

ケニア共和国
小規模園芸農民組織強化・
振興ユニットプロジェクト
中間レビュー調査報告書

平成 25 年 12 月
(2013年)

独立行政法人国際協力機構
ケニア事務所

ケニ事
JR
13-007

ケニア共和国
小規模園芸農民組織強化・
振興ユニットプロジェクト
中間レビュー調査報告書

平成 25 年 12 月
(2013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、ケニア共和国政府の要請に基づき、「小規模園芸農民組織強化・振興ユニットプロジェクト」を実施することを決定しました。これに基づき、独立行政法人国際協力機構（JICA）は、2010年2月に討議議事録（R/D）の署名をケニア共和国政府と取り交わし、2010年3月から5カ年にわたって実施することとなりました。

協力開始後2年半が経過したことに伴い、本案件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ともに、必要に応じて活動計画を見直し、今後のプロジェクトの方向性を検討することを目的として、JICAはケニア共和国側と合同で、2012年10月1日から10月26日まで中間レビュー調査を行いました。

この調査結果は、ミニッツにとりまとめられ、ケニア共和国農業省・JICA双方合意の下に、署名交換が行われました。本報告書は、今回の中間レビュー調査及び協議結果を取りまとめたものであり、今後、本案件を効果的、効率的に実施していくための参考として、広く活用されることを願うものです。

終わりに、本調査にご協力とご支援をいただいた関係各位に対し、心より感謝申し上げますとともに、引き続き一層のご支援をお願いする次第です。

平成25年12月

独立行政法人国際協力機構

ケニア事務所長 江口 秀夫

目 次

序 文

目 次

図表リスト

プロジェクト実施位置図

略語一覧

評価調査結果要約表

第1章 中間レビューの概要	1
1-1 プロジェクトの概要	1
1-1-1 背景	1
1-1-2 プロジェクト概要	2
1-2 評価方法	5
1-2-1 パフォーマンスの検証	5
1-2-2 実施の検証	6
1-2-3 評価5項目に基づいた評価	6
1-3 中間レビュー実施方針	6
1-4 中間レビュー合同調査団員リスト	8
1-5 中間レビューのスケジュール	8
第2章 評価結果	10
2-1 パフォーマンスの検証	10
2-1-1 成果	10
(1) 成果1	10
(2) 成果2	11
(3) 成果3	20
(4) 成果4	21
2-1-2 プロジェクト目標	22
2-1-3 上位目標	23
2-2 実施の検証	23
2-2-1 投入	23
2-2-2 プロジェクト計画	24
2-2-3 プロジェクトサイクルの管理状況	24
(1) プロジェクトのモニタリング・メカニズム	24
(2) コミュニケーション	24
(3) 予算管理	24
(4) プロジェクトへの参加度	25
2-3 評価5項目	25
2-3-1 妥当性	25
(1) 必要性	25

(2) 優先度	25
(3) 手段としての適切性	26
2-3-2 有効性（予測）	26
(1) プロジェクト目標の達成度	26
(2) 成果とプロジェクト目標との因果関係	26
(3) 外部条件	26
2-3-3 効率性	27
(1) プロジェクト目標に対する成果の貢献度	27
(2) 因果関係（成果、活動、投入）	27
(3) 投入	28
2-3-4 インパクト（予測）	29
(1) 因果関係（上位目標とプロジェクト目標）	29
(2) 波及効果	29
(3) 他ドナーとの連携	30
2-3-5 持続性（予測）	30
(1) 政策・制度面	30
(2) 組織面	30
(3) 財政面	30
(4) 技術面	31
(5) オーナーシップ	31
(6) 社会、文化、環境面	31
2-4 評価の結論	32
第3章 提言・教訓	33
3-1 提言	33
3-1-1 プロジェクト実施に関する提言	33
3-1-2 財政関連に関する提言	33
3-1-3 モニタリング・フォローアップに関する提言	33
3-1-4 SHEP アプローチの持続性と拡大に関する提言	33
3-1-5 他のドナープロジェクトとの協調	34
3-1-6 PDM と PO の変更	34
3-2 教訓	34
3-2-1 客観的評価が実施可能な数値指標と効率的なデータ収集	34
3-2-2 農業省の既存の普及システムを活用した効果的な普及活動	34
3-2-3 持続性を重視した PDM 設計	34
3-2-4 農民に受け入れられやすい活動計画・技術	35
付属資料	
1. PDM の変更（1-4 版）	39
2. PO の変更（1-5 版）	49
3. プロジェクト合同調整委員会リスト	54

4. 日本人専門家投入リスト	55
5. ケニア C/P リスト	57
6. プロジェクト支出（合計・ケニア・日本）	58
7. 日本での研修参加者リスト	60
8. 実施県プロポーザルフォーム	61
9. 園芸作物栽培基本技術 20	68
10. ベースライン調査用紙：作物生産及び所得分析データシート	70
11. ベースライン調査用紙：グループ・エンパワーメント指標	72
12. グループ選択ガイドライン	77
13. 情報処理管理システム図	79
14. SHEP アプローチトレーニングリスト	80
15. 収入指標の目標値設定の計算方式	81
16. 平均総収入データ表	83
17. 園芸作物栽培基本技術 20 導入率データ表	87
18. JCC ミニッツ	93
19. 合同レビューレポート	108

図表リスト

図-1 : SHEP アプローチ実施体制図.....	2
図-2 : SHEP アプローチ普及システム図.....	3
図-3 : SHEP アプローチ研修の概略図.....	4
図-4 : プロジェクト・デザイン・マトリックス.....	5
グラフ-1 : SHEP アプローチ活動にかかった総支出.....	28
表-1 : プロジェクト概要.....	2
表-2 : SHEP UP 実施の各行政レベルにおける役割.....	3
表-3 : SHEP UP 実施州のリストと実施年度.....	4
表-4 : PDM の語彙と定義.....	6
表-5 : 評価 5 項目.....	6
表-6 : 中間レビューのスケジュール.....	8
表-7 : セントラル州 10 県の農民個人の平均総収入の増加率 (%).....	13
表-8 : リフト・バレー州 10 県の農民個人の平均総収入の増加率 (%).....	13
表-9 : セントラル州で栽培基本技術を県目標値以上に導入した農民の割合 (%).....	17
表-10 : リフト・バレー州で栽培基本技術を県目標値以上に導入した農民の割合 (%).....	17
表-11 : セントラル州の農民 1 人当たりの栽培基本技術の平均導入数の県別増加率 (%).....	17
表-12 : リフト・バレー州の農民 1 人当たりの栽培基本技術の平均導入数の県別増加率 (%).....	18
表-13 : 収入が減少・または微増した県における技術の導入率及び GEI 指数.....	19
表-14 : 平均総収入が増加した県における技術の導入率及び GEI 指数.....	20
表-15-A : 日本側投入.....	24
表-15-B : ケニア側投入.....	24
表-16 : 成果の達成度.....	27
表-17 : プロジェクト 1 年目に研修を受けた農民、職員及びステーク・ホルダー数.....	29
表-18 : 5 項目評価の達成度.....	32

プロジェクト実施位置図



略語一覽

C/O	Counterpart
DAO	District Agricultural Officer
FABLIST Forum	Farm Business Linkage Stakeholder Forum
FEOs/GFs	Frontline Extension Officers /Group Facilitators
FT-FaDDE	Facilitator's Training for Farmers' Demand Driven Extension
GEIs	Group Empowerment Indicators
GF	Group Facilitator
GHCP&PHHT20	General Horticultural Crop Production & Post-Harvest Handling Techniques ²⁰
GoK	Government of Kenya
HCDA	Horticultural Crops Development Authority
IFAD	International Fund for Agricultural Development
JEF2G	Joint Extension Staff & Farmers Dual Gender
JICA	Japan International Cooperation Agency
M&E	Monitoring and Evaluation
MoA	Ministry of Agriculture
ODA	Official Development Assistance
OVI	Objectively Verifiable Indicator
RICEMAPP	Rice-based and Market-oriented Agriculture Promotion Project
PDA	Provincial Director of Agriculture
PDM	Project Design Matrix
PMC	Project Management Committee
PO	Plan of Operations
PSC	Project Steering Committee
R/D	Record of Discussion
SHEP	Smallholder Horticulture Empowerment Project
SHEP UP	Smallholder Horticulture Empowerment and Promotion Unite Project
SHoMaP	Smallholder Horticulture Marketing Program
SIDEMAN SAL	Sustainable Smallholder Irrigation Development and Management in Semi-Arid Lands project

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：小規模園芸農民組織強化・振興ユニットプロジェクト（SHEP UP）
分野：農業開発・農村開発	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）：5億9,000万円
協力期間	(R/D)：2010年2月24日
	(延長)：
	(F/U)：
	先方関係機関：農業省・園芸開発公社
	日本側協力機関：
	他の関連協力：
<p>1-1 協力の背景と概要</p> <p>ケニア共和国（以下、「ケニア」と記す）の農業セクターはGDPの26%、外資獲得の65%を占めるなど国家経済において重要な役割を果たしている。（農業セクター開発戦略 2010-2020）中でも園芸分野は、年率15-20%の成長率を示す重要なサブセクターであり、その生産量の60%は小規模農家によってもたらされている。収益性の高い輸出市場への小規模園芸生産者の参入割合は低く、かつ参入している場合でも収益性は低い。一方、ケニアの園芸生産量の96%は国内市場で販売、消費されており、収益の機会が多い国内市場において、小規模園芸生産者がより高い収益を得るための支援の必要性が認識されていた。</p> <p>国際協力機構（Japan International Cooperation Agency：JICA）は2006年より3年間にわたり、ケニア国農業省と園芸作物開発公社（Horticultural Crops Development Authority：HCDA）を通じて、小規模園芸農家の組織強化・収入向上と農業省普及員及びHCDA職員の能力向上を目的とした「小規模園芸農民組織強化計画プロジェクト（Smallholder Horticulture Empowerment Project：SHEP）」を実施した。</p> <p>SHEPでは小規模園芸農民組織を対象に、栽培からマーケティングまで市場に対応できるよう、研修を中心とした能力向上支援を行ったところ、支援対象の農民組織において高い所得の伸びが記録される等、大きな成果を収めた。ケニア国政府はこの成果を高く評価し、SHEPをはじめとする既存の農家支援事業の知見に基づき、同様の活動の全国展開を担う目的で小規模園芸農民組織強化・振興ユニット（SHEPユニット）をケニア国農業省作物管理局下に設立することとし、その立ち上げと機能強化支援をわが国に要請した。</p> <p>これを受けてJICAは、農業省作物管理局及び園芸作物開発公社をカウンターパート機関として、小規模園芸農家への効果的な支援システムが全国的に確立されることを目標とした「小規模園芸農民組織強化・振興ユニットプロジェクト（SHEP UP）」を2010年3月から2015年3月まで5年間の予定で実施中である。</p> <p>1-2 協力内容</p> <p>ケニア全8州において農業省・園芸作物開発公社普及員や小規模園芸農民組織を対象として栽培からマーケティングまでの包括的な研修を行い、小規模園芸農家が市場に対応するための効果的な支援システムを全国的に確立し、小規模園芸農家の生計向上をめざすための技術協</p>	

力。

- (1) 上位目標：全国の SHEP アプローチ実施県において小規模園芸農家の生計が向上する。
- (2) プロジェクト目標：小規模園芸農家のための効果的な支援システムが全国的に確立される。

(3) 成果

成果 1：SHEP ユニットにおいて SHEP アプローチ展開のための実施体制が整う。

成果 2：対象農民グループの園芸作物収入が向上する。

成果 3：成果 2. に基づき、実施県において SHEP アプローチが上記対象グループ以外でも展開される。

成果 4：SHEP アプローチの情報管理システムが確立される。

(4) 投入（2012 年 10 月現在）

日本側：総投入額 2.67 億円

長期専門家派遣 3 名 機材供与 717 万円

短期専門家派遣 18 名 ローカルコスト負担 6,512 万 3,000 円

研修員受入 2 名

相手国側：

カウンターパート配置 12 名 機材購入 現地通貨 1,131 万 3,000 ケニアシリング

土地・施設提供 ローカルコスト負担 現地通貨 5,475 万 3,000 ケニアシリング

2. 評価調査団の概要

調査者	総括	花井 淳一	JICA ケニア事務所次長
	計画管理	片山 和久	同所員
	普及・政策	Sebastian Odanga	同在外専門調整員
	評価団員	杉本 寛子	評価分析 太平洋技術監理有限責任事業組合
調査期間	2012 年 10 月 1 日～2012 年 10 月 26 日		評価種類：中間レビュー

3. 評価結果の概要

3-1 実績の確認

3-1-1 成果の達成度

- (1) **成果 1**：SHEP ユニットにおいて SHEP アプローチ展開のための実施体制が整う。

指標 1-1. プロジェクト対象地域において、80%の州及び県レベルの農業省普及職員及びステーク・ホルダーが SHEP アプローチを的確に理解する。

指標 1-2. プロジェクト終了時まで、SHEP アプローチのガイドラインが完成する。

ワークショップ終了後の確認テストや聞き取り調査の結果から、州及び県レベルの農業省職員は SHEP アプローチを理解していると判断された。Farm Business Linkage Stakeholder Forum: FABLIST フォーラムに参加したステーク・ホルダーへの質問では 99%の回答者がフォーラムの意図を理解していた。SHEP アプローチのガイドラインの作成は実施 4 年目から作業が開始されプロジェクト最終年に完成となる予定。これらの理由から**成果 1**の達成は見込まれる。

(2) 成果 2：対象農民グループの園芸作物収入が向上する。

指標 2-1. SHEP アプローチを活用後 2 年以内に、ユニット及び県に支援されたすべての小規模園芸農民グループの個々のメンバー（男・女）及び農民グループは、エーカー当たりの売上高をセントラル州で平均 18.0%～48.2%、リフト・バレー州で平均 17.3%～52.7%、ニャンザ州で平均 13.8%～55.3%、西部州で平均 15.5%～53.6%増加させる。¹

指標 2-2. 研修後 2 年以内に、小規模園芸農民グループの個々のメンバー（男・女）及び農民グループのうち 70%以上が、県目標値以上の園芸作物栽培基本技術を利用する。

指標 2-3. 研修後 2 年以内に小規模園芸農民グループの個々のメンバー（男・女）及び農民グループの園芸作物栽培基本技術の利用率が、セントラル州で平均 16.0%～68.6%、リフト・バレー州で平均 14.2%～43.2%、ニャンザ州で平均 9.2%～67.7%、西部州で平均 33.3%～84.0%増加する。²

セントラル州及びリフト・バレー州の 1 年目のモデル農民グループから 2012 年 8-9 月にかけて収集された平均総収入と技術導入率のデータを元に評価・分析を行ったところ、2 州 12 県において農民の平均総収入は増加していた。また両州 20 県のうち 15 県で 70%以上の農民が、園芸作物栽培基本技術 20 の導入率の県目標値に達していることから、**成果 2 は達成されたと判断する。**一方、平均総収入の下がった県もあり、天候被害による

¹ 各SHEP UP活動実施県における指標2-1は以下のとおり。セントラル州：ラリ県25.7%、ニャンダルア・セントラル県47.7%、キエニ・イースト県38.9%、カンダラ県18.0%、キエニ・ウェスト県22.0%、キクユ県19.5%、キリニャガ・ウェスト県48.1%、リムル県36.7%、ニャンダルア・ウェスト県37.4%及びムランガ・サウス県48.2%。リフト・バレー州：ナンディー・イースト県24.0%、ナクル・ノース県22.4%、ワレング県17.3%、ナンディー・サウス県23.1%、カジアド・ノース県24.0%、ライキピア・ウェスト県52.7%、マラクウェット・ウェスト県35.3%、トランスマラ・ウェスト県44.9%、ソッティック52.1%及びナロック・サウス県21.2%。ニャンザ州：シアヤ県51.5%、ニャミラ県24.3%、ボンド県47.7%、マサバ・サウス県27.0%、ラチュオニョ・サウス県25.4%、ゲム県25.9%、グチャ県42.0%、スバ県55.3%、キスム・イースト県42.2%及びウゲンヤ県13.8%。西部州：クウィセロ県17.6%、カカメガ・ノース県43.7%、マウント・エルゴン県42.9%、サバティア県20.1%、カカメガ・セントラル県15.9%、ハミシ県15.6%、マテテ県19.0%、チェプタイス県53.6%、ブンゴマ・イースト県52.7%及びテソ・ノース県15.5%。

² 各SHEP UP活動実施県における指標2-2は以下のとおり。セントラル州：ラリ県44.6%（男：41.2%/女：48.3%）、ニャンダルア・セントラル県68.6%（男：87.6%/女：49.0%）、キエニ・イースト県42.7%（男：38.5%/女：47.9%）、カンダラ県60.3%（男：63.1%/女：57.6%）、キエニ・ウェスト県37.3%（男：37.2%/女：37.5%）、キクユ県19.3%（男：18.2%/女：20.3%）、キリニャガ・ウェスト県45.1%（男：44.2%/女：45.9%）、リムル県45.3%（男：42.2%/女：47.8%）、ニャンダルア・ウェスト県16.0%（男：14.0%/女：17.2%）及びムランガ・サウス県45.0%（男：38.9%/女：54.8%）。リフト・バレー州：ナンディー・イースト県22.0%（男：20.8%/女：23.3%）、ナクル・ノース県31.4%（男：28.5%/女：34.2%）、ワレング県16.4%（男：10.3%/女：24.8%）、ナンディー・サウス県36.5%（男：29.7%/女：45.8%）、カジアド・ノース県14.2%（男：10.7%/女：17.7%）、ライキピア・ウェスト県37.8%（男：36.0%/女：40.0%）、マラクウェット・ウェスト県43.2%（男：48.6%/女：35.9%）、トランスマラ・ウェスト23.3%（男：22.5%/女：25.0%）、ソッティック16.4%（男：16.0%/女：16.8%）及びナロック・サウス県30.7%（男：23.6%/女：35.5%）。ニャンザ州：シアヤ県64.2%（男：51.6%/女：73.4%）、ニャミラ県56.7%（男：51.4%/女：62.1%）、ボンド県16.8%（男：15.4%/女：18.2%）、マサバ・サウス県31.2%（男：27.7%/女：34.1%）、ラチュオニョ・サウス県12.1%（男：12.4%/女：11.6%）、ゲム県42.4%（男：33.1%/女：53.8%）、グチャ県67.7%（男：62.6%/女：69.5%）、スバ県64.4%（男：61.9%/女67.8%）、キスム・イースト県9.2%（男：10.6%/女：8.1%）及びウゲンヤ県21.8%（男：20.2%/女：23.1%）。西部州：クウィセロ県33.3%（男：33.7%/女：33.1%）、カカメガ・ノース県39.6%（男：33.9%/女：44.9%）、マウント・エルゴン県56.5%（男：51.3%/女：63.6%）、サバティア県58.7%（男：49.1%/女：68.8%）、カカメガ・セントラル県46.2%（男：37.2%/女：56.9%）、ハミシ県84.0%（男：46.7%/女：113.6%）、マテテ県39.3%（男：37.2%/女：40.5%）、チェプタイス県56.1%（男：47.5%/女：64.5%）、ブンゴマ・イースト県59.6%（男：54.9%/女：64.1%）及びテソ・ノース県40.6%（男：35.0%/女：45.9%）。

収穫のロス、道路網の悪さや農業普及員・Group Facilitator : GF のサポートの弱さなどの外部要因や課題がある。

(3) **成果 3** : 成果 2 に基づき、実施県において SHEP アプローチが上記対象グループ以外でも展開される。

指標 3-1. 実施県 100%が、翌年の年間計画/予算に SHEP アプローチを組み込む。

指標 3-2. SHEP アプローチを翌年の年間計画/予算に組み込んだ 100%の実施県がその年実際に SHEP アプローチを実施する。

指標 3-3. SHEP アプローチを活用後 2 年以内に、実施県で県独自の資金で支援された小規模園芸農民グループの個々のメンバー（男・女）及び農民グループすべてが、エーカー当たりの売上高を平均---%増加させる。

SHEP ユニットの支援で 1 年目のプロジェクトを実施したセントラル州とリフト・バレー州全 20 県は、現在、県の予算と計画に沿って SHEP アプローチの 2 年目を実施している。現時点では評価が困難な指標 3-3 を除いて**成果 3 は達成されている**。一方、農業省からのプロジェクト予算の配賦が十分でないなど課題がある。

(4) **成果 4** : SHEP アプローチの情報管理システムが確立される。

指標 4-1. 初年度第 3 四半期目の終わりまでに、モニタリング・評価戦略を含むユニットの情報管理のガイドラインの素案（第 1 ドラフト）が策定される。

指標 4-2. 特定されたすべての園芸普及資料の目録が作成される。

指標 4-3. 60%の農民グループ（県、普及スタッフ）がユニットの提供する情報に満足する。

情報処理ガイドラインの第 1 草案や情報管理システムは既に構築されており、SHEP ユニット内で活用されている。情報処理システムの拡張を目的として、現在セントラル州の実施 2 県でパイロットテストを実施中であり、ネットワーク環境が整備されると、両県から SHEP ユニット内に構築された園芸普及資料へのアクセスが可能になる。聞き取り調査から県 SHEP 運営チームの 86%が SHEP ユニットから提供される情報に満足していると回答している。また、農業普及員・GF や農民からも提供されている情報に満足しているとの回答があった。以上の理由により、**成果 4 は達成された**と判断する。

プロジェクト目標 : 小規模園芸農家のための効果的な支援システムが全国的に確立される。

指標 1. プロジェクト終了時まで、プロジェクト実施県で SHEP アプローチを用いたすべての小規模園芸農民グループの個々のメンバー（男・女）及び農民グループが、売上を平均--%増加する。

指標 2. プロジェクト終了時まで、ユニットの支援後 70%の実施県が SHEP アプローチを実施し続ける。

2 州 12 県にて農民の平均総収入は増加している。また、1 年目に SHEP ユニットの支援を受けたすべての実施県が、2 年目に SHEP アプローチを継続していることから、現時点でのプロジェクト目標達成の可能性は高い。

上位目標：全国の SHEP アプローチ実施県において小規模園芸農家の生計が向上する。

指標：園芸小規模農民の世帯当たりの園芸売上による収入が、プロジェクト開始 1 年目から--%増加する。

本調査では上位目標について評価することはできないが、現時点で実施 2 州において農民の所得向上が確認されていること、上位目標とプロジェクト目標の間に相関関係が存在していることからプロジェクト目標が達成されれば**上位目標が達成される可能性が高い**と言える。

3-2 評価結果の要約

(1) **妥当性**は以下の理由により高い。

- プロポーザル方式を用いた実施県の選出でニーズの高い県が選択されており、聞き取り調査でも小規模園芸農民のニーズに合致しているとの回答が得られている。
- 小規模農民の生産率の増加は、ケニアの国家計画や農業セクター開発戦略 2010-2020 の目標でもある。わが国の対ケニアの農業分野支援の優先項目として、市場ニーズに対応する園芸作物の生産を小規模農家の援助を通して行うとことがあげられており優先度は高い。
- 農業省の普及システムに沿ってプロジェクトが実施され、農業省の一連の行政システムをケニア全州で網羅している。またモデル農民グループの選択や農民のトレーニング参加にジェンダーバランスを条件づけるなどジェンダーに関する配慮が行き届いている。
- SHEP アプローチの紹介された技術やスキルを、モデル農民グループ以外の農民が導入しようとしていることや土のう技術を用いた道の修復にコミュニティメンバーや時には地元自治体や道路省などが参加するなど波及効果がみられる。

(2) **有効性**は以下の理由によりある程度高い。

- プロジェクト目標達成の可能性は高い。現行 PDM 第 3 版の指標を改訂する必要があるが、成果とプロジェクト目標との因果関係は存在する。悪天候による影響、2013 年 3 月に予定されている総選挙の影響や州制から郡制への行政システムの移行は重要な外部条件である。

(3) **効率性**は以下の理由により高い。

- 現時点で検証可能な成果のほとんどが達成されており、成果、活動、投入の間に因果関係が成立している。プロジェクトは計画当初に予定されていた投入人数より少ない人員で効率よく実施されているが、この先実施州を拡大すると旧実施県に対するモニタリングやフォローアップへの人的投入に関する懸念は残る。一方、活動に係る支出は実施 2 年目には下がっており、実施県による 2 年目の実施コストは 1 年目のコストの約 5 分の

1 まで下がっている。

(4) インパクトは可能性としては高いといえる。

- 2 州 12 県で農民の平均総収入の増加という現時点での成果や、上位目標とプロジェクト目標の間に相関関係が存在していることから、プロジェクト目標が達成されれば上位目標が達成される可能性が高い。
- 第 1 バッチ 2 州における土のう技術を用いた道の修復（1342.9m）やジェンダー啓蒙トレーニングにより夫婦間の農作業への協調性や家族関係の向上、SHEP アプローチで導入された農業技術がモデル農民グループ以外にも広がっていることなどの波及効果も見られている。

(5) 持続性は高いといえるが問題も存在する。

- SHEP ユニットは、既に農業省作物管理局の 1 ユニットとして設立されておりプロジェクト終了後も継続されていくことから持続性は確保されている。
- SHEP ユニット職員のキャパシティがプロジェクト開始当初から比較して格段に強化されたこと、また質問表に答えた 60%の県職員らが SHEP ユニットからのサポートを受けずにプロジェクトを継続できると答えていることから、キャパシティ面での持続性は高いといえる。
- 実施県での 2 年目のプロジェクト予算が十分でないことは懸念事項の 1 つであり、特にモニタリングやフォローアップのための経費の不足は、その活動を制限している。
- 1 年目のモデル農民グループにおける園芸作物栽培基本技術 20 の導入度がきわめて高い。また、聞き取り調査や質問表からも技術移転に関して正の反応が読み取れる。
- プロポーザル方式での実施県の選択は、県や州のオーナーシップを高めるうえでも効果があった。合同調整委員会は農業省の事務次官や園芸開発公社総裁が議長を務め、ケニア政府の高官の関与がオーナーシップの醸成に役立っている。

3-3 効果発現に貢献した要因

(1) 計画内容に関すること

- プロジェクトに用いられた成果、キャパシティの構築（成果 1）、対象グループの平均総収入と技術導入率（成果 2）、実施県によるプロジェクトの持続性（成果 3）及び情報管理（成果 4）のすべて指標は測定可能であり、成果の達成によりプロジェクト目標が達成される枠組みが論理的に構築されている。

(2) 実施プロセスに関すること

- プロジェクトは、農業省の一連の普及システムに従い、本省の SHEP ユニットから州、県、区、農業普及員のすべてのレベルに対し SHEP アプローチのトレーニングを実施する。プロジェクト実施期間中に農業省・HCDA の職員の 50%以上が SHEP アプローチに関する 1 週間のトレーニングを受ける計画であり、SHEP アプローチを農業省・HCDA 内を幅広く広めることで、プロジェクト目標の効果的な支援システムの確立をめざす。
- プロポーザル方式による実施県の選択により、プロジェクトに対するニーズの高い県が

選択されることになり、このことが実施県における2年目以降のプロジェクトの継続率を高めたと思われる。加えて1年目に学んだことを県が2年目に自力で実践するという仕組みにより、実施県のキャパシティ強化に役立っている。

- **SHEP** アプローチの園芸作物栽培基本技術 20 は、市場調査による作物の選択から収穫後のハンドリングまで園芸農業にかかる技術を包括的に網羅しており、これらの技術を導入することで収穫量が増えるように設計されている。

3-4 問題点及び問題を惹起した要因

(1) 計画内容に関すること

計画内容に関して特に問題点は見られなかった。

(2) 実施プロセスに関すること

- 成果2の指標 2-1 について、2州8県において農民の平均総収入は減少したが、その要因として収集されたデータ個数の少なさ、悪天候による収穫のロス、道路網の悪さや普及員・GFのサポートの弱さなどが挙げられる。
- 一方、平均総収入が増加した県において、高いグループ・エンパワーメント値や技術導入率が確認された。

3-5 結論

プロジェクト目標である小規模園芸農家のための効果的な支援システムが全国的に確立されることの達成度は良好といえる。**SHEP** ユニットやフィールドレベルでの職員のキャパシティは強化されているし、農民グループによる技術の導入率も高い。平均総収入が12県で増加したことは所得向上の目標達成へも明るい見通しであるといえる。**SHEP** アプローチの継続に関しても職員や農民のやる気も高く、農業省のプロジェクトへのオーナーシップも醸成されている。持続性に関する問題点としては、プロジェクト予算の醸成、モニタリングやフォローアップに係るリソースの醸成、悪天候や社会的動乱、行政システムの変更などの外部要因による影響が挙げられる。

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) プロジェクトチームに対する提言

- **SHEP** アプローチのガイドライン草案作成に関する計画を具体化する。
- 成果2で提示された阻害要因に対する解決策のフォローアップを続ける。
- プロジェクトの実施州の拡大に伴い、新しい州・県での実施と従来の州・県のモニタリングやフォローアップとの間のバランスを見出す。
- モデル農民グループ間での経験や成功例を発表し、共有する意見交換会の開催をプロジェクト活動の一環として実施する。

(2) ケニア政府に対する提言

- 実施県へプロジェクト2年目の予算が十分に配賦される。

- 2015 年のプロジェクト終了後も教材が引き続き確保されるための持続性のあるメカニズムを、農業省内で確立する。
- 農業関連のドナー・プロジェクトの情報共有や、SHEP アプローチを他ドナーへ紹介する機会を提供する。

3-7 教訓

- PDM の指標について、計測可能な数値を入れたため、プロジェクト目標達成の進捗を客観的に確認することができた。
- SHEP アプローチの一連の研修について、農業省の既存の普及システムを活用して実施したことで、効果的・効率的に農業省職員や農民の能力を強化できたとともに、活動実施後の支援体制（農民に対する普及員の支援、普及員に対する県 SHEP 運営チームの支援など）も強化することができた。
- プロジェクト活動を 1 年目と 2 年目に分け、1 年目は農業省からの支援を直接受けて実施し、1 年目の経験を活用して 2 年目の活動を農業省の地方（県）支所が独自の人的リソースと財源で継続するように設計されている。
- 移転する技術が園芸農業のバリューチェーンをすべて網羅しているとともに、研修内容が効果的に農民の営農活動に取り入れられるよう、一連の研修計画が農民の営農活動に配慮して設計されている。

第1章 中間レビューの概要

1-1 プロジェクトの概要

1-1-1 背景

ケニア共和国（以下、「ケニア」と記す）の農業セクターは GDP の 26%、外資獲得の 65% を占めるなど国家経済において重要な役割を果たしている〔農業セクター開発戦略（ASDS）2010-2020〕。中でも園芸分野は、年率 15-20 % の成長率を示す農業セクターにおける重要なサブセクターであり、その生産量の 60% は小規模農家が担っている。収益性の高い輸出市場への小規模園芸生産者の参入割合は低く、かつ参入している場合でも収益性は低い。一方、ケニアの園芸生産量の 96% は国内市場で販売、消費されており、収益の機会が多い国内市場において、小規模園芸生産者がより高い収益を得るための支援の必要性が認識されていた。

JICA は 2006 年より 3 年間にわたり、ケニア国農業省と園芸作物開発公社（HCDA）を通じて、小規模園芸農家の組織強化・収入向上と農業省普及員及び HCDA 職員の能力向上を目的とした「小規模園芸農民組織強化計画プロジェクト（SHEP）」を実施した。

SHEP では小規模園芸農民組織を対象に、栽培からマーケティングまで市場に対応できるよう、研修を中心とした能力向上支援（SHEP アプローチ）を行ったところ、支援対象の農民組織において所得の向上が確認される等、大きな成果を収めた。ケニア国政府はこの成果を高く評価し、SHEP をはじめとする既存の農家支援事業の知見に基づき、同様の活動の全国展開を担う目的で小規模園芸農民組織強化・振興ユニット（以下、「SHEP ユニット」と記す）を農業省作物管理局下に設立することとし、同ユニットの立ち上げと機能強化支援をわが国に要請した。

これを受けて JICA は、農業省作物管理局及び HCDA をカウンターパート機関として、小規模園芸農家への効果的な支援システムが全国的に確立されることを目標とした「小規模園芸農民組織強化・振興ユニットプロジェクト（SHEP UP）」を 2010 年 3 月から 2015 年 3 月まで 5 年間の予定で実施中である。

SHEP UP では、SHEP ユニットや農業省普及員、HCDA 職員などに対し SHEP アプローチに関する一連の研修を行い、彼ら自身が農家を指導する能力を強化することで、全国の小規模園芸農家を効果的に支援するシステムを構築することを目的としている。プロジェクトは全国 8 州を対象とし、各州において実施県 10 県がプロポーザル方式に基づき選出される。選出された各実施県はモデル農民グループを 5 グループ選出し、各グループから男女 1 名ずつの農民代表が農業普及員と共に研修を受ける仕組みを導入するなど、研修の成果発現に向けた工夫が施されている。SHEP アプローチは、園芸農業のバリューチェーンに沿って、作物のマーケティング（お見合いフォーラムや市場調査）から作物の選択、市場で求められる品質の作物を栽培するための技術習得まで網羅的に実施される。SHEP アプローチを通じて、「作ってから売る」から「売るために作る」という農民の意識の変化をもたらすような仕組みとなっている。

2013 年 10 月現在、「チーフ・アドバイザー/園芸政策」と「園芸生産・普及」の 2 名の長期専門家が農業省内の SHEP ユニットに派遣され、ケニア側カウンターパート（Counterpart: C/P）と共同でプロジェクトを実施している。

1-1-2 プロジェクト概要

プロジェクトの概要は以下のとおりである。

表-1 プロジェクト概要

上位目標	全国の SHEP アプローチ実施県において小規模園芸農家の生計が向上する。	
プロジェクト目標	小規模園芸農家のための効果的な支援システムが全国的に確立される。	
成果	成果 1	SHEP ユニットにおいて SHEP アプローチ展開のための実施体制が整う。
	成果 2	対象農民グループの園芸作物収入が向上する。
	成果 3	成果 2 に基づき、実施県において SHEP アプローチが上記対象グループ以外でも展開される。
	成果 4	SHEP アプローチの情報管理システムが確立される。

プロジェクトの意思決定は、プロジェクト合同調整委員会 (Project Steering Committee : PSC) で行われる。PSC は実施機関である農業省、HCDA 及び JICA の代表により構成されており 6 カ月毎に開催され、以下の役割を担う。

- ① プロジェクト枠組み (Project Design Matrix : PDM) において活動計画を承認する。
- ② 計画に対してプロジェクトの成果の達成度及び進捗を確認する。
- ③ 必要に応じてプロジェクトに対し助言を行う。

プロジェクトにおいて農村インフラや農産物加工といった活動が追加されたため、2010 年 10 月に開催された第 1 回 PSC において、農業省内の関連部局の局長がメンバーとして追加された (付属資料 3 参照)。

プロジェクト運営委員会 (Project Management Committee : PMC) は、プロジェクト・ディレクター (農業省作物管理局長)、プロジェクト・マネジャー (農業省園芸部長)、副マネジャー (HCDA 技術助言サービス部長)、SHEP UP ユニット・リーダーとチーフアドバイザー (JICA 専門家) で構成されている。PMC も含めた SHEP ユニットの体制は、以下のとおり。



図-1 SHEP アプローチ実施体制図

SHEP ユニットのプロジェクト実施の中核であり JICA 専門家と農業省及び HCDA から派遣されたケニア側 C/P で成り立っている。SHEP アプローチの実施は以下のとおり、農業省の普及システムに従って行われている。



図-2 SHEP アプローチ普及システム図

各フィールドレベルにおける職員のプロジェクト実施に関する主な役割は以下のとおり。

表-2 SHEP UP 実施の各行政レベルにおける役割

行政レベル	主な役割	職員
州 SHEP UP 運営チーム	<ul style="list-style-type: none"> 実施県の選出 プロジェクト実施県へのサポート 	州農業省ディレクター 州 SHEP デスクオフィサー、HCDA ステーション・マネジャー
県 SHEP UP 運営チーム	<ul style="list-style-type: none"> モデル農民グループの選出 普及員・GF へのサポート プロジェクトのモニタリングとフォローアップ 県レベルにおける実施の年間計画・予算の作成 普及員・GF の研修 (2年目以降) 	県農業官、 SHEP デスクオフィサー、HCDA ステーション・マネジャー
区農業官	<ul style="list-style-type: none"> 普及員・GF のサポート プロジェクト実施におけるモニタリングとフォローアップ 	区農業官
農業普及員・グループファシリテーター (GF)	<ul style="list-style-type: none"> 農民グループの研修 実施中の農民グループのモニタリングとフォローアップ 	農業普及員・GF
農民グループ	裨益グループ	

(出典: 中間レビュー調査団)

プロジェクトはケニア全州を対象とし、各年毎に2州においてプロジェクトを実施する。実施1年目はプロジェクト予算（主に JICA 負担）を用いて SHEP ユニット職員による研修（表-3の黒色部分）が行われ、実施2年目は1年目の経験を基に、県 SHEP UP 運営チームが中心となりケニア側の予算と年間計画を策定し、新たな農民グループを選出してプロジェクトを実施する（表-3の灰色部分）。

表-3 SHEP UP 実施州のリストと実施年度

州	バッチ	2010	2011	2012	2013	2014	2015
Central	1 st						
Rift Valley	1 st						
Nyanza	2 nd						
Western	2 nd						
Eastern	3 rd						
Coast	3 rd						
North Eastern	4 th						
Nairobi	4 th						

(出典：中間レビュー調査団)

今回の中間レビューの時点ではセントラル州とリフト・バレー州2州が実施2年目の最終段階にあり、ニャンザ州とウエスタン州では実施1年目の最終段階であった。SHEP ユニットは中間レビュー終了直後からイースタン及びコースト州の実施1年目を開始する予定である。

SHEP UP の目的は SHEP アプローチを通して農業普及員のキャパシティを構築し、小規模園芸農家グループへのサポートを強化することから以下の研修を行っている。研修の詳細に関しては付属資料14を参照のこと。



図-3 SHEP アプローチ研修の概略図

SHEP アプローチの研修に加え、モデル農民グループの要請に答える形で農産物加工や土のう技術の研修も行っている。農産物加工と土のう技術の研修に関する詳細は付属資料 9 を参照のこと。

1-2 評価方法

本調査は、「新 JICA 事業評価ガイドライン」（2010 年 6 月改訂版）に基づいた評価手法に沿って以下のとおり実施した。

- ① プロジェクトの計画を論理的に配置したプロジェクト・デザイン・マトリックス（PDM）最新版をレビューの枠組みとして捉え、その指標に照らしてプロジェクトの実績を確認した（最新 PDM は付属資料 1 参照）。
- ② プロジェクト目標の達成度合いに貢献した要因や阻害した要因をプロジェクトのデザイン・実施プロセスの観点から分析した。
- ③ 「妥当性」「有効性」「効率性」「インパクト」「持続性」の 5 つの観点（評価 5 項目）から、プロジェクトをレビューした。今回は中間レビューのため、特に「妥当性」、「有効性」、「効率性」に重きを置いた。
- ④ プロジェクトの残りの期間の活動に対する提言を抽出した。

本調査は、日本側とケニア側の合同レビューとして実施された。結果を合同レビューレポート（英）に取りまとめた。

1-2-1 パフォーマンスの検証

プロジェクト・パフォーマンスの検証は、PDM に記されている成果、プロジェクト目標、上位目標を各指標を用いて検証する。中間レビューでは、プロジェクト目標と上位目標の達成は予測の範囲に留める。以下、PDM の概念と PDM に使用される語彙の定義を示す。

Project Design Matrix (PDM)

Narrative Summary of the Project	Verifiable Indicator	Means of Verification	Important Assumption
Overall Goal			
Project Purpose			
Outputs			
Activities	Inputs		
			Preconditions

（出典：新 JICA 事業評価ガイドライン 2010 年より抜粋）

図-4 プロジェクト・デザイン・マトリックス

表－４ PDM の語彙と定義

語彙	定義
上位目標	プロジェクト終了後 3-5 年以内に見込まれる間接的・長期的な効果、対象社会へのインパクト
プロジェクト目標	プロジェクト終了時に到達すると期待されるターゲットグループや対象社会への直接的な効果
成果	活動を行うことによって、産出される財・サービス
活動	成果を産出するための活動
外部条件	プロジェクトによる効果が持続していくための条件
前提条件	活動を始める前にクリアする条件
指標	目標の達成度を測る指標と目標値
検証方法	指標の測定するための情報源
投入	活動に必要な資源（人材、資金、資機材等）

(出典：新 JICA 事業評価ガイドライン 2010 年より抜粋)

1-2-2 実施の検証

実施の検証については活動がプロジェクト計画（Plan of Operations：PO）に提示されたとおり進んでいるか、プロジェクトの管理は正しく行われているか、実施に際する阻害・貢献要因は存在するかなどを検証した。

1-2-3 評価 5 項目に基づいた評価

調査団は以下に示す評価 5 項目に沿って評価を行う。

表－５ 評価 5 項目

1. 妥当性	プロジェクトの正当性・必要性を確認する。プロジェクト目標と上位目標がケニアの政策や日本の ODA 政策・戦略に沿っているか。ターゲットグループや最終受益者のニーズに合致しているか。
2. 有効性	プロジェクトの成果の達成度はどの程度か。また、成果がプロジェクト目標の達成度と結びついているか。
3. 効率性	プロジェクトの投入から生み出されるアウトプットの程度は、タイミング、質、量の観点から妥当であったか。
4. インパクト	プロジェクトの実施によってもたらされる、より長期的・間接的効果や波及効果はあったか（予期していなかった正・負の効果や影響を含む）。
5. 持続性	協力終了後、プロジェクトによってもたらされた成果や効果が持続されるか、あるいは拡大されていく可能性があるか（政策的、組織的、技術的、財政的な各側面からプロジェクトの持続性を見込みを考察する）。

(出典：新 JICA 事業評価ガイドライン 2010 年より抜粋)

1-3 中間レビュー実施方針

全体の対処方針として中間レビューでは以下の点に基づく評価を実施する。

- ① 中間レビュー開始時点での PDM 最新版（第 3 版、付属資料 1 参照）に沿って、投入実績、活動実績、計画達成度の見込みを確認する。

- ② 計画達成度を踏まえ、評価 5 項目（妥当性、有効性、効率性、インパクト、持続性）の観点から、プロジェクトの目標達成及び成果達成の見込み等を調査する。
- ③ 実施プロセス等に関する情報・データの収集・分析を行い、プロジェクト実績の貢献・阻害要因を抽出する。
- ④ プロジェクト終了までの課題及び今後の活動計画について合同調査団として協議し、提言や教訓を取りまとめる。
- ⑤ 以上の調査結果をもとに、合同調査団として評価 5 項目の観点から評価を行い、合同評価報告書として取りまとめる。
- ⑥ PSC にて評価結果及び PDM や PO の関連部分の変更も含めた提案を行い、評価・協議結果を協議議事録（M/M）として取りまとめる。

今回の中間レビューでは、主に今まで対象としてきた地域の実績をもとに、普及関係者に SHEP アプローチを浸透させるための実施体制（成果 1）と、SHEP アプローチの導入による対象グループの園芸作物による収入の向上（成果 2）の達成見込みの確認に重点を置き、今後の活動に向けた提言と教訓を提示する。

評価 5 項目に関して、調査団は以下の点に注目して評価を行った。

- ① 妥当性：本案件は先行案件の SHEP を通じて高い効果が確認された SHEP アプローチを、農業省内に新設された SHEP ユニットを拠点に全国 8 州に展開する仕組みを構築することを目的としている。特に、県農務官（District Agricultural Officer : DAO）の要請に基づき州農務官が対象県を選定するというプロポーザル方式を新たに採用している。調査団はプロジェクト実施州・県を訪れ、実施体制や研修・普及システム、プロポーザル方式の妥当性を検討する。
- ② 有効性：現在 4 州 40 県に対して SHEP アプローチが実施されているが、その対象地域の農家グループから平均収入や技術の導入率等の情報が得られている。現時点での入手可能な情報をもとに、調査団はプロジェクト目標の達成見込みや阻害・貢献要因について分析する。
- ③ 効率性：本案件では、SHEP の経験をもとに開発された各種研修やモニタリングを実施するために資金や人的資源、機材（教材）を投入している。また、ジェンダー主流化、土のう技術、農産物加工、ウォーター・ハーベスティングといった手法・技術の導入のために、人的資源を投入している。今回の調査では、各投入について、成果を生み出すために量・質・時期が効率的であったかを検討する。
- ④ インパクト：上位目標達成の見込みについて検討するとともに、プロジェクト実施によりもたらされる、より長期的・間接的な正・負の効果について検討する。また、波及効果発現のために必要な活動（政策レベルへの働きかけ、他ドナー・他プロジェクトとの連携等）についても検討する。

- ⑤ 持続性：持続性に関しては、政策・制度、組織、財政、技術、オーナーシップと社会経済環境面の各側面から考察する。特に財政面に関しては日本・ケニア間での予算分配や2015年援助終了後のプロジェクトの継続性についても検討する。

1-4 中間レビュー合同調査団員リスト

ケニア側

氏名	所属
Benson Mureithi	農業省作物局園芸部副部長、品質保証及び規格課、植物検疫長
Stanley Miyogo	農業省政策・外交部シニア副部長
Jacqueline Oseko	園芸開発公社職員

日本側

担当	氏名	所属
団長	花井 淳一	JICA ケニア事務所次長
計画管理	片山 和久	JICA ケニア事務所所員
普及・政策	Sebastian Odanga	JICA ケニア事務所所在外専門調査員
評価分析	杉本 寛子	太平洋技術監理有限責任事業組合

1-5 中間レビューのスケジュール

本中間レビューは以下の示す調査スケジュールに基づき2012年10月1日から26日まで実施された。

表-6 中間レビューのスケジュール

Date	Place	Activities
2012/10/01	Nairobi : JICA Kenya Office	Courtesy call to the JICA Kenya Office, Discussion with an Evaluation Team members from JICA side
2012/10/02	Nairobi : JICA Kenya Office	Meeting at the JICA Kenya Office, 12:00 pm : TV Conference with JICA H.Q.
2012/10/03	Nairobi : SHEP UP Office	9:00 am - 11:00 am : Discussion with an Evaluation Team members from Kenyan side @ AS Committee Room (3F) , MoA
2012/10/04	Nairobi : MoA & HCDA	Visit SHEP UP Office to conduct interviews to the SHEP UP Team & data collection etc.
2012/10/05	Nairobi : SHEP UP Office	8:00 am : Courtesy call to the MoA (PS) , 11:00 am : Courtesy call to the HCDA H.Q. (MD) , Visit SHEP UP Office to discuss with SHEP UP Team (JICA Expert & C/Ps) on procedures of the evaluation
2012/10/06	Nairobi	

2012/10/07	Nairobi -> Nyeri	Field Trip to the Implementing Districts of the 1st Batch (1st Year's & 2nd Year's Groups) & 2nd Batch (1st Year's Group)
2012/10/08	Nyeri	Visit PDA's Office of Central Province, Mwihoko Self Help Group (1st Year's Group) of Kieni East District in Central Province, Nginyii Maendeleo Self Help Group (2nd Year's Group) of Kieni West in Central Province
2012/10/09	Nyeri -> Nakuru -> Nairobi	Kacengo Self Help Group (1st Year's Group) of Nakuru North in Rift Valley Province, Bathi Dairy and Horticulture Self Help Group (1st Year's Group) of Lari Districts in Central Province
2012/10/10	Nairobi -> Eldoret (Flight)	Tulwop Ng'etuny Charity Women Group (1st Year's Group) of Wareng District in Rift Valley Province
2012/10/11	Eldoret -> Kakamega -> Homabay	Baraka Youth Group (1st Year's Group) of Kakamega Central District in Western Province
2012/10/12	Homabay -> Suba -> Kisumu	Madundu Self Help Group (1st Year's Group) of Suba District in Nyanza Province
2012/10/13	Kisumu -> Nairobi (Flight)	
2012/10/14	Nairobi	
2012/10/15	Nairobi : SHEP UP Office	Data analysis & Preparation of an evaluation report
2012/10/16	Nairobi : MoA & HCDA	Data analysis & Preparation of an evaluation report
2012/10/17	Nairobi : Other related organizations	Data analysis & Preparation of an evaluation report. The Team meeting to finalize the evaluation results.
2012/10/18	Nairobi	Discussion with SHEP UP Team. Preparation of an evaluation report
2012/10/19	Nairobi	Finalize an evaluation report
2012/10/20	Nairobi	
2012/10/21	Nairobi	
2012/10/22	Nairobi	Finalize an evaluation report
2012/10/23	Nairobi	Finalize an evaluation report
2012/10/24	Nairobi	10:00 am : The 5th Project Steering Committee Meeting & Mid-term Evaluation Report @ PS Board Room (7F) , MoA
2012/10/25	Nairobi	Making a M/M, Revision of the evaluation report
2012/10/26	Nairobi	Report at the JICA Kenya Office

(出典 : SHEP ユニット)

第2章 評価結果

2-1 パフォーマンスの検証

2-1-1 成果

(1) 成果1

成果1	SHEP ユニットにおいて SHEP アプローチ展開のための実施体制が整う。
指標	1-1. プロジェクト対象地域において、80%の州及び県レベルの農業省普及職員及びステーク・ホルダーが SHEP アプローチを的確に理解する。 1-2. プロジェクト終了時までには、SHEP アプローチのガイドラインが完成する。
達成度	成果1の達成は見込まれるが SHEP アプローチのガイドラインはプロジェクトの後半部に完成される予定。

成果1に関しては以下の理由から達成が見込まれる。

指標 1-1. プロジェクト対象地域において、80%の州及び県レベルの農業省普及職員及びステーク・ホルダーが SHEP アプローチを的確に理解する。

指標 1-1 については以下の点を持って 80%の州及び県レベルの農業省普及員及びステーク・ホルダーが SHEP アプローチを的確に理解しているかを検証した。

- 県 SHEP UP 運営チームのワークショップの最後に SHEP アプローチの理解度に関するテストを行ったところ、その合格率が 100%であった。
- 県 SHEPUP 運営チームに聞き取り調査を行ったところ、全員が SHEP アプローチや研修プログラムに関して説明することができた。
- FABLIST フォーラムに参加したステーク・ホルダーへの質問に対し、99%の回答者が農民と園芸関連のバリューチェーンにかかわるステーク・ホルダーとの橋渡しを目的とするという同フォーラムの趣旨を正しく理解していた。

指標 1-2. プロジェクト終了時までには、SHEP アプローチのガイドラインが完成する。

プロジェクトの実施において集積された方法、ツール、経験や学習を集約し、今後に活かす目的で、SHEP アプローチのガイドラインの作成がなされる。実施4年目の第4バッチの州のプロジェクト開始後から草案作りを始め、プロジェクト最終年に完成させる予定である。

(2) 成果 2

成果 2	対象農民グループの園芸作物収入が向上する。
指標	2-1. SHEP アプローチを活用後 2 年以内に、ユニット及び県に支援されたすべての小規模園芸農民グループの個々のメンバー（男・女）及び農民グループは、エーカー当たりの売上高をセントラル州で平均 18.0%～48.2%、リフト・バレー州で平均 17.3%～52.7%、ニャンザ州で平均 13.8%～55.3%、西部州で平均 15.5%～53.6%増加させる。 ¹ 2-2. 研修後 2 年以内に、小規模園芸農民グループの個々のメンバー（男・女）及び農民グループのうち 70%以上が、県目標値以上の園芸作物栽培基本技術を利用する。 2-3. 研修後 2 年以内に小規模園芸農民グループの個々のメンバー（男・女）及び農民グループの園芸作物栽培基本技術の利用率が、セントラル州で平均 16.0%～68.6%、リフト・バレー州で平均 14.2%～43.2%、ニャンザ州で平均 9.2%～67.7%、西部州で平均 33.3%～84.0%増加する。 ²
達成度	成果 2 は達成されたが問題点は存在する。

成果 2 は達成されたが問題点は存在する。今回の中間レビューはセントラル及びリフト・バレー州の 1 年目のモデル農民グループから 2012 年 8-9 月にかけて収集された 1 年目のデータに関して評価・分析を行った。収集された農民グループの平均総収入と技術導入率を各県でのプロジェクト開始時に収集されたベースライン調査値と比較した。また、当初 PDM の

¹ 各SHEP UP活動実施県における指標2-1は以下のとおり。セントラル州：ラリ県25.7%、ニャンダルア・セントラル県47.7%、キエニ・イースト県38.9%、カンダラ県18.0%、キエニ・ウェスト県22.0%、キクユ県19.5%、キリニャガ・ウェスト県48.1%、リムル県36.7%、ニャンダルア・ウェスト県37.4%及びムランガ・サウス県48.2%。リフト・バレー州：ナンディー・イースト県24.0%、ナクル・ノース県22.4%、ワレング県17.3%、ナンディー・サウス県23.1%、カジアド・ノース県24.0%、ライキピア・ウェスト県52.7%、マラクウェット・ウェスト県35.3%、トランスマラ・ウェスト県44.9%、ソッティック52.1%及びナロック・サウス県21.2%。ニャンザ州：シアヤ県51.5%、ニャミラ県24.3%、ボンド県47.7%、マサバ・サウス県27.0%、ラチュオニョ・サウス県25.4%、ゲム県25.9%、グチャ県42.0%、スバ県55.3%、キスム・イースト県42.2%及びウゲンヤ県13.8%。西部州：クウィセロ県17.6%、カカメガ・ノース県43.7%、マウント・エルゴン県42.9%、サバティア県20.1%、カカメガ・セントラル県15.9%、ハミシ県15.6%、マテテ県19.0%、チェブタイス県53.6%、ブンゴマ・イースト県52.7%及びテソ・ノース県15.5%。

² 各SHEP UP活動実施県における指標2-2は以下のとおり。セントラル州：ラリ県44.6%（男：41.2%/女：48.3%）、ニャンダルア・セントラル県68.6%（男：87.6%/女：49.0%）、キエニ・イースト県42.7%（男：38.5%/女：47.9%）、カンダラ県60.3%（男：63.1%/女：57.6%）、キエニ・ウェスト県37.3%（男：37.2%/女：37.5%）、キクユ県19.3%（男：18.2%/女：20.3%）、キリニャガ・ウェスト県45.1%（男：44.2%/女：45.9%）、リムル県45.3%（男：42.2%/女：47.8%）、ニャンダルア・ウェスト県16.0%（男：14.0%/女：17.2%）及びムランガ・サウス県45.0%（男：38.9%/女：54.8%）。リフト・バレー州：ナンディー・イースト県22.0%（男：20.8%/女：23.3%）、ナクル・ノース県31.4%（男：28.5%/女：34.2%）、ワレング県16.4%（男：10.3%/女：24.8%）、ナンディー・サウス県36.5%（男：29.7%/女：45.8%）、カジアド・ノース県14.2%（男：10.7%/女：17.7%）、ライキピア・ウェスト県37.8%（男：36.0%/女：40.0%）、マラクウェット・ウェスト県43.2%（男：48.6%/女：35.9%）、トランスマラ・ウェスト23.3%（男：22.5%/女：25.0%）、ソッティック16.4%（男：16.0%/女：16.8%）及びナロック・サウス県30.7%（男：23.6%/女：35.5%）。ニャンザ州：シアヤ県64.2%（男：51.6%/女：73.4%）、ニャミラ県56.7%（男：51.4%/女：62.1%）、ボンド県16.8%（男：15.4%/女：18.2%）、マサバ・サウス県31.2%（男：27.7%/女：34.1%）、ラチュオニョ・サウス県12.1%（男：12.4%/女：11.6%）、ゲム県42.4%（男：33.1%/女：53.8%）、グチャ県67.7%（男：62.6%/女：69.5%）、スバ県64.4%（男：61.9%/女67.8%）、キスム・イースト県9.2%（男：10.6%/女：8.1%）及びウゲンヤ県21.8%（男：20.2%/女：23.1%）。西部州：クウィセロ県33.3%（男：33.7%/女：33.1%）、カカメガ・ノース県39.6%（男：33.9%/女：44.9%）、マウント・エルゴン県56.5%（男：51.3%/女：63.6%）、サバティア県58.7%（男：49.1%/女：68.8%）、カカメガ・セントラル県46.2%（男：37.2%/女：56.9%）、ハミシ県84.0%（男：46.7%/女：113.6%）、マテテ県39.3%（男：37.2%/女：40.5%）、チェブタイス県56.1%（男：47.5%/女：64.5%）、ブンゴマ・イースト県59.6%（男：54.9%/女：64.1%）及びテソ・ノース県40.6%（男：35.0%/女：45.9%）。

指標 2-2 については、より明快になるよう指標 2-2 と 2-3 に分割して記載することにした。

指標 2-1. SHEP アプローチを活用後 2 年以内に、ユニット及び県に支援されたすべての小規模園芸農民グループの個々のメンバー（男・女）及び農民グループは、エーカー当たりの売上高をセントラル州で平均 18.0%～48.2%、リフト・バレー州で平均 17.3%～52.7%、ニャンザ州で平均 13.8%～55.3%、西部州で平均 15.5%～53.6%増加させる。

指標 2-1 に示されている平均総収入の目標値の設定はベースライン調査値のデータを基準として次の 3 要素を考慮して県別に設定されている。

- A. 生産量：ベースライン調査値を基本として、国家・県別の生産量の可能性、過去 3 年間の生産量の達成値及び種子会社数社が示す目標値を元に生産量の目標値が設定された。
- B. グループ・エンパワーメント値（GEI 値）：GEI 値のレベルが上がれば総収入が増加するという仮定に基づき各 GEI 値の増加を 20%として追加する。
- C. 農村インフラ：土のう技術により道路状態がよくなることで収入の増加が見込まれるという仮定から土のう技術による道修理を 10%として追加する。

以上 3 要素から計算された値を各県の収入増加の目標値（指標 2-1）とする。目標値の算出方法に関する詳細は付属資料 16 を参照のこと。

今回の中間レビューのために収集されたデータに基づき、グループ別、個人別、男女別の平均総収入が各県ごとに算出された。今回収集されたデータの個数がベースライン調査の個数に比べて少なかった県が多くそのため母数が小さくなった。このことから今回の中間レビューでは、グループ別のデータを使用せずに農民個人（男女別）のデータのみを利用して評価・分析を行うこととした。

指標 2-1 の結果は以下のとおりである。

- セントラル州 10 県のうち 8 県で農民個人の平均総収入が増加した。
- リフト・バレー州 10 県のうち 4 県で農民個人の平均総収入が増加した。

表 7 はセントラル州の農民個人の平均総収入の増加率と目標値を示している。詳細のデータについては付属資料 17 を参照のこと。

表－7 セントラル州 10 県の農民個人の平均総収入の増加率（％）

県	Lari	Nyandarua Central	Kieni East	Kandara	Kieni West	Kikuyu	Kirinyaga West	Limuru	Nyandarua West	Murang'a South
目標値	25.7	47.7	38.9	18.0	22.0	19.5	48.1	36.7	37.4	48.2
達成値	-28.3	50.3	75.4	-56.5	119.0	28.8	4.4	369.9	241.4	85.1

（出典：中間レビュー調査団）

セントラル州では 10 県のうち 8 県で農民個人の平均収入が増加し、うち 7 県では増加率が目標値以上に達した。一方、キリニャガ・ウェスト県はベースライン調査値に比べて平均収入は増加したが目標値には達しなかった。目標値に達した県の平均総収入の伸び率の幅は 28.8%から 369.9%であり、多くの県で目標値を大幅に上回った。特にリムル県ではその上昇率は目標値の 10 倍以上、ニヤンダルア・ウェスト県では 6 倍以上、キエニ・ウェスト県では 5 倍以上の伸びを示している。

平均総収入が下がった 2 県での収入の減少率は-18.3%と-56.6%であった。この 2 県の目標値は他県に比べて低く設定されていたにもかかわらず、目標値には至らなかった。

平均総収入の伸び率を男女別に考察してみると、ほとんどの県において同様の傾向が見られた。ただし、うち 2 県では男性農民の平均総収入は増加したが女性農民の値は減少、1 県では女性農民の平均総収入が増加したが男性農民の値は減少している。

表－8 はリフト・バレー州の農民個人の（詳細は付属資料 16-1、16-2 参照）。平均総収入の増加率と目標値を示している。

表－8 リフト・バレー州 10 県の農民個人の平均総収入の増加率（％）

県	Nandi East	Nakuru North	Wareng	Nandi South	Kajiado North	Laikipia West	Marakwet West	Transmara West	Sotik	Narok South
目標値	24.0	22.4	17.3	23.1	24.0	52.7	35.3	44.9	52.1	21.2
達成値	-8.1	-65.6	2.0	-16.4	-24.3	248.0	-73.2	130.2	81.4	-23.1

（出典：中間レビュー調査団）

リフト・バレー州の 10 県のうち 4 県で農民個人の平均総収入が増加した。うち 3 県では増加率が目標値以上に達したが、1 県は目標値には達しなかった。目標値に達した 3 県での平均総収入は大幅な伸び率を示しており、その幅は 81.4%から 248%であった。特にライキピア・ウェスト県では上昇率は目標値の 4.5 倍以上、トランスマラ・ウェスト県では約 3 倍以上、ソティック県では 1.5 倍の伸びを示している。

一方、平均総収入が下がった 6 県における減少率の幅は-8.1%から-73.2%であった。特に 2 県での減少率が大きく、ナロック・ノース県では 65%の減少、マラクウェット・ウェスト県では 73%減少した。

男女別に見てみると、農民個人の平均総収入が増加した 3 県においては男女農民の平均総収入もそれぞれ増加した。個人の収入が減少した 6 県のうち、5 県では女性農民の収入は増

加したが男性農民の値は減少した。

指標 2-1 の農民個人の平均総収入の増加・減少に関する阻害要因及び貢献要因について、調査団が SHEP ユニットと討議を行った結果、以下の要因が明らかになった。

A. 天候による被害

ナクル・ノース (-65.6%)、ニャンディ・サウス (-16.4%)、マラクウェット・ウェスト県 (-73.2%) では早魃や霜害、洪水などの天候被害により収穫量は減少し、結果として収入も減少した。



水不足の影響をうける、ナクル・ノース県ビイディキリモグループのトマト



洪水のためにラリ県キナレ地区において作物が流された。

(出典：SHEP ユニットより提供)

問題解決に向けた対処策

農村インフラ整備の一環として SHEP ユニットでは治水技術の導入を計画しており、2012年5月には短期専門家による現地調査が行われ、農家グループに導入可能なウォーター・ハーベスティング技術の検討が行われた。さらに2012年11月にも短期専門家の派遣が予定されており、同専門家の到着後、前回の検討結果により推奨されたウォーター・ハーベスティング技術を、第3バッチのイースタン州・コースト州において導入する予定である。

B. 収集データの不足

今回の調査ではベースライン調査時に比べて収集されたデータ数が少なかったことから、比較のための母数が小さくなった。データの収集期間がベースライン調査時に比べて短かったこと、データ収集時の農業普及員・GF への SHEP ユニットからのサポートが十分でなかったことが理由として挙げられる。また、農民グループの中には、作物の生産量やそこから得た収入といったデータをすべて報告せず、一部のみ(例：8種類の作物のうち4種類のみ)を報告したグループや、バナナやパッションフルーツなどデータ収集時には収穫に至っていない作物があったため報告しなかったグループもあった。プロジェクトの活動にはモニタリングも含まれており、また終了時評価においても同様の情報が必要になることをかんがみると、今後引き続き SHEP ユニットが中心となって正確なデータ収集を続けることを期待する。

問題解決に向けた対処策

- データ収集時の農業普及員・GF へのサポートを強化する。
- データ収集期間を十分に確保する。

C. 農業普及員・GF に関する問題

収入が減少した県の多くでは農業普及員・GF のモデル農民グループへのサポートが十分でなかったとの報告も受けている。農業普及員・GF はプロジェクトの成功の鍵を握る重要な役割を担っていることから、SHEP ユニットは農業普及員・GF の能力強化のために、SHEP アプローチによる一連の研修や栽培技術を写真入りの紙芝居で説明した教材も提供している。しかし、遠距離のため農業普及員・GF がモデル農民グループへ訪問する機会が減った、人事異動により研修を受けていない農業普及員・GF が入れ替わりで配属された、県や区から農業普及員・GF へのバックアップが弱い、などが理由として挙げられる。

問題解決に向けた対処策

- 県 SHEP・UP 運営チームに対し農業普及員・GF へのバックアップ強化の働きかけを促す。
- 人事異動で新しく配置になった農業普及員・GF への研修実施、教材の提供。
- 県 SHEP・UP 運営チームに対し農業普及員・GF の活動に必要なリソースの提供を促す。

D. グループ・エンパワーメント（Group Empowerment Indicators：GEIs）指標の低さ

収入が減少した県において、GEI 指標の数値が低いグループの割合が高いことが指摘された。GEI 指標はグループの結束性を測るために先行案件から導入されたツールであり、リーダーシップ、メンバーの協調性、ジェンダーバランスの 3 要素（パラメーター）から構成されている。リーダーシップの強さやメンバー間の協調性の高さ、ジェンダーバランスが取れていると GEI 値が高いと判断され、5 段階のレベル付けがされている。

小規模園芸農民は、グループとして生産活動を行うほうが個人で活動するより裨益を得ることが多いため、グループの結束性を高めることは重要である。このことは農民や農業普及員からの聞き取り調査の結果にも表れてきており、グループで行動することで以下の裨益が得られたとの回答がある。

- 農薬、肥料、種子などの農業インプットをグループ購入することで価格を下げる事が出来た。
- 作物を販売する際にグループとして交渉することで有利になった。
- グループとして作物を継続してバイヤーに供給することが可能になり、過去に不利益をもたらすことが多かった仲介業者の介入を避けることができた。

問題解決に向けた対処策

- 農業普及員・GFがグループ・エンパワーメントの重要性について理解不足である場合は、SHEPユニットから県SHEP運営チームに農業普及員・GFの理解を促すよう働きかけ、必要に応じてフォローアップ研修を行う。また、農業普及員・GFから農民グループに対して組織強化に向けた取り組みが実践されているかについても、県SHEP運営チームを通して適宜確認する。

以下は、平均総収入が大幅に伸びた県の貢献要因として考えられる。

A. 市場調査

市場調査を通じて農民グループは何時、誰に、何を売るとかという市場のニーズを把握することの重要性を学び、作物の選択や販売時期に関する選択ができるようになる。現地調査では農民の多くが現在は作物の植え付けの前に市場調査を行うようになったと回答している。また、あるHCDA職員は、農民が市場調査を行うようになってから、作物の売り先を見つけてほしいという依頼が来なくなったと答えている。

B. FABLIST フォーラム

FABLIST フォーラムを通じて、農民グループは種子、肥料、農薬会社や金融機関、卸業者などの園芸農業のバリューチェーンにかかわるステーク・ホルダーと知り合う機会を得ることができる。そこで得たネットワークを通じて、農民グループは投入資材のグループ購入や良質な種子の入手、ローンの獲得などの機会を得ており、このことが作物の生産性・品質の向上や収入の増加に貢献したと考えられる。

C. ジェンダー啓蒙や家計管理の研修

ジェンダー啓蒙や家計管理の研修は夫婦関係に正の影響を及ぼしている。現地調査で得た回答から、農民夫婦間で農作業や家事の共同負担が増えたことや、夫が家計やその他の決定を妻に相談するようになったことなどが聞き取られた。これは夫婦関係が従来の「経営者と労働者」の関係から「ビジネス・パートナー」の関係に推移したことを示しており、このことにより家庭内の無駄な支出や夫婦間での重複支出が抑えられ、その分、将来の投資（種子や肥料の購入など）に回せるようになったと考えられる。

指標 2-2. 研修後 2 年以内に、小規模園芸農民グループの個々のメンバー（男・女）及び農民グループのうち 70%以上が、県目標値以上の園芸作物栽培基本技術を利用する。

指標 2-2 は、SHEP UP が推奨する園芸作物を栽培する際に必要とされる 20 種類の基本技術の導入率に関する指標である。ベースライン調査値を元に、各県ごとに目標値（12～16 種類）を設定している（詳細は付属資料 17-1、17-2 参照）。

本調査では収集されたデータを元に次の 2 点を検証した。

セントラル州で園芸作物栽培基本技術 20 の導入率を県目標値以上に導入した農民の割合

を以下に示す。

表－9 セントラル州で栽培基本技術を県目標値以上に導入した農民の割合（％）

県	Lari	Nyandarua Central	Kieni East	Kandara	Kieni West	Kikuyu	Kirinyaga West	Limuru	Nyandarua West	Murang'a South
目標値 (種類)	15	12	15	15	15	15	15	15	14	14
達成値	77.0	81.8	66.2	82.2	94.3	92.8	84.1	83.3	54.9	83.6

(出典：中間レビュー調査団)

セントラル州 10 県のうち 8 県において 70%以上の農民が県目標値に達した。また男女別の導入率に関しても同様の傾向が見られた。

表－10 リフト・バレー州で栽培基本技術を県目標値以上に導入した農民の割合（％）

県	Nandi East	Nakuru North	Wareng	Nandi South	Kajiado North	Laikipia West	Marakwet West	Transmara West	Sotik	Narok South
目標値 (種類)	15	16	15	16	13	15	15	15	15	13
達成値	82.6	48.5	90.0	15.9	77.9	75.9	76.0	84.8	43.8	93.5

(出典：中間レビュー調査団)

リフト・バレー州 10 県のうち 7 県において 70%以上の農民が県目標値に達した。また男女別の導入率においても同様の傾向が見られたが、1 県では女性の到達度が満たなかったのに対し、男性の到達度は達成された。

指標 2-3. 研修後 2 年以内に小規模園芸農民グループの個々のメンバー（男・女）及び農民グループの園芸作物栽培基本技術の利用率が、セントラル州で平均 16.0%～68.6%、リフト・バレー州で平均 14.2%～43.2%、ニャンザ州で平均 9.2%～67.7%、西部州で平均 33.3%～84.0%増加する。

農民 1 人当たりの園芸作物栽培基本技術 20 の平均導入数の県別増加率を以下に示す。

表－11 セントラル州の農民 1 人当たりの栽培基本技術の平均導入数の県別増加率（％）

県	Lari	Nyandarua Central	Kieni East	Kandara	Kieni West	Kikuyu	Kirinyaga West	Limuru	Nyandarua West	Murang'a South
目標値	44.6	68.6	42.7	60.3	37.3	19.3	45.0	45.3	16.0	45.0
達成値	56.3	91.2	48.2	73.0	58.5	35.9	55.4	54.8	11.4	60.1

(出典：中間レビュー調査団)

セントラル州 10 県のうち 9 県において、平均導入数の増加率が県目標値を上回っている。また、ニャンダルア・ウェスト県を除くすべての県で男女別の技術導入率も県目標値に達した。

表-12 リフト・バレー州の農民 1 人当たりの栽培基本技術の平均導入数の県別増加率 (%)

県	Nandi East	Nakuru North	Wareng	Nandi South	Kajiado North	Laikipia West	Marakwet West	Transmara West	Sotik	Narok South
目標値	22.0	31.4	16.4	36.5	14.2	37.8	43.2	23.3	16.4	30.7
達成値	38.5	23.5	32.3	4.6	26.2	48.4	57.4	40.8	9.1	68.1

(出典：中間レビュー調査団)

リフト・バレー州 10 県のうち 7 県において、平均導入数の増加率が県目標値を上回っている。男女の技術導入率についても同様の傾向を示している。

全体として、園芸作物栽培基本技術 20 の平均導入率は高かったが、一部導入率が低かった県の理由としては以下の点が挙げられる。

- 農業普及員・GF からモデル農民グループへのサポートの弱さ、または県 SHEP 運営チームから農業普及員・GF へのサポートの弱さ。
- 物質的援助を期待していた農民グループが技術習得に取り組まなかった。
- 識字率の低いメンバーの比率が高い農民グループは、研修の内容や概念の理解に時間がかかった。

一方、農民や農業普及員に対する聞き取りでは、生産量の増加は研修による以下の技術の習得が要因となっていると回答している。

- 作物カレンダーの利用。
- 優良種子の選択と適切な苗床作り。
- 肥料や農薬を適量使用することで、作物の病害の発生をコントロールすることができた。
- 収穫後の適切な保存方法の習得。

表－13 は、指標 2-1 で収入が減少した県の技術の導入率及び GEI 指数値の関係を示している。

表－13 収入が減少・または微増した県における技術の導入率及び GEI 指数

県	農民個人の平均総収入の増加率	技術導入の県目標値以上に達した農民の割合	GEI 指数
Rift Valley Province			
Nandi East	-8.1	82.61	1.2
Nakuru North	-65.6	48.48	2.6
Wareng	2.0	90.00	2.5
Nandi South	-16.4	15.94	1.4
Kajiado North	-24.3	77.92	1.4
Marakwet West	-73.2	69.88	2.0
Narok South	-23.1	93.51	2.4
Central Province			
Lari	-28.3	77.03	2.4
Kandara	-56.5	82.22	2.4
Kirinyaga West	4.4	84.09	1.5

(出典：中間レビュー調査団)

農民 1 人当たりの平均総収入が減少した県の多くは GEI 指数値が低く、とりわけニャンディ・サウス県及びマラクウェット・ウェスト県に関しては技術の導入率も低い。これらの県ではグループの協調性の低さと技術の導入率の低さが収入の増加率に影響を与えた可能性もある。

しかし、前述のとおり収集されたデータ個数の少なさ、天候被害による収穫のロス、道路網の悪さや農業普及員・GF のサポートの弱さなどの要素も、平均総収入が伸びなかった原因として考慮する必要がある。以上の県のうち、5 県では天候被害のため生産量に影響が出ており、またマラクウェット・ウェスト県やカジアド・ノース県では悪路が負の影響を及ぼしていると考えられる。

表－13 の 5 県のデータ収集率はベースライン調査値から比べて 22-63%であった。グループによってはすべての対象作物でなく一部の作物だけを報告したところもあり、収集されたデータが不十分である事は結果を正確に判断することを困難にしている。今後のモニタリング活動では、ベースライン調査時の手法に則り適切にデータを収集し、適切なサンプル母数を確保することでより正確に現状を把握し、評価することが望ましい。

一方、表－14 は平均総収入が大幅に増加した県に関する技術の導入率と GEI 指数値を示している。

表-14 平均総収入が増加した県における技術の導入率及び GEI 指数

県	農民個人の平均総収入の増加率	技術導入の県目標値以上に達した農民の割合	GEI 指数
Rift Valley Province			
Laikipia West	248.0	75.91	2.4
Transmara	130.2	84.76	2.8
Sotik	81.4	54.17	2.6
Central Province			
Nyandarua Central	50.3	81.82	1.6
Kieni East	75.4	66.15	2.4
Kieni West	119	94.29	2.2
Kikuyu	28.8	92.75	3.0
Limuru	369.9	83.33	2.2
Nyandarua West	241.4	54.84	2.2
Muranga South	85.1	83.64	2.4

(出典：中間レビュー調査団)

平均総収入率が増加した県において、1 県を除くすべての県で高い GEI 指数値と技術の導入率が確認された。この表から技術の導入率の高さやグループの協調性の高さが平均総収入に貢献していると推察される。

(3) 成果 3

成果 3	成果 2 に基づき、実施県において SHEP アプローチが上記対象グループ以外でも展開される。
指標	3-1. 実施県 100%が、翌年の年間計画/予算に SHEP アプローチを組み込む。 3-2. SHEP アプローチを翌年の年間計画/予算に組み込んだ 100%の実施県がその年実際に SHEP アプローチを実施する。 3-3.SHEP アプローチを活用後 2 年以内に、実施県で県独自の資金で支援された小規模園芸農民グループの個々のメンバー（男・女）及び農民グループすべてが、エーカー当たりの売上高を平均---%増加させる。
達成度	中間レビューの時点で評価が不可能な指標 3-3 を除いて成果 3 は達成されている。

次の理由により成果 3 は達成されたと考えられる。

指標 3-1. 実施県 100%が、翌年の年間計画/予算に SHEP アプローチを組み込む。

SHEP ユニットのサポートで 1 年目のプロジェクトを実施したセントラル州とリフト・バレー州全 20 県は、現在県の予算と計画に沿って 2 年目の活動を実施している。プロポーザル方式でやる気が高く実施能力のある県を実施県として選定できたことが、100%の継続率に貢献していると考えられる。

指標 3-2. SHEP アプローチを翌年の年間計画/予算に組み込んだ 100%の実施県がその年実際に SHEP アプローチを実施する。

前述の指標 3-1 について、すべての県で 2 年目のプロジェクトが実施されている。しかしながら、多くの県にとってプロジェクト予算を確保することは大きな課題であった。現地調査での聞き取りや質問表の回答から、大多数の県 SHEP 運営チームは請求した予算のすべてを農業省から受領することができず、ほとんどの県で 30-60%削減された予算でと回答している。削減された予算でプロジェクトを実施した県では、以下の対策を採っている。

- モデル農家グループ数を予算に応じて調整する。
- SHEP ユニットから活動の幾つかに関して支援を受ける。
- 他のプロジェクトや活動からの予算を適用する。
- 県 SHEP 運営チームの職員や農業普及員が追加手当なしで業務を行う。

指標 3-3. SHEP アプローチを活用後 2 年以内に、実施県で県独自の資金で支援された小規模園芸農民グループの個々のメンバー（男・女）及び農民グループすべてが、エーカー当たりの売上高を平均---%増加させる。

現在、第 1 バッチ 2 年目で県の独自予算により支援を受けているモデル農民グループは、いまだ一連の研修を受けている過程であるため、この指標に対する評価は現時点では行えない。ただ、進捗状況としては、セントラル州とリフト・バレー州で 78 グループ（セントラル州 38、リフト・バレー州 40）が県の独自予算で SHEP アプローチを実施中である。現地調査期間中にそのうちの 1 グループに聞き取りを行った際、この農民グループの作物はいまだ苗床にある状態だが、既に FABLIST フォーラムを通じてできたネットワークを通して作物の購買予定者が決まっていると回答しており、「売るために作る」という概念が定着していることが伺われた。

SHEP ユニットは、今後、指標 3-3 の目標値を設定する予定である。

(4) 成果 4

成果 4	SHEP アプローチの情報管理システムが確立される。
指標	4-1. 初年度第 3 四半期の終わりまでに、モニタリング・評価戦略を含むユニットの情報管理のガイドラインの素案（第 1 ドラフト）が策定される。 4-2. 特定されたすべての園芸普及資料の目録が作成される。 4-3. 60%の農民グループ（県、普及スタッフ）がユニットが提供する情報に満足する。
達成度	成果 4 は達成された。

以下の理由により成果 4 は達成されたと考えられる。

指標 4-1. 初年度 3 四半期の終わりまでに、モニタリング・評価戦略を含むユニットの情報管理のガイドラインの素案（第 1 ドラフト）が策定される。

情報処理ガイドラインの第 1 草案は既に SHEP ユニットで使用されており、2013 年 1 月に最終版が完成する予定。

指標 4-2. 特定されたすべての園芸普及資料の目録が作成される。

ファイル命名方式と共有ドキュメントの保管システムは既に構築されており、SHEP ユニット内で活用されている。情報処理システムの拡張を目的として、現在セントラル州の 2 県、キエニ・イースト県とムランガ・サウス県でパイロットテストを実施中である。2012 年の 9 月にワークショップを行い、現在両県では試験的にシステムを使用している。

指標 4-3. 60%の農民グループ（県、普及スタッフ）がユニットの提供する情報に満足する。

現地調査での聞き取りから、県 SHEP 運営チームの 86%が SHEP ユニットから提供される情報は農業普及員・GF に提供するのに十分であると答えている。またすべての農業普及員・GF が、農民を指導するために必要な情報に満足しており、農民も提供されている情報に満足していると答えている。

2-1-2 プロジェクト目標

プロジェクト 目標	小規模園芸農家のための効果的な支援システムが全国的に確立される。
指標	1. プロジェクト終了時まで、プロジェクト実施県で SHEP アプローチを用いたすべての小規模園芸農民グループの個々のメンバー（男・女）及び農民グループが、売上を平均--%増加する。 2. プロジェクト終了時まで、ユニットの支援後 70%の実施県が SHEP アプローチを実施し続ける。
達成度	プロジェクト目標の達成の可能性は大きい。

プロジェクト目標の達成に関しては、プロジェクト終了時に評価がなされるため、中間レビューにおいてはプロジェクト目標達成の見込みについて検討した。下記の理由によりプロジェクト目標達成の可能性は大きい。

- 2 州 12 県にて農民の平均総収入は増加した。
- SHEP ユニットのサポートを受けて 1 年目のプロジェクトを実施したすべての県が、2 年目の SHEP アプローチを継続している。

指標 1. プロジェクト終了時まで、プロジェクト実施県で SHEP アプローチを用いたすべての小規模園芸農民グループの個々のメンバー（男・女）及び農民グループが、売上を平均--%増加する。

調査結果では 2 州 12 県で農民の平均総収入は増加していることが確認された。また、目標達成に関する阻害・貢献要因の分析及び対処策が SHEP ユニットにより適切に行われており、今後改善が期待できる。

指標 2.プロジェクト終了時まで、ユニットの支援後 70%の実施県が SHEP アプローチを実施し続ける。

現時点では SHEP ユニットのサポートを受けて 1 年目のプロジェクトを実施したすべての県が、2 年目の活動を継続している。

2-1-3 上位目標

上位目標	全国の SHEP アプローチ実施県において小規模園芸農家の生計が向上する。
指標	小規模園芸農家の世帯当たりの園芸売上による収入が、プロジェクト開始 1 年目から--%増加する。
達成度	しかしながら現時点での成果の到達度にかんがみれば、上位目標達成の可能性が高い。

上位目標は、プロジェクト終了後 3-5 年後に達成が期待される目標であることから、今回の中間レビューでは上位目標について評価することはできない。しかしながら、上位目標達成の可能性として以下の点が挙げられる。

- 現時点では実施 2 州において農民の所得向上が確認されており、成果（特に成果 2-1）を挙げつつある。
- 上位目標とプロジェクト目標の間に因果関係が確認されることから、プロジェクト目標が達成されれば上位目標が達成される可能性が高い。

2-2 実施の検証

プロジェクト実施は全般的に順調に進捗しており、活動の多くは計画より進んでいる。一方、実施体制については、業務調整の専門家が 2012 年 6 月より不在となっているが、現在派遣中の専門家が協力して補っている。ただ、SHEP ユニットの現状の職員数では、プロジェクト実施県が拡大するにつれ、1-2 年目の実施県に対するモニタリングやフォローアップが、手薄になる可能性がある。

2-2-1 投入

日本側及びケニア側によるプロジェクトへの投入は以下のとおり。

表-15-A 日本側投入

1) 専門家	専門家派遣全 21 名〔長期 3 名、短期 18 名 (2012 年 10 月現在)〕
2) 機材	研修用教材の提供
3) 本邦研修	県 SHEP 運営チーム 2 県の代表が筑波での研修に参加 (2012 年 4-9 月)
4) プロジェクト支出額	総支出額 75,926,815 Ksh (2012 年 6 月現在)

表-15-B ケニア側投入

1) 職員数	SHEP ユニット職員 12 名
2) オフィススペース及び施設提供	事務所、事務所家具、コンピュータ及びプロジェクト車両の提供
3) プロジェクト支出額	事務所スペース及び機器などを含む総支出額 66,067,339 Ksh (2012 年 6 月現在)

(出典：中間レビュー調査団)

2-2-2 プロジェクト計画

プロジェクトは計画どおり進められており、プロジェクトの終了に向け第 3 バッチの研修を計画より前倒しで進めている。PDM・PO は運営委員会の承認を受けて数回変更されており、現在使用されているのは PMD 第 3 版、PO 第 4 版。

2-2-3 プロジェクトサイクルの管理状況

(1) プロジェクトのモニタリング・メカニズム

聞き取り調査や質問表、プロジェクト報告書などから判断したところ、以下の理由によりプロジェクト実施におけるモニタリングは適切に行われている。

情報管理システムは綿密に構築され、有効に機能している。例えば、情報管理・モニタリング評価担当職員が研修に関する報告書を受け取るとそれを参加名簿、参加者によるアンケートなどと照らし合わせ確認する。その際に何か問題が発見されるとユニット・リーダーなどに報告され、対策が採られる。

州から農業普及員に至るまで現行の農業省の普及システムに沿って活動を行っているため、問題が生じた際に SHEP ユニットが対策を採りやすい。現場レベルで問題が解決しない場合でも、その上のレベルに解決を依頼することが可能である。SHEP の経験を活かして州政府が実施県をプロポーザル方式で選定するというシステムを採用することで、州政府の責任の所在を明確にするとともに、州政府のプロジェクトに対するオーナーシップの醸成も可能になった。

(2) コミュニケーション

聞き取り調査や質問表、プロジェクト報告書などから判断したところ、職員間、SHEP ユニットとフィールド事務所との間のコミュニケーションは良好である。

(3) 予算管理

2012 年 6 月から現在まで業務調整の専門家が不在のため、チーフアドバイザーが日本側

の予算を管理している。業務調整の専門家は2012年12月に着任する予定。ケニア側の予算はSHEPユニット・リーダーが管理している。プロジェクトの現時点での支出に関しては付属資料6を参照。

(4) プロジェクトへの参加度

SHEP ユニット職員、フィールド職員や農民グループのプロジェクトへの参加度は十分である。

- 聞き取り調査に答えた100%の県農業官・デスクオフィサーは、プロジェクト開始後に農業普及員・GFの参加や態度に変化が見られるようになったと回答している。
- 裨益者である農民グループの参加度は高い。聞き取り調査では、農民は研修を受けてから学んだことを実践したために収穫量が増加し、収入も増えたと回答している。また、収入向上が動機となって活動を続けているとの回答も散見された。
- 聞き取り調査に答えた99%の農業普及員・GFは、農民の態度が肯定的に変わったと回答している。特に農民グループは積極的にプロジェクトに参加するだけでなく、農業普及員などの助言を待たずに自ら問題を解決しようとする態度が現れてきたと回答している。

2-3 評価5項目

2-3-1 妥当性

以下の理由から一般的に妥当性は高いと判断される。

(1) 必要性

プロジェクトは次の理由から社会や地域、対象グループのニーズに対応している。

州農業官や州デスクオフィサーからの聞き取り調査から、本プロジェクトはその州の小規模園芸農民のニーズに合致しているという回答を得ている。また先述のとおり、実施県の選出はプロポーザル方式を用いて行われている。プロジェクト導入ワークショップ終了後に、自県でプロジェクト実施を希望する県農業官は、州農業官に対しプロポーザルを提出する機会を与えられる。提出されたプロポーザルは、プロポーザル選出ガイドラインに沿って考慮され、州農業官により実施県が選出される。プロポーザル方式を取ることでニーズの高い県や農業官のやる気の高い県を選出することが可能となった。

(2) 優先度

本プロジェクトはケニアの政策の優先度と合致している。ケニアの国家計画である「Vision 2030」では、農業分野を年間10%の経済成長率を実現するための重要セクターとして挙げており、中でも以下の分野での向上をめざしている。

- 農業、酪農、林業及び野生動物を管轄する主要な組織の改革。
- 農作物、家畜及び森林の生産性の向上。
- サプライチェーンマネジメント向上による小規模農家の市場アクセスの向上。

また、農業セクター開発戦略 2010-2020 (ASDS2010-2020) では品種改良された種子、改良された飼料や肥料などの農業資材の導入、農薬や農業機械の安全な使用方法の小規模農家への普及度は低いとし、近代的な農業方法を導入することで小規模農民の生産性を増加させることを課題としている。

(3) 手段としての適切性

以下の理由から本プロジェクトで導入された手段は適切である。

- プロジェクトの実施が本省から州、県、区、農業普及員のレベルまで農業省の普及システムに沿って実施されている。
- ケニアの全州を対象とし、園芸作物栽培のニーズの有無をプロポーザル方式で確認し、実施県を選定している。聞き取り調査では、州農業担当官はプロポーザルによる選出方式は妥当であるだけでなく、すべての県に平等に機会を提供している優れたシステムだと回答している。
- ジェンダー主流化に関しては、モデル農民グループの選定にあたり「ジェンダーの問題に考慮していること」が選定条件の中に含まれている。加えて、農民が参加する研修はすべては男女一人ずつの参加が義務付けられていることから、ジェンダーに関する配慮が行き届いている。

2-3-2 有効性 (予測)

現時点での成果の達成度から推測すると、プロジェクト目標達成の見込みは高いと考えられるが、以下に示す外部条件が、その達成度へ影響を与えると考えられる。

(1) プロジェクト目標の達成度

次の理由によりプロジェクト目標達成の可能性は高いと推測される。

- 2州12県にて農民の平均総収入が増加している。
- SHEP ユニットの支援を受けて1年目の活動を実施したすべての県が、2年目の活動を継続している。

(2) 成果とプロジェクト目標との因果関係

PDM 第3版に使用されている指標に関して一部改訂する必要がある。プロジェクト目標において「平均売上高」が指標に使われているのに対し、上位目標では「収入」が使われている。収入は売り上げからコストを差し引いたものであり、売り上げの増加は必ずしも収入の増加を意味するわけではないため、上位目標、プロジェクト目標及び成果の指標に関して、「売上高」ではなく「収入」に統一する必要がある。

(3) 外部条件

以下の外部条件はプロジェクトへ影響を及ぼしている、あるいは及ぼし得ると考えられる。

まず、天候被害による影響は重要な外部条件である。例えば、セントラル州及びリフト・バレー州のモデル農民グループは、早魃、霜害、洪水、水不足の被害に見舞われた結果、生産性が悪化し収入が減少した。また、一般的にケニアの農業において水不足は懸念材料である。SHEP ユニットでは水不足の可能性の高いイースタン州及びコースト州での活動実施に際し、ウォーター・ハーベスティング技術を導入する予定であり、同分野の短期専門家が 2012 年 11 月に派遣される予定である。

また、ケニアでは 2013 年 3 月に総選挙が予定されている。先行 SHEP の実施期間中、2007-08 年に起こった選挙後の暴動のため、プロジェクトの実施が数カ月遅延したことを考慮して、予防措置として SHEP ユニットでは次州での研修などの活動を前倒しで実施する予定であり、その変更は PO 第 5 版に示されている（付属資料 2 参照）。

前述のとおり、ケニアの政権交代、行政システムの変更、特に州制から郡（カウンティ）制への移行により先行きの見通しが立たない状況は、プロジェクトの進捗に影響を与える重要な外部条件である。今後、郡制においては実施県への予算の流れが変わる可能性が高く、現時点では農業省本省が予算を管理するのか、あるいは郡政府が管理するのかが定かでない。新システムの発表は 2013 年初旬に行われる見込みである。

2-3-3 効率性

次の理由により効率性は高い。

(1) プロジェクト目標に対する成果の貢献度

表-16 は現時点での成果の達成度を示している。現時点で検証可能な成果のほとんどが達成されていることから、プロジェクト目標への貢献度は極めて高い。

表-16 成果の達成度

成果	達成度
成果 1	達成済み（指標 1-2 に関してはプロジェクト後半に評価）
成果 2	達成済みであるが懸念はある
成果 3	達成済み（指標 3-3 に関しては後半に評価）
成果 4	達成済み

（出典：中間レビュー調査団）

(2) 因果関係（成果、活動、投入）

成果、活動、投入の間に因果関係が成立しているが、先述のとおり PDM の指標を整理することで、その因果関係がより明確になる（PDM の変更に関する詳細は付属資料 1 参照）。

主な PDM の変更点は、以下のとおり。

- 成果 2、指標 2-1 に現在使用されている平均売り上げの指標を、前述の有効性の箇所
で指摘したプロジェクト目標と統一するため、平均総収入に変更する。
- 成果 2、指標 2-2 を 2 指標に分割し指標 2-2 と指標 2-3 とすることで指標内容を明確
にする。

- 今後 SHEP ユニットの上位目標、プロジェクト目標、成果 2 及び 3 に関するベースライン調査値を確認出来れば目標値を設定する予定である。

(3) 投入

a. 日本側の投入

長期専門家の当初派遣予定は 4 名であったが、現状 2 名の専門家が派遣されており、2012 年 12 月に更に 1 名追加予定である。当初予定では、情報利活用分野の専門家を長期で派遣する予定であったが、適切な人材を長期に派遣することが困難なため、短期専門家による複数回の投入で代替している。

b. ケニア側の投入

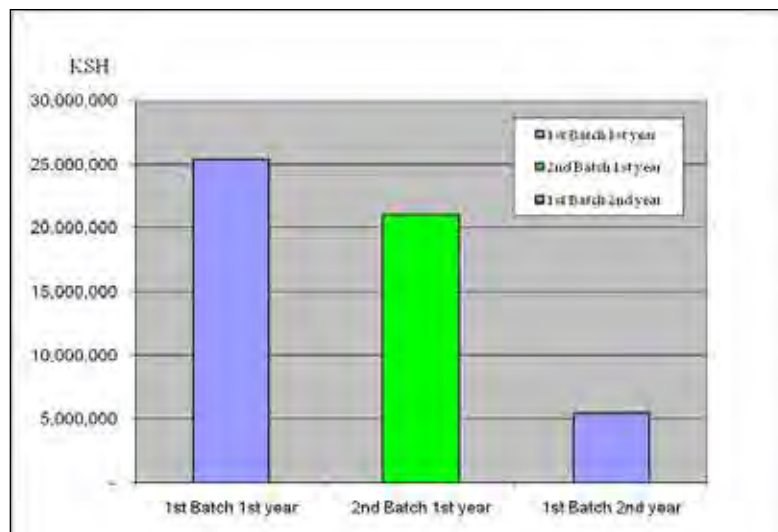
現時点では SHEP ユニットの職員は農業省及び HCDA から派遣された 12 名。プロジェクトが拡大するに伴い追加の職員が必要になる可能性は高い。

プロジェクトは当初計画されていた投入人数より少ない人員（専門家及び C/P）で効率よく実施されている。しかしながら SHEP ユニットのプロジェクトが第 3、4 バッチへ拡大するにつれて、第 1、第 2 バッチの実施県に対するモニタリングやフォローアップの時間が十分に取れなくなることが予想される。現在、第 1、第 2 バッチの実施県が県の予算で 2 年目または 3 年目の実施に入ろうとしているが、とりわけ問題が起こった際の SHEP ユニットの支援は重要であるため、モニタリングも含めた活動のより効率的な実施が求められる。

c. プロジェクト・コスト

プロジェクトの実施に伴いコストも削減されている。グラフー 1 は SHEP アプローチの活動実施にかかった総コストを示している（プロジェクト・コストに関する詳細は付属資料 6-1、6-2 参照）。

グラフー 1 SHEP アプローチ活動にかかった総支出



(出典：SHEP ユニットの提供)

活動に係る支出は実施 2 年目には削減されている。また、第 1 バッチ県の 2 年目には、実施県が自ら農業省から予算を確保し SHEP アプローチを実施するが、その際のコストは第 1 バッチ 1 年目のコストの約 5 分の 1 である。コストが下がった理由としては、教材費コストの低下と、県職員が研修を実施するため、SHEP ユニット職員がナイロビから出張する必要がなくなったことが大きな要因だと考えられる。

プロジェクト実施 1 年目に研修を受けた農民、職員及びステーク・ホルダーの数を表-17 に示している。

表-17 プロジェクト 1 年目に研修を受けた農民、職員及びステーク・ホルダー数

第 1 バッチ (セントラル及びリフト・バレー州)	農民	職員	ステーク・ホルダー*
	2,683 (男性：1,395 女性：1,288)	289	376

*ステーク・ホルダーの数は FABLISIT フォーラムに参加した人数

グラフ-1 及び表-17 から、農民 1 人当たりの研修にかかった費用の平均は 9,474 ケニアシリングであるが、このコストは実施 2 年目には大幅に下がることが予想される。

d. 他の JICA プロジェクトとの協調や連携による効率性

他の JICA プロジェクト、「半乾燥地小規模灌漑開発管理プロジェクト (Sustainable Smallholder Irrigation Development and Management in Semi-Arid Lands Project : SIDEMAN SAL)」や「稲作を中心とした市場志向農業振興プロジェクト (Rice-based and Market-oriented Agriculture Promotion Project : RICEMAPP)」の C/P が SHEP アプローチについての研修に参加することでプロジェクト間の連携を図っている。

2-3-4 インパクト (予測)

以下の理由によりインパクトの可能性は高い。

(1) 因果関係 (上位目標とプロジェクト目標)

プロジェクト目標の指標を上位目標と統一化することで、上位目標とプロジェクト目標との間の因果関係がより明確になる。既に活動を実施した第 1 バッチ 1 年目の 2 州 12 県にて農民の平均総収入は増加傾向にあることを確認しているため、上位目標が達成される可能性は高い。

(2) 波及効果

以下に示す正のインパクトが見られた。

聞き取り調査では、99%の県職員はプロジェクトの効果がモデル農民グループ外へも広まっていると回答している。モデル農民グループの生産性や収入の増加を知ったグループ外の近郊農民たちが、モデル農民や農業普及員・GF から学び、普及員研修 (Facilitator's Training for Farmers' Demand Driven Extension : FT-FaDDE) やフィールド研修で得られる技

術やスキルを活用し始めていると回答している。市場調査や農業資材のグループ購入、農産物のグループ販売など、集団で活動することで裨益を得ることを知った農民たちが新たにグループを結成した例もある。

土のう技術は、モデル農民グループのみでは活動できず、周りのコミュニティにも協力を求める必要があるため、その波及効果は大きい。地元自治体や道路省などが土のう技術を利用して道を修理した例もあり、セントラル州とリフト・バレー州の2州において現在までに1342.9mの道が土のう技術を用いて修復されている。

(3) 他ドナーとの連携

国際農業開発基金（International Fund for Agricultural Development : IFAD）による小規模園芸農民マーケティングプログラム（Smallholder Horticultural Marketing Program : SHoMaP）は、市場への道路アクセスの改善を目的として、農村インフラ整備に投資していることから、同プログラムによって整備された道路を SHEP UP のモデル農家グループも利用する可能性が考えられる。

2-3-5 持続性（予測）

持続性は高いが課題も存在する。

(1) 政策・制度面

ケニアの長期的国家戦略である「Vision 2030」において、農業セクターは主要セクターと位置付けられている。また、「農業開発戦略 2010-2020」では、小規模農民の農業ビジネス化、市場アクセスの向上、土地利用の向上、研究開発や普及員制度の強化を挙げており、SHEP アプローチはこれらの分野を広くカバーしている。

(2) 組織面

SHEP ユニットは既に農業省作物管理局の1ユニットとして設置されており、プロジェクト終了後も継続されていくことから、持続性は確保されている。

専門家に対する聞き取り調査から、SHEP ユニットのC/Pの能力が、プロジェクト開始当初から比較して格段に向上したことが確認された。プロジェクト開始当初、SHEP 時の旧C/Pを3カ月動員して現C/Pとペアで研修を行わせ、実地訓練を行ったところ、3カ月後には旧C/Pのサポートなしで研修を行うことが出来るようになったとのこと。

一方、質問表に答えた60%の県職員らは、SHEP ユニットからのサポートを受けずにプロジェクトを継続できると答えている。本プロジェクトは、1年目にSHEP ユニットの支援を受けて実施したことを、2年目に県が独自に実践するように設計されており、実地訓練を通して実施県の能力強化に繋がっている。ただ、2年目以降の対象モデル農民グループにSHEP アプローチで推奨されている技術を定着させるためには、引き続きSHEP ユニットからのモニタリングとフォローアップが必要であると思われる。

(3) 財政面

現地調査での聞き取りや質問表に対する回答において、県職員の多くが2年目のプロジ

エクトの実施のための予算が十分でないことを課題の1つに挙げている。成果3でも述べたが、多くの実施県で要求に対して30-60%の予算しか2年目の実施に確保されていない。十分な予算が獲得できなかった県では、活動を優先度の高いものから実施するために、1年目のモデル農民グループへのモニタリングやフォローアップに時間を割けない状況にある。聞き取り調査で多くの県職員が、モニタリングやフォローアップの必要性は認識しているが、経費不足のために活動が制限されていることが問題だと回答している。

前述のとおり、ケニアの行政システムは州制度から郡（カウンティ）制度への移行過程にあり、この制度変革は農業省の今後の普及戦略に大きな変化をもたらすと予想される。制度変革の内容は2013年初旬に発表される見込みである。現在、県レベルでのプロジェクト実施に関する予算は農業本省より配賦されているが、郡制度へ移行した場合、郡から予算が配賦されるか、引き続き農業本省が配賦するのかは、現時点で定かでない。今後、郡政府が予算を配賦することが確定した場合には、SHEP ユニットとしては、早期に郡の農業関係職員に対しSHEP UP 紹介ワークショップを開催し、同職員からのサポートと理解を得る予定である。

(4) 技術面

指標 2-2 の結果で説明したが、1年目のモデル農民グループにおける園芸作物栽培基本技術 20 の導入率は極めて高い数値が出ている。また、聞き取り調査や質問表からも技術移転に関して正の反応が読み取れる。これらのことから推測すると技術の持続性は高いと思われるが、阻害要因で指摘した識字率の低い農民グループなどへの技術移転の問題は、今後の活動の中で考慮されるべきであろう。

(5) オーナーシップ

プロポーザル方式による実施県の選定を導入したことは、州や県のプロジェクトへのオーナーシップを高めるうえでも効果があった。県職員がJICA 援助終了後もSHEP アプローチを持続していくことに対するやる気の高さが聞き取り調査や質問表からも伺える。

プロポーザル方式は、先行案件のSHEP では州政府の関与が低かったことの反省から導入され、州政府が実施県の選択に責任を持つことでオーナーシップを高めることを狙いとしており、その効果は聞き取り調査などで確認されている。

また、PSC は農業省の事務次官またはHCDA 総裁が議長を務めており、プロジェクト運営委員会はプロジェクト・ディレクター（農業省の作物局長）、プロジェクト・マネージャー（農業省の園芸部長）、副マネージャー（HCDA 技術助言サービス部長）が関与しており、農業省やHCDA の高官の関与がオーナーシップの醸成に役立っている。

(6) 社会、文化、環境面

ジェンダー啓蒙と家計研修は、SHEP アプローチの一連の研修の中でも重要なコンポーネントの1つであり、これらの研修によりジェンダーに関する理解が深まり家族関係や農業生産への正の効果が現れたことが聞き取り調査などにより確認できた。本プロジェクトは、今後イスラム教徒の多いコースト州での実施に移行することから、ジェンダーに関する研修を実施する際に、特別な配慮が必要になる可能性がある。

2-4 評価の結論

表-18 は中間レビューの結論を要約している。

表-18 5項目評価の達成度

評価項目	達成度
妥当性	妥当性は高い
有効性（予測）	有効性はある程度高い
効率性	効率性は高い
インパクト（予測）	インパクトは可能性としては高い
持続性（予測）	持続性は高いが問題も存在する

(出典：中間レビュー調査団)

プロジェクト目標である小規模園芸農家のための効果的な支援システムが全国的に確立されることの達成度はおおむね良好と言える。SHEP ユニットやフィールドレベルでの職員の能力は強化されつつあり、モデル農民グループによる技術の導入率も高い。平均総収入が12県で増加したことは、所得向上の目標達成へも明るい見通しである。SHEP アプローチの継続に関しても職員や農民のやる気が高く、農業省におけるプロジェクトへのオーナーシップも醸成されている。問題点としては、2年目以降のプロジェクト予算の確保、モニタリングやフォローアップに係る人的リソースの確保、天候被害や社会的動乱、行政システムの変更などの外部要因による影響が挙げられる。

第3章 提言・教訓

3-1 提言

調査団からの提言は以下のとおり。

3-1-1 プロジェクト実施に関する提言

- 成果1指標1-2のSHEPアプローチのガイドライン草案作成に関する計画を具体化する。
- 成果2で提示された阻害要因に対する解決策のフォローアップを続ける。

3-1-2 財政関連に関する提言

2年目以降のプロジェクト実施に係る予算不足は、本調査で重大な問題と捉えており、解決策が見出されることを期待する。特に、前年度のモデル農民グループへのモニタリングやフォローアップの実施は、SHEPアプローチが継続的に営農活動に活用され、定着させるために重要である。調査団は、ケニア政府側に実施県へプロジェクト予算が十分に配賦されることを提言するとともに、プロジェクトに対しても、モニタリングやフォローアップの活動のための予算を確保することを提言する。

また、紙芝居を含む全ての研修教材作成が、JICA側の予算で賄われている。研修教材は、SHEPアプローチによる一連の研修において、職員や農民の理解を促すための補助機能を果たしているため、SHEPアプローチの継続と拡大において重要な資材である。調査団としては2015年のプロジェクト終了後も研修教材が引き続き確保されるように、持続性のある教材作成メカニズムを農業省内で確立することを提言する。

3-1-3 モニタリング・フォローアップに関する提言

本案件は、ケニア全州を対象としているため、実施年が進むに連れ、必然的に実施対象州・県が拡大する。そのため、SHEPユニットは、新たな実施県でSHEPアプローチを展開しつつ、過去に実施した県へもモニタリングやフォローアップ活動を行っていかねばならないため、職員への負担が大きくなることが予想される。現状、モニタリングやフォローアップのための時間が十分に取れていないため、新たな対象地域でのSHEPアプローチの実施と従来の対象地域のモニタリングやフォローアップとのバランスを見出すことが今後重要になってくる。

3-1-4 SHEPアプローチの持続性と拡大に関する提言

現地調査での聞き取りにおいて、農民や職員から、実施県内外でモデル農民グループの成功例を発表し、他の農民グループと経験を共有する意見交換会の開催を求める声が多くあった。農民による意見交換会の開催は農民同士が互いに学ぶ機会を提供するだけでなく、SHEPユニットにとってもSHEPアプローチの継続や更なる効率化、拡大を図るための示唆や課題について検討できる機会とも成り得る。調査団としてはプロジェクトの一環として、農民間での意見交換会の実施を提案する。

3-1-5 他のドナープロジェクトとの協調

本調査結果は、現時点でプロジェクトの進捗は良好であるとしているが、調査団としては本プロジェクトと他ドナーとの関係を構築することで、ケニアの園芸農業開発に更なる波及効果が見出せるのではないかと考える。そのため、ケニア政府に対し、農業関連のドナー・プロジェクトとの情報交換や、SHEPアプローチの他ドナーへの紹介、ひいては他ドナーによる SHEPアプローチの導入を促進することを期待する。

3-1-6 PDM と PO の変更

先述のとおり、プロジェクト目標、成果、投入と活動を明確化、統一化する目的で現 PDM の変更を提案する(PDM と PO の変更に関しては付属資料の 1-4、及び 2-5 参照)。

3-2 教訓

3-2-1 客観的評価が実施可能な数値指標と効率的なデータ収集

本案件の PDM では、指標を設定する際に、増加率や占有率などの割合を用いており、数値を用いた客観的な評価が実施できるような設計になっている。また、グループ・エンパワーメント指数や技術導入率など、独自の指標設定方法も導入し、組織強化の度合いや技術の普及状況が確認できる仕組みが導入されており、本調査でも評価・分析の際に活用することができた。もちろん、以上の数値指標が設定できる前提条件としては、データ収集が適切に実施されなければならないが、本プロジェクトは活動の一環としてベースライン調査を導入しており、効率的にデータ収集を行っている。このような指標の導入やデータ収集方法は、今後、新たに実施する別案件でも取り入れることを奨励する。

3-2-2 農業省の既存の普及システムを活用した効果的な普及活動

SHEP アプローチの一連の研修は、プロジェクト独自に新たな普及システムを導入したわけではなく、農業省の既存の普及システムを活用して実施したことで、効果的・効率的に農業省職員や農民の能力強化に寄与することができた。更に、活動実施後のフォローアップについても、農民に対する普及員の支援、普及員に対する県 SHEP 運営チームの支援など、既存の普及システムを通じてフォローアップ体制を強化することができた。他国で同様の案件を立ち上げる際には、新たな実施体制やシステムを導入すると、体制作りにはばかり労力が割かれる可能性もあるので、既存のものをいかに活用するかを優先的に検討すべきである。

3-2-3 持続性を重視した PDM 設計

本案件では、プロジェクト活動を1年目と2年目に分け、1年目は農業省(SHEPユニット)から実施県に対して直接支援を実施し、県SHEP運営チームの職員や普及員にSHEPアプローチを理解させることを1つの目的として活動を行っている。県SHEP運営チームや普及員は、1年目の経験を活かして2年目の活動を独自の人的リソースと財源で継続するように設計されている。2年目の活動を通じて、県SHEP運営チームや普及員が主体的に取り組むようになり、限られたリソースの中で活動を継続するために自ら工夫するようになることが確認された。この行動変化は、本案件の持続性に寄与するだけでなく、オーナーシップの醸成にも繋がっていると言える。以上のように、先方が主体的に活動できる機会を計画の中に組み込むことが望ましい。

3-2-4 農民に受け入れられやすい活動計画・技術

SHEP アプローチの一連の研修では、移転する技術が園芸農業のバリューチェーンをすべて網羅しているとともに、農民が研修内容を効果的かつ適時に営農活動に取り入れられるよう、農民の営農活動に配慮して研修計画が設計されている。他の案件においても、活動計画や新たな技術を導入する際は、農民に受け入れやすい工程や技術レベルとなっているか、配慮する必要がある。

付 属 資 料

1. PDM の変更 (1-4 版)
2. PO の変更 (1-5 版)
3. プロジェクト合同調整委員会リスト
4. 日本人専門家投入リスト
5. ケニア C/P リスト
6. プロジェクト支出 (合計・ケニア・日本)
7. 日本での研修参加者リスト
8. 実施県プロポーザルフォーム
9. 園芸作物栽培基本技術 20
10. ベースライン調査用紙：作物生産及び所得分析データシート
11. ベースライン調査用紙：グループ・エンパワーメント指標
12. グループ選択ガイドライン
13. 情報処理管理システム図
14. SHEP アプローチトレーニングリスト
15. 収入指標の目標値設定の計算方式
16. 平均総収入データ表
17. 園芸作物栽培基本技術 20 導入率データ表
18. JCC ミニッツ
19. 合同レビューレポート

Project Design Matrix (PDM) for Smallholder Horticulture Empowerment and Promotion Unit Project

Ver. 1, January, 2009

Project Title: Smallholder Horticulture Empowerment and Promotion Unit Project (SHEP-UP)

Duration: 5 years from the date of the dispatch of Japanese Experts (March 3, 2010 – March 3, 2014) **Implementing Agency:** MoA in association with HCDA

Beneficiaries: Smallholder horticulture farmers in implementing districts

Project Area: Nationwide

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
<p>Overall Goal Livelihood of horticulture smallholders in implementing districts is improved</p>	<ul style="list-style-type: none"> - Horticulture smallholders increase their income from horticulture sales per household by ----% from first year of the Project. - 	<ul style="list-style-type: none"> • District Development Profiles • Base-line survey reports • Project Evaluation Reports 	<ul style="list-style-type: none"> • Kenyan Government policies regarding the smallholder horticulture does not change
<p>Project Purpose Effective support system for horticulture smallholders nationwide is established.</p>	<ul style="list-style-type: none"> - By the end of the project period, individual members (men and women) of the smallholder horticulture farmer groups and the groups in the implementing districts using SHEP Approach increase their sales by average ----%. - By the end of the project period, ----% of implementing districts continue to implement SHEP Approach after supported by the Unit. 	<ul style="list-style-type: none"> • Base-line Survey Reports • Project Evaluation Reports 	<ul style="list-style-type: none"> • There is no severe drought. • Any policy review enhance to attain overall goal • Market demand of horticultural produce and products do not shrink; • Market prices of horticultural crops don't slump. • There is no serious social disturbance
<p>Outputs</p> <ol style="list-style-type: none"> 1. The SHEP Approach (*1) is adopted by the Unit and ready for implementation. 2. Implementing farmer groups' income from horticulture produce is improved. 3. SHEP Approach is properly replicated by implementing districts based on the output 2. 4. Information Management System for SHEP Approach is established. 	<ol style="list-style-type: none"> 1-1. 80 % of Provincial and District level government extension staff and stakeholders understand the SHEP Approach properly 1-2. By the end of the project period, the guideline of SHEP Approach is completed. 2-1. Within two years after adopting SHEP Approach, implementing individual members (men and women) of the smallholder horticulture farmer groups and the groups supported by the Unit and district increase their sales by average ---% 2-2. Within two years after the technical training, more than ---% of individual members (men and women) of implementing smallholder horticulture farmer groups increase rate of applying the technologies by ---%. 3-1. 100% of implementing districts incorporates SHEP Approach in their annual plan/budget for the following year. 3-2. ---% of implementing districts which incorporated SHEP Approach in their annual plan/budget for following year implements the Approach in the year. 3-3. Within two years using SHEP Approach, individual members (men and women) of the smallholder horticulture farmer groups and the groups supported by the district's own resource in implementing district increase their sales by average ---% 4-1. By the mid-term review of the project, the first draft of guideline for information management including monitoring and evaluation strategy for the Unit is ready. 4-2. All identified horticulture extension materials are catalogued. 4-3. ---% of farmer groups (district, extension staff) is satisfied by information provided by the Unit. 	<ul style="list-style-type: none"> • Base-line Survey Reports • Project Evaluation Reports • Performance Contract of DAOs 	<ul style="list-style-type: none"> • Market demand of horticultural produce and products do not shrink; • Market prices of horticultural crops don't slump; • There is no severe drought and or outbreak of pests and diseases; • Kenyan Government Policy continue to support road maintenance and network development. • There is no serious social disturbance

(*1) SHEP stands for Smallholder Horticulture Empowerment and Promotion

SHEP Approach includes i) effective methods and techniques to promote smallholder horticulture, ii) a series of activities to disseminate those methods and techniques, iii) monitoring and evaluation system from farmers to the Unit in the Project

<p>Activities</p> <p>1-1. Formulate implementation strategy of SHEP Approach 1-2. Design SHEP Approach for implementation 1-2. Design criteria of selection of implementing districts 1-3. Train and sensitize Unit staff on SHEP Approach 1-4. Formulate SHEP Approach Guideline</p> <p>2-1. Sensitize the Province and District stakeholders on SHEP approach 2-2. Select through Provincial Agricultural Offices the implementing districts based on the criteria which is identified the activity 1-2 2-3. Conduct training programme(s) for stakeholders in the implementing district(s) 2-4. Support implementing district(s) to conduct a series of activities as trained through the above programme(s) (activities 2-3).(*2) 2-4-1. Conduct baseline survey in the implementing district(s) 2-4-2. Hold FABLIST forum 2-4-3. Conduct the JEF2G training programme 2-4-4. Conduct the FT-Fadde training programme 2-4-5. Conduct field training programmes for extension officers in the implementing district(s) 2-5. Monitor the activities, outputs and impacts of 2-4.</p> <p>3-1. Support implementing district(s) to incorporate in their work plan/budget the SHEP approach as the items 2-4-1 to 2-4-5. 3-2. support implementing district(s) to implement SHEP approach according to work plan/budget of the district(s)</p> <p>4-1. Review and analyze the existing challenges well as good practices regarding information management and sharing in each level 4-2. Draft and propose solution for better information management and sharing in each level 4-3. Based on the result of the item 4-2, introduce new information management and sharing system in the Unit 4-4. Based on the result of the item 4-2, introduce better information flow from the field level to the Unit 4-5. Draft and propose application of market information to the improved information management system 4-6. Draft and propose application of introducing effective methods and techniques to the improved information management system</p>	<p>Input</p> <p>From Japan Side</p> <ul style="list-style-type: none"> · Assignment of Japanese Experts <p><Long term basis></p> <ul style="list-style-type: none"> · Chief Adviser / Horticulture Policy · Horticulture Production and Extension · Monitoring and Evaluation / Information management · Project Coordinator <p><Intermittent basis></p> <ul style="list-style-type: none"> · Farmer Group Strengthening and Management · Marketing · Appropriate Technology on Rural Infrastructure · Agro-possessing · Other short-term experts may be dispatched when necessity arises · Project Activity Cost · Provision of complementally equipment necessary for the Project <p>From Kenya side</p> <ul style="list-style-type: none"> · Assignment of counterparts · Project Director · Project Manager · Unit Leader · Administration staff · Monitoring and Evaluation/Information Management staff · Subject Matter Specialists (Horticulture Production, Farmers Group strengthening, Gender Mainstreaming, Rural Infrastructure, Agro-processing) · Arrangement of Office Space and equipment for the Project · Operational cost for the Unit. 	<ul style="list-style-type: none"> · No serious natural disaster such as severe drought occurs. · Market demand of horticultural produce and products do not shrink; · Market prices of horticultural crops don't slump. · There is no serious social disturbance <p>Pre-Conditions</p> <ul style="list-style-type: none"> · Government sustains the budgetary allocation for the Unit
--	---	--

(*2): throughout these activities, following topics are covered; empowerment of farmer groups, horticulture production techniques, rural infrastructure, and agro-processing

Project Design Matrix (PDM) for Smallholder Horticulture Empowerment and Promotion Unit Project

Ver. 2, January, 2012

Project Title: Smallholder Horticulture Empowerment and Promotion Unit Project (SHEP UP)

Duration: 5 years from the date of the dispatch of Japanese Experts (March 3, 2010 – March 3, 2015) **Implementing Agency:** MoA in association with HCDA

Beneficiaries: Smallholder horticulture farmers in implementing districts

Project Area: Nationwide

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
<p>Overall Goal Livelihood of horticulture smallholders in implementing districts is improved.</p>	<p>- Horticulture smallholders increase their income from horticulture sales per household by ---% from first year of the Project.</p>	<ul style="list-style-type: none"> • District Development Profiles • Base-line survey reports • Project Evaluation Reports 	<ul style="list-style-type: none"> • Kenyan Government policies regarding the smallholder horticulture does not change.
<p>Project Purpose Effective support system for horticulture smallholders nationwide is established.</p>	<ul style="list-style-type: none"> - By the end of the project period, individual members (men and women) of the smallholder horticulture farmer groups and the groups in the implementing districts using the SHEP Approach increase their sales by average ---%. - By the end of the project period, 70 % of implementing districts continue to implement the SHEP Approach after supported by the Project. 	<ul style="list-style-type: none"> • Base-line Survey Reports • Project Evaluation Reports 	<ul style="list-style-type: none"> • There is no severe drought. • Any policy review enhances to attain overall goal. • Market demand of horticultural produce and products do not shrink • Market prices of horticultural crops don't slump. • There is no serious social disturbance.
<p>Outputs</p> <ol style="list-style-type: none"> 1. The SHEP Approach (*1) is adopted by the Unit and ready for implementation. 2. Implementing farmer groups' income from horticulture produce is improved. 3. The SHEP Approach is properly replicated by implementing districts based on the Output 2. 4. Information Management System for the SHEP Approach is established. 	<ol style="list-style-type: none"> 1-1. 80 % of Provincial and District level government extension staff and stakeholders understand the SHEP Approach properly. 1-2. By the end of the project period, the guideline of the SHEP Approach is completed. 2-1. Within two years after adopting the SHEP Approach, implementing individual members (men and women) of the smallholder horticulture farmer groups and the groups supported by the Unit and district increase their sales by average from 18.0 % to 48.2 % in Central Province and from 17.3 % to 52.7 % in Rift Valley Province (*2). 2-2. Within two years after the technical training, more than ---% of individual members (men and women) of implementing smallholder horticulture farmer groups increase rate of applying the technologies by ---%. 3-1. 100 % of implementing districts incorporates the SHEP Approach in their annual plan/budget for the following year. 3-2. 100 % of implementing districts which incorporated the SHEP Approach in their annual plan/budget for following year implements the Approach in the year. 3-3. Within two years using the SHEP Approach, individual members (men and women) of the smallholder horticulture farmer groups and the groups supported by the district's own resource in implementing district increase their sales by average ---%. 4-1. By the mid-term review of the project, the first draft of guideline for information management including monitoring and evaluation strategy for the Unit is ready. 4-2. All identified horticulture extension materials are catalogued. 4-3. 60 % of farmer groups (district, extension staff) is satisfied by information provided by the Unit. 	<ul style="list-style-type: none"> • Base-line Survey Reports • Project Evaluation Reports • Performance Contract of DAOs 	<ul style="list-style-type: none"> • Market demand of horticultural produce and products do not shrink. • Market prices of horticultural crops don't slump. • There is no severe drought and or outbreak of pests and diseases. • Kenyan Government Policy continues to support road maintenance and network development. • There is no serious social disturbance.

<p>Activities</p> <p>1-1. Formulate implementation strategy of the SHEP Approach. 1-2. Design the SHEP Approach for implementation. 1-3. Design criteria of selection of implementing districts. 1-4. Train and sensitize Unit staff on the SHEP Approach. 1-5. Formulate the SHEP Approach Guideline.</p> <p>2-1. Sensitize the Province and District stakeholders on the SHEP Approach. 2-2. Select through Provincial Agricultural Offices the implementing districts based on the criteria which is identified the Activity 1-3. 2-3. Conduct training programme(s) for stakeholders in the implementing district(s). 2-4. Support implementing district(s) to conduct a series of activities as trained through the above programme(s) (Activities 2-3) (*3). 2-4-1. Conduct Baseline Survey in the implementing district(s). 2-4-2. Hold FABLIST Forum (*4). 2-4-3. Conduct the JEF2G Training programme (*5). 2-4-4. Conduct the FT-FaDDE training programme (*6). 2-4-5. Conduct In-field Training programmes for extension officers in the implementing district(s). 2-5. Monitor the activities, outputs and impacts of the Activity 2-4.</p> <p>3-1. Support implementing district(s) to incorporate in their work plan/budget the SHEP Approach as the Activities 2-4-1 to 2-4-5. 3-2. Support implementing district(s) to implement the SHEP Approach according to work plan/budget of the district(s).</p> <p>4-1. Review and analyze the existing challenges well as good practices regarding information management and sharing in each level. 4-2. Draft and propose solution for better information management and sharing in each level. 4-3. Based on the result of the Activity 4-2, introduce new information management and sharing system in the Unit. 4-4. Based on the result of the Activity 4-2, introduce better information flow from the field level to the Unit. 4-5. Draft and propose application of market information to the improved information management system. 4-6. Draft and propose application of introducing effective methods and techniques to the improved information management system.</p>	<p>Input</p> <p>From Japan Side</p> <ul style="list-style-type: none"> • Assignment of Japanese Experts <Long term basis> <ul style="list-style-type: none"> • Chief Adviser / Horticulture Policy • Horticulture Production and Extension • Monitoring and Evaluation / Information management • Project Coordinator <Intermittent basis> <ul style="list-style-type: none"> • Farmer Group Strengthening and Management • Marketing • Appropriate Technology on Rural Infrastructure • Agro-possessing • Other short-term experts may be dispatched when necessity arises • Project Activity Cost • Provision of complementally equipment necessary for the Project <p>From Kenya Side</p> <ul style="list-style-type: none"> • Assignment of counterparts <ul style="list-style-type: none"> • Project Director • Project Manager • Unit Leader • Administration staff • Monitoring and Evaluation/Information Management staff • Subject Matter Specialists (Horticulture Production, Farmers Group strengthening, Gender Mainstreaming, Rural Infrastructure, Agro-processing) • Arrangement of Office Space and equipment for the Project • Operational cost for the Unit 	<ul style="list-style-type: none"> • No serious natural disaster such as severe drought occurs. • Market demand of horticultural produce and products do not shrink. • Market prices of horticultural crops don't slump. • There is no serious social disturbance. <p>Pre-Conditions</p> <ul style="list-style-type: none"> • Government sustains the budgetary allocation for the Unit.
--	--	--

(*1) SHEP stands for Smallholder Horticulture Empowerment and Promotion. The SHEP Approach includes i) effective methods and techniques to promote smallholder horticulture, ii) a series of activities to disseminate those methods and techniques, iii) monitoring and evaluation system from farmers to the Unit in the Project.

(*2) The indicator is a range since each SHEP UP Implementing districts has a specific target as follows. Central Province: Lari 25.7 %; Nyandarua Central 47.7 %; Kiari East 38.9 %; Kandara 18.0 %; Kiari West 22.0 %; Kikuyu 19.5 %; Kirinyaga West 48.1 %; Limuru 36.7 %; Nyandarua West 37.4 % and Murang'a South 48.2 %. Rift Valley Province: Nandi East 24.0 %; Nakuru North 22.4 %; Wareng 17.3 %; Nandi South 23.1 %; Kajiado North 24.0 %; Laikipia West 52.7 %; Marakwet West 35.3 %; Transmara West 44.9 %; Sotik 52.1 % and Narok South 21.2 %..

(*3): Throughout these Activities, following topics are covered; empowerment of farmer groups, horticulture production techniques, rural infrastructure, and agro-processing.

(*4): FABLIST Forum stands for Farm Business Linkage Stakeholder Forum.

(*5): JEF2G stands for Joint Extension Staff and Farmers Dual (2) Gender Training.

(*6): FT-FaDDE stands for Facilitators' Training for Farmers' Demand Driven Extension.

Project Design Matrix (PDM) for Smallholder Horticulture Empowerment and Promotion Unit Project

Project Title: Smallholder Horticulture Empowerment and Promotion Unit Project (SHEP UP)

Duration: 5 years from the date of the dispatch of Japanese Experts (March 3, 2010 – March 3, 2015) **Implementing Agency:** MoA in association with HCDA

Beneficiaries: Smallholder horticulture farmers in implementing districts

Project Area: Nationwide

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
<p>Overall Goal Livelihood of horticulture smallholders in implementing districts is improved.</p>	<p>- Horticulture smallholders increase their income from horticulture sales per household by ---% from first year of the Project.</p>	<ul style="list-style-type: none"> • District Development Profiles • Base-line survey reports • Project Evaluation Reports 	<ul style="list-style-type: none"> • Kenyan Government policies regarding the smallholder horticulture does not change.
<p>Project Purpose Effective support system for horticulture smallholders nationwide is established.</p>	<ul style="list-style-type: none"> - By the end of the project period, individual members (men and women) of the smallholder horticulture farmer groups and the groups in the implementing districts using the SHEP Approach increase their sales by average ---%. - By the end of the project period, 70 % of implementing districts continue to implement the SHEP Approach after supported by the Project. 	<ul style="list-style-type: none"> • Base-line Survey Reports • Project Evaluation Reports 	<ul style="list-style-type: none"> • There is no severe drought. • Any policy review enhances to attain overall goal. • Market demand of horticultural produce and products do not shrink • Market prices of horticultural crops don't slump. • There is no serious social disturbance.
<p>Outputs</p> <ol style="list-style-type: none"> 1. The SHEP Approach (*1) is adopted by the Unit and ready for implementation. 2. Implementing farmer groups' income from horticulture produce is improved. 3. The SHEP Approach is properly replicated by implementing districts based on the Output 2. 4. Information Management System for the SHEP Approach is established. 	<ol style="list-style-type: none"> 1-1. 80 % of Provincial and District level government extension staff and stakeholders understand the SHEP Approach properly. 1-2. By the end of the project period, the guideline of the SHEP Approach is completed. 2-1. Within two years after adopting the SHEP Approach, implementing individual members (men and women) of the smallholder horticulture farmer groups and the groups supported by the Unit and district increase their sales by average from 18.0 % to 48.2 % in Central Province, from 17.3 % to 52.7 % in Rift Valley Province, from 13.8 % to 55.3 % in Nyanza Province and from 15.5 % to 53.6 % in Western Province (*2). 2-2. Within two years after the technical training, more than 70 % of individual members (men and women) of implementing smallholder horticulture farmer groups increase rate of applying the technologies by average from 16.0 % to 68.6 % in Central Province, from 14.2 % to 43.2 % in Rift Valley Province, from 9.2 % to 67.7 % in Nyanza Province and from 33.3 % to 84.0 % in Western Province (*3). 3-1. 100 % of implementing districts incorporates the SHEP Approach in their annual plan/budget for the following year. 3-2. 100 % of implementing districts which incorporated the SHEP Approach in their annual plan/budget for following year implements the Approach in the year. 3-3. Within two years using the SHEP Approach, individual members (men and women) of the smallholder horticulture farmer groups and the groups supported by the district's own resource in implementing district increase their sales by average ---%. 4-1. By the mid-term review of the project, the first draft of guideline for information management including monitoring and evaluation strategy for the Unit is ready. 4-2. All identified horticulture extension materials are catalogued. 4-3. 60 % of farmer groups (district, extension staff) is satisfied by information provided by the Unit. 	<ul style="list-style-type: none"> • Base-line Survey Reports • Project Evaluation Reports • Performance Contract of DAOs 	<ul style="list-style-type: none"> • Market demand of horticultural produce and products do not shrink. • Market prices of horticultural crops don't slump. • There is no severe drought and or outbreak of pests and diseases. • Kenyan Government Policy continues to support road maintenance and network development. • There is no serious social disturbance.

Activities	Input	From Kenya Side	
<p>1-1. Formulate implementation strategy of the SHEP Approach.</p> <p>1-2. Design the SHEP Approach for implementation.</p> <p>1-3. Design criteria of selection of implementing districts.</p> <p>1-4. Train and sensitize Unit staff on the SHEP Approach.</p> <p>1-5. Formulate the SHEP Approach Guideline.</p> <p>2-1. Sensitize the Province and District stakeholders on the SHEP Approach.</p> <p>2-2. Select through Provincial Agricultural Offices the implementing districts based on the criteria which is identified the Activity 1-3.</p> <p>2-3. Conduct training programme(s) for stakeholders in the implementing district(s).</p> <p>2-4. Support implementing district(s) to conduct a series of activities as trained through the above programme(s) (Activities 2-3) (*4).</p> <p>2-4-1. Conduct Baseline Survey in the implementing district(s).</p> <p>2-4-2. Hold FABLIST Forum (*5).</p> <p>2-4-3. Conduct the JEF2G Training programme (*6).</p> <p>2-4-4. Conduct the FT-FaDDE training programme (*7).</p> <p>2-4-5. Conduct In-field Training programmes for extension officers in the implementing district(s).</p> <p>2-5. Monitor the activities, outputs and impacts of the Activity 2-4.</p> <p>3-1. Support implementing district(s) to incorporate in their work plan/budget the SHEP Approach as the Activities 2-4-1 to 2-4-5.</p> <p>3-2. Support implementing district(s) to implement the SHEP Approach according to work plan/budget of the district(s).</p> <p>4-1. Review and analyze the existing challenges well as good practices regarding information management and sharing in each level.</p> <p>4-2. Draft and propose solution for better information management and sharing in each level.</p> <p>4-3. Based on the result of the Activity 4-2, introduce new information management and sharing system in the Unit.</p> <p>4-4. Based on the result of the Activity 4-2, introduce better information flow from the field level to the Unit.</p> <p>4-5. Draft and propose application of market information to the improved information management system.</p> <p>4-6. Draft and propose application of introducing effective methods and techniques to the improved information management system.</p>	<p>From Japan Side</p> <ul style="list-style-type: none"> • Assignment of Japanese Experts <p><Long term basis></p> <ul style="list-style-type: none"> • Chief Adviser / Horticulture Policy • Horticulture Production and Extension • Monitoring and Evaluation / Information management • Project Coordinator <p><Intermittent basis></p> <ul style="list-style-type: none"> • Farmer Group Strengthening and Management • Marketing • Appropriate Technology on Rural Infrastructure • Agro-possessing • Other short-term experts may be dispatched when necessity arises <ul style="list-style-type: none"> • Project Activity Cost • Provision of complementally equipment necessary for the Project 	<p>From Kenya Side</p> <ul style="list-style-type: none"> • Assignment of counterparts • Project Director • Project Manager • Unit Leader • Administration staff • Monitoring and Evaluation/Information Management staff • Subject Matter Specialists (Horticulture Production, Farmers Group strengthening, Gender Mainstreaming, Rural Infrastructure, Agro-processing) • Arrangement of Office Space and equipment for the Project • Operational cost for the Unit 	<ul style="list-style-type: none"> • No serious natural disaster such as severe drought occurs. • Market demand of horticultural produce and products do not shrink. • Market prices of horticultural crops don't slump. • There is no serious social disturbance. <p>Pre-Conditions</p> <ul style="list-style-type: none"> • Government sustains the budgetary allocation for the Unit.

(*1) SHEP stands for Smallholder Horticulture Empowerment and Promotion. The SHEP Approach includes i) effective methods and techniques to promote smallholder horticulture, ii) a series of activities to disseminate those methods and techniques, iii) monitoring and evaluation system from farmers to the Unit in the Project.

(*2) The indicator is a range since each SHEP UP Implementing districts has a specific target as follows. Central Province: Lari 25.7 %; Nyandarua Central 47.7 %; Kiari East 38.9 %; Kandara 18.0 %; Kiari West 22.0 %; Kikuyu 19.5 %; Kirinyaga West 48.1 %; Limuru 36.7 %; Nyandarua West 37.4 % and Murang'a South 48.2 %. Rift Valley Province: Nandi East 24.0 %; Nakuru North 22.4 %; Wareng 17.3 %; Nandi South 23.1 %; Kajiado North 24.0 %; Laikipia West 52.7 %; Marakwet West 35.3 %; Transmara West 44.9 %; Sotik 52.1 % and Narok South 21.2 %. Nyanza Province: Siaya 51.5 %; Nyamira 24.3 %; Bondo 47.7 %; Masaba South 27.0 %; Rachuonyo South 25.4 %; Gem 25.9 %; Gucha 42.0 %; Suba 55.3 %; Kisumu East 42.2 % and Ugenya 13.8 %. Western Province: Khwisero 17.6 %; Kakamega North 43.7 %; Mt. Elgon 42.9 %; Sabatia 20.1 %; Kakamega Central 15.9 %; Hamisi 15.6 %; Matete 19.0 %; Cheptais 53.6 %; Bungoma East 52.7 % and Teso North 15.5 %.

(*3): The indicator is a range since each SHEP UP Implementing districts has a specific target as follows. Central Province: Lari 44.6 % (M: 41.2 %/F: 48.3%); Nyandarua Central 68.6 % (M: 87.6 %/F: 49.0%); Kiari East 42.7 % (M: 38.5 %/F: 47.9%); Kandara 60.3 % (M: 63.1 %/F: 57.6%); Kiari West 37.3 % (M: 37.2 %/F: 37.5%); Kikuyu 19.3 % (M: 18.2 %/F: 20.3%); Kirinyaga West 45.1 % (M: 44.2 %/F: 45.9%); Limuru 45.3 % (M: 42.2 %/F: 47.8%); Nyandarua West 16.0 % (M: 14.0 %/F: 17.2%) and Murang'a South 45.0 % (M: 38.9 %/F: 54.8%). Rift Valley Province: Nandi East 22.0 % (M: 20.8 %/F: 23.3%); Nakuru North 31.4 % (M: 28.5 %/F: 34.2 %); Wareng 16.4 % (M: 10.3 %/F: 24.8 %); Nandi South 36.5 % (M: 29.7 %/F: 45.8 %); Kajiado North 14.2 % (M: 10.7 %/F: 17.7 %); Laikipia West 37.8 % (M: 36.0 %/F: 40.0 %); Marakwet West 43.2 % (M: 48.6 %/F: 35.9 %); Transmara West 23.3 % (M: 22.5 %/F: 25.0 %); Sotik 16.4 % (M: 16.0 %/F: 16.8 %) and Narok South 30.7 % (M: 23.6 %/F: 35.5 %). Nyanza Province: Siaya 64.2 % (M: 51.6 %/F: 73.4 %); Nyamira 56.7 % (M: 51.4 %/F: 62.1 %); Bondo 16.8 % (M: 15.4 %/F: 18.2 %); Masaba South 31.2 % (M: 27.7 %/F: 34.1 %); Rachuonyo South 12.1 % (M: 12.4 %/F: 11.6 %); Gem 42.4 % (M: 33.1 %/F: 53.8 %); Gucha 67.7 % (M: 62.6 %/F: 69.5 %); Suba 64.4 % (M: 61.9 %/F: 67.8 %); Kisumu East 9.2 % (M: 10.6 %/F: 8.1 %) and Ugenya 21.8 % (M: 20.2 %/F: 23.1 %). Western Province: Khwisero 33.3 % (M: 33.7 %/F: 33.1 %); Kakamega North 39.6 % (M: 33.9 %/F: 44.9 %); Mt. Elgon 56.5 % (M: 51.3 %/F: 63.6 %); Sabatia 58.7 % (M: 49.1 %/F: 68.8 %); Kakamega Central 46.2 % (M: 37.2 %/F: 56.9 %); Hamisi 84.0 % (M: 46.7 %/F: 113.6 %); Matete 39.3 % (M: 37.2 %/F: 40.5 %); Cheptais 56.1 % (M: 47.5 %/F: 64.5 %); Bungoma East 59.6 % (M: 54.9 %/F: 64.1 %) and Teso North 40.6 % (M: 35.0 %/F: 45.9 %).

(*4): Throughout these Activities, following topics are covered; empowerment of farmer groups, horticulture production techniques, rural infrastructure, and agro-processing.

(*5): FABLIST Forum stands for Farm Business Linkage Stakeholder Forum.

(*6): JEF2G stands for Joint Extension Staff and Farmers Qual (2) Gender Training. (*7): FT-FaDDE stands for Facilitators' Training for Farmers' Demand Driven Extension.

Project Design Matrix (PDM) for Smallholder Horticulture Empowerment and Promotion Unit Project

Project Title: Smallholder Horticulture Empowerment and Promotion Unit Project (SHEP UP)

Duration: 5 years from the date of the dispatch of Japanese Experts (March 3, 2010 – March 3, 2015) **Implementing Agency:** MoA in association with HCDA

Beneficiaries: Smallholder horticulture farmers in implementing districts

Project Area: Nationwide

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
<p>Overall Goal Livelihood of horticulture smallholders in implementing districts is improved.</p>	<ul style="list-style-type: none"> - Horticulture smallholders increase their income from horticulture sales per household by ---% from first year of the Project. 	<ul style="list-style-type: none"> • District Development Profiles • Base-line survey reports • Project Evaluation Reports 	<ul style="list-style-type: none"> • Kenyan Government policies regarding the smallholder horticulture does not change.
<p>Project Purpose Effective support system for horticulture smallholders nationwide is established.</p>	<ul style="list-style-type: none"> - By the end of the project period, individual members (men and women) of the smallholder horticulture model farmer groups and the groups in the implementing districts using the SHEP Approach increase their net-income on average from ---%. - By the end of the project period, 70 % of implementing districts continue to implement the SHEP Approach after supported by the Project. 	<ul style="list-style-type: none"> • Base-line Survey Reports • Project Evaluation Reports 	<ul style="list-style-type: none"> • There is no unfavourable weather and/or outbreak of pests and diseases. • Any policy review enhances to attain overall goal. • Market demand of horticultural produce and products do not shrink • Market prices of horticultural crops don't slump. • There is no serious social disturbance.
<p>Outputs</p> <ol style="list-style-type: none"> 1. The SHEP Approach (*1) is adopted by the Unit and ready for implementation. 2. Implementing farmer groups' income from horticulture produce is improved. 3. The SHEP Approach is properly replicated by implementing districts based on the Output 2. 4. Information Management System for the SHEP Approach is established. 	<ol style="list-style-type: none"> 1-1. 80 % of Provincial and District level government extension staff and stakeholders understand the SHEP Approach properly. 1-2. By the end of the project period, the guideline of the SHEP Approach is completed. 2-1. Within two years after technical training of the SHEP Approach, individual members (men and women) of the smallholder horticulture model farmer groups and the groups supported by the Unit and implementing districts increase their net-income on average from 18.0 % to 48.2 % in Central Province, from 17.3 % to 52.7 % in Rift Valley Province, from 13.8 % to 55.3 % in Nyanza Province and from 15.5 % to 53.6 % in Western Province (*2). 2-2. Within two years after technical training of the SHEP Approach, more than 70 % of individual members (men and women) of the smallholder horticulture model farmer groups supported by the Unit and implementing districts achieve adoption of horticultural production techniques above their district targets (*3). 2-3. Within two years after technical training of the SHEP Approach, individual members (men and women) of the smallholder horticulture model farmer groups supported by the Unit and implementing districts increase rate of applying the horticultural production techniques on average from 16.0 % to 68.6 % in Central Province, from 14.2 % to 43.2 % in Rift Valley Province, from 9.2 % to 67.7 % in Nyanza Province and from 33.3 % to 84.0 % in Western Province (*4). 3-1. 100 % of implementing districts incorporates the SHEP Approach in their annual plan/budget for the second year. 3-2. 100 % of implementing districts which incorporated the SHEP Approach in their annual plan/budget for the second year implements the Approach in the year. 3-3. Within two years after technical training of the SHEP Approach, individual members (men and women) of the smallholder horticulture model farmer groups and the groups supported by the implementing districts using their own resources increase their net-income on average from ---%. 4-1. By the mid-term review of the project, the first draft of guideline for information management including monitoring and evaluation strategy for the Unit is ready. 4-2. All identified horticulture extension materials are catalogued. 4-3. 60 % of farmer groups (district, extension staff) is satisfied by information provided by the Unit. 	<ul style="list-style-type: none"> • Base-line Survey Reports • Project Evaluation Reports • Performance Contract of DAOs 	<ul style="list-style-type: none"> • Market demand of horticultural produce and products do not shrink. • Market prices of horticultural crops don't slump. • There is no unfavourable weather and/or outbreak of pests and diseases. • Kenyan Government Policy continues to support road maintenance and network development. • There is no serious social disturbance. • Kenya's administrative system remains unchanged.

Activities	Input		
<p>1-1. Formulate implementation strategy of the SHEP Approach.</p> <p>1-2. Design the SHEP Approach for implementation.</p> <p>1-3. Design criteria of selection of implementing districts.</p> <p>1-4. Train and sensitize Unit staff on the SHEP Approach.</p> <p>1-5. Formulate the SHEP Approach Guideline.</p> <p>2-1. Sensitize the Province and District stakeholders on the SHEP Approach.</p> <p>2-2. Select through Provincial Agricultural Offices the implementing districts based on the criteria which is identified the Activity 1-3.</p> <p>2-3. Conduct training programme(s) for stakeholders in the implementing district(s).</p> <p>2-4. Support implementing district(s) to conduct a series of activities as trained through the above programme(s) (Activities 2-3) (*5).</p> <p>2-4-1. Conduct Baseline Survey in the implementing district(s).</p> <p>2-4-2. Hold FABLIS Forum (*6).</p> <p>2-4-3. Conduct the JEF2G Training programme (*7).</p> <p>2-4-4. Conduct the FT-FaDDE training programme (*8).</p> <p>2-4-5. Conduct In-field Training programmes for extension officers in the implementing district(s).</p> <p>2-5. Monitor the activities, outputs and impacts of the Activity 2-4.</p> <p>3-1. Support implementing district(s) to incorporate in their work plan/budget the SHEP Approach as the Activities 2-4-1 to 2-4-5.</p> <p>3-2. Support implementing district(s) to implement the SHEP Approach according to work plan/budget of the district(s).</p> <p>4-1. Review and analyze the existing challenges well as good practices regarding information management and sharing at each level.</p> <p>4-2. Draft and propose solution for better information management and sharing at each level.</p> <p>4-3. Based on the result of the Activity 4-2, introduce new information management and sharing system in the Unit.</p> <p>4-4. Based on the result of the Activity 4-2, introduce better information flow from the field level to the Unit.</p> <p>4-5. Draft and propose application of market information to the improved information management system.</p> <p>4-6. Draft and propose application of introducing effective methods and techniques to the improved information management system.</p>	<p>From Japan Side</p> <ul style="list-style-type: none"> • Assignment of Japanese Experts <Long term basis> <ul style="list-style-type: none"> • Chief Adviser / Horticulture Policy • Horticulture Production and Extension • Monitoring and Evaluation / Information management • Project Coordinator <Intermittent basis> <ul style="list-style-type: none"> • Farmer Group Strengthening and Management • Marketing • Appropriate Technology on Rural Infrastructure • Agro-possessing • Other short-term experts may be dispatched when necessity arises • Project Activity Cost • Provision of complementally equipment necessary for the Project 	<p>From Kenya Side</p> <ul style="list-style-type: none"> • Assignment of counterparts <ul style="list-style-type: none"> • Project Director • Project Manager • Unit Leader • Administration staff • Monitoring and Evaluation/Information Management staff • Subject Matter Specialists (Horticulture Production, Farmers Group strengthening, Gender Mainstreaming, Rural Infrastructure, Agro-processing) • Arrangement of Office Space and equipment for the Project • Operational cost for the Unit 	<ul style="list-style-type: none"> • No serious natural disaster such as severe drought occurs. • Market demand of horticultural produce and products do not shrink. • Market prices of horticultural crops don't slump. • There is no serious social disturbance. <p>Pre-Conditions</p> <ul style="list-style-type: none"> • Government sustains the budgetary allocation for the Unit.

(*1) SHEP stands for Smallholder Horticulture Empowerment and Promotion. The SHEP Approach includes i) effective methods and techniques to promote smallholder horticulture, ii) a series of activities to disseminate those methods and techniques, iii) monitoring and evaluation system from farmers to the Unit in the Project.

(*2) The indicator is a range since each SHEP UP implementing districts has a specific target as follows. Central Province: Lari 25.7 %; Nyandarua Central 47.7 %; Kieni East 38.9 %; Kandara 18.0 %; Kieni West 22.0 %; Kikuyu 19.5 %; Kirinyaga West 48.1 %; Limuru 36.7 %; Nyandarua West 37.4 % and Murang'a South 48.2 %. Rift Valley Province: Nandi East 24.0 %; Nakuru North 22.4 %; Wareng 17.3 %; Nandi South 23.1 %; Kajiado North 24.0 %; Laikipia West 52.7 %; Marakwet West 35.3 %; Transmara West 44.9 %; Sotik 52.1 % and Narok South 21.2 %. Nyanza Province: Siaya 51.5 %; Nyamira 24.3 %; Bondo 47.7 %; Masaba South 27.0 %; Rachuonyo South 25.4 %; Gem 25.9 %; Gucha 42.0 %; Suba 55.3 %; Kisumu East 42.2 % and Ugenya 13.8 %. Western Province: Khwisero 17.6 %; Kakamega North 43.7 %; Mt. Elgon 42.9 %; Sabatia 20.1 %; Kakamega Central 15.9 %; Hamisi 15.6 %; Matete 19.0 %; Cheptais 53.6 %; Bungoma East 52.7 % and Teso North 15.5 %.

(*3) Targets of the no. of horticultural production techniques for the SHEP UP implementing districts are as follows. Central Province: Lari 15; Nyandarua Central 12; Kieni East 15; Kandara 15; Kieni West 15; Kikuyu 15; Kirinyaga West 15; Limuru 15; Nyandarua West 14 and Murang'a South 15. Rift Valley Province: Nandi East 15; Nakuru North 16; Wareng 15; Nandi South 16; Kajiado North 13; Laikipia West 15; Marakwet West 15; Transmara West 15; Sotik 15 and Narok South 13. Nyanza Province: Siaya 14; Nyamira 14; Bondo 14; Masaba South 14; Rachuonyo South 16; Gem 16; Gucha 10; Suba 14; Kisumu East 16 and Ugenya 16. Western Province: Khwisero 13; Kakamega North 15; Mt. Elgon 15; Sabatia 12; Kakamega Central 15; Hamisi 12; Matete 15; Cheptais 14; Bungoma East 15 and Teso North 15.

(*4) The indicator is a range since each SHEP UP implementing districts has a specific target as follows. Central Province: Lari 44.6 % (M: 41.2 %/F: 48.3%); Nyandarua Central 68.6 % (M: 87.6 %/F: 49.0%); Kieni East 42.7 % (M: 38.5 %/F: 47.9%); Kandara 60.3 % (M: 63.1 %/F: 57.6%); Kieni West 37.3 % (M: 37.2 %/F: 37.5%); Kikuyu 19.3 % (M: 18.2 %/F: 20.3%); Kirinyaga West 45.0 % (M: 44.2 %/F: 45.9%); Limuru 45.3 % (M: 42.2 %/F: 47.8%); Nyandarua West 16.0 % (M: 14.0 %/F: 17.2%) and Murang'a South 45.0 % (M: 38.9 %/F: 54.8%). Rift Valley Province: Nandi East 22.0 % (M: 20.8 %/F: 23.3%); Nakuru North 31.4 % (M: 28.5 %/F: 34.2 %); Wareng 16.4 % (M: 10.3 %/F: 24.8 %); Nandi South 36.5 % (M: 29.7 %/F: 45.8 %); Kajiado North 14.2 % (M: 10.7 %/F: 17.7 %); Laikipia West 37.8 % (M: 36.0 %/F: 40.0 %); Marakwet West 43.2 % (M: 48.6 %/F: 35.9 %); Transmara West 23.3 % (M: 22.5 %/F: 25.0 %); Sotik 16.4 % (M: 16.0 %/F: 16.8 %) and Narok South 30.7 % (M: 23.6 %/F: 35.5 %). Nyanza Province: Siaya 64.2 % (M: 51.6 %/F: 73.4 %); Nyamira 56.7 % (M: 51.4 %/F: 62.1 %); Bondo 16.8 % (M: 15.4 %/F: 18.2 %); Masaba South 31.2 % (M: 27.7 %/F: 34.1 %); Rachuonyo South 12.1 % (M: 12.4 %/F: 11.6 %); Gem 42.4 % (M: 33.1 %/F: 53.8 %); Gucha 67.7 % (M: 62.6 %/F: 69.5 %); Suba 64.4 % (M: 61.9 %/F: 67.8 %); Kisumu East 9.2 % (M: 10.6 %/F: 8.1 %) and Ugenya 21.8 % (M: 20.2 %/F: 23.1 %). Western Province: Khwisero 33.3 % (M: 33.7 %/F: 33.1 %); Kakamega North 39.6 % (M: 33.9 %/F: 44.9 %); Mt. Elgon 56.5 % (M: 51.3 %/F: 63.6 %); Sabatia 58.7 % (M: 49.1 %/F: 68.8 %); Kakamega Central 46.2 % (M: 37.2 %/F: 56.9 %); Hamisi 84.0 % (M: 46.7 %/F: 113.6 %); Matete 39.3 % (M: 37.2 %/F: 40.5 %); Cheptais 56.1 % (M: 47.5 %/F: 64.5 %); Bungoma East 59.6 % (M: 54.9 %/F: 64.1 %) and Teso North 40.6 % (M: 35.0 %/F: 45.9 %).

(*5) Throughout these Activities, following topics are covered; empowerment of farmer groups, horticulture production techniques, rural infrastructure, and agro-processing.

(*6) FABLIS Forum stands for Farm Business Linkage Stakeholder Forum. (*7) JEF2G stands for Joint Extension Staff and Farmers Dual (2) Gender Training. (*8) FT-FaDDE stands for Facilitators' Training for Farmers' Demand Driven Extension.

Annex 1-5 Suggested change in PDM Ver3 to Ver4 (Mid-Term Evaluation in Oct., 2012)

Section	PDM Version 3	PDM Version 4
Project purpose/OVI	By the end of the project period, individual members (man and women) of the smallholder horticulture farmer groups and the groups in the implementing districts using the SHEP Approach increase their sales by average ____%.	By the end of the project period, individual members (man and women) of the smallholder horticulture model farmer groups and the groups in the implementing districts using the SHEP approach increase their net income on average from ____%.
Project Purpose/ Important Assumptions	There is no severe drought .	There is no unfavorable weather and/or outbreak of pests and diseases .
Output 2-1/ OVI 2-1	Within two years after adopting the SHEP Approach, implementing individual members (men and women) of the smallholder horticulture farmer groups and the groups supported by the Unit and district increase their sales by average from 18.0 % to 48.2 % in Central Province, from 17.3 % to 52.7 % in Rift Valley Province, from 13.8 % to 55.3 % in Nyanza Province and from 15.5 % to 53.6 % in Western Province (*2).	Within two years after technical training of the SHEP Approach, individual members (men and women) of the smallholder horticulture model farmer groups and the groups supported by the Unit and implementing districts increase their net income on average from 18.0 % to 48.2 % in Central Province, from 17.3 % to 52.7 % in Rift Valley Province, from 13.8 % to 55.3 % in Nyanza Province and from 15.5 % to 53.6 % in Western Province (*2).
Output 2-1/ OVI 2-2	Within two years after the technical training, more than 70 % of individual members (men and women) of implementing smallholder horticulture farmer groups increase rate of applying the technologies by average from 16.0 % to 68.6 % in Central Province, from 14.2 % to 43.2 % in Rift Valley Province, from 9.2 % to 67.7 % in Nyanza Province and from 33.3 % to 84.0 % in Western Province (*3).	Within two years after technical training of the SHEP Approach , more than 70 % of individual members (men and women) of the smallholder horticulture model farmer groups supported by the Unit and implementing districts achieve adoption of horticultural production techniques above their district targets (*3) .
Output 2-1/ OVI 2-3		Within two years after technical training of the SHEP Approach , individual members (men and women) of the smallholder horticulture model farmer groups supported by the Unit and implementing districts increase rate of applying the horticultural production techniques on average from 16.0 % to 68.6 % in Central Province, from 14.2 % to 43.2 % in Rift Valley Province, from 9.2 % to 67.7 % in Nyanza Province and from 33.3 % to 84.0 % in Western Province (*4) .
Output 3-3/ OVI	100 % of implementing districts incorporates the	100 % of implementing districts incorporates the SHEP

3-1	SHEP Approach in their annual plan/budget for the following year .	Approach in their annual plan/budget for the second year .
Output 3-3/ OVI 3-2	100 % of implementing districts which incorporated the SHEP Approach in their annual plan/budget for following year implements the Approach in the year.	100 % of implementing districts which incorporated the SHEP Approach in their annual plan/budget for the second year implements the SHEP Approach in the year.
Output 3-3/ OVI 3-3	Within two years using the SHEP Approach, individual members (men and women) of the smallholder horticulture farmer groups and the groups supported by the district's own resource in implementing district increase their sales by average ---%.	Within two years after technical training of the SHEP Approach, individual members (men and women) of the smallholder horticulture model farmer groups and the groups supported by the implementing districts using their own resources increase their net income on average from ---%.
Outputs/ Important Assumptions	New addition	Kenya's administrative system remains unchanged.
	There is no severe drought and or outbreak of pests and diseases.	There is no unfavorable weather and or outbreak of pests and diseases.
Activities	4-1. Review and analyze the existing challenges well as good practices regarding information management and sharing in each level.	4-1. Review and analyze the existing challenges well as good practices regarding information management and sharing at each level.
	4-2. Draft and propose solution for better information management and sharing in each level.	4-2. Draft and propose solution for better information management and sharing at each level.
Footnote	New addition	(*3) Targets of the no. of horticultural production techniques for the SHEP UP implementing districts are as follows. Central Province: Lari 15; Nyandarua Central 12; Kieni East 15; Kandara 15; Kieni West 15; Kikuyu 15; Kirinyaga West 15; Limuru 15; Nyandarua West 14 and Murang'a South 15. Rift Valley Province: Nandi East 15; Nakuru North 16; Wareng 15; Nandi South 16; Kajiado North 13; Laikipia West 15; Marakwet West 15; Transmara West 15; Sotik 15 and Narok South 13. Nyanza Province: Siaya 14; Nyamira 14; Bondo 14; Masaba South 14; Rachuonyo South 16; Gem 16; Gucha 10; Suba 14; Kisumu East 16 and Ugenya 16. Western Province: Khwisero 13; Kakamega North 15; Mt. Elgon 15; Sabatia 12; Kakamega Central 15; Hamisi 12; Matete 15; Cheptais 14; Bungoma East 15 and Teso North 15.

SHEP UP Plan of Operation version.1

	0 year	1 st year				2 nd year				3 rd year				4 th year				5 th year				After the project
		April - June	July - Sep	Oct - Dec	Jan - Mar	April - June	July - Sep	Oct - Dec	Jan - Mar	April - June	July - Sep	Oct - Dec	Jan - Mar	April - June	July - Sep	Oct - Dec	Jan - Mar	April - June	July - Sep	Oct - Dec	Jan - Mar	
0.Pre-preparation																						
0-1. Personnel	■																					
0-2. Office space and procurement necessary items	■																					
1.Preparation																						
1-1. Making the strategy of SHEP-UP		■	■	■																		
1-2. Planning the activities of SHEP-UP		■	■	■																		
1-3. Making the criteria for the implementing districts		■	■	■																		
1-4. Sensitizing SHEP-Unit staff on SHEP approach		■	■	■																		
1-5. Completing the guideline on SHEP approach		■	■	■																		
2. Support for groups in the implementing districts with staff of province and district																						
2-1. Preparation																						
2-1-1. Sensitization workshop for the staff in each province			■	■			■	■			■	■			■	■						
2-1-2. PDA and Unit select the implementing districts through criteria			■	■			■	■			■	■			■	■						
2-1-3. Training for staff of PDA and DAOs on how to organize the events of SHEP approach, ie, FABLIST forum, JEF2G training, FT, FaDDE, in-field trainings			■	■			■	■			■	■			■	■						
2-2. Training for the groups																						
2-2-1. Baseline survey						■	■			■	■			■	■			■	■			
2-2-2. FABLIST forum						■	■			■	■			■	■			■	■			
2-2-3. JEF2G training						■	■			■	■			■	■			■	■			
2-2-4. FT-FaDDE						■	■			■	■			■	■			■	■			
2-2-5. In-field training						■	■			■	■			■	■			■	■			
2-3. Monitoring and Evaluation																						
2-3-1. Conducting monitoring and evaluation										■	■	■	■	■	■	■	■	■	■	■	■	
2-3-2. Analysis of the results										■	■	■	■	■	■	■	■	■	■	■	■	
3. Support for the groups which are not targeted in the previous activities by the implementing district																						
3-1. Preparation on the budget for implementing the SHEP approach for the groups										■	■	■	■	■	■	■	■	■	■	■	■	
3-2. Conducting the activities for the groups by district staff										■	■	■	■	■	■	■	■	■	■	■	■	
3-3. Conducting the monitoring and evaluation										■	■	■	■	■	■	■	■	■	■	■	■	
3-4. Analysis of the results of monitoring and evaluation										■	■	■	■	■	■	■	■	■	■	■	■	
4. Establishment of information management system on SHEP approach																						
4-1. First draft of guideline for information management system in SHEP Unit		■	■	■																		
4-2. Making the list for all identified information on horticulture sub-sector		■	■	■																		
4-3. Utilizing market information, new technology, and so on from outside		■	■	■																		

SHEP UP Plan of Operation Version 2 (as of 16, June 2010)

	2010		2011				2012				2013				2014				2015		After the project
	2009/10	April - June	July - Sep	Oct - Dec	Jan - Mar	April - June	July - Sep	Oct - Dec	Jan - Mar	April - June	July - Sep	Oct - Dec	Jan - Mar	April - June	July - Sep	Oct - Dec	Jan - Mar	April - June	July - Sep	Oct - Dec	
0. Pre-preparation																					
0-1. Personnel	█	█	█																		
0-2. Office space and procurement necessary items	█	█	█																		
1. Preparation																					
1-1. Making the strategy of SHEP UP	█	█	█																		
1-2. Planning the activities of SHEP UP	█	█	█																		
1-3. Making the criteria for the implementing districts	█	█	█																		
1-4. Sensitizing SHEP Unit staff on SHEP Approach	█	█	█																		
1-5. Completing the guideline on SHEP Approach	█	█	█																		
2. Support for groups in the implementing districts with staff of province and district																					
2-1. Preparation																					
2-1-1. Sensitization workshop for the staff in each province			█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
2-1-2. PDA and Unit select the implementing districts through criteria			█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
2-1-3. Training for staff of PDA and DAOs on how to organize the events of SHEP Approach, ie, FABLIST Forum, JEF2G training, FT-FaDDE, In-field Trainings			█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
2-2. Training for the groups																					
2-2-1. Baseline survey			█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
2-2-2. FABLIST Forum			█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
2-2-3. JEF2G Training			█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
2-2-4. FT-FaDDE			█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
2-2-5. In-field Training			█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
2-3. Monitoring and Evaluation																					
2-3-1. Conducting Monitoring and Evaluation																					
2-3-2. Analysis of the results																					
3. Support for the groups which are not targeted in the previous activities by the implementing district																					
3-1. Preparation on the budget for implementing the SHEP Approach for the groups																					
3-1. Preparation on the budget for implementing the SHEP Approach for the groups			█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
3-2. Conducting the activities for the groups by district staff																					
3-2-1. Baseline survey			█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
3-2-2. FABLIST Forum			█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
3-2-3. JEF2G Training			█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
3-2-4. FT-FaDDE			█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
3-2-5. In-field Training			█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
3-3. Conducting Monitoring and Evaluation																					
3-3. Conducting Monitoring and Evaluation																					
3-4. Analysis of the results of Monitoring and Evaluation																					
3-4. Analysis of the results of Monitoring and Evaluation																					
4. Establishment of information management system on SHEP Approach																					
4-1. First draft of guideline for information management system in SHEP Unit																					
4-1. First draft of guideline for information management system in SHEP Unit			█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
4-2. Making the list for all identified information on horticulture sub-sector																					
4-2. Making the list for all identified information on horticulture sub-sector			█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
4-3. Utilizing market information, new technology, and so on from outside																					
4-3. Utilizing market information, new technology, and so on from outside			█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█

SHEP UP Plan of Operation Version 3 (as of 20 June 2011)

	2010		2011				2012				2013				2014				2015			After the project
	2009/10	April - June	July - Sep	Oct - Dec	Jan - Mar	April - June	July - Sep	Oct - Dec	Jan - Mar	April - June	July - Sep	Oct - Dec	Jan - Mar	April - June	July - Sep	Oct - Dec	Jan - Mar	April - June	July - Sep	Oct - Dec	Jan - Mar	
0. Pre-preparation																						
0-1 Personnel	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
0-2 Office space and procurement of necessary items	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
1. Preparation																						
1-1 Making the strategy of SHEP UP	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
1-2 Planning the activities of SHEP UP	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
1-3 Making the criteria for selection of the implementing districts	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
1-4 Sensitizing SHEP Unit staff on SHEP Approach	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
1-5 Completing the guideline on SHEP Approach	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
2. Support for groups in the implementing districts with staff of province and district																						
2-1 Preparation																						
2-1-1 Sensitization workshop for the staff in each province	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
2-1-2 PDA and SHEP Unit select the implementing districts through criteria	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
2-1-3 Organizers' Training on Basic SHEP Approach for Provincial & District SHEP UP Management Teams	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
2-2 Training for the groups																						
2-2-1 Sensitization Workshop for the FEOs and the groups	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
2-2-2 Baseline Survey	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
2-2-3 FABLIST Forum	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
2-2-4 JEF2G Training	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
2-2-5 FT-FaDDE	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
2-2-6 In-field Training	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
2-2-7 "Do-now" Training	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
2-2-8 Agro-processing Training	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
2-3 Monitoring and Evaluation																						
2-3-1 Conducting Monitoring and Evaluation	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
2-3-2 Analysis of the results of Monitoring and Evaluation	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
3. Support for the groups which are not targeted in the previous activities by the implementing district																						
3-1 Preparation of the budget for implementing the SHEP Approach for the groups																						
3-1-1 Sensitization Workshop for the FEOs and the groups	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
3-1-2 Baseline Survey	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
3-1-3 FABLIST Forum	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
3-1-4 JEF2G Training	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
3-1-5 FT-FaDDE	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
3-1-6 In-field Training	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
3-1-7 "Do-now" Training	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
3-1-8 Agro-processing Training	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
3-3 Monitoring and Evaluation																						
3-3-1 Conducting Monitoring and Evaluation	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
3-3-2 Analysis of the results of Monitoring and Evaluation	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
4. Establishment of information management system on SHEP Approach																						
4-1 First draft of guideline for information management system in SHEP Unit	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
4-2 Making the list for all identified information on horticulture sub-sector	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
4-3 Utilizing market information, new technology, and so on from outside	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

SHEP UP Plan of Operation Version 4 (as of 23rd January, 2012)

	2010				2011				2012				2013				2014				2015				After the project
	2009/10	April - June	July - Sep	Oct - Dec	Jan - Mar	April - June	July - Sep	Oct - Dec	Jan - Mar	April - June	July - Sep	Oct - Dec	Jan - Mar	April - June	July - Sep	Oct - Dec	Jan - Mar	April - June	July - Sep	Oct - Dec	Jan - Mar				
0. Pre-preparation																									
0-1 Personnel																									
0-2 Office space and procurement of necessary items																									
1. Preparation																									
1-1 Making the strategy of SHEP UP																									
1-2 Planning the activities of SHEP UP																									
1-3 Making the criteria for selection of the implementing districts																									
1-4 Sensitizing SHEP Unit staff on SHEP Approach																									
1-5 Completing the guideline on SHEP Approach																									
2. Support for groups in the implementing districts with staff of province and district																									
2-1 Preparation																									
2-1-1 Sensitization workshop for the staff in each province																									
2-1-2 PDA and SHEP Unit select the implementing districts through criteria																									
2-1-3 Organizers' Training on Basic SHEP Approach for Provincial & District SHEP UP Management Teams																									
2-2 Training for the groups																									
2-2-1 Sensitization Workshop for the FEOs and the groups																									
2-2-2 Baseline Survey																									
2-2-3 FABLIST Forum																									
2-2-4 JEF2G Training																									
2-2-5 FT-FaDDE																									
2-2-6 In-field Training																									
2-2-7 "Do-nou" Training																									
2-2-8 Agro-processing Training																									
2-3 Monitoring and Evaluation																									
2-3-1 Conducting Monitoring and Evaluation																									
2-3-2 Analysis of the results of Monitoring and Evaluation																									
3. Support for the groups which are not targeted in the previous activities by the implementing district																									
3-1 Preparation of the budget for implementing the SHEP Approach for the groups																									
3-2 Conducting the activities for the groups by district staff																									
3-2-1 Sensitization Workshop for the FEOs and the groups																									
3-2-2 Baseline Survey																									
3-2-3 FABLIST Forum																									
3-2-4 JEF2G Training																									
3-2-5 FT-FaDDE																									
3-2-6 In-field Training																									
3-2-7 "Do-nou" Training																									
3-2-8 Agro-processing Training																									
3-3 Monitoring and Evaluation																									
3-3-1 Conducting Monitoring and Evaluation																									
3-3-2 Analysis of the results of Monitoring and Evaluation																									
4. Establishment of information management system on SHEP Approach																									
4-1 First draft of guideline for information management system in SHEP Unit																									
4-2 Making the list for all identified information on horticulture sub-sector																									
4-3 Utilizing market information, new technology, and so on from outside																									

SHEP UP Plan of Operation Version 5 (as of 19th October, 2012)

	2010			2011			2012			2013			2014			2015			After the project	
	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26			
	April - June	July - Sep	Oct - Dec	Jan - Mar	April - June	July - Sep	Oct - Dec	Jan - Mar	April - June	July - Sep	Oct - Dec	Jan - Mar	April - June	July - Sep	Oct - Dec	Jan - Mar	April - June	July - Sep	Oct - Dec	Jan - Mar
0-Pre-preparation																				
0-1 Personnel	■	■																		
0-2 Office space and procurement of necessary items	■	■																		
1-Preparation																				
1-1 Making the strategy of SHEP UP	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
1-2 Planning the activities of SHEP UP	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
1-3 Making the criteria for selection of the implementing districts	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
1-4 Sensitizing SHEP Unit staff on SHEP Approach	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
1-5 Completing the guideline on SHEP Approach	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
2-Support for groups in the implementing districts with staff of province and district																				
2-1 Preparation																				
2-1-1 Sensitization workshop for the staff in each province		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
2-1-2 PDA and SHEP Unit select the implementing districts through criteria		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
2-1-3 Organizers' Training on Basic SHEP Approach for Provincial & District SHEP UP Management Teams		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
2-2 Training for the groups																				
2-2-1 Sensitization Workshop for the FEOs and the groups			1 st Batch	2 nd Batch	3 rd Batch	4 th Batch														
2-2-2 Baseline Survey			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
2-2-3 FABLIST Forum			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
2-2-4 JEF2G Training			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
2-2-5 Group Exercises			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
2-2-6 Gender Mainstreaming & Family Budgeting Training			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
2-2-7 FT-FaDDE			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
2-2-8 In-field Training			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
2-2-9 "Do-nou" Training			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
2-2-10 Agro-processing Training			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
2-3 Monitoring and Evaluation																				
2-3-1 Conducting Monitoring and Evaluation			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
2-3-2 Analysis of the results of Monitoring and Evaluation			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
3-Support for the groups which are not targeted in the previous activities by the implementing district																				
3-1 Preparation of the budget for implementing the SHEP Approach for the groups																				
3-1 Conducting the activities for the groups by district staff			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
3-1-1 Sensitization Workshop for the FEOs and the groups			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
3-1-2 Baseline Survey			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
3-1-3 FABLIST Forum			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
3-1-4 JEF2G Training			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
3-1-5 Group Exercise			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
3-1-6 Gender Mainstreaming & Family Budgeting Training			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
3-1-7 FT-FaDDE			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
3-1-8 In-field Training			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
3-1-9 "Do-nou" Training			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
3-1-10 Agro-processing Training			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
3-2 Monitoring and Evaluation																				
3-2-1 Conducting Monitoring and Evaluation			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
3-2-2 Analysis of the results of Monitoring and Evaluation			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
4-Establishment of information management system on SHEP Approach																				
4-1 First draft of guideline for information management system in SHEP Unit																				
4-1 Making the list for all identified information on horticulture sub-sector			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
4-2 Utilizing market information, new technology, and so on from outside			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

3. プロジェクト合同調整委員会リスト

Annex 3. List of SHEP UP Steering Committee Members

1. Members of the Steering Committee in R/D (as of 24, February 2010)

【Kenyan Side】

Permanent Secretary, Ministry of Agriculture (MoA)/Chairperson
Agriculture Secretary, Ministry of Agriculture (MoA)
Director, Directorate of Crop Management, Ministry of Agriculture (MoA)
Director, Directorate of Extension, Research Liaison & Trainings, Ministry of Agriculture (MoA)
Ministry of Finance (MoF)
Managing Director, Horticulture Crops Development Authority (HCDA)
General Manager for Technical Service, Horticulture Crops Development Authority (HCDA)
Deputy Director, Horticulture Division, Ministry of Agriculture (MoA)

【Japanese Side】

Chief Representative, Japan International Cooperation Agency, Kenya Office
Chief Advisor, Smallholder Horticulture Empowerment & Promotion Unit Project (SHEP UP)
Project Coordinator, Smallholder Horticulture Empowerment & Promotion Unit Project (SHEP UP)
Other JICA Experts, Smallholder Horticulture Empowerment & Promotion Unit Project (SHEP UP)
Other personnel concerned from JICA side as necessary

2. Proposed Members of the Steering Committee in the 1st PSC

【Kenyan Side】

Permanent Secretary, Ministry of Agriculture/Chairperson
Agriculture Secretary, Ministry of Agriculture
Director of Policy and External Relations, Ministry of Agriculture
Director of Crop Management, Ministry of Agriculture
Director of Agribusiness and Marketing, Ministry of Agriculture
Director of Extension, Research Liaison & Trainings, Ministry of Agriculture
Director of Agriculture Engineering Services, Ministry of Agriculture
Ministry of Finance
Managing Director, Horticultural Crops Development Authority
Deputy Director, Horticulture Division, Ministry of Agriculture
General Manager, Technical Advisory Services, Horticultural Crops Development Authority
Principal Accounts Controller, Ministry of Agriculture
Chief Finance Officer, Ministry of Agriculture
SHEP Unit Leader, Smallholder Horticulture Empowerment and Promotion Unit

* Additional members are in red.

【Japanese Side】

Chief Representative, Japan International Cooperation Agency, Kenya Office
Chief Advisor, Smallholder Horticulture Empowerment and Promotion Unit Project
Project Coordinator, Smallholder Horticulture Empowerment and Promotion Unit Project
Other JICA Experts, Smallholder Horticulture Empowerment & Promotion Unit Project (SHEP UP)
Other personnel concerned from JICA side as necessary

Annex 4. List of Japanese Experts

【Long-term】

Name	Assignment	Period	Office Affiliated
Mr. Naoki HASHIMOTO	Chief Advisor/Horticulture Policy	02.Nov.2010 - to date	
Ms. Harue KITAJIMA	Horticulture Production and Extension	03.Mar.2010 - to date	
Mr. Isao TOJO	Project Co-ordination/Training Planning	27.Jun.2010 - 26.Jun.2012	

【Short-term】

Name	Assignment	Period	Office Affiliated
Ms. Yoko HARADA	Gender Mainstreaming	2011.Jan.30 - 2011.Feb.19	Social Development Specialist, Global Link Management
		2012.Apr.15 - 2012.May.11	
Dr. Yoshinori FUKUBAYASHI	Rural Infrastructure	2011.Feb.26 - 2011.Mar.27	Community Road Empowerment (CORE)
		2012.Jan.11 - 2012.Mar.15	
Mr. Shinichi KOYAMA	Agro-processing/Training Planning	2011.Jan.31 - 2011.Mar.9	Overseas Agricultural Development Association
		2012.Feb.12 - 2012.Mar.10	
Mr. Hiroyuki KOZU	Information Management & Utilization	2010.Nov.27 - 2010.Dec.16	Technical Consultant, YSK Consultants Co. Ltd.
		2011.Apr.10 - 2011.Apr.27	
Mr. Yasumitsu ISHIKAWA	Information Management & Utilization	2011.Nov.06 - 2011.Dec.16	Japan Development Service Co. Ltd.
		2012.Aug.22 - 2012.Oct.08	
Dr. Yasuhiro DOI	Water Harvesting	2012.May.06 - 2012.Jun.16	Special Adviser, Japan International Cooperation Agency (JICA), Headquarters

【Mission Member】

Name	Assignment	Period	Office Affiliated
Mr. Hajime ISHII	Information Management & Utilization	2010.Jun.7 - 2010.Jun.19	Associate Expert, Japan International Cooperation Agency (JICA), Headquarters
Dr. Jiro Aikawa	Project Management	2010.May.21 - 2010.Jun.25	Senior Advisor, Japan International Cooperation Agency (JICA), Headquarters
	Project Management	2010.Nov.25 - 2010.Dec.8	Senior Advisor, Japan International Cooperation Agency (JICA), Headquarters
	Project Management	2011.Jan.26 - 2011.Feb.9	Senior Advisor, Japan International Cooperation Agency (JICA), Headquarters
	Project Management	2011.Aug.15 - 2011.Aug.26	Senior Advisor, Japan International Cooperation Agency (JICA), Headquarters
	Project Management	2012.Jan.19 - 2012.Jan.28	Senior Advisor, Japan International Cooperation Agency (JICA), Headquarters
	Project Management	2012.Jun.17 - 2012.Jun.30	Senior Advisor, Japan International Cooperation Agency (JICA), Headquarters

Annex 5. List of Kenyan Counterpart Personnel

Post/Assignment		Name	Organization /Department	Period
Smallholder Horticulture Empowerment & Promotion (SHEP) Unit Leader		Francisca Malenge (Ms.)	Ministry of Agriculture	03.Mar.2010 - to date
Technical Component	Horticultural Crops Production & Quality Control Sub-Component	Stephen Kioko (Mr.)	Ministry of Agriculture	03.Mar.2010 - to date
		Collins Otieno (Mr.)	Horticultural Crops Development Authority (HCDA)	03.Mar.2010 - to date
		Elizabeth Mbutia (Ms.)	Ministry of Agriculture	03.Jul.2012 - to date
	Farmer Group Empowerment & Gender Mainstreaming Sub-Component	Thomas Mumu (Mr.)	Ministry of Agriculture	03.Mar.2010 - to date
		Florence Wambua (Ms.)	Horticultural Crops Development Authority (HCDA)	03.Mar.2010 - to date
	Rural Infrastructure Sub-component	Stephen Nzioka (Mr.)	Ministry of Agriculture	20.Sep.2010 - to date
		Dishon Mkaya (Mr.)	Ministry of Agriculture	21.Feb.2012 - to date
	Agro-processing Sub-Component	Alice Nyaga (Ms.)	Ministry of Agriculture	03.Mar.2010 - to date
Information Management/Monitoring & Evaluation Component		Raymond Chelule (Mr.)	Ministry of Agriculture	03.Mar.2010 - to date
		Antonina Luta (Ms.)	Horticultural Crops Development Authority (HCDA)	03.Jan.2012 - to date
Administration Component		Peter Orangi (Mr.)	Ministry of Agriculture	03.Mar.2010 - to date

6. プロジェクト支出（合計・ケニア・日本）

Annex 6-1. Project Expenditure by Japan, Kenya and Total (June 2012)

〈Japan Side〉

	2009/10 (Result)	2010/11 (Result)	2011/12 (Result)	Total Expenditure (2012 June)
General recurrent cost by JICA	3,488,486	22,842,330	42,906,939	69,237,755
Equipment by JICA		2,894,060	4,795,000	7,689,060
Total	3,488,486	25,736,390	47,701,939	76,926,815
*JFY: Japanese Financial Year; April - March				

〈Kenyan Side〉

Items of Expenditure	2009/10 (Result)	2010/11 (Result)	2011/12 (Result)	
General recurrent cost by GOK	229,000	22,337,752	32,187,067	54,753,819
Equipment	4,742,591	6,570,929	0	11,313,520
Total	4,971,591	28,908,681	32,187,067	66,067,339

〈Total〉

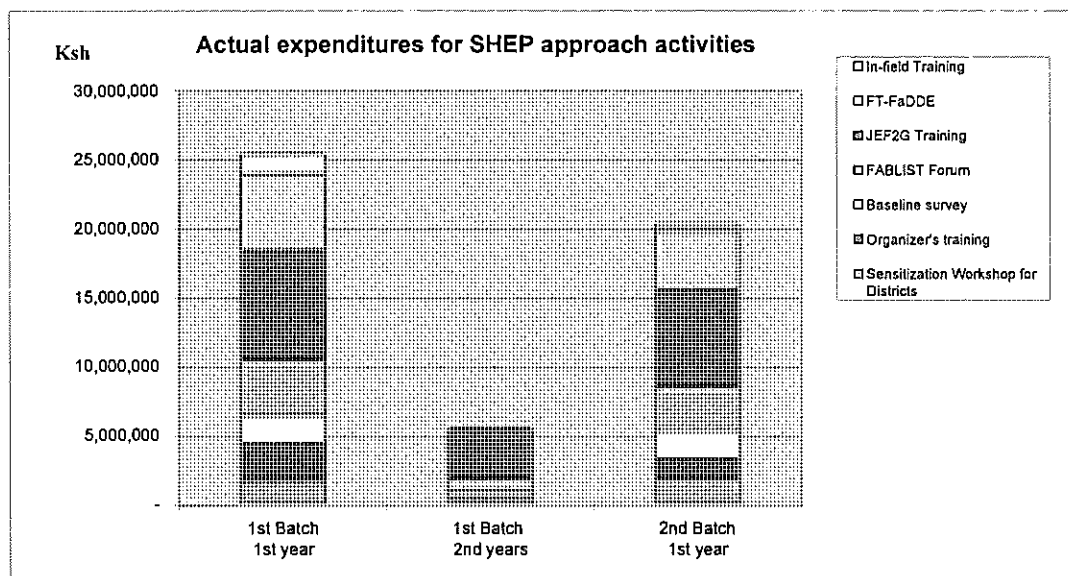
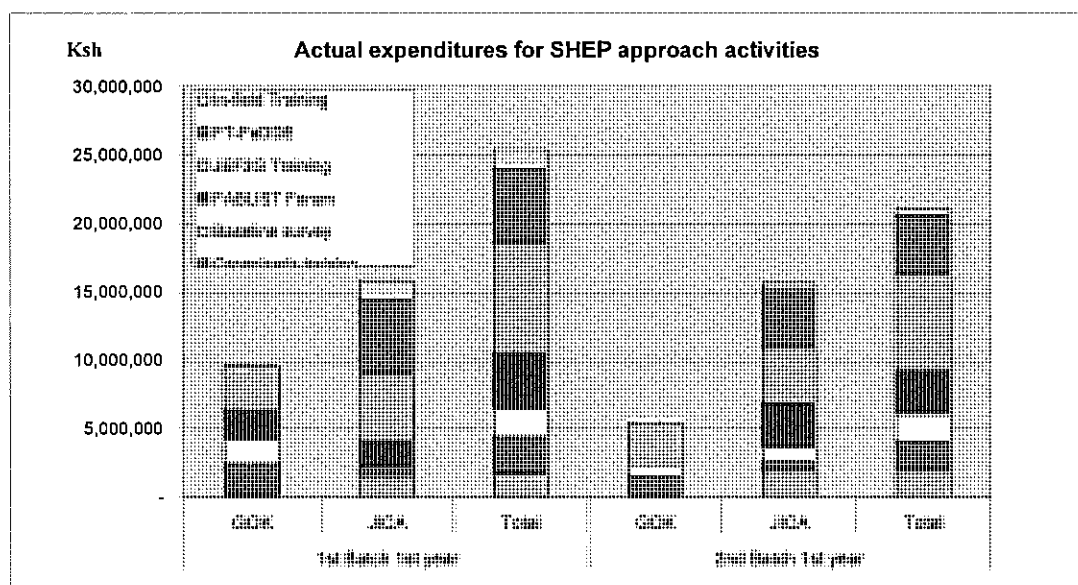
Items of Expenditure	2009/10 (Result)	2010/11 (Result)	2011/12 (Result)	
General recurrent cost	3,717,486	45,180,082	75,094,006	123,991,574
Equipment	4,742,591	9,464,989	4,795,000	19,002,580
Total	8,460,077	54,645,071	79,889,006	142,994,154

Annex 6-2. Actual expenditures for SHEP approach activities

	1st Batch 1st year			2nd Batch 1st year			3rd Batch		
	GOK	JICA	Total	GOK	JICA	Total	GOK	JICA	Total
Sensitization Workshop for Districts	149,000	1,522,932	1,671,932	-	1,860,192	1,860,192	-	1,601,720	1,601,720
Organizer's training	2,270,950	431,418	2,702,368	1,460,545	715,440	2,175,985	1,361,470	318,900	1,680,370
Baseline survey	1,804,950	262,710	2,067,660	932,500	1,063,350	1,995,850	-	-	-
FABLIST Forum	2,133,950	1,862,584	3,996,534	-	3,148,461	3,148,461	-	-	-
JEF2G Training	3,195,750	4,808,967	8,004,717	3,049,110	4,070,800	7,119,910	-	-	-
FT-FaDDE	-	5,515,011	5,515,011	-	4,249,890	4,249,890	-	-	-
In-field Training	-	1,460,538	1,460,538	-	536,450	536,450	-	-	-
Total	9,554,600	15,864,160	25,418,760	5,442,155	15,644,583	21,086,738	1,361,470	1,920,620	3,282,090

	1st Batch 2nd year		
	GOK	JICA	Total
Sensitization Workshop for Districts	-	-	-
Organizer's training	-	-	-
Sensitization Workshop for FEOs	545,630	-	545,630
Baseline survey	535,910	-	535,910
FABLIST Forum	685,778	-	685,778
JEF2G Training	3,681,040	-	3,681,040
FT-FaDDE	-	-	-
In-field Training	-	-	-
Total	5,448,358	-	5,448,358

KSH	
1st Batch 1st year	25,418,760
2nd Batch 1st year	21,086,738
1st Batch 2nd year	5,448,358



Annex 7. List of Kenyan Counterpart Personnel Trained in Japan

	Name	Course Title	Duration (D/M/Y)	Post	Organization/Department
1	Collins Otieno (Mr.)	The Region-Focused Training Course on Horticultural Crop Cultivation and Extension for Africa	09.May.2010 - 11.Sep.2010	Project Counterpart	Horticultural Crops Development Authority (HCDA)
2	Paul Busienei (Mr.)	The Region-Focused Training Course on Horticultural Crop Cultivation and Extension for Africa	09.May.2010 - 11.Sep.2010	District Crops Development Officer, Trans-Nzoia West District Office	Ministry of Agriculture
3	Evans Nyamache (Mr.)	The Region-Focused Training Course on Horticultural Crop Cultivation and Extension for Africa	07.May.2011 - 11.Sep.2011	District Crops Officer, Kisii South District Office	Ministry of Agriculture
4	Calistus Nkundu (Mr.)	The Region-Focused Training Course on Horticultural Crop Cultivation and Extension for Africa	07.May.2011 - 11.Sep.2011	Horticultural Officer, Nkubu Depot, Horticultural Crops Development Authority (HCDA)	Horticultural Crops Development Authority (HCDA)
5	Antony Rutto (Mr.)	The Region-Focused Training Course on Horticultural Crop Cultivation and Extension for Africa	07.Apr.2012 - 09.Sep.2012	Horticultural Officer, Iten Station, Horticultural Crops Development Authority (HCDA)	Horticultural Crops Development Authority (HCDA)
6	Magdaline Munene (Ms.)	The Region-Focused Training Course on Horticultural Crop Cultivation and Extension for Africa	07.Apr.2012 - 09.Sep.2012	Horticultural Crops Officer, Murang'a South District Office	Ministry of Agriculture

8. 実施県プロポーザルフォーム

Proposal of Selecting SHEP UP Implementing Districts
Name of District: _____
Name of County: _____

Annex 8. PROPOSAL OF SELECTING SHEP UP IMPLEMENTING DISTRICTS

The proposal of selecting SHEP UP implementing districts has four main considerations: **Motivation, Resources Availability and Mobilization, Geographical Conditions and Socio-economic Considerations.** You are requested to provide information of your district using the format given by ticking in the appropriate box or filling in the blank spaces.

Background Information

- i.) Name of Province :-----
- ii.) Name of District :-----
- iii.) Size of the District (km²) :-----
- iv.) Number of Administrative Units:
 - Number of Divisions :-----
 - Number of Locations :-----
 - Number of Extension Units :-----
- v.) Number of Technical Staff
 - District Headquarter :-----
 - Divisions :-----
 - Locations :-----

I. Motivation

1. Do you want to implement SHEP approach in your district? YES NO
If the answer is yes then proceed, but if the answer is no then you don't need to proceed.

2. Has the district implemented SHEP activities previously? YES NO

3. Please explain what contributed to success of the previous Smallholder Horticulture Empowerment Project (SHEP)?

4. What activities do you need to implement during the first year with SHEP UP?

Name of District: _____

Name of County: _____

5. What do you intend to do to ensure continuity in implementation of SHEP approach from the second year and subsequent years?

6. District Staff Motivation

1) Please gauge the motivational level of your extension staff in terms of working with smallholder horticulture farmers using limited resources?

HIGH MEDIUM LOW

2) Please gauge the willingness of extension staff to learn and apply new ideas and/or approaches?

HIGH MEDIUM LOW

7. Please identify 3 major challenges under the following sections.

1) Horticulture Crop Production

2) Marketing

8. Agricultural Projects/Programmes in the District: in the table below, please indicate major projects/programmes for the last 5 years including RRI activity.

Name of Project/ Programmes	Main Activities	Target Area	Target Group	Number of Groups	Date of Completion
RRI Activity					

Name of District: _____
 Name of County: _____

II. Resource Availability and Mobilization

9. Extension Staff: in the table below, please provide information on numbers of farm families and extension staff at divisional and locational levels.

Name of Division	No. Farm Families	No. DIV.SMS	No. FEOs

10. Availability of Functional Office Equipment

Type of Equipment	Quantity

11. Motor Vehicle/Motor Cycle Availability: please indicate the number of motor vehicles/motor cycles which are in good condition for extension activities.

- 1) Number of motor vehicles in good condition in the district. :-----
- 2) Number of motor vehicles in good condition in the divisions. :-----
- 3) Number of motor cycles in good condition in the district. :-----
- 4) Number of motor cycles in good condition in the divisions. :-----

12. Financial Resource Mobilization

Is the District Agricultural Officer's office willing to mobilize funds to implement and up scale SHEP UP activities? YES NO

III. Geographical Conditions

13. Climatic Conditions

1) Rainfall: please provide information in the table below.

Name of District	Mean Annual Rainfall in last 5 Years (mm)				
	2011	2010	2009	2008	2007

2) Temperature °C (2011): please provide information in the table below.

Month	Maximum	Minimum	Diurnal Temperature Range
January			
February			

March			
April			
May			
June			
July			
August			
September			
October			
November			
December			

- 3) Relative Humidity (%) :-----
14. Altitude (in meters above sea level)
 Highest point :----- Lowest point :-----
15. Soils
- 1) Predominant Soil Type :-----
- 2) Predominant Soil pH :-----
16. What is the main source of water for irrigation?
- 1) Permanent Rivers Lakes Springs Dams Water Pans
- 2) Comment on suitability of water for irrigation from the main source.

17. Repair and maintenance of unclassified roads: involvement of community and stakeholders.
- 1) Are community members willing to participate by providing labor and resources in road repair and maintenance? YES NO
- 2) Are there stakeholders willing to support community to repair and maintain rural access and farm roads? YES NO
- 3) List the major stakeholders who would be willing to support road repairs.
- -----
 - -----
 - -----
 - -----
 - -----
 - -----

IV. Socio-economic Considerations

18. Poverty Level (as per 2009 CBS data) :-----
19. Major agricultural enterprises, acreage, production, and income derived from each in 2011.

Enterprise	Acreage	Total Production (Tons)	Total Income (Ksh.)	Gross Margin

20. Fill in major horticultural enterprises and production trends in the table below.

Enterprise	Total Production (Tons)					Total Income (Ksh.)				
	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011

21. Income derived from other off-farm activities.

Activity	Income (Ksh.)

22. Involvement of Smallholder Farmer Groups in Horticulture Production

- 1) Are there smallholder farmer groups involved in group production for export market?
 YES NO
- 2) Are there smallholder farmer groups involved in group production for domestic market?
 YES NO
- 3) Are there smallholder farmer groups involved in contract farming?
 YES NO

23. Markets and Market Infrastructure

- 1) Names of nearest wholesale markets in your district.
 - -----
 - -----
 - -----
 - -----
- 2) Names of main exporters operating in your district.
 - -----

Proposal of Selecting SHEP UP Implementing Districts
Name of District: _____
Name of County: _____

Name of District Agricultural Officer : -----

Signature : -----

Date : -----

Stamp : -----

General Horticultural Crop Production & Post-Harvest Handling Techniques (GHCP&PHHT) 20

Name of the Farmer Group:

Name of District:

Date: / /2012

Name of Farmer:

Male/Female:

Tel. No

Pre to Post Cultivation Stages		Items	Horticultural Techniques Advocated for Adoption	Yes*	No
1	Pre-Cultivation Preparation	Q 1	Does the farmer undertake a market survey to determine the crop(s) to cultivate each season?		
		Q 2	Does the farmer prepare and use crop planting calendar(s) based on the market survey results?		
		Q 3	Does the farmer undertake soil testing at least once in two years for vegetables/annual flowers; or before the planting for fruit trees/perennial flowers?		
		Q 4	Does the farmer use recommended composting practices by using different organic materials to supply major nutrients: Nitrogen (N), Phosphorus (P), and Potassium (K) in preparing compost/manure?		
		Q 5	Does the farmer use recommended quality planting material(s) with one or more of the following characteristics: disease resistance and tolerance, high yield, early maturity, better tastes, size, and longer shelf life?		
2	Land Preparation	Q 6	Does the farmer use with one or more following recommended land preparation practices in management of pests & diseases: solarization, timely ploughing, appropriate depth of ploughing, and minimizing movement of soil to check possible spread soil borne pests & diseases?		
		Q 7	Does the farmer incorporate crops residue at least two months before planting into the farm during ploughing to enhance recycling of nutrients?		
		Q 8	Does the farmer incorporate compost/manure or organic fertilizer as a basal application at least 1-2 weeks before the planting?		
3	Crop Establishment (Planting/ Transplanting)	Q 9	Does the farmer use recommended practices in raising seedlings for vegetables/annual flowers or use seedlings for fruit trees/perennial flowers raised from recognized nursery(s)?		
		Q 10	Does the farmer use recommended planting/transplanting spacing ?		
		Q 11	Does the farmer plant/transplant using recommended fertilizer application rates ?		
4	Crop Management	Q 12	Does the farmer supplement crop water requirement through one or more of the following irrigation methods: watering can, overhead, drip, and fallow to meet the minimum crop water requirement?		
		Q 13	Does the farmer ensure timely weeding and use of appropriate weeding tools in managing of weeds ?		

4	Crop Management	Q 14	Does the farmer undertake appropriate top-dressing practices: timeliness, type and recommended rate of application, and method of application?		
		Q 15	Does the farmer use at least two of the following Integrated Pests Management (IPM) practices : cultural, biological, physical and chemical?		
		Q 16	Does the farmer observe the following use of safe and effective use of pesticides : appropriate doses, recommended pesticides, and Pre Harvest Interval (PHI)?		
5	Harvest	Q 17	Does the farmer use at least one of the following harvesting indices : color, size, shape, and firmness?		
6	Post-Harvest Handling	Q 18	Does the farmer use harvesting/storage/transportation containers/standard packaging materials with following characteristics: well-ventilated, easy to clean, and smooth thus minimizing damages?		
		Q 19	Does the farmer apply one of the following recommended value addition techniques: cleaning, sorting, grading, packaging or processing of the produce ?		
7	Cost and Income Analysis	Q 20	Does the farmer keep records on cost of production and sales and undertake cost and income analysis ?		

* Please tick appropriately for "YES" or "NO".

CROP PRODUCTION & INCOME ANALYSIS DATA (CP&IAD) SHEET

DATE: ____ / ____ / ____ GROUP NAME: _____

DISTRICT: _____ FARMER'S NAME: _____

MALE/FEMALE: _____ TELEPHONE NO.: _____

1. Crop Name and Variety	2. Area under the Crop (M x M or Acres)		3. Total Production (Kg)	4. Total Production per Acre (Kg/acre)	5. Net Produce (Kg)	6. Net Produce per Acre (Kg/acre)	7. Average Price per Kg (Ksh./kg)	8. Total Income (Ksh.)	9. Total Cost of Production (Ksh.)	10. Net Income (Ksh.)
	2 a.	2 b.		(3./2 b.)		(5./2 b.)		(5. x 7.)		(8. - 9.)
1 st Crop:	M x M (M ²)	Acres								
2 nd Crop:	M x M (M ²)	Acres								
Other Crop	M x M (M ²)	Acres								
Other Crop	M x M (M ²)	Acres								

NOTES:

Farmers need to answer all questions under the un-shaded columns. The shaded columns are optional to farmers who are skills in conversion.

1. **Crop Name and Variety:** indicate name of the crop and the variety
2. **Area under the Crop (M x M or Acres):** where it is difficult to estimate the area in acres, it can be given in paces for both length and width of the farm in square meters
3. **Total Production (Kg):** farmers should indicate total production in kg for the area which has been put under the crop. Total production should include both marketable (net produce) and the unmarketable produce
4. **Total Production per Acre (Kg/acre):** all production including marketable and unmarketable produce per acre (this will be calculated by the project from column 2 & 3)
5. **Net Produce (Kg):** this is marketable produce and is obtained by subtracting unmarketable produce from total production
6. **Net Produce per Acre (Kg/acre):** total produce minus unmarketable produce per acre (this will be calculated by the project from column 2 & 5)
7. **Average Price per Kg (Ksh./kg):** where marketing is done using units other than weighing balances, the units need to be converted into kg
8. **Total Income (Ksh.):** average price per kg multiplied by net produce in kilos (this will be calculated by the project from column 5 & 7)
9. **Total Cost of Production (Ksh.):** should include the following where applicable:
 - Cost of seed/planting material, fertilizers and manures, pesticides, posts/stakes,
 - Labour costs such as nursery establishment/maintenance, ploughing, manures/fertilizer application, weeding, staking/training, spraying, harvesting
 - Transportation costs
10. **Net Income (Ksh.):** total income minus total cost of production (this will be calculated by the project from column 8 & 9)

Annex 11

Smallholder Horticulture Empowerment & Promotion Unit Project (SHEP UP)

**Group Empowerment Indicators
- Indicators to assess the capacity change in a farmer group -**

Version 1: February 2011

Level	Description		Qualitative Aspects	Quantitative Aspects
Level 1	The group is formed as recommended by outsiders. But not all members are fully convinced of its benefit.	Leadership	<ul style="list-style-type: none"> - There has been no election for officials. - Only the group officials are exclusively involved in the decision-making. 	- No documentation of group activities.
		Cooperation among members	- Little cooperation exists among members i.e. limited number of group members implement the group activities.	- Membership list has not been updated for more than one year / No membership list has been prepared.
		Gender	<ul style="list-style-type: none"> - No awareness on gender issues i.e. What is to be a man and What is to be a woman - Gender disparities are accepted as culture and tradition. 	- Less than 10% of group officials are women/men.

Level	Description		Qualitative Aspects	Quantitative Aspects
Level 2	The group members are becoming aware of the benefits of grouping.	Leadership	<ul style="list-style-type: none"> - Officials are selected by members. - Leaders started taking an initiative in group operation. ie Leaders have started to support day to day activities of the group. - The meetings are not for discussion but to convey messages from the leaders/officials to the ordinary members i.e. Group members are not given the opportunity either to make changes or approve the agenda. 	<ul style="list-style-type: none"> - Both the management committee and the general meeting are held on ad hock basis. ie There is no consensus reached; on the time, date and place where the next meeting will be held at the end of the meeting (No schedule is available in writing). - Record on members' contribution is available.
		Cooperation among members	<ul style="list-style-type: none"> - Group members organize the farming activities together with an aim to upgrade their skills/knowledge. - Some members show interests on how the group is managed. 	<ul style="list-style-type: none"> - After group representatives attend the training, acquired skills and knowledge are shared in the meeting held within a month with more than 70% of members participating. - Market survey is organized and action plan is formulated with more than 70% of members involved. But less than 30% of members are implementing. - Less than 50% of members contribute regularly*1. - Less than 50% of members are aware of group by-laws.
		Gender	<ul style="list-style-type: none"> - Women participate in the group activities along with men. - Few women show their interest to join the decision-making process and men dominate both the general meetings and the management committee. ie. Women passively participate in the management and general meetings. 	<ul style="list-style-type: none"> - More than 70% of women members participate in the group activities regularly. - Less than 30% of group officials are women.

Level	Description		Qualitative Aspects	Quantitative Aspects
Level 3	The group members became confident in each other.	Leadership	<ul style="list-style-type: none"> - Leaders respect members' opinions and try to encourage their participation. - The decisions and plans of the group activities are discussed in the regular management and general meetings. - Leaders started to look for information for network building with buyers, input suppliers and service providers. 	<ul style="list-style-type: none"> - The management committee and the general meeting are held on a regular basis. - Secretary keeps non-financial records*2. - Treasurer keeps financial records*3.
		Cooperation among members	<ul style="list-style-type: none"> - Every member actively participates in a general meeting, which is regularly held. - The members support each other in the implementation of new skills/knowledge both in the individual field and the common field. - The group collectively purchases inputs and sells products. - All members honor and practice the by-laws. 	<ul style="list-style-type: none"> - The general meetings are held regularly with more than 80% of men and women members participating. - Skills/knowledge trained by the extension officer are implemented by more than 50% of members in their fields. - More than 80% of members contribute regularly *1. - The formulated action plan is approved by more than 80% of members. 30 – 50% of members are implementing the action plan.
		Gender	<ul style="list-style-type: none"> - Both men and women are comfortable in expressing him/herself freely in the meeting. - Both men and women are actively involved in the group management. 	<ul style="list-style-type: none"> - Either gender assumes more than 30% of group officials.

Level	Description		Qualitative Aspects	Quantitative Aspects
Level 4	A strong tie has been established among the group members. The members are interested in the capacity enhancement of the group as well as the community as a whole.	Leadership	<ul style="list-style-type: none"> - Members have confidence in leaders and assist them for the smooth group operation. 	<ul style="list-style-type: none"> - More than 70% of members participate in the election of officials. - Financial / Non-financial records are properly filed with all the relevant information as trained by SHEP UP.
		Cooperation among members	<ul style="list-style-type: none"> - The group has a capacity to find a solution for most of the problems raised in the group management and operation including the collective purchase of inputs and marketing of products. OR The group has an effective conflict resolution mechanism in place. - The members assist the neighbors and community members in dissemination of their farming skills/knowledge freely and openly. 	<ul style="list-style-type: none"> - More than 70% of members are aware of and are satisfied with how the membership fee is spent and how the profits from the collective marketing are shared among the members (Minutes of meetings with list of attendance is available). - The formulated action plan was fully implemented and the next action plan was formulated with more than 80% of members involved. - The group has established networking with more than one buyer, one input supplier and one service provider. - Skills/knowledge trained by the extension officer are implemented by more than 80% of members in their fields.
		Gender	<ul style="list-style-type: none"> - Both men and women are fully aware of the negative impacts of the gender disparities on the community development as well as the improvements of their livelihoods. - Women members also participate in the community meetings actively. 	<ul style="list-style-type: none"> - Either gender assumes more than 40% of group officials. - Women members participate in various community activities.

Level	Description		Qualitative Aspects	Quantitative Aspects
Level 5	The group is able to work together to address various problems and can build and maintain the network with other groups and organizations.	Leadership	<ul style="list-style-type: none"> - The change of leaders doesn't affect the group management and operation. 	<ul style="list-style-type: none"> - The terms of officials are stated in the by-laws and strictly observed.
		Cooperation among members	<ul style="list-style-type: none"> - The group interacts with other groups/organization to address any problem that arises. - Many members are engaged in the well-being of the community, making use of their skills/knowledge learned through the SHEP UP activities. - The group negotiates with buyers over the prices and volumes. - The external shocks such as loss of buyers, unfavorable weather, poor prices don't jeopardize the group cohesion and integrity. - The group members are engaged in the skills / knowledge dissemination to other farmers. 	<ul style="list-style-type: none"> - There is an evidence for regular interaction with other groups / organizations. - The group has an annual budget plan for the group activities. - The group has a documented agreement with buyers.
		Gender	<ul style="list-style-type: none"> - Both men and women work with other community members on the improvement of gender relations in the community. - The group interacts and assists vulnerable groups of the community to improve their livelihoods. 	<ul style="list-style-type: none"> - The community increased the number of women committee members in the community development committee (the highest decision-making entity in the community). - There is an evidence for interaction with vulnerable groups in the community.

*1: Contribution includes membership fee, member contribution and payment of collective purchase both in cash and in kind.

*2: Non-financial records include minutes of group meetings and discussions as well as of farming.

*3: Financial records include those of membership fee/contribution as well as of collective input purchase and product sales.

Annex 12

Smallholder Horticulture Empowerment & Promotion Unit Project (SHEP UP)

Selection Criteria of SHEP UP Model Farmer Groups for the 3rd Batch (2012/2013)

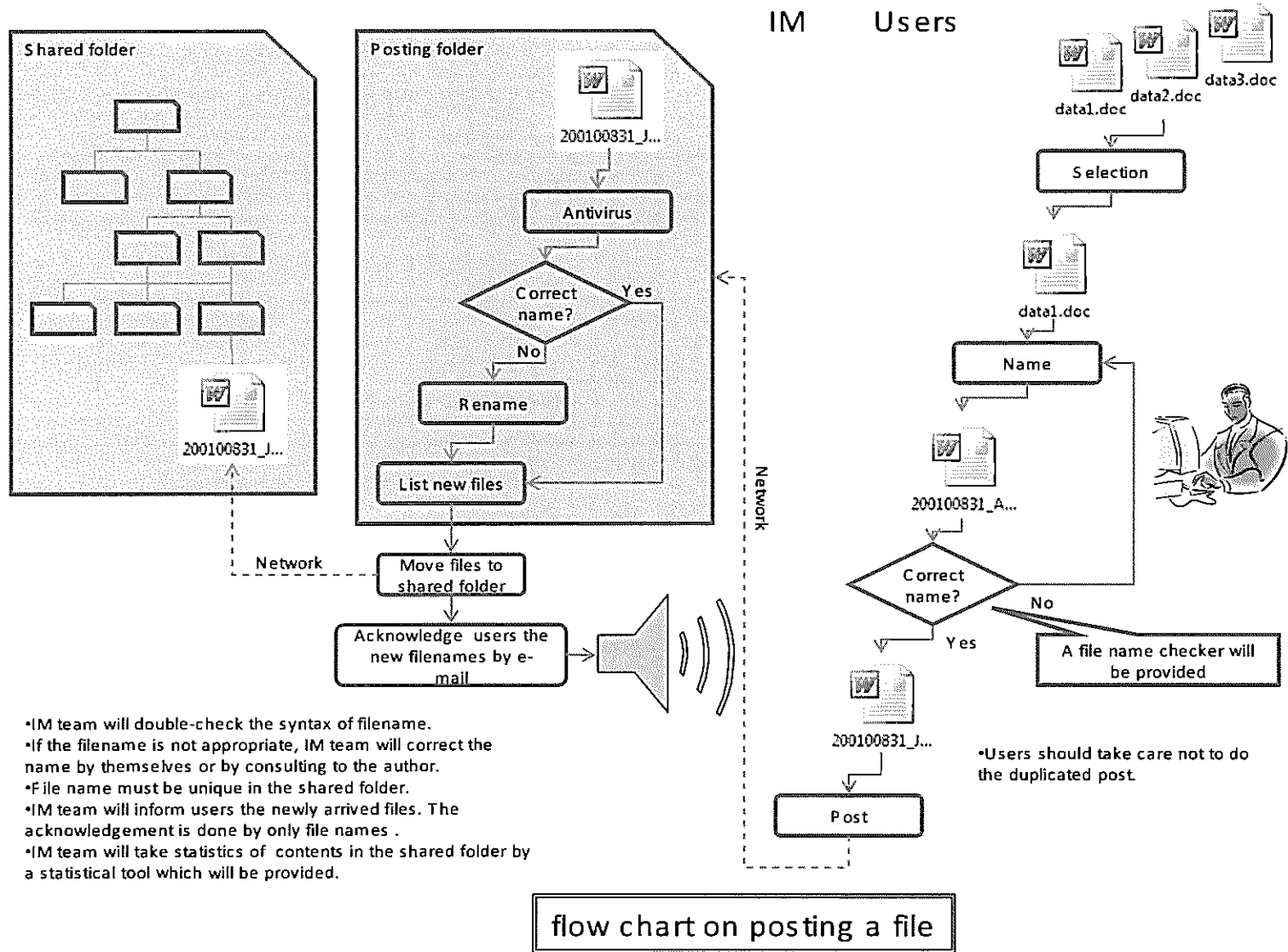
1	Number of Groups	Each District will choose 5 (Five) Model Farmer Groups for the 1st Year (2012/2013) to implement the SHEP Approach under the supervision of the SHEP Unit
2	Group Status	Select Model Farmer Groups from both “ Formal ” and “ Informal ” Groups Do NOT form a new group for SHEP UP, but select from existing groups
3	Membership	The group membership must be between 15 (fifteen) and 50 (fifty)
4	Age	Out of school youths to adults
5	Literacy	Group officials should be literate or semi-literate in order to read and write during the Training sessions and may also translate the training materials/handouts into their local languages when needed
6	Occupation	Each group member must be practicing “ Horticulture ”
7	Group Activities	Choose groups whose core business is “ Horticulture ” Choose groups whose alternative income generating activities do NOT have negative impact on “ Horticulture ” Choose more than 60 % of the total groups from the groups which have NOT started buying inputs and selling their produce together Choose less than 40 % of the total groups from the groups which have started buying inputs and selling their produce together Avoid choosing groups with similar horticultural activities which are being supported by other

		Projects/Programmes (e.g. SHoMaP, SHDP etc.)
		Choose groups in which the Project will compliment the work done by other service providers
8	Group Attitude	Choose groups with a “Healthy & Positive Attitude” towards extension service providers to have dialogue
		Choose groups with a “High Motivation” to learn new ideas & technologies
		Choose groups with an ability & willingness to mobilize resources
9	Area under Coverage	Choose groups to evenly cover the production areas in your district (Avoid choosing only groups from the same area)
		Avoid choosing groups from the areas which have security concerns (It might cause some negative effects to the field activities of the Project)
10	Accessibility	Choose groups which are accessible by road (i.e. Frontline Extension Officers (FEOs)/Group Facilitators need to visit groups to give a series of the In-field Training)
11	Group’s Sensibility to Gender Issues	Gender Balance – The Project is pro-gender balance. Thus, do NOT choose groups with less than 30 % of female/male participation
		Advocacy – The Project will give preference to groups with women official(s) (i.e. Women with the leadership role)
12	Special Groups	SHEP UP will support “Special Groups” of the disadvantaged or discriminated in the society

Notes:

- Based on the proposed **Selection Criteria** written above, District SHEP UP Management Teams may adjust/add criteria according to their specific situation with approval of **SHEP UP**.
- In case of any changes, **fill out** the “**Revision/Addition of the Selection Criteria**” form and submit it to the **SHEP UP** in advance.

Flow Chart on Posting a File in SHEP UP

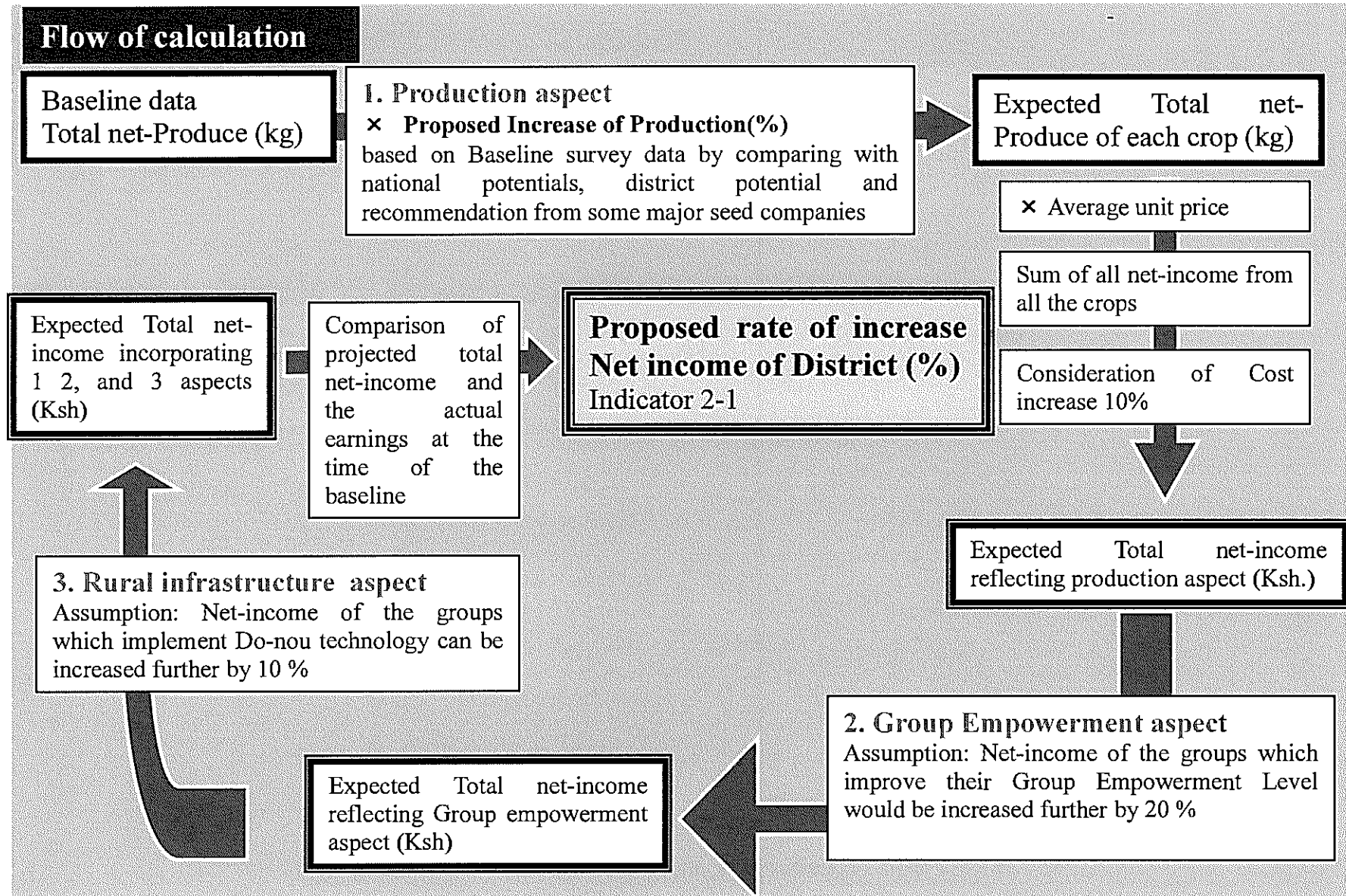


14. SHEP アプローチトレーニングリスト

Annex 14. List of Trainings and their Objectives in the SHEP Approach

No.	Trainings	Objectives
1.	Sensitization Workshop	<ul style="list-style-type: none"> - To sensitize farmer group representatives (both male and female), Frontline Extension Officers/Group Facilitators (FEOs/GFs) and Divisional Agricultural Extension Officers (DAEOs) on the SHEP Approach and outline of the SHEP UP
2.	Baseline Survey	<ul style="list-style-type: none"> - To assess the levels of the Model Farmer Groups in terms of: yields & income, horticultural crop production practices and group empowerment through data collection before the actual project activities
3.	Farm Business Linkage Stakeholder (FABLIST) Forum	<ul style="list-style-type: none"> - To link SHEP UP Model Farmer Groups with potential stakeholders
4.	Joint Extension Staff & Farmers Dual Gender (JEF2G) Training	<ul style="list-style-type: none"> - To impart skills on Action Plan making to farmer group representatives (both male and female) and their FEOs/GFs through the practices of Market Survey, Crop Selection & Ranking and Problem/Objective Maps making - To strengthen relationship between farmers and FEOs/Group Facilitators for smooth implementation of field activities
5.	Group Excises	<ul style="list-style-type: none"> - To train other members of the Model Farmer Groups on topics covered during the JEF2G Training - To make Group Action Plan based on information form the Market Survey and the result of Crop Selection & Ranking and Problem/Objective Maps
6.	Facilitators' Training for Farmers' Demand Driven Extension (FT-FaDDE)	<ul style="list-style-type: none"> - To impart horticultural crop production skills to the FEOs/GFs and district & divisional staff to address challenges raised in the Group Action Plans of the Model Farmer Groups - To sensitize FEOs/GFs and district & divisional staff on implementation process of the In-field Training
7.	In-field Training	<ul style="list-style-type: none"> - To train Model Farmer Groups on horticultural crop production skills and techniques of their selected crops based on their needs identified in their Group Action Plans
8.	Follow-up/Monitoring and Evaluation	<ul style="list-style-type: none"> - To observe the implementation process of the In-field Training and ensure the quality of training sessions - To assess the implementation process of Group Action Plan - To evaluate group development during and after the project intervention through monitoring & evaluation of the group activities in terms of crop production, adoption of technologies and group cohesiveness

Annex 15. Calculation of indicators for target average net-income



Indicator (2-1) of the Outcome 2

Name of District: Masaba South

1. Calculation of the Proposed Increase in Net Income (Ksh.)

Selected Crops	Total Net Produce (Kg)	Proposed Increase in Production (%) ^{*1}	Total No. of Groups in the District	No. of Group(s) that Selected the Crop ^{*2}	Average Unit Price (Ksh./kg)	Influence of Farmer Group Empowerment/ Gender (+ 20 %)	Influence of Rural Infrastructure (+ 10 %)	Effect of Cost of Production (- 10 %) ^{*3}	Proposed Increase in Net Income (Ksh.)
Banana	46096.00	10%	5	1	28.11	120%	110%	90%	30785.15
BNS	8295.00	46%	5	2	33.18	120%	110%	90%	60157.98
Cabbage	67265.00	48%	5	2	8.91	120%	110%	90%	136647.50
Spider Plant	2705.00	74%	5	1	34.16	120%	110%	90%	16244.85
Spring Onion	7117.00	74%	5	1	49.18	120%	110%	90%	61539.08
Tomato	23368.00	111%	5	3	24.80	120%	110%	90%	458468.15

2. Proposed Rate of Increase in Net Income

1) Total Net Income for all Horticultural Crops in the district (Ksh.) =	2827720.00
2) Total Proposed Increase in Net Income (Ksh.) =	763842.71
3) Proposed Net Income within two years (Ksh.) =	3591562.71
4) Proposed Rate of Increase in Net Income $\{2\} \div 1) \times 100 (\%) \}$ (%) =	27.0

Note:

^{*1} It is assumed that the proposed rate will be achieved within two years after the district adopts the SHEP Approach.

^{*2} The column shows that the number of groups that selected the crop will influence the proposed rate of increase in production.

^{*3} It is assumed that total cost of production will increase by 10 % within two years after the district adopts the SHEP Approach.

Annex 16-1: Detailed Data for Average Net-income Increase in Central Province

Smallholder Horticulture Empowerment & Promotion Unit Project (SHEP UP)

Indicator (2-1) of the Outcome 2

Province: Central Province

Target: 1st Year's Model Farmer Groups

1. Average Net-income Benefit (Ksh.) per District

Name of District	Comparison	Average Net-income Benefit (Ksh.)				Proposed Rate of Increase (%)
		Group	Per Farmer	Per Male	Per Female	
Lari	Baseline	1,007,984	57,930	53,809	62,345	25.7
	Current	556,631	41,540	44,435	36,974	
	Increased Rate (%)	-44.8	-28.3	-17.4	-40.7	
Nyandarua Central	Baseline	210,643	12,391	10,575	14,747	47.7
	Current	115,480	18,626	23,912	11,306	
	Increased Rate (%)	-45.2	50.3	126.1	-23.3	
Kieni East	Baseline	567,308	20,407	18,218	23,126	38.9
	Current	465,298	35,792	37,548	33,743	
	Increased Rate (%)	-18.0	75.4	106.1	45.9	
Kandara	Baseline	1,497,686	53,109	83,428	20,561	18.0
	Current	411,429	23,114	32,577	15,389	
	Increased Rate (%)	-72.5	-56.5	-61.0	-25.2	
Kieni West	Baseline	818,560	39,736	47,706	27,182	22.0
	Current	1,200,921	87,023	84,453	90,787	
	Increased Rate (%)	46.7	119.0	77.0	234.0	
Kikuyu	Baseline	556,061	39,719	39,113	40,296	19.5
	Current	665,160	51,166	62,746	30,020	
	Increased Rate (%)	19.6	28.8	60.4	-25.5	
Kirinyaga West	Baseline	495,603	20,312	21,481	19,063	48.1
	Current	190,863	21,207	16,703	27,759	
	Increased Rate (%)	-61.5	4.4	-22.2	45.6	
Limuru	Baseline	527,065	21,253	26,452	17,242	36.7
	Current	1,637,901	99,872	122,917	78,421	
	Increased Rate (%)	210.8	369.9	364.7	354.8	
Nyandarua West	Baseline	103,454	5,684	10,832	2,614	37.4
	Current	360,962	19,407	15,619	21,300	
	Increased Rate (%)	248.9	241.4	44.2	715.0	
Murang'a South	Baseline	386,415	18,578	17,331	20,150	48.2
	Current	323,203	34,383	31,109	37,028	
	Increased Rate (%)	-16.4	85.1	79.5	83.8	

Notes:

- * Number in "black" indicates positive growth and achieved the proposed increased rate.
- * Number in "blue" indicates positive growth, however not yet to achieve the proposed increased rate.
- * Number in "red" indicates negative growth.

Annex 16-1: Detailed Data for Average Net-income Increase in Central Province

Smallholder Horticulture Empowerment & Promotion Unit Project (SHEP UP)

Indicator (2-1) of the Outcome 2

Province: Central Province

Target: 1st Year's Model Farmer Groups

3. No. of Groups and Analyzed No. of Individual Farmer's Data (CP&IAD)

Name of District	Group		Total		Male		Female	
	No. of Group		No. of Data		No. of Data		No. of Data	
	Baseline	Current	Baseline	Current	Baseline	Current	Baseline	Current
Lari	5	5	87	67	45	41	42	26
Nyandarua Central	5	5	85	31	48	18	37	13
Kieni East	5	5	139	65	77	35	62	30
Kandara	5	5	141	89	73	40	68	49
Kieni West	5	5	103	69	63	41	40	28
Kikuyu	6	5	84	65	41	42	43	23
Kirinyaga West	5	3	122	27	63	16	59	11
Limuru	5	5	124	82	54	39	70	43
Nyandarua West	5	5	91	93	34	31	57	62
Murang'a South	5	5	104	47	58	21	46	26
Total	51	48	1,080	635	556	324	524	311

Annex 16-2: Detailed Data for Average Net-income Increase in Rift Valley Province

Smallholder Horticulture Empowerment & Promotion Unit Project (SHEP UP)

Indicator (2-1) of the Outcome 2

Province: Rift Valley Province

Target: 1st Year's Model Farmer Groups

1. Average Net-income Benefit (Ksh.) per District

Name of District	Comparison	Average Net-income Benefit (Ksh.)				Proposed Rate of Increase (%)
		Group	Per Farmer	Per Male	Per Female	
Nandi East	Baseline	291,414	15,178	19,192	10,814	24.0
	Current	103,266	13,955	23,107	5,285	
	Increased Rate (%)	-64.6	-8.1	20.4	-51.1	
Nakuru North	Baseline	663,048	31,877	52,865	10,066	22.4
	Current	109,760	10,976	9,913	11,746	
	Increased Rate (%)	-83.4	-65.6	-81.2	16.7	
Wareng	Baseline	1,168,949	49,955	60,530	36,737	17.3
	Current	764,674	50,978	60,172	38,955	
	Increased Rate (%)	-34.6	2.0	-0.6	6.0	
Nandi South	Baseline	544,230	32,395	38,388	24,782	23.1
	Current	341,347	27,091	28,512	25,714	
	Increased Rate (%)	-37.3	-16.4	-25.7	3.8	
Kajiado North	Baseline	1,000,670	83,389	111,131	47,948	24.0
	Current	833,163	63,118	76,340	50,675	
	Increased Rate (%)	-16.7	-24.3	-31.3	5.7	
Laikipia West	Baseline	474,525	14,039	11,624	16,880	52.7
	Current	1,250,818	48,860	47,539	50,267	
	Increased Rate (%)	163.6	248.0	309.0	197.8	
Marakwet West	Baseline	741,554	49,437	42,514	59,263	35.3
	Current	191,022	13,265	11,986	14,696	
	Increased Rate (%)	-74.2	-73.2	-71.8	-75.2	
Transmara West	Baseline	873,371	40,434	46,877	27,547	44.9
	Current	1,489,013	93,063	130,349	39,960	
	Increased Rate (%)	70.5	130.2	178.1	45.1	
Sotik	Baseline	313,304	17,215	24,013	10,850	52.1
	Current	274,733	31,220	27,393	32,898	
	Increased Rate (%)	-12.3	81.4	14.1	203.2	
Narok South	Baseline	2,207,852	135,175	229,376	37,048	21.2
	Current	1,538,416	103,947	119,232	90,230	
	Increased Rate (%)	-30.3	-23.1	-48.0	143.5	

Notes:

- * Number in "black" indicates positive growth and achieved the proposed increased rate.
- * Number in "blue" indicates positive growth, however not yet to achieve the proposed increased rate.
- * Number in "red" indicates negative growth.

Annex 16-2: Detailed Data for Average Net-income Increase in Rift Valley Province

Smallholder Horticulture Empowerment & Promotion Unit Project (SHEP UP)

Indicator (2-1) of the Outcome 2

Province: Rift Valley Province

Target: 1st Year's Model Farmer Groups

2. No. of Groups and Analyzed No. of Individual Farmer's Data (CP&IAD)

Name of District	Group		Total		Male		Female	
	No. of Group		No. of Data		No. of Data		No. of Data	
	Baseline	Current	Baseline	Current	Baseline	Current	Baseline	Current
Nandi East	5	5	96	37	50	18	46	19
Nakuru North	5	5	104	50	53	21	51	29
Wareng	5	4	117	60	65	34	52	26
Nandi South	5	5	84	63	47	31	37	32
Kajiado North	6	5	72	66	40	32	32	34
Laikipia West	5	5	169	128	94	66	75	62
Marakwet West	5	5	75	72	44	38	31	34
Transmara West	5	5	108	80	72	47	36	33
Sotik	5	5	91	44	44	20	47	24
Narok South	3	5	49	74	25	35	24	39
Total	49	49	965	674	534	342	431	332

Annex 17-1 Detailed Data for Adoption of Horticultural Production Techniques (GHCP&PHHT20) in Central Province

Smallholder Horticulture Empowerment & Promotion Unit Project (SHEP UP)**Indicator (2-2) of the Outcome 2**

Province: Central Province

Target: 1st Year's Model Farmer Groups

1. Percentage of Individual Members of the Model Farmer Groups who apply Techniques (GHCP&PHHT20) above their District Targets

Name of District	Total			Male			Female		
	Percentage of Farmers (%)		Increase (%)	Percentage of Farmers (%)		Increase (%)	Percentage of Farmers (%)		Increase (%)
	Baseline	Current		Baseline	Current		Baseline	Current	
Lari	17.0	77.0	60.0	22.2	73.8	51.6	11.6	81.3	69.6
Nyandarua Central	15.3	81.8	66.5	10.4	90.0	79.6	21.6	69.2	47.6
Kieni East	10.0	66.2	56.2	9.2	61.8	52.6	10.9	71.0	60.0
Kandara	16.3	82.2	66.0	16.0	92.5	76.5	16.5	74.0	57.5
Kieni West	15.1	94.3	79.2	12.9	97.6	84.7	18.2	89.3	71.1
Kikuyu	20.2	92.8	72.5	15.4	89.7	74.4	24.4	96.7	72.2
Kirinyaga West	10.6	84.1	73.5	8.1	87.5	79.4	13.1	80.0	66.9
Limuru	9.4	83.3	74.0	12.7	83.7	71.0	6.8	83.0	76.1
Nyandarua West	43.8	54.8	11.0	46.9	46.9	0.0	42.1	59.0	16.9
Murang'a South	13.5	83.6	70.2	14.8	88.9	74.1	11.6	78.6	66.9

Notes:

* Number in "black" indicates more than 70 % of individual members applying techniques above their district targets.

* Number in "red" indicates less than 70 % of individual members applying techniques above their district targets.

Annex 17-1 Detailed Data for Adoption of Horticultural Production Techniques (GHCP&PHHT20) in Central Province

Smallholder Horticulture Empowerment & Promotion Unit Project (SHEP UP)

Indicator (2-2) of the Outcome 2

Province: Central Province

Target: 1st Year's Model Farmer Groups

2. Increase Rate of the Average No. of Techniques (GHCP&PHHT20) applied by Individual Members of the Model Farmer Groups per District

Name of District	Total					Male					Female				
	Ave. No. of Techniques			Proposed Increase (%)	Actual Increase Rate (%)	Ave. No. of Techniques			Proposed Increase (%)	Actual Increase Rate (%)	Ave. No. of Techniques			Proposed Increase (%)	Actual Increase Rate (%)
	Baseline	Target	Current			Baseline	Target	Current			Baseline	Target	Current		
Lari	10.38	15	16.22	44.6	56.3	10.62	15	16.24	41.2	52.9	10.12	15	16.19	48.3	60.0
Nyandarua Central	7.12	12	13.61	68.6	91.2	6.40	12	14.05	87.6	119.7	8.05	12	12.92	49.0	60.5
Kieni East	10.51	15	15.58	42.7	48.2	10.83	15	15.21	38.5	40.4	10.14	15	16.00	47.9	57.8
Kandara	9.36	15	16.19	60.3	73.0	9.20	15	16.50	63.1	79.4	9.52	15	15.94	57.6	67.5
Kieni West	10.92	15	17.31	37.3	58.5	10.94	15	17.57	37.2	60.7	10.91	15	16.93	37.5	55.2
Kikuyu	12.57	15	17.09	19.3	35.9	12.69	15	16.87	18.2	32.9	12.47	15	17.37	20.3	39.3
Kirinyaga West	10.34	15	16.07	45.0	55.4	10.40	15	16.33	44.2	57.0	10.28	15	15.75	45.9	53.2
Limuru	10.32	15	15.98	45.3	54.8	10.55	15	16.09	42.2	52.6	10.15	15	15.87	47.8	56.4
Nyandarua West	12.07	14	13.44	16.0	11.4	12.28	14	13.03	14.0	6.1	11.95	14	13.66	17.2	14.3
Murang'a South	9.65	14	15.45	45.0	60.1	10.08	14	16.33	38.9	62.0	9.05	14	14.61	54.8	61.5

Notes:

- * Number in "black" indicates positive growth and achieved the proposed increased rate.
- * Number in "blue" indicates positive growth, however not yet to achieve the proposed increased rate.

Annex 17-1 Detailed Data for Adoption of Horticultural Production Techniques (GHCP&PHHT20) in Central Province

Smallholder Horticulture Empowerment & Promotion Unit Project (SHEP UP)

Indicator (2-2) of the Outcome 2

Province: Central Province

Target: 1st Year's Model Farmer Groups

3. No. of Groups and Analyzed No. of Individual Farmer's Data (GHCP&PHHT20)

Name of District	Group		Total		Male		Female	
	No. of Group		No. of Data		No. of Data		No. of Data	
	Baseline	Current	Baseline	Current	Baseline	Current	Baseline	Current
Lari	5	5	88	74	45	42	43	32
Nyandarua Central	5	5	85	33	48	20	37	13
Kieni East	5	5	140	65	76	34	64	31
Kandara	5	5	160	90	81	40	79	50
Kieni West	5	5	106	70	62	42	44	28
Kikuyu	6	5	84	69	39	39	45	30
Kirinyaga West	5	4	123	44	62	24	61	20
Limuru	5	5	128	90	55	43	73	47
Nyandarua West	5	5	89	93	32	32	57	61
Murang'a South	5	5	104	55	61	27	43	28
Total	51	49	1,107	683	561	343	546	340

Annex 17-2 Detailed Data for Adoption of Horticultural Production Techniques (GHCP&PHHT20) in Rift Valley Province

Smallholder Horticulture Empowerment & Promotion Unit Project (SHEP UP)

Indicator (2-2) of the Outcome 2

Province: Rift Valley Province

Target: 1st Year's Model Farmer Groups

1. Percentage of Individual Members of the Model Farmer Groups who apply Techniques (GHCP&PHHT20) above their District Targets

Name of District	Total			Male			Female		
	Percentage of Farmers (%)		Increase (%)	Percentage of Farmers (%)		Increase (%)	Percentage of Farmers (%)		Increase (%)
	Baseline	Current		Baseline	Current		Baseline	Current	
Nandi East	34.1	82.6	48.5	42.2	78.4	36.2	25.6	87.5	61.9
Nakuru North	17.9	48.5	30.6	20.0	55.2	35.2	15.9	43.2	27.4
Wareng	39.1	90.0	50.9	47.6	94.1	46.5	28.8	84.6	55.8
Nandi South	11.5	15.9	4.4	16.7	18.9	2.3	5.1	12.5	7.4
Kajiado North	26.6	77.9	51.3	25.7	69.7	44.0	25.6	84.1	58.5
Laikipia West	15.5	75.9	60.4	19.6	76.1	56.5	10.5	75.8	65.2
Marakwet West	9.7	76.0	66.3	9.3	83.3	74.0	10.3	66.7	56.3
Transmara West	31.2	84.8	53.6	31.5	86.4	54.9	30.6	82.6	52.1
Sotik	28.9	43.8	14.9	28.9	51.6	22.7	28.9	36.4	7.5
Narok South	12.0	93.5	81.5	22.9	92.3	69.5	5.3	94.7	89.5

Notes:

* Number in "black" indicates more than 70 % of individual members applying techniques above their district targets.

* Number in "red" indicates less than 70 % of individual members applying techniques above their district targets.

Annex 17-2 Detailed Data for Adoption of Horticultural Production Techniques (GHCP&PHHT20) in Rift Valley Province

Smallholder Horticulture Empowerment & Promotion Unit Project (SHEP UP)

Indicator (2-2) of the Outcome 2

Province: Rift Valley Province

Target: 1st Year's Model Farmer Groups

2. Increase Rate of the Average No. of Techniques (GHCP&PHHT20) applied by Individual Members of the Model Farmer Groups per District

Name of District	Total					Male					Female				
	Ave. No. of Techniques			Proposed Increase Rate (%)	Actual Increase Rate (%)	Ave. No. of Techniques			Proposed Increase Rate (%)	Actual Increase Rate (%)	Ave. No. of Techniques			Proposed Increase Rate (%)	Actual Increase Rate (%)
	Baseline	Target	Current			Baseline	Target	Current			Baseline	Target	Current		
Nandi East	12.30	15	17.03	22.0	38.5	12.42	15	16.86	20.8	35.8	12.16	15	17.22	23.3	41.6
Nakuru North	12.18	16	15.08	31.4	23.8	12.45	16	15.24	28.5	22.4	11.92	16	14.95	34.2	25.4
Wareng	12.89	15	17.05	16.4	32.3	13.60	15	17.21	10.3	26.5	12.02	15	16.85	24.8	40.2
Nandi South	11.72	16	12.26	36.5	4.6	12.33	16	12.86	29.7	4.3	10.97	16	11.56	45.8	5.4
Kajiado North	11.38	13	14.36	14.2	26.2	11.74	13	13.45	10.7	14.6	11.05	13	15.05	17.7	36.2
Laikipia West	10.89	15	16.15	37.8	48.4	11.03	15	16.38	36.0	48.5	10.71	15	15.91	40.0	48.5
Marakwet West	10.47	15	16.48	43.2	57.4	10.09	15	17.21	48.6	70.6	11.03	15	15.55	35.9	40.9
Transmara West	12.17	15	17.12	23.3	40.8	12.25	15	17.10	22.5	39.6	12.00	15	17.15	25.0	42.9
Sotik	12.89	15	14.06	16.4	9.1	12.93	15	14.42	16.0	11.5	12.84	15	13.73	16.8	6.9
Narok South	9.95	13	16.71	30.7	68.1	10.51	13	16.82	23.6	60.0	9.60	13	16.61	35.5	73.0

Notes:

* Number in "black" indicates positive growth and achieved the proposed increased rate.

* Number in "blue" indicates positive growth, however not yet to achieve the proposed increased rate.

Annex 17-2 Detailed Data for Adoption of Horticultural Production Techniques (GHCP&PHHT20) in Rift Valley Province

Smallholder Horticulture Empowerment & Promotion Unit Project (SHEP UP)

Indicator (2-2) of the Outcome 2

Province: Rift Valley Province

Target: 1st Year's Model Farmer Groups

3. No. of Groups and Analyzed No. of Individual Farmer's Data (GHCP&PHHT20)

Name of District	Group		Total		Male		Female	
	No. of Group		No. of Data		No. of Data		No. of Data	
	Baseline	Current	Baseline	Current	Baseline	Current	Baseline	Current
Nandi East	5	5	88	69	45	37	43	32
Nakuru North	5	5	123	66	60	29	63	37
Wareng	5	4	115	60	63	34	52	26
Nandi South	5	5	87	69	48	37	39	32
Kajiado North	5	5	79	77	35	33	43	44
Laikipia West	5	5	168	137	92	71	76	66
Marakwet West	5	5	72	75	43	42	29	33
Transmara West	5	5	109	105	73	59	36	46
Sotik	5	5	90	64	45	31	45	33
Narok South	5	5	92	77	35	39	57	38
Total	50	49	1,023	799	539	412	483	387

MINUTES OF THE 5TH SMALLHOLDER HORTICULTURE EMPOWERMENT AND PROMOTION UNIT PROJECT STEERING COMMITTEE MEETING HELD AT KILIMO HOUSE CONFERENCE ROOM ON 24TH OCTOBER 2012

List of members in attendance;

Name	Deployment	Station / Organization	E-mail
Dr. Wilson Songa, MBS	Agriculture Secretary	MoA	agricsecretary@kilimo.go.ke
Dr. Alfred Serem	Managing Director	HCDA	md@hcda.or.ke
Ms. Mary Kamau, OGW	Director/Extension	MoA	director.extension@yahoo.com
Ms. Anne Onyango, MBS	Director/Policy	MoA	directorpolicy@yahoo.com
Ann Njoroge	Representing DDA Horticulture	MoA	wanjarogen@yahoo.com
Nehemiah Tuitoek	Representing Chief Engineer /AES	MoA	engineeringmoa@yahoo.com
Mohamed D. Chute	Representing SCFO	MoA	mdchutt@yahoo.com
Robert Gatonga	Min of Finance	MOF	rwegatongo@gmail.com
Junichi Hanai	Senior Representative/ Representing Chief Representative	JICA Kenya	Hanai.junichi@jica.go.jp
Kazuhisa Katayama	Representative	JICA Kenya	katayama.kazuhisa@jica.go.jp
Naoki Hashimoto	Chief Advisor	SHEP UP	nhashimoto852@gmail.com
Harue Kitajima	JICA Expert	SHEP UP	harue.kitajima@gmail.com

Sebastian Odanga	Consultant	JICA Kenya	odangasebastian.ky@jica.go.jp
Francisca Malenge	Unit Leader	SHEP UP	fmalenge@shepunit.org
A.K.Barno	Representing Director Agribusiness	MOA	abrahambarno@yahoo.com
Rose Ndana	Accountant	MOA	rwndana@yahoo.com

Absent with apology:

1. Dr. Johnson Irungu, Director, Crops Management
2. Mr. James Arim, GM-TAS HCDA

Also in attendance:

Hiroko Sugimoto	Consultant for Mid-term Evaluation	Nairobi	sugimotohiroko@gmail.com
Stanley Miyogo	Member Mid-Term Evaluation team	MOA	smiyogo@yahoo.com
Jacqueline Oseko	Member Mid-Term Evaluation team	HCDA	md@hcda.or.ke
Benson Mureithi	SHEP UP Desk Officer & a Member Mid-Term Evaluation team	MOA	mureithibk@yahoo.com

Secretariat

Name	Deployment	Station/ Organization	E-mail
Stephen Kioko	Counterpart/SHEP UP	SHEP UP	skioko@shepunit.org
Raymond Chelule	Counterpart/SHEP UP	SHEP UP	rchelule@shepunit.org

Peter Orangi	Counterpart/SHEP UP	SHEP UP	porangi@shepunit.org
Alice Nyaga	Counterpart/SHEP UP	SHEP UP	anyaga@shepunit.org
Collins Otieno	Counterpart/SHEP UP	SHEP UP	cotieno@shepunit.org
Antonina Luta	Counterpart/SHEP UP	SHEP UP	aluta@shepunit.org
Thomas Mumu	Counterpart/SHEP UP	SHEP UP	tmumu@shepunit.org

Agenda

1. Introduction
2. Opening remarks by chairman
3. Remarks by the Chief Representative, JICA Kenya Office
4. Confirmation of the Minutes of the 4th SHEP UP Steering Committee meeting
5. Matters Arising
6. Achievements of SHEP UP
7. Mid-Term Evaluation Report
8. Signing of minutes of Mid-term Evaluation Report
9. AOB
10. Closing remarks by chairman

The Chair called the meeting to order at 10.10 am.

Min. 1/24/10/2012: Introduction

The Chair welcomed members to the meeting and asked for self introduction.

Min. 2/24/10/2012: Opening Remarks by the Chairman

The Chair, Agriculture Secretary, Dr. Wilson Songa thanked the project leadership and said that the horticulture sub-sector is doing very well partly because of projects like SHEP UP. He appreciated the active participation of HCDA and JICA in the project activities.

Min. 3/24/10/2012: Remarks by Chief Representative, JICA Kenya Office

Mr. Junichi Hanai representing the Chief Representative JICA Kenya office appreciated all staff members in the ministry for implementing the project. He said there were tangible results from the previous project SHEP which was implemented from 2006 to 2009. Based on that success SHEP UP was formulated to cover the whole country. He reminded the meeting of the fact that SHEP UP had been implemented for two and a half years and it was time to assess the progress made so far and hence the mid-term review.

He further informed the meeting that there will be a TICAD conference in Japan in June next year whereby 4 pillars for development will be raised. One of these pillars will be Promotion of Market Oriented Agriculture for Smallholder in Africa. He recognized that SHEP UP is one of the best examples of projects promoting Market Oriented Agriculture. He assured the members of JICA's full support in this project and any other in the Ministry.

Min. 4/24/10/2012: Confirmation of minutes of the 4th SHEP UP Steering Committee meeting

The minutes were confirmed as a true record of proceedings. They were proposed by Ms. Anne Onyango and seconded by Dr. Alfred Serem but there was a correction on page 2. The name of one participant was written as Bernard K. Mureithi instead of Benson K. Mureithi.

Min. 5/24/10/2012: Matters Arising

Actions taken by the project in matters arising were read out to members by the Unit Leader and summarized as follows:

Ex Min 5/22/06/2012

ex-min. 6/1/30/2012 achievement of SHEP UP: July 2011 to 30th January, 2012.

Information management

The following activities on information management were conducted:

1. sensitization workshop on information management

- A one day sensitization workshop was carried out in kilimo house. The objective was to sensitize directors, project coordinators and s on how information management & utilization is practiced in the SHEP Unit.
- Attendance: A total of 22 (11M,11F) staff

Way forward

It was agreed that those interested in Information Management as presented to them should officially write to SHEP UP for further action

2. Follow-up on Information Management in Central and Rift Valley Districts

Target No. of districts : 20
Achieved : 20

Issues captured:

- Information storage
- No. of computers and capacity
- Security of data & information (backup system, scanning)

3. Training of staff in Kiéni East And Murang'a South Districts

The two are pilot districts in Central Province where training workshop was carried out on Information Management & Utilization as practiced in the SHEP Unit.

- 15(6M,9F) staff were trained in the 2 districts
- Categorization of information, customization of the file naming rule, designing of the district folder structure and installation of the district folder structure in the district PCs was addressed during the training.
- Staff were advised to start practicing the file naming rule and also store information in the various folders. Renaming of the previous files was also encouraged

Ex MIN 6/22/06/2012 Achievement of SHEP UP: February 2012 to June 2012

SHEP UP special groups

The SHEP UP Model groups which could be considered special were given as follows:

S/No	CATEGORY	1 ST BATCH		2 ND BATCH
		1 st Year	2 nd Year	1 st Year
1	Youth groups	8	7	24
2	Women Groups	4	4	14
3	Widows	0	0	1
4	Groups of Disabled persons	0	0	1
5	Groups of Internal Displaced Persons(IDPS)	1	0	0
6	Groups Supporting Orphans	0	1	2

Absorption Rate for Donor Funds

The SHEP Unit leader informed the meeting that the vouchers of JICA funded expenditures are now surrendered to the Ministry's accounts department every first week of every month.

Increase in production and income for farmers'

This was reported by the mid term evaluation team.

Ex MIN 8/22/06/2012 Planned SHEP UP Activities 2012/2013: 1st July, 2012 to 31st June, 2013

Capacity Building for SHEP Unit Staff

All Counterparts from the Ministry of Agriculture have undertaken promotional courses. However, the SHEP Unit was advised to include the capacity building done elsewhere such as Japan.

Stakeholder Participation in Rural Infrastructure

The stakeholders who assist SHEP UP in the road repairs using "Do nou" technology were given as follows:

S/ No	Stakeholder	Contribution
1	Provincial Administration	<ul style="list-style-type: none"> • Community mobilization • Lorry for transportation
2	County Council	<ul style="list-style-type: none"> • Murram & its transportation
3	Kenya Rural Roads Authority	<ul style="list-style-type: none"> • Murram • Technical Support on Labour based technology, drainage and road maintenance
4	Constituency Development Fund	<ul style="list-style-type: none"> • Do-Nou bags from CDF projects • Murram • Funds • Culverts
5	NGOs (e.g. Good Neighbors in Transmara West, Kijabe Environment Volunteers (KENVO) in Lari)	<ul style="list-style-type: none"> • Murram • Transportation of Murram
6	Private Individuals	<ul style="list-style-type: none"> • Murram • Transportation of murram • Do-Nou bags
7	Faith Based Organizations	<ul style="list-style-type: none"> • Community Mobilization
8	Ministry of Water and Irrigation	<ul style="list-style-type: none"> • Culverts

Ex Min. 9/22/06/2012 Budget for the SHEP UP Activities 2012/2013

The SHEP Unit requested for additional Ksh. 13 million to cover for the shortfall as per the Project Work Plan.

Observation from matters arising

The members observed that it was a good precedence to have issues in matters arising written.

Min. 6/24/10/2012: Achievements of SHEP UP: July 2012 to October 2012

The SHEP Unit Leader made a presentation on the achievements of the project from July 2012 to October 2012 based on the following activities carried out;

3rd batch 1st year's activities (Eastern & Coast):

- Sensitization Meeting to PDAs and Provincial Staff
- Sensitization Workshop for all DAOs and HCDA Regional Managers
- Selection of the implementing districts
- Organizers' Training for the Basic SHEP Approach (PDAs, DAOs, Districts SHEP UP Desk Officers and HCDA Regional Managers)

The total number of contacts made was 108.

1st batch groups 2nd year's activities (Central & Rift Valley districts):

- Facilitator Training for Farmers Demand Driven Extension (FT-FadDE)
- Gender Mainstreaming and Family Budgeting TOT
- In-Field Training (farmer training)
- Total number of staff trained was 323 while 638 farmers were trained.

Establishment of information management system on the SHEP Approach:

- 1- day Information Management and Utilization at Kilimo House
- Follow up at the district level
- Piloting of Information Management & Utilization System to Murang'a South and Kieni East districts

Other activities:

Periodical follow-ups to the 1st batch, 1st year's Model Farmer Groups (20 districts).

- In- Field Trainings follow-ups to the 2nd batch 1st year's Model Farmer Groups.

- Received the trainees of the Region –Focused Training course on Horticultural Crop Cultivation and Extension for Africa as a part of Third country Training phase.
- “Do Nou” training and Agro Processing TOTs to the 1st batch 1st years’ groups.
- Exhibition of “Do Nou” technology and Bokashi at Central Kenya ASK show.

Issues Raised/Comments

- Members wanted to know whether the SHEP UP information management system is compliant with the ISO requirements. The meeting was assured that IM&U system is compliant with ISO because it does not interfere with the naming of the hard copy. The system is used for quick retrieval of records (soft copy).
- The chairman commended the project for attracting stakeholders to undertake project activities and especially the private individuals. He said that this was a sign of good results from the project.
- The disaggregated figures are used to plan and target activities in the project to make a better reach. The same data will be used to assess the impact of the project to both male and female members. Youth involved.
- Thorough follow-ups to be carried out to avoid a situation where the project is spreading too thinly and not able to get good outcomes. The follow up teams should include all directorates and HCDA headquarters.
- In order to collect reliable data on income data from the farmers, the SHEP Unit was advised to be asking leading and not direct questions.
- All DAOs are encouraged to have an all inclusive report where outcomes and impacts are reported.
- Members were informed that water harvesting & Agro processing in the project will only cater for capacity building and not infrastructural development or equipments.

- Groups undertaking agro processing will be linked to other service providers for further training and resource mobilization. The project should work closely with other projects and directorate of Agribusiness for development of agro processing ventures by the groups e.g. ABSS project
- Documentation of activities that are successful with a clear technical message is important for training, sharing information and up scaling. Roles of all players involved to be clearly spelt out.
- All implementing agencies are equally involved in the implementation of the project activities and are satisfied.

Minutes 7/24/10/2012: Mid-term Evaluation Report

The results of mid-term Evaluation were presented by Ms. Hiroko Sugimoto, the mid term evaluation consultant.

Highlights of the Presentation

1. Objective of the Mid Term Review

- To confirm: project implementation based on PDM (Ver.3) and PO (Ver.4)
- To examine the degree of likelihood to achieve project purpose and project outputs based on current level of achievement and
- To evaluate the project using five evaluation criteria (Relevance, Effectiveness, Efficiency, Impact, and Sustainability)
- To discuss and reach agreement within the Joint Evaluation Team about suggestions and lessons learnt
- To compile the Mid-term Evaluation Report
- To present evaluation results to PSC, propose any necessary adjustment or amendment recommendations.

2. **Achievement: Implementation Process**

- Project Schedule: implementation is on schedule
- Project Cycle Management: monitoring system is functional but need to be improved
- The information management system is well organized
- Clear reporting line in the field offices that follows the administrative line of Ministry of Agriculture.
- Monitoring and follow up are weak in some previous implementing districts

Project participation

- DAOs: Observed the changes in the involvement and attitude of Frontline Extension Officers (FEOs)/Group Facilitators after the implementation of project
- Frontline Extension Officers (FEOs)/Group Facilitators had observed the positive changes by the farmers. The farmers can now take initiative to solve their own problems
- The beneficiary farmer groups' involvement is high
- Overall the project implementation is satisfactory

3. **Achievement: Project Outputs**

Outputs are achieved as planned with some concern

❖ **OVI 2-1: Net Income**

- **8 out of 10 districts** had increased average net income per farmer in Central Province
- **4 out of 10 districts** had increased average net income per farmer in Rift Valley Province

- The analysis of obstructing factors for those under-achieved districts is as follows:
 - Decrease of No. of farmers who submitted data
 - Decrease of production due to unfavorable weather
 - Weak support systems either by Frontline Extension Officers (FEOs)/Group Facilitators , or District SHEP UP Management Team to the Model Farmer Groups
 - Low cohesion of group members

❖ **OVI 2-2: Adoption of Technology**

- **8 out of 10 districts** had achieved the target for the adoption of horticultural production techniques in Central Province
- **7 out of 10 districts** had achieved the target for the adoption of horticultural production techniques in Rift Valley Province

The analysis of obstructing factors for those under-achieved districts is as follows:

- Weak support systems either by FEOs/GFs, or District SHEP UP Management Team to backstop FEOs/GFs
- Wrong expectation of farmer group for receiving material supports.
- Some groups had high rate of illiteracy, making difficult for the famers to understand the concepts.

4. Achievement: Overall Goal (Prospect)

Current achievements show good progress with prospect for achieving project goal of improved livelihood of horticulture smallholders in implementing districts.

5. Evaluation Criteria

Five aspects were assessed:

- a) **Relevance in terms of;** Necessity, Country priority, Priority of Japan's ODA strategies and Appropriateness of the methodology.
- b) **Effectiveness in terms of;** Forecast for achieving project purpose and important assumptions.
- c) **Efficiency in terms of;** Project inputs and cooperation with other JICA projects.
- d) **Impact in terms of;** Likelihood of achieving overall goal and ripple effects.
- e) **Sustainability in terms of;** Institutional and financial aspects

6. Conclusion

- Relevance is considered high
- Effectiveness is moderately high
- Efficiency is high
- Impact is high
- Sustainability is high with some challenges

7. Recommendations

The mid term revaluation team recommendations were as follows:

- To establish milestone for the drafting process of the SHEP Approach guideline (Output1)
- To follow up on obstructing factors
- Cater for the financial needs of districts to implement the 2nd year activities fully
- Budget for monitoring and follow ups be incorporated as part of project activities
- While implementation of project activities in new regions is taking place, monitoring and follow up of previous districts must be done

- Organize the forum for experience exchange among the farmer groups within/without the districts
- Clarify and streamline the overall goal, project purpose, outputs, inputs and activities
- Amend and adjust current PDM
- Adjust PO to cater for current and future situation

Comments/Issues Raised

- The assumptions should be positive e.g. favorable Weather not unfavorable weather.
- A revised Project Design Matrix version 4 and a Plan of Operation Version 5 were presented to members and were approved.

Minutes 8/24/10/2012: Signing of minutes of Mid-term Evaluation Report

The Mid-term Evaluation Report had not been finalized at by the time of the meeting and it was postponed to a later date.

A.O.B

Since the ministry has several projects targeting smallholder horticulture farmers, it was agreed that there was need to organize forum for exchange of ideas and share experiences.

Closing Remarks

The Chairman commended the SHEP unit for their work. He thanked JICA for their continued support and thanked all members for their attendance and contribution during the meeting.

There being no other business, the meeting came to an end at 1:00 pm.

Signed for circulation:

Secretary F: *MALONCE* Sign: *[Signature]* Date: *26/10/2012*

Confirmed by:

Chairperson.....Sign.....Date.....

Secretary.....Sign.....Date.....

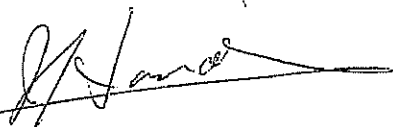
**MINUTES OF MEETINGS BETWEEN
THE JAPANESE MID-TERM REVIEW TEAM
AND
AUTHORITIES CONCERNED OF THE GOVERNMENT OF
THE REPUBLIC OF KENYA
ON
JAPANESE TECHNICAL COOPERATION
FOR
SMALLHOLDER HORTICULTURE EMPOWERMENT AND PROMOTION
UNIT PROJECT (SHEP-UP)**

The Japanese Mid-term Review Team (hereinafter referred to as "the Japanese Team"), organized by the Japan International Cooperation Agency (hereinafter referred to as "JICA"), headed by Mr. Junichi Hanai, and the Kenyan Mid-term Review Team (hereinafter referred to as "the Kenyan Team") headed by Mr. Benson Mureithi formed the Joint Review Team (hereinafter referred to as "the Team") to conduct a mid-term review of the Smallholder Horticulture Empowerment Promotion Unit Project, SHEP-UP, (hereinafter referred to as "the Project") from 2nd of October to 24th of October 2012.

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.

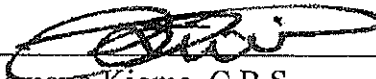
As a result of the review and discussions, the Team agreed to recommend to their respective Governments the matters referred to in the Evaluation Report attached hereto.

Nairobi, 13th November, 2012



Mr. Junichi Hanai

Leader,
Japanese Mid-term Review Team
Japan International Cooperation Agency
Japan



Dr. Romano Kiome, C.B.S.

Permanent Secretary,
Ministry of Agriculture,
Republic of Kenya

JOINT MID-TERM REVIEW REPORT
ON
THE JAPANESE TECHNICAL COOPERATION
FOR
THE SMALLHOLDER HORTICULTURE EMPOWERMENT
AND PROMOTION UNIT PROJECT
IN THE REPUBLIC OF KENYA

Japan International Cooperation Agency
and
Ministry of Agriculture of the Republic of Kenya

November 7th, 2012

Table of Contents

I	OUTLINE OF MID-TERM REVIEW	1
1.	PROJECT OVERVIEW	1
1-1.	Background	1
1-2.	Summary of the Project.....	2
2.	METHODOLOGY OF EVALUATION	5
2-1.	Verification of Performance.....	5
2-2.	Verification of Implementation.....	6
2-3.	Evaluation Based on the Five Evaluation Criteria	7
3.	OBJECTIVES OF MID-TERM REVIEW	7
4.	MEMBERS OF THE JOINT REVIEW TEAM	9
5.	SCHEDULE OF MID-TERM REVIEW.....	9
II	THE EVALUATION RESULTS	11
1.	VERIFICATION OF PERFORMANCE.....	11
1-1.	Output	11
1-2.	Project Purpose	22
1-3.	Overall Goal.....	23
2.	VERIFICATION OF IMPLEMENTATION.....	23
2-1.	Input	23
2-2.	Project Schedule.....	24
2-3.	Project Cycle Management	24
3.	THE FIVE EVALUATION CRITERIA	25
3-1.	Relevance.....	25
3-2.	Effectiveness	26
3-3.	Efficiency	27
3-4.	Impact (Prospects).....	29
3-5.	Sustainability (Prospects).....	30
4.	EVALUATION CONCLUSIONS	33
III	RECOMMENDATION.....	33
1.	Project Implementation	33
2.	Project Budget	33
3.	Monitoring and Follow-up	34
4.	Sustainability and Expansion of the SHEP Approach.....	34
5.	Cooperation with Other Donor Projects	34
6.	Proposed Changes of PDM/PO	35

List of Tables, Figures and Graphs

Figures		Page
Figure 1	The SHEP UP Organizational Structure	2
Figure 2	The SHEP UP Implementation Structure	3
Figure 3	Diagram of the SHEP Approach	5
Figure 4	Project Design Matrix	6

Graphs		Page
Graph 1	Total Expenditure for the SHEP Approach Activities	29
Graph 2	Actual Expenditure for the SHEP Approach for 1 st Year's Model Farmer Groups of 1 st & 2 nd Batch	34

Tables		Page
Table 1	Narrative Summary of SHEP UP	2
Table 2	Key Tasks of the SHEP UP at Each Administrative Level	3
Table 3	List and Timing of Provinces the SHEP UP is Implemented	4
Table 4	Terms and Definitions of PDM	6
Table 5	Five Evaluation Criteria	7
Table 6	Mid-Term Review Schedule	9
Table 7	Average Increase of Net Income per Farmer in 10 Districts of Central Province (%)	13
Table 8	Average Increase of Net Income per Farmer in 10 Districts of Rift Valley Province (%)	13
Table 9	Percentage of Individual Farmers Who Apply Techniques above Their District Targets in Central Province (%)	17
Table 10	Percentage of Individual Farmers Who Apply Techniques Above Their District Targets in Rift Valley Province (%)	17
Table 11	Actual Increase Rate of the Average Number of Techniques Applied by Individual Members per District in Central Province (%)	17
Table 12	Actual Increase Rate of the Average Number of Techniques Applied by Individual Members per District in Rift Valley Province (%)	18
Table 13	Districts with Negative/Small Average Growth in Average Net Income	19
Table 14	District with Positive Growth in Average Net Income per Farmer	20
Table 15-a	Inputs by Japan	23
Table 15-b	Inputs by Kenya	24
Table 16	Achievement of Outputs	28
Table 17	The Numbers of Trained Officers, Farmers and Stakeholders During the 1 st Batch of Project in Central and Rift Valley Provinces	32
Table 18	Achievement of Five Evaluation Criteria	33

List of Annex

Annex 1	Proposed Change in PDM (Ver.1- Ver. 4)
Annex2	Proposed Change in PO (Ver.1-Ver.5)
Annex3	List of Project Steering Committee members
Annex4	List of Japanese Experts
Annex5	List of Kenyan Counterpart Personnel
Annex6	Project Expenditure (Total, Japan, Kenya)
Annex7	List of Kenyan Counterpart Personnel Trained in Japan
Annex8	District Selection Proposal
Annex9	General Horticultural Crop Production & Post-Harvest Handling Techniques (GHCP&PHHT) 20
Annex10	Baseline Survey: Crop production & Income Analysis data (CP& IAD)Sheet
Annex11	Baseline Survey: Group Empowerment Indicators
Annex12	Group Selection Criteria
Annex13	Diagram of Information Management System
Annex 14	List of Trainings in the SHEP Approach
Annex 15	Calculation of Indicators for Target Average Income
Annex 16	Detailed Data for Average Net Income
Annex 17	Detailed Data for Adoption of Technique20 (GHCP&PPHHT20)

List of Abbreviations

C/O	Counterpart
DAO	District Agricultural Officer
FABLIST Forum	Farm Business Linkage Stakeholder Forum
FEOs/GFs	Frontline Extension Officers /Group Facilitators
FT-FaDDE	Facilitator's Training for Farmers' Demand Driven Extension
GEIs	Group Empowerment Indicators
GHCP&PHHT20	General Horticultural Crop Production & Post-Harvest Handling Techniques20
GoK	Government of Kenya
HCDA	Horticultural Crops Development Authority
IFAD	International Fund for Agricultural Development
JEF2G	Joint Extension Staff & Farmers Dual Gender
JICA	Japan International Cooperation Agency
M&E	Monitoring and Evaluation
MoA	Ministry of Agriculture
ODA	Official Development Assistance
OVI	Objectively Verifiable Indicator
Rice MAPP	Rice-based and Market-oriented Agriculture Promotion Project
PDA	Provincial Director of Agriculture
PDM	Project Design Matrix
PMC	Project Management Committee
PO	Plan of Operations
PSC	Project Steering Committee
R/D	Record of Discussion
SHEP	Smallholder Horticulture Empowerment Project
SHEP UP	Smallholder Horticulture Empowerment and Promotion Unite Project
SHoMaP	Smallholder Horticulture Marketing Program
SIDEMAN SAL	Sustainable Smallholder Irrigation Development and Management in Semi-Arid Lands project

I OUTLINE OF MID-TERM REVIEW

1. PROJECT OVERVIEW

1-1. Background

Agricultural sector is the backbone of Kenya's economy, composing of 26% of GDP and 65% of foreign currency earnings (Agricultural Sector Development Strategy 2010-2022, GoK). Horticulture has emerged as a growing important sub-sector with annual growth rate of 15-20%. Besides the economic growth horticulture provides employment especially to small scale farmers who contribute 60% of overall horticultural production. 96% of this produce is sold and consumed in the domestic market, while 4% is exported. Despite of this, small scale farmers receive only 2% of profit from the lucrative export market of horticultural produce. This therefore calls for the need to recognize the small scale farmers to gain higher profits from the domestic market and hence improve their livelihoods.

In 2006, JICA in partnership with the Ministry of Agriculture (MoA) and the Horticultural Crops Development Authority (HCDA) implemented a three year project "Smallholder Horticulture Empowerment Project (SHEP)." The SHEP was aimed at strengthening farmers' organization and increasing income of small scale horticultural farmers while building the capacity of MoA and HCDA officers.

In the SHEP, a series of training centered in capacity building from production to marketing was conducted to the targeted small scale horticultural farmers: this resulted in high growth of their incomes, demonstrating the project as a success. The Government of Kenya (GoK) regarded this success highly and paid attention to the support system demonstrated in SHEP to small scale horticultural farmers. Based on this conviction, GoK/MoA established the SHEP Unit to implement the SHEP Approach nationwide and requested Japan to support the startup of project and to build capacity of the SHEP Unit. Against this backdrop, JICA in partnership with MoA and HCDA launched the implementation of a five year Smallholder Horticulture Empowerment Promotion and Unite Project (SHEP UP) from March 2010 to March 2015. The SHEP UP aims at establishing effective support system for horticulture smallholders nationwide through building the capacity of the SHEP Unit at MoA and extension officers in line ministry with a series of trainings on the SHEP Approach. The Project covers all of 8 provinces in Kenya. In each province ten districts are selected by the proposal system as implementation districts. Each district selects five model farmer groups, two representatives farmers (male and female) from the groups will be trained with Field Extension Workers/Group Facilitators (FEOs/GFs). The training is comprehensive: covering entire value chain of farming, from seed selection to the produce marketing, and post-harvest handling. By learning and implementing the SHEP Approach into practice, the farmers will soon understand the shift of ideas from "Grow and Sell" to "Grow to Sell."

Currently two full-time experts namely the Chief Advisor/Horticultural Policy; and Horticultural production/Extension were dispatched from Japan to the SHEP Unit and are engaged in the Project with Kenyan counterparts (C/P).

1-2. Summary of the Project

Narrative summary of project are as follows:

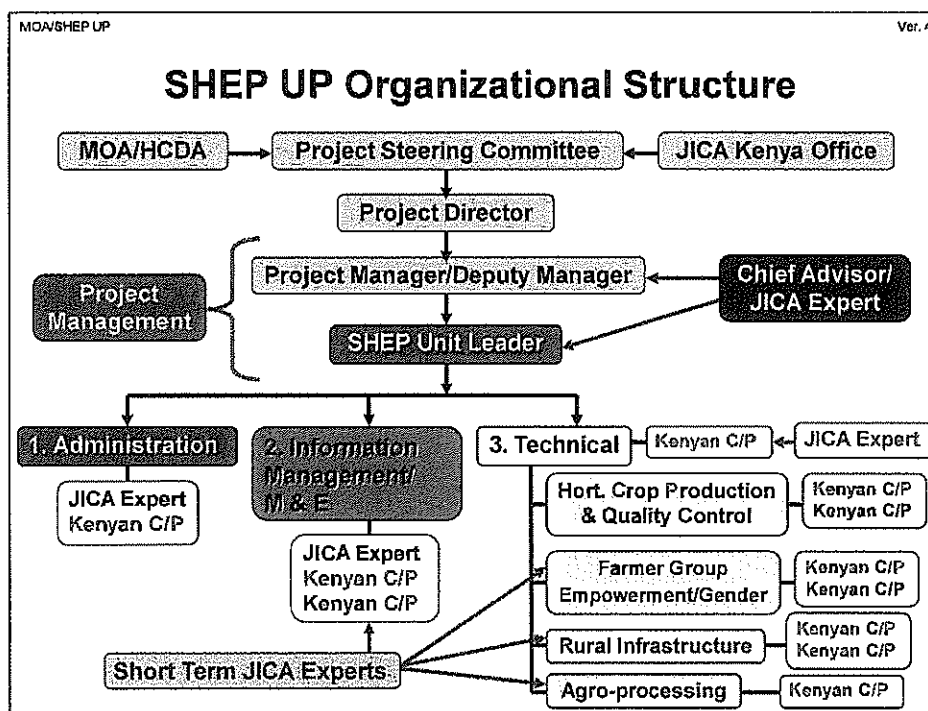
Table 1. Narrative Summary of SHEP UP

Overall Goal	Livelihood of horticulture smallholders in implementing districts is improved.	
Project Purpose	Effective support system for horticulture smallholders nationwide is established.	
Output	Output 1	The SHEP Approach is adopted by the Unit and ready for implementation.
	Output 2	Implementing farmer groups' income from horticulture produce is improved.
	Output 3	The SHEP Approach is properly replicated by implementing districts based on the Output 2.
	Output 4	Information Management System for the SHEP Approach is established.

(Source: project PDM ver.3)

The management structure of project implementation is shown below.

Figure 1. The SHEP UP Organizational Structure



(Source: the SHEP Unit)

Project Steering Committee (PSC) is composed of representatives from the implementing agencies (MoA, HCDA, and JICA) and meets every 6 month. The functions of PSC are:

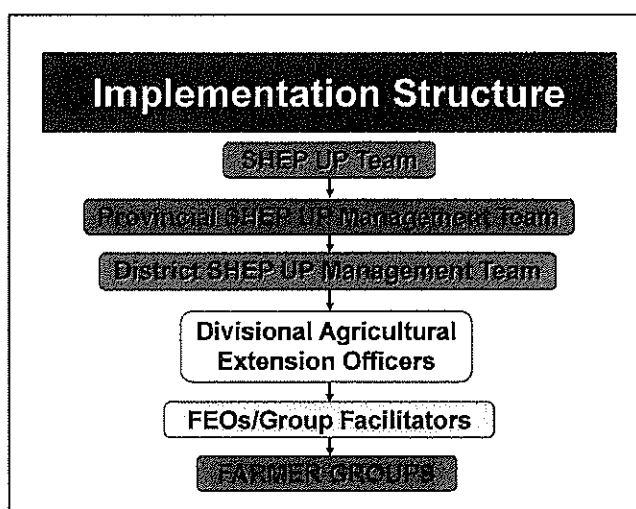
- (1) To approve the plan of operations under the framework of the Project
- (2) To review achievements against the plan as well as the overall progress of the Project
- (3) To offer consultation, advice and recommendations to the project management on various issues as necessary

At the 1st PSC meeting in October 2010, certain offices and directorates of MoA were added as PSC members to increase the contribution to the success of project. The list of PSC members are attached in Annex 3.

Project Management Committee (PMC) is composed of: Project Manager (Deputy Director, Horticulture Division, MoA); Project Deputy Manager (General Manager, Technical Advisory Services, HCDA); SHEP Unit Leader; and Chief Advisor of the SHEP UP (JICA Expert).

The SHEP Unit is the key implementation organ and composed of Kenyan counter parts assigned from MoA and HCDA. The implementation of project follows the MoA administrative system as shown below.

Figure 2. The SHEP UP Implementation Structure



(Source: the SHEP Unit)

The key task of each administrative level is as follows:

Table 2. Key Tasks of the SHEP UP at Each Administrative Level

Administrative Levels	Key Tasks	Officers
Provincial SHEP UP Management Team	<ul style="list-style-type: none"> • Selection of implementing districts • Backstopping of implementing districts 	Provincial Director of Agriculture, Provincial SHEP UP Desk Officer
District SHEP UP Management Team	<ul style="list-style-type: none"> • Coordination and implementation of the SHEP Approach • Selection of Model Farmer Groups • Supervising and backstopping of lower levels • Monitoring and follow-up of project implementation • Prepare work plans/budgets to implement the SHEP Approach at the district level • Conduct the SHEP Approach training series for FEOs/GFs and Model Farmer Groups (from the 2nd year) 	District Agricultural Officer, District SHEP UP Desk Officer, HCDA Station Manager
Divisional Office	<ul style="list-style-type: none"> • Supporting of FEOs/GFs to implement In-field 	Divisional Agricultural

9X

	Training <ul style="list-style-type: none"> • Carrying out follow-ups to Model Farmer Groups 	Extension Officer
Frontline Extension Officers/Group Facilitators	<ul style="list-style-type: none"> • Supporting Model Farmer Group representatives and members to conduct the project activities • Implementing In-field Training to the Model Farmer Groups • Carrying out follow-ups to the Model Farmer Groups • Conducting monitoring and evaluation of groups' activities 	Frontline Extension Officers, Divisional Staff
Model Farmer Groups	Beneficially	

(Created by the Review Team)

The Project covers all eight provinces of Kenya. Each year, 2 provinces are rolled into the Project. The first year, they receive full supports from the SHEP Unit (in black). Upon the completion of 1st year, those districts are expected to continue with the implementation for the 2nd year with their own annual plan and budget (in gray) as the SHEP Unit moves to the next provinces.

Table 3. List and Timing of Provinces the SHEP UP is Implemented

Provinces	Batch	2010	2011	2012	2013	2014	2015
Central	1 st						
Rift Valley	1 st						
Nyanza	2 nd						
Western	2 nd						
Eastern	3 rd						
Coast	3 rd						
North Eastern	4 th						
Nairobi	4 th						

(Created by the Review Team)

At the time of Mid-term Review, the 2nd year's activities are ongoing in Central and Rift Valley provinces, and also 1st year's activities are ongoing in Nyanza and Western provinces. The SHEP Unit is planning to start the implementation in Eastern and Coast provinces from 2012.

The SHEP UP aims at building the capacity of agricultural extension officers and empowering horticultural smallholders through the SHEP Approach. During the 5 year project period, more than 50% of officers from MoA and HCDA will be receiving one-week trainings on the SHEP Approach. The following diagram shows the training package of the SHEP Approach. The detailed trainings are provided in Annex14.

4x

Figure 3. Diagram of the SHEP Approach



(Source: the SHEP Unit)

In addition to the main training package of the SHEP Approach, trainings for Agro-processing and "Do-nou" Technology are provided to the groups who would like to obtain those skills and techniques.

2. METHODOLOGY OF EVALUATION

As the Project comes to the turning point, Japan and Kenya Joint Review Team (hereafter the Team) was organized to evaluate the Project. The Review Team aims at examining project achievements from the Project inception to date, reviewing and evaluating the Project as indicated in Record of Discussion(R/D), Plan of Operations (PO) and Project Design Matrix (PDM) by using five evaluation criteria. The Team also intends to review project plan for the rest of the project duration and to discuss the framework of cooperation further. It also intends to propose suggestions for any adjustment or amendment for the project implementation if deemed necessary.

2-1. Verification of Performance

Verification of Performance was measured in terms of Outputs, Project Purpose and Overall Goal in comparison with the Objectively Verifiable Indicator (OVI) of the PDM (Ver.3). In this review, prospect of achieving Project Purpose and Overall Goal were measured. Below is the concept of PDM and definitions of each PDM terminology.

9x

Figure 4. Project Design Matrix

Project Design Matrix (PDM)

Narrative Summary of the Project	Verifiable Indicator	Means of Verification	Important Assumption
Overall Goal			
Project Purpose			
Outputs			
Activities	Inputs		Preconditions

(Source: JICA Project Evaluation Guideline 2010)

Table 4. Terms and Definitions of PDM

Items in PDM	Definitions
Overall Goal	The development effect expected as a result of the achievement of the project purpose in about 3-5 years after the project ends.
Project Purpose	The objective that is expected to be achieved by the end of the project. It should be described as a specific benefit or impact given to the target group.
Outputs	Outputs are objectives to be realized by the project in order to achieve the Project Purpose by implementing the series of project activities.
Activities	Activities are specific actions intended to produce the outputs of the project by effective use of the Inputs. It is important to include the activities needed for monitoring and evaluation and those for the management of the project.
Important Assumption	Important Assumptions are conditions required for the success of a project but existing outside the control of the project.
Pre-Conditions	Pre-Conditions are requirements prior to the launch of the project. Projects cannot be expected to succeed if they get started before pre-conditions are met.
Objectively Verifiable Indicators	The indicators to verify the achievements of the Outputs, Project Purpose and Overall Goal. Indicators should be objectively verified.
Means of Verification	This refers to the data source required to verify indicators.
Inputs	Inputs are personnel, equipment, and cost required for each of the Project Activities.

(Source: JICA Project Evaluation Guideline 2010)

2-2. Verification of Implementation

Verification of Implementation was reviewed to examine if the activities have been implemented according to the schedule outlined in the Plan of Operations, and to examine if the Project has been managed properly as well as to identify contributing and/or hampering factors that have affected the implementation process.

24

2-3. Evaluation Based on the Five Evaluation Criteria

The Project is analyzed and evaluated based on the Five Evaluation Criteria as described below:

Table 5. Five Evaluation Criteria

1. Relevance	Whether the Project is consistent with the priority of both counterpart and Japanese governments (County Priority); whether the Project responds to the needs of target group and society(Necessity); whether the methodology taken in the Project is appropriate to address developmental strategy of the country or region (Appropriate Technology)
2. Effectiveness	How far the project purpose has been/is likely to be achieved as a result of Outputs produced; Are there any effects by important assumptions as well as factors of contributing/hampering in achieving the project purpose.
3. Efficiency	Has the degree of Output achievement been appropriate: whether the quality, quantity, and timing of Inputs have been appropriate to the achievements level of Outputs; any synergy effects with other schemes and/or assistance from other donors or JICA projects, and any factors of contributing/hampering the efficient project implementation.
4. Impact	Whether there are any long-term effects including direct or indirect, positive or negative, intended or unintended for the achievements of Overall Goal; whether the causality between Project Purpose and Overall Goal exist
5. Sustainability	Assessed from the aspects of policy, institutional, financial, and technological, including negative effects, whether the effects brought by the Project sustain and/or expand after the termination of the assistances.

(Source: JICA Project Evaluation Guideline 2010)

3. OBJECTIVES OF MID-TERM REVIEW

In overall, following evaluation points are the focus of this evaluation:

- ① To confirm: project inputs; project outputs; degree of achievement indicated in PDM (Ver.3);
- ② To examine the degree of likelihood to achieve project purpose and project outputs based on current level of achievement and to evaluate them by using five evaluation criteria (Relevance, Effectiveness, Efficiency, Impact, and Sustainability) ;
- ③ To collect information and data on project implementation process and to conduct analysis to identify positive and/or negative effect on the project outputs;
- ④ To discuss and to reach agreement within the joint Review Team about suggestions and lessons learnt from this Mid-term Review;
- ⑤ Based on the above agreement, to compile Mid-term Review report;
- ⑥ To present evaluation results to PSC, propose any necessary adjustment or amendment recommendations for PDM and/or PO, and receive adoption and approval of evaluation results from the meeting minutes of PSC.

This Mid-term Review aims to examine mainly two of the Project's four outputs: Output 1, Adaptation of the SHEP Approach to the SHEP Unit and other staff; Output 2, Implementing farmer group's income from horticulture produce is improved. The achievements of those two outputs and suggestions towards the rest of project implementation period will be the key evaluating points.

Evaluation based on 5 Evaluation Criteria

9X

Since its inception, the project implementation has come to its turning point (2.7 years out of 5 year). To date, the SHEP UP has been implementing the SHEP Approach to 40 districts in 4 provinces. Judging from the monthly project reports and quarterly reports submitted by the Project Team, the Project is on track.

In each five evaluation criteria, the team will examine following points for the Project.

1) Relevance: This project aims at the scale up of the SHEP Approach, proven by the previous SHEP, as pilot project, for its effectiveness to the nationwide. This will be done through the establishment of the SHEP Unit in MoA which will implement the SHEP Approach in eight provinces. The Project also incorporated proposal system where District Agricultural Officers submit proposals to the MoA provincial office and PDA will select the target districts based on the submitted proposal. Through the field visit to the provinces and districts where project is currently implemented, the Team will evaluate the relevance of implementation mechanism, training and dissemination system of knowledge and proposal system.

2) Effectiveness: In order to confirm the progress of the Project in this Mid-term Review, the Project Team has already compiled data i.e. average net-income, and adoption rate of technology from the forty districts in Central and Rift Valley provinces. Based on currently available data, the Review Team will analyze and examine the likelihood to achieve project purpose while identifying obstructive or contributing factors of the Project.

3) Efficiency: The implementation of project, a series of trainings and monitoring systems developed by previous SHEP project, injected inputs of resources such as financial, personnel, and tools (materials). In addition, to introduce Agro-processing, and Water Harvesting Technology, additional man power had been utilized. The Review Team examines the efficiency of these inputs (quantity, quality and timing) against the achievement of project outputs.

4) Impact: The evaluation will examine about the likelihood to achieve project objective while assessing, long-term effect (positive or negative) that the Project may bring. The Team will also consider necessary actions or activities such as outreach to the policy level, complementarily with other donor funded projects or other JICA projects to bring the ripple effects of this project to wider community.

5) Sustainability: The sustainability is accessed from the different aspects; policy and legislative; institutional; financial; technological, ownership and socio-economical aspects. Particularly in financial aspects, the budgetary allocation by MoA and Japan in terms of ensuring the continuation of project after the completion of project in 2015 will be examined.

4. MEMBERS OF THE JOINT REVIEW TEAM

The Mid-Term Review was conducted by the Joint Evaluation Team comprised of the following members:

Kenyan side

1. Mr. Benson Mureithi	Evaluator Assistant Director of Agriculture Head Phytosanitary, Quality Assurance & Standards Subdivision, Horticulture Division, Ministry of Agriculture
2. Mr. Stanley Miyogo	Evaluator Senior Assistant Director Policy and External Relations Directorate, Ministry of Agriculture
3. Ms. Jacqueline Oseko	Evaluator Horticulture Officer Horticulture Crops Development Authority

Japanese side

1. Mr. Junichi Hanai	Team Leader Senior Representative, JICA Kenya Office
2. Mr. Kazuhisa Katayama	Planning and Management Representative, JICA Kenya Office
3. Mr. Sebastian Odanga	Extension and Policy Consultant, JICA Kenya Office
4. Ms. Hiroko Sugimoto	Evaluation Analysis Consultant, Taiheiyo Engineering Limited Liability Partnership

5. SCHEDULE OF MID-TERM REVIEW

The Mid-Term Review was carried out from 1 to 26 October 2012. The schedule of the review is shown below.

Table 6. Mid-Term Review Schedule

Date	Place	Activities
2012/10/01	Nairobi: JICA Kenya Office	Courtesy call to the JICA Kenya Office, Discussion with the Review Team members from JICA side
2012/10/02	Nairobi: JICA Kenya Office	Meeting at the JICA Kenya Office, TV Conference with JICA H.Q.
2012/10/03	Nairobi: SHEP UP Office	9:00 am-11:00 am: Discussion with the Review Team members from Kenyan side at AS Committee Room (3F), MoA
2012/10/04	Nairobi: MoA & HCDA	Visit SHEP UP Office to conduct interviews to the SHEP UP Team & data collection etc.
2012/10/05	Nairobi: SHEP UP Office	8:00 am: Courtesy call to the MoA (PS), 11:00 am: Courtesy call to the HCDA H.Q.(MD), Visit SHEP UP Office to discuss with SHEP UP Team (JICA Expert & C/Ps) on procedures of the evaluation

2012/10/06	Nairobi	
2012/10/07	Nairobi -> Nyeri	Field Trip to the Implementing Districts of the 1st Batch (1st Year's & 2nd Year's Groups) & 2nd Batch (1st Year's Group)
2012/10/08	Nyeri	Visit PDA's Office of Central Province, Mwioko Self Help Group (1st Year's Group) of Kieni East District in Central Province, Nginyii Maendeleo Self Help Group (2nd Year's Group) of Kieni West in Central Province
2012/10/09	Nyeri -> Nakuru -> Nairobi	Kacengo Self Help Group (1st Year's Group) of Nakuru North in Rift Valley Province, Bathi Dairy and Horticulture Self Help Group (1st Year's Group) of Lari Districts in Central Province
2012/10/10	Nairobi -> Eldoret (Flight)	Tulwop Ng'etuny Charity Women Group (1st Year's Group) of Wareng District in Rift Valley Province
2012/10/11	Eldoret -> Kakamega -> Homabay	Baraka Youth Group (1st Year's Group) of Kakamega Central District in Western Province
2012/10/12	Homabay -> Suba -> Kisumu	Madundu Self Help Group (1st Year's Group) of Suba District in Nyanza Province
2012/10/13	Kisumu -> Nairobi (Flight)	
2012/10/14	Nairobi	
2012/10/15	Nairobi: SHEP UP Office	Data analysis & Preparation of the Mid-term Review Report
2012/10/16	Nairobi: MoA & HCDA	Data analysis & Preparation of the Mid-term Review Report
2012/10/17	Nairobi: Other related organizations	Data analysis & Preparation of the Mid-term Review Report. The Team meeting to finalize the evaluation results.
2012/10/18	Nairobi	Discussion with SHEP UP Team. Preparation of the Mid-term Review Report
2012/10/19	Nairobi	Finalize the Mid-term Review Report
2012/10/20	Nairobi	
2012/10/21	Nairobi	
2012/10/22	Nairobi	Finalize the Mid-term Review Report
2012/10/23	Nairobi	Finalize the Mid-term Review Report
2012/10/24	Nairobi	10:00 am: The 5 th Project Steering Committee Meeting & Mid-term Review Report at PS Board Room (7F), MoA
2012/10/25	Nairobi	Making a M/M, Revision of the Mid-term Review Report
2012/10/26	Nairobi	Report at the JICA Kenya Office

(Source: the SHEP Unit)

9X

II THE EVALUATION RESULTS

1. VERIFICATION OF PERFORMANCE

1-1. Output

(1) Output 1

Output 1	The SHEP Approach is adopted by the Unit and ready for implementation
Objectively Verifiable Indicators	1-1. 80 % of provincial and district level government extension staff and stakeholders understand the SHEP Approach properly. 1-2. By the end of the project period, the guideline of the SHEP Approach is completed.
Achievement	The Output 1 is likely to be achieved except the completion of guideline which will take place later period of the project implementation.

The Output 1 is likely to be achieved with the following reasons.

OVI-1-1 80 % of provincial and district level government extension staff and stakeholders understand the SHEP Approach properly.

To examine whether 80% of participants of provincial and district level government extension staff and stakeholders understood the SHEP Approach properly, the following points were considered:

- During the Organizers' Training for the Basic SHEP Approach for the Provincial and District SHEP UP Management Teams, an examination on SHEP Approach is conducted at the end of the training to confirm their understanding of the SHEP Approach. The passing rate was 93%;
- 100% of interviewed District SHEP UP Management team members could explain about the SHEP Approach and its activities in front of the interviewers;
- 99% of survey results indicate that the intention of FABLIST (Farmer Business Linkage Stakeholder) Forum for linking farmers and stakeholders who engaged in the horticultural value chain was well understood by the stakeholders who attended FABLIST Forum.

OVI-1-2 By the end of the project period, the guideline of the SHEP Approach is completed.

The objective of the SHEP Approach guideline is to compile the methodologies, tools, experiences, and lessons accumulated during the project implementation period and consolidate them into the guideline for the future use. The guideline drafting process will start in the 4th year after the start of implementation of 4th Batch provinces and will continue the drafting process till the completion of project in the final year.

(2) Output 2

Output 2	Implementing farmer groups' income from horticulture produce is improved.
Objectively Verifiable Indicators	2-1 Within two years after adopting the SHEP Approach, implementing individual members (men and women) of the smallholder horticulture farmer groups and the groups supported by the Unit and district increase their <u>sales</u> ¹ by average from 18.0 % to 48.2 % in Central Province, from 17.3 % to 52.7 % in Rift Valley

¹ To streamline with overall goal, the change of indicator from "sales" to "net income" is proposed.

	Province, from 13.8 % to 55.3 % in Nyanza Province and from 15.5 % to 53.6 % in Western Province ² 2-2. Within two years after the technical training, more than 70 % of individual members (men and women) of implementing smallholder horticulture farmer groups increase rate of applying the technologies by average from 16.0 % to 68.6 % in Central Province, from 14.2 % to 43.2 % in Rift Valley Province, from 9.2 % to 67.7 % in Nyanza Province and from 33.3 % to 84.0 % in Western Province ³
Achievement	The Output 2 has been achieved with some challenges.

The Output 2 has been achieved with some challenges.

The data was collected from the 1st year's Model Farmer Groups in Central and Rift Valley Provinces between August and September 2012. For the purpose of this evaluation, the data from the 1st year of average net-income and technological adoption rates was utilized to compare with the Baseline Survey data which was taken at the initial stage of project implementation of each Batch.

OVI-2-1: Within two years after adopting the SHEP Approach, implementing individual members (men and women) of the smallholder horticulture farmer groups and the groups supported by the Unit and district increase their sales by average from 18.0 % to 48.2 % in Central Province, from 17.3 % to 52.7 % in Rift Valley Province, from 13.8 % to 55.3 % in Nyanza Province and from 15.5 % to 53.6 % in Western Province.

The indicator for the target income was set based on the Baseline Survey data. To set the target rate the following three aspects were considered;

- Production: Based on the Baseline Survey data by comparing with national and district potentials and production achievements for a period of three years and production potential from some major seed companies, proposed increase of production was calculated,
- Group Empowerment Level: Based on the assumption that if the group improves Group Empowerment Level, it will increase the net-income, each level of increment by 20%,
- Rural Infrastructure: Based on the assumption that improvement of road condition by "Do-now" Technology can increase the income by 10%,
- Increase of Unit Price: Based on the assumption that the price growth causes appreciation of the Unit Price of horticulture product by 10%.

² The indicator is a range since each SHEP UP Implementing districts has a specific target as follows. Central Province: Lari 25.7 %; Nyandarua Central 47.7 %; Kieni East 38.9 %; Kandara 18.0 %; Kieni West 22.0 %; Kikuyu 19.5 %; Kirinyaga West 48.1 %; Limuru 36.7 %; Nyandarua West 37.4 % and Murang'a South 48.2 %. Rift Valley Province: Nandi East 24.0 %; Nakuru North 22.4 %; Wareng 17.3 %; Nandi South 23.1 %; Kajiado North 24.0 %; Laikipia West 52.7 %; Marakwet West 35.3 %; Transmara West 44.9 %; Sotik 52.1 % and Narok South 21.2 %. Nyanza Province: Siaya 51.5 %; Nyamira 24.3 %; Bondo 47.7 %; Masaba South 27.0 %; Rachuonyo South 25.4 %; Gem 25.9 %; Gucha 42.0 %; Suba 55.3 %; Kisumu East 42.2 % and Ugenya 13.8 %. Western Province: Khwisero 17.6 %; Kakamega North 43.7 %; Mt. Elgon 42.9 %; Sabatia 20.1 %; Kakamega Central 15.9 %; Hamisi 15.6 %; Matete 19.0 %; Cheptais 53.6 %; Bungoma East 52.7 % and Teso North 15.5 %.

³ The indicator is a range since each SHEP UP Implementing districts has a specific target as follows. Central Province: Lari 44.6 % (M: 41.2 %/F: 48.3%); Nyandarua Central 68.6 % (M: 87.6 %/F: 49.0%); Kieni East 42.7 % (M: 38.5 %/F: 47.9%); Kandara 60.3 % (M: 63.1 %/F: 57.6%); Kieni West 37.3 % (M: 37.2 %/F: 37.5%); Kikuyu 19.3 % (M: 18.2 %/F: 20.3%); Kirinyaga West 45.1 % (M: 44.2 %/F: 45.9%); Limuru 45.3 % (M: 42.2 %/F: 47.8%); Nyandarua West 16.0 % (M: 14.0 %/F: 17.2%) and Murang'a South 45.0 % (M: 38.9 %/F: 54.8%). Rift Valley Province: Nandi East 22.0 % (M: 20.8 %/F: 23.3%); Nakuru North 31.4 % (M: 28.5 %/F: 34.2 %); Wareng 16.4 % (M: 10.3 %/F: 24.8 %); Nandi South 36.5 % (M: 29.7 %/F: 45.8 %); Kajiado North 14.2 % (M: 10.7 %/F: 17.7 %); Laikipia West 37.8 % (M: 36.0 %/F: 40.0 %); Marakwet West 43.2 % (M: 48.6 %/F: 35.9 %); Transmara West 23.3 % (M: 22.5 %/F: 25.0 %); Sotik 16.4 % (M: 16.0 %/F: 16.8 %) and Narok South 30.7 % (M: 23.6 %/F: 35.5 %). Nyanza Province: Siaya 64.2 % (M: 51.6 %/F: 73.4 %); Nyamira 56.7 % (M: 51.4 %/F: 62.1 %); Bondo 16.8 % (M: 15.4 %/F: 18.2 %); Masaba South 31.2 % (M: 27.7 %/F: 34.1 %); Rachuonyo South 12.1 % (M: 12.4 %/F: 11.6 %); Gem 42.4 % (M: 33.1 %/F: 53.8 %); Gucha 67.7 % (M: 62.6 %/F: 69.5 %); Suba 64.4 % (M: 61.9 %/F: 67.8 %); Kisumu East 9.2 % (M: 10.6 %/F: 8.1 %) and Ugenya 21.8 % (M: 20.2 %/F: 23.1 %). Western Province: Khwisero 33.3 % (M: 33.7 %/F: 33.1 %); Kakamega North 39.6 % (M: 33.9 %/F: 44.9 %); Mt. Elgon 56.5 % (M: 51.3 %/F: 63.6 %); Sabatia 58.7 % (M: 49.1 %/F: 68.8 %); Kakamega Central 46.2 % (M: 37.2 %/F: 56.9 %); Hamisi 84.0 % (M: 48.7 %/F: 113.6 %); Matete 39.3 % (M: 37.2 %/F: 40.5 %); Cheptais 56.1 % (M: 47.5 %/F: 64.5 %); Bungoma East 59.6 % (M: 54.9 %/F: 64.1 %) and Teso North 40.6 % (M: 35.0 %/F: 45.9 %).

JK

Combined data of these three aspects are calculated as proposed as the rate of increase of net-income of each district. (Indicator 2-1) The detail of calculation of district indicator is provided in Annex 16.

Based on the collected data, the average net-income was calculated for group, per farmer, per male, and per female in each district. In this report, the data per farmer is used for the following analysis. Due to the small size of sample data collected compared with the Baseline Survey data, the Team decided not to examine the group data but to use only average income of individual farmer.

In short, the overall results of OVI 2-1 are:

- **8 out of 10 districts** had increased average net-income per farmer in Central Province
- **4 out of 10 districts** had increased average net-income per farmer in Rift Valley Province

The following Table 7 summarizes the target and the achieved rate for average increase of net-income per individual farmer in Central Province. The detailed data is provided in Annex 17-1.

Table 7. Average Increase of Net-Income per Farmer in 10 Districts of Central Province (%)

District	Lari	Nyandarua Central	Kieni East	Kandara	Kieni West	Kikuyu	Kirinyaga West	Limuru	Nyandarua West	Murang'a South
Proposed	25.7	47.7	38.9	18.0	22.0	19.5	48.1	36.7	37.4	48.2
Achieved	-28.3	50.3	75.4	-56.5	119.0	28.8	4.4	369.9	241.4	85.1

(Source: the SHEP Unit)

- In Central Province, 8 out of 10 districts had increased average net-income per farmer. Among them, 7 districts achieved over the target rate. In one district (Kirinyaga West), the target had not been achieved even though the average net-income of the district increased compared with the Baseline Survey data.
- For those districts that had achieved the target rate, the range of increase was from 28.8% to 369.9%. In many of those districts, the rate of increase from the proposed rate was significant; the average net-income per farmer was increased from 21,253 Ksh (Baseline Survey) to 99,872 Ksh (Current) in Limuru district, from 5,684 Ksh (Baseline Survey) to 19,407 Ksh (Current) in Nyandarua West, and from 39,736 Ksh (Baseline Survey) to 87,023 Ksh (Current) in Kieni West.
- 2 districts had experienced the reduction of the average net-income with the rate of -28.3% and -56.5%. The original target rate was lower in these two districts; however those districts had failed to achieve the target rates.
- Concerning the gender difference, in most of the districts where the average net-income per farmer had increased, similar trend was observed with the increase or the decrease of average net-income among male and female farmers: in 2 districts, the average net-income of male farmer had increased while the average net-income of female farmer had decreased; in one district, the average net-income of male farmer had decreased while the average net-income of female farmer had increased.

The following Table 8 summarizes the target and the achieved rate for the average increase of net-income per individual farmer in Rift Valley Province. The detailed data is provided in Annex 17-2.

Table 8. Average Increase of Net-Income per Farmer in 10 Districts of Rift Valley Province (%)

District	Nandi East	Nakuru North	Wareng	Nandi South	Kajiado North	Laikipia West	Marakwet West	Transmara West	Sotik	Narok South
Proposed	24.0	22.4	17.3	23.1	24.0	52.7	35.3	44.9	52.1	21.2
Achieved	-8.1	-65.6	2.0	-16.4	-24.3	248.0	-73.2	130.2	81.4	-23.1

(Source: the SHEP Unit)

- In Rift Valley Province, 4 out of 10 districts had increased average net-income per farmer. 3 of those districts had achieved over the target rate. In one district, the average income had increased, but it has not been the level to achieve the target rate.
- For those 3 districts above, the rates of increase had been significant in the range of 81.4% and 248%. The average net-income per farmer was increased from 14,039 Ksh (Baseline Survey) to 48,860 Ksh (Current) in Laipikia West, from 40,434 Ksh (Baseline Survey) to 93,063 Ksh (Current) in Transmara West, and from 17,215 Ksh (Baseline Survey) to 31,220 Ksh (Current) in Sotik.
- On the other hand, the average net-income had decreased in 6 districts in the range of -8.1% and -73.2%. In 2 districts, the decrease rate of average net-income had been substantial: 65% reduction in Nakuru North, and 73% reduction in Marakwet West.
- Concerning the gender difference, 3 districts where the average income had reached the target, the average income of both male and female had also increased. In 5 districts which recorded negative income growth, the average net-income of female farmer had increased while the average net-income by male farmer had decreased.

For OVI 2-1 indicator of the increase rate of average net-income per farmer, the Team discussed with the SHEP Unit about the obstructive and the contributing factors that affected the rate of increase of average net-income.

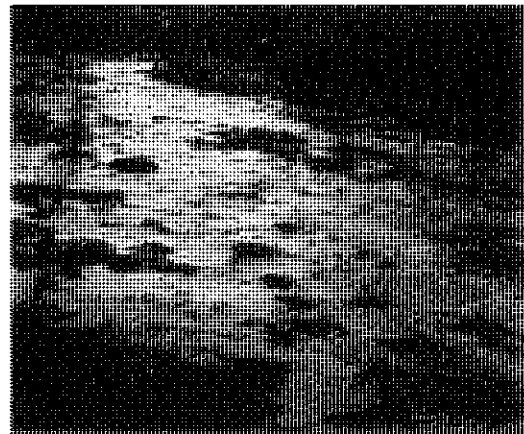
The following factors may have affected the rate of increase of average net-income negatively.

A. Unfavorable weather

Unfavorable weather such as drought, frost damage, and flood affected the rates of production in the districts like Nakuru North, Nandi South and Marakwet West. The failure of crops due to the unfavorable weather condition discouraged some of the groups to continue planting, resulting in low production rate of crops.



Water stressed Tomato by drought: Bidii Kilimo Group_Nakuru North District



Flooding washed away crops in Kinale: Lari District

To solve this issue, the SHEP Unit had taken the following actions:

As a part of appropriate technology for rural infrastructure, the SHEP Unit is examining the introduction of Water Harvesting Technologies. Already, a short-term expert was dispatched in May 2012 and the field surveys were conducted and appropriate Water Harvesting Technologies were identified. In

2/2

November 2012, the SHEP Unit is expecting another short-term expert on Water Harvesting Technologies, the implementation of already identified Water Harvesting Technologies will be taken place upon the arrival of short-term expert in the 3rd Batch provinces of Eastern and Coast Provinces.

B. Low rate of collection of data

Low rate of collected data affected the sample size of data. This was due to the short period allocated for the data collection and FEOs/GFs had received less support for data collection from the SHEP Unit compared with the time of Baseline Survey. Some groups only submitted data for few crops (ex. out of 8 crops, only the data for 4 crops were submitted) while the data for some of the crops (ex. Banana and Passion Fruits) have not been reported because those produces were not ready at the time of data collection.

To solve this issue, the SHEP Unit will be taking the following actions:

- a. To backstop District SHEP UP Management Team to prepare and implement data collection
- b. To provide more support during data collection to FEOs/GFs,
- c. To allow more time for the data collection.

C. Weak FEOs/GFs

In many districts with negative growth, weak supports to the farmer groups by FEOs/GFs were observed. FEOs/GFs are the lifeline of the success of the Project. Therefore, the training series of the SHEP Approach emphasizes to enhance the capacities of FEOs/GFs and equipping them with teaching materials such as *KAMISHIBAI*. Possible reasons of weak support by FEO/GFs are: the distance reaching to the Model Farmer Groups is far therefore the frequency of visits by FEOs/GFs to those groups is low; changes in personnel with new FEOs/GFs without the SHEP Approach training and; in some cases inadequate backstopping of FEOs/GFs by the district or divisional offices.

To solve this issue, the SHEP Unit will be taking the following actions:

- a. Follow-up with the District SHEP UP Management Team to increase the backstopping of concerned FEOs/GFs;
- b. In case of new FEOs/GFs, equip them with training materials;
- c. Emphasis the DAOs to deliver the facilitation to FEOs/GFs;
- d. Encourage district to select the Model Farmer Group carefully.

D. Low Group Empowerment Level

Higher numbers of groups with low Group Empowerment Level were observed in the districts with negative growth of income. Group Empowerment Level is the assessment tool for group cohesiveness consisting of 3 essential parameters: leadership; cooperation among members and gender. Higher the number in Group Empowerment Level (level 1 to 5, 5 as the highest) indicates stronger leadership, better cooperation and better gender balance.

Group Empowerment Level is crucial indicator to assess the group cohesion. The small scale horticultural farmers can often benefit by acting as a group rather than individuals. This was well documented during the field interview. Farmers and officers indicated that an increase in net-income was due to;

- The reduction of cost of farm inputs (ex. fertilizer, pesticide, seeds) since the farmers purchased them in bulk as a group,
- As a group, they could negotiate better prices of their produces,
- As a group, they could supply produces continuously to the buyers hence could avoid the exploitation by middlemen.

To solve this issue, the SHEP Unit will be taking the following actions:

- a. In case the FEOs/GFs do not fully understand Group Empowerment Indicators (GEIs), the SHEP Unit recommends the district or divisional officers to conduct a one-day workshop on GEIs to re-train them.
- b. In case the farmers do not understand GEIs, the SHEP Unit recommends the FEOs/GFs to re-train the group on GEIs.

In some of the districts, the average net-income had increased dramatically. The followings may be the contributing factors.

A. Market Survey

Through the training, the Model Farmer Groups learned the importance of surveying the market for their produce: knowing when, where, and who to sell helped the groups to identify crops they select and the timing of sale. Many farmers responded during the field interview that they now conduct the market survey before planting. During the field interview, one HDCA officer informed the Review Team that farmers were no longer asking her for the market of their produces.

B. FABLIST Forum

Through the FABLIST Forum, the farmer groups had opportunities to meet stakeholders who were engaged in the horticultural value chain business such as input suppliers (seed, fertilizer & pesticide companies), financing institutions, and produce buyers. During the Forum, networks were established between farmer groups and stakeholders. Through these networks, the groups could purchase farm inputs in bulk, obtain better seeds, and are able to obtain loans, these all contributed to the increase of production hence their income.

C. Gender Awareness and Family Budgeting Trainings

Gender Awareness and Family Budgeting Trainings brought the positive changes for the relations between husband and wife. During the field interview, the farmers gave testimonies of increased cooperation in farming activities and house chores among couples. Husbands now consult with wives on decision making and financing issues, making couples become business partner rather the owner and the worker as previously observed.

OVI-2-2. Within two years after the technical training, more than 70 % of individual members (men and women) of implementing smallholder horticulture farmer groups increase rate of applying the technologies by average from 16.0 % to 68.6 % in Central Province, from 14.2 % to 43.2 % in Rift Valley Province, from 9.2 % to 67.7 % in Nyanza Province and from 33.3 % to 84.0 % in Western Province.

The indicator for the applying horticultural production techniques was set based on the Baseline Survey data of General Horticultural Crop Production & Post-Harvest Handling Techniques 20 (GHCP&PHHT20). Due to the differences of level of Baseline data, the target rate was set for each district. The detailed data is available in Annex 18.

Based on the collected data, two sets of data were examined for the evaluation:

- 1) Percentage of individual farmers who applied horticultural production techniques above their district targets above 70% or lower.
- 2) Increase rate of the average numbers of horticultural production techniques applied by individual

farmers of the Model Farmer Groups per district.

The following tables indicate the percentage of individual farmers who achieved their target rate of applying horticultural production techniques (GHCP&PHHT20).

Table 9. Percentage of Individual Farmers of the Model Farmer Groups who apply Techniques (GHCP&PHHT20) above their District Targets in Central Province (%)

District	Lari	Nyandarua Central	Kieni East	Kandara	Kieni West	Kikuyu	Kirinyaga West	Limuru	Nyandarua West	Murang'a South
Baseline	17.0	15.3	10.0	16.3	15.1	20.2	10.6	9.4	43.8	13.5
Achieved	77.0	81.8	66.2	82.2	94.3	92.8	84.1	83.3	54.9	83.6

(Source: the SHEP Unit)

- **8 out of 10 districts** had more than 70% of individual farmers had achieved the target for the application of horticultural production techniques in Central Province. In 2 districts, the rate of achievement to the target was lower than 70%: still more than 50% of famers (54.9% and 66.2%) had achieved the target rate in those districts.
- The rates of male and female farmers who had applied horticultural production techniques above their district targets indicate the similar results.

Table 10. Percentage of Individual Farmers of the Molde Farmer Groups who apply Techniques (GHCP&PHHT20) above their District Targets in Rift Valley Province (%)

District	Nandi East	Nakuru North	Wareng	Nandi South	Kajiado North	Laikipia West	Marakwet West	Transmara West	Sotik	Narok South
Baseline	34.1	17.9	39.1	11.5	26.6	15.5	9.7	31.2	28.9	12.0
Achieved	82.6	48.5	90.0	15.9	77.9	75.9	76.0	84.8	43.8	93.5

(Source: the SHEP Unit)

- **7 out of 10 districts** had more than 70% of individual farmers had achieved the target for the application of horticultural production techniques in Rift Valley Province while the rate in 3 districts had not met the 70% marks. In those districts, the rates were in the range from 15.9% to 48.5%.
- The rates of male and female farmers who had applied horticultural production techniques above their district targets indicate the similar results with the mixed individual. In one district, the rate of female farmer had not reached the target while the rate of male farmer had reached the target.

2) The following tables indicate the increase rates of average numbers of horticultural production techniques applied by individual farmers compared with the proposed target. The detailed data is provided in Annex 18.

Table 11. Increase Rate of the Average Number of Techniques (GHCP&PHHT20) applied by Individual Farmers of the Model Farmer Groups per District in Central Province (%)

District	Lari	Nyandarua Central	Kieni East	Kandara	Kieni West	Kikuyu	Kirinyaga West	Limuru	Nyandarua West	Murang'a South
Proposed	44.6	68.6	42.7	60.3	37.3	19.3	45.0	45.3	16.0	45.0
Actual	56.3	91.2	48.2	73.0	58.5	35.9	55.4	54.8	11.4	60.1

(Source: the SHEP Unit)

- In **9 districts out of 10** in Central Province, the increase rate of average numbers of horticultural production techniques applied by individual farmers was higher than the proposed increased rate. Only one district (Nyandarua West) had not achieved the proposed target.
- All except one district (Nyandarua West), both male and female increased rate of application of horticultural production techniques exceeded the proposed rate.

Table 12. Increase Rate of the Average Number of Techniques (GHCP&PHHT20) applied by Individual Farmers of the Model Farmer Groups per District in Rift Valley Province (%)

District	Nandi East	Nakuru North	Wareng	Nandi South	Kajiado North	Laikipia West	Marakwet West	Transmara West	Sotik	Narok South
Proposed	22.0	31.4	16.4	36.5	14.2	37.8	43.2	23.3	16.4	30.7
Actual	38.5	23.5	32.3	4.6	26.2	48.4	57.4	40.8	9.1	68.1

(Source: the SHEP Unit)

- In 7 districts out of 10 in Rift Valley Province, the increase rate of average number of horticultural production techniques applied by individual farmers had exceeded the proposed target rate. In the 3 districts, the increase rate had not achieved the proposed targets.
- The trends of the rate of increase of application of horticultural production techniques in male and female farmers follow the similar patterns with the trend of mixed individual.

Overall, the average number of horticultural production techniques applied is high and there is no district with negative average number of rates. Some of the factors for those under-achieved districts may be:

- Weak support systems either by the FEOs/GFs, or the District SHEP UP Management Team to backstop FEOs/GFs;
- Wrong expectation of Model Farmer Groups from the Project. As they expected for receiving handouts/material supports;
- Some Model Farmer Groups had high rate of illiteracy among group members, making difficult for them to understand the contents and concepts of trainings.

During the field interview, the farmers and the FEOs/GFs indicated that the increase rate of production is attributed to the following farming techniques obtained through the trainings:

- Use of Crop Planting Calendar;
- Selection of good seeds and proper seedling methods;
- Appropriate usage of fertilizer and pesticide, and control of pests and diseases;
- Proper post-harvest handling techniques.

The increase of average net-income and application rates of horticultural production techniques are the two indicators in Output 2.

To examine obstructing factors for the increase of average net-income, the following table indicates the relation between the adoption rate of horticultural production techniques and the Group Empowerment Level of the districts with negative growth in their average net-income.

Table 13. Districts with Negative/Small Growth in Average Net-Income

District	Ave. rate of increase of net income per farmer	% of farmer who applied technique more than target per district	Over all Group Empowerment Level
Central Province			
Lari	-28.3	77.03	2.4
Kandara	-56.5	82.22	2.4
Kirinyaga West	4.4	84.09	1.5
Rift Valley Province			
Nandi East	-8.1	82.61	1.2
Nakuru North	-65.6	48.48	2.6
Wareng	2.0	90.00	2.5
Nandi South	-16.4	15.94	1.4
Kajiado North	-24.3	77.92	1.4
Marakwet West	-73.2	69.88	2.0
Narok South	-23.1	93.51	2.4

(Source: the SHEP Unit)

In many districts with negative growth of average net-income indicates the low level of overall Group Empowerment Level. Among these districts, the adoption rate of techniques is lower in Nandi South and Marakwet West. The combination of low level of group cohesiveness and low level of adoption of techniques may have negatively affected to the growth rate of net-income.

Nevertheless, other factors such as the low rate of data collection, the loss of production due to the unfavorable weather, poor road network and support factor by FEOs/GFs may need to be considered as well to examine why the net-income had not increased in those districts. Among above districts, the unfavorable weather affected the crop productions in 5 districts. Bad road networks may have affected 2 districts, namely Marakwet West and Kajiado North.

In 5 districts in the Table 12, the rate of data collection was between 63% and 22% of Baseline Survey data. Some Model Farmer Groups only reported the data for some of the crops but not all the crops. The inconsistency of collected data makes difficult to obtain accurate project results. In future, the higher rate of data collection hence larger sample size will be crucial to obtain more accurate pictures.

To examine the contributing factors for the increase of average net-income, the following Table 14 shows the adoption rate of horticultural production techniques and the Group Empowerment Level of the districts with positive growth of average net-income.

Table 14. District with Positive Growth in Average Net-Income per Farmer

District	Ave. rate of increase of net income per farmer (%)	% of famers who applied technique more than target per district	Overall Group Empowerment Level
Central Province			
Nyandarua Central	50.3	81.82	1.6
Kieni East	75.4	66.15	2.4
Kieni West	119	94.29	2.2
Kikuyu	28.8	92.75	3.0
Limuru	369.9	83.33	2.2
Nyandarua West	241.4	54.84	2.2
Murang'a South	85.1	83.64	2.4
Rift Valley Province			
Laikipia West	248.0	75.91	2.4
Transmara West	130.2	84.76	2.8
Sotik	81.4	54.17	2.6

(Source: the SHEP Unit)

For those districts with positive growth for the average net-income, all but one has high Group Empowerment Level and high adoption rates of horticultural production techniques. From this table, one can conclude that the high adoption of horticultural production techniques and the high level of group cohesiveness can be positive contributors to increase average net-income. In above districts, the production rates of crops were above the target rates as well. The farmers in those districts are adopting horticultural production techniques well into their farming practice, this may resulted in higher production. The higher rate of production combined with the high level of group cohesiveness brought the increase of average net-income per individual in those districts.

(3) Output 3

Output 3	The SHEP Approach is properly replicated by implementing districts based on the Output 2.
Objectively Verifiable Indicators	3-1.100 % of implementing districts incorporates the SHEP Approach in their annual plan/budget for the following year. 3-2.100 % of implementing districts which incorporated the SHEP Approach in their annual plan/budget for following year implements the Approach in the year. 3-3. Within two years using the SHEP Approach, individual members (men and women) of the smallholder horticulture farmer groups and the groups supported by the district's own resource in implementing district increase their sales by average ---%.
Achievement	The Output 3 has been achieved except OVI 3-3 which cannot be assessed at the point of Mid-term Review.

The Output 3 has been achieved with the following reasons.

OVI-3-1.100 % of implementing districts incorporates the SHEP Approach in their annual plan/budget for the following year.

All of the 20 districts in Central and Rift Valley Provinces completed the 1st year implementation with the SHEP Unit support are currently implementing the SHEP Approach in the 2nd year with their own resources.

Proposal system of selecting the implementing districts helped to identify the districts with higher motivations, commitments, and good planning capacities. This resulted in 100% of continuation of the SHEP Approach of all of 20 districts.

OVI-3-2.100 % of implementing districts which incorporated the SHEP Approach in their annual plan/budget for following year implements the Approach in the year.

All of the 20 districts mentioned in OVI-1 are implementing the Project in the 2nd year. Although securing financial budget seems to be difficult in those districts, they try to implement the SHEP Approach with the limited budget. Judging from the responses of the field interview and questionnaires, the majority of the Districts SHEP UP Management Teams had difficulty in obtaining requested budget fully, but they answered that they could manage to implement the SHEP Approach. Those districts took the following actions to implement the Projects; received financial support from JICA for some of the activities, staff contributed their voluntary working time. In this regards, the capacity of management of the Districts SHEP UP Management Teams is considered to be strengthen.

OVI 3-3. Within two years using the SHEP Approach, individual members (men and women) of the smallholder horticulture farmer groups and the groups supported by the district's own resource in implementing district increase their sales by average ---%.

Since the Model Farmer Groups supported by the districts' own resources are still in the process of In-field Training, it is difficult to assess this achievement at the point of mid-term Review.

Currently, 83 Model Farmer Groups (Central: 38, Rift Valley: 45) in Central and Rift Valley Provinces are implementing the SHEP Approach supported by the district's own resources. The Team had opportunity to meet one of those groups during the field interview and learned that the Model Farmer Group has already prospective buyers for their produce even though the produce is still at the nursery stage. This is due to the market survey they conducted and the established network with stakeholder during the FABLIST Forum. This example shows that the concept of "Grow to Sell" is being practiced with this farmer group.

The SHEP Unit is planning to propose for additional of targets in OVI-3 in the next PSC meeting in early 2013.

(4)Output 4

Output 4	Information Management System for the SHEP Approach is established.
Objectively Verifiable Indicators	4-1. By the mid-term review of the project, the first draft of guideline for information management including monitoring and evaluation strategy for the Unit is ready. 4-2. All identified horticulture extension materials are catalogued. 4-3. 60 % of farmer groups (district, extension staff) is satisfied by information provided by the Unit.
Achievement	The Output 4 is achieved.

41

The Output 4 has been achieved with the following reasons.

OVI-4-1 By the mid-term review of the project, the first draft of guideline for information management including monitoring and evaluation strategy for the Unit is ready.

The 1st draft of guideline for information management have been completed and currently been used by the SHEP Unit from 2011. The guideline will be finalized in January 2013.

OVI-4-2. All identified horticulture extension materials are catalogued.

The file name system and shared documents depository have been established in the SHEP Unit and have been used. Currently, the SHEP Unit is pilot testing in two districts in Central Province (Kieni East and Murang'a South) to expand the information management system to the district level. The workshop had been completed in September 2012 and the districts are currently pilot using the system without network connectivity. The next short-term expert's visit is planned for January 2013. Upon the arrival of the expert, the evaluation of two districts will take place and the server and WiFi will be installed in these districts.

OVI-4-3. 60 % of farmer groups (district, extension staff) is satisfied by information provided by the Unit.

The result of field interview indicates that 86% of Districts SHEP UP Management Team members feel that enough information had been provided from the SHEP Unit for them to be able to respond to the request of FEOs/GFs. 100% of interviewed FEOs/GFs were satisfied with the available information to instruct farmers, and 100% of interviewed farmers responded that they were satisfied with the information provided.

1-2. Project Purpose

The achievement of project purpose will be evaluated at the end of project. In the Mid-term Review, the Team assessed the likelihood of achieving the project purpose.

Project Purpose	Effective support system for horticulture smallholders nationwide is established.
Objectively Verifiable Indicators	1. By the end of the project period, individual members (men and women) of the smallholder horticulture farmer groups and the groups in the implementing districts using the SHEP Approach increase their sales by average ---%. 2. By the end of the project period, 70 % of implementing districts continue to implement the SHEP Approach after supported by the project.
Achievement	The achievement of project purpose is likely.

The achievement of project purpose is likely with the following reasons:

- In both provinces, the average net-income of Model Farmer Groups increased in 12 districts;
- 100% of implementing districts supported by the SHEP Unit for the 1st year of implementation are now implementing the SHEP Approach in the 2nd year.

OVI-I. By the end of the project period, individual members (men and women) of the smallholder horticulture farmer groups and the groups in the implementing districts using the SHEP Approach increase their sales by average ---%.

12 out of 20 districts had increased average net-income per farmer in two provinces. The analysis of

achievement and non-achievement of each district had been conducted by the SHEP Unit and already some of the measures to improve the situation had been taken.

OVI-2. By the end of the project period, 70 % of implementing districts continue to implement the SHEP Approach after supported by the Project.

All the 20 districts in Central and Rift Valley Provinces had completed the 1st year implementation and are now in their 2nd year of implementation.

1-3. Overall Goal

Overall Goal	Livelihood of horticulture smallholders in implementing districts is improved.
Objectively Verifiable Indicators	Horticultural smallholders increase their income from horticulture sales per household by ----- % from first year of the project
Achievement	Overall goal is to be assessed in post-project evaluation. However, current achievements show good progress with prospect for achieving project goal.

The overall goal is measured on the development effect expected as a result of the achievement of the project purpose in about 3-5 years after the Project ends. Therefore, in this Mid-term Review, the achievement of overall goal cannot be measured. However, there is high potential for achieving overall goal judging from the following reasons:

- Current progress in project outputs, particularly the results of Output 2-1 shows the increase of average net-income of farmers in two provinces;
- There is clear causality between overall goal and project purpose which indicates if the project purpose is achieved, it is likely that the overall goal will be achieved.

2. VERIFICATION OF IMPLEMENTATION

Overall project implementation is satisfactory. Many project activities are either on the schedule or ahead of the schedule. The absence of expert in charge of project coordination put two full time experts an extra burden as they bear some tasks in addition to their own. The expansion of programs to other provinces may hamper the monitoring and follow-up of earlier districts if the number of SHEP Unit staff remains as status quo.

2-1. Input

The following table 15-a and 15-b indicate the inputs from Japan and Kenya.

Table 15-a Inputs by Japan

1) Japanese Experts	A total of 21 experts (3 long-term, 18 short-term) have been fielded.
2) Equipment	Training equipments have been provided.
3) Training in Japan	Counterparts from the two District SHEP Management Teams were trained in Tsukuba, Japan between April–September 2012.
4) Operational Costs	A total of 75,926,815 Ksh. has been spent so far as of June 2012.

(Source: the SHEP Unit & JICA Kenya Office)

Table 15-b Inputs by Kenya

1) Counterpart Personnel	A total of 12 personnel have been appointed in the SHEP Unit.
2) Office and Facilities	Office space, office furniture and computers, project vehicle have been allocated.
3) Operational Costs	A total of 66,067,339 Ksh. (including equipment/office rent) has been spent so far as June 2012.

(Source: the SHEP Unit)

2-2. Project Schedule

Projects activities are implemented as scheduled. Some of the activities, such as trainings in new provinces are ahead of the schedule.

- PDM had been modified and approved by PSC. Currently, PDM Version 3 is used. The detailed changes in PDMs are described in the Annex 1.
- PO had been modified and approved by PSC and currently PO Version 4 is used. Detailed changes in POs are described in the Annex 2.

2-3. Project Cycle Management

(1) Project Monitoring Mechanism

Assessing from the results of interviews and questionnaires, project reports and meeting minutes, the proper implementation monitoring is in place with the following reasons:

- The information management and utilization system is well organized. For example, when the Information Management/Monitoring & Evaluation officers receive training reports, evidence (ex. list of participants) and evaluation forms from the training participants, they verify and analyze them. If any issues are found, they alert to the management for further action. The system is clear and functioning.
- There is a clear reporting line in the field offices that follows the administrative line of MoA: from the provincial level to the level of field extensions. The following administrative line has made it easier for the SHEP Unit to follow-up once a problem occurs, as it can address the problem at particular level. If the problem is not solved at the appropriate level, the SHEP Unit can address the issue to higher levels. The lesson from the previous SHEP was reflected in this project. In SHEP UP, the Provincial office was asked to take responsibility of selecting implementing districts through the Proposal System. This had enhanced the commitment of Provincial office to the Project.

(2) Communication

The results from the interviews and questionnaires, project reports and meeting minutes, indicate that the communication among staff, between the SHEP Unit and field office is good.

(3) Budgetary Monitoring

Due to the absence of the expert in charge of project coordination (from June 2012 to date), currently the Chief Advisor manages the daily financial activities of Japanese budget. The expert of project coordination is scheduled to arrive in December 2012. The budget of Kenya is managed by the SHEP Unit Leader.

(4) Project Participation

Project participations by the project personnel, field officers and farmers groups are satisfactory.

- 100% of interviewed DAOs and District SHEP UP Desk Officers responded that they observed the changes in the involvement and attitude of FEOs/GFs after the implementation of project.
- The beneficiary farmer groups' involvement is high. During the field interview, farmers responded that after the training, they implemented what they had learned. The results lead to higher production and income earnings which encouraged them to keep continue using the SHEP Approach.
- 99% of interviewed FEOs/GFs responded that they have observed the positive changes of the farmers. One of key observations was that not only the farmers actively involved in the Project, but they now take initiative to solve their own problems without waiting to be given the solutions by officers.

3. THE FIVE EVALUATION CRITERIA

3-1. Relevance

In overall, relevance is considered high with the following reasons.

(1) Necessity:

Necessity is high. The Project responds to the needs of society, region and target groups with following reasons:

- The selection of implementing districts was done through the Proposal System. After the Sensitization Workshop, all the DAOs were given equal opportunity to submit proposals to the Provincial office if they wished to implement the Project. The proposals were assessed based on the scoring methods and selected by the PDAs. The introduction of selection method by proposal helped to identify the districts with higher potentials as well as higher motivations of DAOs.
- In the responses of questionnaire by PDAs and Provincial SHEP UP Desk Officers, all of the officers responded that the Project corresponds to the needs of small scale horticultural farmers in the province.

(2) Country Priority:

The Project is consistent with the following policy priority of Kenya

- In Kenya's Vision 2030 has identified agriculture as one of the key sectors to deliver the 10 percent target of annual economic growth rate. This transformation will be accomplished through:
 - *Transforming key institutions in agriculture, livestock, forestry and wildlife to promote agricultural growth*
 - *Increasing productivity of crops, livestock and tree cover*
 - *Improving market access for smallholders through better supply chain Management*
- Agricultural Sector Development Strategy 2010-2020 indicates for small scale farming: adoption of improved inputs such as hybrid seed; concentrate feeds; fertilizer; safe use of pesticides and machinery by small-scale farmers is relatively low. There is huge potential for increasing productivity for these farmers with adoption of modern farming practices.

The Project is consistent with assistance priority of Japan

Japan's ODA strategy for Kenya in agricultural development focused on horticulture that responds to the market needs through assistance for small scale farmers. Therefore the Project is in line with Japan's assistance strategy for Kenya

(3) Appropriateness of Methodology Taken

The methodology taken in the Project is appropriate with the following reasons:

- The Project follows the Ministry of Agriculture's administrative system from Headquarters, Province, District, Division and to frontline extension. Entire line of ministry is covered by the Project.
- The Project covers Kenya's all provinces and select the implementation districts according to the needs of horticulture development through the Proposal System. Currently, Kenya is in the administrative transition from provincial system to country system. The selection process for the implementing districts also considered the forthcoming county system as well.
- In terms of gender mainstreaming, the selection criteria for Model Farmer Groups includes "group sensitive to gender issues" as one of the key criteria. In addition, all the farmer trainings require participants to be gender balanced: one male and one female, ensuring the gender concern is incorporated successfully into the Project.

The ripple effects from the Project were seen. The followings are some of the key ripple effects observed:

- 99% of district officers interviewed responded that the Project will spread outside of Model Farmer Groups. Non-group farmers who witnessed the improvement of productions and income of the Model Farmer Groups started to learn technologies and skills given during FT-FaDDE (Facilitator's Training for Farmers' Demand Driven Extension) and In-Field Trainings from the target farmers or FEOs/GFs. In some cases, new groups were formed to gain group benefit such as group marketing, collective purchase of farm inputs and bulk selling of produces.
- "Do-nou" Technology has been spreading to outside of target groups. Community members were involved with the repairing of roads with the target group members. In some cases, the local authority and/or the Ministry of Road were involved in repairing the road by using "Do-nou" Technology. In total 1,032.7 m of road had been repaired in Central and Rift Valley Provinces to date.

The Project shows the strong comparative advantage of JICA's technical assistance;

Japanese technical assistance focuses on the capacity building of extension officers in relevant ministry in a comprehensive manner. The Project started to establish the capacity of the SHEP Unit staff in Nairobi. Then the SHEP Unit staff trained provincial, districts and field extension officers, covering entire chain of command of the MoA's extension line. This seems to be very effective methodology for spreading the SHEP Approach leading to higher adoption rate.

3-2 Effectiveness (Prospect)

Effectiveness is moderately high. Even though the current level of outputs' achievements shows strong indication for the achievement of project purpose, some of the important assumption may affect its achievement.

(1) Forecast for Achieving Project Purpose

As mentioned earlier, the Team concluded that **the achievement of project purpose is likely** with the following reasons:

- In both provinces, the average net-income of farmers increased in 12 districts;
- 100% of districts supported by the SHEP Unit for the 1st year are implementing the SHEP Approach in the 2nd year.

(2) Causality between project outputs and project purpose

As far as PDM is concerned, some of the indicators used in the current PDM Version 3 need to be clarified. The increase of average sales is used as one of the indicators of project purpose while income is used as indicator for overall goal. Since the increase of sales does not necessary mean the increase of net-income as income is calculated sales minus costs of production, this linkage of indicators between overall goal, project purpose and outputs need to be established. The detailed suggested PDM changes are shown in Annex 1.

(3) Important Assumptions

Following some of the important assumptions affected or may affect the Project.

Unfavorable weather is challenging assumption. During the 1st year of project implementation, some Model Farmer Groups in both Central and Rift Valley experienced drought, frost, flood, hailstones and shortage of water. As a result, the horticulture production went down which resulted in the reduction of average net-income of some groups. As the general shortage of water is also a concern, the SHEP Unit plans to introduce Water Harvesting Technologies to Eastern and Coast Provinces where the area experiences with high frequency of water shortage. The expert for Water Harvesting Technologies will be arriving in November 2012.

General election expected in March 2013. In previous SHEP, the implementation of some of the Project activities was delayed due to the post-election disturbance in 2007-2008 for a few months. To take preventative measures, the SHEP Unit had already shifted some of project activities such as trainings in forthcoming provinces ahead of schedule. The changes are indicated in PO version 5.

As mentioned previously, the transition of country's political and administrative system, particularly the shift from provincial system to county system forecasts some uncertainty to the Project. The current line of command in the ministry will most likely be affected and the change may affect budgetary flow. At this point, it is not certain whether the ministry headquarters still holds the budgetary control of county offices or the county government will hold the budgetary control. It is said that the new system is expected to be announced early second quarter of 2013.

3-3. Efficiency

Efficiency is high as the following reasons.

(1) Level of Achievement of Project Outputs in Relation to the Overall Target

The following Table 16 shows the current level of Outputs' achievements. Considering most of the Outputs currently assessable have been achieved, it is **highly likely that project will achieve project purpose**.

Table 16. Achievement of Outputs

Outputs	Achievement
Output 1	Achieved so far (OVII-2 to be assessed later)
Output 2	Achieved with some concern
Output 3	Achieved so far (OVI 3-3 to be assessed later)
Output 4	Achieved

(2) Causality between Outputs, Activities, and Inputs

The causalities between outputs, activities and inputs exist and are logical. Some modification of terminologies will enhance the clarity of PDM. The detailed suggested PDM changes are shown in Annex 1. Some of the proposed key changes of PDM are:

The average sales as an indicator for output 2, OVI 2-1 was suggested to change to average net-income to streamline with project purpose as suggested in the section of Effectiveness.

The Output 2, OVI 2-2 had been divided into OVI 2-2 and OVI 2-3 to clarify the indicators.

The SHEP Unit is planning the addition of targets of some indicators (Overall goal, project purpose, Output 2 and 3) when the data from the Baseline survey of target areas becomes available.

(3) Project Inputs

a. Efficiency of project inputs by Japan

The number of long-term experts changed from 4 to 3. This was due to the unavailability of long-term expert for information management. Instead, it was replaced by multiple visits of short-term experts and this seems to be functioning well. Currently, two long-term experts are on duty. The vacancy of an expert for project coordination is expected to be filled in early December 2012.

b. Efficiency of project inputs by Kenya

Currently the SHEP Unit has 12 staff assigned from MoA and HCDA. As the Project expands to more numbers of provinces and districts to support, further additional staff may be required.

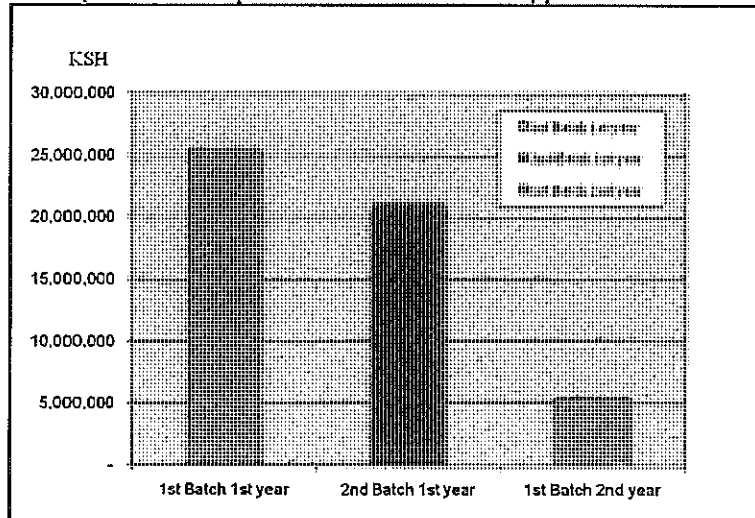
The Project is implemented very efficiently as the numbers of project staff (both Japanese experts and Kenyan counter parts) are less compared with the original plan. However, there is a concern in the SHEP Unit for the lack of resources (i.e. time, man power) to spend for the monitoring and follow-up activities of districts in 1st and 2nd Batches as the SHEP Unit must concentrate resources for the project implementations in new provinces. Although the districts in 1st and 2nd Batches that will soon be implementing the SHEP Approach in their 2nd or 3rd year with their own resources, still the follow-up by the SHEP Unit is important. This is particularly important when those districts experience the troubles during the implementations.

c. Efficiency of project cost

As the project implementation progresses, the substantial cost reduction was observed. The following Graph 1 shows the total expenditures for the SHEP Approach activities.

21

Graph 1. Total Expenditure for the SHEP Approach Activities



(Source: the SHEP Unit)

The activities expenditures were reduced in the implementation of 2nd year. The graph also indicates that the substantial reduction of activity cost of the 1st Batch 2nd year, almost one-fifth of the cost of the 1st year's cost. In the 1st Batch 2nd year, each implementing district acquires the budget from MoA and implements activities of the SHEP Approach independently. The lower expenditure of activities in the 1st Batch 2nd year is due to the reduction of costs for traveling of the SHEP Unit staff from Nairobi as the trainings are conducted by the officers in the district.

The following table indicates the numbers of farmers, officers and stakeholders trained in the project 1st year.

Table 17. The Numbers of Trained Officers, Farmers and Stakeholders During the 1st Batch 1st Year's Activities in Central and Rift Valley Provinces

	Farmers	Officers	Stakeholders*
1 st Batch (Central & Rift Valley)	2683 (Male:1395 Female:1288)	289	376

*Stakeholder section indicates the numbers of stakeholders participated in the FABLIST Forum.

(Source: the SHEP Unit)

The average cost for the each training of farmers and officers was 7,198 Kenya Shilling. It is expected that the training cost in the district with the 2nd year implementation will be reduced substantially.

d. Efficiency by cooperation/coordination with other JICA/donor projects

Coordination with other JICA projects, Sustainable Smallholder Irrigation Development and Management in Semi-Arid Lands project (SIDEMAN SAL) and Rice-based and Market-oriented Agriculture Promotion Project (Rice MAPP) are in process. The staff from both projects attended "the Organizer's Training for the Basic SHEP Approach" of the SHEP UP.

3-4. Impact (Prospects)

The impact is potentially high with the following reasons:

84

(1) Likelihood of Achieving for Overall Goal

As indicated, the overall goal is measured on the development effect expected as a result of the achievement of the project purpose in about 3-5 years after the Project ends. At this Mid-term Review, achievement of overall goal cannot be measured. However, **there is high potential for achieving overall goal** judging from the following two reasons:

- Current progress in project outputs, particularly the results of Output 2-1 shows the increase of average net-income of farmers in two provinces;
- There is clear causality between overall goal and project purpose which indicates if the Project purpose is achieved, it is likely that the overall goal will be achieved.

(2) Causality between Overall Goal and Project Purpose

There is a logical linkage between overall goal and project purpose described in PDM once the change of indicator of project purpose to be streamlined with the indicator of overall goal.

(3) Ripple Effects

In addition to achieving project purpose, the following positive impacts are observed;

- Spread of rural/farm road maintenance using “*Do-nou*” Technology: In Central and Rift Valley provinces, 1,342.9 m of rural/farm road has been repaired by using “*Do-nou*” Technology. The improvement of road condition had given positive impact not only to the Model Farmer Groups but also to other community members who were also benefited from the improved road condition. Several interviewees pointed out that Ministry of Road, local administration or local politicians took up the road repairing by using “*Do-nou*” Technologies.
- Trainings on Gender Awareness and Family Budgeting enhanced cooperative working and family relationships among couples. Often heavy burden of farm works were put on the shoulder of wives or female family members while the control of finance and decision making were rest on the husbands or male family members. The gender training brought the awareness of gender issues for both men and women and enhanced cooperative relationships often resulting in the increase rate of horticultural production and/or the increase of income.
- Good farming practice was spread to non-target group farmers. The non-member farmers who observed positive changes in the lives of SHEP UP Model Farmer Group members are learning from the members or FEOs/GFs thus improving their farm production.
- Additionally, during 5 years of the project implementation term, the total number of the trainees who participate in the trainings for more than 1 week would be 2,840 officers out of 5,100 officers in MoA, and 30 officers out of 55 officers in HCDA. Through those officials, the SHEP Approach is expected to be introduced in MoA and HCDA, and implemented at the local level.

(4) Other JICA/Donor Projects

SHoMaP (Smallholder Horticultural Marketing Program) funded by IFAD intends to invest in spot improvement of rural access and development of market facilities. Once project is completed, Model Farmer Groups may benefit from the improvement of infrastructures brought by the SHoMaP.

3-5. Sustainability (Prospects)

Sustainability is high except some challenges indicated below:

The Ministry of Agriculture already established the SHEP Unit as a unit in its Horticultural Division: ensuring the continuation of the SHEP Approach after the Project completion. This makes strong case for

the sustainability of the SHEP Approach after the completion of the Project.

During field interviews, there was strong indication for the continuation of the SHEP Approach by the officers and farmers after JICA assistance ends in 2015.

Some aspects concerned with sustainability of the SHEP Approach are followings:

(1) Policy/Legislative Aspects

Agriculture is one of the key sectors for the economic growth described in Kenya's Vision 2030. The Project addresses the key interventions of Kenya's smallholder horticulture development described in Agricultural Development Strategy for 2010-2020: improving agribusiness and market access; improving land use and crop development; strengthening research, extension and training. The SHEP Approach addresses those key interventions.

(2) Institutional Aspects

According to the interview with the JICA experts, the capacity of the SHEP Unit staff had tremendously increased since the inception of the Project. At the beginning of the Project, ex-counterparts from the previous SHEP were deployed for initial 3 months. During this period, the SHEP Unit staff conducted the Project activities with ex-counterparts; this learning by doing method was so effective that soon the SHEP Unit staff could conduct the Project activities themselves without the assistance of ex-counterparts.

In response to the questionnaires, 60% of district officers responded that they feel that they have enough capacity to continue the SHEP Approach activities without the assistance from the SHEP Unit. It should also be noted that the Project is designed to increase the capacity of districts as they implement the Project for the second year by putting into practice of what had learnt in the first year. All twenty districts from the 1st Batch are implementing the SHEP Approach activities in the 2nd year. Still there is need for monitoring and follow-up of the implementing districts in the 2nd year to ensure the proper transferring the SHEP Approach in those districts.

(3) Financial Aspects

As indicated in Output 3, it seems that the districts officers strengthen the capacity of management to implement the Project including financial management. Therefore, they could conduct the Project for the 2nd year's implementation with the limited budget. They revised the plan of activities in accordance with their allocated budget, and carried out the plan. In those districts with the reduced budget had to prioritize the projects activities. This often resulting in the elimination of monitoring and follow up of the 1st year's Model Farmer Groups as the districts need to focus on the new farmer groups. In that case, the SHEP Unit supports the expenses for those activities, so that the Model Farmer Groups could get the services to keep their knowledge and skills. Considering the continuous activities of the SHEP Approach, MoA needs to shift the emphasis on budget allocations toward the Project.

Kenya's administrative system is currently in transition from provincial system to county system. This transition is expected to influence the substantial changes in the operation of MoA. The new country system is expected to emerge in middle of 2013. Particular concern dealing with the new system is the uncertainty of source of budget for the project implementation at district levels. Currently, all budgets for the Project are sourced from the MoA headquarters. Whether the budget for the districts will be sourced from MoA or from the county government is uncertain at this point. If the latter case, the SHEP Unit is prepared to conduct the sensitization workshops for the county agricultural officers about the SHEP UP to obtain their supports and understandings at earlier stage.

PK

(4) Technological Aspects

The results of Output 2 indicate that there is high percentage of adoption of horticultural production techniques by the first year's Model Farmer Groups in Central and Rift Valley provinces. The results of interview and questionnaires also indicate the positive responses about the technological transfer. In general, there is high level of transfer of technology observed and in this sense; the sustainability of project is promising. The analysis on the results of techniques adoption rate conducted by the SHEP Unit indicates the high illiteracy rate among the Model Farmer Group members hampers the speed of technological adoption of the group.

(5) Ownership Aspects

The introduction of the Proposal System for the selection of implementing districts is very effective to increase the ownership of Province. This was also evident from the results of interview and questionnaire responses from districts officers that indicating high motivation for the continuation of the SHEP Approach even after the completion of JICA assistance.

This system was introduced from the lessons of previous SHEP where provincial office was not involved actively in previous project. In SHEP UP, the provincial office is responsible for the selection of implementing districts. This enhanced the involvement and ownership of project at Provincial level.

To increase the ownership of project at the Ministerial level, all the directors in the MoA are invited to attend PSC where the meeting is chaired by the Permanent Secretary of MoA or Managing Director of HCDA. In addition, Director of Crops Management, Deputy Director of Horticulture Division and General Manager of Technical Advisory Services of HCDA are closely involved in the operation of the SHEP Unit. The high involvement of directors from the MoA and HCDA helped to secure the ownership of project.

Additionally, during five years for the project term, the total number of the trainees who take the trainings for more than one week would be 2,840 officers out of 5,100 officers in MoA, and 30 officers out of 55 officers in HCDA. Thorough those officials, the awareness of the need of ownership is expected to be fostered in MoA and HCDA.

(6) Socio-economical, Gender, and Environmental Consideration

Gender Awareness and Family Budgeting training is a key training of the SHEP Approach. The training brought positive results: bringing the awareness of gender aspects among family and for agricultural production. As the Project moves to the provinces with higher Muslim population, the SHEP Unit may need to pay extra consideration for the introduction of gender awareness training in those areas.

9X

4. EVALUATION CONCLUSIONS

The conclusion of the evaluation is summarized as follows:

Table 18. Achievement of Five Evaluation Criteria

Evaluation Criteria	Achievement
Relevance	Relevance is high
Effectiveness (prospects)	Effectiveness is moderately high.
Efficiency	Efficiency is high.
Impact (prospects)	Impact is potentially high
Sustainability (prospects)	Sustainability is high with some challenges

(Source: the Review Team)

In conclusion of the Mid-term Review, the Project is making a good progress for the achievement of project purpose of establishing effective support system for horticulture smallholders nationwide. The capacity of the SHEP Unit and the field officers were built through rigorous trainings and this is reflecting in high rate of achievement by the farmer groups to adapt technologies. The average net-income of per farmer had increased in 12 districts: making good progress for achieving income targets. The motivation of officers and farmers to continue the SHEP Approach is high as well as the ownership of project by the MoA. Some of the notable challenges are: sustainability in finance; resources for monitoring and follow up; external factors such as weather, change of government systems and social disturbance.

III RECOMMENDATIONS

The recommendations to be considered for the remaining project periods are as follows.

1. Project Implementation

For the implementation of project, the Team recommends the followings”

The SHEP Unit to establish the milestone for the drafting process of the SHEP Approach guideline indicated in Output 1.

Follow-up with the actions taking or will be taken by the SHEP Unit mentioned in the discussion on the results section of Output 2.

2. Project Budget

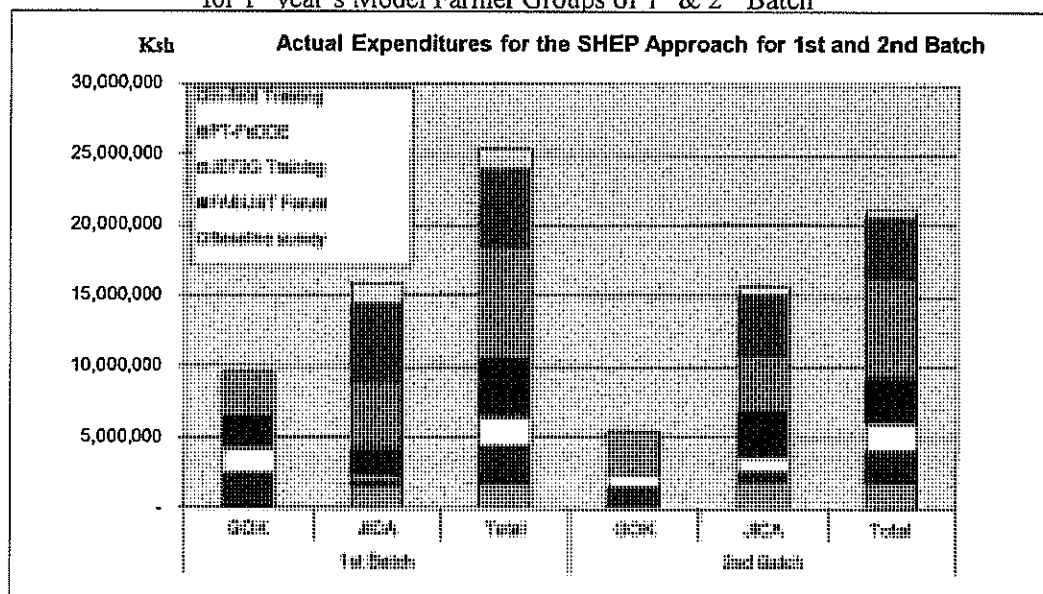
Considering the effective and sustainable implementation of the Project, the appropriate budget planning and implementation are required. As confirmed in “3-3. Efficiency”, the total expenditures for the SHEP Approach activities were reduced between 1st Batch and 2nd Batch, and also between 1st Year and 2nd Year. It is because of the reduction of management cost for the training officers in the 2nd Batch. It is expected that the SHEP Unit will continuously review their activities and consider the appropriate expenditure for the activities.

Additionally, GoK and JICA need to consider the proportion of apportionment of expenses. The Graph 2 indicates the actual expenditures provided by both parties in the 1st Batch and 2nd Batch. GoK provided about one third of total expenditure for the 1st year’s activities in the 1st Batch and 2nd Batch, and should also cover the whole expenditures for the 2nd year’s activities of each batch. Moreover, after the completion of this project, GoK should take over the project activities. Therefore, it is recommended that

94

the proportion of apportionment of expenses by GoK be gradually increased towards the end of project.

Graph 2. Actual Expenditure for the SHEP Approach Activities for 1st year's Model Farmer Groups of 1st & 2nd Batch



(Source: the SHEP Unit)

3. Monitoring and Follow-up

As the number of implementing provinces increases, the number of districts that the SHEP Unit handles will increase: each year 20 more districts are expected to implement the Projects. Not only the number of districts, but also the distance from Nairobi to those districts will be longer (except Nairobi Province). This means an increase in cost and staff time to get to those districts. This will put a heavy burden on the current SHEP Unit staff. There is also concern over inadequate time and resources for the monitoring and follow-up of districts with the 2nd year or 3rd year implementation. The balance between the implementation of the SHEP Approach in new districts and the monitoring and follow-up of previous districts must be found.

4. Sustainability and Expansion of the SHEP Approach

During field interviews, the farmers and officers requested for organized farmers' exchange visits to share experiences and success stories among Model Farmer Groups within or outside of implementing districts. The farmers' exchange visits is not only effective for the Model Farmer Groups to have opportunities to learn each other, it will also provide opportunities for the SHEP Unit to monitor the progress or concerned issues for the continuation of the SHEP Approach collectively. Therefore, the Team recommends this kind of visits to be incorporated into the Project.

5. Cooperation with Other Donor Projects

The evaluation results indicate the Project is making good progress for achieving project purpose of establishing the effective support system for horticulture smallholder nationwide. However, the Team felt the linkages between SHEP UP and other donor projects can be enhanced to bring more ripple effects to the horticulture development of Kenya. This could be an organized forum by MoA to share and

8X

exchange information about agricultural projects by different donors, where the SHEP Approach can be introduced to other donor funded projects as well as the approaches taken by other donors can be incorporated into the SHEP Approach.

6. Proposed Changes of PDM/PO

To clarify and to streamline the overall goal, project purpose, outputs, inputs and activities, amendment and adjustment of current PDM Version 3 are proposed. Detailed proposed changes in PDM and PO are provided in Annex 1 and 2.

Project Design Matrix (PDM) for Smallholder Horticulture Empowerment and Promotion Unit Project

Ver. 1, January, 2009

Project Title: Smallholder Horticulture Empowerment and Promotion Unit Project (SHEP-UP)

Duration: 5 years from the date of the dispatch of Japanese Experts (March 3, 2010 – March 3, 2014) Implementing Agency: MoA in association with HCDA

Beneficiaries: Smallholder horticulture farmers in implementing districts

Project Area: Nationwide

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
<p>Overall Goal Livelihood of horticulture smallholders in implementing districts is improved</p>	<ul style="list-style-type: none"> - Horticulture smallholders increase their income from horticulture sales per household by ---% from first year of the Project. - 	<ul style="list-style-type: none"> • District Development Profiles • Base-line survey reports • Project Evaluation Reports 	<ul style="list-style-type: none"> • Kenyan Government policies regarding the smallholder horticulture does not change
<p>Project Purpose Effective support system for horticulture smallholders nationwide is established.</p>	<ul style="list-style-type: none"> - By the end of the project period, individual members (men and women) of the smallholder horticulture farmer groups and the groups in the implementing districts using SHEP Approach increase their sales by average ---%. - By the end of the project period, ---% of implementing districts continue to implement SHEP Approach after supported by the Unit. 	<ul style="list-style-type: none"> • Base-line Survey Reports • Project Evaluation Reports 	<ul style="list-style-type: none"> • There is no severe drought. • Any policy review enhance to attain overall goal • Market demand of horticultural produce and products do not shrink; • Market prices of horticultural crops don't slump. • There is no serious social disturbance
<p>Outputs</p> <p>1 The SHEP Approach (*1) is adopted by the Unit and ready for implementation.</p> <p>2 Implementing farmer groups' income from horticulture produce is improved.</p> <p>3. SHEP Approach is properly replicated by implementing districts based on the output 2.</p> <p>4. Information Management System for SHEP Approach is established.</p>	<p>1-1. 80 % of Provincial and District level government extension staff and stakeholders understand the SHEP Approach properly</p> <p>1-2. By the end of the project period, the guideline of SHEP Approach is completed.</p> <p>2-1. Within two years after adopting SHEP Approach, implementing individual members (men and women) of the smallholder horticulture farmer groups and the groups supported by the Unit and district increase their sales by average ---%</p> <p>2-2. Within two years after the technical training, more than ---% of individual members (men and women) of implementing smallholder horticulture farmer groups increase rate of applying the technologies by ---%.</p> <p>3-1. 100% of implementing districts incorporates SHEP Approach in their annual plan/budget for the following year.</p> <p>3-2. ---% of implementing districts which incorporated SHEP Approach in their annual plan/budget for following year implements the Approach in the year.</p> <p>3-3. Within two years using SHEP Approach, individual members (men and women) of the smallholder horticulture farmer groups and the groups supported by the district's own resource in implementing district increase their sales by average ---%</p> <p>4-1. By the mid-term review of the project, the first draft of guideline for information management including monitoring and evaluation strategy for the Unit is ready</p> <p>4-2. All identified horticulture extension materials are catalogued.</p> <p>4-3. ---% of farmer groups (district, extension staff) is satisfied by information provided by the Unit.</p>	<ul style="list-style-type: none"> • Base-line Survey Reports • Project Evaluation Reports • Performance Contract of DAOs 	<ul style="list-style-type: none"> • Market demand of horticultural produce and products do not shrink; • Market prices of horticultural crops don't slump; • There is no severe drought and or outbreak of pests and diseases; • Kenyan Government Policy continue to support oad maintenance and network development. • There is no serious social disturbance

(*1) SHEP stands for Smallholder Horticulture Empowerment and Promotion

SHEP Approach includes i) effective methods and techniques to promote smallholder horticulture, ii) a series of activities to disseminate those methods and techniques, iii) monitoring and evaluation system from farmers to the Unit in the Project

<p>Activities</p> <p>1-1. Formulate implementation strategy of SHEP Approach 1-2. Design SHEP Approach for implementation 1-2. Design criteria of selection of implementing districts 1-3. Train and sensitize Unit staff on SHEP Approach 1-4. Formulate SHEP Approach Guideline</p> <p>2-1. Sensitize the Province and District stakeholders on SHEP approach 2-2. Select through Provincial Agricultural Offices the implementing districts based on the criteria which is identified the activity 1-2 2-3. Conduct training programme(s) for stakeholders in the implementing district(s) 2-4. Support implementing district(s) to conduct a series of activities as trained through the above programme(s) (activities 2-3).(*2) 2-4-1. Conduct baseline survey in the implementing district(s) 2-4-2. Hold FABLIST forum 2-4-3. Conduct the JEF2G training programme 2-4-4. Conduct the FT-Fadde training programme 2-4-5. Conduct field training programmes for extension officers in the implementing district(s) 2-5. Monitor the activities, outputs and impacts of 2-4.</p> <p>3-1. Support implementing district(s) to incorporate in their work plan/budget the SHEP approach as the items 2-4-1 to 2-4-5. 3-2. support implementing district(s) to implement SHEP approach according to work plan/budget of the district(s)</p> <p>4-1. Review and analyze the existing challenges well as good practices regarding information management and sharing in each level 4-2. Draft and propose solution for better information management and sharing in each level 4-3. Based on the result of the item 4-2, introduce new information management and sharing system in the Unit 4-4. Based on the result of the item 4-2, introduce better information flow from the field level to the Unit 4-5. Draft and propose application of market information to the improved information management system 4-6. Draft and propose application of introducing effective methods and techniques to the improved information management system</p>	<p>Input</p> <p>From Japan Side</p> <ul style="list-style-type: none"> · Assignment of Japanese Experts <Long term basis> <ul style="list-style-type: none"> · Chief Adviser / Horticulture Policy · Horticulture Production and Extension · Monitoring and Evaluation / Information management · Project Coordinator <Intermittent basis> <ul style="list-style-type: none"> · Farmer Group Strengthening and Management · Marketing · Appropriate Technology on Rural Infrastructure · Agro-possessing · Other short-term experts may be dispatched when necessity arises · Project Activity Cost · Provision of complementally equipment necessary for the Project <p>From Kenya side</p> <ul style="list-style-type: none"> · Assignment of counterparts <ul style="list-style-type: none"> · Project Director · Project Manager · Unit Leader · Administration staff · Monitoring and Evaluation/Information Management staff · Subject Matter Specialists (Horticulture Production, Farmers Group strengthening, Gender Mainstreaming, Rural Infrastructure, Agro-processing) · Arrangement of Office Space and equipment for the Project · Operational cost for the Unit 	<ul style="list-style-type: none"> · No serious natural disaster such as severe drought occurs. · Market demand of horticultural produce and products do not shrink; · Market prices of horticultural crops don't slump. · There is no serious social disturbance <p>Pre-Conditions</p> <ul style="list-style-type: none"> · Government sustains the budgetary allocation for the Unit
---	--	--

(*2): throughout these activities, following topics are covered, empowerment of farmer groups, horticulture production techniques, rural infrastructure, and agro-processing

94

Project Design Matrix (PDM) for Smallholder Horticulture Empowerment and Promotion Unit Project

Ver. 2, January, 2012

Project Title: Smallholder Horticulture Empowerment and Promotion Unit Project (SHEP UP)

Duration: 5 years from the date of the dispatch of Japanese Experts (March 3, 2010 – March 3, 2015) Implementing Agency: MoA in association with HCDA

Beneficiaries: Smallholder horticulture farmers in implementing districts

Project Area: Nationwide

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
<p>Overall Goal Livelihood of horticulture smallholders in implementing districts is improved.</p>	<ul style="list-style-type: none"> - Horticulture smallholders increase their income from horticulture sales per household by ---% from first year of the Project. 	<ul style="list-style-type: none"> • District Development Profiles • Base-line survey reports • Project Evaluation Reports 	<ul style="list-style-type: none"> • Kenyan Government policies regarding the smallholder horticulture does not change.
<p>Project Purpose Effective support system for horticulture smallholders nationwide is established.</p>	<ul style="list-style-type: none"> - By the end of the project period, individual members (men and women) of the smallholder horticulture farmer groups and the groups in the implementing districts using the SHEP Approach increase their sales by average ---%. - By the end of the project period, 70 % of implementing districts continue to implement the SHEP Approach after supported by the Project. 	<ul style="list-style-type: none"> • Base-line Survey Reports • Project Evaluation Reports 	<ul style="list-style-type: none"> • There is no severe drought. • Any policy review enhances to attain overall goal. • Market demand of horticultural produce and products do not shrink • Market prices of horticultural crops don't slump. • There is no serious social disturbance.
<p>Outputs</p> <ol style="list-style-type: none"> 1. The SHEP Approach (*1) is adopted by the Unit and ready for implementation. 2. Implementing farmer groups' income from horticulture produce is improved. 3. The SHEP Approach is properly replicated by implementing districts based on the Output 2. 4. Information Management System for the SHEP Approach is established. 	<ol style="list-style-type: none"> 1-1. 80 % of Provincial and District level government extension staff and stakeholders understand the SHEP Approach properly. 1-2. By the end of the project period, the guideline of the SHEP Approach is completed. 2-1. Within two years after adopting the SHEP Approach, implementing individual members (men and women) of the smallholder horticulture farmer groups and the groups supported by the Unit and district increase their sales by average from 18.0 % to 48.2 % in Central Province and from 17.3 % to 52.7 % in Rift Valley Province (*2). 2-2. Within two years after the technical training, more than ---% of individual members (men and women) of implementing smallholder horticulture farmer groups increase rate of applying the technologies by ---%. 3-1. 100 % of implementing districts incorporates the SHEP Approach in their annual plan/budget for the following year. 3-2. 100 % of implementing districts which incorporated the SHEP Approach in their annual plan/budget for following year implements the Approach in the year. 3-3. Within two years using the SHEP Approach, individual members (men and women) of the smallholder horticulture farmer groups and the groups supported by the district's own resource in implementing district increase their sales by average ---%. 4-1. By the mid-term review of the project, the first draft of guideline for information management including monitoring and evaluation strategy for the Unit is ready. 4-2. All identified horticulture extension materials are catalogued. 4-3. 60 % of farmer groups (district, extension staff) is satisfied by information provided by the Unit. 	<ul style="list-style-type: none"> • Base-line Survey Reports • Project Evaluation Reports • Performance Contract of DAOs 	<ul style="list-style-type: none"> • Market demand of horticultural produce and products do not shrink. • Market prices of horticultural crops don't slump. • There is no severe drought and or outbreak of pests and diseases. • Kenyan Government Policy continues to support road maintenance and network development. • There is no serious social disturbance

21

<p>Activities</p> <p>1-1. Formulate implementation strategy of the SHEP Approach. 1-2. Design the SHEP Approach for implementation. 1-3. Design criteria of selection of implementing districts. 1-4. Train and sensitize Unit staff on the SHEP Approach. 1-5. Formulate the SHEP Approach Guideline.</p> <p>2-1. Sensitize the Province and District stakeholders on the SHEP Approach. 2-2. Select through Provincial Agricultural Offices the implementing districts based on the criteria which is identified the Activity 1-3. 2-3. Conduct training programme(s) for stakeholders in the implementing district(s). 2-4. Support implementing district(s) to conduct a series of activities as trained through the above programme(s) (Activities 2-3) (*3). 2-4-1. Conduct Baseline Survey in the implementing district(s). 2-4-2. Hold FABLIS Forum (*4). 2-4-3. Conduct the JEF2G Training programme (*5). 2-4-4. Conduct the FT-FaDDE training programme (*6). 2-4-5. Conduct In-field Training programmes for extension officers in the implementing district(s). 2-5. Monitor the activities, outputs and impacts of the Activity 2-4.</p> <p>3-1. Support implementing district(s) to incorporate in their work plan/budget the SHEP Approach as the Activities 2-4-1 to 2-4-5. 3-2. Support implementing district(s) to implement the SHEP Approach according to work plan/budget of the district(s).</p> <p>4-1. Review and analyze the existing challenges well as good practices regarding information management and sharing in each level. 4-2. Draft and propose solution for better information management and sharing in each level. 4-3. Based on the result of the Activity 4-2, introduce new information management and sharing system in the Unit. 4-4. Based on the result of the Activity 4-2, introduce better information flow from the field level to the Unit. 4-5. Draft and propose application of market information to the improved information management system. 4-6. Draft and propose application of introducing effective methods and techniques to the improved information management system.</p>	<p>Input</p> <p>From Japan Side</p> <ul style="list-style-type: none"> · Assignment of Japanese Experts <p><Long term basis></p> <ul style="list-style-type: none"> · Chief Adviser / Horticulture Policy · Horticulture Production and Extension · Monitoring and Evaluation / Information management · Project Coordinator <p><Intermittent basis></p> <ul style="list-style-type: none"> · Farmer Group Strengthening and Management · Marketing · Appropriate Technology on Rural Infrastructure · Agro-possessing · Other short-term experts may be dispatched when necessity arises <ul style="list-style-type: none"> · Project Activity Cost · Provision of complementally equipment necessary for the Project <p>From Kenya Side</p> <ul style="list-style-type: none"> · Assignment of counterparts · Project Director · Project Manager · Unit Leader · Administration staff · Monitoring and Evaluation/Information Management staff · Subject Matter Specialists (Horticulture Production, Farmers Group strengthening, Gender Mainstreaming, Rural Infrastructure, Agro-processing) · Arrangement of Office Space and equipment for the Project · Operational cost for the Unit 	<ul style="list-style-type: none"> · No serious natural disaster such as severe drought occurs. · Market demand of horticultural produce and products do not shrink. · Market prices of horticultural crops don't slump. · There is no serious social disturbance. <p>Pre-Conditions</p> <ul style="list-style-type: none"> · Government sustains the budgetary allocation for the Unit.
---	---	--

(*1) SHEP stands for Smallholder Horticulture Empowerment and Promotion. The SHEP Approach includes i) effective methods and techniques to promote smallholder horticulture, ii) a series of activities to disseminate those methods and techniques, iii) monitoring and evaluation system from farmers to the Unit in the Project.

(*2) The indicator is a range since each SHEP UP Implementing districts has a specific target as follows. Central Province: Lari 25.7 %; Nyandarua Central 47.7 %; Kiari East 38.9 %; Kandara 18.0 %; Kiari West 22.0 %; Kikuyu 19.5 %; Kirinyaga West 48.1 %; Limuru 36.7 %; Nyandarua West 37.4 % and Murang'a South 48.2 %. Rift Valley Province: Nandi East 24.0 %; Nakuru North 22.4 %; Wareng 17.3 %; Nandi South 23.1 %; Kajiado North 24.0 %; Laikipia West 52.7 %; Marakwet West 35.3 %; Transmara West 44.9 %; Sotik 52.1 % and Narok South 21.2 %..

(*3): Throughout these Activities, following topics are covered; empowerment of farmer groups, horticulture production techniques, rural infrastructure, and agro-processing.

(*4): FABLIS Forum stands for Farm Business Linkage Stakeholder Forum.

(*5): JEF2G stands for Joint Extension Staff and Farmers Dual (2) Gender Training.

(*6): FT-FaDDE stands for Facilitators' Training for Farmers' Demand Driven Extension.

9/4

Project Design Matrix (PDM) for Smallholder Horticulture Empowerment and Promotion Unit Project

Project Title: Smallholder Horticulture Empowerment and Promotion Unit Project (SHEP UP)

Duration: 5 years from the date of the dispatch of Japanese Experts (March 3, 2010 – March 3, 2015) Implementing Agency: MoA in association with HCDA

Beneficiaries: Smallholder horticulture farmers in implementing districts

Project Area: Nationwide

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
<p>Overall Goal Livelihood of horticulture smallholders in implementing districts is improved.</p>	<ul style="list-style-type: none"> - Horticulture smallholders increase their income from horticulture sales per household by ---% from first year of the Project. 	<ul style="list-style-type: none"> • District Development Profiles • Base-line survey reports • Project Evaluation Reports 	<ul style="list-style-type: none"> • Kenyan Government policies regarding the smallholder horticulture does not change.
<p>Project Purpose Effective support system for horticulture smallholders nationwide is established.</p>	<ul style="list-style-type: none"> - By the end of the project period, individual members (men and women) of the smallholder horticulture farmer groups and the groups in the implementing districts using the SHEP Approach increase their sales by average ---%. - By the end of the project period, 70 % of implementing districts continue to implement the SHEP Approach after supported by the Project. 	<ul style="list-style-type: none"> • Base-line Survey Reports • Project Evaluation Reports 	<ul style="list-style-type: none"> • There is no severe drought. • Any policy review enhances to attain overall goal. • Market demand of horticultural produce and products do not shrink • Market prices of horticultural crops don't slump. • There is no serious social disturbance.
<p>Outputs</p> <p>1. The SHEP Approach (*1) is adopted by the Unit and ready for implementation.</p> <p>2. Implementing farmer groups' income from horticulture produce is improved.</p> <p>3. The SHEP Approach is properly replicated by implementing districts based on the Output 2.</p> <p>4. Information Management System for the SHEP Approach is established.</p>	<p>1-1. 80 % of Provincial and District level government extension staff and stakeholders understand the SHEP Approach properly.</p> <p>1-2. By the end of the project period, the guideline of the SHEP Approach is completed.</p> <p>2-1. Within two years after adopting the SHEP Approach, implementing individual members (men and women) of the smallholder horticulture farmer groups and the groups supported by the Unit and district increase their sales by average from 18.0 % to 48.2 % in Central Province, from 17.3 % to 52.7 % in Rift Valley Province, from 13.8 % to 55.3 % in Nyanza Province and from 15.5 % to 53.6 % in Western Province (*2).</p> <p>2-2. Within two years after the technical training, more than 70 % of individual members (men and women) of implementing smallholder horticulture farmer groups increase rate of applying the technologies by average from 16.0 % to 68.6 % in Central Province, from 14.2 % to 43.2 % in Rift Valley Province, from 9.2 % to 67.7 % in Nyanza Province and from 33.3 % to 84.0 % in Western Province (*3).</p> <p>3-1. 100 % of implementing districts incorporates the SHEP Approach in their annual plan/budget for the following year.</p> <p>3-2. 100 % of implementing districts which incorporated the SHEP Approach in their annual plan/budget for following year implements the Approach in the year.</p> <p>3-3. Within two years using the SHEP Approach, individual members (men and women) of the smallholder horticulture farmer groups and the groups supported by the district's own resource in implementing district increase their sales by average ---%.</p> <p>4-1. By the mid-term review of the project, the first draft of guideline for information management including monitoring and evaluation strategy for the Unit is ready.</p> <p>4-2. All identified horticulture extension materials are catalogued.</p> <p>4-3. 60 % of farmer groups (district, extension staff) is satisfied by information provided by the Unit.</p>	<ul style="list-style-type: none"> • Base-line Survey Reports • Project Evaluation Reports • Performance Contract of DAOs 	<ul style="list-style-type: none"> • Market demand of horticultural produce and products do not shrink. • Market prices of horticultural crops don't slump. • There is no severe drought and or outbreak of pests and diseases. • Kenyan Government Policy continues to support road maintenance and network development. • There is no serious social disturbance

Annex 1-3 PDM Ver.3

Activities	Input	
<p>1-1. Formulate implementation strategy of the SHEP Approach.</p> <p>1-2. Design the SHEP Approach for implementation.</p> <p>1-3. Design criteria of selection of implementing districts.</p> <p>1-4. Train and sensitize Unit staff on the SHEP Approach.</p> <p>1-5. Formulate the SHEP Approach Guideline.</p> <p>2-1. Sensitize the Province and District stakeholders on the SHEP Approach.</p> <p>2-2. Select through Provincial Agricultural Offices the implementing districts based on the criteria which is identified the Activity 1-3</p> <p>2-3. Conduct training programme(s) for stakeholders in the implementing district(s).</p> <p>2-4. Support implementing district(s) to conduct a series of activities as trained through the above programme(s) (Activities 2-3) (*4).</p> <p>2-4-1. Conduct Baseline Survey in the implementing district(s).</p> <p>2-4-2. Hold FABLIST Forum (*5).</p> <p>2-4-3. Conduct the JEFZG Training programme (*6).</p> <p>2-4-4. Conduct the FT-FaDDE training programme (*7).</p> <p>2-4-5. Conduct In-field Training programmes for extension officers in the implementing district(s).</p> <p>2-5. Monitor the activities, outputs and impacts of the Activity 2-4.</p> <p>3-1. Support implementing district(s) to incorporate in their work plan/budget the SHEP Approach as the Activities 2-4-1 to 2-4-5.</p> <p>3-2. Support implementing district(s) to implement the SHEP Approach according to work plan/budget of the district(s)</p> <p>4-1. Review and analyze the existing challenges well as good practices regarding information management and sharing in each level.</p> <p>4-2. Draft and propose solution for better information management and sharing in each level.</p> <p>4-3. Based on the result of the Activity 4-2, introduce new information management and sharing system in the Unit.</p> <p>4-4. Based on the result of the Activity 4-2, introduce better information flow from the field level to the Unit.</p> <p>4-5. Draft and propose application of market information to the improved information management system.</p> <p>4-6. Draft and propose application of introducing effective methods and techniques to the improved information management system.</p>	<p>From Japan Side</p> <ul style="list-style-type: none"> • Assignment of Japanese Experts • Long term basis> • Chief Adviser / Horticulture Policy • Horticulture Production and Extension • Monitoring and Evaluation / Information management • Project Coordinator • Intermittent basis> • Farmer Group Strengthening and Management • Marketing • Appropriate Technology on Rural Infrastructure • Agro-potting • Other short-term experts may be dispatched when necessity arises • Project Activity Cost • Provision of complementally equipment necessary for the Project <p>From Kenya Side</p> <ul style="list-style-type: none"> • Assignment of counterparts • Project Director • Project Manager • Unit Leader • Administration staff • Monitoring and Evaluation/Information Management staff • Subject Matter Specialists (Horticulture Production, Farmers Group strengthening, Gender Mainstreaming, Rural Infrastructure, Agro-processing) • Arrangement of Office Space and equipment for the Project • Operational cost for the Unit 	<ul style="list-style-type: none"> • No serious natural disaster such as severe drought occurs. • Market demand of horticultural produce and products do not shrink. • Market prices of horticultural crops don't slump. • There is no serious social disturbance. <p>Pre-Conditions</p> <ul style="list-style-type: none"> • Government sustains the budgetary allocation for the Unit.

(*1) SHEP stands for Smallholder Horticulture Empowerment and Promotion. The SHEP Approach includes 1) effective methods and techniques to promote smallholder horticulture, 2) a series of activities to disseminate those methods and techniques, 3) monitoring and evaluation system from farmers to the Unit in the Project.

(*2) The indicator is a range since each SHEP UP implementing districts has a specific target as follows. Central Province: Lari 25.7 %; Nyandarua Central 47.7 %; Keru East 38.9 %; Kandara 18.0 %; Kiota West 22.0 %; Kikuyu 19.5 %; Kirinyaga West 48.1 %; Umuu 36.7 %; Nyandarua West 37.4 % and Murang'a South 48.2 %. Rift Valley Province: Nandi East 24.0 %; Nakuru North 22.4 %; Waring 17.3 %; Nandi South 23.1 %; Kajado North 24.0 %; Laikipia West 52.7 %; Marakwet West 35.3 %; Transmara West 44.9 %; Boko 52.1 % and Narok South 21.2 %. Nyanza Province: Siaya 51.5 %; Nyanza 24.3 %; Danda 47.7 %; Masaba South 27.0 %; Rachuonyo South 25.4 %; Gem 25.8 %; Gucha 42.0 %; Suba 55.3 %; Kisumu East 42.2 % and Ugenya 33.8 %. Western Province: Kisumu 17.6 %. Kakamega North 43.7 %; Mt. Elgon 42.9 %; Sabatia 20.1 %; Kakamega Central 15.8 %; Hamisi 15.6 %; Maletu 19.0 %; Cheptais 53.6 %; Bungoma East 52.7 % and Teso North 15.5 %.

(*3) The indicator is a range since each SHEP UP implementing districts has a specific target as follows. Central Province: Lari 44.6 % (M: 43.2 %/F: 48.3%); Nyandarua Central 68.6 % (M: 67.6 %/F: 49.0%); Keru East 42.7 % (M: 38.5 %/F: 47.8%); Kandara 60.3 % (M: 63.1 %/F: 57.6%); Kiota West 37.3 % (M: 37.2 %/F: 37.5%); Kikuyu 19.3 % (M: 18.2 %/F: 20.3%); Kirinyaga West 45.1 % (M: 44.2 %/F: 45.9%); Limuru 45.3 % (M: 42.2 %/F: 47.8%); Nyandarua West 16.0 % (M: 14.0 %/F: 17.2%) and Murang'a South 45.0 % (M: 38.9 %/F: 54.8%). Rift Valley Province: Nandi East 22.0 % (M: 20.8 %/F: 23.3%); Nakuru North 31.4 % (M: 28.5 %/F: 34.2 %); Waring 16.4 % (M: 10.3 %/F: 24.8 %); Nandi South 35.5 % (M: 28.7 %/F: 45.8 %); Kajado North 14.2 % (M: 10.7 %/F: 17.7 %); Laikipia West 37.8 % (M: 36.0 %/F: 40.0 %); Marakwet West 43.2 % (M: 48.8 %/F: 35.9 %); Transmara West 23.3 % (M: 22.5 %/F: 25.0 %); Boko 16.4 % (M: 16.0 %/F: 16.8 %) and Narok South 30.7 % (M: 23.6 %/F: 35.5 %). Nyanza Province: Siaya 64.2 % (M: 51.6 %/F: 73.4 %); Nyamira 56.7 % (M: 51.4 %/F: 62.1 %); Bando 16.8 % (M: 15.4 %/F: 18.2 %); Masaba South 31.2 % (M: 27.7 %/F: 34.1 %); Rachuonyo South 12.1 % (M: 12.4 %/F: 11.6 %); Gem 42.4 % (M: 33.1 %/F: 53.8 %); Gucha 67.7 % (M: 62.6 %/F: 69.5 %); Suba 64.4 % (M: 61.8 %/F: 67.8 %); Kisumu East 8.2 % (M: 10.8 %/F: 8.1 %) and Ugenya 21.8 % (M: 20.2 %/F: 23.1 %). Western Province: Kisumu 33.3 % (M: 33.7 %/F: 33.1 %); Kakamega North 39.6 % (M: 33.9 %/F: 44.8 %); Mt. Elgon 55.5 % (M: 51.3 %/F: 63.6 %); Sabatia 58.7 % (M: 49.1 %/F: 68.8 %); Kakamega Central 46.2 % (M: 37.2 %/F: 58.9 %); Hamisi 84.0 % (M: 46.7 %/F: 113.6 %); Maletu 39.3 % (M: 37.2 %/F: 40.5 %); Cheptais 58.1 % (M: 47.5 %/F: 64.5 %); Bungoma East 59.8 % (M: 54.9 %/F: 64.1 %) and Teso North 40.6 % (M: 35.0 %/F: 45.9 %).

(*4) Throughout these Activities, following topics are covered: empowerment of farmer groups, horticulture production techniques, rural infrastructure, and agro-processing.

(*5) FABLIST Forum stands for Farm Business Linkage Stakeholder Forum.

(*6) JEFZG stands for Joint Extension Staff and Farmers Dual (2) Gender Training. (*7) FT-FaDDE stands for Facilitators' Training for Farmers' Demand Driven Extension.

NR

Project Design Matrix (PDM) for Smallholder Horticulture Empowerment and Promotion Unit Project

Ver. 4, October, 2012

Project Title: Smallholder Horticulture Empowerment and Promotion Unit Project (SHEP UP)

Duration: 5 years from the date of the dispatch of Japanese Experts (March 3, 2010 – March 3, 2015) Implementing Agency: MoA in association with HCDA

Beneficiaries: Smallholder horticulture farmers in implementing districts

Project Area: Nationwide

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
<p>Overall Goal Livelihood of horticulture smallholders in implementing districts is improved.</p>	<ul style="list-style-type: none"> Horticulture smallholders increase their income from horticulture sales per household by —% from first year of the Project. 	<ul style="list-style-type: none"> District Development Profiles Base-line survey reports Project Evaluation Reports 	<ul style="list-style-type: none"> Kenyan Government policies regarding the smallholder horticulture does not change.
<p>Project Purpose Effective support system for horticulture smallholders nationwide is established.</p>	<ul style="list-style-type: none"> By the end of the project period, individual members (men and women) of the smallholder horticulture model farmer groups and the groups in the implementing districts using the SHEP Approach increase their net-income on average from —%. By the end of the project period, 70 % of implementing districts continue to implement the SHEP Approach after supported by the Project. 	<ul style="list-style-type: none"> Base-line Survey Reports Project Evaluation Reports 	<ul style="list-style-type: none"> There is no unfavourable weather and/or outbreak of pests and diseases. Any policy review enhances to attain overall goal. Market demand of horticultural produce and products do not shrink Market prices of horticultural crops don't slump. There is no serious social disturbance.
<p>Outputs</p> <ol style="list-style-type: none"> The SHEP Approach (*1) is adopted by the Unit and ready for implementation. Implementing farmer groups' income from horticulture produce is improved. The SHEP Approach is properly replicated by implementing districts based on the Output 2. Information Management System for the SHEP Approach is established. 	<ol style="list-style-type: none"> 1-1. 80 % of Provincial and District level government extension staff and stakeholders understand the SHEP Approach properly. 1-2. By the end of the project period, the guideline of the SHEP Approach is completed. 2-1. Within two years after technical training of the SHEP Approach, individual members (men and women) of the smallholder horticulture model farmer groups and the groups supported by the Unit and implementing districts increase their net-income on average from 18.0 % to 48.2 % in Central Province, from 17.3 % to 52.7 % in Rift Valley Province, from 13.8 % to 55.3 % in Nyanza Province and from 15.5 % to 53.6 % in Western Province (*2). 2-2. Within two years after technical training of the SHEP Approach, more than 70 % of individual members (men and women) of the smallholder horticulture model farmer groups supported by the Unit and implementing districts achieve adoption of horticultural production techniques above their district targets (*3). 2-3. Within two years after technical training of the SHEP Approach, individual members (men and women) of the smallholder horticulture model farmer groups supported by the Unit and implementing districts increase rate of applying the horticultural production techniques on average from 16.0 % to 68.6 % in Central Province, from 14.2 % to 43.2 % in Rift Valley Province, from 9.2 % to 67.7 % in Nyanza Province and from 33.3 % to 84.0 % in Western Province (*4). 3-1. 100 % of implementing districts incorporates the SHEP Approach in their annual plan/budget for the second year. 3-2. 100 % of implementing districts which incorporated the SHEP Approach in their annual plan/budget for the second year implements the Approach in the year. 3-3. Within two years after technical training of the SHEP Approach, individual members (men and women) of the smallholder horticulture model farmer groups and the groups supported by the implementing districts using their own resources increase their net-income on average from —%. 4-1. By the mid-term review of the project, the first draft of guideline for information management including monitoring and evaluation strategy for the Unit is ready. 4-2. All identified horticulture extension materials are catalogued. 4-3. 60 % of farmer groups (district, extension staff) is satisfied by information provided by the Unit. 	<ul style="list-style-type: none"> Base-line Survey Reports Project Evaluation Reports Performance Contract of DAOs 	<ul style="list-style-type: none"> Market demand of horticultural produce and products do not shrink. Market prices of horticultural crops don't slump. There is no unfavourable weather and/or outbreak of pests and diseases. Kenyan Government Policy continues to support road maintenance and network development. There is no serious social disturbance. Kenya's administrative system remains unchanged.

Activities	Input	
<p>1-1. Formulate implementation strategy of the SHEP Approach.</p> <p>1-2. Design the SHEP Approach for implementation.</p> <p>1-3. Design criteria of selection of implementing districts.</p> <p>1-4. Train and sensitize Unit staff on the SHEP Approach.</p> <p>1-5. Formulate the SHEP Approach Guideline.</p> <p>2-1. Sensitize the Province and District stakeholders on the SHEP Approach.</p> <p>2-2. Select through Provincial Agricultural Offices the implementing districts based on the criteria which is identified the Activity 1-3.</p> <p>2-3. Conduct training programme(s) for stakeholders in the implementing district(s).</p> <p>2-4. Support implementing district(s) to conduct a series of activities as trained through the above programme(s) (Activities 2-3) (*5)</p> <p>2-4-1. Conduct Baseline Survey in the Implementing district(s).</p> <p>2-4-2. Hold FABLST Forum (*6).</p> <p>2-4-3. Conduct the JEF2G Training programme (*7).</p> <p>2-4-4. Conduct the FT-FaDDE training programme (*8).</p> <p>2-4-5. Conduct In-field Training programmes for extension officers in the implementing district(s).</p> <p>2-5. Monitor the activities, outputs and impacts of the Activity 2-4.</p> <p>3-1. Support implementing district(s) to incorporate in their work plan/budget the SHEP Approach as the Activities 2-4-1 to 2-4-5.</p> <p>3-2. Support implementing district(s) to implement the SHEP Approach according to work plan/budget of the district(s).</p> <p>4-1. Review and analyze the existing challenges well as good practices regarding information management and sharing at each level.</p> <p>4-2. Draft and propose solution for better information management and sharing at each level.</p> <p>4-3. Based on the result of the Activity 4-2, introduce new information management and sharing system in the Unit.</p> <p>4-4. Based on the result of the Activity 4-2, introduce better information flow from the field level to the Unit.</p> <p>4-5. Draft and propose application of market information to the improved information management system.</p> <p>4-6. Draft and propose application of introducing effective methods and techniques to the improved information management system.</p>	<p>From Japan Side</p> <ul style="list-style-type: none"> • Assignment of Japanese Experts <Long term basis> <ul style="list-style-type: none"> • Chief Adviser / Horticulture Policy • Horticulture Production and Extension • Monitoring and Evaluation / Information management • Project Coordinator <Intermittent basis> <ul style="list-style-type: none"> • Farmer Group Strengthening and Management • Marketing • Appropriate Technology on Rural Infrastructure • Agro-possessing • Other short-term experts may be dispatched when necessity arises • Project Activity Cost • Provision of complementally equipment necessary for the Project <p>From Kenya Side</p> <ul style="list-style-type: none"> • Assignment of counterparts <ul style="list-style-type: none"> • Project Director • Project Manager • Unit Leader • Administration staff • Monitoring and Evaluation/Information Management staff • Subject Matter Specialists (Horticulture Production, Farmers Group strengthening, Gender Mainstreaming, Rural Infrastructure, Agro-processing) • Arrangement of Office Space and equipment for the Project • Operational cost for the Unit 	<ul style="list-style-type: none"> • No serious natural disaster such as severe drought occurs. • Market demand of horticultural produce and products do not shrink. • Market prices of horticultural crops don't slump. • There is no serious social disturbance. <p>Pre-Conditions</p> <ul style="list-style-type: none"> • Government sustains the budgetary allocation for the Unit.

(*1) SHEP stands for Smallholder Horticulture Empowerment and Promotion. The SHEP Approach includes i) effective methods and techniques to promote smallholder horticulture, ii) a series of activities to disseminate those methods and techniques, iii) monitoring and evaluation system from farmers to the Unit in the Project.

(*2) The indicator is a range since each SHEP UP implementing districts has a specific target as follows. Central Province: Lari 25.7 %; Nyandarua Central 47.7 %; Kieni East 38.9 %; Kandara 18.0 %; Kieni West 22.0 %; Kikuyu 19.5 %; Kirinyaga West 49.1 %; Limuru 36.7 %; Nyandarua West 37.4 % and Murang'a South 48.2 %; Rift Valley Province: Nandi East 24.0 %; Nakuru North 22.4 %; Wareng 17.3 %; Nandi South 23.1 %; Kajiado North 24.0 %; Laikipia West 52.7 %; Marakwet West 35.3 %; Transmara West 44.9 %; Soik 52.1 % and Narok South 21.2 %; Nyanza Province: Siaya 51.5 %; Nyamira 24.3 %; Bondo 47.7 %; Masaba South 27.0 %; Rachuonyo South 25.4 %; Gem 25.9 %; Gucha 42.0 %; Suba 55.3 %; Kisumu East 42.2 % and Ugenya 13.6 %. Western Province: Ktwisero 17.6 %; Kakamega North 43.7 %; Mt. Elgon 42.9 %; Sabatia 20.1 %; Hamisi 15.9 %; Hamisi 15.6 %; Matele 19.0 %; Cheptals 33.6 %; Bungoma East 52.7 % and Teso North 15.5 %.

(*3) Targets of the no. of horticultural production techniques for the SHEP UP implementing districts are as follows. Central Province: Lari 15; Nyandarua Central 12; Kieni East 15; Kandara 15; Kieni West 15; Kikuyu 15; Kirinyaga West 15; Limuru 15; Nyandarua West 14 and Murang'a South 15. Rift Valley Province: Nandi East 15; Nakuru North 10; Wareng 15; Nandi South 16; Kajiado North 13; Laikipia West 15; Marakwet West 15; Transmara West 15; Soik 15 and Narok South 13. Nyanza Province: Siaya 14; Nyamira 14; Bondo 14; Masaba South 14; Rachuonyo South 16; Gem 18; Gucha 10; Suba 14; Kisumu East 16 and Ugenya 18. Western Province: Ktwisero 13; Kakamega North 15; Mt. Elgon 15; Sabatia 12; Kakamega Central 15; Hamisi 12; Matele 15; Cheptals 14; Bungoma East 15 and Teso North 15.

(*4) The indicator is a range since each SHEP UP implementing districts has a specific target as follows. Central Province: Lari 44.6 % (M: 41.2 %/F: 48.3 %); Nyandarua Central 69.6 % (M: 87.6 %/F: 49.0 %); Kieni East 42.7 % (M: 38.5 %/F: 47.9 %); Kandara 60.3 % (M: 63.1 %/F: 57.6 %); Kieni West 37.3 % (M: 37.2 %/F: 37.5 %); Kikuyu 19.3 % (M: 18.2 %/F: 20.3 %); Kirinyaga West 45.0 % (M: 44.2 %/F: 45.9 %); Limuru 45.3 % (M: 42.2 %/F: 47.8 %); Nyandarua West 16.0 % (M: 14.0 %/F: 17.2 %) and Murang'a South 45.0 % (M: 38.9 %/F: 54.8 %); Rift Valley Province: Nandi East 22.0 % (M: 20.8 %/F: 23.3 %); Nakuru North 31.4 % (M: 28.5 %/F: 34.2 %); Wareng 16.4 % (M: 10.3 %/F: 24.8 %); Nandi South 36.5 % (M: 29.7 %/F: 45.8 %); Kajiado North 14.2 % (M: 10.7 %/F: 17.7 %); Laikipia West 37.8 % (M: 36.0 %/F: 40.0 %); Marakwet West 43.2 % (M: 48.6 %/F: 35.9 %); Transmara West 23.3 % (M: 22.5 %/F: 25.0 %); Soik 16.4 % (M: 18.0 %/F: 16.8 %) and Narok South 30.7 % (M: 23.6 %/F: 35.5 %). Nyanza Province: Siaya 64.2 % (M: 51.6 %/F: 73.4 %); Nyamira 56.7 % (M: 51.4 %/F: 62.1 %); Bondo 16.8 % (M: 15.4 %/F: 18.2 %); Masaba South 31.2 % (M: 27.7 %/F: 34.1 %); Rachuonyo South 12.1 % (M: 12.4 %/F: 11.5 %); Gem 42.4 % (M: 33.1 %/F: 53.8 %); Gucha 67.7 % (M: 62.0 %/F: 69.5 %); Suba 64.4 % (M: 61.9 %/F: 67.8 %); Kisumu East 9.2 % (M: 10.6 %/F: 8.1 %) and Ugenya 21.8 % (M: 20.2 %/F: 23.1 %). Western Province: Ktwisero 33.3 % (M: 33.7 %/F: 33.1 %); Kakamega North 39.6 % (M: 33.9 %/F: 44.0 %); Mt. Elgon 56.5 % (M: 51.3 %/F: 63.6 %); Sabatia 58.7 % (M: 49.1 %/F: 68.8 %); Kakamega Central 46.2 % (M: 37.2 %/F: 56.9 %); Hamisi 84.0 % (M: 46.7 %/F: 113.6 %); Matele 39.3 % (M: 37.2 %/F: 40.5 %); Cheptals 58.1 % (M: 47.5 %/F: 64.5 %); Bungoma East 59.8 % (M: 54.9 %/F: 64.1 %) and Teso North 40.6 % (M: 35.0 %/F: 45.9 %).

(*5) Throughout these Activities, following topics are covered; empowerment of farmer groups, horticulture production techniques, rural infrastructure, and agro-processing.

(*6) FABLST Forum stands for Farm Business Linkage Stakeholder Forum. (*7) JEF2G stands for Joint Extension Staff and Farmers Dual (2) Gender Training. (*8) FT-FaDDE stands for Facilitators' Training for Farmers' Demand Driven Extension.

Annex 1-5 Suggested change in PDM Ver3 to Ver4 (Mid-Term Evaluation in Oct., 2012)

Section	PDM Version 3	PDM Version 4
Project purpose/OVI	By the end of the project period, individual members (man and women) of the smallholder horticulture farmer groups and the groups in the implementing districts using the SHEP Approach increase their sales by average ____%.	By the end of the project period, individual members (man and women) of the smallholder horticulture model farmer groups and the groups in the implementing districts using the SHEP approach increase their net income on average from ____%.
Project Purpose/ Important Assumptions	There is no severe drought .	There is no unfavorable weather and/or outbreak of pests and diseases .
Output 2-1/ OVI 2-1	Within two years after adopting the SHEP Approach, implementing individual members (men and women) of the smallholder horticulture farmer groups and the groups supported by the Unit and district increase their sales by average from 18.0 % to 48.2 % in Central Province, from 17.3 % to 52.7 % in Rift Valley Province, from 13.8 % to 55.3 % in Nyanza Province and from 15.5 % to 53.6 % in Western Province (*2).	Within two years after technical training of the SHEP Approach, individual members (men and women) of the smallholder horticulture model farmer groups and the groups supported by the Unit and implementing districts increase their net income on average from 18.0 % to 48.2 % in Central Province, from 17.3 % to 52.7 % in Rift Valley Province, from 13.8 % to 55.3 % in Nyanza Province and from 15.5 % to 53.6 % in Western Province (*2).
Output 2-1/ OVI 2-2	Within two years after the technical training, more than 70 % of individual members (men and women) of implementing smallholder horticulture farmer groups increase rate of applying the technologies by average from 16.0 % to 68.6 % in Central Province, from 14.2 % to 43.2 % in Rift Valley Province, from 9.2 % to 67.7 % in Nyanza Province and from 33.3 % to 84.0 % in Western Province (*3).	Within two years after technical training of the SHEP Approach , more than 70 % of individual members (men and women) of the smallholder horticulture model farmer groups supported by the Unit and implementing districts achieve adoption of horticultural production techniques above their district targets (*3) .
Output 2-1/ OVI 2-3		Within two years after technical training of the SHEP Approach , individual members (men and women) of the smallholder horticulture model farmer groups supported by the Unit and implementing districts increase rate of applying the horticultural production techniques on average from 16.0 % to 68.6 % in Central Province, from 14.2 % to 43.2 % in Rift Valley Province, from 9.2 % to 67.7 % in Nyanza Province and from 33.3 % to 84.0 % in Western Province (*4).
Output 3-3/ OVI 3-1	100 % of implementing districts incorporates the SHEP Approach in their annual plan/budget for the	100 % of implementing districts incorporates the SHEP Approach in their annual plan/budget for the second year .

JK

	following year.	
Output 3-3/ OVI 3-2	100 % of implementing districts which incorporated the SHEP Approach in their annual plan/budget for following year implements the Approach in the year.	100 % of implementing districts which incorporated the SHEP Approach in their annual plan/budget for the second year implements the SHEP Approach in the year.
Output 3-3/ OVI 3-3	Within two years using the SHEP Approach, individual members (men and women) of the smallholder horticulture farmer groups and the groups supported by the district's own resource in implementing district increase their sales by average ---%.	Within two years after technical training of the SHEP Approach, individual members (men and women) of the smallholder horticulture model farmer groups and the groups supported by the implementing districts using their own resources increase their net income on average from ---%.
Outputs/ Important Assumptions	New addition	Kenya's administrative system remains unchanged.
	There is no severe drought and or outbreak of pests and diseases.	There is no unfavorable weather and or outbreak of pests and diseases.
Activities	4-1. Review and analyze the existing challenges well as good practices regarding information management and sharing in each level.	4-1. Review and analyze the existing challenges well as good practices regarding information management and sharing at each level.
	4-2. Draft and propose solution for better information management and sharing in each level.	4-2. Draft and propose solution for better information management and sharing at each level.
Footnote	New addition	(*3) Targets of the no. of horticultural production techniques for the SHEP UP implementing districts are as follows. Central Province: Lari 15; Nyandarua Central 12; Kieni East 15; Kandara 15; Kieni West 15; Kikuyu 15; Kirinyaga West 15; Limuru 15; Nyandarua West 14 and Murang'a South 15; Rift Valley Province: Nandi East 15; Nakuru North 16; Wareng 15; Nandi South 16; Kajiado North 13; Laikipia West 15; Marakwet West 15; Transmara West 15; Sotik 15 and Narok South 13. Nyanza Province: Siaya 14; Nyamira 14; Bondo 14; Masaba South 14; Rachuonyo South 16; Gem 16; Gucha 10; Suba 14; Kisumu East 16 and Ugenya 16. Western Province: Khwisero 13; Kakamega North 15; Mt. Elgon 15; Sabatia 12; Kakamega Central 15; Hamisi 12; Matete 15; Cheptais 14; Bungoma East 15 and Teso North 15.

26

SHEP UP Plan of Operation version.1

	0 year	1 st year				2 nd year				3 rd year				4 th year				After the project
		April - June	July - Sep	Oct - Dec	Jan - Mar	April - June	July - Sep	Oct - Dec	Jan - Mar	April - June	July - Sep	Oct - Dec	Jan - Mar	April - June	July - Sep	Oct - Dec	Jan - Mar	
0. Pre-preparation																		
0-1. Personnel	████																	
0-2. Office space and procurement necessary items	████																	
1. Preparation																		
1-1. Making the strategy of SHEP-UP	████																	
1-2. Planning the activities of SHEP-UP	████																	
1-3. Making the criteria for the implementing districts	████																	
1-4. Sensitizing SHEP-Unit staff on SHEP approach	████																	
1-5. Completing the guideline on SHEP approach	████																	
2. Support for groups in the implementing districts with staff of province and district																		
2-1. Preparation																		
2-1-1. Sensitization workshop for the staff in each province																		
2-1-2. PDA and Unit select the implementing districts through criteria																		
2-1-3. Training for staff of PDA and DACs on how to organize the events of SHEP approach, ie, FABLIST forum, JEF2G training, FT-FaDDE, in-field trainings																		
2-2. Training for the groups																		
2-2-1. Baseline survey																		
2-2-2. FABLIST forum																		
2-2-3. JEF2G training																		
2-2-4. FT-FaDDE																		
2-2-5. In-field training																		
2-3. Monitoring and Evaluation																		
2-3-1. Conducting monitoring and evaluation																		
2-3-2. Analysis of the results																		
3. Support for the groups which are not targeted in the previous activities by the implementing district																		
3-1. Preparation on the budget for implementing the SHEP approach for the groups																		
3-2. Conducting the activities for the groups by district staff																		
3-3. Conducting the monitoring and evaluation																		
3-4. Analysis of the results of monitoring and evaluation																		
4. Establishment of information management system on SHEP approach																		
4-1. First draft of guideline for information management system in SHEP Unit	████																	
4-2. Making the list for all identified information on horticulture sub-sector																		
4-3. Utilizing market information, new technology, and so on from outside																		

SHEP UP Plan of Operation Version 2 (as of 16, June 2010)

	2009/10		2010				2011				2012				2013				2014				2015			After the project
	Apr-June	July-Sep	Oct-Dec	Jan-Mar	April-June	July-Sep	Oct-Dec	Jan-Mar	April-June	July-Sep	Oct-Dec	Jan-Mar	April-June	July-Sep	Oct-Dec	Jan-Mar	April-June	July-Sep	Oct-Dec	Jan-Mar	April-June	July-Sep	Oct-Dec	Jan-Mar		
0 Pre-preparation																										
0-1. Personnel	[Gantt chart bars]																									
0-2. Office space and procurement necessary items	[Gantt chart bars]																									
1. Preparation																										
1-1. Making the strategy of SHEP UP	[Gantt chart bars]																									
1-2. Planning the activities of SHEP UP	[Gantt chart bars]																									
1-3. Making the criteria for the implementing districts	[Gantt chart bars]																									
1-4. Sensitizing SHEP Unit staff on SHEP Approach	[Gantt chart bars]																									
1-5. Completing the guidelines on SHEP Approach	[Gantt chart bars]																									
2. Support for groups in the implementing districts with staff of province and district																										
2.1. Preparation																										
2-1-1. Sensitization workshop for the staff in each province	[Gantt chart bars]																									
2-1-2. PDA and Unit select the implementing districts through criteria	[Gantt chart bars]																									
2-1-3. Training for staff of PDA and DAOs on how to organize the events of SHEP Approach, ie, FABLIST Forum, JEF2G training, FT-FaDDE, In-field Trainings	[Gantt chart bars]																									
2.2. Training for the groups																										
2-2-1. Baseline survey	[Gantt chart bars]																									
2-2-2. FABLIST Forum	[Gantt chart bars]																									
2-2-3. JEF2G Training	[Gantt chart bars]																									
2-2-4. FT-FaDDE	[Gantt chart bars]																									
2-2-5. In-field Training	[Gantt chart bars]																									
2.3. Monitoring and Evaluation																										
2-3-1. Conducting Monitoring and Evaluation	[Gantt chart bars]																									
2-3-2. Analysis of the results	[Gantt chart bars]																									
3. Support for the groups which are not targeted in the previous activities by the implementing district																										
3-1. Preparation on the budget for implementing the SHEP Approach for the groups	[Gantt chart bars]																									
3-2. Conducting the activities for the groups by district staff	[Gantt chart bars]																									
3-2-1. Baseline survey	[Gantt chart bars]																									
3-2-2. FABLIST Forum	[Gantt chart bars]																									
3-2-3. JEF2G Training	[Gantt chart bars]																									
3-2-4. FT-FaDDE	[Gantt chart bars]																									
3-2-5. In-field Training	[Gantt chart bars]																									
3-3. Conducting Monitoring and Evaluation	[Gantt chart bars]																									
3-4. Analysis of the results of Monitoring and Evaluation	[Gantt chart bars]																									
4. Establishment of information management system on SHEP Approach																										
4-1. First draft of guideline for information management system in SHEP Unit	[Gantt chart bars]																									
4-2. Making the list for all identified information on horticulture sub-sector	[Gantt chart bars]																									
4-3. Utilizing market information, new technology, and so on from outside	[Gantt chart bars]																									

2/10

SHEP UP Plan of Operation Version 3 (as of 20 June 2011)

	2010			2011			2012			2013			2014			2015			After the project
	2009/10	April - June	July - Sep	Oct - Dec	Jan - Mar	April - June	July - Sep	Oct - Dec	Jan - Mar	April - June	July - Sep	Oct - Dec	Jan - Mar	April - June	July - Sep	Oct - Dec	Jan - Mar		
0. Pre-preparation																			
0-1. Personnel																			
0-2. Office space and procurement of necessary items																			
1. Preparation																			
1-1. Making the strategy of SHEP UP																			
1-2. Planning the activities of SHEP UP																			
1-3. Making the criteria for selection of the implementing districts																			
1-4. Sensitizing SHEP Unit staff on SHEP Approach																			
1-5. Completing the guideline on SHEP Approach																			
2. Support for groups in the implementing districts with staff of province and district																			
2-1. Preparation																			
2-1-1. Sensitization workshop for the staff in each province																			
2-1-2. PDA and SHEP Unit select the implementing districts through criteria																			
2-1-3. Organizers' Training on Basic SHEP Approach for Provincial & District SHEP UP Management Teams																			
2-2. Training for the groups																			
2-2-1. Sensitization Workshop for the FEOs and the groups																			
2-2-2. Baseline Survey																			
2-2-3. FABLIST Forum																			
2-2-4. JEF2G Training																			
2-2-5. FT-FADDE																			
2-2-6. In-field Training																			
2-2-7. "Do-nou" Training																			
2-2-8. Agro-processing Training																			
2-3. Monitoring and Evaluation																			
2-3-1. Conducting Monitoring and Evaluation																			
2-3-2. Analysis of the results of Monitoring and Evaluation																			
3. Support for the groups which are not targeted in the previous activities by the implementing district																			
3-1. Preparation of the budget for implementing the SHEP Approach for the groups																			
3-1-1. Sensitization Workshop for the FEOs and the groups																			
3-1-2. Baseline Survey																			
3-1-3. FABLIST Forum																			
3-1-4. JEF2G Training																			
3-1-5. FT-FADDE																			
3-1-6. In-field Training																			
3-1-7. "Do-nou" Training																			
3-1-8. Agro-processing Training																			
3-3. Monitoring and Evaluation																			
3-3-1. Conducting Monitoring and Evaluation																			
3-3-2. Analysis of the results of Monitoring and Evaluation																			
4. Establishment of information management system on SHEP Approach																			
4-1. First draft of guideline for information management system in SHEP Unit																			
4-2. Making the list for all identified information on horticulture sub-sector																			
4-3. Utilizing market information, new technology, and so on from outside																			

7x

SHEP UP Plan of Operation Version 4 (as of 23rd January, 2012)

	2010		2011			2012			2013			2014			2015			After the project
	2009/10	Apr-June	July-Sep	Oct-Dec	Jan-Mar	Apr-June	July-Sep	Oct-Dec	Jan-Mar	Apr-June	July-Sep	Oct-Dec	Jan-Mar	Apr-June	July-Sep	Oct-Dec	Jan-Mar	
0. Pre-preparation																		
0-1. Personnel																		
0-2. Office space and procurement of necessary items																		
1. Preparation																		
1-1. Making the strategy of SHEP UP																		
1-2. Planning the activities of SHEP UP																		
1-3. Making the criteria for selection of the implementing districts																		
1-4. Sensitizing SHEP Unit staff on SHEP Approach																		
1-5. Completing the guideline on SHEP Approach																		
2. Support for groups in the implementing districts with staff of province and district																		
2-1. Preparation																		
2-1-1. Sensitization workshop for the staff in each province																		
2-1-2. PDA and SHEP Unit select the implementing districts through criteria																		
2-1-3. Organizers' Training on Basic SHEP Approach for Provincial & District SHEP UP Management Teams																		
2-2. Training for the groups																		
2-2-1. Sensitization Workshop for the FEOs and the groups																		
2-2-2. Baseline Survey																		
2-2-3. FABLIST Forum																		
2-2-4. JEF2G Training																		
2-2-5. FT-FaDDE																		
2-2-6. In-field Training																		
2-2-7. "Do-now" Training																		
2-2-8. Agro-processing Training																		
2-3. Monitoring and Evaluation																		
2-3-1. Conducting Monitoring and Evaluation																		
2-3-2. Analysis of the results of Monitoring and Evaluation																		
3. Support for the groups which are not targeted in the previous activities by the implementing district																		
3-1. Preparation of the budget for implementing the SHEP Approach for the groups																		
3-1. Conducting the activities for the groups by district staff																		
3-2-1. Sensitization Workshop for the FEOs and the groups																		
3-2-2. Baseline Survey																		
3-2-3. FABLIST Forum																		
3-2-4. JEF2G Training																		
3-2-5. FT-FaDDE																		
3-2-6. In-field Training																		
3-2-7. "Do-now" Training																		
3-2-8. Agro-processing Training																		
3-3. Monitoring and Evaluation																		
3-3-1. Conducting Monitoring and Evaluation																		
3-3-2. Analysis of the results of Monitoring and Evaluation																		
4. Establishment of information management system on SHEP Approach																		
4-1. First draft of guideline for information management system in SHEP Unit																		
4-1. First draft of guideline for information management system in SHEP Unit																		
4-2. Making the list for all identified information on horticulture sub-sector																		
4-3. Utilizing market information, new technology, and so on from outside																		

9X

SHEP UP Plan of Operation Version 5 (as of 19th October, 2012)

	2010			2011			2012			2013			2014			2015			After the project
	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25			
	April - June	July - Sep	Oct - Dec	Jan - Mar	April - June	July - Sep	Oct - Dec	Jan - Mar	April - June	July - Sep	Oct - Dec	Jan - Mar	April - June	July - Sep	Oct - Dec	Jan - Mar			
0. Pre-preparation																			
0-1. Personnel	[Gantt bar]																		
0-2. Office space and procurement of necessary items	[Gantt bar]																		
1. Preparation																			
1-1. Making the strategy of SHEP UP	[Gantt bar]																		
1-2. Planning the activities of SHEP UP	[Gantt bar]																		
1-3. Making the criteria for selection of the implementing districts	[Gantt bar]																		
1-4. Sensitizing SHEP Unit staff on SHEP Approach	[Gantt bar]																		
1-5. Completing the guideline on SHEP Approach	[Gantt bar]																		
2. Support for groups in the implementing districts with staff of province and district																			
2-1. Preparation																			
2-1-1. Sensitization workshop for the staff in each province	[Gantt bar]																		
2-1-2. PDA and SHEP Unit select the implementing districts through criteria	[Gantt bar]																		
2-1-3. Organizers' Training on Basic SHEP Approach for Provincial & District SHEP UP Management Teams	[Gantt bar]																		
2-2. Training for the groups																			
2-2-1. Sensitization Workshop for the FEOs and the groups	[Gantt bar]																		
2-2-2. Baseline Survey	[Gantt bar]																		
2-2-3. FABLIST Forum	[Gantt bar]																		
2-2-4. JEPFG Training	[Gantt bar]																		
2-2-5. Group Exercises	[Gantt bar]																		
2-2-6. Gender Mainstreaming & Family Budgeting Training	[Gantt bar]																		
2-2-7. FT-FADDE	[Gantt bar]																		
2-2-8. In-field Training	[Gantt bar]																		
2-2-9. "Do-nou" Training	[Gantt bar]																		
2-2-10. Agro-processing Training	[Gantt bar]																		
2-3. Monitoring and Evaluation																			
2-3-1. Conducting Monitoring and Evaluation	[Gantt bar]																		
2-3-2. Analysis of the results of Monitoring and Evaluation	[Gantt bar]																		
3. Support for the groups which are not targeted in the previous activities by the implementing district																			
3-1. Preparation of the budget for implementing the SHEP Approach for the groups																			
3-1. Preparation of the budget for implementing the SHEP Approach for the groups	[Gantt bar]																		
3-2. Conducting the activities for the groups by district staff																			
3-2-1. Sensitization Workshop for the FEOs and the groups	[Gantt bar]																		
3-2-2. Baseline Survey	[Gantt bar]																		
3-2-3. FABLIST Forum	[Gantt bar]																		
3-2-4. JEPFG Training	[Gantt bar]																		
3-2-5. Group Exercise	[Gantt bar]																		
3-2-6. Gender Mainstreaming & Family Budgeting Training	[Gantt bar]																		
3-2-7. FT-FADDE	[Gantt bar]																		
3-2-8. In-field Training	[Gantt bar]																		
3-2-9. "Do-nou" Training	[Gantt bar]																		
3-2-10. Agro-processing Training	[Gantt bar]																		
3-3. Monitoring and Evaluation																			
3-3-1. Conducting Monitoring and Evaluation	[Gantt bar]																		
3-3-2. Analysis of the results of Monitoring and Evaluation	[Gantt bar]																		
4. Establishment of information management system on SHEP Approach																			
4-1. First draft of guideline for information management system in SHEP Unit	[Gantt bar]																		
4-2. Making the list for all identified information on horticulture sub-sector	[Gantt bar]																		
4-3. Utilizing market information, new technology, and so on from outside	[Gantt bar]																		

9x

Annex 3. List of SHEP UP Steering Committee Members

1. Members of the Steering Committee in R/D (as of 24, February 2010)

【Kenyan Side】

Permanent Secretary, Ministry of Agriculture (MoA)/Chairperson
Agriculture Secretary, Ministry of Agriculture (MoA)
Director, Directorate of Crop Management, Ministry of Agriculture (MoA)
Director, Directorate of Extension, Research Liaison & Trainings, Ministry of Agriculture (MoA)
Ministry of Finance (MoF)
Managing Director, Horticulture Crops Development Authority (HCDA)
General Manager for Technical Service, Horticulture Crops Development Authority (HCDA)
Deputy Director, Horticulture Division, Ministry of Agriculture (MoA)

【Japanese Side】

Chief Representative, Japan International Cooperation Agency, Kenya Office
Chief Advisor, Smallholder Horticulture Empowerment & Promotion Unit Project (SHEP UP)
Project Coordinator, Smallholder Horticulture Empowerment & Promotion Unit Project (SHEP UP)
Other JICA Experts, Smallholder Horticulture Empowerment & Promotion Unit Project (SHEP UP)
Other personnel concerned from JICA side as necessary

2. Proposed Members of the Steering Committee in the 1st PSC

【Kenyan Side】

Permanent Secretary, Ministry of Agriculture/Chairperson
Agriculture Secretary, Ministry of Agriculture
Director of Policy and External Relations, Ministry of Agriculture
Director of Crop Management, Ministry of Agriculture
Director of Agribusiness and Marketing, Ministry of Agriculture
Director of Extension, Research Liaison & Trainings, Ministry of Agriculture
Director of Agriculture Engineering Services, Ministry of Agriculture
Ministry of Finance
Managing Director, Horticultural Crops Development Authority
Deputy Director, Horticulture Division, Ministry of Agriculture
General Manager, Technical Advisory Services, Horticultural Crops Development Authority
Principal Accounts Controller, Ministry of Agriculture
Chief Finance Officer, Ministry of Agriculture
SHEP Unit Leader, Smallholder Horticulture Empowerment and Promotion Unit

* Additional members are in red.

【Japanese Side】

Chief Representative, Japan International Cooperation Agency, Kenya Office
Chief Advisor, Smallholder Horticulture Empowerment and Promotion Unit Project
Project Coordinator, Smallholder Horticulture Empowerment and Promotion Unit Project
Other JICA Experts, Smallholder Horticulture Empowerment & Promotion Unit Project (SHEP UP)
Other personnel concerned from JICA side as necessary

Annex 4. List of Japanese Experts

【Long-term】

Name	Assignment	Period	Office Affiliated
Mr. Naoki HASHIMOTO	Chief Advisor/Horticulture Policy	02.Nov.2010 - to date	
Ms. Harue KITAJIMA	Horticulture Production and Extension	03.Mar.2010 - to date	
Mr. Isao TOJO	Project Co-ordination/Training Planning	27.Jun.2010 - 26.Jun.2012	

【Short-term】

Name	Assignment	Period	Office Affiliated
Ms. Yoko HARADA	Gender Mainstreaming	2011.Jan.30 - 2011.Feb.19	Social Development Specialist, Global Link Management
		2012.Apr.15 - 2012.May.11	
Dr. Yoshinori FUKUBAYASHI	Rural Infrastructure	2011.Feb.26 - 2011.Mar.27	Community Road Empowerment (CORE)
		2012.Jan.11 - 2012.Mar.15	
Mr. Shinichi KOYAMA	Agro-processing/Training Planning	2011.Jan.31 - 2011.Mar.9	Overseas Agricultural Development Association
		2012.Feb.12 - 2012.Mar.10	
Mr. Hiroyuki KOZU	Information Management & Utilization	2010.Nov.27 - 2010.Dec.16	Technical Consultant, YSK Consultants Co. Ltd.
		2011.Apr.10 - 2011.Apr.27	
Mr. Yasumitsu ISHIKAWA	Information Management & Utilization	2011.Nov.06 - 2011.Dec.16	Japan Development Service Co. Ltd.
		2012.Aug.22 - 2012.Oct.08	
Dr. Yasuhiro DOI	Water Harvesting	2012.May.06 - 2012.Jun.16	Special Adviser, Japan International Cooperation Agency (JICA), Headquarters

【Mission Member】

Name	Assignment	Period	Office Affiliated
Mr. Hajime ISHII	Information Management & Utilization	2010.Jun.7 - 2010.Jun.19	Associate Expert, Japan International Cooperation Agency (JICA), Headquarters
Dr. Jiro Aikawa	Project Management	2010.May.21 - 2010.Jun.25	Senior Advisor, Japan International Cooperation Agency (JICA), Headquarters
	Project Management	2010.Nov.25 - 2010.Dec.8	Senior Advisor, Japan International Cooperation Agency (JICA), Headquarters
	Project Management	2011.Jan.26 - 2011.Feb.9	Senior Advisor, Japan International Cooperation Agency (JICA), Headquarters
	Project Management	2011.Aug.15 - 2011.Aug.26	Senior Advisor, Japan International Cooperation Agency (JICA), Headquarters
	Project Management	2012.Jan.19 - 2012.Jan.28	Senior Advisor, Japan International Cooperation Agency (JICA), Headquarters
	Project Management	2012.Jun.17 - 2012.Jun.30	Senior Advisor, Japan International Cooperation Agency (JICA), Headquarters

ad

Annex 5. List of Kenyan Counterpart Personnel

Post/Assignment		Name	Organization /Department	Period
Smallholder Horticulture Empowerment & Promotion (SHEP) Unit Leader		Francisca Malenge (Ms.)	Ministry of Agriculture	03.Mar.2010 - to date
Technical Component	Horticultural Crops Production & Quality Control Sub-Component	Stephen Kioko (Mr.)	Ministry of Agriculture	03.Mar.2010 - to date
		Collins Otieno (Mr.)	Horticultural Crops Development Authority (HCDA)	03.Mar.2010 - to date
		Elizabeth Mbutia (Ms.)	Ministry of Agriculture	03.Jul.2012 - to date
	Farmer Group Empowerment & Gender Mainstreaming Sub-Component	Thomas Mumu (Mr.)	Ministry of Agriculture	03.Mar.2010 - to date
		Florence Wambua (Ms.)	Horticultural Crops Development Authority (HCDA)	03.Mar.2010 - to date
	Rural Infrastructure Sub-component	Stephen Nzioka (Mr.)	Ministry of Agriculture	20.Sep.2010 - to date
		Dishon Mkaya (Mr.)	Ministry of Agriculture	21.Feb.2012 - to date
Agro-processing Sub-Component	Alice Nyaga (Ms.)	Ministry of Agriculture	03.Mar.2010 - to date	
Information Management/Monitoring & Evaluation Component		Raymond Chelule (Mr.)	Ministry of Agriculture	03.Mar.2010 - to date
		Antonina Luta (Ms.)	Horticultural Crops Development Authority (HCDA)	03.Jan.2012 - to date
Administration Component		Peter Orangi (Mr.)	Ministry of Agriculture	03.Mar.2010 - to date

YB

Annex 6. Project Expenditure by Japan, Kenya and Total (June 2012)

〈Japan Side〉

	2009/10 (Result)	2010/11 (Result)	2011/12 (Result)	Total Expenditure (2012 June)
General recurrent cost by JICA	3,488,486	22,842,330	42,906,939	69,237,755
Equipment by JICA		2,894,060	4,795,000	7,689,060
Total	3,488,486	25,736,390	47,701,939	76,926,815

*JFY: Japanese Financial Year; April - March

〈Kenyan Side〉

Items of Expenditure	2009/10 (Result)	2010/11 (Result)	2011/12 (Result)	
General recurrent cost by GOK	229,000	22,337,752	32,187,067	54,753,819
Equipment	4,742,591	6,570,929	0	11,313,520
Total	4,971,591	28,908,681	32,187,067	66,067,339

〈Total〉

Items of Expenditure	2009/10 (Result)	2010/11 (Result)	2011/12 (Result)	
General recurrent cost	3,717,486	45,180,082	75,094,006	123,991,574
Equipment	4,742,591	9,464,989	4,795,000	19,002,580
Total	8,460,077	54,645,071	79,889,006	142,994,154

Annex 7. List of Kenyan Counterpart Personnel Trained in Japan

	Name	Course Title	Duration (D/M/Y)	Post	Organization/Department
1	Collins Otieno (Mr.)	The Region-Focused Training Course on Horticultural Crop Cultivation and Extension for Africa	09.May.2010 - 11.Sep.2010	Project Counterpart	Horticultural Crops Development Authority (HCDA)
2	Paul Busienei (Mr.)	The Region-Focused Training Course on Horticultural Crop Cultivation and Extension for Africa	09.May.2010 - 11.Sep.2010	District Crops Development Officer, Trans-Nzoia West District Office	Ministry of Agriculture
3	Evans Nyamache (Mr.)	The Region-Focused Training Course on Horticultural Crop Cultivation and Extension for Africa	07.May.2011 - 11.Sep.2011	District Crops Officer, Kisii South District Office	Ministry of Agriculture
4	Calistus Nkundu (Mr.)	The Region-Focused Training Course on Horticultural Crop Cultivation and Extension for Africa	07.May.2011 - 11.Sep.2011	Horticultural Officer, Nkubu Depot, Horticultural Crops Development Authority (HCDA)	Horticultural Crops Development Authority (HCDA)
5	Antony Rutto (Mr.)	The Region-Focused Training Course on Horticultural Crop Cultivation and Extension for Africa	07.Apr.2012 - 09.Sep.2012	Horticultural Officer, Iten Station, Horticultural Crops Development Authority (HCDA)	Horticultural Crops Development Authority (HCDA)
6	Magdaline Munene (Ms.)	The Region-Focused Training Course on Horticultural Crop Cultivation and Extension for Africa	07.Apr.2012 - 09.Sep.2012	Horticultural Crops Officer, Murang'a South District Office	Ministry of Agriculture

Annex 8. PROPOSAL OF SELECTING SHEP UP IMPLEMENTING DISTRICTS

The proposal of selecting SHEP UP implementing districts has four main considerations: **Motivation, Resources Availability and Mobilization, Geographical Conditions and Socio-economic Considerations.** You are requested to provide information of your district using the format given by ticking in the appropriate box or filling in the blank spaces.

Background Information

- i.) Name of Province :-----
- ii.) Name of District :-----
- iii.) Size of the District (km²) :-----
- iv.) Number of Administrative Units:
 - Number of Divisions :-----
 - Number of Locations :-----
 - Number of Extension Units :-----
- v.) Number of Technical Staff
 - District Headquarter :-----
 - Divisions :-----
 - Locations :-----

I. Motivation

1. Do you want to implement SHEP approach in your district? YES NO
If the answer is yes then proceed, but if the answer is no then you don't need to proceed.
2. Has the district implemented SHEP activities previously? YES NO
3. Please explain what contributed to success of the previous Smallholder Horticulture Empowerment Project (SHEP)?

4. What activities do you need to implement during the first year with SHEP UP?

AK

Name of District: _____

Name of County: _____

5. What do you intend to do to ensure continuity in implementation of SHEP approach from the second year and subsequent years?

6. District Staff Motivation

1) Please gauge the motivational level of your extension staff in terms of working with smallholder horticulture farmers using limited resources?

HIGH MEDIUM LOW

2) Please gauge the willingness of extension staff to learn and apply new ideas and/or approaches?

HIGH MEDIUM LOW

7. Please identify 3 major challenges under the following sections.

1) Horticulture Crop Production

2) Marketing

8. Agricultural Projects/Programmes in the District: in the table below, please indicate major projects/programmes for the last 5 years including RRI activity.

Name of Project/ Programmes	Main Activities	Target Area	Target Group	Number of Groups	Date of Completion
RRI Activity					

2d

II. Resource Availability and Mobilization

9. Extension Staff: in the table below, please provide information on numbers of farm families and extension staff at divisional and locational levels.

Name of Division	No. Farm Families	No. DIV.SMS	No. FEOs

10. Availability of Functional Office Equipment

Type of Equipment	Quantity

11. Motor Vehicle/Motor Cycle Availability: please indicate the number of motor vehicles/motor cycles which are in good condition for extension activities.

- 1) Number of motor vehicles in good condition in the district. :-----
- 2) Number of motor vehicles in good condition in the divisions. :-----
- 3) Number of motor cycles in good condition in the district. :-----
- 4) Number of motor cycles in good condition in the divisions. :-----

12. Financial Resource Mobilization

Is the District Agricultural Officer's office willing to mobilize funds to implement and up scale SHEP UP activities? YES NO

III. Geographical Conditions

13. Climatic Conditions

1) Rainfall: please provide information in the table below.

Name of District	Mean Annual Rainfall in last 5 Years (mm)				
	2011	2010	2009	2008	2007

2) Temperature °C (2011): please provide information in the table below.

Month	Maximum	Minimum	Diurnal Temperature Range
January			
February			

PK

Name of District: _____
 Name of County: _____

March			
April			
May			
June			
July			
August			
September			
October			
November			
December			

3) Relative Humidity (%) :-----

14. Altitude (in meters above sea level)

Highest point :----- Lowest point :-----

15. Soils

1) Predominant Soil Type :-----

2) Predominant Soil pH :-----

16. What is the main source of water for irrigation?

1) Permanent Rivers Lakes Springs Dams Water Pans

2) Comment on suitability of water for irrigation from the main source.

17. Repair and maintenance of unclassified roads: involvement of community and stakeholders.

1) Are community members willing to participate by providing labor and resources in road repair and maintenance? YES NO

2) Are there stakeholders willing to support community to repair and maintain rural access and farm roads? YES NO

3) List the major stakeholders who would be willing to support road repairs.

- -----
- -----
- -----
- -----
- -----
- -----

IV. Socio-economic Considerations

18. Poverty Level (as per 2009 CBS data) :-----

19. Major agricultural enterprises, acreage, production, and income derived from each in 2011.

9X

Name of District: _____

Name of County: _____

Enterprise	Acreage	Total Production (Tons)	Total Income (Ksh.)	Gross Margin

20. Fill in major horticultural enterprises and production trends in the table below.

Enterprise	Total Production (Tons)					Total Income (Ksh.)				
	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011

21. Income derived from other off-farm activities.

Activity	Income (Ksh.)

22. Involvement of Smallholder Farmer Groups in Horticulture Production

- 1) Are there smallholder farmer groups involved in group production for export market?
YES NO
- 2) Are there smallholder farmer groups involved in group production for domestic market?
YES NO
- 3) Are there smallholder farmer groups involved in contract farming?
YES NO

23. Markets and Market Infrastructure

1) Names of nearest wholesale markets in your district.

- -----
- -----
- -----
- -----

2) Names of main exporters operating in your district.

- -----

9d

Name of District: _____
Name of County: _____

- -----
- -----
- -----

3) Names of horticulture processors operating in your district.

- -----
- -----
- -----
- -----

4) Names of cooling facilities/produce collection centers (public & private) in your district.

- -----
- -----
- -----
- -----

24. Farm Input Stockists/Suppliers

Does the district have adequate farm input stockists providing horticulture inputs?
Adequate Moderately Adequate Not Adequate

25. Farm Labour

- 1) Who is the main provider of farm labour? Family Hired
- 2) How is the level of dependence on labour hired from outside the district?
High Medium Low

26. Security: Are there any major security concerns including wildlife/human conflicts in the district? YES NO

If yes, please explain.

Proposal of Selecting SHEP UP Implementing Districts

Name of District: _____

Name of County: _____

Name of District Agricultural Officer : -----

Signature : -----

Date : -----

Stamp : -----

.....

96

Annex 9

General Horticultural Crop Production & Post-Harvest Handling Techniques (GHCP&PHHT) 20

Name of the Farmer Group:

Name of District:

Date: / /2012

Name of Farmer:

Male/Female:

Tel. No.:

Pre to Post Cultivation Stages		Items	Horticultural Techniques Advocated for Adoption	Yes*	No
1	Pre-Cultivation Preparation	Q 1	Does the farmer undertake a market survey to determine the crop(s) to cultivate each season?		
		Q 2	Does the farmer prepare and use crop planting calendar(s) based on the market survey results?		
		Q 3	Does the farmer undertake soil testing at least once in two years for vegetables/annual flowers; or before the planting for fruit trees/perennial flowers?		
		Q 4	Does the farmer use recommended composting practices by using different organic materials to supply major nutrients: Nitrogen (N), Phosphorus (P), and Potassium (K) in preparing compost/manure?		
		Q 5	Does the farmer use recommended quality planting material(s) with one or more of the following characteristics: disease resistance and tolerance, high yield, early maturity, better tastes, size, and longer shelf life?		
2	Land Preparation	Q 6	Does the farmer use with one or more following recommended land preparation practices in management of pests & diseases: solarization, timely ploughing, appropriate depth of ploughing, and minimizing movement of soil to check possible spread soil borne pests & diseases?		
		Q 7	Does the farmer incorporate crops residue at least two months before planting into the farm during ploughing to enhance recycling of nutrients?		
		Q 8	Does the farmer incorporate compost/manure or organic fertilizer as a basal application at least 1-2 weeks before the planting?		
3	Crop Establishment (Planting/ Transplanting)	Q 9	Does the farmer use recommended practices in raising seedlings for vegetables/annual flowers or use seedlings for fruit trees/perennial flowers raised from recognized nursery(s)?		
		Q 10	Does the farmer use recommended planting/transplanting spacing ?		
		Q 11	Does the farmer plant/transplant using recommended fertilizer application rates ?		
4	Crop Management	Q 12	Does the farmer supplement crop water requirement through one or more of the following irrigation methods: watering can, overhead, drip, and fallow to meet the minimum crop water requirement?		
		Q 13	Does the farmer ensure timely weeding and use of appropriate weeding tools in managing of weeds ?		

4	Crop Management	Q 14	Does the farmer undertake appropriate top-dressing practices: timeliness, type and recommended rate of application, and method of application?		
		Q 15	Does the farmer use at least two of the following Integrated Pests Management (IPM) practices: cultural, biological, physical and chemical?		
		Q 16	Does the farmer observe the following use of safe and effective use of pesticides : appropriate doses, recommended pesticides, and Pre Harvest Interval (PHI)?		
5	Harvest	Q 17	Does the farmer use at least one of the following harvesting indices : color, size, shape, and firmness?		
6	Post-Harvest Handling	Q 18	Does the farmer use harvesting/storage/transportation containers/standard packaging materials with following characteristics: well-ventilated, easy to clean, and smooth thus minimizing damages?		
		Q 19	Does the farmer apply one of the following recommended value addition techniques: cleaning, sorting, grading, packaging or processing of the produce ?		
7	Cost and Income Analysis	Q 20	Does the farmer keep records on cost of production and sales and undertake cost and income analysis ?		

* Please tick appropriately for "YES" or "NO".

9K

Annex 10

CROP PRODUCTION & INCOME ANALYSIS DATA (CP&IAD) SHEET

DATE: ____ / ____ / ____ GROUP NAME: _____

DISTRICT: _____ FARMER'S NAME: _____

MALE/FEMALE: _____ TELEPHONE NO.: _____

1. Crop Name and Variety	2. Area under the Crop (M x M or Acres)		3. Total Production (Kg)	4. Total Production per Acre (Kg/acre)	5. Net Produce (Kg)	6. Net Produce per Acre (Kg/acre)	7. Average Price per Kg (Ksh./kg)	8. Total Income (Ksh.)	9. Total Cost of Production (Ksh.)	10. Net Income (Ksh.)
	2 a.	2 b.		(3./2 b.)		(5./2 b.)		(5. x 7.)		(8. - 9.)
1 st Crop:	M x M (M ²)	Acres								
2 nd Crop:	M x M (M ²)	Acres								
Other Crop	M x M (M ²)	Acres								
Other Crop	M x M (M ²)	Acres								

Annex 10

NOTES:

Farmers need to answer all questions under the un-shaded columns. The shaded columns are optional to farmers who are skills in conversion.

1. **Crop Name and Variety:** indicate name of the crop and the variety
2. **Area under the Crop (M x M or Acres):** where it is difficult to estimate the area in acres, it can be given in paces for both length and width of the farm in square meters
3. **Total Production (Kg):** farmers should indicate total production in kg for the area which has been put under the crop. Total production should include both marketable (net produce) and the unmarketable produce
4. **Total Production per Acre (Kg/acre):** all production including marketable and unmarketable produce per acre (this will be calculated by the project from column 2 & 3)
5. **Net Produce (Kg):** this is marketable produce and is obtained by subtracting unmarketable produce from total production
6. **Net Produce per Acre (Kg/acre):** total produce minus unmarketable produce per acre (this will be calculated by the project from column 2 & 5)
7. **Average Price per Kg (Ksh./kg):** where marketing is done using units other than weighing balances, the units need to be converted into kg
8. **Total Income (Ksh.):** average price per kg multiplied by net produce in kilos (this will be calculated by the project from column 5 & 7)
9. **Total Cost of Production (Ksh.):** should include the following where applicable:
 - Cost of seed/planting material, fertilizers and manures, pesticides, posts/stakes,
 - Labour costs such as nursery establishment/maintenance, ploughing, manures/fertilizer application, weeding, staking/training, spraying, harvesting
 - Transportation costs
10. **Net Income (Ksh.):** total income minus total cost of production (this will be calculated by the project from column 8 & 9)

96

Annex 11

Smallholder Horticulture Empowerment & Promotion Unit Project (SHEP UP)

**Group Empowerment Indicators
- Indicators to assess the capacity change in a farmer group -**

Version 1: February 2011

Level	Description	Qualitative Aspects		Quantitative Aspects
Level 1	The group is formed as recommended by outsiders. But not all members are fully convinced of its benefit.	Leadership	<ul style="list-style-type: none"> - There has been no election for officials. - Only the group officials are exclusively involved in the decision-making. 	- No documentation of group activities.
		Cooperation among members	- Little cooperation exists among members i.e. limited number of group members implement the group activities.	- Membership list has not been updated for more than one year / No membership list has been prepared.
		Gender	<ul style="list-style-type: none"> - No awareness on gender issues i.e. What is to be a man and What is to be a woman - Gender disparities are accepted as culture and tradition. 	- Less than 10% of group officials are women/men.

AK

SHEP UP
Group Empowerment Indicators (GEIs)

Level	Description		Qualitative Aspects	Quantitative Aspects
Level 2	The group members are becoming aware of the benefits of grouping.	Leadership	<ul style="list-style-type: none"> - Officials are selected by members. - Leaders started taking an initiative in group operation. ie Leaders have started to support day to day activities of the group. - The meetings are not for discussion but to convey messages from the leaders/officials to the ordinary members i.e. Group members are not given the opportunity either to make changes or approve the agenda. 	<ul style="list-style-type: none"> - Both the management committee and the general meeting are held on ad hock basis. ie There is no consensus reached; on the time, date and place where the next meeting will be held at the end of the meeting (No schedule is available in writing). - Record on members' contribution is available.
		Cooperation among members	<ul style="list-style-type: none"> - Group members organize the farming activities together with an aim to upgrade their skills/knowledge. - Some members show interests on how the group is managed. 	<ul style="list-style-type: none"> - After group representatives attend the training, acquired skills and knowledge are shared in the meeting held within a month with more than 70% of members participating. - Market survey is organized and action plan is formulated with more than 70% of members involved. But less than 30% of members are implementing. - Less than 50% of members contribute regularly*1. - Less than 50% of members are aware of group by-laws.
		Gender	<ul style="list-style-type: none"> - Women participate in the group activities along with men. - Few women show their interest to join the decision-making process and men dominate both the general meetings and the management committee. ie. Women passively participate in the management and general meetings. 	<ul style="list-style-type: none"> - More than 70% of women members participate in the group activities regularly. - Less than 30% of group officials are women.

92

SHEP UP
Group Empowerment Indicators (GEIs)

Level	Description		Qualitative Aspects	Quantitative Aspects
Level 3	The group members became confident in each other.	Leadership	<ul style="list-style-type: none"> - Leaders respect members' opinions and try to encourage their participation. - The decisions and plans of the group activities are discussed in the regular management and general meetings. - Leaders started to look for information for network building with buyers, input suppliers and service providers. 	<ul style="list-style-type: none"> - The management committee and the general meeting are held on a regular basis. - Secretary keeps non-financial records*2. - Treasurer keeps financial records*3.
		Cooperation among members	<ul style="list-style-type: none"> - Every member actively participates in a general meeting, which is regularly held. - The members support each other in the implementation of new skills/knowledge both in the individual field and the common field. - The group collectively purchases inputs and sells products. - All members honor and practice the by-laws. 	<ul style="list-style-type: none"> - The general meetings are held regularly with more than 80% of men and women members participating. - Skills/knowledge trained by the extension officer are implemented by more than 50% of members in their fields. - More than 80% of members contribute regularly *1. - The formulated action plan is approved by more than 80% of members. 30 – 50% of members are implementing the action plan.
		Gender	<ul style="list-style-type: none"> - Both men and women are comfortable in expressing him/herself freely in the meeting. - Both men and women are actively involved in the group management. 	<ul style="list-style-type: none"> - Either gender assumes more than 30% of group officials.

92

SHEP UP
Group Empowerment Indicators (GEIs)

Level	Description		Qualitative Aspects	Quantitative Aspects
Level 4	A strong tie has been established among the group members. The members are interested in the capacity enhancement of the group as well as the community as a whole.	Leadership	<ul style="list-style-type: none"> - Members have confidence in leaders and assist them for the smooth group operation. 	<ul style="list-style-type: none"> - More than 70% of members participate in the election of officials. - Financial / Non-financial records are properly filed with all the relevant information as trained by SHEP UP.
		Cooperation among members	<ul style="list-style-type: none"> - The group has a capacity to find a solution for most of the problems raised in the group management and operation including the collective purchase of inputs and marketing of products. OR The group has an effective conflict resolution mechanism in place. - The members assist the neighbors and community members in dissemination of their farming skills/knowledge freely and openly. 	<ul style="list-style-type: none"> - More than 70% of members are aware of and are satisfied with how the membership fee is spent and how the profits from the collective marketing are shared among the members (Minutes of meetings with list of attendance is available). - The formulated action plan was fully implemented and the next action plan was formulated with more than 80% of members involved. - The group has established networking with more than one buyer, one input supplier and one service provider. - Skills/knowledge trained by the extension officer are implemented by more than 80% of members in their fields.
		Gender	<ul style="list-style-type: none"> - Both men and women are fully aware of the negative impacts of the gender disparities on the community development as well as the improvements of their livelihoods. - Women members also participate in the community meetings actively. 	<ul style="list-style-type: none"> - Either gender assumes more than 40% of group officials. - Women members participate in various community activities.

2/15

SHEP UP
Group Empowerment Indicators (GEIs)

Level	Description		Qualitative Aspects	Quantitative Aspects
Level 5	The group is able to work together to address various problems and can build and maintain the network with other groups and organizations.	Leadership	<ul style="list-style-type: none"> - The change of leaders doesn't affect the group management and operation. 	<ul style="list-style-type: none"> - The terms of officials are stated in the by-laws and strictly observed.
		Cooperation among members	<ul style="list-style-type: none"> - The group interacts with other groups/organization to address any problem that arises. - Many members are engaged in the well-being of the community, making use of their skills/knowledge learned through the SHEP UP activities. - The group negotiates with buyers over the prices and volumes. - The external shocks such as loss of buyers, unfavorable weather, poor prices don't jeopardize the group cohesion and integrity. - The group members are engaged in the skills / knowledge dissemination to other farmers. 	<ul style="list-style-type: none"> - There is an evidence for regular interaction with other groups / organizations. - The group has an annual budget plan for the group activities. - The group has a documented agreement with buyers.
		Gender	<ul style="list-style-type: none"> - Both men and women work with other community members on the improvement of gender relations in the community. - The group interacts and assists vulnerable groups of the community to improve their livelihoods. 	<ul style="list-style-type: none"> - The community increased the number of women committee members in the community development committee (the highest decision-making entity in the community). - There is an evidence for interaction with vulnerable groups in the community.

*1: Contribution includes membership fee, member contribution and payment of collective purchase both in cash and in kind.

*2: Non-financial records include minutes of group meetings and discussions as well as of farming.

*3: Financial records include those of membership fee/contribution as well as of collective input purchase and product sales.

26

Annex 12

Smallholder Horticulture Empowerment & Promotion Unit Project (SHEP UP)

Selection Criteria of SHEP UP Model Farmer Groups for the 3rd Batch (2012/2013)

1	Number of Groups	Each District will choose 5 (Five) Model Farmer Groups for the 1 st Year (2012/2013) to implement the SHEP Approach under the supervision of the SHEP Unit
2	Group Status	Select Model Farmer Groups from both “ Formal ” and “ Informal ” Groups Do NOT form a new group for SHEP UP, but select from existing groups
3	Membership	The group membership must be between 15 (fifteen) and 50 (fifty)
4	Age	Out of school youths to adults
5	Literacy	Group officials should be literate or semi-literate in order to read and write during the Training sessions and may also translate the training materials/handouts into their local languages when needed
6	Occupation	Each group member must be practicing “ Horticulture ”
7	Group Activities	Choose groups whose core business is “ Horticulture ” Choose groups whose alternative income generating activities do NOT have negative impact on “ Horticulture ” Choose more than 60 % of the total groups from the groups which have NOT started buying inputs and selling their produce together Choose less than 40 % of the total groups from the groups which have started buying inputs and selling their produce together Avoid choosing groups with similar horticultural activities which are being supported by other

92

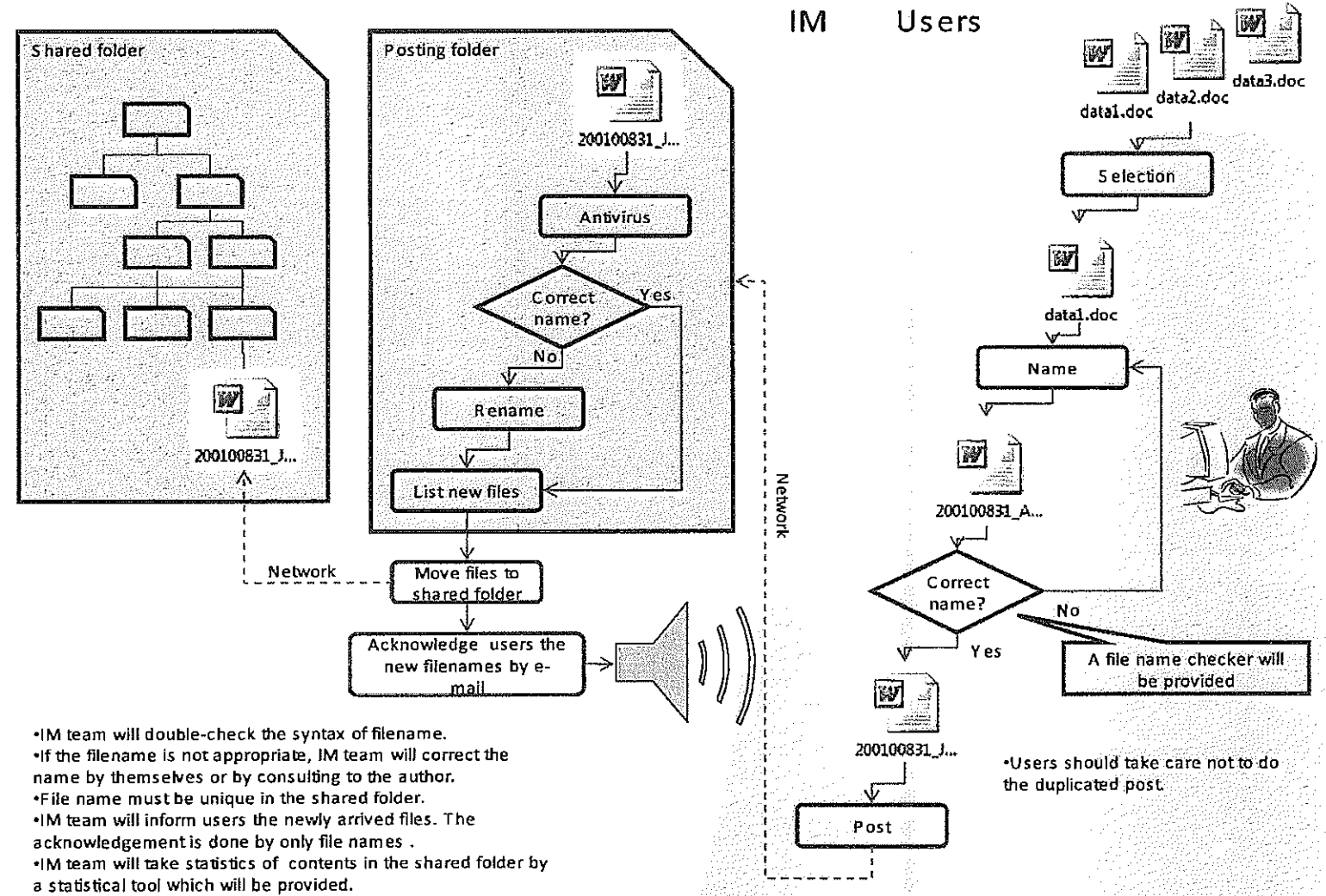
		Projects/Programmes (e.g. SHoMaP, SHDP etc.)
		Choose groups in which the Project will compliment the work done by other service providers
8	Group Attitude	Choose groups with a “Healthy & Positive Attitude” towards extension service providers to have dialogue
		Choose groups with a “High Motivation” to learn new ideas & technologies
		Choose groups with an ability & willingness to mobilize resources
9	Area under Coverage	Choose groups to evenly cover the production areas in your district (Avoid choosing only groups from the same area)
		Avoid choosing groups from the areas which have security concerns (It might cause some negative effects to the field activities of the Project)
10	Accessibility	Choose groups which are accessible by road (i.e. Frontline Extension Officers (FEOs)/Group Facilitators need to visit groups to give a series of the In-field Training)
11	Group’s Sensibility to Gender Issues	Gender Balance – The Project is pro-gender balance. Thus, do NOT choose groups with less than 30 % of female/male participation
		Advocacy – The Project will give preference to groups with women official(s) (i.e. Women with the leadership role)
12	Special Groups	SHEP UP will support “Special Groups” of the disadvantaged or discriminated in the society

Notes:

- Based on the proposed **Selection Criteria** written above, District SHEP UP Management Teams may adjust/add criteria according to their specific situation with approval of SHEP UP.
- In case of any changes, **fill out** the **“Revision/Addition of the Selection Criteria”** form and submit it to the SHEP UP in advance.

92

Flow Chart on Posting a File in SHEP UP



- IM team will double-check the syntax of filename.
- If the filename is not appropriate, IM team will correct the name by themselves or by consulting to the author.
- File name must be unique in the shared folder.
- IM team will inform users the newly arrived files. The acknowledgement is done by only file names .
- IM team will take statistics of contents in the shared folder by a statistical tool which will be provided.

•Users should take care not to do the duplicated post.

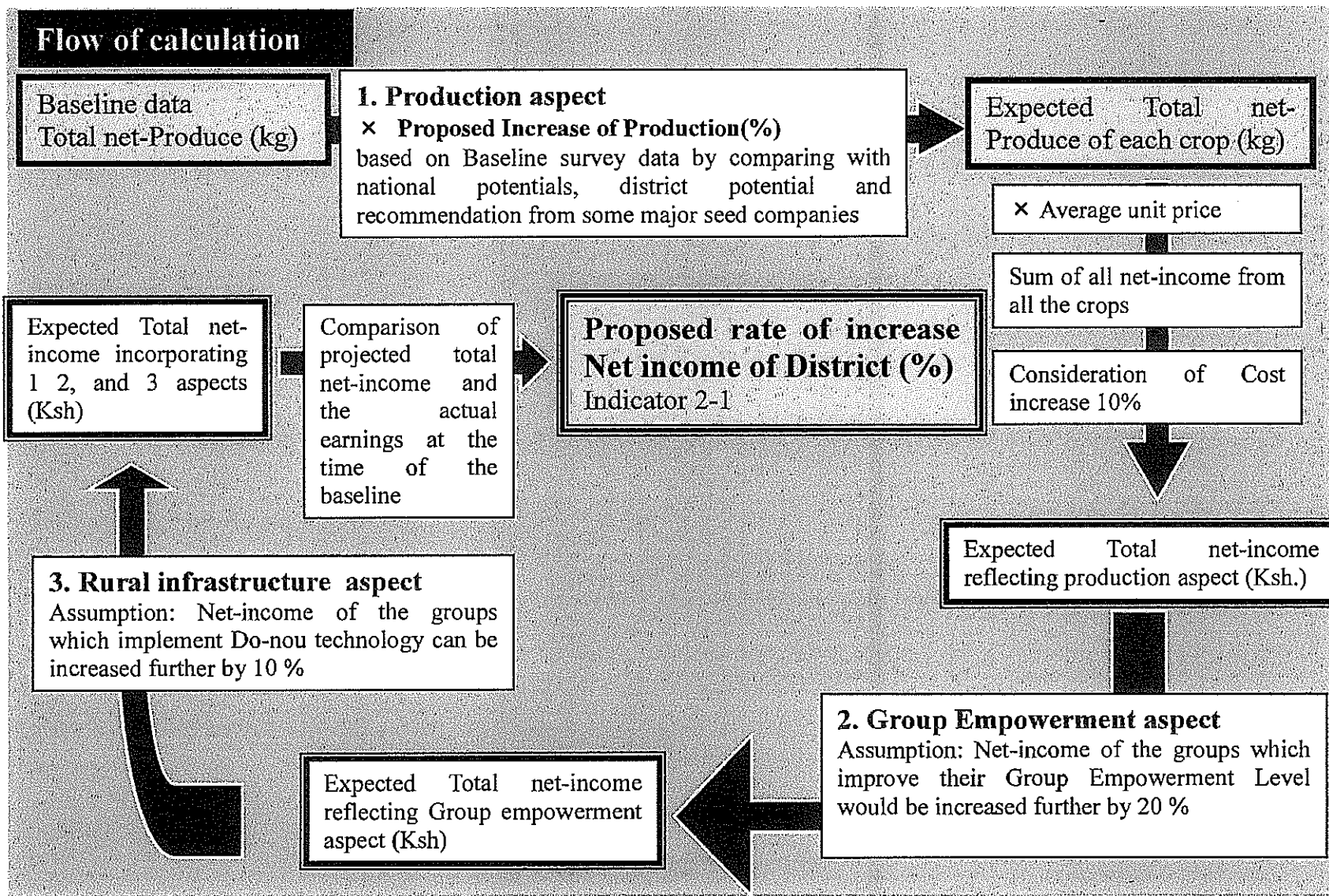
flow chart on posting a file

Annex 14. List of Trainings and their Objectives in the SHEP Approach

No.	Trainings	Objectives
1.	Sensitization Workshop	<ul style="list-style-type: none"> - To sensitize farmer group representatives (both male and female), Frontline Extension Officers/Group Facilitators (FEOs/GFs) and Divisional Agricultural Extension Officers (DAEOs) on the SHEP Approach and outline of the SHEP UP
2.	Baseline Survey	<ul style="list-style-type: none"> - To assess the levels of the Model Farmer Groups in terms of: yields & income, horticultural crop production practices and group empowerment through data collection before the actual project activities
3.	Farm Business Linkage Stakeholder (FABLIS) Forum	<ul style="list-style-type: none"> - To link SHEP UP Model Farmer Groups with potential stakeholders
4.	Joint Extension Staff & Farmers Dual Gender (JEF2G) Training	<ul style="list-style-type: none"> - To impart skills on Action Plan making to farmer group representatives (both male and female) and their FEOs/GFs through the practices of Market Survey, Crop Selection & Ranking and Problem/Objective Maps making - To strengthen relationship between farmers and FEOs/Group Facilitators for smooth implementation of field activities
5.	Group Excises	<ul style="list-style-type: none"> - To train other members of the Model Farmer Groups on topics covered during the JEF2G Training - To make Group Action Plan based on information form the Market Survey and the result of Crop Selection & Ranking and Problem/Objective Maps
6.	Facilitators' Training for Farmers' Demand Driven Extension (FT-FaDDE)	<ul style="list-style-type: none"> - To impart horticultural crop production skills to the FEOs/GFs and district & divisional staff to address challenges raised in the Group Action Plans of the Model Farmer Groups - To sensitize FEOs/GFs and district & divisional staff on implementation process of the In-field Training
7.	In-field Training	<ul style="list-style-type: none"> - To train Model Farmer Groups on horticultural crop production skills and techniques of their selected crops based on their needs identified in their Group Action Plans
8.	Follow-up/Monitoring and Evaluation	<ul style="list-style-type: none"> - To observe the implementation process of the In-field Training and ensure the quality of training sessions - To assess the implementation process of Group Action Plan - To evaluate group development during and after the project intervention through monitoring & evaluation of the group activities in terms of crop production, adoption of technologies and group cohesiveness

9/2

Annex 15. Calculation of indicators for target average net-income



92

Indicator (2-1) of the Outcome 2

Name of District: Masaba South

1. Calculation of the Proposed Increase in Net Income (Ksh.)

Selected Crops	Total Net Produce (Kg)	Proposed Increase in Production (%) ^{*1}	Total No. of Groups in the District	No. of Group(s) that Selected the Crop ^{*2}	Average Unit Price (Ksh./kg)	Influence of Farmer Group Empowerment/ Gender (+ 20 %)	Influence of Rural Infrastructure (+ 10 %)	Effect of Cost of Production (- 10 %) ^{*3}	Proposed Increase in Net Income (Ksh.)
Banana	46096.00	10%	5	1	28.11	120%	110%	90%	30785.15
BNS	8295.00	46%	5	2	33.18	120%	110%	90%	60157.98
Cabbage	67265.00	48%	5	2	8.91	120%	110%	90%	136647.50
Spider Plant	2705.00	74%	5	1	34.16	120%	110%	90%	16244.85
Spring Onion	7117.00	74%	5	1	49.18	120%	110%	90%	61539.08
Tomato	23368.00	111%	5	3	24.80	120%	110%	90%	458468.15

2. Proposed Rate of Increase in Net Income

- 1) Total Net Income for all Horticultural Crops in the district (Ksh.) = 2827720.00
- 2) Total Proposed Increase in Net Income (Ksh.) = 763842.71
- 3) Proposed Net Income within two years (Ksh.) = 3591562.71
- 4) Proposed Rate of Increase in Net Income $(2) \div 1) \times 100 (\%)$ (%) = **27.0**

Note:

- ^{*1} It is assumed that the proposed rate will be achieved within two years after the district adopts the SHEP Approach.
- ^{*2} The column shows that the number of groups that selected the crop will influence the proposed rate of increase in production.
- ^{*3} It is assumed that total cost of production will increase by 10 % within two years after the district adopts the SHEP Approach.

Annex 16-1: Detailed Data for Average Net-income Increase in Central Province

Smallholder Horticulture Empowerment & Promotion Unit Project (SHEP UP)

Indicator (2-1) of the Outcome 2

Province: Central Province

Target: 1st Year's Model Farmer Groups

1. Average Net-income Benefit (Ksh.) per District

Name of District	Comparison	Average Net-income Benefit (Ksh.)				Proposed Rate of Increase (%)
		Group	Per Farmer	Per Male	Per Female	
Lari	Baseline	1,007,984	57,930	53,809	62,345	25.7
	Current	556,631	41,540	44,435	36,974	
	Increased Rate (%)	-44.8	-28.3	-17.4	-40.7	
Nyandarua Central	Baseline	210,643	12,391	10,575	14,747	47.7
	Current	115,480	18,626	23,912	11,306	
	Increased Rate (%)	-45.2	50.3	126.1	-23.3	
Kieni East	Baseline	567,308	20,407	18,218	23,126	38.9
	Current	465,298	35,792	37,548	33,743	
	Increased Rate (%)	-18.0	75.4	106.1	45.9	
Kandara	Baseline	1,497,686	53,109	83,428	20,561	18.0
	Current	411,429	23,114	32,577	15,389	
	Increased Rate (%)	-72.5	-56.5	-61.0	-25.2	
Kieni West	Baseline	818,560	39,736	47,706	27,182	22.0
	Current	1,200,921	87,023	84,453	90,787	
	Increased Rate (%)	46.7	119.0	77.0	234.0	
Kikuyu	Baseline	556,061	39,719	39,113	40,296	19.5
	Current	665,160	51,166	62,746	30,020	
	Increased Rate (%)	19.6	28.8	60.4	-25.5	
Kirinyaga West	Baseline	495,603	20,312	21,481	19,063	48.1
	Current	190,863	21,207	16,703	27,759	
	Increased Rate (%)	-61.5	4.4	-22.2	45.6	
Limuru	Baseline	527,065	21,253	26,452	17,242	36.7
	Current	1,637,901	99,872	122,917	78,421	
	Increased Rate (%)	210.8	369.9	364.7	354.8	
Nyandarua West	Baseline	103,454	5,684	10,832	2,614	37.4
	Current	360,962	19,407	15,619	21,300	
	Increased Rate (%)	248.9	241.4	44.2	715.0	
Murang'a South	Baseline	386,415	18,578	17,331	20,150	48.2
	Current	323,203	34,383	31,109	37,028	
	Increased Rate (%)	-16.4	85.1	79.5	83.8	

Notes:

- * Number in "black" indicates positive growth and achieved the proposed increased rate.
- * Number in "blue" indicates positive growth, however not yet to achieve the proposed increased rate.
- * Number in "red" indicates negative growth.

Annex 16-1: Detailed Data for Average Net-income Increase in Central Province

Smallholder Horticulture Empowerment & Promotion Unit Project (SHEP UP)

Indicator (2-1) of the Outcome 2

Province: Central Province

Target: 1st Year's Model Farmer Groups

3. No. of Groups and Analyzed No. of Individual Farmer's Data (CP&IAD)

Name of District	Group		Total		Male		Female	
	No. of Group		No. of Data		No. of Data		No. of Data	
	Baseline	Current	Baseline	Current	Baseline	Current	Baseline	Current
Lari	5	5	87	67	45	41	42	26
Nyandarua Central	5	5	85	31	48	18	37	13
Kieni East	5	5	139	65	77	35	62	30
Kandara	5	5	141	89	73	40	68	49
Kieni West	5	5	103	69	63	41	40	28
Kikuyu	6	5	84	65	41	42	43	23
Kirinyaga West	5	3	122	27	63	16	59	11
Limuru	5	5	124	82	54	39	70	43
Nyandarua West	5	5	91	93	34	31	57	62
Murang'a South	5	5	104	47	58	21	46	26
Total	51	48	1,080	635	556	324	524	311

Annex 16-2: Detailed Data for Average Net-income Increase in Rift Valley Province

Smallholder Horticulture Empowerment & Promotion Unit Project (SHEP UP)

Indicator (2-1) of the Outcome 2

Province: Rift Valley Province

Target: 1st Year's Model Farmer Groups

1. Average Net-income Benefit (Ksh.) per District

Name of District	Comparison	Average Net-Income Benefit (Ksh.)				Proposed Rate of Increase (%)
		Group	Per Farmer	Per Male	Per Female	
Nandi East	Baseline	291,414	15,178	19,192	10,814	24.0
	Current	103,266	13,955	23,107	5,285	
	Increased Rate (%)	-64.6	-8.1	20.4	-51.1	
Nakuru North	Baseline	663,048	31,877	52,865	10,066	22.4
	Current	109,760	10,976	9,913	11,746	
	Increased Rate (%)	-83.4	-65.6	-81.2	16.7	
Wareng	Baseline	1,168,949	49,955	60,530	36,737	17.3
	Current	764,674	50,978	60,172	38,955	
	Increased Rate (%)	-34.6	2.0	-0.6	6.0	
Nandi South	Baseline	544,230	32,395	38,388	24,782	23.1
	Current	341,347	27,091	28,512	25,714	
	Increased Rate (%)	-37.3	-16.4	-25.7	3.8	
Kajiado North	Baseline	1,000,670	83,389	111,131	47,948	24.0
	Current	833,163	63,118	76,340	50,675	
	Increased Rate (%)	-16.7	-24.3	-31.3	5.7	
Laikipia West	Baseline	474,525	14,039	11,624	16,880	52.7
	Current	1,250,818	48,860	47,539	50,267	
	Increased Rate (%)	163.6	248.0	309.0	197.8	
Marakwet West	Baseline	741,554	49,437	42,514	59,263	35.3
	Current	191,022	13,265	11,986	14,696	
	Increased Rate (%)	-74.2	-73.2	-71.8	-75.2	
Transmara West	Baseline	873,371	40,434	46,877	27,547	44.9
	Current	1,489,013	93,063	130,349	39,960	
	Increased Rate (%)	70.5	130.2	178.1	45.1	
Sotik	Baseline	313,304	17,215	24,013	10,850	52.1
	Current	274,733	31,220	27,393	32,898	
	Increased Rate (%)	-12.3	81.4	14.1	203.2	
Narok South	Baseline	2,207,852	135,175	229,376	37,048	21.2
	Current	1,538,416	103,947	119,232	90,230	
	Increased Rate (%)	-30.3	-23.1	-48.0	143.5	

Notes:

- * Number in "black" indicates positive growth and achieved the proposed increased rate.
- * Number in "blue" indicates positive growth, however not yet to achieve the proposed increased rate.
- * Number in "red" indicates negative growth.

Annex 16-2: Detailed Data for Average Net-income Increase in Rift Valley Province

Smallholder Horticulture Empowerment & Promotion Unit Project (SHEP UP)

Indicator (2-1) of the Outcome 2

Province: Rift Valley Province

Target: 1st Year's Model Farmer Groups

2. No. of Groups and Analyzed No. of Individual Farmer's Data (CP&IAD)

Name of District	Group		Total		Male		Female	
	No. of Group		No. of Data		No. of Data		No. of Data	
	Baseline	Current	Baseline	Current	Baseline	Current	Baseline	Current
Nandi East	5	5	96	37	50	18	46	19
Nakuru North	5	5	104	50	53	21	51	29
Wareng	5	4	117	60	65	34	52	26
Nandi South	5	5	84	63	47	31	37	32
Kajiado North	6	5	72	66	40	32	32	34
Laikipia West	5	5	169	128	94	66	75	62
Marakwet West	5	5	75	72	44	38	31	34
Transmara West	5	5	108	80	72	47	36	33
Sotik	5	5	91	44	44	20	47	24
Narok South	3	5	49	74	25	35	24	39
Total	49	49	965	674	534	342	431	332

84

Annex 17-1 Detailed Data for Adoption of Horticultural Production Techniques (GHCP&PHHT20) in Central Province

Smallholder Horticulture Empowerment & Promotion Unit Project (SHEP UP)

Indicator (2-2) of the Outcome 2

Province: Central Province

Target: 1st Year's Model Farmer Groups

1. Percentage of Individual Members of the Model Farmer Groups who apply Techniques (GHCP&PHHT20) above their District Targets

Name of District	Total			Male			Female		
	Percentage of Farmers (%)		Increase (%)	Percentage of Farmers (%)		Increase (%)	Percentage of Farmers (%)		Increase (%)
	Baseline	Current		Baseline	Current		Baseline	Current	
Lari	17.0	77.0	60.0	22.2	73.8	51.6	11.6	81.3	69.6
Nyandarua Central	15.3	81.8	66.5	10.4	90.0	79.6	21.6	69.2	47.6
Kieni East	10.0	66.2	56.2	9.2	61.8	52.6	10.9	71.0	60.0
Kandara	16.3	82.2	66.0	16.0	92.5	76.5	16.5	74.0	57.5
Kieni West	15.1	94.3	79.2	12.9	97.6	84.7	18.2	89.3	71.1
Kikuyu	20.2	92.8	72.5	15.4	89.7	74.4	24.4	96.7	72.2
Kirinyaga West	10.6	84.1	73.5	8.1	87.5	79.4	13.1	80.0	66.9
Limuru	9.4	83.3	74.0	12.7	83.7	71.0	6.8	83.0	76.1
Nyandarua West	43.8	54.8	11.0	46.9	46.9	0.0	42.1	59.0	16.9
Murang'a South	13.5	83.6	70.2	14.8	88.9	74.1	11.6	78.6	66.9

Notes:

* Number in "black" indicates more than 70 % of individual members applying techniques above their district targets.

* Number in "red" indicates less than 70 % of individual members applying techniques above their district targets.

Annex 17-1 Detailed Data for Adoption of Horticultural Production Techniques (GHCP&PHHT20) in Central Province

Smallholder Horticulture Empowerment & Promotion Unit Project (SHEP UP)

Indicator (2-2) of the Outcome 2

Province: Central Province

Target: 1st Year's Model Farmer Groups

2. Increase Rate of the Average No. of Techniques (GHCP&PHHT20) applied by Individual Members of the Model Farmer Groups per District

Name of District	Total					Male					Female				
	Ave. No. of Techniques			Proposed Increase (%)	Actual Increase Rate (%)	Ave. No. of Techniques			Proposed Increase (%)	Actual Increase Rate (%)	Ave. No. of Techniques			Proposed Increase (%)	Actual Increase Rate (%)
	Baseline	Target	Current			Baseline	Target	Current			Baseline	Target	Current		
Lari	10.38	15	16.22	44.6	56.3	10.62	15	16.24	41.2	52.9	10.12	15	16.19	48.3	60.0
Nyandarua Central	7.12	12	13.61	68.6	91.2	6.40	12	14.05	87.6	119.7	8.05	12	12.92	49.0	60.5
Kieni East	10.51	15	15.58	42.7	48.2	10.83	15	15.21	38.5	40.4	10.14	15	16.00	47.9	57.8
Kandara	9.36	15	16.19	60.3	73.0	9.20	15	16.50	63.1	79.4	9.52	15	15.94	57.6	67.5
Kieni West	10.92	15	17.31	37.3	58.5	10.94	15	17.57	37.2	60.7	10.91	15	16.93	37.5	55.2
Kikuyu	12.57	15	17.09	19.3	35.9	12.69	15	16.87	18.2	32.9	12.47	15	17.37	20.3	39.3
Kirinyaga West	10.34	15	16.07	45.0	55.4	10.40	15	16.33	44.2	57.0	10.28	15	15.75	45.9	53.2
Limuru	10.32	15	15.98	45.3	54.8	10.55	15	16.09	42.2	52.6	10.15	15	15.87	47.8	56.4
Nyandarua West	12.07	14	13.44	16.0	11.4	12.28	14	13.03	14.0	6.1	11.95	14	13.66	17.2	14.3
Murang'a South	9.65	14	15.45	45.0	60.1	10.08	14	16.33	38.9	62.0	9.05	14	14.61	54.8	61.5

Notes:

* Number in "black" indicates positive growth and achieved the proposed increased rate.

* Number in "blue" indicates positive growth, however not yet to achieve the proposed increased rate.

Annex 17-1 Detailed Data for Adoption of Horticultural Production Techniques (GHCP&PHHT20) in Central Province

Smallholder Horticulture Empowerment & Promotion Unit Project (SHEP UP)

Indicator (2-2) of the Outcome 2

Province: Central Province

Target: 1st Year's Model Farmer Groups

3. No. of Groups and Analyzed No. of Individual Farmer's Data (GHCP&PHHT20)

Name of District	Group		Total		Male		Female	
	No. of Group		No. of Data		No. of Data		No. of Data	
	Baseline	Current	Baseline	Current	Baseline	Current	Baseline	Current
Lari	5	5	88	74	45	42	43	32
Nyandarua Central	5	5	85	33	48	20	37	13
Kieni East	5	5	140	65	76	34	64	31
Kandara	5	5	160	90	81	40	79	50
Kieni West	5	5	106	70	62	42	44	28
Kikuyu	6	5	84	69	39	39	45	30
Kirinyaga West	5	4	123	44	62	24	61	20
Limuru	5	5	128	90	55	43	73	47
Nyandarua West	5	5	89	93	32	32	57	61
Murang'a South	5	5	104	55	61	27	43	28
Total	51	49	1,107	683	561	343	546	340

4/12

Annex 17-2 Detailed Data for Adoption of Horticultural Production Techniques (GHCP&PHHT20) in Rift Valley Province

Smallholder Horticulture Empowerment & Promotion Unit Project (SHEP UP)

Indicator (2-2) of the Outcome 2

Province: Rift Valley Province

Target: 1st Year's Model Farmer Groups

1. Percentage of Individual Members of the Model Farmer Groups who apply Techniques (GHCP&PHHT20) above their District Targets

Name of District	Total			Male			Female		
	Percentage of Farmers (%)		Increase (%)	Percentage of Farmers (%)		Increase (%)	Percentage of Farmers (%)		Increase (%)
	Baseline	Current		Baseline	Current		Baseline	Current	
Nandi East	34.1	82.6	48.5	42.2	78.4	36.2	25.6	87.5	61.9
Nakuru North	17.9	48.5	30.6	20.0	55.2	35.2	15.9	43.2	27.4
Wareng	39.1	90.0	50.9	47.6	94.1	46.5	28.8	84.6	55.8
Nandi South	11.5	15.9	4.4	16.7	18.9	2.3	5.1	12.5	7.4
Kajiado North	26.6	77.9	51.3	25.7	69.7	44.0	25.6	84.1	58.5
Laikipia West	15.5	75.9	60.4	19.6	76.1	56.5	10.5	75.8	65.2
Marakwet West	9.7	76.0	66.3	9.3	83.3	74.0	10.3	66.7	56.3
Transmara West	31.2	84.8	53.6	31.5	86.4	54.9	30.6	82.6	52.1
Sotik	28.9	43.8	14.9	28.9	51.6	22.7	28.9	36.4	7.5
Narok South	12.0	93.5	81.5	22.9	92.3	69.5	5.3	94.7	89.5

Notes:

* Number in "black" indicates more than 70 % of individual members applying techniques above their district targets.

* Number in "red" indicates less than 70 % of individual members applying techniques above their district targets.

Annex 17-2 Detailed Data for Adoption of Horticultural Production Techniques (GHCP&PHHT20) in Rift Valley Province

*Smallholder Horticulture Empowerment & Promotion Unit Project (SHEP UP)***Indicator (2-2) of the Outcome 2**

Province: Rift Valley Province

Target: 1st Year's Model Farmer Groups

2. Increase Rate of the Average No. of Techniques (GHCP&PHHT20) applied by Individual Members of the Model Farmer Groups per District

Name of District	Total					Male					Female				
	Ave. No. of Techniques			Proposed Increase Rate (%)	Actual Increase Rate (%)	Ave. No. of Techniques			Proposed Increase Rate (%)	Actual Increase Rate (%)	Ave. No. of Techniques			Proposed Increase Rate (%)	Actual Increase Rate (%)
	Baseline	Target	Current			Baseline	Target	Current			Baseline	Target	Current		
Nandi East	12.30	15	17.03	22.0	38.5	12.42	15	16.86	20.8	35.8	12.16	15	17.22	23.3	41.6
Nakuru North	12.18	16	15.08	31.4	23.8	12.45	16	15.24	28.5	22.4	11.92	16	14.95	34.2	25.4
Wareng	12.89	15	17.05	16.4	32.3	13.60	15	17.21	10.3	26.5	12.02	15	16.85	24.8	40.2
Nandi South	11.72	16	12.26	36.5	4.6	12.33	16	12.86	29.7	4.3	10.97	16	11.56	45.8	5.4
Kajiado North	11.38	13	14.36	14.2	26.2	11.74	13	13.45	10.7	14.6	11.05	13	15.05	17.7	36.2
Laikipia West	10.89	15	16.15	37.8	48.4	11.03	15	16.38	36.0	48.5	10.71	15	15.91	40.0	48.5
Marakwet West	10.47	15	16.48	43.2	57.4	10.09	15	17.21	48.6	70.6	11.03	15	15.55	35.9	40.9
Transmara West	12.17	15	17.12	23.3	40.8	12.25	15	17.10	22.5	39.6	12.00	15	17.15	25.0	42.9
Sotik	12.89	15	14.06	16.4	9.1	12.93	15	14.42	16.0	11.5	12.84	15	13.73	16.8	6.9
Narok South	9.95	13	16.71	30.7	68.1	10.51	13	16.82	23.6	60.0	9.60	13	16.61	35.5	73.0

Notes:

* Number in "black" indicates positive growth and achieved the proposed increased rate.

* Number in "blue" indicates positive growth, however not yet to achieve the proposed increased rate.

Annex 17-2 Detailed Data for Adoption of Horticultural Production Techniques (GHCP&PHHT20) in Rift Valley Province

Smallholder Horticulture Empowerment & Promotion Unit Project (SHEP UP)

Indicator (2-2) of the Outcome 2

Province: Rift Valley Province

Target: 1st Year's Model Farmer Groups

3. No. of Groups and Analyzed No. of Individual Farmer's Data (GHCP&PHHT20)

Name of District	Group		Total		Male		Female	
	No. of Group		No. of Data		No. of Data		No. of Data	
	Baseline	Current	Baseline	Current	Baseline	Current	Baseline	Current
Nandi East	5	5	88	69	45	37	43	32
Nakuru North	5	5	123	66	60	29	63	37
Wareng	5	4	115	60	63	34	52	26
Nandi South	5	5	87	69	48	37	39	32
Kajiado North	5	5	79	77	35	33	43	44
Laikipia West	5	5	168	137	92	71	76	66
Marakwet West	5	5	72	75	43	42	29	33
Transmara West	5	5	109	105	73	59	36	46
Sotik	5	5	90	64	45	31	45	33
Narok South	5	5	92	77	35	39	57	38
Total	50	49	1,023	799	539	412	483	387

