 project districts.</li> <li>Moreover, dissemination of social forestry through FFS in other semi-arid lands is implemented by FD; however, the expenditure from FD is insufficient even during the Project period.</li> <li>Prospect of recurrent budget on social forestry of Kenya is low and should be increased</li> </ol>	С	

**Implementation Process Grid** 

Evaluation Criteria	Study Items	No.	Detailed Study Items	Study Result	Rating
Relevance	Does the Overall Goal match Kenya's development policy?	14	* Are the Overall Goal and the Project purpose cosistent with the development policy of Kenya? (Priority)	The overall goal is consistent with the Poverty reduction Strategy, current National Development Plan and specific District Development Plans, and the Economic Recovery Strategy for Wealth and Employment Creation document which address issues of improved living standards for the rura communities. The project purpose is also in line with the developmen policy, in particular the new forest policy and the Forest Act 2005.	t 1 1 1 t
		15	* Is the Project meeting the Aid Policy of Ministry of Foreign Affair of the Japanese Government to Kenya and the JICA Country Assistance Implementation Plan.	<ol> <li>The Aid Guidelines for Priority Areas and Challenges of the Country Assistance Programme compiled by the Ministry of Foreign Affairs of the Government of Japan in 2000 emphasizes importance of intervention in the field of environment among other sectors. It also recognizes forest protection, afforestation and agricultural land protection in order to prevent further expansion of arid and semi-arid regions due to population growth and urbanization.</li> <li>The Project is accepted in the programme of Forest Protection and Development as one of the Development Issues raised in JICA's Country Assistance Implementation Plan compiled in April 2006.</li> <li>Therefore, the project meets the aid policy of the Government of Japan.</li> </ol>	А
	Does the Project Purpose meet the Kenya's needs?	16	* Are Individual farmers and farmers groups in Kitui, Mbeere and Tharaka districts needed to be supported in the field of social-forestry?	<ol> <li>Supporting of the target groups is indispensable. Target groups are among the rural poor in semi-arid areas; therefore, their standard of living should be increased together with preservation of environment.</li> <li>Climatic condition makes agricultural production unstable in semi-arid areas; therefore, forestry industry which is not likely to be affected by such erratic climate should be combined with farmers' agricultural production to secure their income and natural environment. Farmers lack knowledge and experience of forestation and nursery raising of trees, so it is important for the target groups to learn about social forestry.</li> <li>So far, the farmers and farmer groups participating in the project activities greatly appreciate the support they are getting from the project They feel they should be supported further to realize the full benefits of the project impacts, such as harvesting of timber, fruits, etc, and also to be enabled to practice other income generating activities relevant to socia forestry as a way of improving their income and knowledge levels.</li> </ol>	e
		17	* Are staff of FD, Forestry Officers of 3 districts and Field Extension Officers needed to develop their ability on social-forestry development?	Forest Department (FD) is the Kenyan authority in charge of social forestry dissemination. It is therefore needed for FD to improve ability of its staff through the Project. There are very few staff trained in social forestry dissemination methods by other donors.	f A

Evaluation Criteria	Study Items	No.	Detailed Study Items	Study Result	Rating
Relevance		18	* Have target groups been received benefit from the Project since it had started?	Target groups are practicing nursery raising and planting technologies as a result of FFS and are already realizing monetary benefits from these activities. Most importantly, they have acquired knowledge and skills, and have become empowered to carry out FFS activities and to share the knowledge gained with other farmers.	А
		19	* Has ability of staff of FD, Forestry Officers of 3 districts and Field Extension Officers been developed during the Project implementation?	<ol> <li>Ability of the CPs has been improved through FFS, training and interaction with experts.</li> <li>Ability of the extension officers greatly improved through training in forestry in semi-arid areas and basic agronomy.</li> <li>Moreover, their knowledge and experiences were widened by interaction with other ministries' staff so the extensionist can now respond to farmers' needs.</li> </ol>	А
		20	* Has capacity of individual farmers and farmers groups in Kitui, Mbeere and Tharaka districts been empowered?	A lot of empowerment has been realized among individual farmers and farmer groups in the 3 districts particularly in the areas of time management. level of confidence, communication skills, sharing knowledge with others, accountability and transparency, initiative to start new ideas, etc.	А
	Appropriateness of strategy/ approach	21	* Is the FFS appropriate method for dissemination of social-forestry extension activities?	(1) All levels of respondents interviewed generally agreed that FFS is an appropriate method of social forestry extension, and it has been widely accepted even by neighbouring groups and farmers in the districts. (2) Some advantages of FFS made it easy to be accepted among stakeholders as a method of social forestry dissemination. These are: i) FFS was introduced in Kenya in 1990s and it is still sustained in other African countries, ii) other donors such as UNDP, DFID, DANIDA introduced it as well, iii) same method is shared by different donors making farmers to accept it easily, iv) target is farmers' groups so that high impact is expected from low inputs (numbers of experts, period, etc) compared to the Social Forestry Extension Model Development Project (SOFEM), v) the method is appropriate to monitor forestry activities in the long term. vi) it is a learning process so that it can be easily understood and adopted by stakeholders.	А
		22	* Does Japan have comparative advantage in the field of social-forestry and are there any examples of relevant projects in the past implemented by JICA in Africa?	The involvement of the Government of Japan in the forestry sector in Kenya dates back to the middle 1980's. The GoJ had been supporting forestation in semi-arid lands where the poor people reside for the past about 20 years through grant aid to Kenya Forestry Research Institute (KEFRI), the Social Forestry Training Project (SFTP) and SOFEM. The ISFP Project was requested to GoJ based on these well experienced interventions of the past.	А
	Others	23	* After Ex-ante Evaluation Study, are there any change of policy, socio- economic situation and so forth, influencing over the Project?	There has not been any drastic change in the socio-economic situation, but policy is undergoing a transformation with the enactment of the forest bill and assent of Forest Act 2005. However, this is not expected to change the project direction and purpose since the Project itself is well harmonized with the framework of the new Forest Act.	-

Evaluation Criteria	Study Items	No.	Detailed Study Items	Study Result	Rating
Effectiveness		24	* Can individual farmers and farmers group and other stakeholders intensify social-forestry practices in semi-arid areas?	Individual farmers and farmer groups in the three project districts are already intensifying social forestry activities on their group and individual farms, and the FFS experience should be replicated in other semi-arid districts in order to achieve similar results.	A
		25	Are there any changes in two important assumptions, "No catastrophic climatic condition occur" and "Kenyan government forestry development policy and plans remain consistently positive"	<ol> <li>There is no change so far.</li> <li>Drought should be taken into account for cooperation especially in Africa.</li> <li>There was persistent drought in 2005 and this had an effect on the project purpose.</li> </ol>	-
	Possibility of realization of the Project Purpose	26	* Are there any constraints for achieving the Project Purpose?	<ol> <li>The major constraint cited for realization of the project purpose is counterpart budget allocation, but adjustments are being made to cover this.</li> <li>It is not certain whether establishment of Kenya Forest Service (KFS) from FD through the forestry sector reforms would become a constraint for the achievement of the Project purpose; therefore, the sector reforms should be carefully monitored during the rest of the Project period.</li> </ol>	В
		27	Are the 4 outputs closely coordinated to realize the project purpose?	<ol> <li>Some feedback mechanism for piloting of outputs for ISFP have been initiated and selected foresters and DFOs from Malindi, Kilifi, Laikipia, West Pokot, Meru South, Rachuonyo and Kwale districts have been trained in ISFP FFS extension system and are in the process of making action plans for FFS.</li> <li>Linkage between activities of technology development, survey and study, manual making and field extension activities is weak. For example, market survey is not utilized in FFS.</li> </ol>	B/C
	Are the Output proper enough to realize the Project Purpose?	28	* Is strengthening of institution and technical capacities for social forestry extension in Forest Department progressing? (Output 1)	<ol> <li>Although there was no clear function in "social forestry extension planning and M&amp;E at FD level" at the initial stages of the Project, there are now positive signs about indicators of output 1 as follows.</li> <li>FFS is introduced in other areas through FD 's budget,</li> <li>Clear direction of a functional unit at HQs is now visible through establishment of new forest law, problem analysis of policy and examination of road map, extension planning at districts level and FFS trials.</li> <li>Officers of Drylands and Farm Forestry Branch fully understand functioning of ISFP extension system, have been trained in FFS methodology and jointly undertake planning for FFS activities together with ISFP.</li> <li>In other districts, TOT through FFS will be conducted so that it is envisaged that know-how of extension planning and implementation can be formulated. Moreover, HQs should support TOT in the other districts as part of its functions</li> </ol>	В

Evaluation Criteria	Study Items	No.	Detailed Study Items	Study Result	Rating
		29	* Are social-forestry extension activities among individual farmers and farmers groups in 3 districts are progressing? (Output 2)	Enterprises already being practiced by the farmers and farmer groups are progressing relatively well. However, they mentioned a number of constraints, including problem of termites, water, tools and nursery equipment.	В
ffectiveness	Are the Output proper enough to realize the Project Purpose?	30	* Are farmers and other stakeholders obtaining enough practical knowledge and technique? (Output 3)	The farmers and farmer groups indicated that they are getting enough practical knowledge and techniques, but would like more support in some of the techniques such as Melia propagation, grafting and some IGAs e.g. livestock rearing, beekeeping.	f B
ш		31	* Is information on social forestry extension and related issues being shared among stakeholders? (Output 4)	<ol> <li>All the farmer groups as well as majority of the group members share information on social forestry through field days, tours and visits, graduation events, community barazas and on individual farms.</li> <li>Other means of information sharing among stakeholders include the internet, workshops, meetings, seminars and the media.</li> </ol>	A
Efficiency	Degree of achievement of the Outputs	32	* Is degree of achievement of the Outputs appropriate?	<ol> <li>Output 1         Capacity building at FD H/Qs level has been carried out through training, workshop, seminar and surveys. As a result, the institutional and technical capacities for social forestry extension were efficiently and remarkably improved over the past 2 years.     <li>Output 2</li> <li>Some achievements of the output were cited in 4.4 and they showed substantial success of the FFS method in 3 districts of intensive areas for such a short period.</li> <li>Output 3</li> <li>Majority of the target farmers acquired knowledge and applied it to practice since the FFS method has been introduced efficiently. The number of techniques that were employed by the farmers is about 40 since FFS method was introduced.</li> <li>Output 4</li> <li>According to the total number of survey respondents of 200 in 3 districts of intensive areas, awareness of social forestry was remarkably increased since the Project started. Number of stakeholders who are aware of information on social forestry extension was also increased by 7% in Kitui, 14% in Mbeere and 32% in Tharaka respectively. Moreover, number of visitors to the website of 2,161 by 2006 showed efficient recognition of social forestry.     </li> </li></ol>	В
		33	* Are there any constraints for achieving the Outputs?	<ol> <li>It is not clear yet at this moment, but there might be some influence by establishment of KFS.</li> <li>Delay of budget disbursement from both JICA and FD will affect extension activities.</li> </ol>	В
	Are the Activities and Inputs enough to realize the Outputs?	34	* Are there any excess and deficiency of the Activities to generate the Outputs?	Current level of activities and inputs to realize the outputs is appropriate, however, for better efficiency, it will be necessary to harmonize the number of activities with commensurate timing and scheduling.	В

Evaluation Criteria	Study Items	No.	Detailed Study Items	Study Result	Rating			
Efficiency		35	* Are number of Japanese experts, their fields, timing of placement and terms appropriate?	<ol> <li>Number of Japanese experts and their specialized fields are appropriate.</li> <li>Reduction of Japanese experts is consultative, but feasible in consideration of the degree of realization of the outputs.</li> <li>Extension aspects are very important and all efforts should be made to enhance support.</li> </ol>	A			
		36	* Are kinds of equipment, their quantities and timing of their supply appropriate? Are rehabilitation/ improvement of project offices in FD and other districts appropriate?	Kinds of equipment, quantities and timing of their supply were appropriate; however, procurement of some items was delayed.	A/B			
	Are the Activities and Inputs enough to realize the Outputs?	37	* Is counterpart training provided by JICA proper in terms of contents, period and numbers of participants?	<ol> <li>(1) Counterpart trainings conducted in Japan were relevant to the Project in terms of content, period and numbers of the participants.</li> <li>(2) Counterparts who participated in the course of "Forest Management Administration" introduced PRA, which was acquired in the training to DFEOs.</li> </ol>	A			
		38	* Is budget from both Japanese and Kenyan sides for the Project appropriate for Activities?	<ol> <li>Budget from Kenyan side is not sufficient to sustain current levels of FFS.</li> <li>Japanese side disbursed as had been planned.</li> </ol>	С			
					39	39	39 * Are there any effect of the Important Assumptions after activities on realizing the Outputs?	There was a shortage of rains in 2005, which affected the survival rates of both the seedlings and the planted trees in all 3 districts. In some cases, it was not possible to sell the seedlings as the planting season was not favourable.
Impact	Possibility to achieve the Overall Goal	40	* Can the Overall Goal be realized 3 to 5 years after termination of the Project, considering current situation of the Activities and the Outputs?	According to data and information obtained through the project, the indicators for the Project Purpose can be realized. Therefore, theoretically the Overall Goal will also be achieved if this current progress of the project continues.	A/B			
		41	* Are there any constraints for achieving the Overall Goal?	<ol> <li>Some cases which negatively affect the realization of the Overall Goal should be considered as constraints as follows</li> <li>FFS groups do not receive support after they graduate. However, ISFP has only graduated 1st generation groups and is preparing FFS network activity.</li> </ol>	В			

Evaluation	Study Items	No.	Detailed Study Items	Study Result	Rating
Criteria					
Impact	Proper logical casual relationship between the Project Purpose and the Overall Goal	42	* Are there big gap between the Overall Goal as ultimate direction of the Project and the Project Purpose?	<ol> <li>Theoretically, the Overall Goal will be also achieved if the current progress of the project continues.</li> <li>By achieving the Project Purpose and sustaining it, food self sufficiency and living standards will be improved in the short term. Then, farmers can afford to carry out enterprises in the long term, leading to improved land utilization for environmental conservation.</li> <li>Networking among farmers after FFS will ensure promotion of Income Generation Activities (IGAs) by themselves, leading to realization of the Overall Goal. To do so, extra inputs are required.</li> </ol>	A/B
	Ripple effect	43 pple effect	* Are there any change of consciousness and activities of target groups in 3 districts?	<ol> <li>Attitudes and consciousness of the target groups were changed as follows: Participation in group activity improved, confidence in presentation, not being shy in front of others, being more social to others, being better in self-explanation, tried new ideas on fields, teaching what he/she learnt to others, realizing own hidden talent, being respected by others, being disciplined, attending to other functions, started to go to schools and study, being employed, more income, more time to try other new things, and more diversified farm/IGA activities.</li> <li>Moreover, changes were also observed in groups as follows: New bylaw/reinforced existing bylaw, time management improved, more cohesive, full participation by all members, more participation in decision making, less dominance of group officials, improved leadership skill, started new group activities/IGAs, increase of group fund, applied and acquired fund/assistance, more transparent in fund management, group fund accounting improved, less disparity among the members, participated in community events, being popular with the neighbors, increase of members, and related to the formation of new groups.</li> <li>However, these changes were supported by inputs from the project; therefore, careful and continuous evaluation of the farmers who graduated from FFS is necessary.</li> </ol>	A
		44		* Are there any impact be expected other than the Overall Goal?	<ul> <li>Positive impacts are as explained above.</li> <li>(1) Ability improvement of implementing agency (the Ministry and FD)</li> <li>(2) Farmers' confidence</li> <li>(3) People's interest in social forestry</li> <li>(4) Reduced dependence on state forests for tree products such as timber, poles and firewood</li> <li>(5) Access to other benefits/projects using the existing groups as an entry point.</li> </ul>

Evaluation Criteria	Study Items	No.	Detailed Study Items	Study Result	Rating
		45	* Can policy of social forestry be continued after the Project?	The Government of Kenya has been maintaining social forestry policy for a long time with consistency.	А
Sustainability	Policy and Institution	46	* Is institutional support established to continuously practice FFS method at this moment? Or, will it be established from now on?	<ol> <li>Institution to support FFS method has been structured in the 3 project districts and this is attributed to JICA's budget.</li> <li>Dissemination of FFS in other semi-arid areas largely depends on FD's budget capacity, which is insufficient at the moment.</li> <li>Moreover, if Output 1 was realized, institutional support for the other areas would be realized.</li> <li>Already, piloting of the Outputs from ISFP have been initiated. Selected foresters and DFOs from Malindi, Kilifi, Laikipia, West Pokot, Meru South, Rachuonyo and Kwale districts have been trained in ISFP FFS extension system.</li> <li>In addition, it is expected that establishment of KFS will have an institutional framework to support social forestry as provided for in the Forest Act.</li> </ol>	B/C
		47 48 rganization and Finance	* Does FD have capacity to maintain activities of the Project as an organization as such considering staff allocation and decision making process for further dissemination for other semi-arid areas? Or, will it have from now on?	<ol> <li>Dissemination of social forestry would be technically possible if proto- type of FFS was established in the 3 project districts and infrastructure and budget were provided in other semi-arid areas.</li> <li>On top of that, high level decision making is also necessary regarding recognition of FFS extension method as a viable approach for social forestry extension by KFS.</li> </ol>	В
	Organization and Finance		* Is budget allocation enough to maintain activities for social forestry? Or, is there possibility to increase such budget in the future?	<ol> <li>At the moment, ISFP activities are supported through GoJ budget, GoK counterpart budget and the normal GoK budget to FD.</li> <li>At the same time, there are occasional delays in the disbursement of counterpart budget.</li> <li>Once the project is ended, it will be difficult to maintain the same level of activities in the absence of the GoJ and counterpart budgets.</li> <li>How JICA withdraws from allocating its budget for FFS and hands over the management to FD are main issues during the rest of the Project period.</li> <li>It is noteworthy that for the current financial year, the normal GoK budget allocation to FD has been increased.</li> </ol>	С
			49	* What actions should be taken to sustain the farmers extension system after the Project terminates?	<ol> <li>(1) Consensus making to increase social forestry extension through the sector reform.</li> <li>(2) Reducing FFS cost which should be balanced with FD's budget. Some countermeasures to cut its cost should also be considered at the same time.</li> <li>(3) Extension planning of other semi-arid areas (Output 1) includes extension and logistics cost analysis and their trial and adjustment after the trial.</li> <li>(4) FD (soon to be KFS) should create a budgetary provision to cater for the farmer run FFS especially under the current system of Department/Ministry specific performance contracts. Resources which target "casual labour" engagement should be directed to support farmer run groups.</li> </ol>

Evaluation	Study Items	No.	Detailed Study Items	Study Result	Rating
	Technology	50	* Is extension method, FFS, being accepted by target groups?	<ol> <li>(1) FFS has been well accepted by the target groups. However, cases of some members dropping out due to "intensity and tight programming" of the schedules sometimes occur.</li> <li>(2) Farmer run groups would be continued if external inputs including FD's budget were available.</li> <li>(3) Networking among farmer groups would take part of the inputs; meanwhile FD should coordinate FFS activities in collaboration with Ministry of Agriculture which also uses FFS. Possibility of benefit principle is very low to sustain farmer runs.</li> </ol>	В
		51	* Do Forest Extension Officers have ability to implement FFS method? Or, will they have it in the future?	<ol> <li>From only technical view points, extension officers' ability have been greatly improved through TOT and backstopping as a series of capacity building so that they can implement the extension system.</li> <li>However, some officers are quite qualified while others need further training if anticipated results are to be achieved.</li> <li>Therefore, capacity building carried out in the Project can also be utilized for other extension officers in semi-arid areas, as is already being done for selected districts.</li> </ol>	А
Sustainability	Others	52	* As planned during the Ex-ante evaluation study in 2004, have any necessary measures already taken to hand over the Project activities to Kenyan side during the next 2 years? Or, will they effectively work?	<ol> <li>(1) As envisaged for the handing over process, the GoJ allocation is decreasing as the GoK counterpart allocation is increasing. At the same time, a mechanism is in place to reduce the extension officer run FFS activities and increase the farmer run FFS, to release time and funds for the extension officers to offer backstopping support to the farmer run FFS.</li> <li>(2) The most critical issue is allocation of counterpart funds.</li> <li>(3) Both Japanese and Kenyan side recognize budget constraints to sustain current levels of social forestry dissemination and the Japanese side has been stressing necessity to allocate more counterpart funds from time to time.</li> <li>(4) However, actual disbursement of budget does not coincide with the plan.</li> <li>(5) Possibility to access other donors' funding may support FFS. For example, a loan project of AfDB will involve FFS method in 2006.</li> <li>(6) FAO and the Project can have close linkages to share information and human resources as backstopping and TOT's lecturers. Moreover, both sides have the same needs for master trainers' training and planning and implementation; therefore, these can be conducted together to minimize their cost.</li> <li>(7) The Coast Development Authority has potential to provide human resources for training of FFS and it can also release funds for forestry FFS in 4 districts.</li> </ol>	В
		53	* Are there any other constraints for sustainability, other than the above mentioned?	No other serious constraints.	-

Evaluation	Study Items	No.	Detailed Study Items	Study Result	Rating
Criteria					
		54	* Can the Project Purpose be realized considering current situation of the Activities and the Outputs?	<ol> <li>Already the farmers and farmer groups participating in the project activities in the 3 project districts have intensified social forestry activities. It is just a question of replicating the activities in other semi-arid areas.</li> </ol>	В
		55	* Is it needed to correct any Inputs, Activities, Outputs?	<ol> <li>Activities and outputs are adequate.</li> <li>Budgetary allocation for social forestry activities should be increased.</li> <li>Technical ability of FD staff in the other semi-arid districts should also be improved.</li> </ol>	В
		56	* Are there any new Important Assumptions to effect on the Project?	None.	-
ecessity corrections	Any recommendations for correction of the Project, based on the above evaluation results.	57	* How have the problems and issues that were raised during the Ex-Ante Evaluation Study in 2004 been changed during the implementation of the Project? (Especially, issue of handing over the Project activities to Kenyan side)	<ol> <li>Apart from the financial arrangements for handing over, officers of Drylands and Farm Forestry Branch have been trained in FFS methodology and fully understood the functioning of ISFP extension system. This is a firs step towards a functional social forestry extension planning, monitoring and evaluation unit within FD.</li> <li>They are expected to jointly undertake planning for FFS activities together with ISFP.</li> <li>In other districts, TOT in FFS will be conducted and FD HQs will provide backstopping support.</li> </ol>	B
Any		58	* Are there any items that the Project has to pay attention to?	<ul> <li>KFS is envisaged to have a better focus on extension activities than the current FD and it is very likely that KFS will have better budget support for extension activities. However, attention should be paid to the following:</li> <li>(1) The sector reform is going on. It is not certain if there will be either positive or negative impacts on the Project and social forestry extension. Some negative impacts would be considered as follows:</li> <li>i) Reduction of extension related budget.</li> <li>ii) Reduction of number of staff for extension, hindering extension activities.</li> <li>iii) Any change of extension characteristics and process of implementation.</li> <li>(2) A positive impact is that budget system would be simplified if KFS received the budget directly.</li> </ul>	-

#### 1. PDM Ver.0 から PCM Ver.1 への変更内容(2005年)

(1) 活動

活動 3.2 Development farmers friendly techniques  $\geq$  3.3 Identify useful local forestry related knowledge を融合し、3.2 Identify useful local forestry related knowledge and development farmers friendly techniques  $\geq$  した。

(理由)ふたつの活動ともに農民に裨益する技術の調査・開発。検証に関わる活動項目で あり、活動内容や成果に重複・不可分な部分が多く、統一した1項目としたほうが混乱な いと判断されたため。

活動 3.7 Identify and assess practical field demonstration sites and the needs for promotion の表現を 3.6 Identify and assess useful social forestry related techniques and establish/identify field demonstration site に変更。

(理由) プロジェクト実施前は十分な情報がなかったため適当なサイトを検討するだけの 曖昧な表現にとどめてあったが、特定技術を検討・展示するより具体的な表現に改めた。

活動 3.9 Organize open days of project activities and demonstration plots for farmers and other stakeholders の項目を 3.5 Provide technical assistance for diverse needs of individual farmers, farmers groups and other stake holders に統合。

(理由)周辺コミュニティに対する農地林活動の紹介・導入はすでにフィールドデイとし て農民グループ活動の1項目になっており、特定の活動項目を別に設定する必要性は低い と判断したため。

(2) 指標

上位目標の指標 1. Household income in semi-arid areas are improved by xx% through the use and sale of social forestry products compared to year 2004 level を 1.1 By 2014, agricultural contribution to household income in semi-arid areas is improved by 1% through the use and sale of social forestry products compared to year 2004 level と 1.2 By 2014, accessible sustainable wood production related to farmlands is predicted to increase by 3% compared to year 2004 level.に変更。

(理由)上位目標の指標は社会林業活動とリンクし得る国レベルの経済・環境関連データ から得られる。事前評価調査時及び討議議事録の署名時には、同関連データは所在すると の森林局側説明により当初指標を設定した。しかし、プロジェクト開始後速やかに調査し た結果、上位目標の当初指標の入手は困難であることが明らかになったため、限界はある ものの可能性のある指標に変更。

プロジェクト目標の指標数値を xx 表示から具体的数値で記載。結果、次のようになった。

1. 2% of individual farmers and farmer groups, who did not implement social forestry activities in 2004 in Kitui, Mbeere and Tharaka districts, newly implement them.

2. Number of annual planted trees is increased 2% in Kitui, Mbeere and Tharaka districts by 2009 compared to 2004.

3. More than 2 newly introduced tree species are planted and are taken care on target farmer land in Kitui, Mbeere and Tharaka districts compared to 2004.

4. Number of annual seedlings produced is increased 2% in Kitui, Mbeere and Tharaka districts by 2009 compared to 2004.

5. More than 2 newly introduced tree seedlings are produced on targeted farmer lands in Kitui, Mbeere and Tharaka districts compared to 2004.

(理由)事前評価調査時には、具体的な数値を記入するための現地の詳細情報が不十分で あったため指標の数値を xx と記載し、プロジェクト開始後に得られた情報を基に具体的数 値を提示した。

アウトプットの指標数値を xx 表示から具体的数値で記載。結果、次のようになった。

1.1. By March 2009, Policy and planning for forestry development is elaborated.

1.2. By March 2009, 30 % of district prepare plan on social forestry extension based on the guideline developed.

1.3. By March 2009, a functional social forestry planning, monitoring and evaluation unit is established at FD.

2.1. By March 2009, 60 % of individual farmers who participated in the project applied farm forestry practiced by groups to their own farms.

2.2. By March 2009, 150 farmer groups are involved in social forestry related group network.

2.3. By March 2009, 150 farmers groups were facilitated by farmers in the area.

2.4. By March 2009, 7,500 farmers attended to field days conducted by farmer groups participated the project.

2.5. By March 2009, 70 % of farmers who participated the project appreciate the project extension model.

2.6. By March 2009, 60 % of FD extension staff involved in the project implementation are recognized as qualified farm forestry FFS facilitators.

2.7. By March 2009, 8 groups per one extension officer are created and implemented their work plan though facilitation of extension officers.

3.1. By March 2009, 50% of farmers participated in the project implemented new techniques learned through the project in their own farms.

3.2. By March 2009, 70% of farmers participated the project appreciate knowledge and techniques provided by the project.

4.1. By March 2009, number of stakeholders, who are aware of information on social

forestry extension, is increased by 5 % compared to 2004 level.

4.2. By March 2009, 4,000 people visit the project website.

(理由)事前評価調査時には、具体的な数値を記入するための現地の詳細情報が不十分で あったため指標の数値を xx と記載し、プロジェクト開始後に得られた情報を基に具体的数 値を提示した。

#### 2. PDM Ver.1 から PDM Ver.2 への変更内容 (2006 年)

(1) 指標

上位目標の指標の入手手段を National Bureau Statistics から Kenya Forestry Master Plan 及び District Development Plans へ変更。

プロジェクト目標の指標1~5を次の1~3に変更。

1. Data noted below shows the increase by 2009 compared to 2004 in Kitui, Mbeere and Tharaka Districts among target group

i) Number of tree seedlings annually produced on farm: 50%

ii) Number of trees annually planted on farm: 50%

iii) Number of individual farmers and farmer groups who introduced highly marketable tree species for seedling production of tree planting on farm at least one species: 50%

iv) Number of individual farmers and farmer groups who newly implement social forestry activities: 70%

2. Data noted below shows the increase by 2009 compared to 2004 in Kitui, Mbeere and Tharaka Districts in surrounding area of target group

i) Number of tree seedlings annually produced on farm: 5%

ii) Number of trees annually planted on farm: 5%

iii) Number of individual farmers and farmer groups who introduced highly marketable tree species for seedling production of tree planting on farm at least one species: 5%

iv) Number of individual farmers and farmer groups who newly implement social forestry activities: 5%

3. Planning on social forestry extension is promoted in 10 districts in semi-arid areas

(理由)集中的にインプットしている 3 県以外の半乾燥地域への社会林業普及の達成度を 示す目標値が存在していなかったため、新たに設置。また、集中的にインプットしている 農家または農民グループへのインパクトとその周辺農家へのインパクトの両方を把握する ために、それぞれの指標を設置した。

アウトプット1の指標変更

指標 1.2 By March 2009, 30% of district prepare plan on social forestry extension based on the guideline development  $\overline{c}$  1.2 By March 2009, Implementation plan on social forestry extension is prepared, piloted and improved in 10 districts in semi-arid area に変更。

(理由)森林局の実情から見て半乾燥地域の県レベルの多くの職員に対する研修を行なう

手法を採るよりも、県レベルの実施計画案の作成のためのワークショップ、モニタリング 評価を行なうことが効果的なため、尚、実施計画案の作成の対象県の数を10県とした理由 は、森林局の乾燥地関連の通常予算の配付県(森林局が乾燥地林業の強化の対象としてい る県)が25県。内、半数程度は半乾燥地よりさらに乾燥地であり、また安全上JICA専門 家が行くことができない地域に属する。これらを除くと12~13県、乾燥地関連の通常予算 の配付県以外にも、県内に半乾燥地を抱える県が数県ある。ということから、対象となり うる県は10数県であり、これらの過半の県を網羅するする考えに基づき10県とした。

#### アウトプット2の指標変更

指標 2.7 By March 2009, 8 groups per one extension officer are created and implemented their work plan through facilitation of extension officers  $\delta 2.7$  By March 2009, 120 farmers groups are facilitated by FD extension staff in the area に変更した。

(理由)人事異動等により 5 年間同一同数の普及員が確保できるわけではないことが明確 になったため、各普及員何グループという表現からプロジェクトに配置された普及員によ る通算で何グループという表現に改めた。実数は当初想定された普及員 15 名×8 グループ =120 グループと変わっていない。

(2) その他

ターゲット地域の Semi-arid areas of Kitui, Mbeere and Tharaka Districts を Kitui, Mbeere and Tharaka Districts as the intensive areas of field activities and the other semi-arid areas に変更。

(理由)本プロジェクトの活動は、森林局本局(アウトプット 1)、キツイ・ムベレ・タラ カ県(アウトプット 2 び 3)、半乾燥地(アウトプット 4)の3区分に分かれ、それらが一 体となりプロジェクト目標(半乾燥地を対象)を達成しようとするものである。このため、 当初のターゲット地域の表現の仕方をより適切な表現に変更する。 第1世代 FFS 農民グループ概要(2006年7月13日視察)

District	Mbeere		Division	Gac	hoka		Location Mbita			
Distance from DFEO			15Km How long will			ake				15Minutes
Group Name		Kwa M	Kwa Macembe					Total membership		
Chairperson Name		Gladys	Gladys Muthoni Gatundu				Active members			
Secretary Name		Mrs Si	Mrs Siphora Wegoki				Male Members			
History		Since	Since when 1993				Female Members			
Past project experience		Chicke	Chicken/Goat project, Dam construction					Registered		
Main group activities1. Tree Nursery2. Earth Dams/Wells3. HIV AIDS awareness4. Merry Go Round5. Soil and water conservation6. Goat project										

#### FFS 活動と成果

Enterprise	1. Fruit Orchard 2. Nursery				
Number of produced seedling					
Number of planting	Total 4,972 (Mukau 938, Mango 186, Grevillea 1,670, Others 2,178)				
Number of graduation	15 (79%)				
Remark	Relatively active group, Host farm locates road side, Good making AESA Sheet				

#### 第2世代 FFS 農民グループ概要(2006年7月14日視察)

District	Kitui		Division	Ya	tta			Location	Kanyangi		
Distance from DFEO				55Km	I	How long will it	take				2hrs
Group Name		Kanimi Kaseo				Total membership			28		
Chairperson Name		Kangethe Muisyo			Active members			18			
Secretary Name		Elijah Mwanthi			Male Members		6				
History		Since when 2003			Female Members			22			
Past project experience KA		KAP fur	KAP funded			Registered				Yes	
Main group activities		Farming	g,Tree seed	dlings							

#### FFS 活動と成果

Enterprise	1. Fruit Orchard 2. Woodlot with Agricultural Crops
Number of produced seedling	-
Number of planting	-
Number of graduation	-
Remark	

#### <u>PROCEEDINGS OF STAKEHOLDERS' WORKSHOP ON THE MID-TERM EVALUATION</u> SURVEY OF ISFP HELD AT FD HQS ON 12<sup>TH</sup> JULY, 2006

#### PRESENT

-	Director KEFRI
-	Centre Director KEFRI, Kitui
-	Training Manager, KEFRI
-	Ag Chief Conservator of Forests
-	Project Manager ISFP
-	Planning Officer, FD
-	Farm Forestry Branch, Forest Department
-	Asst. Project Manager, ISFP
-	Head Dry lands Programme, FD
-	Asst. Director KEFRI
-	DFO Mbeere
-	DFO Tharaka
-	Asst. DFO Kitui
-	Social Forestry Extension Expert, ISFP
-	Resident Representative, JICA
-	Asst. Resident Representative, JICA
-	Project Formulation Advisor, RSOESA
-	Senior Pragramme Officer, JICA
-	Forestry Agency, Japan
-	Chief Advisor ISFP/FD
-	ISFP Project Coordinator
-	Consultant, DIC
-	Consultant, DIC
-	Study Assistant, DIC

#### 1 Introduction

The workshop was organized by JICA-Kenya office in collaboration with the Forest Department to discuss the results of the mid-term evaluation for the ISFP. All members in attendance were seated by 11.00 a.m. when the meeting commenced. Ms. Chie Ezaki, asst. Resident Representative JICA moderated the morning session.

#### 2 Workshop objectives

The major objective of the workshop was to bring together the major stakeholders in the ISFP to discuss the mid-term evaluation report together with the evaluation team from Japan.

#### 3 Workshop Programme

Time	Activity
11.00 a.m.	Opening remarks by Yoshiaki Kano
11.10 a.m.	Self introduction by members in attendance
11.10 a.m.	Presentation of the survey results by Development Impact Consulting;
	Questions and answers.
12.00 Noon	Lunch break
1.00 p.m.	Discussions of the issues raised from the survey results
3.00 p.m.	Tea break
3.20 p.m.	Summary of the discussion
3.55 p.m.	Closing remarks by Mr. D.K. Mbugua

The workshop programme was given as follows:

#### 3.1 Official opening

Mr. Patrick M. Kariuki moderated the morning session together with Mr. Muriithi of FD. Members were welcomed by Mr. D. K. Mbugua, Chief Conservator of Forests who also chaired the morning session. As the tradition, all members in attendance introduced themselves before indulging in the days deliberations. Mr. Mbugua gave a welcome note to the guests before proceeding to chair the morning session.

#### **Opening Remarks by Yoshiaki Kano (Resident representative, JICA)**

Mr. Yoshiaki Kano of JICA also gave a brief on the purpose of the mid-term evaluation of the ISFP. He also reiterated duty of the JICA mission already in the country to review the project. He said that he was pleased with the collaboration between the two countries (Kenya and Japan). In the meantime, members were registering themselves as presentation was going on.

#### 3.2 Presentation by DIC

Ms Nancy of DIC gave a presentation on the outcome of the mid-term survey. Two main areas were discussed at length; The Project Design Matrix (PDM) and the Evaluation Grid. Figures obtained from the survey had already been incorporated in the PDM and the constraints arising were also in the evaluation grid. These later became the major focus during the afternoon session. Print outs for the two sections were made and issued to the members for discussions.

After her presentation, several issues arose which were further deliberated upon for the rest of the morning session. The morning session discussed entirely the PDM.

#### **Issues raised (morning session)**

- The overall goal is meant to be given at the end of the project and not during this mid-term review. Even then, it is meant to be for all semi-arid regions of Kenya and not necessarily for the project districts only.
- The activities to achieve project purpose were noted to be well on course and the project is moving in the right direction.
- Mr. Hiro Yamazono reminded the evaluation team that they should focus on the lessons learnt from this mid-term review and make corresponding changes as necessary.

• The issue of discussing the constraints was deferred to the afternoon session for discussion by the two groups.

The CCF made a clarification on the following issues:

- That the project should be able to track down the activities and financing of these activities.
- To use the project system to all other districts outside the project region. Basically talking about replication of the project elsewhere.
- Monitoring the activities of the DFEOs has become very easy unlike before when it was not quite easy to track down their movements at a given time.
- What comes out of the paper work should be reviewed periodically to ascertain changes early enough.

Dr. Konuche was concerned about the use of household income which is a difficult parameter to measure. The consultant explained that the results shown on income on the PDM are those derived from social forestry activities only. But she further explained that other household income activities are shown in the main report.

Dr. Chagalla also sought an explanation on the negative figures on the PDM. It was confirmed that the negative figures shows the reduction in trees planted by the surrounding farmers before FFS and after FFS. It meant that there were more trees planted by surrounding farmers before FFS than after FFS due to drought. Moreover, as explained by the consultant, tree planting activity by surrounding farmers had no bearing on the project hence the project did not affect their tree planting activity.

Mr. Sato sought a clarification on the constraints listed by the Japanese evaluation team on what they meant by some statements appearing on the table of constraints in regards to the Japanese experts. An explanation was given by Mr. Furuichi who did the interview with the Japanese experts. He also promised to omit some of the constraints listed which were not clear to the experts.

3.3 Discussion of the issues raised from the survey

#### **Issues raised (afternoon session)**

The afternoon session was set aside to discuss constraints entirely. Members went straight to their respective groups. Mr. Mureithi of FD took us through the afternoon session. There were 3 major issues on this listed as follows:

- 1 How FD can mainstream the FFS method in social forestry extension.
  - Sector Reform
  - Cost Effectiveness within Kenyan budget
  - Efficiency of activities
- 2 Self Capacity assessment; what kind of ability is improved and what kind of ability should be improved.
- 3 How effective monitoring can be secured in order to improve or feed back in the current or future activities as well enhance the coordination among 4 components.

Members engaged in discussions of the three issues for the entire afternoon and the following major points emerged.

#### Group 1 Discussions

<u>Group Members</u>: Yuchi Sato, Shinji Abe, Mary Mwai, Ebby Chagala, James Chomba, Kenneth Riungu, James Kimondo, Patrick Kariuki, Nancy Ndirangu)

**Question 1:** Presentations for this group was done by Ms. Mary Mwangi and their deliberations yielded the following results.

#### Sector Reform

- FD to recognize FFS as a viable extension system
- Mainstreaming FFS Sector Reforms: Institutionalize FFS as the extension method of FFS
- FD should establish functional division that is in charge of FFS
- Market Driven in terms of forest reform
- Allocate staff for the extension services in the districts
- Logistical support for the facilitators
- Backstopping support from HQs
- Make sure that all divisions have a forester

#### **Cost Effectiveness**

- Budget for specific activities (FF Activity)
- Kenyan Budgets very low at divisional level for effective FFS
- Budget allocation for casuals to pay farmer facilitator
- Farmers should cater for part of the cost of extension ; token payment for extension services to supplement GoK budget
- No of field schools to be determined by allocated budget
- Use of district budget allocation to facilitate farmers
- Pursue cost effectiveness by combining FD-FFS to Agriculture FFS
- Incorporating both long and short term enterprises to realize early returns

#### Efficiency

- Train all extension staff in FFS methodology
- Evaluate advantages of FFS comparing with conventional
- Make workload more practical
- FD has to prepare annual plan to conduct FFS (which district how many groups?)
- Ensure sustainability by motivating facilitators by farmers
- All DFEOs to undergo FFS training
- Train FD staff in FFS methodology in all districts

#### Question 3

- IT Technology
- Computer, email, website
- Efficiency
- M& E to be part of extension
- Feedback
- To research on issues arising
- FFS must be beneficial to farmers

- Improve and develop feedback system between HQ, DFO and DFEO
- Reporting to be done at all levels
- Enjoin the farmers group (FFS) in participatory monitoring
- District level monitoring meetings between HQ, DFO and DFEO
- Provide Monitoring sheets at farmer level for record of activities
- Field visits by HQ staff
- Create for a for information sharing for stakeholders at all levels
- Promote ad-hoc bimonthly regular meetings ISFP, Dryland, Branch, Farm Forestry Branch and KEFRI
- Quarterly, FD up to DFO, JICA Experts, KEFRI
- 2 year semiannual meeting Management issues
- 2 year experience sharing (4 times a year)
- Hold joint planning and implementation Information sharing for all 4 components with FD
- M&E to be done periodically
- Establish an M&E schedule both at Hqs and district level
- Scheduled monitoring missions
- Holding regular meetings
- Identify frequency for monitoring
- Identify key elements & procedure/mechanisms goal at all levels
- Achievement, Lessons learnt, where happens in remote areas
- Incorporate lessons learnt to improve implementation process
- Develop and test M&E tools for use in all districts
- We need functional monitoring sheet to confirm the achievement
- Secure submission of monitoring reports by devel9oping more simple formats
- We frequently have to check achievement of project by DPM
- Allocate more time/staff for monitoring

#### **Group 2 Discussions**

# (Shinji Ogawa, John Ngugi, Anthony Maina, Michael Mukolwe, Paul Karanja, Jane Ndeti, Furuichi Shingo, Chie Ezaki, Yoshiaki Kano, Gaudensia Aomo)

Presentations of the first group was done by Mr. Michael Mukolwe

#### **Question 2a: Improved**

- Improved Public Relations (DFEO, ADFO, FFS, Members)
- Self confidence to communicate with farmers (DFEO, DFO, Farmers)
- Self evaluation recognized (Farmers, DFEO)
- Willingness to participate (be involved)
- Farmer gained knowledge
- More information technical knowledge which farmer requests
- Motivation (though it is not ability)
- Appreciation of FFS extension techniques (Farmer, DFEO)
- DFEO extension skills
- DFEO Accountability
- More Group Activity (Marketing)
- Networking (interacting capacity)
- Farmers started IGAs (seedlings)
- Group organizational skills

- Group Dynamics (Farmer, DFEO)
- Farmers KS farming capacity
- Time management (DFO, Farmer, DFEO, ADFO)
- Farmer's presentation skills
- Communication skills (DFO, Farmer)
- Monitoring of activities
- Ability to plan and implement an activity (DFEO, DFO, Farmer)
- Planning of activities
- Appreciation and understanding of planning process
- Proper planning (DFO, ADFO, Farmer)
- Management
- HQ officer's management
- HQ officers reporting/presentation skills
- Use of existing knowledge (Farmer)
- Farmer's skill and knowledge on forestry
- Farmers improved cropping technique
- Nursery management (Farmer)
- Practical skills; e.g. mango grafting (Farmer, DFEO).
- Tree management e.g. watering pest control (Farmer)
- More knowledge on crop husbandry (ADFO, DFEO, Farmer)
- More knowledge on livestock keeping (ADFO, DFEO)
- Technical skills on non-forestry issues (DFEO)

#### Question 2b: Needed to be improved

- DFOs logistic capacity
- DFEOs reporting skills
- Timeliness in reporting
- DFOs monitoring skills
- Monitoring skills (all levels)
- Monitoring
- Record keeping (Farmer)
- Termite control
- Propagation of *melia volkensii* (Farmer)
- Value added production (Farmer)
- Marketing skills (Farmer)
- Farmer efficient use of resources (tree based)
- Enhance group activity (Farmer)
- Selection of profitable tree crop (Farmer)
- Self evaluation skills (Farmer)
- Linking outputs
- Public relations (DFO, DFEO)

#### Question 1: Mainstreaming of FFS method in social forestry extension

- National forest extension strategic plan
- Finalize forest strategic plan
- Prioritize SF in sector reform

- Institutional decision for FFS
- Support finalization of forest policy
- Support critical reform activities
- Increase budget
- Increase budget for social forestry
- Recognition of farmer facilitator for allowances
- Increase budget
- Motorcycle for all DFEOs
- Extension annual work plan
- Rationalize monitoring FFS
- IT training for DFEOs
- Form an FFS unit at FD HQs to backstop field officers
- Create FFS Advisory unit (Secretariat for backstopping)
- Authorization of FFS within forest service
- Linkages with forest industries
- Support pilot districts
- Training of farmer facilitator
- Balancing contents of FFS & current budget
- Cost down of current FFS method
- Reduce no of hours/visit
- Support case studies to generate micro enterprises
- Education & training curricula (KFS and short courses)
- Increase farmer run FFS
- Strengthen DFEO training
- Capacity building among DFEOs
- ToT for all DFEO
- Capacity building in FFS methodology

#### **Question 3: Effective Monitoring**

- Re-examine who bears cost of monitoring
- Simplification of current monitoring format
- Improvement in record keeping & reporting
- Reduce and simplify monitoring sheets
- Only necessary information should be monitored
- Enhance participatory monitoring by the group
- Termly review of indicators
- Regular meeting of DFEO for preparation of monitoring report
- Review of monitoring tools (format)
- Create discussion forums for all stakeholders
- Re-examine current monitoring to find unnecessary parts in the flour
- Demarcation monitoring team among FD, DFO, DFEO
- Delay of report submission field lack the budget transfer
- Re-examine what to do for monitoring, when and by whom
- Timely reporting
- Simplifying the bureaucracy in accessing finances
- Develop a computer based programme using quantitative proxies
- Email sending from DFO to FD

- Staff motivations
- Incentives
- Educating person in charge of monitoring at FD
- Analysis of reports
- Addressing critical issues as they arise
- Effective follow up on reports
- What monitoring is for should be re-examined
- Analyze and discuss monitoring reports

#### 3.4 Way forward

All members in attendance agreed that all the issues raised during the workshop should be incorporated in the final report by the consultant.

#### 3.5 Closing Remarks

In his closing remarks, Mr. Maina, Head Dry lands Section of FD further explained the sector reform in the forestry department. He reiterated the critical actions in the activities supported by the donors e.g. the JICA who is also assisting in the formulation of the reforms. He noted that FFS is an important tool, it is a means to an end and already consideration for it to be incorporated in the FD extension methodology is underway. He noted the cordial relationship between the counterpart and the donor (JICA). He also talked about the difficulty in re-allocating resources to FFS activities only, but observed that it can be anchored within the new transformation system. He further told the gathering that the forestry college is going to be detached from Kenya Forestry Service. For sustainability of the project, FFS methodology is to be mainstreamed within the curriculum.

In his closing remarks, Mr. Kano, the Resident Representative, JICA Kenya Office, thanked all members who attended the workshop for their contributions which were very valuable for this mid-term review. He said that some of the issues raised would be incorporated in the final report and necessary changes made included in the final report by the consultant. Finally Mr. Muriithi, on behalf of the CCF, closed the workshop at about 5.00 p.m.





JAPAN INTERNATIONAL COOPERATION AGENCY

## Survey for Mid-Term Review of Intensified Social Forestry Project (ISFP) in Semi-arid Areas

**Final Report** 

Submitted by:



### **Development Impact Consulting**

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# **List of Abbreviations**

ACCF	-	Assistant Chief Conservator of Forest	
ADFO	-	Assistant District Forest Officer	
AESA	-	Agro-Ecosystem Analysis	
ASALS	-	Arid and Semi-arid Lands	
ASK	-	Agricultural Society of Kenya	
BTC	-	Belgian Technical Cooperation	
CBD	-	Central Business District	
CCF	-	Chief Conservator of Forest	
DFEO	-	District Forest Extension Officer	
DFO	-	District Forest Officer	
DSA	-	Daily Subsistence Allowance	
FAO	-	Food and Agriculture Organization	
FD	-	Forestry Department	
FFS	-	Farmer Field School	
GIS	-	Geographic Information System	
GoJ	-	Government of Japan	
GoK	-	Government of Kenya	
HQ	-	Headquarters	
ICIPE	-	International Centre for Insect Physiology and Ecology	
ICRAF	-	International Centre for Research in Agro - Forestry	
IGA	-	Income generating Activities	
ISFP	-	Intensified Social Forestry Project	
JCC	-	Joint Coordination Committee	
ЛСА	-	Japan International Cooperation Agency	
KEFRI	-	Kenya Forestry Research Institute	
KFMP	-	Kenya Forestry Master Plan	
KFS	-	Kenya Forest Service	
M&E	-	Monitoring and Evaluation	
MENR	-	Ministry of Environment and Natural Resources	
MKEPP	-	Mount Kenya East Pilot Project	
NGO	-	Non-Governmental Organization	
NWFP	-	Non-wood forestry products	
PDM	-	Project Design Matrix	
PRA	-	Participatory Rural Appraisal	

PTD	-	Participatory Technology Development
PS	-	Permanent Secretary
SFTP	-	Social Forestry Training Project
SHG	-	Self Help Group
SOFEM	-	Social Forestry Extension Model Development Project
SPSS	-	Statistical Package for Social Science
ТОТ	-	Trainer of Trainees
UoN	-	University of Nairobi

# 1 INTRODUCTION

The arid and semi arid lands (ASALs) of Kenya cover about 80% of the total land surface and are home to about 25% of the human population. They are characterized by numerous woodlands, bushlands and wooded grasslands, which amount to about 3.7 million ha and have varying potentials in terms of timber and non-wood tree products. These forest formations are at different states of conservation depending on land tenure, management interventions and population pressure and are progressively being degraded and reduced in coverage.

In terms of expansion of forestry development, the ASALs offer the best bet for increasing forest cover and in the production of forestry goods. This is because the high and the medium potential (agricultural) areas which are also the areas of highest population densities in Kenya are already at their thresholds and it is unlikely that significant areas can be set aside in these areas for forestry expansion. For the drylands to fulfill such a role, deliberate efforts must be made in the allocation of developmental resources in addition to articulation of favourable policies.

Presently, under the prevailing conditions of low technology production systems in the ASALs, coupled with the unreliable rainfall regimes, the ASALs are characterized by poor agricultural productivity and high incidences of poverty. The threat to the livelihoods of the inhabitants of the ASALs is thus real, which calls for practical interventions so as to improve the livelihood conditions of the people living in these areas. However, noteworthy is that tree-based production systems have more resilience to the vagaries of weather, and in conditions of improved technological inputs, hold a lot of promise in improving the productivity of the ASALs. If well tapped, the ASALs have the potential to produce wood biomass for the wood based industries, create employment and wealth and indirectly contribute to conservation of the closed canopy forests.

The involvement of the Government of Japan (GOJ) in the forestry sector dates back to the middle 1980's. The initial assistance was through the Social Forestry Training Project (SFTP), which was implemented over the period 1985 to 1997 and had a component of grant aid technical cooperation. The main focus of this project was dryland forestry technology development for tree nursery and tree establishment in the semi-arid areas and provision of training in social forestry. After the expiry of this cooperation, the GOJ provided further support under the Social Forestry Extension Model Development Project (SOFEM) which was implemented for five years ending November 2002.

Some of the challenges that still require to be addressed are development and dispersal of viable dryland forestry technologies for the wider application to the vast ASAL environment; the harnessing of the untapped economic potential of the non-wood forestry products (NWFP); documentation, scientific improvement and application of local tree related technologies; scientific prediction of the productivity of dryland tree species; lack of detailed understanding of the socio-economic factors underlying the present state of the use of the forestry resources in the drylands. This is in addition to the need for identification and operationalization of appropriate farm forestry extension methodology to support and encourage farmers to invest in tree growing and other social forestry activities.

In dryland forestry, existing opportunities include: technologies especially water harvesting, land availability for commercial tree growing, fast growing tree species such as *Melia volkensii* (mukau), fruit species such as *Mangifera indica* (mango, (grafted)), *Carica papaya* (pawpaw), fodder crops such as pods of *Acacia tortilis*, silk production using mulberry, basketry through the use of doum palm; wood carving and soap production using *Azadirachta indica* (neem). Other opportunities in dryland forestry include unexploited commercial NWFP – honey, gum arabic, haenna, myrrh, oils/ resins, and medicinal indigenous knowledge.

To maximize production in dryland forestry and contribute to socio-economic development strengthening of the forest extension service delivery, commercialization of tree growing, development of micro-enterprises, technology transfer, adaptive research, domestication of fast growing tree species, strengthening linkages, waste reduction, marketing information and channels are a prerequisite.

It is in this context that the Government of Kenya (GOK) requested the GOJ to extend technical cooperation to Kenya for a further five (5) years ending 2009 under the Intensified Social Forestry Project (ISFP). The project is under implementation in Kitui, Tharaka and Mbeere districts in Eastern Kenya.

# 2 **PROJECT INFORMATION**

# 2.1 **Project Objectives**

The Intensified Social Forestry Project (ISFP) aims at improving the living standards of rural people in the semi-arid areas while enhancing sustainable environmental conservation. The purpose of the project is to intensify social forestry practices by individual farmers and farmer groups in the semiarid areas. The following are the expected outputs during the course of the 5-year cooperation:

- 1. Institutional and technical capacities for social forestry extension in FD are strengthened at headquarters level.
- 2. Social forestry extension activities among individual farmers and farmer groups are promoted in Kitui, Mbeere and Tharaka districts.
- 3. Farmers and other stakeholders in Kitui, Mbeere and Tharaka districts obtain enough practical knowledge and techniques.
- 4. Information in social forestry extension and related issues is shared among the stakeholders in semi-arid areas.

# 2.2 **Project Monitoring Information**

The Baseline Survey for ISFP was completed in September, 2004. It was designed to provide fundamental information on the status of the baseline data for the monitoring of progress of the project and evaluation of ISFP. Its objective was to identify and record the status of baseline data in accordance with the objectively verifiable indicators of the Project Design Matrix (PDM) of ISFP.

The survey was carried out through a fully participatory approach in Mbeere, Tharaka, Kitui and Nairobi. It included a group survey, a farmer survey, a public survey and a market survey. Both the group survey and the farmer survey were carried out in the three ISFP project districts of Kitui, Mbeere and Tharaka, whereas the public survey and the market survey were extended to cover Nairobi in addition to the three project districts. Sample sizes included a total of 48 groups and 240 farmers for the group survey and the farmer survey respectively, 264 persons for the public survey and 20 marketing outlets for the market survey. The main tool for data collection in all cases was questionnaire, although discussions with group members and their leaders yielded a lot of useful insights on implementation of social forestry activities both in the groups and among individual farmers.

The project has held three Joint Coordination Meetings at which amendments to the PDM were proposed and adopted.

# **3** SURVEY OBJECTIVE AND SCOPE OF WORKS

The purpose of the Mid-Term Evaluation was to examine whether the project was properly producing the desirable effects at the mid-term. Results of the mid-term evaluation were utilized to improve the project strategy as well as learn lessons for similar types of projects.

The project survey, therefore, was undertaken in order to prepare the monitoring information to be used for the evaluation. The Evaluation Study was based on the revised version of the PDM (Version 2) and the Evaluation Grid provided to the Consultant.

### 3.1 Survey Objective

- 1. To organize project information by reviewing related documents and materials, and interviewing the various groups of people concerned.
- 2. To compile the monitoring information in a report for use by the Mid-Term Evaluation Study Team.

# 3.2 Scope of Works

- 1. Prepare the work plan including survey tools through a series of joint meetings with the Coordination Panel of FD, KEFRI, and JICA.
- 2. Collect, analyze, discuss, identify, count and classify the following data/information through interview, field study, discussion and other appropriate data collection methods.

### [Desk Study at FD Headquarter Level]

- 2.1 Review the available project monitoring reports, forest policy and planning documents and assess the project's contribution in elaborating the policy and planning process for forestry development
- 2.2 Assess the progress made by FD towards preparation, piloting and improvement of implementation planning on social forestry extension for the semi-arid districts
- 2.3 Assess the progress made towards establishment of a functional unit for social forestry extension planning, monitoring and evaluation within FD
- 2.4 Identify and classify forestry strategic plan(s), available district guideline(s) and other related plans/guidelines in the forestry sector
- 2.5 At the FD headquarter, determine the total number of extension staff involved in the project implementation and those qualified as farm forestry facilitators
- 2.6 Assess the level of input to the project from the Government of Kenya
- 2.7 Assess the progress of project activities against the initial plan
- 2.8 Assess the appropriateness of management of the project
- 2.9 Assess the appropriateness of project strategy and/or approach
- 2.10 Assess the adequacy of activities and inputs in realizing the expected outputs
- 2.11 Identify and assess the effects of the project on FD and the target areas

2.12 Assess the sustainability of the project from the view points of policy, institution, technical and financial aspects

# [Field studies in Kitui, Mbeere and Tharaka districts]

2.13 A total of 12 farmer groups, 36 target farmers in the surrounding area of the target groups were studied in the survey.

\*Re 1: Number of the farmers/farmer groups studied in each district was:

Mbeere District	:	3 groups and 3 target farmers/group
Tharaka District	:	3 groups and 3 target farmers/group
Kitui District	:	6 groups and 3 farmers/group

The target groups were selected based on Very active/Moderately active/Less active while the target farmers were selected to balance representation of Farmer Facilitator and Normal Farmer

\*Re 2: The 72 farmers in the surrounding area of target groups were selected based on any neighboring farmer who was not a member of the family of the target farmer.

2.14 Estimate the household income of the farmers studied, that was earned through the use and sale of social forestry products since 2004.

\*Re 3: Social forestry products were classified as:

- Tree seedlings (including Fruit tree)
- Wood (timber)
- Fruits, honey and others gained from or used trees/wood lot
- Agricultural/Food crops
- 2.15 For the target farmer groups, using 2004 as base year, classify and determine the quantity and % age change in the following parameters;
  - Number of tree seedlings annually produced on farm
  - Number of trees annually planted on farm
  - Number of individual farmers and farmer groups who introduced highly marketable tree species for seedling production or tree planting on farm
  - Number of individual farmers and farmer groups who newly implemented social forestry activities
  - Number of farmer groups involved in social forestry related group network
  - Number of farmer groups with farmer facilitated by the FD extension staff
  - Number of farmer groups with farmer facilitators
  - Number of field days organized by the farmer groups
  - Number of farmers who attended farmer field days organized by the farmer groups
  - Number of farmers implementing new techniques on their own farms as learnt through their participation in the project
  - Number of farmers who have appreciated the knowledge and techniques provided by the project.

- 2.16 For the 36 target farmers, using 2004 as base year, assess the following:
  - Degree of progress of farmer's knowledge and competence
  - Degree of extension of farmer's knowledge and technique
  - Variation in farmer's confidence
  - Variation in intra-group cooperation
- 2.17 Repeat task 2.15 for the 72 farmers surveyed in the surrounding areas of each target group
- 2.18 At the FD offices in Kitui, Mbeere and Tharaka districts, determine the total number of FD extension staff involved in the project implementation
- 2.19 Determine the number of extension staff involved in the project implementation who are recognized as qualified farm forestry FFS facilitators
- 2.20 Classify and count the number of farmers/farmer groups who disseminated social forestry information to other farmers/farmer groups.
- 2.21 In Nairobi and the target semi arid districts, classify and determine the number of stakeholders who are aware of information on social forestry.

\**Re 4: Randomly select about 90, 40, 30 and 100 respondents from Kitui, Mbeere, Tharaka and Nairobi respectively.* 

- 2.22 Count the number of visitors to the project web site since its launch
- 2.23 Classify and determine the number of other stakeholders who have participated in the project information dissemination forums
- 3. Analyze and arrange the above data/information sheets in accordance with the Evaluation Grid and discuss the output with JICA prior to preparing the 1st Draft Survey Report.
- 4. Present and discuss the 1<sup>st</sup> and 2<sup>nd</sup> Draft Survey Reports at a joint meeting with JICA and the Coordination Panel.
- 5. Prepare and submit the Final Survey Report incorporating the comments made on the Draft Reports.
- 6. Participate in the Mid-Term Evaluation mission in accordance with the Tentative Schedule and undertake the following activities:
  - Attend the planned meetings of the Evaluation Team and take minutes thereof.
  - Organize the Evaluation Workshop at FD headquarters in consultation with the Coordination Panel.
  - Present the 2<sup>nd</sup> Draft Survey Report findings to the workshop and minute the workshop proceedings.
  - Accompany the Evaluation Team on the 2-day field survey to the target areas.
  - Assist the Evaluation Team in preparing the Joint Evaluation Report and Minutes of Meetings on the evaluation.

# 3.3 Organization of the Report

The report is organized in the following manner:

Chapter 1:	Introduction
Chapter 2:	Project Information
Chapter 3:	Survey Objective and Scope of Works
Chapter 4:	Survey Data collection and Analysis Methods
Chapter 5:	Survey Results
Chapter 6:	Discussions on the Survey Results
Chapter 7:	Conclusions and Lessons Learnt
Chapter 8:	Recommendations
List of Annexes	<u>s:</u>
Annex 1:	PDM
Annex 2:	Evaluation Grid
Annex 3:	List of Groups, Target and Surrounding Farmers Interviewed During the Survey
Annex 4:	Questionnaires Used for the Survey
Annex 5:	Survey Data
Annex 6:	Photographs
Annex 7:	Minutes of Meetings Held During the Survey
Annex 8:	Workshop Proceedings
Annex 9:	Project Monitoring Reports

# 4 SURVEY DATA COLLECTION AND ANALYSIS METHODS

#### 4.1 Approach

The Consultant employed a multi-faceted approach which was fully participatory in order to cater for all the requirements of the assignment. The stakeholders, including the farmers and farmer groups, were involved during all the stages of the study process.

The approach for the survey comprised a number of stages which were complementary in sourcing data and information required by the ToR. These included the following:

- a) Preparatory activities
- b) Desk study/ Review of relevant documents and literature at FD Headquarters level
- c) Group/Farmer surveys in Kitui, Mbeere and Tharaka
- d) Stakeholder/public survey in Nairobi, Kitui, Mbeere and Tharaka
- e) Data capture and analysis
- f) Preparation of the 1<sup>st</sup> Draft Survey Report
- g) Discussion of 1<sup>st</sup> Draft Survey Report at a joint meeting with JICA and the Coordination Panel
- h) Preparation of 2<sup>nd</sup> Draft Survey Report
- i) Organization of Evaluation Workshop/Presentation of 2<sup>nd</sup> Draft Survey Report
- j) Preparation of Final Survey Report
- k) Field visits with Evaluation Team
- 1) Preparation of Joint Evaluation Report and Minutes of Meeting on the evaluation

#### 4.2 Detailed Methodology

#### 4.2.1 Survey Areas

The Survey was carried out in Mbeere, Tharaka, Kitui and Nairobi. The group and farmer surveys were carried out in 6 divisions in Kitui, 3 divisions in Mbeere and 3 divisions in Tharaka. The public survey was done in Nairobi, as well as the three project districts of Kitui, Mbeere and Tharaka.

#### 4.2.2 Sampling Procedures

*i)* Group Survey

Number of groups surveyed per district:

Kitui	:	6 groups
Mbeere	:	3 groups
Tharaka	:	3 groups

Total:12 groups

#### *ii)* Farmer Survey

Number of farmers interviewed per district:

Target Farm	ners:			
Kitui	:	3 target farmers per group x 6 groups	=	18 TFs
Mbeere	:	3 target farmers per group x 3 groups	=	9 TFs
Tharaka	:	3 target farmers per group x 3 groups	=	9 TFs
Total	:		=	36 TFs
Surrounding	g Farmers			
Kitui	:	6 surrounding farmers per group x 6 gr	oups=	36 SFs
Mbeere	:	6 surrounding farmers per group x 3 gr	oups=	18 SFs
Tharaka	:	6 surrounding farmers per group x 3 gr	oups=	18 SFs
Total	:		=	72 SFs

#### *iii)* Public survey

The stakeholder/public survey was carried out in Nairobi, Kitui, Mbeere and Tharaka. The distribution was as follows:

Nairobi	-	100
Kitui	-	60
Mbeere	-	30
Tharaka	-	30
Total	-	220

The distribution of the respondents was as follows:

Kitui	-	$10 \times 6 \text{ divisions} = 60 \text{ perso}$				
Mbeere	-	$10 \times 3 \text{ divisions} = 30 \text{ person}$				
Tharaka	-	10 x 3 divisions	=	30 persons		
Nairobi	-	20 in CBD				
	-	20 at Bus Station				
	-	20 at Nairobi University				
	-	20 at Community				
	-	20 in a Suburb				
Sub-total	=	100				

Total number of persons for stakeholder/public survey = 220

## 4.2.3 Survey Organization

The Mid-Term Evaluation Survey was carried out by members of the consultant team. Where necessary, the team sought the support of local research assistants, while all the time collaborating closely with the DFEOs in each division.

#### *i)* Group Survey

The groups interviewed were selected by the Coordination Panel based on criteria of Very Active/Moderately Active/Not Very Active. Using this criteria, 6 groups were selected in Kitui, 3 in Mbeere and 3 in Tharaka as shown in Table 4.1.

District Name	Division Name	Group Name
A) Kitui	Central	Kyeni FFS
	Matinyani	Mutethya wa Kitumbi FFS
	Mutitu	Kyeni Kya Kunikila FFS
	Mwitika	Miti ni Thayu FFS
	Mutomo	Ekuwa FFS
	Mutha	Mwinzi SHG
B) Mbeere	Gachoka	Gachegethiuri FFS
	Siakago	Mutethania FFS
	Evurori	Karimambai FFS
C) Tharaka	Tharaka North	Mukothima FFS
	Tharaka Central	Karang'i FFS
	Tharaka South	Muungano FFS

#### Table 4.1: List of groups interviewed

*Annex 3* gives the group codes, group names, division, location, sub-location and number of members for each group. A sample questionnaire for the group survey is included in *Annex 4*.

#### ii) Farmers' questionnaire survey in Kitui, Mbeere and Tharaka districts

A total of 108 farmers in the three project districts were interviewed during the questionnaire survey, based on the following criteria:

- i) The selection of the individual farmers was based on the groups interviewed in each division. For each group interviewed, the following farmers were selected
  - 3 target farmers
  - 6 surrounding farmers

Therefore, the total number of farmers interviewed per group = 9.

Total number of farmers interviewed in Mbeere	=	27
Total number of farmers interviewed in Tharaka	=	27
Total number of farmers interviewed in Kitui	=	54

In terms of the farmer categories i.e. target and surrounding farmers, the distribution was as follows:

Target farmers Surrounding farmers	=	36 72
Total no. of farmers interviewed	=	108

Annex 3 gives the full list of farmer names, farmer codes, division, location, sub-location and village of all 108 farmers interviewed.

The questionnaire used during the farmer survey was designed to seek the following information:

- i) Household income earned through sale of social forestry products
- ii) Type of social forestry activities practiced by the farmers e.g. establishment of nursery, tree planting, woodlot establishment, etc.
- iii) Application of ISFP FFS enterprises on individual farms
- iv) Evaluation of ISFP FFS extension model/package
- v) Usefulness of techniques learnt through ISFP FFS
- vi) Adoption of mukau planting
- vii) Extension of farmers' knowledge and techniques
- viii) Empowerment of the individual farmers
- ix) Frequency of visits from FD extension officers
- x) Information sharing between farmers/groups
- xi) Constraints to implementation of FFS activities

Sample questionnaires for the target and surrounding farmers' survey are included in Annex 4.

iii) Public survey in Nairobi, Kitui, Mbeere and Tharaka

The public survey was carried out in Nairobi, Kitui, Mbeere and Tharaka in order to establish the level of awareness on social forestry and FFS among the general public in selected towns/centres. Random selection of members of the public in the four districts/areas was used in selecting the respondents. The total number of respondents for the public survey by district is as shown below:

Kitui - 60 -	- (10 x 3 divisions) - (10 x 6 divisions)
	- (10 x 3 divisions)
Tharaka - 30 -	
Mbeere - 30	- (10 x 3 divisions)
Nairobi - 100 -	<ul> <li>20 in CBD</li> <li>20 at the Bus Station</li> <li>20 at Nairobi University</li> <li>20 at Community</li> <li>20 in a suburb (Embakasi)</li> </ul>

# 4.2.4 Compilation and Analysis of Collected Data

Data capture and analysis was done using SPSS for both the group and farmer surveys. Totals, means, ranges, frequencies, percentages etc. were derived and presented in tables, graphs and piecharts included in this report. MS-Excel was also used to capture and analyze data for the public survey and for inputing information gathered from KEFRI and FD staff at Headquarters and the districts, as well as in presentation of graphs and figures from SPSS output.

#### 4.2.5 Preparation of Reports

# Preparation and Discussion of 1st Draft Report

Preparation of the 1<sup>st</sup> Draft Report was done through team effort by members of the Consultant team. The report was presented to and discussed with members of the Coordination Panel at a joint meeting with the Consultant.

# Preparation and Presentation of 2<sup>nd</sup> Draft Report

Thereafter, the 2<sup>nd</sup> Draft Report was prepared and presented during the Stakeholders' Workshop held at Karura FD HQs on 12<sup>th</sup> July 2006, after discussing it in a joint meeting with JICA and the Coordination Panel.

### Preparation of Final Report

Comments and suggestions arising from the  $2^{nd}$  Draft Report and the Stakeholders' Workshop were incorporated into this Final Report and submitted to the Client in both printed copies (5) and soft copies on CD ROM (3).

Photographs, data collection sheets and minutes of all the meetings held under the assignment were also submitted with the Final Report.

### 5 SURVEY RESULTS

The survey was carried out in two parts:

- i) Desk study and review of relevant literature at FD Headquarters level
- ii) Field survey

In addition to the desk study and review of relevant literature at FD HQs level, interviews and questionnaires with KEFRI and FD staff were carried out to corroborate the information obtained, and to add value to the survey. FD staff at the district level including DFOs and DFEOs were also interviewed.

Further, the field survey consisted of the following parts:

- Group survey
- Farmer survey for both target and surrounding farmers
- Stakeholder/public survey.

This chapter presents the results of both the desk study and the field survey. In combination, the desk study and the field survey sought to address various sections of both the Project Design Matrix (PDM) of ISFP and the Evaluation Grid for the Mid-Term Review as required by the ToR.

### 5.1 Results of the Desk Study and Review of Relevant Literature

The desk study and review of relevant literature covered project monitoring documents, policy documents, plans and strategies documents, among others. A list of the documents studied includes:

- i) Forests Act, 2005
- ii) Sessional Paper No. 9 of 2005 on Forest Policy
- iii) Kenya Forestry Master Plan 1995-2020 (KFMP)
- iv) Kenya Forest Service Draft Strategic Plan
- v) Current National Development Plan (2002-2008)
- vi) District Development Plans for Mbeere, Tharaka and Kitui
- vii) Economic Recovery Strategy for Wealth and Employment Creation (2003-2007)
- viii) Poverty Reduction Strategy Paper
- ix) Economic Survey reports
- x) Baseline Survey Report DIC, 2004
- xi) Project Design Matrix
- xii) Project Progress Reports
- xiii) Project Monitoring Documents
- xiv) Monthly Activity and Problem Summaries
- xv) ISFP website
- xvi) Training/Seminar/Workshop reports
- xvii) Study/Research reports for relevant issues in the semi-arid areas
- xviii) Guidelines and plans

The desk study sought information on policy and planning process for forestry development, implementation planning on social forestry extension for semi-arid areas, institutional improvements, as well as the progress made by the project against the initial plans in terms of inputs, management, appropriateness, implementation activities, impact, sustainability, etc. It also sought information on indicators and activities specified in the Project Design Matrix (PDM) of ISFP.

Table 5.1 is a summary of the progress of project outputs of ISFP as obtained from the project monitoring reports.

# Table 5.1: Project Outputs of ISFP

Outputs	Objectively Verifiable Indicators	Progress of Activities	Means o Verificat	f tion
1. Institutional and technical capacities for social forestry extension in Forest Department are strengthened	1.1 A strategy plan on social forestry extension in semi-arid areas is elaborated	<ul> <li>Information of existing forest policy and legislations collected for situation analysis and through GOK-Donor coordination meetings.</li> <li>Evaluation of KEFRI Regional Training on Promotion of Social Forestry.</li> <li>Information Exchange through FD-donor coordination meetings</li> <li>Enactment of Forests Act</li> <li>GIS training course for FD planners to activate policy discussions in FD HQs conducted.</li> </ul>	Project Reports	Monitoring
		• Assisted to formulate the strategic plan for the envisaged Kenya Forest Service (KFS) and prepared the 1 <sup>st</sup> Draft of the strategic plan	Project Reports	Monitoring
		• Prepared and published Problem Guide – Problem Analysis to implement plan to activate policy discussions	Project Reports	Monitoring
		• Conducted a series of sessions for comprehensive policy analysis in FD	Project Reports	Monitoring
		Prepared Extension Operational Guidelines for ISFP	Project Reports	Monitoring
		<ul> <li>Conducted sessions of problem analysis and Farmers Field Schools (FFS) for the 1<sup>st</sup> regional training course</li> </ul>	Project Reports	Monitoring
	1.2 FD prepares plan on district social forestry extension based on existing (ISFP) guideline	<ul> <li>Compilation of draft extension guidelines for field operation. Field operation undertaken among 48 groups in the 3 districts.</li> <li>Prepared Draft Extension Implementation Plans for Kitui, Mbeere and Tharaka districts</li> </ul>	Project Reports	Monitoring
	1.3 FD staff in charge of the extension, who received training course organized by the project, pass the understanding examination	<ul> <li>Implemented technical workshop for project operation. Techniques seminar and facilitation seminar of FFS (TOT) for DFOs and DFEOs in the three districts.</li> <li>Participatory Forest Extension training for DFOs/DFEOs in selected semi-arid districts outside the project area.</li> <li>Counterpart training in Japan-senior FD officers &amp; DFOs</li> </ul>	Project Reports	Monitoring
	1.4 A functional social forestry extension planning, monitoring and evaluation unit	<ul> <li>Clear direction of functional unit at HQs is now visible through problem analysis of policy and examination of road map, extension planning at districts level and FFS trial, M &amp; E at FD level at the initial stage of the Project.</li> <li>Daily coordination between ISFP and related Branches</li> </ul>	Project Reports Project	Monitoring Monitoring
	is established within FD	of FD HQs	Reports	

Outputs	Objectively	Progress of Activities	Means of
	Verifiable Indicators		Verification
Ind       2. Social forestry extension activities among individual farmers and farmer groups are promoted		<ul> <li>Melia volkensii (mukau) propagation technique seminar conducted for FD nursery headmen in Tharaka and Mbeere districts</li> <li>The 48 1<sup>st</sup> generation extension officer run groups selected and promoted through ground working.</li> <li>Participatory planning and site establishments completed for the 48 groups selected and trained through weekly FFS activities</li> <li>Needs assessments for the 48 1<sup>st</sup> generation extension officer run groups were done. Project promotion and participatory planning were also done.</li> <li>Study visiting plan among farmer groups initiated.</li> <li>DFEO workshop for progress and problems analysis in extension activities conducted for the improvement of extension system and guidelines.</li> <li>Questionnaires for the evaluation of extension staff by farmer groups elaborated and tested.</li> <li>Training needs assessment done through DFEO workshop.</li> <li>Back stopping visit/survey carried out by FFS coordinators/instructors and the HQs project management staff for all DFEO under the project operation.</li> <li>Preliminary database for group profile developed.</li> <li>The weekly FFS learning sessions for 22 2<sup>nd</sup> generation extension officer run groups started.</li> </ul>	Project Monitoring Reports
		<ul> <li>Data collection and processing sessions have been conducted by KEFRI field officers and DFEO as special topic to improve field data collection techniques and long term data processing skills of FFS members.</li> <li>5 final sessions (Ballot box exercise, Cost-benefit analysis, PTD analysis, Self-evaluation, Way forward) are conducted for the first 48 groups in preparation for graduation.</li> <li>Facilitator Seminar for FFS (TOT 2) conducted for the DFO, ADFO and DFEO from project areas and 4 neighbouring districts in semi-arid areas and 25 officers graduated.</li> <li>A week OJT for mukau seedling production was carried out in Nuu nursery, Mwingi for 2 FD nursery staff from Tharaka district.</li> <li>Modification and improvement of preliminary group profile databases are on going. Interface and reporting format need more improvement for daily use.</li> <li>New &amp; old group data collection is on going.</li> </ul>	Project Monitoring Reports

Outputs Objectively Progress of Activ		Progress of Activities	Means of		
F	Verifiable Indicators		Verification		
3. Farmers and other stakeholders obtain enough practical knowledge and techniques		<ul> <li>Refresher Workshop, Training of Trainers Course on Farmer Field School Methodology, Technical Workshop for Project Operation has been conducted for DFOs &amp; DFEOs.</li> <li>Interview and Field Visit were conducted for conservation tillage as useful techniques to promote to the farmers</li> <li>On-farm sites have been identified through participatory planning with the groups.</li> <li>Mulberry was bulked in FD nurseries in Mbeere, Tharaka, Kitui, KEFRI-Kitui centre tree nursery and some farmer groups have started it as an enterprise e.g. Mutethania FFS in Siakago.</li> <li>Technical Guide of TIVA demonstration forest was published for technical sharing.</li> <li>Experiments for conservation tillage techniques were established in mukau intercropping plots in Tiva. A second generation group introduced conservation tillage in their host farm PTD</li> <li>Result of conservation tillage experiment was not valid due to severe drought but preliminary result was assessed</li> <li>The identification of required techniques and coordination with other officers are on going through special topic planning for weekly FFS Activities.</li> <li>Reflection sessions were conducted by 48 1<sup>st</sup> generation extension officer run groups for identification of learnt and required topics for FFS sessions.</li> <li>The activities were on going as special topic in weekly FFS Activities.</li> <li>Field days were conducted by 48 groups.</li> <li>Exchange visits were conducted between all 22 2<sup>nd</sup> generation extension officer run groups. The groups visited old groups in same or neighbouring division.</li> <li>1<sup>st</sup> generation Exchange Visit Report has been presented by 20 groups.</li> <li>Tillage techniques have been elaborated.</li> </ul>	Project Monitoring Reports		
		<ul> <li>2<sup>nd</sup> generation Exchange Visit Report has been presented by 6 groups.</li> <li>Plan for mukau intercropping using conservation tillage</li> <li>Preliminary target techniques were identified during the Workshops in Extension Guidelines Formulation and Technical Workshop for Project Operation with DFOs and DFEOs. Result was compiled in "Group Activity Catalogue".</li> <li>District level Exchange Visit Plan between the FFS groups has been prepared by DFO.</li> <li>Exchange visit was conducted between all 48 1<sup>st</sup> generation extension officer run groups. The groups visited another group in same or neighbouring division.</li> </ul>	Project Monitoring Reports		

Outputs	Objectively Verifiable Indicators	Progress of Activities	Means o Verificat	f tion
4. In formation on social forestry extension and related issues is shared among the stakeholders	Number of stakeholders who are aware of information on social forestry extension is increased	<ul> <li>The total number of visitors to the project website was 2161 as at the time of this survey</li> <li>Needs assessments for the 48 1<sup>st</sup> generation extension officer run groups was done. Project promotion and participatory planning was finalized.</li> <li>Provided project articles for the national newspapers.</li> <li>Several types of marketing surveys in Kitui, Mbeere, Tharaka and other ASALs have been implemented.</li> <li>Published the 1<sup>st</sup> and 2<sup>nd</sup> ISFP newsletter for stakeholders.</li> <li>Developed and improved ISFP homepage.</li> <li>Assisted project field visit by Japanese TV programme and Japanese local newspaper. (Programme and an article released in Japan in May - June 2005)</li> <li>Conducted the 1<sup>st</sup> project seminar with stakeholders and prepared the proceedings</li> </ul>	Project Reports	Monitoring
		• Public barazas, field days, and graduations for FFS groups were held for local stakeholders.	Project Reports	Monitoring

The following aspects of the desk study were covered:

### 5.1.1 Contribution of ISFP in elaborating policy and planning process for Forestry Department

See OVI 1.1, Table 5.1.

5.1.2 Progress of FD towards Preparation, Piloting and Improvement of Implementation Planning on Social Forestry Extension for the Semi-Arid Areas

See OVI 1.2, Table 5.1.

### 5.1.3 Progress towards Establishment of a Functional Unit for Social Forestry Extension Planning, Monitoring and Evaluation within FD

See OVI 1.4, Table 5.1.

5.1.4 Identification and Classification of Forestry Policy, Strategic Plan(s), Available District Guideline(s), and other Related Plans/Guidelines in the Forestry Sector

During the Baseline Survey which was carried out in 2004, a review of legislative policy and planning framework for the forestry sector in Kenya was undertaken as part of the survey.

Since then, a number of changes have taken place, notably:

- i) Forest Policy (Sessional Paper No. 9 of 2005) was released.
- ii) The Forest Bill 2005 was passed by parliament in July 2005 and enacted in November as Forests Act 2005. The Forests Act will become operational in 2007.
- iii) Extension Operational Guidelines for ISFP are at an advanced stage of finalization.
- iv) Extension Implementation Plans for the districts are being prepared with the assistance of ISFP. Drafts are ready for Mbeere, Kitui and Tharaka districts.
- v) ISFP assisted in preparation of 1<sup>st</sup> Draft of the Kenya Forest Service (KFS) strategic Plan.

Tables 5.2 - 5.4 give some details of the GoK legislative, policy and planning documents relevant to the forestry sector.

#### Table 5.2: Legislation/ Policy

No.	Document Title	Level	Year	Relevance
1.	Timber Act (CAP 386)	"	1972	Control of the sale and export of timber by means of grading, inspection and marking; control of timber in transit.
2.	Wildlife (Conservation and Management) Act (CAP 376)	"	1976 (Amended 1989)	Conservation of forests within National Parks, National Reserves and Sanctuaries under the jurisdiction of the Kenya Wildlife Service.
3.	Agriculture Act (CAP 318)	"	1980 (Revised 1986)	Promotion of soil and water conservation; prevention of destruction of vegetation.
4.	Science and Technology Act (CAP 250)	"	Revised, 1980	Establishment of research institutes (KEFRI) to carry out research, undertake training, disseminate research findings, develop research policies and priorities
5.	State Corporations Act (CAP 446)	"	Revised, 1987	Establishment of State Corporations
6.	Environmental Management and Coordination Act, 1999	,,	1999	This is an umbrella registration providing for environmental protection and management. Specifically it addresses protection and conservation of forests; biodiversity conservation; conservation of energy and planting of trees or woodlots; environmental studies; environmental restoration and conservation orders; international treaties, conventions and agreements.
7.	Sessional Paper No. 9 of 2005 on Forest Policy	National	2005	Expanded mandate in the management of all types of forests; involvement of forest adjacent communities and other stakeholders in forest management and conservation; forest management planning based on an ecosystem approach; appropriate incentives to promote sustainable use and management of forest resources; establishment of a semi-autonomous Kenya Forest Service.
8.	Forests Act, 2005	National	2005	Establishment of Kenya Forest Service; ownership of forests and right to forest produce; creation and management of forests; community participation; enforcement of the Forests Act.

No.	Document Title	Level	Year	Relevance
1.	Poverty Reduction Strategy Paper (2001- 2004)	National	2001	Raising income opportunities for the poor; development of ASAL areas; improved policy and legal framework for the forestry sector; promotion and development of both wood and non-wood forestry products; commercialization of plantation forests; collaboration with communities in forest management; promotion of farm forestry.
2.	District Poverty Reduction Strategy Paper s (2001-2004)	District	2001	Soil and water conservation; afforestation; forest conservation; energy conservation; promotion of agro-forestry/farm forestry
3.	National Development Plan (2002-2008)	National	2002	Biodiversity conservation; sustainable forestry development and management; stakeholder involvement; recognition and institutionalization of conventions, etc. relating to sustainable indigenous forest management; valuation of forest resources; strengthening research institutions in forestry
4.	District Development Plans (2002-2008)	District	2002	Protection and conservation of forest areas; promotion of agroforestry/farm forestry; environmental management; farmer training; soil and water conservation
5.	Economic Recovery Strategy for Wealth and Employment Creation	National	2003	Development of clear policy; promotion of agro- forestry; community participation in efficient management of forests; private sector participation; alternative and affordable energy sources; afforestation; introduction of environmental education in schools.

### Table 5.3: General Plans/ Strategies

Table 5.4:	: Forestry Plans/ Strategies/	Guidelines
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No.	Document Title	Level	Year	Relevance
1.	Kenya Forestry Master Plan	Departmental (FD)	1994	Enhance the role of the forestry sector in the socio-economic development of Kenya by strengthening the capabilities of the forestry- related agencies, the private sector, the rural people and the NGO's to manage and develop forest resources; contribute to environmental conservation
2.	Technical Orders	Departmental (FD)	1996	Technical instructions/ guidelines on: organization and administration of forests; management of natural forests; management of forest plantations; research and information
3.	Forest Department General Orders	Departmental (FD)	Various	General instructions/ guidelines on forest management e.g. forest products royalties
4.	MENR Strategic Plan	Ministerial	2002	Development, conservation, protection and sustainable management of environmental and natural resources
5.	FD Strategic Plan	Departmental (FD)	2002	Management of natural forests and water catchment areas; development and management of industrial forest plantations; promotion of farm forestry; forest protection; conservation and management of dryland forests; forest policy and legislation
6.	Participatory and Collaborative Forest Management Guidelines (2003) – Draft	Departmental (FD)	2003	Involvement of stakeholders in the management and conservation of multi-purpose natural forest areas
7.	KEFRI Strategic Plan (2005 - 2010)	Departmental (KEFRI)	2004	Farm forestry and dryland forestry identified as major research programme areas; KEFRI put high priority on farm forestry research programme
8.	District Annual Work Plans	District	Every year	Planning, implementation and monitoring of forestry activities in the districts
9.	Extension Operational Guidelines for ISFP	Project (ISFP)	2005	Conceptual framework and support material for implementation of the Intensified Social Forestry (ISFP) extension
10.	District Extension Implementation Plans (2006/2007 - Draft)	District	Every Year	Integration of FFS methodology into normal extension work for the districts. Still in draft form for Mbeere and Kitui.
11.	Kenya Forest Service Draft Strategic Plan (2006 – 2011)	Departmental	2005	Guide to efficient forest management and administration; sets out KFS vision, mission, goals and objectives for the period 2006 – 2011 to ensure achievement of positive outcomes for the forestry sector.

Fig. 5.1 is a diagrammatic representation of the linkages between the various legislative, policy and planning documents in Kenya.



#### Fig. 5.1: Legislative, Policy and Planning Framework for Forestry in Kenya

# 5.1.5 Number of extension staff involved in the project implementation and those qualified as farm forestry FFS facilitators

Those directly involved in project implementation include 5 senior counterpart staff, 3 District Forest Officers (DFOs) in the project districts of Kitui, Mbeere and Tharaka, 3 Assistant DFOs, 17 DFEOs and 1 Technical Assistant (TA). In total, 36 counterpart personnel have been assigned to the project from FD and KEFRI. A total of 29 staff have been trained and qualified as farm forestry FFS facilitators as shown in Table 5.5. More information on the training is shown in Table 5.1 (see OVI 1.3)

Duty Station	Designation	No. trained in FFS methodology
FD HQs	-	4
KEFRI Kitui Centre	Centre Director	1
Kitui	DFO	1
	ADFO	1
	DFEO	9
	ТА	1
Mbeere	DFO	1
	ADFO	1
	DFEO	4
Tharaka	DFO	1
	ADFO	1
	DFEO	4
Total		29

#### Table 5.5: Number of FD staff trained in FFS methodology

ADFO - Assistant District Forest Officer

- DFEO Divisional Forest Extension Officer
- TA Technical Assistant

#### 5.1.6 Level of input to the project from the Government of Kenya and Government of Japan

#### Inputs from GoJ side

- i) Provision of long term and short term experts These include 3 long term experts namely the Chief Advisor, Coordinator and Social Forestry Extension Expert.
- ii) Provision of overseas training for some DFOs and senior FD staff in Forest Management and Forest Extension Method of Japan.
- iii) Budgetary allocation for ISFP total GoJ allocation upto end of June, 2006 is Kshs 48,707,629 (approximately equivalent to USD687,378 at the exchange rate of USD 1 = Kshs 70.86 according to the JICA official exchange rate in May, 2006).
- iv) Provision of equipment such as computer equipment, telephone and radio equipment, motor vehicles, motor cycles, office furniture, generators, video cameras and GPS.
- v) Office renovation at HQs and the districts.

#### Inputs from GoK side

- i) Provision of 5 senior counterpart staff, namely, the Project Director, Project Co-Director, Project Manager, Project Co-Manager and Assistant Project Manager, and other staff in the districts and at the HQs.
- ii) Provision of GoK counterpart budget totaling Kshs 4.9 million by the end of June, 2006. Crucial expenditure items for ISFP include DSA for the staff and fuel and maintenance for the vehicles.
- iii) Provision of office space at FD HQs and in the project districts.

## 5.1.7 Progress of project activities against the initial plan

The Project Monitoring Documents show that for most part, the actual activities have been carried out as planned for all outputs both at FD HQs and in the field. This is shown in the progress of activities reports for each output (*Annex 9*) and in summary Table 5.1. In some cases, however, there were delays in implementation arising from the GoK disbursement system.

### 5.1.8 Appropriateness of management of the project

For the effective and successful implementation of the Project, a Joint Coordinating Committee (JCC) was established to make decisions relevant to the Project. The Joint Coordinating Committee meets when necessity arises and at least once a year in order to fulfill the following functions:

- i) To formulate annual work plan of the Project based on the Plan of Operations
- ii) To review the results of the annual work plan and the progress of the project
- iii) To exchange views and ideas on major issues that arise during the implementation period of the project

Members of the JCC include:

- 1) Chair: Permanent Secretary, Ministry of Environment and Natural Resources.
- 2) Members: Kenyan Side:
  - Desk Officer responsible for JICA, Ministry of Finance
    - Chief Conservator of forests, FD as project Director
    - Director, KEFRI as Project Co-Director
    - Project Coordinator, FD as Project manager
    - Kitui Centre Director, KEFRI as Project Co-Manager
    - Provincial Forest Officer, Eastern Province, FD
    - Head, Farm Forestry and Extension Branch
    - Head Dryland Forestry Branch
    - DFO, Kitui district, FD
    - DFO, Mbeere district, FD
    - DFO, Tharaka district, FD
    - Relevant personnel accepted by Chairperson, if necessary

#### Japanese Side

- Chief Advisor
- Project Coordinator
- Expert(s)
- Resident Representative of Kenya Office, JICA
- Relevant Expert(s) and staff members accepted by Chaiperson.
- 3) Official(s) of Embassy of Japan in Kenya may attend the Committee meetings as observer(s).

The management chart is shown in Chart 1.





#### 5.1.9 Appropriateness of project strategy and / or approach

The project has adopted the Farmer Field Schools strategy/approach to achieve its objectives. The concept and practice of FFS was first introduced to Kenya in 1996 by FAO after it was developed and successfully applied in South East Asia.

The FFS strategy/approach involves training and implementation of several social forestry enterprises to the farmer groups at the host farm through facilitation by extension officers, and subsequent implementation of the same on individual farms. There are a total of 122 farmer groups in the 3 project districts. This figure includes 48 1<sup>st</sup> generation extension officer run groups, who have graduated, plus 22 2<sup>nd</sup> generation extension officer run groups and 52 1<sup>st</sup> generation farmer run groups, who are still undergoing the FFS process.

The farmers/farmer groups are also expected to share the knowledge and techniques they gain through FFS to other farmers/farmer groups during various events such as field days, graduations, exchange visits and tours, barazas, etc. So far, 175 such functions have been conducted by the 1<sup>st</sup> generation of 48 extension officer run FFS groups, with an average turn up of about 90 persons per function.

Farmer facilitators are also trained from each group, with the responsibility of establishing new FFS schools and training them with regular backstopping from the extension officers. A full list of farmer facilitators is given in section 5.2.8, Table 5.16. ISFP has successfully applied the FFS approach in the project areas, and both implementers and beneficiaries agree that it is an appropriate method of farm forestry extension.

Monitoring of the project activities is done at various levels. Some of the reports generated from the monitoring are shown in Table 5.6.

Person(s) Responsible	Type of Report
Farmers	1. Group weekly report
	2. Group Fund Management Sheet
DFEOs	1. Farmer Facilitator Evaluation Report
	2. Monthly Implementation Plan
	3. Monthly Report
	4. Monthly Problem Report
	5. Monthly Backstopping Report
	6. Other Reports
DFOs	1. Monthly Report
	2. Monthly Implementation Sheet
	3. Other Reports
Project Officer	1. Monthly Activity and Problem Summary
	2. Tree Planting Report Summary
	3. Seedling Production Report Summary
	4. Activity Evaluation Questionnaire Summary
	5. Group Visiting Roster Summary
	6. Other Reports Summary

#### Table 5.6: Reports generated during monitoring of FFS activities

# 5.1.10 Adequacy of activities and inputs in realizing the expected outputs

Both the GoJ and the GoK had specific inputs to the project, as shown in section 5.1.6. The activities of the project for realizing the expected outputs are shown in the PDM (*Annex 1*).

The desk study and interviews with key persons concerned with project implementation established that the activities and inputs were adequate for realizing the expected outputs. However, it emerged

that the monitoring workload is a bit heavy for the time allocated, and it was proposed that the reporting schedules should be reviewed to harmonize the expected activities with the available time.

# 5.1.11 Effects of the project on FD and the target areas

This is discussed in the Evaluation Grid under "Relevance" (*Annex 2*). It shows that among other things, technical capacity on social forestry extension has been built in FD staff. At the same time, farmers have acquired knowledge and techniques for social forestry enterprises, and some have started to enjoy the benefits such as cash from sale of seedlings, seedlings for own use and improved food harvests in the short term, and are expecting other benefits such as fruits, firewood, poles, timber, honey, etc in the long term. Other effects include empowerment for both FD staff and the farmers/farmer groups, as discussed under sections 5.2.12 and 5.3.12.

# 5.1.12 Sustainability of the project from the view points of policy, institution, technical and financial aspects

Sustainability of the project is discussed at length in the Evaluation Grid under "Sustainability" (see *Annex 2*). Details of the policy, institution, technical and financial aspects are given under various sections above.

### 5.1.13 Information sharing on social forestry extension and related issues among the stakeholders

ISFP holds regular meetings at various levels to share information on social forestry and related issues. They also held a project seminar in February 2006. Regular stakeholders are shown in Table 5.7, along with other stakeholders who attended the ISFP project seminar held on  $9^{\text{th}}$  -10<sup>th</sup> February 2006.

A) Stakeholders regularly involved in ISFP		
No.	Name of Institution/Organization	
1.	Forest Department	
2.	Kenya Forest Research Institute (KEFRI HQs, Muguga)	
3.	Kenya Forest Research Institute (KEFRI, Kitui Centre)	
4.	JICA Kenya Office	
5.	Ministry of Agriculture	
6.	DFOs from Kitui, Mbeere Tharaka	
7.	ADFOs from Kitui, Mbeere Tharaka	
8.	DFEOs from Kitui, Mbeere Tharaka	
9.	Farmer groups	
10.	Local administration	
B) Ot	her stakeholders who attended ISFP project Seminar	
No.	Name of Institution/Organization	
1.	FAO-Nairobi	
2.	ICIPE	
3.	ICRAF	
4.	Netherlands	
5.	Embassy of Finland	
6.	Min. of Forestry & Reclamation, Lesotho	
7.	Ministry of Agriculture and Forestry, South Sudan	
8.	Forestry, Lesotho	
9.	DFO Blantyre, Malawi	
10.	Forestry Training Institute, Arusha, Tanzania	
11.	Nyabyeya Forestry College, Uganda	
12.	Oedza, Malawi	
13.	Rwanda Agricultural Research Institute	
14.	Forest Extension, Moshi, Tanzania	
15.	RPSVD	

#### Table 5.7: Names of institutions/ organizations participating in information dissemination on ISFP

16.	Mozambique
17.	DCCFF, Tanzania
18.	Elangata Wuas Ecosystem
19.	Nari, Eritrea
20.	Oromia Region, Ethiopia
21.	Lusaka Zambia
22.	Minanet Bujumbura Burundi
23.	Wondo Genet College of Forestry, Ethiopia

The other important avenue of information sharing established by the ISFP is a project website, <u>http://www.isfp-fd.org</u>. By the end of June, 2006, 2161 people had visited the website. The information contained in the website includes:

- i) Introduction
  - Background
  - Project outline
  - PDM
  - Project organization
  - Plan of operations
  - Maps
  - Contacts
- ii) FD homepage (under preparation)
  - Extension Branch
  - Dryland Branch
- iii) ISFP core activities
  - FD capacity development
  - Farm Forestry Field School
  - Data collection/analysis
  - Technology/demonstration development
- iv) Related activities
  - Regional training
  - CDM forum in Japan
- v) Publications
  - Reports
  - Guidelines
  - FFS study guide
  - Technical guidelines
  - Newsletter
  - Brochure
- vi) Related links (under preparation)

A channel for feedback, questions and answers is provided through <u>info@isfp-fd.org</u>. ISFP also provides newsletters and technical guides in addition to the website. Posters have also been developed.
## 5.1.14 Constraints for the implementation of the project

One of the constraints seen to affect the implementation of the project was the lengthy disbursement process of GoK funds allocated to the project. Others collected during interviews with various implementing staff are shown in Table 5.8 as vocalized by the different respondents.

	FD	DFO	DFEO	KEFRI	Japanese Experts
Monitoring	<ul> <li>Too much paper work-reports</li> <li>Delays in communication</li> <li>Delays in receiving field reports.</li> </ul>	<ul> <li>Large no. of groups to visit</li> <li>Time constraints due to other projects e.g. MKEPP (Tharaka)</li> </ul>	<ul> <li>Contact time is very intense during FFS, leading to time constraints</li> <li>Overloading of ISFP activities</li> </ul>		• Time constraints for visiting the field due to combined roles for office and field
Extension		Insufficient logistical support e.g. lack of fuel due to low funding from counterpart budget	<ul> <li>Motorbike breakdown</li> <li>Insufficient logistical support e.g. lack of fuel</li> <li>Long distances to the groups</li> </ul>	<ul> <li>Time constraints for extension officers</li> <li>Contact time very intense</li> <li>No incentives for farmers to undertake extension</li> </ul>	• Imbalance between FFS and time allocated to FFS
Budget	<ul> <li>Budgetary delay of counterpart funds - adjusting to new system (GFS)</li> <li>Rigid itemization of the budgetary</li> </ul>		• Low financial support from GoK	• Sharing of vehicle with other officers	<ul> <li>Insufficient C/P fund for extension</li> <li>Decreasing JICA budget over the project period</li> </ul>
Miscellaneous	Issues of training for extension officers		<ul> <li>Cumbersome procurement procedures</li> <li>Language problem hindering progress</li> <li>Low level of education</li> </ul>	Many assumptions which hamper growth	<ul> <li>Impacts of KFS on the project still not clear</li> <li>Forest Policy depends greatly on external factors</li> </ul>

 Table 5.8: Constraints mentioned by respondents for implementation of the project

## 5.2 Results of Groups' Survey in Kitui, Mbeere and Tharaka

The groups' survey was carried out in the three project districts of Mbeere, Tharaka and Kitui. For every division surveyed, 1 group was interviewed. The number of divisions and groups in each district are shown in Table 5.9. The full list of the groups interviewed is given in *Annex 3*.

District	Total No. of Divisions per District	No. of divisions surveyed	No. of groups interviewed
Kitui	10	б	6
Mbeere	4	3	3
Tharaka	3	3	3
Total	17	12	12

Table 5.9:	No. of	grouns	visited	during	the	survey
1 abic 5.7.	110.01	groups	visitu	uuring	unc	Survey

The results of the groups' survey are presented in the following sections:

## 5.2.1 Group Income from FFS activities

The survey established without doubt that there has been positive change in the income levels for the groups arising from FFS activities. The most income from group FFS activities was realized in Mbeere, as can be seen in Table 5.10. The biggest percentage increase between 2004 and 2005 was seen in Tharaka, followed by Kitui, and finally Mbeere [calculated as the difference (income in 2005 – income in 2004)/income in 2004]. The biggest contributor to the increased income in all the 3 districts is seedlings, as can be seen in Fig. 5.2.

District	Total income (Kshs)							
	Before FFS (2004) After FFS (2005) % Increase							
Kitui	2,000	15,410	670					
Mbeere	7,500	20,000	167					
Tharaka	1,316	11,072	741					

Table 5 10.	Total sugar	·	TEC and		J	hafana and	after FFC
1 able 5.10:	Total group	meome from	I FFS act	ivities by (	uistrict,	before and	alter rrs

Fio	5 2.	Contribution	of FFS	activities	to	oroun fund	1
rig.	J.2.	Commonitor	UTTO	ucuvuies	w	group junu	



## 5.2.2 Number of tree seedlings annually produced on group nurseries

Five (5) groups out of the total twelve (12), representing 42 %, did not own group nurseries before FFS. In comparison, all the groups surveyed (100%) now own group nurseries. Table 5.11 shows this trend.

District	Group Name	Division	Nursery Ownership (Yes/No)	
	_		Before FFS	After FFS
Mbeere	Mutethania	Siakago	Yes	Yes
	Gacegethiuri	Gachoka	Yes	Yes
	Karima Mbai	Evurore	Yes	Yes
Tharaka	Mukothima FFS	Tharaka North	Yes	Yes
	Karangi FFS	Tharaka Central	Yes	Yes
	Muungano FFS	Tharaka South	No	Yes
Kitui	Kyeni kya kunikila	Mutitu	No	Yes
	Mwinzi FFS	Mutha/Ikutha	No	Yes
	Kyeni FFS	Kitui Central	Yes	Yes
	Ekuuwa FFS	Mutomo	Yes	Yes
	Miti ni thayu	Mwitika	No	Yes
	Mutethya wa Kitumbi	Matinyani	No	Yes

Table 5.11:	Nursery ownership	by groups,	before and	after FFS
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The number of seedlings produced in the group nurseries at the beginning of and during FFS (2004 and 2005 respectively, are shown in Table 5.12. The highest percentage increase in average number of seedlings produced by the groups was realized in Kitui, followed by Tharaka then Mbeere (245.0%, 186.5% and 157.3% respectively). The % increase is given by the difference (seedlings in 2005 – seedlings in 2004) divided by seedlings in 2004.

District		Total number of seedlings produced in group nursery								
	D	During FFS (2005)Beginning of FFS (2004)% increase								
	Tree	Fruit	Total	Tree	Fruit	Total				
Kitui	8,258	2,524	10,782	1,000	2,125	3,125	245.0			
Mbeere	6,526	3,041	9,567	2,678	1,040	3,718	157.3			
Tharaka	9,804	1,575	11,379	3,710	262	3,972	186.5			

#### Table 5.12: Total number of seedlings produced in group nurseries

Figs 5.3 (a-c) show the total number of tree and fruit seedlings produced in group nurseries in Kitui, Mbeere and Tharaka respectively.





Fig. 5.3 (b): Average number of seedlings produced in group nurseries, Mbeere







## 5.2.3 Number of trees annually planted on group farm

Prior to FFS, only 2 out of the 12 groups interviewed were planting trees as a group (Karima Mbai FFS in Mbeere and Mwinzi FFS in Kitui). However, all the 12 groups have been planting trees during FFS.

District	Group Name	Division	Tree Planti	ng (Yes/No)
			Before FFS (2004)	After FFS (2005)
Mbeere	Mutethania FFS	Siakago	No	Yes
	Gacegethiuri FFS	Gachoka	No	Yes
	Karima Mbai FFS	Evurore	Yes	Yes
Tharaka	Mukothima FFS	Tharaka North	No	Yes
	Karangi FFS	Tharaka Central	No	Yes
	Muungano FFS	Tharaka South	No	Yes
Kitui	Kyeni Kya Kunikila	Mutitu	No	Yes
	Mwinzi FFS	Mutha/Ikutha	Yes	Yes
	Kyeni FFS	Kitui Central	No	Yes
	Ekuuwa FFS	Mutomo	No	Yes
	Miti ni Thayu FFS	Mwitika	No	Yes
	Mutethya wa Kitumbi	Matinyani	No	Yes

## Table 5.13: Tree planting activities by groups

Hardly any farmer groups were planting trees before FFS. Then, most of the trees planted since the beginning of FFS were planted in 2004 as part of the woodlot, fruit orchard, intercropping and fodder bank enterprises. Thereafter, very few trees were planted in 2005, primarily because the only group land was given to the groups by the host farmers, and no more land was available for more tree planting. Therefore, the few trees planted in 2005 were for replacing those in the enterprises that had died.

Table 5.14 shows the total number of trees planted by the groups per district during FFS (2005), at the beginning of FFS (2004) and before FFS (2003). The last column shows the percentage increase in planted trees before FFS (2003) and the project period (2004 and 2005). The comparison is between the total trees and fruits planted in 2003 and the average number of trees and fruits planted in 2004 and 2005.

The reason for using this formula is that since farmers are supposed to learn techniques and apply them to their own farms, the land used for pilot farms is not so big and therefore only a limited number of trees can be planted there. At the same time, while the number of trees planted increased after intervention by the project in 2004, in 2005 the farmers were supposed to mainly observe and tend to them, carry out enrichment planting and do additional planting in any unused spaces.

The highest number of planted trees among the groups was observed in Kitui, followed by Mbeere and lastly Tharaka. However, only one group planted trees in 2003 (Ekuwa FFS, one neem tree). Most of the trees were planted at the beginning of FFS (2004) during the enterprises such as woodlots and fruit orchards. In Tharaka, many of the trees planted in 2004 at the beginning of FFS died due to persistent drought and lack of water, hence the high proportion of replacement of the trees in 2005. The situation is shown in Figs 5.4 (a-c), which shows the average number of trees and fruits planted by district.

Table 5.14: Number of trees and fruits planted by the groups during, at the beginning and before FFS

District		Total trees and fruits planted by groups						
	During FFS (2005) - A	Beginning of FFS (2004) - B	Before FFS (2003) - C	Average of 2004 and 2005 D=(A+B)/2	% increase (D-C)/C x 100			
Kitui	139	164	1	151.5	15,050			
Mbeere	26	129	0	77.5	-			
Tharaka	23	57	0	40.0	-			



Fig. 5.4(a): Average number of trees and fruits planted by groups, Kitui

Fig. 5.4(b): Average number of trees and fruits planted by groups, Mbeere



Fig. 5.4(c): Average number of trees and fruits planted by groups, Tharaka



# 5.2.4 Number of farmer groups who introduced highly marketable tree species for seedling production or tree planting on farm

The number of groups who had produced seedlings of highly marketable tree and fruit species (mukau, neem and eucalyptus for the former and grafted mangoes for the latter) are shown in Table 5.15(a), while those who had planted trees of the same species are shown in Table 5.15(b). In all cases, there was an increase in the number of groups who produced seedlings of these highly marketable species, except for mukau in Kitui where the number of groups reduced from 2 to 1. Neem was the most common of the three tree species (seedlings).

Only one neem tree was planted by Ekuwa FFS in Kitui in 2003. None of the other groups planted trees in 2003. Mwinzi FFS had a lot of neem and mukau woodlot, but they were planted much earlier during a different programme under Belgian Technical Cooperation (BTC).

Produced	Species	Kitu	Kitui (6)		Mbeere (3)		Tharaka (3)	
seedlings		Beginning	During	Beginning	During	Beginning	During	
		of FFS	FFS	of FFS	FFS	of FFS	FFS	
		(2004)	(2005)	(2004)	(2005)	(2004)	(2005)	
Trees	Mukau	2	1	0	2	0	0	
	Neem	0	3	0	2	0	3	
	Eucalyptus	0	1	0	2	0	1	
Fruits	Grafted mangoes	0	2	0	2	1	2	

Table 5.15(a): Groups who had produced seedlings of highly marketable species at the beginning of, and during FFS

Tuble elle (b). Groups who had planted thees of highly had here species at the segmenting of and during the
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Planted	Species	Kitu	Kitui (6) Mbeere (3)		Tharaka (3)		
trees		Beginning	During	Beginning	During	Beginning	After
		of FFS	FFS	of FFS	FFS	of FFS	FFS
		(2004)	(2005)	(2004)	(2005)	(2004)	(2005)
Trees	Mukau	4	2	1	2	3	2
	Neem	1	1	0	0	0	0
	Eucalyptus	3	1	1	0	0	0
Fruits	Grafted mangoes	4	3	1	1	2	2

## 5.2.5 Number of farmer groups who newly implemented social forestry activities

As well as the 7 groups who had nurseries and the 2 who were planting trees as a group before FFS, all the groups have introduced new social forestry activities such as woodlot for timber, woodlot for poles and firewood, fruit orchard, mukau (or other) intercropping, fodder bank and special activities including IGAs. In addition, all the groups who had no nursery before FFS have since established group nurseries.

## 5.2.6 Number of farmer groups involved in social forestry related group networking

None of the groups are involved in social forestry related group networking. However, all the groups indicated that they are interacting with other farmers/farmer groups. The most common form of interaction was found to be the field day, during which groups and individual farmers were invited by the host groups and shown various social forestry techniques. At the same time, all the groups have farmer facilitators who are active in establishing and facilitating new farmer schools in the FFS model/package. Common techniques facilitated include tree nursery establishment and management, tree planting and management, establishment of woodlots and fruit orchards, grafting, AESA and IGAs.

## 5.2.7 Number of farmer groups with farmers facilitated by the FD extension staff

All the groups that were visited during the survey have had their groups facilitated by the FD extension staff, and have received extension visits as frequently as once every week. In total, 48 1<sup>st</sup> generation extension officer run groups were facilitated by FD, while another 22 2<sup>nd</sup> generation extension officer run groups are currently being facilitated by the FD extension staff (total 70 groups).

## 5.2.8 Number of farmer groups with farmer facilitators

Total number of trained farmer facilitators is 138. Out of these, 104 opened new FFS schools. Table 5.16 shows the groups and numbers of all the farmer facilitators who opened new FFS schools, including those not visited during the survey.

<b>Table 5.16:</b>	List of farmer	facilitators who	o opened new	FFS schools
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District	Division	Name of FFS	No. of farmer facilitators
Mbeere	Evurori	Kariru	2
		Thara Mbere	2
		Karima Mbai	2
	Siakago	Kwirutira	4
	C	Mutethania	4
	Gachoka	Kabuguri	4
		Gachegethiuri	2
		Kwa Macembe	2
	Mwea	Kanyonga	2
		Kalumaita	4
		Ndia Ndaasa	2
Tharaka	Tharaka North	Kugia kwa Nthaka	2
		Kiriti	2
		Mukothima Kagunda	2
	Tharaka Central	Ntithini	2
		Mwendantu	2
		Karangi	2
	Tharaka South	Muungano	2
		Nturubani	2
		Utumi	2
Kitui	Mutonguni	Koma	2
		Mukuyuni	2
	Matinyani	Kalia Kithito	2
		Mutethya	2
		Mutethya wa Kitumbi	2
	Kitui Central	Kyeni	4
		Kithambangii	2
	Chuluni	Uthasyo	2
		Ngenda	4
		Kilumu	2
	Yatta	Manyaa	2
		Wasya wa Iveti	4
	Mutomo	Ekuwa	2
		Twone Mbee	2
		Tuituke	4
	Ikutha	Kyeni kya Iveti	4
		Mwinzi	2
		Kwiliwa Nokwo Kumanya	2
	Mutitu	Kyeni Kya Kunikila	2
		Wikwatyo wa Miambani	2
	Mwitika	Kyemea	2
		Miti ni Thayu	2
		Mukilye	2
		Total	104

# 5.2.9 Number of field days organized by the farmer groups

All the 48 1<sup>st</sup> generation extension officer run groups were expected to hold a total of 3 field days each over the 1 <sup>1</sup>/<sub>2</sub> years of FFS. Graduation days also serve as fora to share information with others. Farmers, farmer groups and the general community participate and are educated on various aspects of social forestry. All together, a total of 175 such functions were held over the same period. However, the team did not establish how many participants turned up for each function.

## 5.2.10 Number of techniques employed by farmer groups trained and/or instructed through FFS

Before FFS, very few social forestry techniques were employed by the farmer groups. For example, in Kitui only 1 group was practicing cropping with improved techniques (under a different project), while 2 had group nurseries. In Mbeere, 1 group was practicing intercropping and 2 had group nurseries. In Tharaka, only 1 group had a group nursery (Table 5.17 (a)). This has changed drastically, and the number of techniques has increased. The techniques newly practiced by groups in Kitui included (mukau) intercropping, establishment of woodlots, fruit orchard, and IGAs. In Mbeere they included cropping with improved techniques, establishment of woodlots, tree fodder bank, fruit orchard and IGAs. In Tharaka, cropping with improved techniques, (mukau) intercropping, establishment of woodlots, fruit orchard by the groups. (Table 5.17 (b)).

#### Table 5.17 (a): Techniques practiced by groups before FFS (2004)

Enterprise	Before FFS (2004)				
	Kitui (6)	Mbeere (3)	Tharaka (3)		
Cropping with Improved techniques	1				
Intercropping (Planting trees with Crops)		1			
Woodlot for timber					
Woodlot for pole & firewood					
Tree Fodder Bank					
Fruit Orchard					
Tree Nursery	2	2	1		
IGAs					

#### Table 5.17 (b): Techniques practiced by groups during FFS (2005)

Enterprise	After FFS (2005)				
	Kitui (6)	Mbeere (3)	Tharaka (3)		
Cropping with Improved techniques	4	1	2		
Intercropping (Planting trees with Crops)	4	2	2		
Woodlot for timber	4		1		
Woodlot for pole & firewood	2				
Tree Fodder Bank		1			
Fruit Orchard	5	1	3		
Tree Nursery	6	2	3		
IGAs	1	1			

Majority of the groups interviewed indicated that they were getting enough practical knowledge and techniques, although a number of them would like more assistance with some of the techniques such as propagation of mukau and grafting of mangoes. Others indicated that they would need help with special topics and income generating activities.

# 5.2.11 Number of farmer groups who appreciate knowledge and techniques provided by the project

The groups have shown a lot of appreciation of the FFS knowledge and techniques. Fig. 5.5 shows the various knowledge and techniques that the groups found to be useful (out of a total of 6 groups in Kitui, 3 in Mbeere and 3 in Tharaka). Not only are the techniques many in number, but they are also widely practiced. In all the three districts, grafting and nursery techniques occupy a position of prominence among the various techniques. Tree planting techniques (including establishment of woodlots), improved cropping and Agro-Ecosystem Analysis (AESA) were also well appreciated.

Fig. 5.5: Appreciation of FFS knowledge and techniques



# 5.2.12 Empowerment of the groups

One of the effects of FFS on the groups is empowerment. During the questionnaire survey, the group members were asked to assess their situation before and after FFS as poor, fair or good in terms of several empowerment aspects such as by-laws, self confidence, etc (see Group Questionnaire, Annex 4).

The results show that the groups/group members have experienced a lot of improvement and are more empowered than before. For example, in Kitui the percentage of total scores for poor, fair and good was 69%, 30% and 1% respectively before FFS, compared to 6%, 31% and 63% respectively after FFS. This means that a lot of people have grown from poor to fair and good, and also from fair to good. The same trend was observed in Mbeere and Kitui, as shown in Fig. 5.6. In the case of Mbeere, there was no score for "poor" after FFS.



Fig. 5.6a: Empowerment of the groups, self assessment, Kitui, Mbeere, Tharaka

In addition, the DFEOs were asked to assess the changes in empowerment in the groups before and after FFS, using the same criteria. In this case, most of the groups were mostly "poor" before FFS (58.0% in Kitui, 72.2% in Mbeere and 67.3% in Tharaka), while most of the groups were "good" after FFS (75.4% in Kitui, 79.6% in Mbeere and 78.8% in Tharaka. None of the groups scored "poor" in any empowerment aspect after FFS.



Fig. 5.6b: Empowerment of the groups, assessment by DFEOs, Kitui, Mbeere, Tharaka

The DFEOs were also asked to assess themselves using a separate list, but on a similar rating of "poor", "fair" and "good". The results of the self assessment are shown in Fig. 5.7. They show marked improvement from mostly "fair" (71.6% in Kitui, 61.7% in Mbeere and 46.7% in Tharaka), to mostly "good" (90.8% in Kitui, 92.6% in Mbeere and 95.5% in Tharaka).

Fig. 5.7: Empowerment of DFEOs, self assessment, Kitui, Mbeere, Tharaka



## 5.3 Results of Farmer Survey in Kitui, Mbeere and Tharaka

The farmer survey was carried out for a total of 36 target farmers and 72 surrounding farmers. The criteria for selection of the farmers was done as follows:

Target farmers

3 target farmers were interviewed per group:

Farmer 1:	Host Farmer
Farmer 2:	Farmer Facilitator
Farmer 3:	Ordinary Group Member (not host farmer or farmer facilitator)

Number of target farmers interviewed for each district was as follows:

Kitui:	3 target farmers x 6 groups	=	18 target farmers
Mbeere:	3 target farmers x 3 groups	=	9 target farmers
Tharaka:	3 target farmers x 3 groups	=	9 target farmers
Total:		=	36 target farmers

## Surrounding farmers

6 surrounding farmers were interviewed per group.

The surrounding farmers were selected based on any neighbouring farmer who is not a member of the family of the target farmers.

Number of surrounding farmers interviewed for each district was as follows:

Kitui:	6 surrounding farmers x 6 groups	=	36 surrounding farmers
Mbeere:	6 surrounding farmers x 3 groups	=	18 surrounding farmers
Tharaka:	6 surrounding farmers x 3 groups	=	18 surrounding farmers
Total:		=	72 surrounding farmers

## 5.3.1 Contribution of FFS activities to household income

One of the expected impacts of ISFP was that the enterprises facilitated through FFS, when practiced by the farmers, would make an increased contribution to the household income compared to the period before the project. This was seen to be the case, as is illustrated in Fig. 5.8. In both Mbeere and Kitui, the observed increase for all farmers (both target and surrounding farmers combined) was found to be 2%. Much of this increase has been contributed by the sale of seedlings, which are able to give quick returns due to the short period required to raise seedlings. In Tharaka, however, there was no increase in the contribution of social forestry as a percentage of the total household income. It was noted that many of the farmers in Tharaka did not sell many of their seedlings in 2005, partly because of the shortage of rains during the main tree planting season.





Fig. 5.8a (ii): Kitui contribution to HH income, after FFS



Fig. 5.8b (i): Mbeere contribution to HH income, before FFS



Fig. 5.8b (ii): Mbeere contribution to HH income, after FFS



### Fig. 5.8c (i): Tharaka contribution to HH income, before FFS



Fig. 5.8c (ii): Tharaka contribution to HH income, after FFS



Apart from the cash benefits to the farmers, there were several non-cash benefits which they said they were getting from the social forestry activities they were practicing, such as seedlings for own use, fodder for their animals, fruits, firewood, poles, honey, etc. The most common non cash benefit was found to be firewood for both target and surrounding farmers in Kitui, Mbeere and Tharaka. A comparison of percentages of farmers benefiting before and after the project is given in Figs a-c. It shows that the most common benefits for Kitui farmers were firewood, fruits, poles and honey. There was a general increase for Kitui target and surrounding farmers for seedlings, fodder, fruits, seeds, timber, firewood, poles and honey. There was no increase in farmers benefiting from charcoal (surrounding farmers only).

In Mbeere, the most common benefits were timber, firewood and poles for both target and surrounding farmers. There was an increase in percentage of farmers benefiting from seedlings, fodder and fruits for target farmers, and in fruits, timber and firewood for surrounding farmers.

In Tharaka, the most common benefits were firewood, poles, fruits and seeds. The only increase was for honey and seedlings for target farmers and seedlings for surrounding farmers.





Fig. 5.9b: Non-cash benefits from SF activities, Mbeere







# 5.3.2 Nursery ownership by individual farmers

The percentage of target farmers and surrounding farmers who owned individual nurseries before and after FFS are compared in Fig. 5.10 (a-c) for all three districts. The general trend was for target farmers to show an increase in those with nurseries, which is not necessarily true for the surrounding farmers, who in some cases showed negative or no increment. Percentage wise, Kitui had an increase of 34% and 27% for target and surrounding farmers respectively, for Mbeere it was 45% for target and 0% for surrounding farmers, while for Tharaka it was 44% for target farmers and -6% for surrounding farmers.





Fig. 5.10 b: Nursery ownership, Mbeere



Fig. 5.10c: Nursery ownership, Tharaka



## 5.3.3 Number of tree seedlings annually produced on individual farms

Average seedlings (both tree and fruit) produced per farmer type in the 3 districts before and after FFS are shown in Fig. 5.11. A summary of total seedlings for target and surrounding farmers is provided in Table 5.18a-b below. Table 5.18c shows the percentage increase in number of seedlings planted in 2005 compared to 2004.

	During FFS (2005)			Before FFS (2004)		
	Tree	Fruit	Total	Tree	Fruit	Total
Kitui	6,179	3,235	9,414	3,128	232	3,360
Mbeere	297	272	569	43	79	122
Tharaka	4,057	384	4,441	3,388	89	3,477

 Table 5.18a: Number of seedlings annually produced on individual farms (target farmers)

Table 5.18b:	Number of seedlings	annually produced of	on individual farms	(surrounding farmers)
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	During FFS (2005)			Before FFS (2004)		
	Tree	Fruit	Total	Tree	Fruit	Total
Kitui	11,724	5,323	17,047	2,686	168	2,854
Mbeere	0	65	65	5	110	115
Tharaka	563	50	613	1,265	59	1,324

 Table 5.18c:
 Percentage increase in number of seedlings annually produced on individual farms (both target and surrounding farmers)

District	Total see	dlings for Targe	et Farmer	Total seedlings for Surrounding Farmer			
	Before FFS During FFS		% increase	<b>Before FFS</b>	<b>During FFS</b>	% increase	
	(2004)	(2005)		(2004)	(2005)		
Kitui	3,360	9,414	180.2	2,854	17,047	497.3	
Mbeere	122	569	366.4	115	65	-43.5	
Tharaka	3,477	4,441	27.7	1,324	613	-53.7	

Details of the average seedlings by species and farmer type are shown for each district in Fig. 5.11a-f. It is noted that apart from the increased numbers of seedlings, the farmers have also realized an increase in the number of species for both tree and fruit seedlings.

Fig. 5.11a (i): Average seedlings produced before FFS, Kitui, target farmers



Fig. 5.11a (ii): Average seedlings produced before FFS, Kitui, surrounding farmers



Fig. 5.11b (i): Average seedlings produced during FFS, Kitui, target farmers



5.11b (ii): Average seedlings produced during FFS, Kitui, surrounding farmers







Fig. 5.11c (ii): Average seedlings produced before FFS, Mbeere, surrounding farmers



Fig. 5.11d (i): Average seedlings produced during FFS, Mbeere, target farmers



Fig. 5.11d (ii): Average seedlings produced during FFS, Mbeere, surrounding farmers



Fig. 5.11e (i): Average seedlings produced before FFS, Tharaka, target farmers





Fig. 5.11e (ii): Average seedlings produced before FFS, Tharaka, surrounding farmers



Fig. 5.11f (i): Average seedlings produced during FFS, Tharaka, target farmers





## 5.3.4 Number of trees annually planted on individual farm

Both categories of farmers were planting trees before and after FFS in all 3 districts. In Kitui there was an increase of 22% among target farmers and 25% among surrounding farmers currently planting trees on their own farms compared to pre-project period; in Mbeere all target farmers were planting before and after FFS, whereas percentage of surrounding farmers who were planting trees remained at 83%. In Tharaka there was an increase of 44% for target farmers, but a decrease of 6% for surrounding farmers (refer to Fig. 5.12a-c).

The total numbers for trees and fruits planted on individual farms for both target and surrounding farmers in each district are summarized in Tables 5.19a and 5.19b. The percentage increase in number of trees and fruits planted in 2005 compared to 2003 is shown in Table 5.19c(i) for target farmers and Table 5.19c(ii) for surrounding farmers. The calculation is explained in the tables.

For surrounding farmers, a decrease in the number of trees and fruits planted was noted. The drought experienced in 2005 appears to have affected surrounding farmers much more than target farmers, since all surrounding farmers posted a negative between 2003 and 2005, unlike target farmers who posted a positive percentage increase.

	During FFS 2005			Beginning of FFS 2004			Before FFS 2003		
	Tree	Fruit	Total	Tree	Fruit	Total	Tree	Fruit	Total
Kitui	2,966	442	3,408	2,112	677	2,789	1,644	68	1,712
Mbeere	325	147	472	217	51	268	263	75	338
Tharaka	1,221	218	1,439	495	109	604	818	156	974

Table 5.19a:	Total number of	trees and	fruits p	lanted on	individual	farms	(target farmers)
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Table 5.19b:	Total number	of trees and	fruits planted	on individual	farms (surr	ounding farmers)
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	During FFS 2005			Beginning of FFS 2004			Before FFS 2003		
	Tree	Fruit	Total	Tree	Fruit	Total	Tree	Fruit	Total
Kitui	1,400	382	1,782	936	285	1,221	2,195	99	2,294
Mbeere	314	466	780	111	441	552	1,988	369	2,357
Tharaka	304	80	384	108	47	155	876	131	1,007

Table 5.19c(i): Percentage increase between 2003 (before FFS) and 2005 (during FFS) in number of trees and fruits planted on individual farms (target farmers)

District	Total tro	Total trees planted by target farmers								
	<b>During FFS</b>	% increase								
	(2005) - A	(2003) - B	(A-B)/B x 100							
Kitui	3,408	1,712	99.0							
Mbeere	472	338	39.6							
Tharaka	1,439	974	47.7							

Table 5.19c(ii): Percentage increase between 2003 (before FFS) and 2005 (during FFS) in number of trees and fruits planted on individual farms (surrounding farmers)

District	Total trees	planted by surrou	inding farmers
	<b>During FFS</b>	% increase	
	(2005) - A	(2003) - B	(A-B)/B x 100
Kitui	1,782	2,294	-22.3
Mbeere	780	2,357	-66.9
Tharaka	384	1,007	-61.9

# Fig. 5.12a: Tree planting, Kitui



Fig. 5.12c: Tree planting, Tharaka



The average number of trees planted on the individual farms are given in Fig. 5.13.

## Fig. 5.12b: Tree planting, Mbeere







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Fig. 5.13a (i): Average number of trees planted, Kitui, target farmers (2003)



Fig. 13a (ii): Average number of trees planted, Kitui, surrounding farmers (2003)







Fig. 5.13b (ii): Average number of trees planted, Kitui, surrounding farmers (2004)







Fig. 5.13c (ii): Average number of trees planted, Kitui, surrounding farmers (2005)



Fig. 5.13d (i): Average number of trees planted, Mbeere, target farmers (2003)



Fig. 5.13d (ii): Average number of trees planted, Mbeere, surrounding farmers (2003)



Fig. 5.13e (i): Average number of trees planted, Mbeere, target farmers (2004)



Fig. 5.13e (ii): Average number of trees planted, Mbeere, surrounding farmers (2004)



Fig. 5.13 f (i): Average number of trees planted, Mbeere, target farmers (2005)



Fig. 5.13f (ii): Average number of trees planted, Mbeere, surrounding farmers (2005)







Fig. 5.13g (ii): Average number of trees planted, Tharaka, surrounding farmers (2003)



Fig. 5.13h (i): Average number of trees planted, Tharaka, target farmers (2004)



Fig. 5.13h (ii): Average number of trees planted, Tharaka, surrounding farmers (2004)



Fig. 5.13i (i): Average number of trees planted, Tharaka, target farmers (2005)



Fig. 5.13i (ii): Average number of trees planted, Tharaka, surrounding farmers (2005)



# 5.3.5 Number of farmers who introduced highly marketable tree species for seedling production or tree planting on farm

Many of the farmers introduced highly marketable tree species for seedlings production and/or tree planting on their individual farms. These include mukau, Eucalyptus spp. and neem (tree species) and grafted mangoes (fruit species). Table 5.20 shows the number of farmers who planted trees of these (4) species in 2005, 2004 and 2003. The percentage increase is calculated as the increase in number of farmers planting these species between 2003 and 2005, as a percentage of the total number of farmers interviewed for each category by district. Results generally show a higher increase among target farmers than among surrounding farmers, the latter sometimes showing a decrease.

		Target fa Tharaka	Target farmers (Kitui 18, Mbeere 9, Tharaka 9)				Surrounding farmers (Kitui 36, Mbeere 18, Tharaka 18)			
		During FFS - 2005 (A)	Begin ning of FFS - 2004	Befor e FFS - 2003 (B)	% increase (A-B)/C x 100	Durin g FFS - 2005 (A)	Begin ning of FFS - 2004	Befor e FFS - 2003 (B)	% increase (A-B)/C x 100	
Kitui	Mukau	9	1	1	44.4	4	3	3	2.8	
	Eucalyptus	5	2	2	16.7	5	1	4	2.8	
	Neem	8	6	2	33.3	5	1	2	8.3	
	Grafted mangoes	8	6	0	44.4	5	0	0	13.9	
Mbeere	Mukau	6	3	4	22.2	9	5	4	27.8	
	Eucalyptus	5	1	0	55.6	0	0	1	-5.6	
	Neem	3	1	0	33.3	0	2	1	-5.6	
	Grafted mangoes	7	3	2	55.6	3	4	2	5.6	
Tharaka	Mukau	6	0	0	66.7	1	2	2	-5.6	
	Eucalyptus	3	1	1	22.2	2	0	1	5.6	
	Neem	5	1	1	44.4	3	0	0	16.7	
	Grafted mangoes	4	1	0	44.4	1	0	1	0	

 Table 5.20: Number of farmers who introduced highly marketable tree species for tree planting (mukau, Eucalyptus, neem, grafted mangoes)

Where A=number of farmers who introduced highly marketable tree species for seedling production in 2005; B= number of farmers who introduced highly marketable tree species for seedling production in 2003; C=total number of farmers interviewed for each farmer category in district)

Asked whether they will continue to plant mukau on their farms, the majority said they would, principally for the high quality timber not only for own use but also for income generation. In Kitui 94% of target and 91% of surrounding farmers said they will continue planting, while in Mbeere and Tharaka 100% of target farmers said they would continue planting while 89% of surrounding farmers said they would continue planting while 89% of surrounding farmers said they would continue planting while 89% of surrounding farmers said they would continue planting while 89% of surrounding farmers said they would continue planting while 89% of surrounding farmers said they would continue planting respectively.

Reasons given included the fact that mukau is indigenous in most of the areas under survey and is fast growing, and resistance to drought and termite attack, the two major problems of tree survival in semi-arid areas. Other reasons include the high quality of the timber for own use, as well as the high prices fetched by its timber compared to other species. Use as fodder and suitability for intercropping were also mentioned.





In spite of the above positive attitude towards mukau in all areas under survey, there was a general indication that propagation under nursery conditions was difficult, due to poor germination of the seedlings. Many farmers also indicated that they need support in order to master the art of mukau propagation.

# 5.3.6 Number of farmers who newly implemented social forestry activities

Generally, there was an increase in the number of farmers who practised many of the social forestry techniques/enterprises taught during FFS. Among target farmers in Kitui, there was an increase in the percentage of farmers who practised cropping with improved techniques (61.1%), intercropping (11.2%), woodlot for timber (22.2%), woodlot for poles (16.6%), fruit orchard (38.9%) and tree nursery (55.5%). Vegetable growing was also newly implemented by some farmers as an IGA (5.6%). Among surrounding farmers, there was an increase in cropping with improved techniques (27.7%), intercropping (8.3%), woodlot for poles and firewood (2.8%), fruit orchard (25.0%) and tree nursery (33.4%). Boundary planting was also introduced (5.6%).

Among Mbeere target farmers; there was an increase in cropping with improved techniques (44.4%), tree fodder bank (22.2%), fruit orchard (33.3%) tree nursery (44.5%), and woodlot for poles and firewood (11.1%). For surrounding farmers, there was an increase in intercropping (5.5%) and fruit orchard (5.6%).

For Tharaka target farmers there was an increase in cropping with improved techniques (22.3%), intercropping (33.3%) tree nursery (22.2%), and boundary planting (11.1%). For surrounding farmers there was an increase in intercropping (11.2%) and tree nursery (11.1%).




Fig. 5.15a (ii): Enterprises practised after FFS, Kitui



#### Fig. 5.15b (i): Enterprises practised before FFS, Mbeere





Fig. 5.15c (i): Enterprises practised before FFS, Tharaka



#### Fig. 5.15c (ii): Enterprises practised after FFS, Tharaka



The questionnaire sought to compare adoption of specific techniques of the enterprises by the individual farmers, both target and surrounding. An example is given for cropping with improved techniques, which was one of the enterprises practiced by all the farmer groups. Results are shown in Fig. 5.16a-c for Kitui, Mbeere and Tharaka. It shows a marked increase in adoption of taught techniques such as planting in line, spacing of 3'x1', sowing 1 seed in a hole, change to new identified species, change in manure and fertilizer application, termite and diseases and pest control, protection of farmland from livestock and frequent monitoring of crops. The changes were more pronounced among target farmers than surrounding farmers.



#### Fig. 5.16a: Changes in cropping with improved techniques, Kitui



#### Fig. 5.16b: Changes in cropping with improved techniques, Mbeere





An analysis of the changes in adoption of specific techniques for other enterprises such as mukau intercropping, woodlot for timber, woodlot for poles and firewood, tree fodder bank, fruit orchard and tree nursery are included in the data sheets (*Annex 5*, Excel sheets under All Districts Farmer 5-1(b-g).

# 5.3.7 Number of farmers implementing new techniques on their own farms as learnt through their participation in the project

As seen in the section above, majority of the farmers had newly implemented many of the techniques they learnt through FFS. It was noted that all the farmers had implemented at least some of the new techniques they had learnt through FFS on their own farms. A good case was seen in Ekuwa FFS where all the members were assisting each other to ensure they had all implemented such techniques as establishment of nursery, intercropping with neem or mukau, woodlot for timber, woodlot for poles and firewood (some had eucalyptus while others had senna seamea), fruit orchard and cropping with improved techniques.

However, both target and surrounding farmers cited problems which they encounter in the course of implementing their social forestry activities. Generally, the target farmers were more aware of the problems they were experiencing (83% in Kitui, 100% in both Mbeere and Tharaka) compared to the surrounding farmers (83% in Kitui, 57% in Mbeere and 67% in Tharaka). This does not mean that the surrounding farmers are experiencing less problems, but that they are less bothered by the problems since they are not so keen on social forestry activities.



Fig. 5.17: Farmers who encounter problems in implementing social forestry activities, Kitui, Mbeere and Tharaka

The problems most cited by the farmers are given in Table 5.21. Problems of water and termites are common to all the farmers, but the surrounding farmers also cited lack of knowledge, insufficient tools and equipment and low survival rate of planted trees, which were not mentioned by the target farmers. This is expected as the surrounding farmers do not participate in the FFS activities where knowledge and skills are taught to the members. Low survival rates of planted trees result from lack of tree management skills.

District	Target farmers	Surrounding farmers
Kitui	i) Problem of water (46.7%)	i) Problem of water/drought 58.6%)
	ii) Problem of termites (40%)	ii) Lack knowledge and skills in tree management
		(24.1%)
	iii) Pests and diseases (26.7%)	iii) Problem of termites (24.1%)
	iv) Financial constraints (13.3%)	iv) Pests & diseases (20.7%)
	v) Labour force (13.3%)	v) Insufficient tools/equipment (17.2%)
Mbeere	i) Insufficient tools/equipment (55.6%)	i) Tree planting knowledge & skills (75%)
	ii) Problem of water/drought (55.6%)	ii) Low survival rate (37.5%)
	iii) Problem of termites (22.2%)	iii) Problem of water/drought (12.5%)
	iv) Low survival rate (11.1%)	
	v) Destruction by livestock (11.1%)	
Tharaka	ii) Problem of water/drought (44.4)	i) Problem of water/drought (58.3)
	iii) Insufficient tools/equipment (22.2)	ii) Tree planting knowledge & skills (41.7)
	iv) Time constraints to teach (22.2)	iii) Low survival rate (16.7)
	v) Problem of termites (11.1)	iv) Problem of termites (16.7)
	vi) Land is very rocky (11.1)	v) Seedlings lacking (16.7)

 Table 5.21: Problems encountered in implementing social forestry activities, Kitui, Mbeere and Tharaka

Fig. 5.18 (a-c) gives the order of the problems cited in order of importance (according to frequency of response).











Fig. 5.18(c): Problems of implementing social forestry, Tharaka

Regarding progress of FFS activities, most target farmers felt their FFS activities were progressing well in spite of the problems cited. However, a few target farmers disagreed that their activities were progressing well (17% in Kitui, 11% in Tharaka) and some even strongly disagreed (33% in Tharaka). In comparison, 44% of surrounding farmers in Kitui, 40% in Mbeere and 61% in Tharaka disagreed that their activities were progressing well. 6% of surrounding farmers in Kitui, 13% in Mbeere and 6% in Tharaka strongly disagree. This means that a lot still needs to be done, especially as regards addressing the constraints faced by the farmers in implementing social forestry activities.

Fig. 5.19: Progress of FFS activities



# 5.3.8 Number of farmers involved in social forestry related group networking

So far, no social forestry group networking systems have been put in place.

However, the survey also sought to know whether farmers were sharing the information, knowledge and skills that they had gained through their participation in the project to others. It was found that 94% of target farmers in Kitui, 78% in Mbeere and 100% in Tharaka shared with others the knowledge and skills they acquired from the FFS. The situation was different for the surrounding farmers, where 36% in Kitui and 6% in Tharaka shared with others. Surrounding farmers in Mbeere did not share. This is because many surrounding farmers themselves lack knowledge on FFS activities.



Fig. 5.20: Sharing of knowledge and skills, all districts (target and surrounding farmers)

Those who were shared with are shown in Fig. 5.21 and include family members, surrounding farmers, other groups, community barazas and newly established FFS schools.

Fig. 5.21: Those that were shared with, all districts (Mbeere surrounding did not share)



The techniques that the farmers shared with others are shown in Fig. 5.22 (a-d) for each of the districts by farmer category. Target farmers shared most of the techniques they learnt, including nursery establishment and management, tree planting and management, establishment of fruit orchard, establishment of woodlot, grafting, cropping with improved techniques, group management, etc. Only a few surrounding farmers in Kitui and one in Tharaka have shared the social forestry techniques they are practicing. Those in Kitui shared on such techniques as tree planting and management, nursery establishment and management, vegetable growing, fruit orchard and cropping with improved techniques. The one in Tharaka only shared knowledge on tree planting.





Fig. 5.22b: Techniques shared with others, Kitui surrounding farmers



Fig. 5.22c: Techniques shared with others, Mbeere target farmers



Fig. 5.22d: Techniques shared with others, Tharaka target farmers



# 5.3.9 Number of techniques employed by farmers trained and/or instructed

Each target farmer practiced some (in some cases all) of the enterprises they were facilitated during FFS (Table 5.22). In each case, various techniques were facilitated. Some of the techniques the farmers adopted include:

	<b>Table 5.22:</b>	Techniques	employed l	by farmers	trained in	FFS
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Enterprise	Technique
Cropping with improved	• Planting in line
techniques	Adopted proper crop spacing
	• Reduced number of seeds per hole
	• Changed to new identified crop varieties, especially for maize varieties
	• Changed method of manure application from broadcast to spot
	• Improved pest and disease control using both indigenous methods and
	agro-chemicals
	• Fencing to protect crops from livestock
	<ul> <li>Frequent monitoring of crops through AESA</li> </ul>
Intercropping (with mukau,	• Identified new species, e.g. mukau, neem
neem, etc)	• Complete weeding in land preparation
	• Early pitting before onset of rains
	• Proper hole size, spacing
	Branch pruning
	• Bud pruning for mukau
	• Intercropping
	• Some few farmers started individual crop protection from livestock e.g. in
	Ekuuwa
	• Improved termite control using both indigenous methods and agro-
	chemicals
	• Improved pest and disease control using both indigenous methods and
	agro-chemicals
	• Frequent monitoring of trees through AESA
Woodlot for timber	• Identified new species, e.g. mukau, eucalyptus
	• Others as for intercropping, except intercropping (planting trees with crops)
Woodlot for poles and	• Identified new species, e.g. eucalyptus, senna seamea
firewood	• Others as for woodlot for timber
Tree fodder bank	• Identified new species, e.g. calliandra, mulberry
	• Others as for woodlot for timber, except bud pruning for mukau
Fruit orchard	• Identified new species, e.g. grafted mangoes
	• Others as for woodlot for timber, except bud pruning for mukau
Tree nursery	Criteria for mother tree selection on seed collection
	• Seed pre-treatment
	• Seed-bed preparation
	• Soil mixture in potting
	• Pricking out
	• Shade control
	• Time for watering
	• Root pruning
	• Sorting
	• Nurserv record keeping
IGAs such as vegetable	• Cost-benefit analysis
growing, jam making.	• Various, depending on IGA
cookery, brick making, soap	
making, etc.	

The target and surrounding farmers were asked whether they were getting enough practical knowledge and techniques from the project. Their responses are as given in Fig 5.23 where more target farmers felt they were getting between moderate and enough (except a small fraction in Kitui who said it was slightly lacking), than surrounding farmers, most of who felt it was moderate to lacking.



Fig. 5.23: Adequacy of practical knowledge and techniques from the project, all districts

# 5.3.10 Number of farmers who appreciate knowledge and techniques provided by the project

The proportion of those who found the knowledge and techniques provided by the project useful against those who did not is shown in Fig. 5.24. 100% of target farmers in all districts and surrounding farmers agreed that the knowledge and techniques were useful. 6% in Kitui and 40% in Mbeere gave a response in the negative. However, it is understandable since the surrounding farmers have not actively participated in and understood the FFS activities.





Generally, evaluation of FFS was higher among target farmers than surrounding farmers (excellent in Kitui target 50%, surrounding 15%; excellent in Mbeere target 67%, surrounding 24%; excellent in Tharaka target 56%; surrounding 6%). This was expected, since the surrounding farmers do not have an understanding of FFS as do the target farmers.

The farmers were asked to evaluate ISFP/FFS extension model/package. The outcome was favourable for all target farmers (100% in all districts), who rated FFS between "good" and "excellent". The responses were varying among surrounding farmers, with 73% and 52% of farmers in Kitui and Mbeere respectively rating it "good"/"excellent". Only in Tharaka was the percentage less than 50.





The most common reason given for this was that FFS combines theory and practicals, making it easier to understand for all categories of members i.e. young and old, literate and illiterate, etc. Another common reason was that it is cost effective since the extension officer was able to reach many members at once, as opposed to the former FD conventional farm visit extension method.

Another question posed to the farmers on FFS was meant to check its appropriateness as a method for dissemination of social forestry activities (Fig. 5.26). Again, the results were varied, with all target farmers and Kitui surrounding farmers either agreeing or strongly agreeing (total 100%). A greater variety was found in Mbeere and Tharaka, where a few surrounding farmers did not agree that FFS is an appropriate method for dissemination of social forestry activities. Again, with surrounding farmers it is understandable since they did not participate in the project activities and therefore do not understand the principle behind it.

#### Fig.5.26: Appropriateness of FFS, all districts



# 5.3.11 Benefits from project

When target farmers were asked to give the benefits they had gained from the project, they were quick to give the most important one as knowledge and techniques. Others were direct benefits from the project such as stationery, plastic tubes, watering cans, scissors, tapes, etc. In addition, they talked of empowerment at individual and group level, income generation, better tree and crop management leading to higher survival rates and higher yields, among others as summarized in Fig. 5.27 (a-c).

#### Fig. 5.27a: Benefits from Project, Kitui



Fig. 5.27b: Benefits from Project, Mbeere







# 5.3.12 Degree of change/Empowerment of the farmers

All target farmers interviewed in the 3 project districts indicated that they had improved in various aspects at individual level after undergoing the FFS training. Some of the attributes in which they saw improvement include group management, leadership skills, time management, self confidence, initiative to try new ideas, popularity with neighbours, improved management skills at personal level, etc. As shown in Fig. 5.28, there was a lot of improvement from mostly "poor" and "fair" to "good". For instance only 3% of target farmers in Kitui, 6% in Mbeere and 1% in Tharaka assessed themselves as "good" in all the qualities of the survey put together before FFS. This contrasts sharply with 78% of the target farmers in Kitui, 69% in Mbeere and 74% in Tharaka who assessed themselves as "good" after FFS.





# 5.4 Results of Public Survey in Kitui, Mbeere, Tharaka and Nairobi

# 5.4.1 Distribution of respondents for the Public Survey

The stakeholder survey was carried out in all the project districts of Kitui, Mbeere and Tharaka, and in Nairobi. For each divisions/areas covered, respondents were randomly selected from the major towns/centers where the interviews were conducted. Table 5.23 gives the name of the division, town/center and number of respondents in each of the 3 project districts, as well the areas surveyed for Nairobi. The total number of respondents in every district/area is also shown, making a total of 220 respondents.

Kitui		Mbeere		Tharaka		Nairobi	
Central	10	Evurori	10	Central	10	Bus station	20
Matinyani	10	Gachoka	10	Tharaka North	10	Community	20
Mutitu	10	Siakago	10	Tharaka South	10	Embakasi	20
Mutomo	10					CBD	20
Mwitika	10					UoN	20
Mutha	10						
Total	60		30		30		100

 Table 5.23: Number of respondents for the public survey per district/division

# 5.4.2 Gender of the respondents

More males than females were interviewed during the public survey. Fig. 5.29 shows 56%, 52%, 70% and 57% of all respondents in Nairobi, Kitui, Mbeere and Tharaka were male.

The reason for the trend is that generally more men than women were found within the shopping centers/towns, where the public surveys were carried out.

Fig. 5.29: Gender of the respondents by district



# 5.4.3 Age Distribution of the Respondents

Overall, majority of respondents fall between the age of 20-49, which is the most productive age bracket. Very few respondents are below age 20 and above age 59. Ideally, the composition by age should follow a normal distribution curve, with the majority of the respondents falling within the 30-39 age bracket (33.3%), and reducing towards the lower and higher age categories. Variations of this trend were seen in all the survey districts (Fig. 5.30).

Fig. 5.30: Age of the respondents by district



# 5.4.4 Awareness of Social Forestry

Fig. 5.31 shows that awareness of social forestry has risen since the Baseline survey in 2004. The percentages of those who had heard of social forestry in 2004 and those who have heard during the current survey are as follows:

District	Baseline Survey (%)	Mid-Term Evaluation	Increase (%)
		Survey (%)	
Nairobi	63	74	11
Kitui	75	82	7
Mbeere	73	87	14
Tharaka	55	87	32

#### Table 5.24: Percentage of respondents aware of "Social Forestry"

The current survey has established that awareness on social forestry has risen in both the project districts and in Nairobi (see Table 5.24). Currently, awareness is highest in Mbeere and Tharaka and lowest in Nairobi, compared with the Baseline Survey when awareness was highest in Kitui and lowest in Tharaka. The trend could be due to the fact that the project has been concentrating its efforts in the districts rather than in Nairobi.

#### Fig. 5.31: Awareness of Social Forestry by district



Generally, awareness of social forestry is higher among men than among women, as shown in Fig. 5.32. This was still the case during the Baseline Survey.



Fig. 5.32: Awareness of Social Forestry by district, gender

In Fig. 5.33, the percentages of those aware of social forestry is highest among respondents aged 20-49 for all districts. It is lowest among those below 20 and above 60.

Fig. 5.33: Aware of Social Forestry by district, age



# 5.4.5 Rating of Social Forestry Knowledge

In order to compare the degree of knowledge during the Baseline Survey and the current survey, the percentages of those who had no knowledge of what social forestry is, even though they had heard about it, were analyzed. The findings were that the percentages of those who had no knowledge of what social forestry is had gone down considerably (Table 5.25). Again the case for Tharaka was notable, where the minimum percentages of those without knowledge of social forestry was found, and that for Nairobi where the lack of knowledge of social forestry was highest.

The fact that the project has been concentrating its activities in the districts other than in Nairobi may have contributed to the situation.

District	Baseline Survey	Mid-Term Evaluation Survey
Nairobi	35%	32%
Kitui	27%	18%
Mbeere	27%	17%
Tharaka	48%	13%

 Table 5.25: Percentage with no knowledge of "Social Forestry", even though they had heard about it

Percentages for all the rating categories, including none, elementary, satisfactory and excellent, are shown in Fig. 5.34.

#### Fig. 5.34: Rating of Social Forestry knowledge by district



# 5.4.6 Source of Social Forestry Knowledge (All districts)

Results of the stakeholder/public survey show that the six most important sources of information on social forestry are:

- i) Neighbouring farmers and friends (18.65%)
- ii) Radio programmes (18.24%)
- iii) Training courses and seminars (15.16%)
- iv) Schools and colleges (12.30%)
- v) Newspapers (11.48%)
- vi) Magazines/brochures/pamphlets (10.25%)

Others are TV, extension staff, public barazas, colleagues, groups and EMI (Fig. 5.35).

Fig. 5.35: Source of Social Forestry knowledge



# 5.4.7 Techniques known to the stakeholders/public

Fig. 5.36 shows the percentages of the techniques the respondents said they had knowledge of, as a factor of the total responses they gave. In order of the percentages of those who knew the techniques, the first ten (10) most known were:

- i) Grafting and budding
- ii) Soil conservation
- iii) Seed collection, treatment and storage
- iv) Vegetable growing
- v) Fruit orchard
- vi) Livestock management
- vii) Microcatchment
- viii) Nursery establishment and management
- ix) Propagation of mukau
- x) Tree planting





This is very different from what was observed during the Baseline Survey, where the ten (10) most known techniques were in the following order:

- i) Tree planting
- ii) Soil conservation
- iii) Nursery establishment
- iv) Vegetable growing
- v) Livestock management
- vi) Pest and disease control
- vii) Seed collection
- viii) Composting
- ix) Fruit orchard
- x) Grafting and budding

It can only be concluded that people have acquired much greater knowledge of the more complex social forestry techniques now than at the beginning of the ISFP project e.g. grafting and budding, seed collection, treatment and storage, establishment of fruit orchard and propagation of mukau.

# 5.4.8 Awareness of FFS

Awareness of FFS is much lower than on "Social Forestry". The percentages for those who have heard are shown in Fig. 5.37, which shows that the highest is in Kitui (55%), followed by Tharaka (50%). It is lowest in Mbeere (20%) and Nairobi (15%). This can be explained by the fact that FFS is a relatively new concept in forestry circles, and people are yet to catch onto it. More awareness therefore needs to be done on FFS.





Awareness of FFS was found to be higher among men than among women respondents, except in Kitui where more women respondents were aware (Fig. 5.38).

Fig. 5.38: Awareness on FFS by district, gender



Awareness of FFS by district and age bracket is shown in Fig. 5.39. In Kitui and Mbeere, it follows roughly a normal distribution curve, which is expected since this is the trend for the general population where the majority of the respondents fall in the 30-39 age bracket, and reduce for the younger and also for the older age groups.

Fig. 5.39: Awareness of FFS by district, age

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# 5.4.9 Sources of Information on FFS

The two major sources of awareness on the FFS model/package are:

- i) Neighbouring farmers and friends
- ii) Extension officers

Others are magazines/brochures/pamphlets, Internet, ASK shows, groups and group members, radio programmes, newspapers and agricultural officers (Fig. 5.40).

Fig. 5.40: Source of knowledge of FFS



In summary of the findings of the field surveys (group, farmer and public), Table 5.26 shows the progress of ISFP in the completed PDM comparing the original OVIs for the project with the current level of achievement upto June, 2006 when the Mid-Term Evaluation Survey was carried out for the sample survey.

Narrative Summary	Objectively Verifiable Indicators (Original)	Objectively Verifiable Indicators (At Mid-Term Evaluation)	Remarks
	(Original)	(At Mid-Term Evaluation)	
Overall Goal	For 2014	By June 2006	
Living standards of the people in semi- arid areas are improved while enhancing sustainable environmental conservation.	1.1. By 2014, agricultural contribution to household income in semi-arid areas is improved by 1 % through the use and sale of social forestry products compared to year 2004 level.	1.1. Indicator for agricultural contribution to household income in semi-arid areas was not assessed because the relevant documents have not been revised.	By June 2006, contribution of social forestry to household income in the 3 project districts had improved by (Kitui 2%, Mbeere 2%, Tharaka 0%) through the use and sale of social forestry products compared to year 2004 level.
	1.2. By 2014, accessible sustainable	1.2. Indicator for accessible sustainable	OVI not assessed
	predicted to increase by 3 % compared to year 2004 level.	wood production related to farmlands was not assessed because the relevant documents have not been revised.	
Project Purnose	By Mar. 2009	By June 2006	
110jeet 1 urpose	<b>Dy</b> Wiat 2007	By Suite 2000	
Individual farmers, farmer groups and other stakeholders intensify social forestry practices in	1. Data noted below shows the increase by 2009 compared to 2004 in Kitui, Mbeere and Tharaka District among target group.	1. Data noted below shows the increase by 2006 compared to 2004 in Kitui, Mbeere and Tharaka District among target group.	
semi-arid areas.	i) Number of tree seedlings annually produced on farm. : 50%	i) Number of tree seedlings annually produced on farm. : (Kitui 245.0%, Mbeere 157.3%, Tharaka 186.5%)	
	ii) Number of trees annually planted on farm. : 50%	ii) Number of trees annually planted on farm. : (Kitui 15,050%, Mbeere and Tharaka not possible to calculate because the groups did not plant trees in 2003 )	Baseline number of trees before FFS (2003) was 1 for Kitui and zero for Mbeere and Tharaka)
	iii) Number of individual farmers and farmer groups who introduced highly marketable tree species for seedling production or tree planting on farm at least one species: 50%	iii) All the groups facilitated (70 under extension officer run to date and 52 under farmer-run) have introduced highly marketable tree species for seedling production or tree planting on farm (at least one species, mostly melia, eucalyptus and/or neem). Individual target farmers are also replicating on their own farms.	
	iv) Number of individual farmers and farmer groups who newly implement social forestry activities. : 70%	iv) All the 122 groups participating in the project have newly implemented social forestry activities, as they previously had few or no such activities before the project. The same case applies to the individual target farmers.	

2. Data noted below shows the increase by 2009 compared to 2004 in Kitui, Mbeere and Tharaka District in surrounding area of target group.	2(a) Data noted below shows the increase by 2006 compared to 2004 in Kitui, Mbeere and Tharaka District in area of target group.	
i) Number of tree seedings annually produced on farm. : 5%	1) Number of free seedings annually produced on farm (target farmers): (Kitui 180.2%, Mbeere 366.4%, Tharaka 27.7%)	
ii) Number of trees annually planted on farm. : 5%	<ul><li>ii) Number of trees annually planted on farm (target farmers): (Kitui 81.0%, Mbeere 9.5%, Tharaka 4.9%)</li></ul>	
iii) Number of individual farmers and farmer groups who introduced highly marketable tree species for seedling production or tree planting on farm at least one species: 5%	iii) Number of individual target farmers who introduced highly marketable tree species for tree planting on farm at least one species: Kitui: Eucalyptus (16.7%), Neem (33.3%), Mukau (44.4%), Grafted mangoes (44.4%); Mbeere: Eucalyptus (55.6%), Neem (33.3%), Mukau(22.2%), Grafted mangoes (55.6%); Tharaka: Eucalyptus (22.2%), Neem (44.4%), Mukau (66.7%) Grafted mangoes (44.4%)	
iv) Number of individual farmers and farmer groups who newly implement social forestry activities. : 5%	iv) Number of individual target farmers who newly implemented social forestry activities:Kitui: cropping with improved techniques (61.1%), intercropping (11.2%), woodlot for timber (22.2%), fruit orchard (38.9%) and tree nursery (55.5%). Vegetable growing was newly practiced after FFS (5.6%); Mbeere: Cropping with improved techniques (44.4%), tree fodder bank (22.2%), fruit orchard (33.3%), woodlot for pole and firewood (11.1%) and tree nursery (44.5%); Tharaka: intercropping (33.3%), tree nursery (22.2%), boundary planting (11.1%) and cropping with improved techniques (22.3%).	
	(b) Data noted below shows the increase by 2006 compared to 2004 in Kitui, Mbeere and Tharaka District in surrounding area of target group.	
	i) Number of tree seedlings annually produced on farm (surrounding farmers) : (Kitui 497.3%, Mbeere - 43.5%, Tharaka -53.7%)	
	<ul><li>ii) Number of trees annually planted on farm (surrounding farmers): (Kitui - 34.5%, Mbeere -71.7%, Tharaka -73.2%)</li></ul>	
	<ul> <li>iii) Number of individual surrounding farmers who introduced highly marketable tree species for tree planting on farm at least one species: Kitui: Eucalyptus (2.8%), Neem (8.3%), Mukau (2.8%), Grafted mangoes (13.9%); Mbeere: Eucalyptus (-5.6%), Neem (-5.6%), Mukau(27.8%), Grafted mangoes (5.6%); Tharaka: Eucalyptus (5.6%), Neem (16.7%), Mukau (-5.6%), Grafted mangoes (0%)</li> </ul>	

	3. Planning on social forestry extension is promoted in 10 districts in semi- arid areas.	<ul> <li>iv) Number of individual surrounding farmers who newly implemented social forestry activities:Kitui: cropping with improved techniques (27.7%), intercropping (8.3%), woodlot for timber (2.8%)fruit orchard (25.0%) and tree nursery (33.4%). Boundary planting was newly practiced after FFS (5.6%); Mbeere: Intercropping (5.5%) and fruit orchard (5.6%); Tharaka: intercropping (11.2%) and tree nursery (11.1%)</li> <li>3. Planning on social forestry extension is being promoted in several semi-arid districts outside the project area, and selected FD staff from Kwale, Malindi, Kilifi, Laikipia , Rachuonyo, West Pokot, Laikipia and Meru South districts have been trained in ISFP FFS extension system.</li> </ul>	
Outputs			
At the headquarters level	At the headquarters level	At the headquarters level	
1. Institutional and technical capacities for social forestry extension in Forest Department are strengthened.	1.1. By March 2009, Policy and planning for forestry development is elaborated.	1.1. By June 2006, policy and planning for forestry development is elaborated. The Forest Act has already been enacted, and the Draft Forest Policy is waiting to be re-published. ISFP assisted to formulate the strategic plan for the envisaged Kenya Forest Service (KFS) and prepared the 1st Draft of the strategic plan	
	1.2. By March 2009, Implementation plan on social forestry extension is prepared, piloted and improved in 10 districts in semi-arid area.	1.2. By June 2006, implementation plan on social forestry extension is in the preparation process, and drafts are ready for Kitui, Mbeere and Tharaka. Piloting of outputs for ISFP have been initiated and selected foresters and DFOs from Malindi, Kilifi, Laikipia, West Pokot, Meru South, Rachuonyo and Kwale districts have been trained in ISFP FFS extension system.	
	1.3. By March 2009, a functional unit for social forestry extention planning, monitoring and evaluation is established at FD.	1.3. By June 2006, Heads of Drylands and Farm Forestry Branch have been trained in FFS methodology and fully understand functioning of ISFP extension system. They are expected to jointly undertake planning for FFS activities together with ISFP. Moreover, it is expected that establishment KFS will have an institutional framework to support social forestry activities. (Also, 17 DFEOs, 1 TA, 3 DFOs and 3 ADFOs have been trained locally as ToTs in FFS methodology, basic agronomy and IGAs. Some DFOs and senior FD staff have also been trained in Japan in Forestry Management and Forestry Extension Methods of Japan). 3 ADFOs have been deployed to the 3 project districts. ISFP has assisted to formulate the strategic plan for the envisaged Kenya Forest Service (KFS) and prepared the 1st Draft of the strategic plan, also prepared_	

		Extension Operational Guidelines for ISFP	
In Kitui, Mbeere and Tharaka districts	In Kitui, Mbeere and Tharaka districts	In Kitui, Mbeere and Tharaka districts	
2. Social forestry extension activities among individual farmers and farmer	<ul><li>2.1. By March 2009, 60 % of individual farmers who participated in the project apply social forestry practiced by groups to their own farms.</li><li>2.2. By March 2009, 120 farmer groups</li></ul>	<ul><li>2.1. By June 2006, 100 % of individual farmers who participated in the project apply (some) social forestry activities practiced by groups to their own farms.</li><li>2.2. By June 2006, 0 farmer groups are</li></ul>	
groups are promoted.	are involved in social forestry related group network.	involved in social forestry related group network.	
	2.3. By March 2009, 150 farmers groups are facilitated by farmers in the area.	2.3. By June 2006, 52 farmer groups are facilitated by farmers in the area.	
	2.4. By March 2009, 7, 5 00 farmers attend field days conducted by farmer groups participated in the project.	2.4. By June 2006, 175 field days have been conducted by farmer groups who participated in the project, with an average attendance of 90 farmers per field day (approximately 15,750 participants).	
	2.5. By March 2009, 70 % of farmers who participated in the project appreciate the project extension model.	2.5. By June 2006, 100 % of farmers who participated in the project appreciate the project extension model.	
	2.6. By March 2009, 60 % of FD extension staff involved in the project implementation are recognized as qualified farm forestry FFS facilitators.	2.6. By June 2006, 100 % of FD extension staff involved in the project implementation are recognized as qualified farm forestry FFS facilitators.	
	2.7 By March 2009, 120 farmers groups are facilitated by FD extension staff in the area.	2.7 By June 2006, 70 farmers groups are facilitated by FD extension staff in the 3 project districts.	
3. Farmers and other stakeholders obtain enough practical	3.1. By March 2009, 50% of farmers who participated in the project implemented new techniques learned through the project in their own farms.	3.1. By June 2006, 100% of farmers who participated in the project implemented new techniques learned through the project in their own farms.	
knowledge and techniques.	3.2. By March 2009, 70% of farmers who participated in the project appreciate knowledge and techniques provided by the project.	3.2. By March 2006, 100% of farmers who participated in the project appreciate knowledge and techniques provided by the project.	
In semi-arid areas	In semi-arid areas	In semi-arid areas	
4. Information on social forestry extension and related issues is shared among the	4.1. By March 2009, number of stakeholders, who are aware of information on social forestry extension, is increased by 5 % compared to 2004 level.	4.1. By June 2006, number of stakeholders, who are aware of information on social forestry extension, is increased by (Nairobi 11%, Kitui 7%, Mbeere 14%, Tharaka 32%) compared to 2004 level.	
stakenoiders.	4.2. By March 2009, 4,000 people visit the project website.	4.2. By June 2006, 2161 people had visited the ISFP website.	

# 6 DISCUSSIONS ON THE SURVEY RESULTS

This section gives a discussion of the survey findings based on both the PDM and the Evaluation Grid of the Mid-Term Review.

# 6.1 The Project Design Matrix (PDM)

#### **Overall Goal:** Living standards of the people in semi-arid areas are improved while enhancing sustainable environmental conservation

The means of verification for this indicator, the Kenya Forestry Master Plan and the District Development Plans, have not yet been revised. In any case, no baseline was found in these documents at the beginning of the project. However, the information gathered during the Baseline Survey, together with data gathered during the Mid-Term Evaluation study, has been used for the purpose of assessing improvements in the living standards of the people in the 3 project districts only, and does not give the situation in other semi-arid areas. Based on these, it was estimated that there was an increase of 2% in Kitui, 2% in Mbeere and none (0%) in Tharaka in the contribution of social forestry products as a percentage of the total household income for the surveyed households. Much of this increase was from sale of seedlings, which require only a short period to show returns compared to the other enterprises being practiced.

# Project Purpose: Individual farmers, farmer groups and other stakeholders intensify social forestry activities in semi-arid areas

There are a total of 122 farmer groups in the 3 project districts. This figure includes 48  $1^{st}$  generation extension officer run groups, who have graduated, plus 22  $2^{nd}$  generation extension officer run groups and 52  $1^{st}$  generation farmer run groups, who are still undergoing the FFS process. All of them were seen to have intensified social forestry activities in their areas, and are practicing several enterprises such as tree nurseries, woodlots, fruit orchards, tree fodder banks, cropping with improved techniques, intercropping and IGAs. The farmers/members of these groups are also in varying degrees replicating what they have learnt in the groups onto their own individual land.

# Output 1: Institutional and technical capacities for social forestry extension in FD are strengthened

Several training courses, seminars and workshops have been held to strengthen the technical capacities of the FD staff. Some of these include ToT training in FFS methodology, basic agronomy and IGAs locally for DFOs and DFEOs, and overseas training (Japan) in Forestry Management and Forestry Extension Methods of Japan for some DFOs and senior FD staff.

Heads of Drylands and Farm Forestry Branch have been trained in FFS methodology and fully understand functioning of ISFP extension system. This is considered a first step in paving way for the establishment of a functional planning, monitoring and evaluation unit at FD. These staff are expected to jointly undertake planning for FFS activities together with ISFP. Moreover, it is expected that establishment of KFS will provide an institutional framework to support social forestry activities.

Institutional strengthening of the district staff has been achieved through deployment of Assistant DFOs in the 3 project districts, to assist the DFOs with the implementation of the project activities.

ISFP assisted to formulate the strategic plan for the envisaged Kenya Forest Service (KFS) and prepared the 1<sup>st</sup> Draft of the strategic plan, and have prepared Extension Operational Guidelines for ISFP. Based upon these guidelines, district extension implementation plans for field operation are being prepared, and drafts are ready for Kitui, Mbeere and Tharaka.

# Output 2: Social forestry extension activities among individual farmers and farmer groups are promoted

Participating farmers and farmer groups showed great appreciation of the FFS extension method, and it have widely accepted it. Through this system of extension, the farmers were able to practice extension activities among themselves and among their groups through such fora as field days, exchange visits and graduations. So far, 175 such functions had been conducted by the 1<sup>st</sup> generation of 48 extension officer run FFS groups, with an average turn up of about 90 persons per function. However, the total number of participants was not determined.

Apart from the extension officers, some of the farmers were selected and trained as farmer facilitators, with each group having at least 2 farmer facilitators. These are supported to establish and train a total of 52 newly established FFS schools between them, with monthly backstopping from the DFEOs.

# Output 3: Farmers and other stakeholders obtain enough practical knowledge and techniques

Forty eight (48) FFS groups have already graduated. Another 74 are ongoing with facilitation of the DFEOs and the farmer facilitators. They are taught many social forestry activities such as establishment and management of tree nurseries, establishment of woodlots and fruit orchards, basic agronomy and IGAs, among others. All the group members are not only expected to replicate what they have learnt to their own farms, but are supposed to share the knowledge and skills with other community members such as family members, neighbours, friends, groups, etc. The survey established that all the target farmers, who are group members, are in varying degrees of implementing the knowledge and skills they learnt during FFS. Some positive influence was also observed among surrounding farmers and family members.

# Output 4: Information on social forestry extension and related issues is shared among the stakeholders

ISFP regularly holds meetings at various levels to share information on social forestry and related issues. In addition, the project has established a website whose details are given in section 5.1.12. ISFP also provides newsletters, technical guides and has held a project seminar for stakeholders. Posters have also been developed. At local (district) level, field days, exchange visits and graduations are also organized. Information sharing has therefore been effective at all levels of the project.

# 6.2 The Evaluation Grid

# Verification of Performance

# **Study Item: Degree of Achievement of Project Purpose**

So far, the degree of achievement of the project purpose for the target groups is very positive, as shown in PDM (*Annex 1*). However, the impact to surrounding farmers is not wholly felt in all the districts, as the interaction time with these neighbours has been so far limited to field days and graduations. It is expected that more will be achieved as time goes by.

# **Study Item: Degree of achievement of the Outputs**

For most part, the actual activities have been carried out as planned for all outputs both at FD HQs and in the field. This is shown in the progress of activities reports for each output. In some cases, however, there have been some delays arising from the GoK disbursement system and cumbersome procurement procedures.

# **Study Item: Actual inputs**

Inputs for ISFP were expected from both the GoJ and the GoK. Inputs from each side are discussed under section 5.1.6. The inputs were said to be adequate, apart from the budgetary allocation from GoK which was proposed to be increased so as to meet the extension needs once the project ends. Also there were delays in disbursement which at times occasioned delays in implementation schedules.

#### Verification of Implementation Process

#### **Study Item: Progress of the Activities**

Although there were some delays in extension due to budget reduction, implementation of the project has mostly been carried out as planned especially examination of extension method of FFS and its trial. This is because the activities were implemented from the beginning of the project. Some other activities were performed based on outputs of initial stages' achievements. The few cases where there were gaps between planned and actual activities were occasioned by delays in the disbursement of the counterpart budget (achievement of outputs Oct 2005-Mar 2006).

#### Study Item: Appropriateness of management of the project

The management of the project was seen to be appropriate. Details are provided under section 5.1.8.

#### Monitoring Activities

Several FD officers, KEFRI staff and JICA Experts are routinely involved in project monitoring. It is currently done at different levels by different officers. DFEOs are the people directly engaged in routine visits to the farmers on the ground, and they visit the FFS groups on a weekly basis, while the DFOs visit the groups once monthly. Reporting is done weekly by DFEOs and monthly by DFOs using formatted sheets. At the FD level, reports are received from the district levels regarding the progress of the project. DFEOs.

The ISFP JICA coordinator has set up a guideline for farmers and farmer groups to write down their daily activities. This is issued to the farmers by the DFEOs who normally do the routine follow ups as well as guide the farmers. In this context monitoring entails assessments of enterprises, routine follow ups on the groups, random visits to farmers, checking the syllabus coverage and ascertaining if the beneficiaries appreciate the activities of the project.

Monitoring at FD level involves field visits, meetings with DFOs/DFEOs, checking use of field resources, scrutinizing field reports and backstopping for DFEOs. KEFRI is also involved in project monitoring. Most of the FD/KEFRI staff confirmed they do so mostly once per month.

Monitoring involves data collection, assessment, reporting and checking progress of activities. The farmer groups are also involved in monitoring at their level. Several reports are generated

The Joint Coordinating Committee (JCC) holds regular annual meetings. Other meetings include semi-annual meetings biannually for project monitoring staff including experts, counterparts, JICA staff and FD staff. Monthly meetings are held at HQs and at district level.

Utilization of monitoring process to improve the project implementation is achieved through:

- Identification of both the strong and weak points of the projects with implementers and taking necessary corrective measures.
- Identification of problems, and addressing them promptly
- Discussions at various levels including the headquarters.
- Follow up of the schedules to ascertain their conformity.
- Adjustment of methodologies whenever need arises

- Improvement of management and reporting format
- Backstopping in key areas
- Arranging field meetings
- Capacity building for DFEOs

# **Communication**

Issues of communication do occasionally arise where information flow is not achieved as desired. According to FD staff, sometimes information from the headquarters to DFEOs via DFO does not arrive on time and vice versa. In many instances those delays can be very costly in terms of time and money. Communication between the implementers of the project at all levels has generally been rated as good, and implementors at various level of the project appear satisfied with communication at the moment.

Japanese experts and counterparts share ideas through round table discussions, both formally and informally. This kind of communication takes place frequently whenever any issue of concern arises. This was corroborated by other staff at the FD HQs. At every stage, recommendations made are communicated to the relevant persons and action taken immediately. This is then followed up to confirm that it is implemented as suggested. Incase of any problems between Japanese experts and counterparts, the project management team creates a forum for discussing the issue(s) that may arise during course of the project implementation. However, such a scenario has not arisen.

# How often communication takes place with Japanese experts & counterparts

Communication takes place differently for various staff. Meetings between Japanese experts and counterparts occur quite frequently, twice a week and after every fortnight to discuss the progress of the project. Some communication also takes place via memos and meetings e.g. with the Head, Drylands Programme. CCF meets with the team only when need arises but not routinely although frequent updates on the project are communicated to him. The FD staff members are the ones involved in routine meetings with the Japanese experts. In most cases they go together during monitoring visits to the districts.

#### Countermeasures to solve problems with counterparts

To solve any problems that may arise, technical issues are addressed by various departmental technical committees, while administrative issues are addressed by the CCF and/or JCC. Frequent consultations are held to tackle any issues arising from the project management team. Information sharing is done through project updates, semi annual meetings and free and open discussions in the conduct of daily routines. The project management team meetings also create a forum where any issues arising can be tackled.

# Study Item: Involvement of beneficiaries (target groups) in the project

# Participation of target groups in the project

The selection of the farmer groups was based on a criteria of how active they already were in carrying out social forestry activities. By offering them a wide range of enterprises and a conducive learning environment using the FFS strategy, the farmers and farmer groups have become even more motivated to participate in project activities. In the process, the farmers have become empowered in terms of time management, self confidence, initiative, etc. The farmers also indicated that they have been training other farmers of their own accord. Farmer facilitators, on the other hand, have taken over the role of establishing and teaching new FFS groups with some incentive from the project.

Individual farmers are already implementing the techniques learnt in the FFS groups on their own farms, and in some cases they have shared information with surrounding farmers, family members

and other groups. Intra-group support was also seen to be working well, and this way the weaker members are assisted by the stronger ones.

### Study Item: Ownership of project by the executing institution of Kenya

The project is supposed to be handed over to the FD at the end of the 5-year implementation period. However, this should be done gradually in order to have a smooth handing over process. Several counterpart staff have been deployed to the project, including 5 senior staff from FD and KEFRI responsible for project management. Other staff are deployed in the districts, including the DFOs and DFEOs who are responsible for implementation and close monitoring of the project at farmer level.

All the staff responsible for social forestry extension in the project districts have received training on the FFS methodology. This has been extended to the Heads of Extension and Drylands Branches of FD, and to selected DFOs in semi-arid districts outside the project area. This aims at building capacity of the FD staff to take over the ISFP activities once the project ends.

Other donors utilize monetary methods such as top-ups to maintain incentives of counterparts but JICA does not; meanwhile, the extension method and careful support through official trips, fuel, per diem and making reports increases consciousness of counterparts on the Project. As for DFOs, their responsibilities and duties should be increased to develop a higher sense of ownership.

#### Budget allocation for social forestry activities

At present, the bulk of the project cost is borne by the JICA budget. Once the project is over, the GoK budgetary allocation will be expected to continue funding the activities of the project. Unfortunately, it was a considered opinion by many interviewees that the budget usually allocated by the GoK for the regular extension activities will be insufficient to sustain the current level of activities. Moreover, the disbursement process of the allocated funds has occasioned a lot of delays and bureaucracy. This has its unique drawbacks which at times constitute a constraint to the implementation process.

#### Study Item: Problems/Constraints during implementation of the project activities

The major constraint mentioned by majority of the respondents at JICA and FD hinge on the GoK budget, in terms of its adequacy and timeliness to facilitate the implementation of activities of the project. Although dissemination of social forestry through FFS in other semi-arid lands is implemented by FD, the allocation given to FD is problematic even during the project period. Recurrent budget on social forestry of Kenya should be considered for increment if it is to cope with the situation.

How JICA solves this budget issue and hands over management of extension system to FD should be considered during the remaining project period. Some of the countermeasures include:

- i) Increasing GoK budget for extension activities
- ii) Reducing the unit cost of FFS by re-examination of FFS activities
- iii) Possibility of additional support from other development partners.

To raise investment efficiency, all three scenarios should be considered.

Other constraints encountered in implementing the project at various levels are given in section 5.1.14, Table 5.8, as they were vocalized by the respondents.

In order to ensure sustainability of project activities, there is need to look into these problems critically and explore ways of solving them. At the moment, many of the said problems are dealt with through direct support from JICA.

#### Relevance

#### Study Item: Matching of Overall Goal with Kenya's development policy

The overall goal is consistent with the Poverty Reduction Strategy, current National Development Plan and specific District Development Plans, and the Economic Recovery Strategy for Wealth and Employment Creation document which address issues of improved living standards for the rural communities. The project purpose is also in line with the development policy, in particular the Sessional Paper No. 1 of 2005 on Forest Policy, and the Forests Act 2005.

### Study Item: Project purpose and Kenya's needs

So far, the farmers and farmer groups participating in the project activities greatly appreciate the support they are getting from the project. However, they feel they should be supported further to realize the full benefits of the project impacts, such as harvesting of timber, fruits, etc, and also to be enabled to practice other income generating activities relevant to social forestry as a way of improving their income and knowledge levels. Target groups are among the rural poor in semi-arid areas; therefore, their standard of living should be increased together with preservation of the environment.

Climatic conditions in the semi-arid areas make agricultural production unstable; therefore, forestry industry which is not likely to be affected by such erratic climate should be combined with farmers' agricultural production to secure their income and natural environment. Farmers lack knowledge and experiences of forestry and nursery raising of trees, so it is important for the target groups to learn about social forestry.

Specific areas where farmers and farmer groups requested further training to enhance implementation include rural development, mukau propagation and development, agronomy, social forestry related IGAs, marketing information and outlets for social forestry products, PRA techniques and general communication skills at all levels. Capacities of FD staff and forestry extension officers have been developed, although they also felt they need more capacity building in the face of interacting constraints within the project. Nevertheless, some degree of achievement in this regard has been realized i.e. they have become more target oriented and better managers/planners. The utilization of resources has also improved greatly.

There is great need for development of capacity for forest officers and extension officers in the 3 districts in the field of social forestry. The general indication is that the following areas require capacity development for the officers to maximize impact of the project:

- Management of income generating activities
- Extension planning, resource assessment and marketing
- Forestry extension methodology, regular refresher training exploring FFS
- Business development for farmers to commercialize farm forestry activities
- Basic agronomy
- Farm activity planning
- Enterprise development management, cost benefit analysis and cost accounting
- Training of farmers to do extension

#### Study Item: Appropriateness of strategy/approach

#### Appropriateness

The ISFP FFS approach has been lauded by both the implementers and the beneficiaries as an appropriate method of extension of social forestry knowledge and techniques. The main reason cited by the farmers and farmer groups is that the FFS combines theory and practice, making it easier to understand by all categories of farmers, including the old and the illiterate. The strategy also

encourages farmers to practice what they learn in the groups on their own farms, thereby increasing their income and improving their environment through planting of more trees.

#### Benefits to farmers

Already the farmers are realizing benefits not only in terms of cash from sale of products such as seedlings, but also from non-cash benefits like a greener environment, shade, higher food produce, and later from firewood, poles, timber, fruits, honey, fodder etc for own use. In this way, their living standards will be lifted. Other benefits are less tangible and are experienced at personal level.

#### Strengthening of institutional and technical capacities for social forestry extension in FD

The FFS approach is also appropriate in increasing knowledge and techniques not only for the farmers and groups, but also for the extension staff implementing the project, whereby they have received training and have also realized greater motivation and better management at personal and duty station level, among other empowerment parameters. Ability of the counterpart staff has been improved through FFS, training and interaction with experts. Ability of the extension officers greatly improved through trainings on forestry in semi-arid areas and basic agronomy. Moreover, their knowledge and experiences were increased by interaction with other ministries' staff so the extensionist can now respond to farmers' needs. Already, the project has enabled capacity building for both the district staff and senior FD staff at HQs in FFS methodology and Forestry Extension Methods. These include local and overseas courses.

#### Social-forestry extension activities among individual farmers and farmers groups

Ability of the farmers to teach their neighbours the techniques acquired has also been greatly enhanced. Farmer facilitators have been facilitating other FFS groups, though with some incentive from the project. These farmer facilitators not only participate in the activities of their groups, but they also participate in other community activities. This indicates that they are able to work on their own with little supervision, other than the backstopping they receive from the DFEOs.

#### Sharing of social forestry extension and related issues among stakeholders

All the farmer groups as well as majority of the group members share information on social forestry through field days, tours and visits, graduation events, community barazas and on individual farms. Other means of information sharing among other stakeholders include the internet, workshops, meetings, seminars and the media.

#### Changes of policy

Finally, the ongoing sector reforms and the formation of the KFS may have more positive impacts for the ISFP FFS approach than negative ones. This is because chances are high that extension will receive the emphasize it deserves within the new framework. Therefore, if FFS is accepted as the extension method of FD, it will face lesser challenges especially in the area of budget since KFS will be an autonomous body.

#### Effectiveness

#### Study Item: Possibility of realization of the project purpose

# Intensification of social-forestry practices among individual farmers and farmers groups and other stakeholders in semi-arid areas

Individual farmers and farmer groups in the three project districts are already intensifying social forestry activities on their group and individual farms, and the FFS experience should be replicated in other semi-arid districts in order to achieve similar results.

Intensification of social forestry activities by target farmers and farmer groups is strongly agreed. Already non-FFS members are being facilitated by FFS farmer facilitators. They are able to share with other community members of the various techniques acquired during FFS lessons. Mobilization, good training and farmer/group interactions are already in place in several divisions of the project district. Several social forestry activities are flourishing e.g. tree planting, nursery management, mango grafting whose penetration rate is commendable. These activities to some extent have taken a commercial direction, where they are adopted as IGAs. Other members even teach for a fee especially grafting of mangoes. One particular group has mastered the art of mukau propagation so well that they are now able to germinate their seedlings with ease. This particular group is called Kyeni Kya Kunikila in Mutitu division of Kitui district. Farmers and farmer groups are therefore obtaining enough practical knowledge and techniques for social forestry intensification.

# Constraints for achieving the Project Purpose

The major constraint cited for realization of the project purpose is counterpart budget allocation, but adjustments are being made to cover this. It is not certain whether by becoming a public corporation, establishment of KFS from FD through the forestry sector reform would be a constraint for the achievement of the project purpose; however, the sector reform should be carefully monitored during the rest of the project period.

#### Coordination of the 4 outputs to realize the project purpose

More coordination is needed among the outputs. Some feedback mechanism for piloting of outputs for ISFP have been initiated and selected foresters and DFOs from Malindi, Kilifi, Laikipia, West Pokot, Meru South and Ukambani districts have been trained in ISFP FFS extension system and are in the process of preparing action plans for FFS. Linkages between activities of technology development, survey and study, manual making and field extension activities need to be improved.

#### Study Item: Outputs for the realization of the project purpose

# <u>Progress of strengthening of institutional and technical capacities for social forestry extension in FD</u> (Output 1)

Strengthening of institutional and technical capacities for social forestry extension in FD is progressing. Senior FD officials are well versed with project activities and there is reasonable acceptance of extension system used by ISFP. Adequate interaction between ISFP and non-project districts has already been achieved. FD staff have been trained in both extension methodology and other disciplines relevant to forestry that have improved their capacity greatly, and FFS methodology has already been introduced in other semi-arid districts outside the project area using FD budget.

Clear direction of a functional unit at H/Qs is now visible through problem analysis of policy and examination of road map, extension planning at district level and FFS trials, and M&E at FD level at the initial stage of the Project. Officers of Drylands and Farm Forestry Branch fully understand functioning of ISFP extension system, have been trained in FFS methodology and jointly undertake planning for FFS activities together with ISFP. In other districts, TOT in FFS is envisaged. In this regard, FD HQs should support TOTs in the other districts as part of their role.

Information on social forestry extension and related issues are being shared effectively among stakeholders. The project is well understood and good working relationships by key departments in the project area; existence of home page, occasional newsletters, workshops and exchange study tours. Adequate interaction of ISFP and non-project districts has been strengthened.

#### Extension activities among individual farmers and farmers groups in the 3 districts (Output 2)

Individual farmers and farmer groups have widely accepted the FFS extension method. They also understand that they are expected to pass on the knowledge they learn to other farmers in their surroundings. In their groups, they are able to hold knowledge transfer functions such as field days, exchange visits and graduations. So far, 175 such functions have been conducted by 48 - 1<sup>st</sup> generation extension officer run FFS groups, with an average turn up of about 90 persons.

Farmer facilitators have been trained from each group are supported to establish and train other FFS groups. This system is working very well, and a total of 52 new FFS schools are receiving facilitation from the farmer facilitators, with monthly backstopping from the DFEOs.

# Acquisition of practical knowledge and techniques among farmers and other stakeholders (Output 3)

The farmers are taught many social forestry activities such as establishment and management of tree nurseries, establishment of woodlots and fruit orchards, basic agronomy and IGAs, among others. All the group members are not only expected to replicate what they have learnt to their own farms, but are supposed to share the knowledge and skills with other community members such as family members, neighbours, friends, groups, etc. The survey established that all the target farmers are in varying degrees of implementing the knowledge and skills they learnt during FFS. Some positive influence was also observed among surrounding farmers and family members.

#### Information sharing on social forestry extension and related issues among stakeholders (Output 4)

All the farmer groups as well as majority of the group members share information on social forestry through field days, tours and visits, graduation events, community barazas and on individual farms. Other means of information sharing among other stakeholders include the internet, workshops, meetings, seminars and the media.

#### Efficiency

# **Study Items: Degree of achievement of outputs**

Degree of achievement of each output is good, as the outputs are already being realized within the two and a half years of project implementation (see section on outputs for the realization of the project purpose above).

#### Constraints for achieving the Outputs

Adequacy and timely disbursement of GoK counterpart fund has so far been the one single biggest constraint to achieving the project outputs due to subsequent delays in implementation.

# Study Item: Adequacy of Activities and inputs to realize the outputs

#### Excess and deficiency of activities to generate project outputs

Relevant activities to sector reform should be strengthened to generate better output levels. It seems that the amount of work (activities) that need to be done are not commensurate with the time provided. This has created a general feeling of time constraint among the implementers. For better efficiency, it will be necessary to harmonize the number of activities with commensurate timing and scheduling. In future, however, the workload is expected to reduce due to the involvement of farmer facilitators, which releases time for the DFOs/DFEOs to take care of other extension duties while giving backstopping support to the farmer run FFS groups.

#### Appropriateness of number of Japanese experts, their fields, timing of placement and terms

Number of Japanese experts and their specialized fields were found to be appropriate, as they have been deployed as per the initial project plan. However, the reduction of Japanese experts should be more consultative, taking care to recognize the importance of extension as the thrust of the project.
## Appropriateness of kinds of equipment required by the project, their quantities and timing supply

The kinds of equipment, their quantities and timing were considered appropriate at current levels. The GoJ budget allocation to ISFP is satisfactory, but that of the GoK has so far been observed to be inadequate.

Decision for reduction of JICA experts should be carefully considered, bearing in mind the importance of extension to social forestry activities. The extension function should therefore be maintained on long term basis. This is because new trials in the field of social forestry are going on and accumulation of lessons learnt and packaging of the extension system are yet to be done. At the same time, additional backstopping function for implementation of FFS in other districts is expected. Therefore, the role of the social forestry expert is increasing rather than decreasing. This role is crucial to continued achievement of the project outputs.

## Appropriateness of budget from both Japanese and Kenyan sides for the Project Activities

Budget from Kenyan side is not sufficient to sustain current level of FFS. Japanese side disbursed as had been planned; however, some of it had to be used to supply fuel cost and per diem in the event of delay in GoK disbursement. The inputs from Japanese side should gradually be reduced as GoK's is increased.

## Effect of the important assumptions on achievement of project outputs

One of the assumptions of the project is that no catastrophic climatic occur in the course of the project period. Although shortage of rain is perceived to be normal in semi-arid areas, the farmers complained that there the persistent drought they experienced in 2005 affected the survival rates of both the seedlings and the planted trees in all 3 districts. In some cases, it was not possible to sell the seedlings as the planting season was not favourable.

#### Impact

# Study Item: Possibility to achieve the overall goal

So far, the objectively verifiable indicators (OVIs) for the overall goal are positive. Therefore, the Overall Goal should continue to be realized even after the project ends, as long as the current progress of the project is sustained.

# Constraints for achieving the Overall Goal

Some of the constraints to achieving the overall goal include adequacy and timeliness of disbursement of funds to support implementation. The five years duration of the project are also considered inadequate to realize and appreciate some of the benefits that arise from the social forestry activities like planting of trees which takes quite a duration of time before its benefits can be enjoyed. The other constraint that needs addressing is the marketing of social forestry products such as seedlings, which go to waste in the absence of proper marketing information. Another constraint mentioned by the farmers is lack of credit facilities and collateral for small scale social forestry IGAs. Not to forget the common constraints of lack of water and problem of termites at farm level.

# Study Items: Proper logical relationship between the project purpose and the overall goal

Theoretically, the overall goal will also be achieved if the current progress of the project continues. By achieving the Project Purpose and sustaining it, food self sufficiency and living standards will be improved in the short term. Then, farmers can afford to carry out enterprises in the long term, leading to improved land utilization in environmental conservation. Networking among farmers after FFS will ensure the promotion of IGAs by themselves, leading to realization of the Overall Goal.

## **Study Item: Ripple Effect**

# Change of consciousness and activities of target groups in 3 districts

There has been positive change among the extension officers, the groups and the farmers, mainly in the area of empowerment in terms of better time management, self confidence, initiative to try new ideas, improved management skills at personal level, etc. In many of the qualities which they were assessing themselves, the farmers realized their situation had changed from "poor" and "fair" to "good".

Other impacts achieved/expected from the project other than the overall goal include:

- Improved technical ability of implementing agency (FD)
- Increased level of confidence among the farmers and farmer groups
- Increased interest in social forestry
- Reduced dependence on state forests for tree products such as timber, timber and firewood
- Access to other benefits/project using the existing groups as an entry point.

#### Sustainability

#### **Study Item: Policy and Institution**

#### Policy

The Government of Kenya has been maintaining social forestry policy for a long time with consistency. The enactment of Forest Bill, 2005 confirms commitment of the GoK to policy support to the forest sector. The Environmental Management and Coordination Act 1999 is an umbrella legislation providing for environmental protection and management. The Economic Recovery Strategy for Wealth and Employment Creation, Poverty Reduction Strategy Papers, District Development Plans are also among the national documents providing policy guidelines on farm forestry/social forestry, among other issues.

#### Institution

Institution to support FFS method has been structured in the 3 districts. Dissemination of the FFS in other semi-arid areas largely depends on FD's budget capacity. Moreover, if Output 1 was realized, institutional support for the other areas would be realized. Already, piloting of outputs for ISFP have been initiated and selected foresters and DFOs from Malindi, Kilifi, Laikipia, West Pokot, Meru South and Ukambani districts have been trained in ISFP FFS extension system. Moreover, it is expected that establishment KFS will have an institutional framework to support social forestry activities.

#### **Study Item: Organization and Finance**

#### Capacity of FD to maintain activities of the project

It is envisaged that once the KFS is established, FD will have the capacity to maintain the activities of the project but staff allocation and decision making process for further dissemination to other semi-arid areas will need careful planning. One of the decisions to be made will be whether to institutionalize FFS extension method as a viable approach for social forestry extension.

#### Actions to be taken to sustain farmers' extension system after end of project

Some of the foreseen actions should include:

1) Concensus building to increase social forestry extension through the sector reforms.

- 2) Reducing FFS cost which should be balanced with FD's budget. Some countermeasures to cut its cost should also be considered at the same time.
- 3) Extension planning of other semi-arid areas (Output 1) includes extension and logistics cost analysis and their trial and adjustment after the trial.
- 4) FD (soon to be KFS) should create a budgetary provision to cater for the farmer-run FFS especially under the current system of Department/Ministry specific performance contracts. Resources which target "casual labour" engagement could be directed to support farmer facilitators.

#### Acceptance of FFS by target groups

FFS has been well accepted by the target groups. However, cases of some members dropping out due to "intensity and tight programming" of the schedules sometimes occur. Farmer-runs can be continued as long as external inputs including FD's budget are made available.

# **Study Item: Technology**

FFS methodology is generally accepted by farmers so far involved in it. Adoption level by the beneficiaries is also quite high. However drop outs due to its intensity and tight programming sometimes occur.

A cost analysis carried out by the project has shown that the unit cost and resource use efficiency for FFS is much lower than that of the conventional FD farmer visit extension method.

## Promotion of high value trees and seedlings, e.g. mukau

ISFP FFS is promoting planting of trees and raising of seedlings of high value species. One of these is mukau, which is indigenous to the project districts and is therefore drought-adapted. It is also resistant to termite attack, giving it greater chances of survival. During the wet season, the tree exhibits very vigorous growth that is characterized by heavy green foliage. It is therefore fast growing, which is an encouragement to the farmers.

The economic and technological advantages of mukau were found to be common knowledge to the residents, who gave prompt answers on its virtues which include:

- Income generation through high prices of the timber
- High quality timber for own use in construction and furniture
- Fodder especially for goats during drought
- Soil fertility improvement
- Provision of shade
- Termite resistant both at seedling and tree growth level
- Fast growing
- Drought resistant
- Agroforestry species
- Provision of fuelwood

However, economic advantage of mukau has not been scientifically proved, and studies should be done to establish them as fact.

The farmers and farmer groups indicated will continue to plant this tree species for the same reasons given above. The major drawback is its propagation under nursery conditions, which can discourage some farmers due to poor germination rates. A lot needs to be done to ensure that enough seedlings are raised on a scale large enough to cater for the demand from farmers.

#### **Study Item: Handing over process**

Apart from the financial arrangements for handing over, Officers of Drylands and Farm Forestry Branch have been trained in FFS methodology and fully understand the functioning of ISFP extension system. This is a first step towards a functional social forestry extension planning, monitoring and evaluation unit within FD. They are expected to jointly undertake planning for FFS activities together with ISFP. In other districts, TOT in FFS will be conducted, and H/Qs will provide backstopping support.

#### Study Item: Other constraints for sustainability

Constraints to project sustainability include and are not limited to budgetary allocations, human resources with capacity to implement social forestry activities, lack of project support after graduation, failure to extend activities after graduation and limited motivation to the farmers. Suggestions from respondents to address these issues include intensification of training of staff and farmers, increased budgetary allocations, inclusion of IGAs in the enterprise activity catalogue, provision of loan facilities to graduated FFS members, inclusion of group change as part of the curriculum, increasing the fund to extend the enterprises and provision of marketing channels for IGA activities arising from social forestry.

ISFP extension system is functional and with FD support, good results are evident. However additional resources are needed.

A summary of the achievements of the ISFP project is given in the Evaluation Grid (Annex 2).

# 7 CONCLUSIONS AND LESSONS LEARNT

## 7.1 Conclusions

The conclusions drawn from the study are based on the results of OVIs of the PDM and the specific items of the Evaluation Grid for the Project Review. However, the study was not able to assess all the semi-arid areas, but rather concentrated on the 3 project districts of Kitui, Mbeere and Tharaka.

*i)* **Overall Goal:** Living standards of the people in semi arid areas are improved while enhancing sustainable environmental conservation

It was not possible to assess the overall goal of the project for all the semi-arid areas, as the means of verification for this indicator, the Kenya Forestry Master Plan and the District Development Plans, have not yet been revised. In any case, no baseline was found in these documents at the beginning of the project. However, the study has shown that the contribution of social forestry activities to household income has increased by 2% in Kitui and and 2% in Mbeere. No change, however, was observed in Tharaka.

*ii) Project Purpose:* Individual farmers, farmer groups and other stakeholders intensify social forestry practices in semi-arid areas

Individual farmers and farmer groups and other stakeholders have embraced the knowledge and techniques they have learnt from the project, and are practicing many of the enterprises they have learnt on their own farms. Many have intensified social forestry practices on their own farms, such as tree nurseries, woodlots, fruit orchards, fodder banks, cropping with improved techniques, intercropping and IGAs.

*iii)* **Output 1:** Institutional and technical capacities for social forestry extension in FD are strengthened

Technical capacity of FD staff has been improved through training both locally and overseas. Institutional capacity has also been strengthened through deployment of Assistant DFOs in each district to assist the DFO. ISFP has also been actively involved in the development of policy, strategy and planning documents for the FD and the forest sector.

*iv*) *Output 2:* Social forestry extension activities among individual farmers and farmer groups are promoted

Through the FFS system of extension, the farmers have been empowered and enabled not only to practice extension activities on their own farms, but they also share the knowledge and techniques with other farmers and farmer groups. Intra group extension is also common. In addition, the groups hold field days, graduations and exchange visits which they use to inform and educate others on FFS extension method and practices.

v) Output 3: Farmers and other stakeholders obtain enough technical knowledge and techniques

All groups and farmers participating in FFS indicated that they have obtained a lot of knowledge and techniques from the project. However, they indicated that there are still some techniques which they need to master such as propagation of mukau, and also requested further support in establishment of IGAs of their choice. However, the situation is different for surrounding farmers, only few of whom have benefited from the knowledge.

*vi*) *Output 4:* Information on social forestry extension and related issues is shared among the stakeholders.

Effective communication and information sharing channels have been established and information is effectively shared. These include the internet, workshops, meetings, seminars and the media. Farmer groups share information on social forestry through field days, tours and visits, graduation events, community barazas and on individual farms. The public survey established that there had been an increase in the percentage of people aware of social forestry information in all the project districts and in Nairobi.

# vii) Verification of Performance

- So far, the degree of achievement of the project purpose for the target groups is very positive. However, the impact to surrounding farmers is not wholly felt in all the districts, as the interaction time with these neighbours has been limited to field days and graduations. It is expected that more will be achieved as time goes by.
- The project outputs have also been achieved as planned, albeit with some delays. This was assessed using the project monitoring documents which compare the achievements against the goals.
- Both the GoK and the GoJ have been contributing to the budget for implementation of project activities. For the GoJ, this includes provision of long and short term experts for the project, training for the counterpart staff, office and other equipment, vehicles and motor cycles, as well as a budgetary allocation for the running of the project. The GoK side provides counterpart staff, budget allocation mostly for DSAs and running costs of the vehicles, as well as office space and land on which the offices stand.
- The study has established that the GoK budget allocation is inadequate to maintain the current level of activities once the project ends. In addition, there have been occasional delays in disbursement, which have constituted a constraint for the project implementation. Input from the GoJ component was disbursed as planned.

# vii) Verification of Implementation Process

- For most part, the actual activities have been carried out as planned for all outputs both at FD HQs and in the field. This is shown in the progress of activities reports for each output. In some cases, however, there have been some delays arising from the GoK disbursement system and cumbersome procurement procedures.
- Management of the project was found to be appropriate, and interactions between the Japanese experts and the counterpart staff were generally smooth.
- The workload for monitoring activities was found to be heavy on the extension staff, and will need to be reviewed.
- A lot of capacity in social forestry extension has already been developed among the counterpart staff. However, more capacity needs to be developed among the staff. The farmers also acquired a lot of benefits, the most important being knowledge and techniques from FFS. They also indicated that they need to be supported to further their skills in specific techniques such as propagation of mukau.

# vii) Relevance

• The overall goal is consistent with the Poverty reduction Strategy, current National Development Plan and specific District Development Plans, and the Economic Recovery

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Strategy for Wealth and Employment Creation document which address issues of improved living standards for the rural communities. The project purpose is also in line with the development policy, in particular the new forest policy and the Forest Act 2005.

- FFS has been accepted by both implementers and beneficiaries as an appropriate method of social forestry extension.
- More coordination is needed among the four outputs of the project.
- Clear direction of a functional unit at H/Qs is now visible.
- Information on social forestry extension and related issues are being shared effectively among stakeholders.
- viii) Effectiveness
  - Individual farmers and farmer groups in the three project districts are already intensifying social forestry activities on their group and individual farms.
  - The adequacy and timeliness of the counterpart budget allocation constituted a constraint for realization of the project purpose was, as the amount was not enough to cover the required components on the GoK side, and there were cases of delays in disbursements.
- *ix)* Efficiency
  - Degree of achievement of each output is good, as the outputs are already being realized within the two years and four months of project implementation.
  - All inputs to the project are appropriate. However, for better efficiency, it will be necessary to harmonize the number of activities with commensurate timing and scheduling.
  - When considering the reduction of Japanese experts to the project the project approaches the end, the extension function should be maintained on long term basis. This is because new trials in the field of social forestry are going on and accumulation of lessons learnt and packaging of the extension system are yet to be done. At the same time, additional backstopping function for implementation of FFS in other districts is expected.

# x) Impact

- The overall goal of improving the living standards of people living in semi-arid areas while enhancing sustainable environmental conservation has already started to be realized. This is because in Kitui and Mbeere, there is already an increase in the contribution of social forestry activities to household income, and the increased practice of social forestry techniques has improved the environmental situation, at least at farm level.
- Other impacts have also been realized, including empowerment of groups, farmers and implementing staff, including the DFOs and DFEOs.
- Some indirect impacts include reduced dependence on state forests for tree products such as timber, timber and firewood, and increased access to other benefits/projects using the existing groups as an entry point.

# xi) Sustainability

- A lot has been done in terms of policy, institutional and technical support to the project and its activities, and to social forestry in general. However, sustainability of project activities and their benefits after end of ISFP is not obvious, and needs to be worked on, particularly as regards the financial aspect.
- The sector reforms are expected to contribute positively to sustainability of the the project ideals and to social forestry extension.

# 7.2 Lessons Learnt

- i) ISFP has played a key role in support of policy and planning in the forest sector.
- ii) ISFP has brought about a great change in extension as far as knowledge transfer is concerned, and the FFS methodology is well accepted by the farmers and farmer groups.
- iii) Majority of the farmers and farmer groups are sharing the knowledge and techniques they have gained from the project with other farmers and groups.
- iv) Farmers have embraced the knowledge and techniques they have learnt from the project, and are practicing many of the enterprises they have learnt on their own farms. Some have already started enjoying the fruits of their labour, especially from sale of seedlings and increased yields when they employ improved cropping methods.
- v) It is commendable that in spite of harsh conditions compounded by the recent persistent drought, the farmers have gone out of their way to ensure survival of the enterprises they are practicing on their farms. Some have lost their prized seedlings and planted trees to the drought and are discouraged.
- vi) Lack of water is a great impediment to the success of the social forestry techniques in semiarid areas.
- vii) Situations have already arisen where lack of market outlets for social forestry products such as tree seedlings is a great impediment to its continued practice.
- viii) Farmers are generally willing to plant as many trees as possible but some factors limit their efforts e.g. vagaries of the weather and termite attack both at seedling and tree development level. In one case, a group's seedlings were swept away when the river near which they had established their nursery for proximity to water overflowed its banks and carried away their seedlings.
- ix) Propagation of mukau is seen as a difficult technique by most farmers. However, they are not ready to give up, and are combining scientific methods and their own indigenous knowledge to overcome the problems.
- x) Mukau is seen as a very important tree in all the areas visited, primarily because it is indigenous to these areas, is fast growing, and is resistant to drought and termite attack. The economic importance due to its high priced and good quality timber is also obvious to the residents. They have vowed to continue planting it both for income and for own use.
- xi) ISFP has put in place good ideas regarding delivery of extension services. However due to the requirements/structure of the system, five years has been considered by most of the FD staff and the farmers/farmer groups to be too short a duration for a project of this caliber.

xii) Awareness on social forestry has increased in all the project districts under survey as well as in Nairobi. The same is true concerning the degree and variety of knowledge and techniques of social forestry. However, the concept of FFS is still new to many, and majority have not even heard about it. Therefore, a more aggressive campaign should be mounted to address the issue.

## 8 **RECOMMENDATIONS**

- i) FFS should be institutionalized as one of the extension methods for FD. The ISFP FFS extension system can greatly contribute to the planning and extension management under the new institution, KFS.
- ii) The possibility of making extension a market driven initiative should be explored, with the beneficiaries contributing to offset the cost of extension.
- iii) GoK allocation to social forestry activities (and to FD) should be increased, and the disbursement method improved.
- iv) Monitoring activities and schedules should be reviewed in order to harmonize the workload with the available time.
- v) There should be a weaning period whereby the frequency of visits of the extension staff to the FFS groups should taper off instead of ending suddenly. Individual farmers could also be supported in terms of inputs to expand those activities/technologies that they have appreciated. Backstopping to the graduated groups should be considered once in a while.
- vi) It is important to focus on changing communities' attitude towards development of farm forestry as an economic occupation.
- vii) Marketing channels for social forestry products need to be promoted.
- viii) The issue of staffing and budgetary support should be addressed in order not to isolate other farmers and farmer groups not involved in project activities. The issue of capacity building at various levels of project development also goes hand in hand with sustainability and replication of the project in other districts.
- ix) All FD extension staff should be trained in FFS methodology. FD HQs should provide backstopping support to district undertaking extension.
- x) The extension function in the project should be maintained on long term basis.
- xi) Effort should be maintained and if possible added to aggressively inform stakeholders and would be beneficiaries on the importance of social forestry, and more so the FFS concept. Available media like the newspapers, radios and TVs should be used. The project should also consider establishing their own publishing unit to cater for the great need of information material.
- xii) Sustainability of the project activities and benefits is a major issue which warrants careful attention by all concerned. All the issues seen to be an impediment to the continued accrual of benefits to the farmers in the semi-arid areas should be addressed. In this connection, the handing over process should be done gradually to facilitate smooth running of all activities.

# 付属資料(電子データ参照)

- 1. PDM
- 2. Evaluation Grid
- 3. List of Groups, Target and Surrounding Farmers Interviewed During the Survey
- 4. ISFP MT Questionnaires Used for the Survey
- 5. ISFP MTR Data
- 6. Photographs
- 7. Minutes of Meetings Held During the Survey Period
- 8. Karura FD Workshop Proceedings
- 9. Project Monitoring Reports