Republic of Kenya Ministry of Agriculture, Livestock, Fisheries and Cooperatives

## Project Completion Report on

# Smallholder Horticulture Empowerment and Promotion Project for Local and Up-Scaling (SHEP PLUS)

#### August 2020

### JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

## Smallholder Horticulture Empowerment and Promotion Project for Local and Up-Scaling (SHEP PLUS)

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#### 1. Project Outline

The Smallholder Horticulture Empowerment and Promotion Project for Local and up Scaling (SHEP PLUS) is a technical cooperation project between the governments of Kenya through State Department for Crop Development in the Ministry of Agriculture, Livestock, Fisheries and Cooperatives (MoALFC), Horticultural Crops Directorate in the Agriculture and Food Authority (HCD/AFA) and Japan through Japanese International Cooperation Agency (JICA). The project period is for 5 years running from March 2015 to March 2020 with the following objectives and outputs.

#### 1-1. Objective and Outputs

#### Overall Goal

Livelihood of Smallholder horticulture farmers applying the SHEP Approach in implementing Counties is improved.

#### Project Purpose Implementation System to support smallholder horticulture farmers in implementing Counties is established.

#### Output

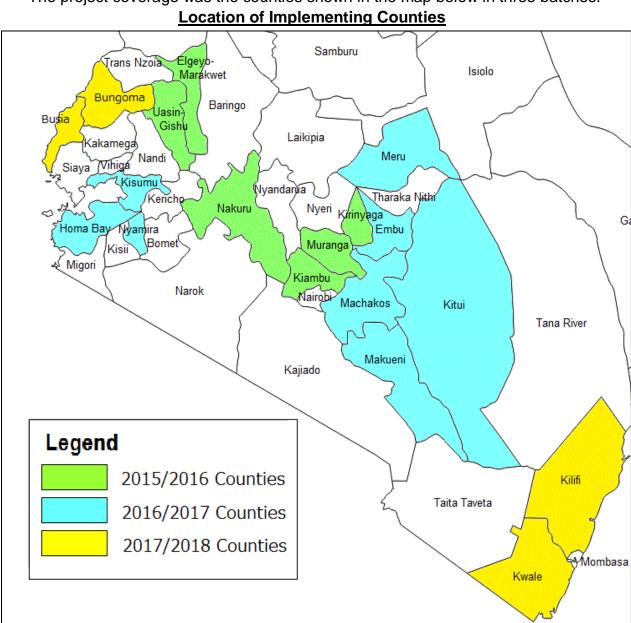
Output 1: The SHEP Approach is improved by the Project Coordination Unit and adopted/adapted by implementing Counties.

Output 2: Income of individual members of smallholder horticulture Model Farmer Groups is improved through the implementation of the SHEP Approach at implementing Counties.

Output 3: Systems of monitoring and evaluation between the PCU and implementing Counties are established.

Output 4: The SHEP Approach is improved by utilizing the experience from in-country training and advisory missions to African countries.

The project coverage was the counties shown in the map below in three batches.

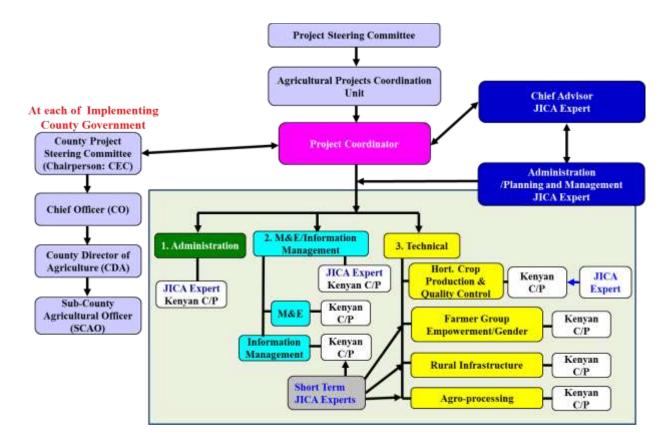


(Source: URL: https://d-maps.com)

#### 1-2.Implementing Structure

The project team consists of personnel from both Kenya and Japan. The Kenyan side is composed of Project Director, Project Coordinator and Counterparts in horticultural crop production, spot improvement using Do-nou, entrepreneurship & information management, farmer group empowerment and gender mainstreaming, Training Coordination, and M&E drawn from both MOALFC and HCD.

The JICA side dispatched long-term experts, such as Chief Adviser, Horticulture Crop Production/Extension and Coordination/SHEP Approach in African Countries, SHEP Approach Promotion and short-term experts in other specific technical areas. The structure is as shown below:



The main implementing Agencies of the project were as follows;

- State Department for Crop Development / MoALFC
- HCD/AFA
- JICA
- County Governments

#### 1-3.Main Concept of the Project

Agriculture is one of the key industries in Kenya. Particularly, the horticulture sub-sector has recently been showing a strong growth with an average annual growth rate of 15-20 %. More than 80% of smallholder farmers are engaged in horticulture crop production and about 80% of horticulture crop production is produced by smallholder farmers. <sup>1</sup>Under these circumstances JICA in collaboration with MoALFC established a model of

<sup>&</sup>lt;sup>1</sup> National Horticulture Policy, MoALFC https://www.kenyamarkets.org/wp-content/uploads/2016/06/National-Horticulture-Policy-

extension called the SHEP Approach which has been implemented in Kenya from 2006 to date aimed at contributing to improvement of livelihood of farmers. It refers to specific methods and techniques for empowering smallholder horticulture farmers. It includes a series of training sessions for both farmer groups & Frontline Extension Officers (FEOs)/Group Facilitators.

Kenya adopted devolution system of government from 2013 and so SHEP PLUS was started in 2015 specifically to support further implementation of the SHEP Approach by Counties under the devolved system. The project targeted groups of smallholder farmers (to be selected based on the criteria set by the Project in 18 Counties) (1 Sub-county / County). The Project supported training of 5 groups in the first year & 5 groups in the second year per Sub-County. Similarly, the project spearheaded training of staff from other African Countries who in turn trained their farmers.

The SHEP Approach training package is as shown below;

#### **SHEP Approach Training package**

- 1. Sensitization Workshops
  - 2. Baseline Survey
- 3. Stakeholder Forum (FABLIST)
  - 4. Gender Mainstreaming ToT
- 5. Training on Market Survey & Crop Selection (JEF2G)
  - 6. Market Survey & Crop Selection by Farmers
- 7. Crop Production (TOTs) for Extension Staff (FT-FaDDE)
  - 8. Farmers Group Trainings (In-field Training)
    - 9. Monitoring & Evaluation

**Market-oriented Smallholder Farmer Groups** 

#### 1-4.Adoption/Adaption

The Project made efforts in supporting the County Governments to implement the 'SHEP Approach' under the Devolved Government Structure by themselves. It promoted adoption / adaption to the implementing counties so as to enhance sustainability of the approach.

<sup>2012.</sup>pdf#search=%27Kenya+National+Horticulure+Policy%27

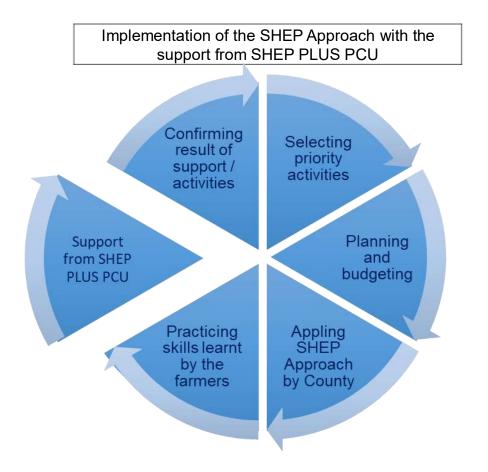
#### Adoption.

Adoption means the application of a **full package** of the SHEP Approach in the implementing County.

#### Adaption.

Adaption means the application of the SHEP Approach to the farmers or **incorporation** of the SHEP Approach in other **Projects/ Programmes** with some **modifications to suit** the County.

The Counties first need to internalize & then institutionalize the "SHEP Approach"



The above diagram shows the implementation of the SHEP Approach by the Counties with their own initiatives. This requires realistic planning based on County's own context (priority, resource and implementing system at the field level etc.)

#### 1-5. Administration

The project was guided and supported by a Project Steering Committee (PSC) whose membership was appointed by the Principal Secretary, State Department for Crop Development. PSC Meetings were therefore regularly held to share the progress and

achievement of the Project and discuss matters arising from the Project among project stakeholders. Field tours for the PSC members were also were conducted to farmer groups in the implementing Counties so as help the members enhance their understanding of the project activities.

The Project held a total of seven (7) PSC meetings and Two (2) Special PSC meetings during the project period, where they discussed, approved and decided the important issues of the Project such as approval of annual work plans & budgets, approval of PDM, staffing issues and results of JICA advisory mission. In addition, the Project reported the progress of activities, achievement, challenges, formulated way-forward to address the challenges. Some of PSC meetings included field visits to beneficiaries, etc. Also, JICA headquarters dispatched advisory missions whose results were discussed during the PSC Meetings. The table below summarizes the details of the PSC meetings held within the project period.

Table 4-1: List of PSC Agenda

| PSC        | Date       | Number of<br>Attendance | Agenda  | Remarks  |
|------------|------------|-------------------------|---|--|
| 1st<br>PSC | 2015/10/22 | 19 (M13, F6)            | Outline of SHEP PLUS and achievements to date Proposal of Amendments of Record of Discussion, PDM and PO Impact Evaluation Proposal of 2nd batch Target areas   | Joint PSC with Project on Enhancing Gender Responsive Extension Services in Kenya (PEGRES) |
| 2nd<br>PSC | 2016/5/5   | 20 (M14, F6)            | Achievement and plan of activities Detail of proposed changes in PDM 2nd and 3rd Batch Counties Progress of Impact Evaluation   | Joint PSC with PEGRES, in- advance field visit to a FG Revised PDM Approved                |
| 3rd<br>PSC | 2016/11/2  | 27 (M20, F7)            | SHEP PLUS Progress Report<br>SHEP PLUS 2016/2017 Work<br>Plan & Schedule of Activities<br>Progress of Impact Evaluation<br>PEGRES Progress Report of<br>last six months<br>Plan of Operations of next six<br>months | Joint PSC with Project on Enhancing Gender Responsive Extension Services in Kenya (PEGRES) |

|            |                |              | Presentation of Benchmark Data of PDM Indicators   |  |
|------------|----------------|--------------|--|--|
| 4th<br>PSC | 2017/7/3       | 18 (M14, F4) | Review of last minutes Activity report Plan for 2017/2018 Result of JICA Advisory Mission Report of Impact Evaluation  |  |
| 5th<br>PSC | 2018/5/3       | 16 (M10, F6) | Progress Report Presentation of PDM Indicators 2018/2019 Work Plan & Schedule of Activities  | Target figures for OVIs in PDM approved                                      |
| 6th<br>PSC | 2018/11/7 16 ( | 16 (M11, F5) | Reviewing field visit Approval of last PSC minutes Progress in last 6 months and plan for next 6 months PDS results and analysis paper Impact Evaluation progress. | Field visit to Nyamira County OVI for Overall Goal in PDM approved           |
| 7th<br>PSC | 2019/5/2       | 17 (M11, F6) | Progress of 2018/19 activities Result of Periodical Data Survey Plan for 2019/20 Achievement of OVIs on PDM  | MM to agree<br>figures in OVI on<br>PDM was signed<br>on 9th January<br>2019 |
| SP.<br>PSC | 2019/9/12      | -            | Project Terminal Evaluation  | MM of terminal evaluation was signed.  |
| SP<br>PSC  | 2019/10/31     | -            | Project Formulation  | MM of SHEP PLUS 2 was signed   |

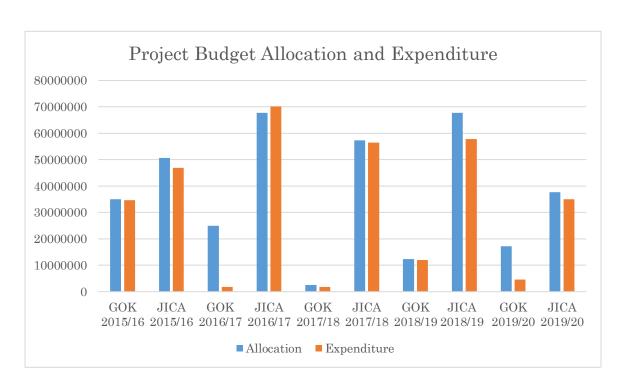
(Source: The Project)

#### 1-6.Budget Spent as of Feb. 2020

| Summary GOK Operational Cost |            |            |           |            |            |            |  |  |  |
|------------------------------|------------|------------|-----------|------------|------------|------------|--|--|--|
| FY                           | 2015/16    | 2016/17    | 2017/18   | 2018/19    | 2019/20    | Total      |  |  |  |
| Budget<br>(Allocated)        | 35,000,000 | 25,000,000 | 2,500,000 | 12,380,000 | 17,250,000 | 92,130,000 |  |  |  |

| (in Ksh)                          |            |            |           |            |           |            |
|-----------------------------------|------------|------------|-----------|------------|-----------|------------|
| Actual<br>Expenditure<br>(in Ksh) | 34,589,000 | 24,562,156 | 1,800,000 | 11.951,195 | 4,541,399 | 65,492,399 |

|                                   | Summary JICA Operational Cost |            |            |            |            |            |             |  |  |  |  |
|-----------------------------------|-------------------------------|------------|------------|------------|------------|------------|-------------|--|--|--|--|
| FY                                | 2014/15                       | 2015/16    | 2016/17    | 2017/18    | 2018/19    | 2019/20    | Total       |  |  |  |  |
| Allocated<br>Budget<br>(In Ksh)   | 2,143,300                     | 50,690,988 | 67,690,100 | 57,301,714 | 67,790,300 | 37,664,022 | 283,280,424 |  |  |  |  |
| Actual<br>Expenditure<br>(In Ksh) | 1,455,000                     | 46,926,577 | 70,188,554 | 56,409,484 | 57,745,822 | 35,067,858 | 260,772,559 |  |  |  |  |



#### 2. Quantitative Achievement

2-1. Number of County and Sub County

| S/No. | County      | Sub County     | S/No. | County   | Sub County     |
|-------|-------------|----------------|-------|----------|----------------|
| 1.    | Elgeyo      | Marakwet East  | 10.   | Meru     | Igembe Central |
|       | Marakwet    |                |       |          |                |
| 2.    | Uasin Gishu | Moiben         | 11.   | Embu     | Runyenjes      |
| 3.    | Nakuru      | Molo           | 12.   | Machakos | Masinga        |
| 4.    | Kiambu      | Thika          | 13.   | Kitui    | Kitui South    |
| 5.    | Kirinyaga   | Kirinyaga East | 14.   | Makueni  | Mbooni         |

| 6. | Murang'a                | Kangema | 15. | Kwale   | Matuga       |
|----|-------------------------|---------|-----|---------|--------------|
| 7. | Kisumu                  | Seme    | 16. | Kilifi  | Kilifi South |
| 8. | Homabay Rachuonyo North |         | 17. | Bungoma | Kabuchai     |
|    |                         | Rangwe  | 18. | Busia   | Teso south   |
| 9. | Nyamira                 | Manga   |     |         |              |

2-2.Number of County Staff and Farmers Trained

| Category                 | Male  | Female  | Total |
|--------------------------|-------|---------|-------|
| MoALFC Staff             | 20**  | 14      | 34    |
| County Officers*         | 418   | 216     | 634   |
| Farmer (1st Year Groups) | 874** | 1,354** | 2,228 |
| Farmer (2nd Year Groups) | 899** | 1,226** | 2,125 |
| Total                    | 2,211 | 2,810   | 5,021 |

<sup>(</sup>Note) \*County officers include extension staff and other County Government officers.

#### 2-3. Number of Farmer Groups and Farmers

| S/No. | Sub                   | No. of | No. Of    | S/No.     | Sub           | No. of    | No. of  |
|-------|-----------------------|--------|-----------|-----------|---------------|-----------|---------|
|       | County                | groups | farmers   |           | County        | Groups    | farmers |
| 1.    | Marakwet              | 11     | 233       | 10.       | Igembe        | 10        | 278     |
|       | East                  |        |           |           | Central       |           |         |
| 2.    | Moiben                | 10     | 245       | 11.       | Runyenjes     | 12        | 317     |
| 3.    | Molo                  | 10     | 266       | 12.       | Masinga       | 10        | 304     |
| 4.    | Thika                 | 11     | 197       | 13.       | Kitui South   | 10        | 163     |
| 5.    | Kirinyaga             | 10     | 216       | 14.       | Mbooni        | 10        | 308     |
|       | East                  |        |           |           |               |           |         |
| 6.    | Kangema               | 10     | 184       | 15.       | Matuga        | 10        | 198     |
| 7.    | Seme                  | 10     | 254       | 16.       | Kilifi South  | 12        | 204     |
| 8.    | Rachuonyo             | 6      | 128       | 17.       | Kabuchai      | 10        | 216     |
|       | North                 |        |           |           |               |           |         |
|       | Rangwe                | 4      | 104       | 18.       | Teso south    | 12        | 300     |
| 9.    | Manga                 | 10     | 238       |           |               |           |         |
|       | Total: No. of         | Groups | 188, Numl | per of fa | rmers 4,353 ( | (1,773 M, |         |
|       | 2,580 F) <sup>2</sup> |        |           |           |               |           |         |

<sup>&</sup>lt;sup>2</sup> AIC Wiitu Youth Group (Kitui County) and Nyachido Young Farmers (Kisumu County) were dropped after a series of trainings were provided. Thus, they are counted in this table.

<sup>\*\*</sup>These figures are different from the ones in terminal evaluation report. Several mistakes were found and corrected. As the result, total number decreased by 23.

2-4.CP&IAD 1st Batch 1st Years' Groups (Jan, 2016 - May 2018)

| County  | Sub-<br>County | Comparison | No. of Farmers | Grand Total<br>Net-Income<br>(Ksh.) | Average Net-<br>Income per<br>Farmer (Ksh.) | Increas<br>ed Rate<br>(%) |  |
|---|----------------|------------|----------------|-------------------------------------|---|---------------------------|--|
|   | Thika          | BL         | 93             | 4,829,446                           | 51,930                                      |                           |  |
| Kiambu  | Town           | PDS        | 52             | 3,165,238                           | 60,870                                      | 17%                       |  |
| Virinyaga   | Kirinyaga      | BL         | 99             | 3,636,888                           | 36,736                                      | 60%                       |  |
| Kirinyaga   | East           | PDS        | 86             | 5,059,503                           | 58,831                                      | 00%                       |  |
| Murangla  | Kangama        | BL         | 95             | 893,572                             | 9,406                                       | 171%                      |  |
| Murang'a  | Kangema        | PDS        | 63             | 1,608,574                           | 25,533                                      | 17 170                    |  |
| Elgeyo  | Marakwet       | BL         | 95             | 2,167,842                           | 22,819                                      | 375%                      |  |
| Marakwet  | East           | PDS        | 89             | 9,638,601                           | 108,299                                     | 3/5%                      |  |
| Nakuru  | Molo           | BL         | 87             | 1,291,878                           | 14,849                                      | 33%                       |  |
| INAKUIU   |                | PDS        | 63             | 1,240,605                           | 19,692                                      | 3370                      |  |
| Uasin   | Moiben         | BL         | 106            | 3,120,059                           | 29,435                                      | 88%                       |  |
| Gishu   | Molbell        | PDS        | 54             | 2,981,243                           | 55,208                                      | 88%                       |  |
| Total No. of Farmers / Total Net-Income / Average Net-Income per Farmer |                | BL         | 575            | 15,939,685                          | 27,721                                      | 4400/                     |  |
|   |                | PDS        | 407            | 23,693,763                          | 58,216                                      | 110%                      |  |

#### 1st Batch 2nd Years' Groups (Dec 2016 - Feb 2018, June 2019)

| County                   | Sub-<br>County | Comparison | No. of<br>Farmers | Grand Total<br>Net-Income<br>(Ksh.) | Average Net-<br>Income per<br>Farmer (Ksh.) | Increas<br>ed Rate<br>(%) |
|--------------------------|----------------|------------|-------------------|-------------------------------------|---|---------------------------|
| Kiambu                   | Thika          | BL         | 79                | 2,485,263                           | 31,459                                      | 113%                      |
| Manibu                   | Town*          | PDS        | 36                | 2,415,778                           | 67,105                                      | 11370                     |
| Kirinyaga Kirinyaga East | BL             | 116        | 2,559,581         | 22,065                              | 217%  |                           |
|                          | East           | PDS        | 38                | 2,659,449                           | 69,986                                      | 21770                     |
| Murang'a                 | Kangama        | BL         | 84                | 1,013,062                           | 12,060                                      | 396%                      |
| iviurariy a              | Kangema        | PDS        | 61                | 3,650,430                           | 59,843                                      | 39070                     |
| Elgeyo                   | Marakwet       | BL         | 138               | 5,587,265                           | 40,487                                      | 67%                       |
| Marakwet                 | East           | PDS        | 56                | 3,794,935                           | 67,767                                      | 07 70                     |
| Nakuru                   | Molo           | BL         | 123               | 2,815,925                           | 22,894                                      | 11%                       |
| Nakuru                   | Molo           | PDS        | 71                | 1,810,155                           | 25,495                                      | 1170                      |
| Uasin                    | Moiben         | BL         | 140               | 7,083,934                           | 50,600                                      | 79%                       |

| Gishu                  |           | PDS | 67  | 6,060,594  | 90,457 |       |
|------------------------|-----------|-----|-----|------------|--------|-------|
| Total No. of Farmers / |           | BL  | 680 | 21,545,029 | 31,684 |       |
| Total Net-             | Income /  |     |     |            |        | 96%   |
| Average Ne             | et-Income |     |     |            |        | 90 /0 |
| per Fa                 | rmer      | PDS | 329 | 20,391,340 | 61,980 |       |

#### 2nd Batch 1st Years' Groups (Dec 2016 - Apr-Jun 2019)

| County        | Sub-                       | Comparison | No. of  | Grand Total<br>Net-Income | Average Net-                | Increase      |
|---------------|----------------------------|------------|---------|---------------------------|-----------------------------|---------------|
| County        | County                     | Comparison | Farmers | (Ksh.)                    | Income per<br>Farmer (Ksh.) | d Rate<br>(%) |
| Homa          | Rachuonyo                  | BL         | 122     | 1,762,548                 | 14,447                      | (70)          |
| Bay           | North                      | PDS        | 73      | 5,357,167                 | 73,386                      | 408%          |
| Бау           | 1401111                    | BL         | 144     | 1,707,078                 | 11,855                      |               |
| Kisumu        | Seme                       | PDS        | 98      | 5,133,381                 | 52,381                      | 342%          |
|               |                            |            |         |                           | ·                           |               |
| Nyamira       | Manga                      | BL         | 107     | 3,076,996                 | 28,757                      | 87%           |
| ,             |                            | PDS        | 83      | 4,458,186                 | 53,713                      |               |
| Embu Runyenje | Runvenies                  | BL         | 157     | 5,050,277                 | 32,167                      | 57%           |
|               |                            | PDS        | 84      | 4,247,342                 | 50,564                      | <b>3</b> . 70 |
| Kitui         | Kitui                      | BL         | 57      | 3,055,276                 | 53,601                      | 90%           |
| Kitui         | South**                    | PDS        | 36      | 3,662,031                 | 101,723                     | 9070          |
| Maabakaa      | Masings                    | BL         | 146     | 1,551,698                 | 10,628                      | 2070/         |
| Machakos      | Masinga                    | PDS        | 112     | 4,725,211                 | 42,189                      | 297%          |
| Malarasi      | N Ale e e e :              | BL         | 149     | 3,196,834                 | 21,455                      | 4000/         |
| Makueni       | Mbooni                     | PDS        | 123     | 5,858,111                 | 47,627                      | 122%          |
| Meru          | Igembe                     | BL         | 144     | 1,981,520                 | 13,761                      | 457%          |
| ivieru        | Central                    | PDS        | 106     | 8,119,779                 | 76,602                      | 437 70        |
|               | of Farmers /<br>t-Income / | BL         | 1,026   | 21,382,226                | 20,840                      |               |
|               | Net-Income                 |            |         |                           |                             | 179%          |
| 1             | armer                      | PDS        | 715     | 41,561,207                | 58,128                      |               |

#### 2nd Batch 2nd Years' Groups (Oct 2017 - Jul 2019)

| County | Sub-County | Comparison | No. of<br>Farmers | Grand Total<br>Net-Income<br>(Ksh.) | Average<br>Net-Income<br>per Farmer<br>(Ksh.) | Increase<br>d Rate<br>(%) |
|--------|------------|------------|-------------------|-------------------------------------|---|---------------------------|
| Homa   | Rachuonyo  | BL         | 98                | 1,031,736                           | 10,528  | 384%                      |
| Bay    | North      | PDS        | 55                | 2,802,098                           | 50,947  | JU4 /0                    |
| Kisumu | Seme       | BL         | 97                | 1,983,440                           | 20,448  | 192%                      |

|                        |              | PDS | 66        | 3,945,670  | 59,783 |        |  |
|------------------------|--------------|-----|-----------|------------|--------|--------|--|
| Nyamira                | Manga        | BL  | 82        | 1,004,226  | 12,247 | EEE0/  |  |
| i vyanina i wanga      | Manga        | PDS | 64        | 5,134,461  | 80,226 | 555%   |  |
| Embu Runyenjes         | BL           | 132 | 3,636,223 | 27,547     | 48%    |        |  |
|                        | Runyenjes    | PDS | 106       | 4,328,674  | 40,837 | 4070   |  |
| Kitui Kitui South      | BL           | 68  | 3,307,516 | 48,640     | 155%   |        |  |
|                        | PDS          | 51  | 6,318,078 | 123,884    | 155%   |        |  |
| Machakos Masinga       | BL           | 118 | 6,348,320 | 53,799     | 11%    |        |  |
| IVIacriakos            | Masiriya     | PDS | 88        | 5,253,103  | 59,694 | 11/0   |  |
| Makueni                | Mbooni       | BL  | 144       | 2,705,783  | 18,790 | 109%   |  |
| Makuem                 | MIDOGINI     | PDS | 100       | 3,919,318  | 39,193 | 10370  |  |
| Meru                   | Igembe       | BL  | 126       | 1,774,153  | 14,081 | 480%   |  |
| ivieru                 | Central      | PDS | 59        | 4,819,851  | 81,692 | 460%   |  |
| Total No.              | of Farmers / | BL  | 865       | 21,791,397 | 25,192 |        |  |
| Total Ne               | t-Income /   |     |           |            |        | 146%   |  |
| Average Net-Income per |              |     |           |            |        | 140 /0 |  |
| Farmer                 |              | PDS | 589       | 36,521,252 | 62,006 |        |  |

#### 3rd Batch 1st Years' Groups (Nov 2017 - Jul 2019)

| County                                       | Sub-County   | Comparison | No. of<br>Farmers | Grand Total<br>Net-Income<br>(Ksh.) | Average<br>Net-Income<br>per Farmer<br>(Ksh.) | Increas<br>ed Rate<br>(%) |
|--|--------------|------------|-------------------|-------------------------------------|---|---------------------------|
| Rungoma                                      | Kabuchai     | BL         | 107               | 1,932,005                           | 18,056  | 270%                      |
| Bungoma                                      | Nabuciiai    | PDS        | 84                | 5,616,595                           | 66,864  | 21070                     |
| Busia Teso South                             | BL           | 157        | 1,630,486         | 10,385                              | 109%  |                           |
| Dusia  | reso south   | PDS        | 99                | 2,147,618                           | 21,693  | 10970                     |
| Kilifi                                       | Kilifi North | BL         | 108               | 1,678,179                           | 15,539  | 149%                      |
| IXIIII                                       | MIIII INOLUI | PDS        | 74                | 2,867,264                           | 38,747  | 14970                     |
| Kwale  | Matuga       | BL         | 89                | 1,183,748                           | 13,301  | 157%                      |
| Nwale  | iviatuga     | PDS        | 50                | 1,711,988                           | 34,240  | 157%                      |
| Total No.                                    | of Farmers / | BL         | 461               | 6,424,418                           | 13,936  |                           |
| Total Net-Income /<br>Average Net-Income per |              |            |                   |                                     |   | 189%                      |
| Fa   | armer        | PDS        | 307               | 12,343,465                          | 40,207  |                           |

#### 3rd Batch 2nd Years' Groups (Oct 2018 - Dec.2019)

| County    | Sub-County   | Comparison | No. of<br>Farmers | Grand Total<br>Net-Income<br>(Ksh.) | Average<br>Net-Income<br>per Farmer<br>(Ksh.) | Increas<br>ed Rate<br>(%) |  |
|-----------|--|------------|-------------------|-------------------------------------|---|---------------------------|--|
| Bungoma   | Kabuchai   | BL         | 62                | 988,554                             | 15,944  | 290%                      |  |
| Burigorna | Nabuciiai  | PDS        | 56                | 3,482,416                           | 62,186  | 290 /0                    |  |
| Rusia     | Busia Teso South   | BL         | 118               | 3,061,442                           | 25,944  | 46%                       |  |
| Dusia     |  | PDS        | 103               | 3,895,563                           | 37,821  | 40 /0                     |  |
| Kilifi    | Kilifi North   | BL         | 105               | 2,062,134                           | 19,639  | 153%                      |  |
| Kiiiii    | KIIII NOLII  | PDS        | 89                | 4,413,955                           | 49,595  | 15570                     |  |
| Kwale     | Matuga   | BL         | 59                | 1,846,408                           | 31,295  | 21%                       |  |
| Nwaie     | Matuga   | PDS        | 42                | 1,595,034                           | 37,977  | Z 1 /0                    |  |
| Total Ne  | Total No. of Farmers / Total Net-Income / Average Net-Income per |            |                   |                                     |   | 100%                      |  |
| Fa        | armer  | BL         | 344               | 7,958,537                           | 23,135  |                           |  |

Average net income calculated with all farmers result in nominal and real basis.3

| Nominal/ | Baselin        | Baseline Survey |                | eriodical<br>vey | The Rate of  |  |
|----------|----------------|-----------------|----------------|------------------|--------------|--|
| Real     | No. of Farmers | (Ksh.)          | No. of Farmers | (Ksh.)           | Increase (%) |  |
| Nominal  | 0.054          | 24,055          | 0.607          | 56,086           | 133.2        |  |
| Real     | 3,951          | 13,668          | 2,637          | 27,895           | 104.1        |  |

Real income is calculated taking into account of inflation rate with CPI of February 2009 as 100.

#### 2-5.General Horticultural Crop Production & Post Harvest Handling Techniques (G20)

The tables below show the change in the number of horticultural techniques adopted by implementing farmers across the Counties in the three batches. It is observed only Kirinyaga County's % of use went down. But it was presumed too high number of techniques uses at the stage of baseline caused it.

| Batch 1 | Y1 Groups |     |   | Y2 Groups |     |   |
|---------|-----------|-----|---|-----------|-----|---|
| County  | BL        | PDS | % | BL        | PDS | % |

-

<sup>&</sup>lt;sup>3</sup> On average, farmers nominal net income from horticulture production increased by 137% (Income increased from Ksh 65 to Ksh 156 per day)

| Kiambu           | 10.1 | 14.5 | 43.5%  | 9.2 | 12.6 | 37.1%  |
|------------------|------|------|--------|-----|------|--------|
| Murang'a         | 5.8  | 16.1 | 176.8% | 6.8 | 17.3 | 153.0% |
| Kirinyaga        | 13.6 | 12.0 | -11.6% | 7.8 | 16.4 | 109.8% |
| Nakuru           | 7.1  | 14.4 | 104.2% | 5.7 | 14.7 | 159.0% |
| Uasin Gishu      | 11.0 | 14.8 | 34.2%  | 9.2 | 14.9 | 62.4%  |
| Elgeyo Marakwet  | 7.4  | 13.2 | 78.6%  | 8.1 | 13.0 | 61.3%  |
| Weighted Average | 9.3  | 14.1 | 52.6%  | 7.8 | 15.0 | 93.0%  |

| Batch 2          |      | Y1 Groups |        |      | Y2 Groups |        |  |  |
|------------------|------|-----------|--------|------|-----------|--------|--|--|
| County           | BL   | PDS       | %      | BL   | PDS       | %      |  |  |
| Machakos         | 8.8  | 14.6      | 65.5%  | 10.1 | 15.7      | 54.7%  |  |  |
| Makueni          | 9.1  | 15.4      | 69.0%  | 9.9  | 14.9      | 51.1%  |  |  |
| Kitui            | 11.5 | 15.6      | 36.2%  | 9.6  | 16.5      | 71.2%  |  |  |
| Embu             | 8.6  | 14.6      | 70.8%  | 6.7  | 15.0      | 123.1% |  |  |
| Meru             | 9.4  | 17.5      | 85.9%  | 8.0  | 15.5      | 93.4%  |  |  |
| Homabay          | 7.0  | 14.2      | 103.7% | 7.1  | 15.4      | 118.9% |  |  |
| Kisumu           | 10.3 | 15.9      | 54.4%  | 11.4 | 15.5      | 35.7%  |  |  |
| Nyamira          | 9.3  | 13.5      | 45.2%  | 5.3  | 16.0      | 203.6% |  |  |
| Weighted Average | 9.1  | 15.2      | 66.8%  | 8.5  | 15.5      | 80.9%  |  |  |

| Batch 3             |     | Y1 Group | s      | Y2 Groups |      |        |  |
|---------------------|-----|----------|--------|-----------|------|--------|--|
| County              | BL  | PDS      | %      | BL        | PDS  | %      |  |
| Bungoma             | 8.7 | 16.7     | 91.8%  | 6.6       | 16.7 | 153.1% |  |
| Busia               | 6.7 | 16.0     | 138.1% | 9.4       | 16.4 | 75.0%  |  |
| Kilifi              | 7.8 | 14.5     | 84.7%  | 4.4       | 11.6 | 160.9% |  |
| Kwale               | 8.4 | 10.7     | 28.0%  | 7.2       | 14.3 | 98.3%  |  |
| Weighted<br>Average | 7.8 | 15.0     | 92.6%  | 7.0       | 14.7 | 109.7% |  |

#### Overall average of Adopted Techniques

|     | •    | •            |
|-----|------|--------------|
| BL  | PDS  | Increased by |
| 8.4 | 15.0 | 78.2%        |

#### 2-6.Adoption Adaption

The table below shows the number of Counties that implemented Adoption / Adaption and

the total number of beneficiaries.

Adoption/Adaption reported by Counties as of Aug. 2010. This figure was used in Joint Terminal Evaluation.

|  | Number<br>of<br>County | Number<br>of Sub<br>County | Number<br>of Male<br>Farmer | Number<br>of<br>Female<br>Farmers | Total<br>Number<br>of<br>Farmers |
|--|------------------------|----------------------------|-----------------------------|-----------------------------------|----------------------------------|
| (i) Number of Counties that implemented Adoption/Adaption in implementing counties in 2016 and 2017)   | 3                      | 8                          | 241                         | 192                               | 433                              |
| (ii) Number of Counties that implemented Adoption/Adaption in implementing counties (in 2018 and 2019) | 11                     | 34                         | 1,295                       | 1,926                             | 3,221                            |
| Total  | 14                     | 42                         | 1,536                       | 2,118                             | 3,654                            |

There are three different patterns of Adoption/Adaption. One is that County targeted and delivered the extension services using SHEP Approach. Another one is the training conducted by capacity of individual County staff. The last is the incorporation of SHEP Approach into existing County or Donor projects. In those trainings conducted by Counties, the number of beneficiary farmers are increasing.

| Till August, 2019                 | M     | F     | Total  |
|-----------------------------------|-------|-------|--------|
| County Efforts for Up-Scaling     | 1,536 | 2,118 | 3,654  |
| Individual Efforts for Up-Scaling | 2,964 | 3,813 | 6,777  |
| Incorporation                     | 700   | 553   | 1,253  |
| Grand Total                       | 5,208 | 6,520 | 11,728 |

| After August, 2019                | M     | F      | Total  |
|-----------------------------------|-------|--------|--------|
| County Efforts for Up-Scaling     | 1,789 | 2,647  | 4,436  |
| Individual Efforts for Up-Scaling | 3,904 | 4,851  | 8,755  |
| Incorporation*                    | 3,210 | 4,212  | 7,422  |
| Grand Total                       | 8,903 | 11,710 | 20,613 |

Note: Figure is the sum of county report presented in Review workshop, Aug. 2019 and CEC workshop Nov. 2019.

#### 2-7.Up-Scaling in Other African Countries

The Project also focuses on the promotion of the SHEP Approach to other African countries regarding Output 4 so as to play a leading role in conducting supplementary training sessions on Market-oriented Agriculture for other African Countries. The Figure below indicates the implementing structure of the Project for prompting of the SHEP Approach to other African countries.

#### Enhancement of Kenya's status as a leading country in Promotion of Market-oriented Dissemination of Agriculture in Sub Saharan Africa accumulated Knowledge/Knowhow in Kenya Promotion of the SHEP Approach in Other African Countries Training on Market-oriented Agriculture & the SHEP Approach in Japan Japan (JICA) (1) Dispatch SHEP (1) Receiving high Unit CPs as Implementation of level officers from facilitators target counties the SHEP Approach (3) Dispatch (2) Dispatch Staff of JICA as Staff of JICA as Resource Person Resource Person (2) Receiving officers Target Kenya from target counties Countries (SHEP Unit) (3) Dispatch SHEP Unit CPs & Japanese Experts for Follow-up Feedback of experiences to the

#### **Promotion of SHEP Approach in Other African Countries**

A total of 150 participants from other African countries participated in twelve (12) training courses organized by the Project. The Project dispatched a cumulative total of 13 C/Ps and Chair of the Project's PSC in nine (9) times to advisory missions or the relevant training opportunities such as SHEP Approach training courses held in other African counties.

#### 2-8. Trainings in Japan

Activities in Kenya

In the course of the project period mainly three of training were conducted in Japan for different categories of officers, i.e. senior officers, planners and project implementers. Twelve training courses for other African countries were held from June 2015 to May 2019.

The details of the trainings are as follows;

| S/No. | Course Title                            | Dates                                     | No. of        |
|-------|---|---|---------------|
|       |   |   | Participants  |
| 1.    | Management of Agriculture Extension     | 7 <sup>th</sup> – 16 <sup>th</sup>        | 8 (6M, 2F)    |
|       | by Devolved Governments (for Senior     | November 2015                             |               |
|       | officers)                               | 4 <sup>th</sup> – 10 <sup>th</sup>        | 13 (10M, 3F)  |
|       |   | September 2016                            |               |
|       |   | 30 <sup>th</sup> July – 3 <sup>rd</sup>   | 5 (2M, 3F)    |
|       |   | August 2018                               | ,             |
|       | Sub total                               |   | 26 (18M, 8F)  |
| 2.    | Market Oriented Agriculture Promotion   | 31 <sup>st</sup> May -6 <sup>th</sup>     | 2 (1M, 1F)    |
|       | for Africa (Planning & Management) (for | June, 2015                                | ,             |
|       | planners)                               | 8 <sup>th</sup> – 22 <sup>nd</sup>        | 3 (2M, 1F)    |
|       |   | November 2015                             | , ,           |
|       |   | 8 <sup>th</sup> – 21 <sup>st</sup> May,   | 2 (1M, 1F)    |
|       |   | 2016                                      |               |
|       |   | 6 <sup>th</sup> – 9 <sup>th</sup>         | 2 (1M, 1F)    |
|       |   | November, 2016                            |               |
|       |   | 7 <sup>th</sup> – 20 <sup>th</sup> May,   | 2 (1M, 1F)    |
|       |   | 2017                                      |               |
|       |   | 6 <sup>th</sup> – 17 <sup>th</sup>        | 2 (2M, 0F)    |
|       |   | November, 2017                            |               |
|       |   | 5 <sup>th</sup> – 16 <sup>th</sup>        | 1 (1M,0F)     |
|       |   | November, 2018                            |               |
|       |   | 13 <sup>th</sup> – 24 <sup>th</sup> May,  | 1 (1M, 0F)    |
|       |   | 2019                                      |               |
|       | Sub total                               |   | 15 (10M, 5F)  |
| 3.    | Market Oriented for Agriculture         | 3 <sup>rd</sup> – 16 <sup>th</sup> July,  | 12 (4M, 8F)   |
|       | Promotion for SHEP PLUS                 | •   | , ,           |
|       | Implementing Counties in Kenya (for     | 19 <sup>th</sup> – 30 <sup>th</sup> July, | 17 (13M, 4F)  |
|       | project implementers)                   | 2017                                      |               |
|       | Sub total                               |   | 29 (17M, 12F) |
| 4.    | Market Oriented Agriculture Promotion   | 15 <sup>th</sup> April – 12 <sup>th</sup> | 2 (1M, 1F)    |
|       | for Africa (Extension Officer)          | September, 2015                           |               |
|       |   | 3 <sup>rd</sup> April – 10 <sup>th</sup>  | 2 (0M, 2F)    |
|       |   | September, 2016                           |               |
|       |   | 2 <sup>nd</sup> April – 9 <sup>th</sup>   | 2 (1M, 1F)    |
|       |   | September, 2017                           |               |
|       |   | 1 <sup>st</sup> April –                   | 2 (1M, 1F)    |
| 1     |   | September 2018                            |               |

|           | 1 <sup>st</sup> April – 7 <sup>th</sup><br>September, 2019 | 2 (2M, 0F)    |
|-----------|--|---------------|
| Sub total |  | 10 (5M, 5F)   |
| Total     |  | 80 (50M, 30F) |

#### 3. Impact

Through the project intervention in the implementers, many positive changes as indicated below have been observed.

HCD recognizes the applicability of the SHEP Approach and have adopted business linkage forum which they have renamed as Horticulture Business Linkage forum (HOBLINK). This HOBLINK has been adopted by other donor-funded projects. It provides a platform for farmers or farmer groups to have mutually beneficial interaction with different stakeholders in the horticulture industry to address specific constraints. The Manager of Technical & Advisory Services indicated that the concept of HOBLINK was followed by FABLIST Forum from the SHEP Approach.

According to periodical follow up with farmer group members conducted in the Project, they experienced livelihood improvement such as building residential and rental houses, installation of electricity, paying school fees, paying dowry, improving nutrition status of family members etc.

The trained extension officers/groups are utilizing the acquired skills in their extension work and have gained confidence and have trained other farmer groups within their capacity, practicing the agricultural extension through the SHEP Approach. The provided training materials and *kamishibais* (Pictorial Materials) are of great help to the staff. Some of the pictures depicting impacts among the beneficiaries are as follows;

#### 3-1.Outcomes

- Quantitative and qualitative Improvement of food and nutrition security hence improved productivity.
- Diversification of enterprises by farmers. Some farmers have diversified both on farm & off farm enterprises.
- There is Improved communication and relations among household members
- Group members have a sense of belonging since they are recognized and appreciated by the others.
- Improved family incomes
- Increase in community resource mobilization and creation of revolving funds
- Improved Linkages to business service providers

- Creation of job opportunities and involvement of men, women, youth and Persons abled differently in development (Social inclusion) thus making them participate more in the social activities.
- Reduced poverty levels.
- Improved standards of living

#### 3-2. Examples of Impacts

- Paying school fees
- Construction of semi to permanent houses
- Electricity connection and/or installation of solar panels
- Purchase of dairy cows, poultry
- Purchase of water tanks
- Purchase of motor bikes and vehicles
- Purchase of cooking stoves, gas and other energy saving devices
- Purchase of household items
- Purchase of farm inputs
- Purchase of water pumps and pipes including other irrigation kits
- Purchase of land(plot) and establishment of small businesses

#### 4. Training Methodology

#### 4-1.Sensitization

Sensitization activities were conducted for County Executive Committee members, Chief Officers, County Directors of Agriculture and Ward Agricultural Officers and farmer group members.

#### **Objectives**

The objective of conducting sensitization was to deepen understanding of the project activities, share vision and goals as well as roles and responsibilities among the implementers.

#### **Achievement**

Sensitization for CECs and other government Officials

| Month/Year    | Venue               | Number in    |
|---------------|---------------------|--------------|
|               |                     | Attendance   |
| June 2015     | KALRO Naivasha      | 16 (8M/8F)   |
| February 2017 | Dairy Training      | 16 (9M7F)    |
|               | Institute, Naivasha |              |
| February 2019 | Ole Ken Hotel,      | 42 (27M/15F) |
|               | Nakuru              |              |

| November 2019 | Green Hills Hotel, | 55 (36M/19F) |
|---------------|--------------------|--------------|
|               | Nyeri              |              |

#### One Day Sensitization Workshop organized by Sub-County Agricultural Office

| Year      | Counties       | Staff        | Farmer       | Remarks                         |
|-----------|----------------|--------------|--------------|---------------------------------|
|           |                | Attendance   | Attendance   |                                 |
| 2015/2016 | Elgeyo         | 88 (46M/42F) | 59 (23M/36F) | Workshops for 1st               |
|           | Marakwet,      |              |              | year groups for first           |
|           | Uasin Gishu,   |              |              | batch where PCU                 |
|           | Nakuru,        |              |              | members were the                |
|           | Kiambu,        |              |              | main facilitators               |
|           | Murang'a &     |              |              |                                 |
|           | Kirinyaga      |              |              |                                 |
|           | (B1Y1)         |              |              |                                 |
| 2016/2017 | Elgeyo         | 82 (45M/37F) | 61 (25M/36F) | Workshops for 2 <sup>nd</sup>   |
|           | Marakwet,      |              |              | year groups for first           |
|           | Uasin Gishu,   |              |              | batch where                     |
|           | Nakuru,        |              |              | County officers                 |
|           | Kiambu,        |              |              | were main                       |
|           | Murang'a &     |              |              | facilitators                    |
|           | Kirinyaga      |              |              | supported by PCU                |
|           | (B1Y2)         |              |              | members                         |
|           | Meru, Embu,    | 149          | 81 (38M/43F) | Being 1 <sup>st</sup> groups of |
|           | Machakos,      | (102M/47F)   |              | second batch, the               |
|           | Makueni,       |              |              | main facilitators               |
|           | Kisumu,        |              |              | were PCU                        |
|           | Homa Bay &     |              |              | members                         |
|           | Nyamira        |              |              |                                 |
|           | (B2Y1)         |              |              |                                 |
| 2017/2018 | Meru, Embu,    | 112          | 75 (27M/48F) | These were 2 <sup>nd</sup>      |
|           | Machakos,      | (78M/34F)    |              | year groups of                  |
|           | Kitui,         |              |              | second batch                    |
|           | Makueni,       |              |              | County officials                |
|           | Kisumu,        |              |              | were main                       |
|           | Homa Bay &     |              |              | facilitators with               |
|           | Nyamira        |              |              | support from PCU                |
|           | (B2Y2)         |              |              | members                         |
|           | Kilifi, Kwale, | 67 (54M/13F) | 40 (17M/23F) | 1 <sup>st</sup> year groups of  |
|           | Bungoma &      |              |              | third batch                     |
|           | Busia (B3Y1)   |              |              |                                 |

| 2018/2019 | Kilifi, Kwale, | 50 (32M/18F) | 45 (23M/22F) | 2 <sup>nd</sup> year groups of |
|-----------|----------------|--------------|--------------|--------------------------------|
|           | Bungoma &      |              |              | third batch                    |
|           | Busia (B3Y2)   |              |              |                                |
| Total     |                | 548          | 361          |                                |
|           |                | (357M/191F)  | (153M/208F)  |                                |

NOTE: Most of the staff in each county participated in the sensitization workshops twice.

#### 4-2.Baseline Survey

SHEP PLUS conducted baseline surveys with the 188 groups which were implementing the project activities. These groups were drawn from the 18 Counties and 19 sub Counties. Baseline survey is essential before starting implementing a project/ programme because it acts as a benchmark for measuring project success or failure. Baseline survey provides an information base against which to monitor and assess activities' progress and effectiveness during implementation and after the activities are completed. The information is collected as accurately as possible using designed templates.

This information is essential for both the Extension officers and farmers to make key crop production decisions. Through this participatory exercise, farmers are able to understand the importance of keeping records in order to calculate the actual profits they make from farming and the changes in household income after they have been trained. The participant farmers are also introduced to a simple and practical format of farm record keeping. The extension staff can use the baseline survey information to understand the reality of the farmers they serve. They also acquire necessary skills for farm management. Baseline survey for SHEP PLUS was carried out by County and Sub-County staff, Ward Agricultural Officers, Group facilitators and Farmer Group members. It is carried out for one day for each group at an agreed convenient venue within the locality of the group. The exercise is schedules as follows:

- 1 (one)-day Workshop for WAOs & Group Facilitators
- 1 (one)-day for Implementation of the Baseline Survey
- 1 (one)-day for Collection of the Data Sheets

#### Survey tools

- Crop Production & Income Analysis Data sheets
   This tool is used to determine the level of yield and income of the target farmers. This is done based on the production records provided by individual farmers.
- General Horticultural Crop Production & Post Harvest Handling Techniques (G20)
   The tool is used to assess the adoption of crop production techniques by the target

farmers. The assessment is based on the information provided by the farmers on the techniques/ skills which they have adopted or not. The tool (Shortly known as G20) has 7 stages and 20 techniques.

Group profile

#### **Objectives**

- To determine the level of yield and income of horticulture crops for Model Farmer Groups members.
- To assess the level of both individual farmers and groups in adopting basic horticultural production techniques

#### Data Collection

Group Facilitators facilitates the Baseline Survey as follows:

Crop Production & Income Analysis Data (CP&IAD) Sheet

Agree with farmers on how to fill in all horticultural crops which they are growing. Go through the 'Useful Tool for Survey' (estimations of crop production using household/farming equipment) with the farmers and add any missing information depending on their situation.

Distribute the 'CP&IAD sheets', pencils and erasers. Explain the sheets and discuss column by column in a language that is most familiar with the farmers.

- > Ensuring that all farmers have answered each particular question before proceeding to the next one
- > Help farmers with calculations
- > Give time and guidance for the literate farmers to support the farmers not able to write
- ➤ Ensure answers are provided to all questions under un-shaded row section of a column before moving to the next crop
- 2General Horticultural Crop Production & Post-Harvest Handling Techniques 20 (G20)

Distribute the 'G20' to all group members

Explain each item to the members

Give members time to check the right box

Ensure all answers are provided

#### Group Profile

Distribute Information Sheets (Group Profile, Membership List & Attendance Sheet) and allow the group members to fill in.

Sub-County Desk Officer and Group Facilitators organize the place and time to pick up all the filled Baseline Survey Tools (CP&IAD Sheet, G 20) & Information Sheets (Group Profile, Membership List and Attendance Sheet) from each Model Farmer Group

#### Data Key in

Sub-County Management Team cross-checks the collected data sheets as well as keyedin excel sheets, and submit the same to the Project Secretariat.

The Project Secretariat to backstops the GFs in data collection exercise to ensure data is collected

#### Data Analysis

The Project Secretariat to check the filled questionnaire and keyed-in excel sheets, and analyses the Baseline Survey data The results are communicated to the target Counties and Implementing Sub-Counties within two months.

#### 4-3.Business Forum

The project has conceptualized a business forum dubbed Farm Business Linkage Stakeholder (FABLIST) Forum. This is a forum of facilitating business engagement between farmers and stakeholders. The forum has a limited number of participants who are: Farmer Group Representatives (4 members: 2 Male & 2 Female), Group Facilitator (1) and Stakeholders (3 per category). Farmers democratically elect their representatives. The representatives are 2 farmers from each gender. The group Facilitator should be the one who trains the farmers. He/ She guides the farmers on technical issues so that they make quick decisions. The convener of the forum invites a wide range of relevant stakeholders. The stakeholders are drawn along the entire value chain.

Before the actual day of the forum, by extracting information collected at baseline survey, PCU develops group profiles containing following information on:

- Background of the group
- Groups' contact address
- Current leadership & membership
- Major horticultural crop enterprises
- Actual production level per enterprise
- Major production & marketing challenges
- Any other useful information

The stakeholders who have confirmed attending the forum also develop their profile. The profiles of the stakeholders and farmer groups are exchanged so that the parties can

learn and understand each other in advance. Before the material day, a convenient venue is secured and preparatory meetings are held. Adequate chairs and tables are also sought so that a round table set up can be made (Booth for discussion). On the actual day of the forum the Farmer Group Representatives and their Group Facilitator visit the stakeholder's booth and discuss business based on their issues thereby developing initial linkages. This sitting arrangement is nick named-"Arranged Marriage". Limited time is allocated for discussion between stakeholders and farmer group representatives so that the farmer groups can visit all the booths of their choice. After the negotiations, farmer groups and stakeholders endorse what has been agreed upon by filling an Initial linkage form.

Sample programme of Farm Business Linkage Stakeholder (FABLIST) forum is referred to Attachment 1.

Follow-up meetings between farmer groups and stakeholders are done to conclude unfinished business transactions. During these follow-ups the Group Facilitator also accompanies the farmers for any technical guidance. In essence, this is an initial linkage between the farmers and the stakeholders. Farmers are urged to continue making business linkages with stakeholders so that they can improve their businesses.

#### 4-4. Market Survey and Crop Selection

After FABLIST forum, the project conducts a Training of Trainers (ToT) on the following activities for Group Facilitators (GFs), Ward Agricultural Officers (WAO), and two group representatives from each group. The training is called Joint Extension Staff & Farmer Dual Gender Training (JEF2G Training). It is programmed for 5 days, and the trained GFs and farmer group representatives are expected to share the gained knowledge with the rest of the members and conduct the same activities as in the trainings. For the 1<sup>st</sup> year groups, the PCU members are the lecturers whiles for the 2<sup>nd</sup> years, the trained county staff are the lecturers of the ToT.

#### **Objectives**

- To impart skills on market survey, crop selection, problem analysis, objective maps and Action plan making.
- To strengthen relationship between farmers and Group Facilitators for smooth implementation of activities

#### 4-4-1.Market Survey

Market survey is an organized effort by farmers to gather vital information about the market, produce and the customers. The information about the market include services offered in the market, its structure as well as general market information. Information on

produce include quantity and quality required by the market while customer information include characteristics, preference and their purchasing power. This information gathered during market survey enables farmers to make decisions in order to meet the needs of the market.

In addition to the public markets, the PCU trained the GFs and farmer representatives on interviewing other potential buyers such as schools, hospitals, supermarkets, processors and exporters. The PCU also encouraged the groups to visit such market outlets for market survey and most of groups collected market information from such institutions.

All the implementing farmer groups conducted market survey in different markets. Some farmer groups were able to access markets from exporters and processors. The farmer groups were able to get names of traders, their telephone numbers, type of produce, quantity and quality required and purchase price and time of the year the produce is needed in large quantities.

#### 4-4-2.Crop Selection

Crop selection is a process which guides members of farmer groups in choosing crop enterprises which have ability to increase their income. Each farmer group is guided to democratically choose two priority horticultural crop enterprises which members are able to produce adequate quantity and quality for the identified market. Results of the market survey as well as technical information provided by the extension staff and other stakeholders guide farmers to select priority crops. Information on crop selection include gross margin, main production challenges, market requirements and suitability of environmental conditions in producing the said crop enterprises. Information on crop selection is used to rank the suitability of a minimum of five crops. The crops being considered for selection are then ranked whereby each farmer group member is requested to vote for crop of their choice. The crop which gets the highest number of votes becomes the group's priority crop number one. In order to get their 2<sup>nd</sup> priority crop. the process is repeated. The farmer groups select two priority crops so that they produce the required volume and quality for the market. Farmers can continue to produce their individual horticultural crops even after they have selected priority crops. In case their selected enterprises failed, they could conduct market survey again and re-select their target enterprise as a group. The list of crops selected by each farmer group is referred to Attachmen2.

#### 4-4-3, Action Plan Making

It is an activity-based plan of operation aimed at solving challenges which farmers face during production, transportation and marketing of the selected crops. The process of action plan making involves development of problem and objective maps accompanied by designing activities which can make the group realize their objectives. The farmer groups developed action plans for the selected crops where the activities and resources required were identified. The action plan also indicated the implementer, monitor and the time of implementation. Based on the information shown in the action plans such as challenges in production of specific selected crops; the contents of the crop production techniques Tots were organized.

**Achievements** 

Number of beneficiaries and ToT on Market Survey, Crop Selection and Action Plan Making

| Name of County/  | Venue of                    | Staff in |            | Farm | ers in |       | Remarks |                                |
|--|-----------------------------|----------|------------|------|--------|-------|---------|--------------------------------|
| Sub-county   | Training                    | atten    | attendance |      | Atte   | ndand | e       |                                |
|  |                             | T        | M          | F    | T      | M     | F       |                                |
| Nakuru (Molo), Uasin Gishu (Moiben), Elgeyo Marakwet (Marakwet East)             | Mabanga<br>ATC              | 45       | 26         | 19   | 29     | 11    | 18      | For Year 1<br>groups<br>(B1Y1) |
| Kiambu (Thika), Murang'a (Kangema), Kirinyaga (Kirinyaga East)                   | Wambugu<br>ATC              | 46       | 26         | 20   | 30     | 13    | 17      | For Year 1<br>groups<br>(B1Y1) |
| Nakuru (Molo),<br>Uasin Gishu<br>(Moiben), Elgeyo<br>Marakwet<br>(Marakwet East) | Mabanga<br>ATC              | 23       | 15         | 8    | 28     | 14    | 14      | For Year 2<br>Groups<br>(B1Y2) |
| Kiambu (Thika),<br>Murang'a<br>(Kangema),<br>Kirinyaga<br>(Kirinyaga East)       | Bethany<br>House,<br>Sagana | 26       | 13         | 13   | 28     | 11    | 17      | For Year 2<br>groups<br>(B1Y2) |
| Embu (Runyenjes), Meru (Igembe Central)  | Wambugu<br>ATC              | 31       | 20         | 11   | 22     | 13    | 9       | For Year 1<br>Groups<br>(B2Y1) |
| Kitui (Kitui South)  | Kitui ATC                   | 44       | 31         | 13   | 29     | 15    | 14      | For Year 1                     |

| Machakos<br>(Masinga)<br>Makueni (Mbooni)                        |   |     |     |     |     |     |     | Groups<br>(B2Y1)               |
|--|---|-----|-----|-----|-----|-----|-----|--------------------------------|
| Kisumu (Seme) Homa Bay (Karachuonyo North) Nyamira (Manga)       | Maseno<br>ATC                                       | 43  | 27  | 16  | 28  | 14  | 14  | For Year 1<br>groups<br>(B2Y1) |
| Embu<br>(Runyenjes),<br>Meru (Igembe<br>Central)                 | Wambugu<br>ATC                                      | 17  | 12  | 5   | 22  | 9   | 13  | For Year 2<br>Groups<br>(B2Y2) |
| Kitui (Kitui South)<br>Machakos<br>(Masinga)<br>Makueni (Mbooni) | Lau Hotel,<br>Machakos                              | 25  | 18  | 7   | 30  | 15  | 15  | For Year 2<br>Groups<br>(B2Y2) |
| Kisumu (Seme) Homa Bay (Karachuonyo North) Nyamira (Manga)       | Maseno<br>ATC                                       | 25  | 14  | 11  | 29  | 12  | 17  | For Year 2<br>Groups<br>(B2Y2) |
| Bungoma<br>(Kabuchai)<br>Busia (Teso<br>South)                   | Reformed<br>Church of<br>East<br>Africa,<br>Eldoret | 24  | 15  | 9   | 22  | 9   | 13  | For Year 1<br>Groups<br>(B3Y1) |
| Kilifi (Kilifi North)<br>Kwale (Matuga)                          | Beaumont<br>Hotel,<br>Mtwapa                        | 23  | 17  | 6   | 20  | 8   | 12  | For Year 1<br>Groups<br>(B3Y1) |
| Bungoma<br>(Kabuchai)<br>Busia (Teso<br>South)                   | Reformed<br>Church of<br>East<br>Africa,<br>Eldoret | 23  | 15  | 8   | 22  | 11  | 11  | For Year 2<br>Groups<br>(B3Y2) |
| Kilifi (Kilifi North)<br>Kwale (Matuga)                          | Woget<br>Hotel,<br>Mombasa                          | 23  | 19  | 4   | 24  | 11  | 13  | For Year 2<br>Groups<br>(B3Y2) |
| Total No. of Contact   | is  | 418 | 250 | 150 | 363 | 166 | 197 |                                |

#### 35 crops selected by SHEP PLUS farmer groups

|          | B1Y1 | B1Y2 | B2Y1 | B2Y2 | B3Y1 | B3Y2 |    |
|----------|------|------|------|------|------|------|----|
| Amaranth | 0    | 0    | 2    | 1    | 7    | 5    | 15 |

| Avocado            | 0  | 0  | 2  | 0  | 0  | 0  | 2  |
|--------------------|----|----|----|----|----|----|----|
| Banana             | 1  | 0  | 1  | 2  | 0  | 0  | 4  |
| Black Nightshade   | 7  | 4  | 8  | 6  | 4  | 7  | 36 |
| Bulb Onion         | 3  | 1  | 10 | 6  | 3  | 0  | 23 |
| Butternut          | 0  | 0  | 4  | 1  | 0  | 0  | 5  |
| Cabbage            | 4  | 11 | 0  | 0  | 1  | 0  | 16 |
| Capsicum           | 2  | 5  | 2  | 5  | 1  | 2  | 17 |
| Carrot             | 2  | 4  | 2  | 1  | 0  | 0  | 9  |
| Chili              | 5  | 0  | 0  | 1  | 1  | 4  | 11 |
| Coriander          | 2  | 4  | 0  | 4  | 1  | 0  | 11 |
| Courgette          | 2  | 0  | 0  | 0  | 0  | 0  | 2  |
| Cowpea Leaves      | 0  | 0  | 3  | 3  | 0  | 0  | 6  |
| Crotalaria         | 0  | 0  | 1  | 3  | 0  | 0  | 4  |
| Cucumber           | 0  | 1  | 0  | 0  | 0  | 0  | 1  |
| Egg Plant          | 0  | 0  | 0  | 0  | 2  | 0  | 2  |
| French Bean        | 0  | 0  | 1  | 1  | 0  | 0  | 2  |
| Garden Pea         | 3  | 2  | 1  | 0  | 0  | 0  | 6  |
| Green Maize        | 0  | 1  | 2  | 1  | 0  | 0  | 4  |
| Irish Potato       | 5  | 4  | 0  | 0  | 0  | 0  | 9  |
| Jute Mallow        | 0  | 1  | 0  | 0  | 0  | 0  | 1  |
| Kale               | 4  | 6  | 14 | 15 | 10 | 10 | 59 |
| Mango              | 0  | 0  | 2  | 0  | 0  | 0  | 2  |
| Okra               | 0  | 0  | 0  | 0  | 3  | 6  | 9  |
| Papaya             | 1  | 0  | 1  | 2  | 0  | 0  | 4  |
| Passion Fruit      | 0  | 0  | 0  | 0  | 0  | 1  | 1  |
| Pumpkin            | 1  | 1  | 0  | 0  | 0  | 0  | 2  |
| Pumpkin Leaves     | 0  | 0  | 0  | 0  | 0  | 1  | 1  |
| Spider Plant       | 1  | 0  | 1  | 1  | 1  | 0  | 4  |
| Spinach            | 7  | 6  | 3  | 2  | 0  | 0  | 18 |
| Spring Onion       | 1  | 1  | 1  | 9  | 0  | 1  | 13 |
| Sweet Potato       | 0  | 1  | 0  | 1  | 1  | 0  | 3  |
| Tomato             | 6  | 6  | 17 | 14 | 7  | 7  | 57 |
| Tree Tomato        | 2  | 1  | 0  | 0  | 0  | 0  | 3  |
| Watermelon         | 3  | 2  | 4  | 3  | 0  | 2  | 14 |
| TOTAL <sup>4</sup> | 62 | 62 | 82 | 82 | 42 | 46 |    |

#### 4-5. Gender Mainstreaming, Farm Family Budgeting and GEI

Gender is a social relationship between men and women as prescribed by the society. On the other hand, gender mainstreaming is a strategy which ensures that the needs, entitlements and experiences of men and women are taken into account in the design, implementation, monitoring and evaluation of a project so that inequality will not be perpetuated. In the project ,farmer group empowerment and gender mainstreaming Sub component was designed to ensure that all gender groups namely men, women, youth, persons with disabilities are not only included in project activities but also in sharing the

<sup>&</sup>lt;sup>4</sup> Kiambu county had 6 groups for B1Y1, Elgeyo Marakwet county had 6 groups in B1Y2, Embu county had 6 groups Busia county had 6 groups for B3Y1 and B3Y2for B2Y1 and B2Y2, Kilifi county had 7 groups for B3Y2.

#### benefits.

The major activities in the sub component include Gender mainstreaming, Farm Family Budgeting & Group Empowerment Training of Trainers (ToT) and training for farmers (Group exercises).

#### 4-5-1.Training of Trainers (ToT)

This is a five-day training conducted in a convenient venue. The participants who include Gender officers, Ward Agricultural Officers and Group Facilitators are taken through lecture and practical sessions on how to facilitate gender, Farm Family Budgeting and Group empowerment. The ToT programme contains lectures done for three (3) days while practical sessions are done for two (2) days. Sample schedule of the training is referred to Attachment 3.

#### **Objective**

To improve the knowledge and skills of staff in facilitating gender, Farm Family Budgeting and group empowerment levels and their implication in agriculture.

<u>Achievement</u>
Staff trained on Gender-(capacity building-No. of contacts)

| C/N <sub>1</sub> | County/Sub county          | Veer |       | Staff |    |
|------------------|----------------------------|------|-------|-------|----|
| S/No             | County/Sub county          | Year | Total | M     | F  |
|                  | Lieus bur/Thiles Terrin    | 1    | 16    | 4     | 12 |
| 1                | Kiambu(Thika Town)         | 2    | 20    | 14    | 6  |
| 2                | Marson et a (Marson et a)  | 1    | 11    | 5     | 6  |
| 2                | Murang'a (Kangema)         | 2    | 6     | 3     | 3  |
| 3                | Kirinyaga(Kirinyaga        | 1    | 15    | 11    | 4  |
| 3                | East)                      | 2    | 10    | 6     | 4  |
| 4                | Nakuru(Molo)               | 1    | 16    | 6     | 10 |
| 4                | Nakuru(M010)               | 2    | 10    | 4     | 6  |
| 5                | Uasin Gishu( Moiben)       | 1    | 15    | 7     | 8  |
| 5                | Dasifi Gisfiu( Moiberi)    | 2    | 10    | 5     | 5  |
|                  | Elgeyo                     | 1    | 12    | 11    | 1  |
| 6                | Marakwet(Marakwet East)    | 2    | 8     | 8     | 0  |
| 7                | Kigumu (Como)              | 1    | 13    | 8     | 5  |
| 1                | Kisumu (Seme)              | 2    | 10    | 4     | 6  |
|                  | Homa Bay                   | 1    | 14    | 9     | 5  |
| 8                | (Karachuonyo<br>N./Rangwe) | 2    | 6     | 4     | 2  |
| 9                | Nyomira (Manga)            | 1    | 9     | 6     | 3  |
| 9                | Nyamira (Manga)            | 2    | 4     | 3     | 1  |
| 10               | Maru (Igamba Cantral)      | 1    | 9     | 6     | 3  |
| 10               | Meru (Igembe Central)      | 2    | 5     | 5     | 0  |
| 11               | Embu( Bunyanias)           | 1    | 16    | 7     | 9  |
| 11               | Embu( Runyenjes)           | 2    | 12    | 7     | 5  |
| 12               | Kitui(Kitui South)         | 1    | 12    | 10    | 2  |
| 13               | Machakos(Masinga)          | 1    | 14    | 10    | 4  |

|    |                  | 2                   | 10                              | 7   | 3   |
|----|------------------|---------------------|---------------------------------|-----|-----|
| 14 | Makuani (Mhaani) | 1                   | 14                              | 10  | 4   |
| 14 | Makueni (Mbooni) | 2                   | 10                              | 6   | 4   |
| 15 | Busia            | 1                   | 12                              | 7   | 5   |
| 15 | Busia            | 2 10<br>1 13<br>2 9 | 5                               | 5   |     |
| 16 | Pungomo          | 1                   | 13                              | 8   | 5   |
| 10 | Bungoma 1 2      | 9                   | 7                               | 2   |     |
| 17 | Kilifi           | 1                   | 14                              | 10  | 4   |
| 17 | Kiiii            | 2                   | 14<br>10<br>12<br>10<br>13<br>9 | 8   | 1   |
| 18 | Kwale            | 1                   | 11                              | 9   | 2   |
| 10 | Rwaie            | 2                   | 8                               | 7   | 1   |
|    | Total            |                     | 393                             | 247 | 146 |

#### 4-5-2. Group exercises

This activity is conducted by the group facilitators who were trained during the ToT. Each facilitator is expected to carry out three trainings (gender mainstreaming, farm family budgeting and group empowerment) and guide their respective farmer groups to develop gender action plans as well as establish the group empowerment levels. Four days are allocated for these trainings. i.e. a day to mobilize the farmers, a day to train gender mainstreaming, a day to train FFB and another day to train group dynamics and group Empowerment. During mobilization the farmers are encouraged to invite their spouses (wife or husband) and key opinion leaders to participate in the trainings. On this day the objective of the trainings is explained and a tentative schedule of carrying out the trainings is drawn. During the training the farmers are made to understand their real life situation and come up with issues which affect them (existing gaps). For issues that affect them negatively, the famers are guided to draw action plans on how to solve them one at a time. The farmers then go ahead to implement their action plans. The farmers are encouraged to review their action plans so that they can improve their situation by sharing workloads and have more time for the farm hence improve productivity. Below is a sample action plan developed by a farmer group in Runyenjes Sub County, Embu County.

| No. | Group Name     | Most tedious work | Activities   | Implementation status                          |
|-----|----------------|-------------------|--|--|
| 1   | Ithatha        | Fetching firewood | Splitting of wood                                    |  |
|     | Women Group    |                   | Planting of trees                                    | 16 members planted 1500 seedlings each (72%)   |
|     |                |                   | Installation of energy saving jikos                  | 9 members bought a meko gas each (40%)         |
|     |                | Fetching water    | Purchase of water tanks                              | 13 members bought 1000-3000lts tank each (60%) |
| 2   | Kamiugu        | Fetching firewood | Splitting of wood                                    |  |
|     | Irrigation SHG |                   | Installation of improved jikos                       | Each of 28 members bought an improved jiko     |
|     |                |                   | Planting of trees                                    | Each of the 28 members planted a seedling.     |
|     |                | Feeding livestock | Planting of fodder trees(Caliandria & Nappier grass) | Not done                                       |
| 3   |                |                   | Planting trees                                       | Not yet done                                   |

|   | Kigumo/ Fetching Mukuria firewood/Cooking |                            | Purchase Jikokoa                | 9 members bought 13 (meko stove/improved jikos)-53%                                  |
|---|---|----------------------------|---------------------------------|--|
|   | Horticultural                             | Fetching water             | Purchase of water tanks         |  |
|   | SHG                                       |                            | Drilling of shallow wells       |  |
| 4 | Kirangano<br>Women Group                  | Cooking                    | Installation of Maendeleo jiko  | 18 members bought a jiko each-<br>(86%) & 15 members bought a<br>meko gas each (86%) |
|   |   | Fetching water             | Purchase of plastic water tanks | 24 members bought a water tank each (100%)   |
|   |   |                            | Rain water harvesting           |  |
|   |   |                            | Digging shallow wells           |  |
| 5 | Lower<br>Nthamari                         | Cooking                    | Purchase of jikokoa             | 7 members bought a maendeleo jiko each (58%)   |
|   | Gachagori coffee growers                  |                            | Purchase of hot pots and flasks |  |
|   | SHG                                       |                            | Purchase of meko gas            | 5 members bought a meko gas cooker each (42%)  |
|   |   | Feeding livestock          | Making silage                   |  |
|   |   | Fetching water             | Buying of storage tanks         | 4 members bought a water each (33%)  |
| 6 | Way Forward<br>SHG                        | Cooking/ fetching firewood | Purchase of improved jikos      |  |
|   |   |                            | Purchase of meko gas            | 4 members bought a meko gas cooker each-10%  |
|   |   | Fetching water             | Purchase of water tanks         | 5 members bought 1000-3000 lts tank each-10%   |
|   |   |                            | Installation of piped water     |  |

#### 4-5-3. Farm Family budgeting.

During this training they are given the opportunity to understand how they spend their incomes and explore better ways of managing their resources. The farmers are urged to practice family budgeting with their family members.

With regard to group Empowerment the gender sub component developed group empowerment indicators (GEIs). The GEIs are designed so that the farmer groups can work on their leadership, cooperation and gender relations among members in the group. These GEIs enable the farmer groups to progressively grow to be better and cohesive groups, i.e. move from level one (1) to level five (5).

**Note:** Gender mainstreaming, Farm Family Budgeting and Group Empowerment training is conducted any time after sensitization workshop and should be a continuous activity. During the trainings group members are requested to invite their spouses, the facilitators to invite local leaders such as administrators, religious among others in the area and gender action Plans are reviewed periodically. The group facilitator also identifies the 'red flags' and avoids them.

#### Achievement

#### Farmers trained-(capacity building-No. of contacts)

| O/N - | County/Code County         | V    |       | Farmers | s    |  |  |
|-------|----------------------------|------|-------|---------|------|--|--|
| S/No  | County/Sub County          | Year | Total | M       | F    |  |  |
| 4     | Kionshu/Thika Taura)       | 1    | 86    | 22      | 64   |  |  |
| 1     | Kiambu(Thika Town)         | 2    | 61    | 26      | 35   |  |  |
| 2     | Marron e'o (Kanasana)      | 1    | 101   | 24      | 77   |  |  |
| 2     | Murang'a (Kangema)         | 2    | 86    | 42      | 44   |  |  |
| 3     | Kirinyaga (Kirinyaga Faat) | 1    | 111   | 33      | 78   |  |  |
| 3     | Kirinyaga(Kirinyaga East)  | 2    | 108   | 43      | 65   |  |  |
| 4     | Nokuru(Mole)               | 1    | 104   | 47      | 57   |  |  |
| 4     | Nakuru(Molo)               | 2    | 111   | 59      | 52   |  |  |
| 5     | Uasin Gishu( Moiben)       | 1    | 106   | 51      | 55   |  |  |
| 5     | Oasin Gishu( Moiberi)      | 2    | 100   | 60      | 40   |  |  |
| 6     | Elgeyo                     | 1    | 123   | 49      | 74   |  |  |
| 6     | Marakwet(Marakwet East)    | 2    | 105   | 46      | 59   |  |  |
| 7     | Kiaumu (Cama)              | 1    | 141   | 42      | 99   |  |  |
| ,     | Kisumu (Seme)              | 2    | 99    | 44      | 55   |  |  |
| 8     | Homa Bay (Karachuonyo      | 1    | 87    | 30      | 57   |  |  |
| 0     | N./Rangwe)                 | 2    | 78    | 37      | 41   |  |  |
| 9     | Nyomira (Manga)            | 1    | 69    | 18      | 51   |  |  |
| 9     | Nyamira (Manga)            | 2    | 63    | 24      | 39   |  |  |
| 10    | Meru (Igembe Central)      | 1    | 139   | 70      | 69   |  |  |
| 10    | Meru (igeribe Ceritial)    | 2    | 158   | 73      | 85   |  |  |
| 11    | Embu( Bunyaniaa)           | 1    | 118   | 75      | 43   |  |  |
| 11    | Embu( Runyenjes)           | 2    | 148   | 58      | 90   |  |  |
| 12    | Kitui(Kitui South)         | 1    | 90    | 46      | 44   |  |  |
| 13    | Machakos(Masinga)          | 1    | 114   | 65      | 49   |  |  |
| 13    | iviacriakos(iviasiriga)    | 2    | 96    | 40      | 56   |  |  |
| 14    | Makueni (Mbooni)           | 1    | 111   | 41      | 70   |  |  |
| 14    | Maruelli (MDOOIII)         | 2    | 130   | 51      | 79   |  |  |
| 15    | Busia                      | 1    | 135   | 55      | 80   |  |  |
| 10    | Dusia                      | 2    | 133   | 62      | 71   |  |  |
| 16    | Bungoma                    | 1    | 69    | 28      | 41   |  |  |
| 10    | Bullgollia                 | 2    | 98    | 36      | 62   |  |  |
| 17    | Kilifi                     | 1    | 123   | 33      | 90   |  |  |
| 17    | IXIIII                     | 2    | 125   | 44      | 81   |  |  |
| 18    | Kwale                      | 1    | 98    | 44      | 54   |  |  |
| 10    |                            | 2    | 58    | 27      | 31   |  |  |
|       | Total                      |      | 3682  | 1545    | 2137 |  |  |

#### Issues identified and Implementation status of action plans

#### 4-5-4. Issues identified by farmer groups in various Counties

|    | County             | Fetching<br>firewood | Feeding<br>livestock | Fetching<br>water | Washing clothes | Cooking | Milking | Harvesting vegetables | Taking care of families | Weeding |
|----|--------------------|----------------------|----------------------|-------------------|-----------------|---------|---------|-----------------------|-------------------------|---------|
| 1. | Kirinyaga          | 7                    | 3                    | 1                 | 1               | _       | -       | -                     | -                       | -       |
| 2. | Kiambu             | 6                    | 3                    | 2                 | 2               | 4       | 1       | _                     | _                       | -       |
| 3. | Murang'a           | 1                    | 8                    | 3                 | _               | _       | _       | _                     | _                       | -       |
| 4. | Elgeyo<br>Marakwet | 4                    | _                    | 7                 | _               | _       | _       | 1                     | _                       | _       |
| 5. | Uasin Gishu        | 6                    | _                    | 8                 | _               | 1       | _       | _                     | 2                       | _       |

| 6.    | Nakuru   | 10 | _  | _   | _ | _  | _        | _ | _ | _ |
|-------|----------|----|----|-----|---|----|----------|---|---|---|
| 7.    | Machakos | 3  | _  | 8   | _ | 3  | _        | _ | _ | _ |
| 8.    | Kitui    | 3  | _  | 7   | 1 | 4  | _        | _ | _ | _ |
| 9.    | Makueni  | 1  | _  | 7   | _ | 4  | <b>-</b> | _ | _ | _ |
| 10.   | Meru     | 7  | 1  | 9   | - | 5  | 1        | _ | _ | _ |
| 11.   | Embu     | 5  | 3  | 11  | _ | 8  | -        | _ | _ | _ |
| 12.   | Kisumu   | 1  | _  | 7   | _ | 2  | -        | _ | _ | _ |
| 13.   | Homa Bay | 5  | _  | 6   | _ | -  | _        | _ | _ | _ |
| 14.   | Nyamira  | 1  | _  | 5   | - | 1  | -        | _ | _ | _ |
| 15.   | Kwale    | 1  | _  | 7   | _ | 4  | _        | _ | _ | 2 |
| 16.   | Kilifi   | 1  | _  | 6   | _ | -  | 2        | _ | _ | 3 |
| 17.   | Busia    | 11 | _  | 1   | _ | _  | 2        | _ | _ | _ |
| 18.   | Bungoma  | 7  | _  | 12  | _ | _  | 1        | _ | _ | _ |
| Total |          | 80 | 18 | 107 | 4 | 36 | 7        | 1 | 2 | 5 |
|       |          |    |    |     |   |    |          |   |   |   |

#### Most Tedious Work

| S/no. | Most tedious<br>work | Suggested solution                             | Implementation status | Remarks  |
|-------|----------------------|--|-----------------------|--|
| 1     | Fetching water       | Roof water harvesting                          | 50-70%                | An issue in Counties which are                     |
|       |                      | sinking shallow wells                          | 40%                   | dry or farmers do not have piped                   |
|       |                      | Construction of water ponds                    | 30-40%                | water. Farmers purchased tanks                     |
|       |                      | connecting piped water to homesteads           | 30%                   | with a capacity ranging from 100-<br>5000 Its      |
|       |                      | Purchase of water storage tanks                | 50-80%                |  |
| 2     | Fetching<br>firewood | Establishing woodlots                          | 40-60%                | Installation of maendeleo jikos, rocket stoves and |
|       |                      | Installation/purchase of energy saving devices | 50-70%                | purchase of jiko koa                               |

| 3                       | Cooking              | Purchase of thermos flasks and hot dishes         | 70-80% | An issue with many farm families; Cooking many times a day                       |
|-------------------------|----------------------|---|--------|--|
|                         |                      | Purchase of gas cookers                           | 40-60% | ,  |
| 5                       | Feeding<br>livestock | Establishing fodder                               | 80-90% | An issue with farmers who are keeping dairy                                      |
| Conserving fodder 30-40 | 30-40%               | animals-Kiambu,<br>Murang'a,<br>Kirinyaga, Embu & |        |  |
|                         |                      | Purchase of chaff cutters                         | 20%    | Meru   |
| 6                       | Weeding              | Use herbicides                                    | 40-50% | An issue in Kilifi & Kwale Counties because the farmers use small tools to weed. |

#### Qualitative achievements

Gender and FFB trainings have made substantial changes in our farmers. Among the changes realized are:

- Gender group members have upgraded their skills/knowledge as all gender groups can attend trainings.
- Farmer to farmer dissemination of technical skills/knowledge through the networks of both men and women.
- Group members now feel recognized and appreciated irrespective of sex, age, color, culture, ability, position in society etc.
- Household members are now sharing the roles/responsibilities.
- There is better family time management resulting from sharing duties among household members.
- In some instances there is improved interaction between parents and children.
- Household members are now motivated to work in the farm as a result of shared benefits.
- Improved communication and relation among household members.
- Better family income management resulting from enhanced communication and transparency among household members.
- Deliberate effort by members of the household to increase the family income.
   There is diversification of enterprises by our farmers.

- Creation of opportunities and involvement of men, women, youth and Persons with Disabilities (PWDs) in development (Social inclusion) making them participate more in the society.
- Reduction of poverty and improvement of living standards thus contributing to the development of the country.

# 4-6.Crop Production ToT and In-Field Training

The "Facilitators' Training for Farmers' Demand-Driven Extension" (FT-FaDDE) is a technical Training of Trainers (ToT) for Agricultural Extension Staff, at Ward, Sub-County and County level who have the mandate to impart knowledge and skills to members of SHEP PLUS model farmer groups. Its purpose is to provide extension officers with the knowledge and techniques they need in order to support the model farmer groups in putting into practice the action plans they prepared and how to conduct trainings to the groups dubbed in-field trainings.

#### **Objectives**

- To train FEOs/Group Facilitators on general horticultural crops production techniques
- To train FEOs/Group Facilitators on specific production techniques for the selected crops based on the needs indicated in the group action plans made by the Model Farmer Groups
- To train FEOs/Group Facilitators on how to conduct the In-field Training

# **Preparation**

The content of the training is selected and developed by the Project Coordination Unit based on; results from Baseline Survey, Crop Selection and the Group Action Plans. The Action Plans are reviewed by PCU to identify crop production challenges for the selected crops. The training seeks to provide possible solutions through the training materials developed. The topics are categorized into the following:

- General Horticultural Crop Production and Post-Harvest Handling Techniques (G20)
- Specific Production Techniques (SPTs) for the selected crops
- How to conduct In-Field Training
- Sensitization on water harvesting, agro-processing and spot improvement/repair of rural access roads using *Do-Nou* Technology

#### 4-6-1. Methodology of the Training

The FT-FaDDE training is conducted as follows:

Classroom lectures General Horticultural Crop Production Techniques and Specific Production Techniques on two priority crops selected by the SHEP PLUS model farmer groups.

#### Demonstrations

**G20:** composting, soil sampling, soil solarization, nursery bed establishment & management, safe and effective use of pesticides.

SPTs: hot water treatment of banana suckers and sorting & grading of selected crops

#### Class exercises

Preparation of crop planting calendar and fertilizer calculation Sample FT-FaDDE Training programme can be referred to Attachment 4.

# 4-6-2.General Horticultural Crop Production and Post-Harvest Handling Techniques (G20)

There are 20 basic horticultural crop production and post-harvest handling techniques covered during the first 3 days. The main topics include: Principals of horticultural crop production, crop planting calendars, composting, soil sampling, land preparation, fertilizer and manure application, planting/transplanting, crop management: weeding, pest & disease management, integrated pest management (IPM), safe and effective use of pesticides, harvesting & post-harvest handling and farm record keeping.

# 4-6-3. Specific Production Techniques (SPTs)

The specific crop production techniques of the selected crops from input acquisition to marketing is taught. Emphasis is put on the possible solutions to the challenges identified in the Group Action Plans. Training on SPTs covers 2-3 days depending on the number of crops selected.

Therefore, capacity building of extension officers is performed through demand-driven technical training with a view to meeting the needs of farmer groups written in their crop action plans.

#### 4-6-4, Training Materials and Kamishibai

The Project provides Technical Training Materials (notes and manuals) to the Extension Staff to support farmer training in the field (In-field Training). These materials commonly referred to as Kamishibai are specially prepared, laminated with clear pictures on one side for farmers and clear pictures together with explanation notes for the staff on the other side. On the last day of the training, staff are taught how to use these training materials and then they are distributed to them. This will enable them conduct in-field training tailored to meet farmers' needs with confidence.

#### Key Point:

The extension officers feel confident enough to provide training to farmers using the visually-attractive, easy-to-understand extension materials.

#### **Preparation for In-Field Training**

After FT-FaDDE, the trained group facilitators are expected to conduct a series of training sessions carried out on farms to members of the model farmer group to address the specific training needs of the group as indicated in their group action plans. The preparation done during FT-FaDDE includes:

- Tentative Schedule of in-field training: to be agreed between farmers and officers according to the needs of farmer members and seasonality
- Training materials: distributed to the Group Facilitators on the last day of FT-FaDDE
- How to write In-field Training Reports for submission to the Project, by the sub-County team and Group Facilitators.

# **Achievements**

Table of FT-FaDDE Trainings for the three batches

| S/No. | Venue             | Batch    | Region      | Attendance |        |       |
|-------|-------------------|----------|-------------|------------|--------|-------|
|       |                   | and Year |             | Male       | Female | Total |
| 1     | Wambugu ATC       | B1Y1     | Central     | 30         | 17     | 47    |
| 2     | Mabanga ATC       | B1Y1     | Rift Valley | 18         | 11     | 29    |
| 3     | Wambugu ATC       | B1Y2     | Central     | 12         | 13     | 25    |
| 4     | Mabanga ATC       | B1Y2     | Rift Valley | 13         | 9      | 22    |
| 5     | Maseno ATC        | B2Y1     | Nyanza      | 18         | 14     | 32    |
| 6     | Wambugu ATC       | B2Y1     | U. Eastern  | 15         | 11     | 26    |
| 7     | Bethany, Sagana   | B2Y1     | L. Eastern  | 30         | 12     | 42    |
| 8     | Wambugu ATC       | B2Y2     | U. Eastern  | 15         | 6      | 21    |
| 9     | Bethany Sagana    | B2Y2     | L. Eastern  | 24         | 9      | 33    |
| 10    | Maseno ATC        | B2Y2     | Nyanza      | 17         | 10     | 27    |
| 11    | Beaumont, Mombasa | B3Y1     | Coast       | 21         | 4      | 25    |
| 12    | RCEA, Eldoret     | B3Y1     | Western     | 17         | 10     | 27    |
| 13    | Woget, Mombasa    | B3Y2     | Coast       | 18         | 2      | 20    |
| 14    | RCEA, Eldoret     | B3Y2     | Western     | 10         | 8      | 18    |
|       | Total             |          |             | 258        | 136    | 394   |

#### 4-7.In-Field Trainings

Infield training is a series of training sessions carried out on farms by the Group Facilitator to members of the model farmer group to address the specific training needs of the group as indicated in their group action plans over a period of time. It is meant to address specific needs of the model farmer group captured in the action plan at a suitable time. The Group Facilitator who went through the training of trainers (ToT) course, Facilitators' Training for Farmers' Demand-Driven Extension (FT-FaDDE), takes the farmers through the topics taught during the ToT including the general horticultural crop production and

post-harvest handling techniques and specific production techniques of crops that were selected by the individual model farmer groups. It is advisable for group facilitators to invite relevant stakeholders to train farmers together. This enhances understanding and gives most current issues.

#### **Objectives**

To provide skills and knowledge by the Group Facilitators to members of model farmer groups on production and post-harvest handling of their selected crops.

## **Training Topics**

The training topics are broadly categorized into 2 parts:

- The General Horticultural Crop Production & Post-Harvest Handling Techniques (G20)
- Specific Production Techniques for the Selected Crops

#### <u>Planning</u>

The Group Facilitator, in consultation with members of the group select the training venue e.g. churches, community halls, members' homes or any convenient venue. Group members are expected to attend all the training sessions so as to upgrade their skills. They are also expected to provide materials for demonstration purposes so that they get practical experience during the training. Group facilitators plan these before the commencement of each training.

## 4-7-1.Methodology

The methodology used during the trainings includes use of lectures, demonstrations and exercises as taught during FT-FaDDE. The Group Facilitators use SHEP PLUS training notes/manuals/materials and additional handouts provided during the FT-FaDDE training to carry out the infield trainings. They are also expected to collect pest and disease specimens to be used for identification during the training. Model farmer group members are expected to be implementing topics being trained in their own farms concurrently. To ensure timely implementation of the training sessions, a schedule for the in-field training is provided to the Group Facilitators to guide them in planning and carrying out at least 9 trainings. After each training session, the Group Facilitators are expected to fill in the Infield Training Report for submission to the Project. Implementation of the infield training is monitored using a field report submitted by the Group Facilitator after each training session. During the training sessions, the Project staff and Sub-County Management teams make follow up visits to the groups to monitor the progress of trainings and submit reports to the PCU. Follow up on In-field training report form can be referred to Attachment 5.

## 4-7-2.Monitoring

Among 9 trainings, at least one training was visited by PCU members, 2 by County staff, HCD regional managers, and Sub-county staff to backstop the contents of the training, advise on the training facilitation skill, venue selections etc. so that the quality of subsequent trainings would be improved.

## **Achievements**

During the 5-year project period, a total of 188 groups underwent in-field trainings and the reports submitted to the project. The total number of contacts with members of the groups in Central, Rift Valley, Western, Nyanza, Eastern and Coast regions is indicated in the summary. The number of contacts with members can be referred to Attachment 6.

# **Challenges during Infield Trainings and Way Forward**

| S/No. | Challenges             | Way Forward                                       |
|-------|------------------------|---|
| 1.    | Limited pests and      | Facilitators bought produce from market and       |
|       | disease specimens      | collected from nearby demonstration fields        |
| 2.    | Adverse weather during | Scheduling of practical lessons where possible    |
|       | demonstrations         |   |
| 3.    | Low Attendance during  | Group Facilitators were flexible, majority rule/  |
|       | In-field trainings     | consensus among the members to be applied in crop |
|       |                        | selection exercises                               |
| 4.    | Low literacy level in  | Use of Kamishibai and specimens                   |
|       | some regions           |   |

#### 4-8. Water Harvesting

In the light of growing for the market, farmers are advised to supplement rainfall with irrigation water for their crops. Most of the smallholder farmers do not have access to irrigation water and hence the need to harvest rain water. The water is harvested from the roof catchment, runoff from the road and other uncultivated surfaces.

The training was done for County staff and 4 demonstrations were done. The farm ponds were designed in a way the farmer can expand them as more water is required in future. The embankments were reinforced used sand bags, compacted and arranged in a symmetrical manner. These bags are known as Do- nou bags in Japanese meaning "wrapping soil in a gunny bag".

Demonstration of water harvesting structure in terms of farm ponds of 300M3 were constructed and a drip irrigation system for 1/8 Acre installed in 4 counties of Kiambu, Uasin Gishu, Murang'a and Nakuru.

The objective of the demonstration was to trigger the use of supplemental irrigation for increased yields and consequently incomes. However, of all the 4 counties only Murang'a had been able to replicate the technology where 80 farmers in Muguru Ward were targeted to have individual farm ponds of more than 50M3 to increase their productivity. Other counties are yet to replicate.

4-9. Spot Improvement of Rural Access Roads using Do-nou Technologies This technology is used to repair spots on non-bitumen road surfaces. The technology has been applied by 22 farmer groups and a total of 3074 M of bad spots repaired. A total of 2456 (1413 M / 1042 F) members of the community surrounding these groups were trained to use this technology to repair impassable sections of the rural access roads.

The objective was to improve accessibility of the horticulture production sites, and

other vital facilities like hospitals, schools, markets and shopping centre.

The impassable portions of the roads were constructed and maintained using locally available material. *Do Nou* technology is labour based and is technically simple, meaning very limited knowledge is required for one to apply. It is an effective way used to repair rural roads, build small cross drains and foot bridges across small streams in the rural environment. The farmers and other community members learnt to apply do nou technology through demonstrations.

"Do-nou" technology was applied in construction and maintenance of different impassable road conditions, deep ruts, road sags, road gullies, road affected by ground water, cross drains and sunken roads.

4-10.Monitoring and Evaluation (Including, CEC, CDA/SCAO Review Workshop) This section highlights the training methodologies and the processes involved in undertaking M&E activities in SHEP PLUS. The Key activities are; Follow ups for in-field trainings, Periodical follow ups and periodical data survey exercises, and CEC/CDA/SCAO Review Meeting.

#### 4-10-1. Follow Ups on In-Field Training

Follow-up on In-field Training is an important part of the actual implementation of the infield training. It offers an opportunity to assess both the quality and frequency of the In-field Training. It also involves actual visits to Model Farmer Groups. It is organized by Sub-County Management Team assisted by the Project Secretariat. The participants are Agricultural Officers, Group Facilitators and members of the Model Farmer Group. It takes 3 to 5 days per county depending on the number of groups, each group takes half a day. The venue is within the locality of the group.

#### <u>Objectives</u>

- To establish the implementation status of In-field Trainings
- To evaluate the quality of In-field Trainings

- To evaluate the implementation status of Groups Action Plans
- To evaluate the extend of backstopping by Ward and Sub-County SHEP UP Teams

#### Preparation for the Follow-up

- Sub-County Management Team arranges dates and venues in consultation with Model Farmer Groups
- Groups officials
- Sub-county Management Team to arrange the route considering time and cost effectiveness.
- Sub-County Management Team to prepares the necessary tools for implementing the Follow-up on In field Trainings

# Methodology

- Sub-County Management Team, WAOs and Group Facilitators to visit Model Farmer Groups and Follow up the implementation process of In-field Training, following the contents of 'Field Report on In-field Training.
- The Field Report on In-field Trainings includes:
- Post-Training Questions for Model Farmer Groups to determine the level of farmer's understanding
- Mode of Facilitation, Outputs, Observation, Suggestion & Way forward for Group Facilitators Observation & Comments by WAOs
- Comments by SCAOs
- HCD Regional Managers also backstop groups who need specialized extension services.
- SCAO submits the Report together with the Attendance Sheet to Project Secretariat
- PCU provides practical advice on observed in-field training to Group Facilitators, WAOs and other county staff

#### 4-10-2. Periodical Follow Ups

Periodical Follow-up is an activity conducted by Sub-County Management Team to monitor and evaluate the progress of Model Farmer Group in terms of the level of crop production, adoption of technologies and group empowerment levels. The Follow-up is conducted using the contents of an elaborated monitoring sheet known as 'Observation Note of the SHEP PLUS Field Activity'. It involves actual visits to Model Farmer Groups. The exercise mainly takes half a day or one day depending on the distance of the group from the Sub County Office. The Group facilitator selects the appropriate venue within the locality of the model farmer group.

## **Objective**

To observe the progress of implementation of Action Plans (Group Action Plan and Gender Action Plan) by Model Farmer Group, identify challenges the group is facing the group members and give appropriate advice to address the challenge.

#### <u>Methodology</u>

- Periodical follow up is organized and implemented by the Sub-County Management Team assisted by Project Secretariat. Other members involved include; The County Director of Agriculture team, Ward Agricultural Officers, Group facilitators and Model Farmer Group members.
- Sub-County Management Team to arrange field visit to every Model Farmer Group.
- Sub-County Management Team to prepare necessary tools for implementing Periodical Follow-up.
- Sub-County Management Team, WAOs and Group Facilitators to review the results of Baseline Survey /the previous Periodical Follow-ups.
- Sub-County Management Team, WAOs and Group Facilitators to visit Model Farmer Groups and observe their achievements, following the contents of 'Observation Sheet'.

- Sub-County Management Team, WAOs and Group Facilitators to discuss challenges the group is facing and necessary information and advice for solving the issues.
- Sub-County Management Team to wrap up Periodical Follow-up with WAOs and Group Facilitators

# 4-10-3.Periodical Data Survey

Periodical Data Survey is an activity of data collection with the aim of determining changes in target groups in terms of horticultural crop production (yield and income), adoption of horticulture crop production techniques and group empowerment levels over a period of time. Before conducting the actual Periodical Data Survey, the Project Secretariat trains the staff on how to carry out the survey (One-day Workshop on Periodical Data Survey). Periodical Data Survey is done using the same survey tools as Baseline Survey. The exercise is conducted within the locality of each group at a convenient venue. The exercise takes half a day for each group. The key facilitator during the exercise is the group facilitator who is backstopped by the Ward Agricultural Officer and Sub County Management team. The Model farmer group members should be available to provide the required information.

#### Tools

- Crop Production & Income Analysis Data (CP&IAD)
- General Horticultural Crop Production & Post-Harvest Handling Techniques
   (G20)

#### <u>Objective</u>

- To determine the progress of Model Farmer Groups by comparing the results to the ones of Baseline Survey / previous Periodical Data Survey.
- For farmer to find out who much they are earning/ losing through their horticulture enterprises.

 To evaluate achievements of activities in the "SHEP Approach" and share the results among County Government Staff, Sub-County Management Team, WAO, Group Facilitators and Model Farmer Groups.

#### 4-10-4.CEC, CDA/SCAOS Review Meetings

The meetings are organized with an objective of sharing upscaling of SHEP Approach to other groups

The CDA/SCAO gives a brief description of the Geographical location of the County/ Sub County and the administrative units in their area as well as the major market for fresh horticulture produce that are sourced from outside the County. The CDA also gives the crop development priorities for the County. A detailed report on the status of adoption and adaption of SHEP APPROACH is also given. The report presented during the workshop follows the following format

- Staff training on SHEP Approach
- Upscaling groups
- Individual farmers who were trained on SHEP Approach
- Incorporation of SHEP APPROACH into other programmes
- Plans for upscaling during the following year

#### 4-11.SHEP Approach Impact Field Day

It seeks to create awareness through learning how SHEP PLUS farmers succeeded in their agriculture business. The field day is different from ordinary field days which demonstrate recommended varieties of crops or production techniques. Its emphasis is on the process of changing farmers' mindsets. Farmers who have benefited from the Approach share their success stories and experiences during the Field Day.

## **Objectives**

- To introduce techniques acquired and applied by farmers through the SHEP Approach.
- To share farmers' experiences in improving farming business through the SHEP Approach.
- To share achievements of farmers practicing the SHEP Approach.
- Provide opportunity to farmers to learn new technologies from stakeholders

# **Achievement**

Conducted SHEP Approach Impact Field Day

| County  | Month        | Sub<br>County  | No.<br>Farmer<br>Groups<br>Presented | Total No.<br>of<br>Farmers* | Participated County stakeholders   |
|---------|--------------|----------------|--------------------------------------|-----------------------------|--|
| Kisumu  | Mar.<br>2019 | Seme           | 5                                    | 127                         | CEC for Agri. CO Agri. SC (Sub County) Admin. Ward Admin. Com. for cooperative Private Companies |
| Makueni | Apr.<br>2019 | Mbooni         | 5                                    | 397                         | CEC Agri. MCA Rep. SC Social office SC Environment office  |
| Meru    | May<br>2019  | Igembe         | 6                                    | 712                         | CO Agri.<br>MCA<br>Sub County Adm.<br>Ward Adm.<br>KWS<br>Private companies                      |
| Nyamira | Sep.<br>2019 | Manga          | 5                                    | 507                         | CEC Water CEC Environment CO Agri. Private companies   |
| Kitui   | Nov.<br>2019 | Kitui<br>South | 5                                    | 1002                        | Deputy Governor<br>CEC Agri.<br>Private companies  |

<sup>\*</sup>Total No. includes farmers who shared their success and who were invited from some groups targeted in Adoption/Adaption.

As a result of these activities, Makueni, Bungoma and Machakos Counties incorporated presentation by SHEP farmers in the County own field day.

## 5. Challenges and Way Forward

Throughout the implementation of the Project following challenges are observed.

| Challenges                             | Way Forward                             |
|--|---|
| Some groups expected handouts          | Re-sensitized group members on          |
|  | operation of the project                |
| Weak leadership or uncooperative       | Involved social services department for |
| members in some groups                 | training on group dynamics              |
| Some youths left farming for other     | Groups advised to recruit new members   |
| opportunities                          |   |
| Poor record keeping by farmers         | Increased Periodical Follow-ups to      |
|  | emphasize the importance of record      |
|  | management                              |
| High staff turn-over or inadequate     | The SCAOs made sure all groups had a    |
| Ward extension staff in some           | Group Facilitator                       |
| counties                               |   |
| Inadequate or lack of irrigation water | Groups advised to harvest water or      |
|  | utilize available water efficiently     |

# 6.Lessons learnt

Vulnerable groups can also engage in Profitable Horticulture with guidance on crop selection depending on their prevailing circumstances.

Baseline survey should be Participatory and should focus on the beneficiaries (unlike baseline survey for the region).

Involving all Subject Matter Specialists in project implementation is important (compared to dealing with ONLY Desk officer).

Vision sharing and guiding farmers to set their goals motivates them to do better.

Collaboration between the two levels of government is key to success.

Combination of software (capacity building) and hardware such as irrigation infrastructure accelerates adoption.

Market survey and crop selection by the farmers themselves make them feel autonomous.

#### 7.Other Achievement

# 7-1.SHEP Approach Implementation Guidebook

This is a training material for all extension service providers for successful work. It explains the concept and advantage of SHEP Approach. Training procedure is explained as well.

## 7-2. Horticulture Crop Technical Handbook Ver. 1 and 2

ToT materials on crop production techniques used in FT-FaDDE were compiled in books. Extension service providers can refer them to confirm technical aspects for famers' training. Some of materials accessible on Web is referred to Attachment 7

# 7-3. Other Training Materials

SHEP PLUS used mostly Power Point Presentation during trainings. Those materials and related documents are stored in share folder of SHEP PLUS server. Types of folders storing documents are referred to Attachment 8.

# 8.Attachment

# Attachment 1;

Sample programme for FABLIST forum

| TIME       | ACTIVITY   |  |  |
|------------|--|--|--|
| 08:30 am - | Registration   |  |  |
| 09:00 am   |  |  |  |
| 09:00 am - | Opening Remarks  |  |  |
| 09:30 am   | Introduction of Participants                               |  |  |
|            | Programme of the Farm Business Linkage Stakeholder         |  |  |
|            | (FABLIST) Forum  |  |  |
| 09:30 am - | Information on the Participating Stakeholders              |  |  |
| 10:30 am   |  |  |  |
| 10:30 am - | S H O R T B R E A K  |  |  |
| 11:00 pm   |  |  |  |
| 11:00 pm - | Representatives of SHEP PLUS Model Farmer Groups           |  |  |
| 14:00 pm   | visit Stakeholders for Sharing Information & Business Talk |  |  |
| 14:00 pm - | Way forward  |  |  |
| 14:30 pm   | Closing Remarks  |  |  |
| 14:30 pm – | LUNCH&DEPARTURE  |  |  |

# Attachment 2;

| County/Sub-                 | Farmer Group Name          | Crops selected                    |
|-----------------------------|----------------------------|-----------------------------------|
| County                      |                            |                                   |
| Kirinyaga/                  | Wibange Oriu               | Cabbage (Riana F1), Tomato        |
| Kirinyaga East              |                            | (Rambo F1)                        |
|                             | Wendani Kiritini W/G       | Pumpkin, Banana                   |
| 1 <sup>st</sup> Year Groups | Mukure Agriculture SHG     | Capsicum (California Wonder),     |
|                             |                            | Papaya                            |
|                             | Urumwe wa Kariru           | Kale (Thousand Headed),           |
|                             |                            | Cabbage (Copehagen Market)        |
|                             | Jikaze                     | Cabbage & Spinach                 |
| Kirinyaga/                  | Kiamutugu Jikaze Self Help | Carrot; Onion                     |
| Kirinyaga East              | Group                      |                                   |
| 2 <sup>nd</sup> Year Groups | Kathukia Self Help Group   | Carrots; Kales                    |
|                             | Kianjau Wendani            | Coriander, Kales                  |
|                             | Kwirimira SHG              | Cabbage, Spinach                  |
|                             | Ngungu SHG                 | Pumpkin, Black Nightshade         |
| Murang'a/Kangema            | Kirunyu Hort SHG           | Water melon (Sukari F1), Bulb     |
| 1 <sup>st</sup> Year Groups |                            | onion (Red creole)                |
|                             | Nyakahura Hort Group       | Bulb onion, Irish potato          |
|                             | Kioneki SHG                | Spinach (Ford Hook Giant),        |
|                             |                            | Courgette (Dark green)            |
|                             | Shallom                    | Tree tomato (Magenta) & coriander |
|                             |                            | (Cory)                            |
|                             | Boyo Women Group           | Cabbage (Gloria F1), Tree tomato  |
|                             |                            | (Magenta)                         |
| Murang'a/Kangema            | B.I.G Youth Group          | Spinach, Cabbage                  |
| 2 <sup>nd</sup> Year Groups | Kariruo SHG                | Corriander, Kales                 |
|                             | Mukungai Horticulture      | Capsicum, Cabbage                 |
|                             | Group                      |                                   |
|                             | Nyagaka Women Group        | Cabbage, Corriander               |

|                             | Young Pioneer SHG        | Cucumber, Spinach                  |
|-----------------------------|--------------------------|------------------------------------|
| Kiambu/Thika                | Karibaribi Horticulture  | Tomato (Kilele F1), Watermelon     |
| Town                        | Growers                  | (Sukari F1)                        |
| 1 <sup>st</sup> Year Groups | Rurii SHG                | Capsicum (Super Bell F1), Tomato   |
|                             |                          | (Kilele F1)                        |
|                             | Daughters of Hope        | Spinach, Corriander                |
|                             | Mungano SHG              | Water melon (Sukari F1), Tomato    |
|                             |                          | (Rambo F1)                         |
|                             | Ngoliba Volunteers       | Tomato (Kilele F1), Spinach (Ford  |
|                             |                          | Hook Giant)                        |
|                             | Mwangaza Women Group     | Spinach, Black Nightshade          |
| Kiambu/Thika                | Athena Self Help Group   | Spinach, Tomato                    |
| Town                        | Charity Self Help Group  | Capsicum, Jute mallow              |
| 2 <sup>nd</sup> Year Groups | Munyu Kiyo Self Help     | Spinach, Capsicum                  |
|                             | Group                    |                                    |
|                             | Ngoliba Umoja Farmers    | Sweet potato, Green Maize          |
|                             | Self Help Group          |                                    |
|                             | Valley Land Self Help    | Corriander, Capsicum               |
|                             | Group                    |                                    |
| Elgeyo Marakwet/            | Culture Women Group      | Garden Peas (Grano), Carrots       |
| Marakwet east               |                          | (Nantes)                           |
| 1 <sup>st</sup> Year Groups | Kipsacha Youth Group     | Kales (Collards), Black nightshade |
|                             | Muungano Women Group     | Black Nightshade, Kales            |
|                             |                          | (Thousand Headed)                  |
|                             | Maron Conservation Youth | Kales (Thousand Headed), Potato    |
|                             | Group                    | (Shangi)                           |
|                             | Chepchoren Farmers       | Onion, Chili                       |
|                             | Group                    |                                    |
| Elgeyo Marakwet/            | Biriro Self Help Group   | Irish Potato (Shangi), Cabbage     |
| Marakwet east               |                          | (Gloria F1)                        |
| 2 <sup>nd</sup> Year Groups | Chepkog Women Group      | Cabbage (Gloria F1), Kales         |

|                             |                              | (Collards)                       |
|-----------------------------|------------------------------|----------------------------------|
|                             | Cheptirmet Youth Group       | Irish Potato (Shangi), Cabbage   |
|                             |                              | (Gloria F1)                      |
|                             | Endo Development Group       | Water melon, Tomato              |
|                             | Kapchelaga Self Help         | Irish Potato, Garden Peas        |
|                             | Group                        |                                  |
|                             | Matunda Mazuri Women         | Tomato, water melon              |
|                             | Group                        |                                  |
| Uasin Gishu/                |                              | Tomato (Rio grande); Black       |
| Moiben                      | Sosiyo Farmers SHG           | Nightshade                       |
| 1 <sup>st</sup> Year Groups | Bethleem Tuungane SHG        | Chili (Long cayenne); Black      |
|                             |                              | Nightshade                       |
|                             | Kituyo Women Group           | Chili (Red Demon); Spider Plant  |
|                             | Kap Engine                   | Black Nightshade; chili (Long    |
|                             |                              | Cayene)                          |
|                             | Kamaua Widows                | Black Nightshade; Chili          |
| Uasin Gishu/                | Kapsoen maisha bora SHG      | Cabbage (Gloria F1); Black Night |
| Moiben                      |                              | shade                            |
| 2 <sup>nd</sup> Year Groups | Mutirithia block 2 Self Help | Kales (Collards); Spinach        |
|                             | Group                        | (Fordhook Giant)                 |
|                             | Ngala Self Help Group        | Tomat; Black Nightshade          |
|                             | Rocky foundation youth       | Cabbage; Capsicum (California    |
|                             | group                        | Wonder)                          |
|                             | SIMASE Self Help Group       | Tomato (Rio Grande); Cabbage     |
|                             |                              | (Gloria)                         |
| Nakuru/Molo                 | Green Rehema Kilimo          | Potato (Shangi); Spring onion    |
| 1 <sup>st</sup> Year Groups | SHG                          |                                  |
|                             | Lawina Upendo Women          | Potato (Shangi); Garden Peas     |
|                             | Group                        | (Grano)                          |
|                             | Nyakiambi Women Group        | Carrot (Nantes); Spinach (Ford   |

|                             |                             | Hook Giant)                        |
|-----------------------------|-----------------------------|------------------------------------|
|                             | Milima Mitatu Jubilee Youth | Potato (Shangi); Garden Peas       |
|                             | Group                       | Cabbage replaced Garden peas       |
|                             | Michatha Organic B SHG      | Courgette; Spinach (Fordhook       |
|                             |                             | Giant)                             |
| Nakuru/Molo                 | Elburgon Division 'B' Youth | Cabbage (Gloria); Carrots (Nantes) |
| 2 <sup>nd</sup> Year Groups | Group                       |                                    |
|                             | Emitik Women Group          | Black Nightshade; Spring onion     |
|                             | Langam Women Group          | Irish potato (Shangi); Garden Peas |
|                             | Mburi Self Help Group       | Tomato (Cal J); Kales (Thousand    |
|                             |                             | Headed)                            |
|                             | Turi Tree Tomato Growers    | Tree tomato; Carrots               |
| Kitui/Kitui South           | AIC Wiitu Youth Group       | Tomato; Bulb Onion                 |
| 1 <sup>st</sup> Year Groups | Bidii Youth Development     | Tomato; Bulb Onion                 |
|                             | Group                       |                                    |
|                             | Kitambaa Vegetable          | Tomato (Eden); Spinach (Fordhook   |
|                             | Growers                     | Giant)                             |
|                             | Wendano Wa Aka Women        | Cowpea leaves; Bulb Onion          |
|                             | Group                       |                                    |
|                             | Yakilindi Farmers Field     | Watermelon (Sukari); Tomato        |
|                             | School                      |                                    |
| Kitui/Kitui South           | Aki Farmers SHG             | Tomato (Asila); Capsicum ( Yolo    |
| 2 <sup>nd</sup> Year Groups |                             | Wonder)                            |
|                             | Nguni Horticultural         | Tomato (Asila); Spinach            |
|                             | Farmers group               |                                    |
|                             | Tuvila Ngangani SHG         | Tomato (Rio Grande); Bulb Onion    |
|                             |                             | (Bombay Red)                       |
|                             | Upendo Irrigation SHG       | Tomato (Rio Grande); Bulb onion    |
|                             | (Kathiaka)                  |                                    |
|                             | Wendo Maiini SHG            | Tomato (Rio Grande); Kales         |

|                             |                           | (Collards)                       |
|-----------------------------|---------------------------|----------------------------------|
| Machakos/Masinga            | Kaonyweni Water Dam       | Tomato (Kilele F1); Kale         |
| 1 <sup>st</sup> Year Groups | SHG                       | (Thousand Headed)                |
|                             | Muambani Conservation     | Mango (Apple); Papaya (Mountain) |
|                             | SHG                       |                                  |
|                             | Nguuka SHG                | Tomato (Rio Grande); Kale        |
|                             |                           | (Collard)                        |
|                             | Wamboo SHG                | Tomato; Capsicum (California     |
|                             |                           | Wonder)                          |
|                             | Wiwano wa Kasuvilo SHG    | Butternut; Cowpea leaves         |
| Machakos/                   | Dynamic Youth Group       | Kales; Coriander                 |
| Masinga                     | Kathukini Mango Growers   | Tomato; Papaya                   |
| 2 <sup>nd</sup> Year        | Nguumo SHG                | Tomato (Rio Grande); Bulb Onion  |
| Groups                      |                           | (Red Creole)                     |
|                             | Twone Mbee Kasuvilo       | Butternut; Cowpea leaves         |
|                             | SHG                       |                                  |
|                             | Kathinge SHG              | French Beans (Serengeti); Tomato |
|                             |                           |                                  |
| Makueni/                    | Kanini Kaseo Women        | Bulb Onion; Mango                |
| Mbooni                      | Group                     |                                  |
| 1 <sup>st</sup> Year        | Kwatuma water Project     | Green Maize; Kales (Collards)    |
| Groups                      | SHG                       |                                  |
|                             | Kwekavi Horticultural     | French Beans; Kales              |
|                             | Growers                   |                                  |
|                             | Kandula Ag. Project Group | Spinach; Amaranthus              |
|                             | Umanthi Nthanganthini     | Bulb Onion; water melon          |
|                             | SHG                       |                                  |
| Makueni/                    | Kikameni Group            | Kales; Spinach                   |
| Mbooni                      | Kitwii Irrigation SHG     | Bulb Onion (Bombay Red); Tomato  |
| 2 <sup>nd</sup> Year        |                           | (Kilele F1)                      |
| Groups                      | Kyangwa SHG               | Bulb onion; Kales (Marrow stem)  |

|                             | Kyeni Kya Kyaavua                      | Corriander; Capsicum (Yolo Wonder)          |
|-----------------------------|--|---|
|                             | Utangwa Horticultural SHG              | Bulb Onion (Bombay Red); Chili (Bullet)     |
| Embu/                       | Gichemwe Banana                        | Banana; Bulb Onion                          |
| Runyenjes                   | Growers SHG                            |   |
| 1 <sup>st</sup> Year        | Itimbogo Irrigation CBO                | Butternut; Green Maize                      |
| Groups                      | Kamuga SHG                             | Bulb Onion; Carrots                         |
|                             | Kianyingi Horticultural Group          | Avocado (Hass); Kales (Collards)            |
|                             | Machumo Farmers Tomato Growers Group   | Tomato; Butternut                           |
|                             | Njeruri Tea SHG                        | Garden pea; Spinach                         |
| Embu/Runyenjes              | Ithatha Women Group                    | Banana; Kales (Collards)                    |
| 2 <sup>nd</sup> Year Groups | Kamiugu Irrigation SHG                 | Green Maize; Corriander                     |
|                             | Kigumo/ Mukuria Horticultural SHG      | Capsicum; Bulb Onion                        |
|                             | Kirangano Women Group                  | Bulb Onion (Red Creole);<br>Amaranthus)     |
|                             | Lower Nthamari Gachagori<br>Coffee SHG | Bulb Onion (Red Pinoy); Black<br>Nightshade |
|                             | Way Forward SHG                        | Black Nightshade; Kales (Thousand Headed)   |
| Meru/                       | Karimi (Makena) Women                  | Tomato; Kales                               |
| Igembe Central              | Youth Group                            |   |
| 1 <sup>st</sup> Year Groups |  |   |
|                             | Mangala Irrigation Project             | Tomato (Commando); Kales                    |
|                             | Mazao SHG                              | Amaranthus; Avocado                         |
|                             | Mwiteithia Ntukai SHG                  | Tomato; Water melon                         |
|                             | Nkuri Mwichuiri Water<br>Project       | Tomato; Kales                               |

| Meru/                       | Kanjoo Community Health   | Water melon (Sukari F1); Bulb      |  |  |  |  |  |
|-----------------------------|---------------------------|------------------------------------|--|--|--|--|--|
| Igembe Central              | Volunteers                | Onion (Bombay Red)                 |  |  |  |  |  |
| 2 <sup>nd</sup> Year Groups | Ruuji Rwiro Farmers SHG   | Sweet potato (Kembo 10); Papaya    |  |  |  |  |  |
|                             | Kinnaduba Farmers SHG     | Tomato (Asilla F1); Water melon    |  |  |  |  |  |
|                             |                           | (Sukari F1)                        |  |  |  |  |  |
|                             | Kathithi Farmers SHG      | Kales; Tomato                      |  |  |  |  |  |
|                             | Ruuji Rweru Mporoko       | Kales (Collards); Carrots (Nantes) |  |  |  |  |  |
|                             | Rehabilitators            |                                    |  |  |  |  |  |
| Kisumu/Seme                 | Kaluso Women Group        | Balck Nightshade; Bulb Onion (Red  |  |  |  |  |  |
| 1 <sup>st</sup> year Groups |                           | creole)                            |  |  |  |  |  |
|                             | Kanyonditi SHG            | Kales; Black Nightshade            |  |  |  |  |  |
|                             | Kauka Development Group   | Crotolaria; Black Nightshade       |  |  |  |  |  |
|                             | Lengo Bora SHG            | Bulb Onion; Kales                  |  |  |  |  |  |
|                             | Othany Farmers Group      | Water melon; Tomatoes              |  |  |  |  |  |
| Kisumu/Seme                 | Duogo Dero Initiative SHG | Black Nightshade; Kales            |  |  |  |  |  |
| 2 <sup>nd</sup> Year Groups | Inuka Women Group         | Cowpea leaves; Crotolaria          |  |  |  |  |  |
|                             | Nyachido Young Farmers    | Cowpea leaves; Crotolaria          |  |  |  |  |  |
|                             | Nyasi Hunters Youth Group | Kales; Crotolaria                  |  |  |  |  |  |
|                             | Pundo Kouche              | Kales; Water Melon (Sugar Baby)    |  |  |  |  |  |
|                             | Development Group         |                                    |  |  |  |  |  |
| Homa                        | Andemo Small Scale        | Black Nightshade; butternut        |  |  |  |  |  |
| Bay/Ranchuonyo              | Farmer Group              |                                    |  |  |  |  |  |
| North                       | Lkue SHG                  | Kale; Black Nightshade             |  |  |  |  |  |
| 1 <sup>st</sup> Year Groups | Nyatoto Women Group       | Tomato (Kilele F1); Cowpeas        |  |  |  |  |  |
|                             |                           | leaves                             |  |  |  |  |  |
|                             | Riwa SHG                  | Tomato (Kilele F1); Bulb onion     |  |  |  |  |  |
|                             | Samanga Adult Group       | Tomato (Kilele F1); Kales          |  |  |  |  |  |
| Homa                        | Ogopa SHG                 | Kales (Collards); Black Nightshade |  |  |  |  |  |
| Bay/Rachuonyo               | Block I SHG               | Bulb onion; Kales                  |  |  |  |  |  |
| North                       | Kinda Japur SHG           | Kales (Mfalme F1); Tomato (Cal J)  |  |  |  |  |  |

| 2 <sup>nd</sup> Year Groups | Kinda Jopur SHG                 | Tomato (Dani F1); Capsicum (Yolo Wonder)     |  |  |  |  |  |
|-----------------------------|---------------------------------|--|--|--|--|--|--|
|                             | Oyie Tich Women Group           | Bulb Onion (Red Creole); Tomato (Rio Grande) |  |  |  |  |  |
| Nyamira/Manga               | Kenyoro Women Group             | Black Nightshade; Kales                      |  |  |  |  |  |
| 1 <sup>st</sup> Year Groups | Nyachichi Vision Youth<br>Group | Capsicum; Kales                              |  |  |  |  |  |
|                             | Sasati Youth Group              | Black nightshade; Spider plant               |  |  |  |  |  |
|                             | Steward Rogena Youth            | Spring onion; Carrots                        |  |  |  |  |  |
|                             | Group                           | Spring official, Carrols                     |  |  |  |  |  |
|                             | St. Monica SHG                  | Tomato; Black Nightshade                     |  |  |  |  |  |
| Nyamira/Manga               | Bondeka Obomo Women             | Black Nightshade; Spider plant               |  |  |  |  |  |
| 2 <sup>nd</sup> Year Groups | Group                           |  |  |  |  |  |  |
|                             | Ikobe Banana Group              | Spring onion; Corriander                     |  |  |  |  |  |
|                             | Obomo SHG                       | Capsicum (California Wonder);                |  |  |  |  |  |
|                             |                                 | Banana (Ngombe)                              |  |  |  |  |  |
|                             | Omokonge Widows                 | Black Nighshade; Spring onion                |  |  |  |  |  |
|                             | Women Group                     |  |  |  |  |  |  |
|                             | Ribwago SHG                     | Kales; Spring onion                          |  |  |  |  |  |
| Bungoma/Kabuchai            | Kabuchai Zinduka Youth          | Kales; Tomato                                |  |  |  |  |  |
| 1 <sup>st</sup> Year Groups | Bunge                           |  |  |  |  |  |  |
|                             | Green Warriors Self Help        | Kales; Black Night shade                     |  |  |  |  |  |
|                             | Group                           |  |  |  |  |  |  |
|                             | Waluma Youth Group              | Kales (Collards); Black Night shade          |  |  |  |  |  |
|                             | Vumilia Women Group             | Sweet potato; Bulb onion                     |  |  |  |  |  |
|                             | Kamulupo Youth Group            | Bulb onion; Cabbage                          |  |  |  |  |  |
| Bungoma/Kabuchai            | Sambaza SHG                     | Kales; Black Night shade                     |  |  |  |  |  |
| 2 <sup>nd</sup> Year Groups | Lukina Women Group              | Kales; Black Night shade                     |  |  |  |  |  |
|                             | Christian Vision Youth          | Kales; Black Night shade                     |  |  |  |  |  |
|                             | Bunge                           |  |  |  |  |  |  |
|                             | Kosiana SHG                     | Black night shade; Pumpkin leaves            |  |  |  |  |  |

|                             | III F F'. I I O I I       | District of a Kalas             |  |  |  |
|-----------------------------|---------------------------|---------------------------------|--|--|--|
|                             | Hope Farmers Field School | Black Nightshade; Kales         |  |  |  |
| Busia/Teso South            | Amerikwai Farmers' Group  | Corriander; Bulb Onion          |  |  |  |
| 1 <sup>st</sup> Year Groups | Katamakisi Women Group    | Black Nightshade; Kales         |  |  |  |
|                             | Apegei Support Group      | Tomato; Kales                   |  |  |  |
|                             | Osuret Community Unit     | Spider plant; Kales             |  |  |  |
|                             | Group                     |                                 |  |  |  |
|                             | Aturet Acaun Youth Group  | Tomato; Kales                   |  |  |  |
|                             | Kamarinyang Acamun        | Black nightshade; Kales         |  |  |  |
|                             | Support Group             |                                 |  |  |  |
| Busia/Teso South            | Agolot Farmers Group      | Kales; Spring onion             |  |  |  |
| 2 <sup>nd</sup> Year Groups | Fanyakazi Youth Bunge     | Chili; Kales                    |  |  |  |
|                             | Ketisisiata Youth Group   | Tomato; Kales                   |  |  |  |
|                             | Amukurat Self Help Group  | Kales; Black Nightshade         |  |  |  |
|                             | Alemar Ican Women Group   | Kales; Black Night shade        |  |  |  |
|                             | Amukura Central Farmers   | Kales; Chili                    |  |  |  |
|                             | SHG                       |                                 |  |  |  |
| Kilifi/Kilifi North         | Katsungwini Women Group   | Tomato; Amaranthus              |  |  |  |
| 1 <sup>st</sup> Year Groups | Bahari Mazingira Bora     | Tomato (Kilele F1) ; Amaranthus |  |  |  |
|                             | SHG                       |                                 |  |  |  |
|                             | Mazingira Bora SHG        | Amaranthus (Dubious); Tomato    |  |  |  |
|                             |                           | (Kilele F1)                     |  |  |  |
|                             | Faidika SHG               | Amaranthus; Okra                |  |  |  |
|                             | Maonyesho SHG             | Eggplant (Ravaya); Amaranthus   |  |  |  |
|                             |                           | (Dubious)                       |  |  |  |
| Kilifi/Kilifi North         | Bofa Farmers Field School | Tomato; Okra                    |  |  |  |
| 2 <sup>nd</sup> Year Groups | Mwezango'mbe FFS          | Amaranthus;Okra                 |  |  |  |
|                             | Benesi Youth SHG          | Tomato; Okra                    |  |  |  |
|                             | Mwakuhenga Youth Group    | Amaranthus; Okra                |  |  |  |
|                             | Kadzinuni FFS             | Watermelon; Amaranthus          |  |  |  |
|                             | Tumaini FFS               | Tomato; Okra                    |  |  |  |
|                             | Nia Njema SHG             | Amaranthus; Okra                |  |  |  |
|                             | Nia Njema SHG             | Amaranthus; Okra                |  |  |  |

| Kwale/Matuga                | Lukore Vegetable CIG    | Egg Plant; Chili       |  |  |
|-----------------------------|-------------------------|------------------------|--|--|
| 1 <sup>st</sup> Year Groups | Burani Irrigation Group | Okra; Kales            |  |  |
|                             | Chiphingoni SHG         | Capsicum; Kales        |  |  |
|                             | Upendo Disabled         | Amaranthus; Kales      |  |  |
|                             | Community Welfare Group |                        |  |  |
|                             | Mstamilivi Women Group  | Amaranthus; Okra       |  |  |
| Kwale/Matuga                | Likoni 'A' SHG          | Tomato; Capsicum       |  |  |
| 2nd Year Groups             | Mtumizi Development     | Tomato; Amaranthus     |  |  |
|                             | Group                   |                        |  |  |
|                             | Malengo SHG             | Capsicum; Chili        |  |  |
|                             | Mubandeni SHG           | Passion fruits; Tomato |  |  |
|                             | Utui SHG                | Chili; Okra            |  |  |

**Attachment 3;**Sample Programme of Gender Mainstreaming, Farm Family Budgeting & Group Empowerment Training

| Time        | Mon  | Tue  | Wed   | Thur  | Fri   |
|-------------|--|--|---|---|---|
| 8:00- 8:15  | Registration   | Recap<br>session   | Recap<br>session  | Recap<br>session  | Recap session                                       |
| 8:15- 8:45  | Introduction Opening remarks by SHEP PLUS                    | Farm family budgeting  | Travel to farmers group   | Travel to farmers group                                     | Group dynamics                                      |
| 8:45-9:15   | Introduction of 5-<br>day programme                          | Farm family budgeting  | Preparation at farmers group  | Preparation at farmers                                      |   |
| 9:15-10:00  | Gender concept   | exercise   | O a mada m  | group   | Group   |
| 10:00-10:30 | Short break  |  | Gender<br>concept   | Procedure of farm family budgeting                          | Empowerment<br>Indicators(GEIs)                     |
| 10:30-11:15 | Procedure of gender analysis tools                           | Short break  | Procedure of gender analysis tools  | Farm family budgeting exercise                              | Short break   |
| 11:15-13:15 | Gender analysis tools exercise                               | Discussion on issues identified from the                       | Gender<br>analysis tools<br>exercises                                       |   | Record keeping                                      |
|             |  | exercises  |   |   | Submission of monitoring sheets                     |
| 13:15-14:15 | Lunch break  | Lunch break  | Lunch break   | Lunch break   | Lunch break   |
| 14:15-15:00 | Presentation of gender analysis tools exercise s             | Tips for gender sensitive training                             | Presentation<br>of gender<br>analysis tools<br>exercises                    | Presentation<br>of farm family<br>budgeting<br>exercises    | Issuance of gender training materials & way forward |
| 15:00-15:30 | Short break  | Preparation<br>for field<br>work(farmers<br>group<br>training) | Discussions<br>on issues<br>identified from<br>exercises/Lori<br>ondo story | Discussions<br>on issues<br>identified<br>from<br>exercises | Closing remarks                                     |
|             | Identification & discussion of issues arising from the tools |  | Gender action plan making   | Consideratio<br>n & wrap up                                 |   |
| 16:30-17:30 | Gender action plan(exercise & presentation)                  | Wrap up  | Discussion & wrap up  |   |   |
| 17:30-18:00 | Discussion & wrap up   |  |   |   |   |

# Attachment 4;

# Sample Training Programme for FT-FaDDE

~Smallholder Horticulture Empowerment & Promotion Project for Local and Up-Scaling (SHEP PLUS) ~

# PROGRAMME OF THE FACILITATORS' TRAINING FOR FARMERS' DEMAND DRIVEN EXTENSION (FT-FaDDE) AT WAMBUGU ATC Embu, Meru County

Date: 16th - 20th Apr. 2018

| TIME   | Monday<br>16/Apr/2018  | Tuesday<br>17/Apr/2018  | Wednesday<br>18/Apr/2018   | Thursday<br>19/Apr/2018                              | Friday<br>20/Apr/2018  |  |
|--|--|---|--|--|--|--|
| 8:15 am - 8:30 am  | Registration   | • Recap   | - Recap  | * Recap  | * Recap  |  |
| Course Objectives     Official Opening     Fer     En     (Fer |  | GHCP&PHHT20: 3 & 11 (Seit<br>Sampling(30min/ 8:30-9:00),<br>Ferrilization(30min/9:00-9:30))     Exercise on the GHCP&PHHT20: 11<br>(Fertilizer Calculation (30min/ 9:30-10:00)) |  | SPT on Bulb Onion Production (90 min/ 8:30-10:90)    | SPT on Kales Production (90min/ 8:3<br>10:00)  |  |
| 19:00 am - 19:30 am  |  | H E   | ALTH BR  | EAK  |  |  |
| 10:30 am - 01:00 pm  | Horticultural Crop Production (30min/<br>10:30-11:00)  | GHCP&PHHT20: 6, 13, 15 & 16 (Land Preparation: Solarization (30min/10:30-11:00), Crop Management: Pesta & Diseases Control: IPM, Spraying (60min/11:00-12:00))                  | • SPT on Tomato (75 min/ 10:30-<br>11:45)  | SPT on Carrot Production (75 min/<br>10:30-11:45)    | SPT on Black Nightshade Production<br>(75 min/ 10.30-11:45)  |  |
|  | General Horticultural Crop Production & Post-Harvest Handling Techniques (GHCP&PHHT) 20 (90min/ 11:00-12:30)     GHCP&PHHT20: 2 (Crop Planting Calendar (30min/ 12:30-13:00) | GHCP&PHHT20: 17 - 19 (Harvest & Post-Harvest Handling (45min/ 12:00-12:45))     Smartphone use in extension activities (15min/ 12:45-13:00)                                     | (75 min/ 11:45-13:00)  | + SPT on Bassesa Production (75 min/<br>11:45-13:00) | SPT on Amaranthus Production (75<br>min/ 11:45-13:00)  |  |
| 01:00 pm - 02:00 pm  |  | L U   | NCH BRI  | E A K  |  |  |
| 82:00 pm - 04:36 pm  | GHCP&PHHT20: 4 Compost<br>(30min/ 14:00-14:30)     Demo. on the GHCP&PHHT20: 2 &<br>4 (Crop Planting Calendar (30min/  | <ul> <li>Denno. on the GHCP&amp;PHHT20: 3, 6</li> <li>&amp; 16 (Soil Sampling, 60 min/ 14:00-<br/>15:00)</li> <li>Solarization, Spraying 90min/ 15:00-</li> </ul>               |  | SPT on Green Maize Production (75 min/ 14:00-15:15)  | How to conduct & Evaluate the Infield Training     Utilization of Kamishibai     Way forward   |  |
|  | 14:30-15:00), Group Presentation<br>(30min' 15:00-15:30) Compost (60min/<br>15:30-16:30))  |   | SPT on Sweet Potate<br>Production (75 min/ 15:15-<br>16:30)  | SPT on Coriander Production (75 min/<br>15:15-16:30) | Official Closing     Presentation of Certificate     Handover of Kamishibai  |  |
| 04:30 pm - 05:00 pm  |  |   | Videos: SHEP   | good practice, SHEP Documentary (NTV                 | ), Gender, Grafting etc.   |  |
| 05:00pm-   |  | H E   | The state of the s | EAK  | The state of the s |  |

# Attachment 5;

Follow up on In-Field training report form

# Smallholder Horticulture Empowerment & Promotion Project For Local and Up-scaling (SHEP PLUS)

# Follow up and backstopping on In-Field Training

| 1. | Back | groun | ıd Info | ormation |
|----|------|-------|---------|----------|
|----|------|-------|---------|----------|

| Na  | me of                                    |                       | ounty/Sub-Count   | y/Ward:        |                 |         |
|-----|--|-----------------------|-------------------|----------------|-----------------|---------|
| Na  | me                                       | of                    | the               | Farn           | ner's           | Group   |
|     | mbership of Far                          | mer Group             | (Current): Total; |                | Male;           | Female; |
| Nu  | <br>mber of the Partic                   | <b>cipants:</b> Total | ;, Ma             | ale;           | Female;         |         |
| Dat | te (M/D/Y):                              |                       | <u>/</u>          |                |                 |         |
| Ver | nue:                                     |                       |                   |                |                 |         |
| 2.  | Suitability of ven                       | ue                    |                   |                |                 |         |
| 3.  | Did majority of the                      | ne members            | arrive on time    | Yes            | No              |         |
| 4.  | Percentage atten                         | dance                 |                   |                |                 | _       |
| 5.  | Schedule of train<br>trainings, is there |                       | he farmers and th | eir facilitato | or scheduled in | field   |
| 6.  | Relevance (timin cultivation cycle for   | •                     |                   | _              | •               |         |
|     |  |                       |                   | <del></del>    |                 |         |
| 7.  | Training                                 |                       |                   |                |                 |         |
|     | topic(s):                                |                       |                   |                |                 | ·       |
| 8.  | <b>Quality of trainin</b>                | g                     |                   |                |                 |         |

|     | a)  | Use of Training Materials (Kamishibai, training notes, visual aids): Please indicate the training materials used by the Group Facilitator |
|-----|-----|---|
|     |     | Kamishibai  |
|     |     | Training notes  |
|     |     | Visual aids   |
|     |     | Any other (specify)   |
|     |     |   |
|     | b)  | Based on your observation did the training materials adequately cover the topic?  |
|     |     | Yes/No  |
|     | c)  | If the answer to (b) is no, what improvement is required to cover the topic   |
|     |     | adequately?   |
|     |     |   |
|     |     |   |
|     |     |   |
|     |     |   |
|     | d)  | Facilitator's training skill (please rate the facilitators training skills): Very High/   |
|     |     | High/Medium/Low/Very Low  |
| 9.  | Ap  | art from the no of farmers trained, what are the other Outputs of the training?   |
|     | -   | ease indicate specific output/s of this training e.g. demonstration on compost  |
|     | pre | eparation was carried out, planting calendar)   |
|     | a)  |   |
|     | b)  |   |
|     | IJ, |   |
|     | c)  |   |
|     |     |   |
|     | d)  |   |
| 10. | Fa  | rmers views if any  |
|     |     |   |
|     |     |   |
|     |     | ······  |
|     |     |   |
|     |     |   |

| 11. Challenges (Identify the major challenges encountered | during this training) |
|---|-----------------------|
|   |                       |
|   |                       |
|   |                       |
|   |                       |
| 12. Suggested way forward                                 |                       |
|   |                       |
|   |                       |
|   |                       |
| <del></del>   |                       |
| 13. Additional Comments                                   |                       |
|   |                       |
|   |                       |
|   |                       |
| 14. Photos  |                       |
| Compiled by:  |                       |
| Name:   | Component:            |
|   |                       |
| Signature:  |                       |

Attachment 6;

The number of contacts with members No. of Beneficiaries (farmers, cumulative) of the In-field Training for the 1st Batch 2nd Year's Model Farmer Groups

|                      | Name of County |     |           |     |          |     |             |     |                    |     |        |     |       |       |
|----------------------|----------------|-----|-----------|-----|----------|-----|-------------|-----|--------------------|-----|--------|-----|-------|-------|
|                      | Kiam           | bu  | Kirinyaga |     | Murang'a |     | Uasin Gishu |     | Elgeyo<br>Marakwet |     | Nakuru |     |       |       |
| 1st Batch            | 694<br>319 375 |     | 737       |     | 763      |     | 597         |     | 709                |     | 606    |     | 4,106 |       |
| 1st Year             |                |     | 229       | 508 | 190      | 573 | 265 332     |     | 258 451            |     | 226    | 380 | 1,487 | 2,619 |
|                      |                |     |           |     |          |     |             |     |                    |     |        |     |       |       |
| 1st Batch            | 427            | 7   | 87        | 79  | 5        | 54  |             | 726 | 6                  | 54  | 72     | 22  | 3,9   | 962   |
| 2 <sup>nd</sup> Year | 191            | 238 | 297       | 582 | 237      | 317 | 487         | 239 | 245                | 409 | 310    | 412 | 1,767 | 2,197 |

(M) (F)

No. of Beneficiaries (farmers, cumulative) of the In-field Training for the 2nd Batch 1st Year's Model Farmer Groups

|    |     |                          |                 |                |     |         | N   | Name o  | f Coun | ity |     |     |       |     |     |       | То    | tal   |
|----|-----|--------------------------|-----------------|----------------|-----|---------|-----|---------|--------|-----|-----|-----|-------|-----|-----|-------|-------|-------|
|    | Me  | Meru Embu Kitui Machakos |                 | Makueni Kisumu |     | Homabay |     | Nyamira |        |     |     |     |       |     |     |       |       |       |
| B2 | 978 |                          | 698 299         |                | 99  | 898     |     | 937     |        | 898 |     | 610 |       | 522 |     | 5,840 |       |       |
| Y1 | 477 | 501                      | 372             | 326            | 126 | 173     | 393 | 505     | 317    | 620 | 282 | 616 | 222   | 388 | 103 | 419   | 1,788 | 2,544 |
| B2 | 987 |                          | 987 872 468 673 |                | '3  | 796 880 |     | 30      | 531    |     | 331 |     | 5,538 |     |     |       |       |       |
| Y2 | 476 | 511                      | 165             | 707            | 183 | 285     | 294 | 379     | 347    | 449 | 282 | 598 | 273   | 258 | 125 | 206   | 1,590 | 2,537 |

(M) (F)

No. of Beneficiaries (farmers, cumulative) of the In-field Training for the 3<sup>rd</sup> Batch 1<sup>st</sup> Year's Model Farmer Groups

|   | Name of County |     |       |     |        | Total |       |         |       |       |
|---|----------------|-----|-------|-----|--------|-------|-------|---------|-------|-------|
|   | Bungoma        |     | Busia |     | Kilifi |       | Kwale |         |       |       |
| 2rd Datab                                     | 662            |     | 903   |     | 719    |       | 584   |         | 2,868 |       |
| 3 <sup>rd</sup> Batch<br>1 <sup>st</sup> Year | 242            | 420 | 317   | 586 | 149    | 570   | 198   | 38<br>6 | 906   | 1,962 |
|   | 633            |     | 785   |     | 926    |       | 516   |         | 2,860 |       |
| 3rd Batch<br>2nd Year                         | 212            | 421 | 393   | 392 | 225    | 701   | 231   | 28<br>5 | 1,061 | 1,799 |

(M) (F)

# **Attachment 7**; List of bound books and materials accessible on Web Crop production TOT materials available on the website

| Kale      | ● Tomato     | Black Nightshade        | Bulb Onion    |
|-----------|--------------|-------------------------|---------------|
| Capsicum  | Cabbage      | Amaranth                | Watermelon    |
| • Chili   | Irish Potato | Banana                  | Avocado       |
| Egg Plant | French Bean  | <ul><li>Mango</li></ul> | Passion Fruit |

# KAMISHIBAI materials available on website

| • | Data Survey for Crop | • | Data Survey for Crop | • | Crop calendar            |  |  |
|---|----------------------|---|----------------------|---|--------------------------|--|--|
|   | and Income           |   | techniques           |   |                          |  |  |
| • | ● Banana ● Bl        |   | Black Night Shade    | • | Bulb Onion               |  |  |
| • | Cabbage              |   | Capsicum             | • | <ul><li>Cowpea</li></ul> |  |  |
| • | Irish Potato         | • | Kale                 |   | Tomato                   |  |  |
| • | Water Melon          |   |                      |   |                          |  |  |

https://www.jica.go.jp/project/english/kenya/015/index.html

# Attachment 8; Soft data of Presentation Materials

The Project used Power Point Materials for each session of training. Since the materials are too many and heavy, the latest soft data used in the training for Batch3 Year 1 is submitted by USB separately. The materials are stored in follow folders.

