

Country Name	<b>Smallholder Horticulture Empowerment Project</b>
Republic of Kenya	

**I. Project Outline**

Background	In Kenya, most of the population living below the poverty line were small farmer households in rural areas who derived their livelihoods from agriculture and its related activities. Under this situation, horticulture was the fastest growing sub-sector but predominantly small-scale farming. Smallholder horticulture farmers suffered low income despite their relatively large production volume. Empowerment of smallholder horticulture was the key to redress the existing disparity as well as to reduce rural poverty.				
Objectives of the Project	<p>The Project aimed at developing capacity of the smallholder horticulture farmer groups in the target districts in Kenya through increasing bargaining power of the target groups<sup>1</sup> in marketing their produce, increasing the production of better quality crops of the target groups, and developing capacity of the target groups to improve rural infrastructure for production and transportation, thereby improving livelihoods of smallholder horticulture farmers in the target districts.</p> <ol style="list-style-type: none"> <li>Overall Goal: Improved livelihoods of smallholder horticulture farmers in the target districts</li> <li>Project Purpose: Developed capacity of the smallholder horticulture farmer groups supported by the project</li> </ol>				
Activities of the Project	<ol style="list-style-type: none"> <li>Project Site<sup>2</sup>: Bungoma East, West, North, South Districts (Formerly Bungoma District), Western Province; Trans-Nzoia East, West and Kwanza Districts (Formerly Trans-Nzoia District), Rift Valley Province; Kisii Central, South and Masaba Districts (Formerly Kisii District), Nyanza Province; Nyandarua North and South District (Formerly Nyandarua District), Central Province. *Names as of Terminal Evaluation in July 2009.</li> <li>Main activities: sensitization workshop, selection of model groups, baseline survey, stakeholder forum, training (development of training materials; residential training and in-field training for the direct supported farmer groups; residential training, training of trainers, and in-field training by extension staff for the indirect supported farmer groups), follow-up support, development of manuals</li> <li>Inputs (to carry out above activities) *As of Terminal Evaluation in July 2009 <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <b>Japanese Side</b>            1) Experts: (Long-term) 3 persons; (Short-term) 2 persons            2) Trainees Received: 9 persons            3) Equipment: vehicles, office equipment, etc.            4) Local Costs         </td> <td style="width: 50%; vertical-align: top;"> <b>Kenyan Side</b>            1) Staff Allocated: 7 persons (3 from Ministry of Agriculture (MOA)<sup>3</sup>, 4 from Horticultural Crops Development Agency (HCDA))<sup>4</sup>            2) Building and Facilities            3) Counterpart Budget         </td> </tr> </table> </li> </ol>			<b>Japanese Side</b> 1) Experts: (Long-term) 3 persons; (Short-term) 2 persons 2) Trainees Received: 9 persons 3) Equipment: vehicles, office equipment, etc. 4) Local Costs	<b>Kenyan Side</b> 1) Staff Allocated: 7 persons (3 from Ministry of Agriculture (MOA) <sup>3</sup> , 4 from Horticultural Crops Development Agency (HCDA)) <sup>4</sup> 2) Building and Facilities 3) Counterpart Budget
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Project Period	November 2006 to November 2009	Project Cost	(ex-ante) 295 million yen, (actual) 317 million yen		
Implementing Agency	Ministry of Agriculture (MOA) and Horticultural Crops Development Agency (HCDA)				
Cooperation Agency in Japan	None				

**II. Result of the Evaluation**

## &lt;Constraints on Evaluation&gt;

(i) The primary source of information on the post-project situation is the questionnaire survey and interviews with related county or sub-county (former district) agriculture officers and farmer groups (one or two per former district) in the former Bungoma District, Trans-Nzoia District, and Nyandarua District, three out of the four original target districts. The evaluator did not collect information from the former Kisii District due to the limited evaluation resources.

(ii) Quantitative data was not available to verify the indicators for Project Purpose and the Overall Goal, mainly because the said agriculture officers do not monitor the data for the indicators, and the available statistical information is either limited or not up to date. Therefore, the evaluator used qualitative information collected in the way mentioned in (i) above.

## &lt; Special Perspectives Considered in the Ex-Post Evaluation &gt;

(i) Contribution of succeeding technical cooperation of JICA: Continuation status of project effects, achievement of Overall Goal, and institutional,

<sup>1</sup> Target groups consisted of direct supported farmer groups (42 groups in total, around 1,000 farmers) and indirect supported farmer groups (80 groups in total (around 1,600 farmers).

<sup>2</sup> See (i) of "Special Perspective Considered in the Ex-Post Evaluation".

<sup>3</sup> Presently known as Ministry of Agriculture Livestock and Fisheries (MOALF).

<sup>4</sup> Presently known as Horticultural Crops Directorate (HCD), Agriculture and Food Authority (AFA).

technical and financial aspects of Sustainability include both outcomes/impacts of this project and the succeeding technical cooperation of JICA, namely, the follow-up cooperation (December 2009- March 2010)<sup>5</sup>, “Smallholder Horticulture Empowerment and Promotion Unit Project (SHEP UP)” (2010-2015), and ongoing “Smallholder Horticulture Empowerment and Promotion Project for Local and Up-scaling (SHEP PLUS)” (2015-2020). It is difficult to separate outcomes/impacts of this project from those of the succeeding technical cooperation at central level and to a lesser degree at local level because some of the project sites (original target districts) of this project overlap with the succeeding ones (among the original target districts surveyed for this ex-post evaluation, only the former Trans-Nzoia District is not covered by the succeeding projects).

(ii) Names of project sites: The project sites originally consisted of four target districts (i.e. Bungoma District (Western Province), Trans-Nzoia District (Rift Valley Province), Kisii District (Nyanza Province) and Nyandarua District (Central Province)), but they had been divided into 12 by the time of terminal evaluation in 2009 as shown in the “Project Site”. It is noted that the data in the Terminal Evaluation Report was presented and analyzed by the original four target districts instead of the divided 12. Further, after completion of the project, provinces and districts were replaced by counties due to change in the local administrative system in 2013. To maintain consistency with the terminal evaluation, names of the original target districts shall be used to refer to the project sites and data shall be presented by these four target districts.

(iii) Overall Goal: Target year and target number for the Indicator are not specified in the existing documents. For the ex-post evaluation, the target year shall be set to 2012 based on the normal timing of JICA’s ex-post evaluation (i.e. three years after completion of the project). As for the Indicator (“Reduced poverty rate in the target districts”), it is difficult to clarify the target number at the time of ex-post evaluation so that the exact level of achievement cannot be assessed. As an alternative, whether or not the degree of poverty reduction is considered to be large enough on reasonable grounds in light of “improved livelihoods of the smallholder horticulture farmers” as stated in Overall Goal shall be checked. The highest possible level of achievement of Overall Goal shall be “mostly achieved” for the same reason. In addition, the number of groups which practice market-oriented farming promoted by the project and the household in the groups as well as the total number of households in the target districts shall be confirmed as supplementary information in-order to estimate the degree of contribution of the project.

## 1 Relevance

### <Consistency with the Development Policy of Kenya at the Time of Ex-Ante Evaluation and Project Completion>

At the time of ex-ante evaluation, the project was consistent with the development policy of promotion of poverty reduction and creation of employment as set forth in Economic Recovery Strategy for Wealth and Employment Creation (2002-2007) and Strategy for Revitalizing Agriculture (2004-2014). At the time of project completion, the project was also consistent with government policy of transforming the agricultural sector into a profitable, commercially oriented activity that also sustains use of natural resources as set forth in the Ministry of Agriculture Strategic Plan (2008-2012), which was in line with the national development plan i.e., Vision 2030 (2008-2030) and the Agricultural Sector Development Strategy (ASDS) (2009-2020).

### <Consistency with the Development Needs of Kenya at the Time of Ex-Ante Evaluation and Project Completion >

At the time of ex-ante evaluation, the project was consistent with the development needs of Kenya. Smallholders who practiced horticultural production in the target districts had difficulty in marketing their produce mainly derived from remoteness from both local and urban major markets, limited marketing channels except for local traders, underdeveloped rural roads which easily become impassable during rainy seasons. Also, the high cost of farm inputs, lack of access to information on technology and marketing, and fluctuation of producer prices together constrained smallholders to benefit from horticulture. At the time of project completion, government’s supporting system for small-scale farmers through strengthening existing extension system was still weak.

### <Consistency with Japan’s ODA Policy at the Time of Ex-Ante Evaluation>

The project was consistent with Japan’s Country Assistance Program for Republic of Kenya (2000), which set agriculture development, including promotion of small-scale agriculture, as one of the priority areas.

### <Evaluation Result>

In light of the above, the relevance of the project is high.

## 2 Effectiveness/Impact

### <Status of Achievement for the Project Purpose at the time of Project Completion>

The Project Purpose was achieved by the time of project completion. The targeted smallholder horticulture farmer groups more or less gained bargaining power in marketing their produce according to the measurement by the project team, and average net production per unit of land increased in all the original four target districts where the project was implemented. Net-income benefit of individual members of the smallholder horticulture groups and groups supported by the project increased by 67.4-195.2% (as compared with the target 14.7-20.2 %) between April 2007 and October 2009<sup>6</sup> (Indicator). The approach introduced by this project was called the “SHEP approach” to an improvement of livelihood of smallholder farmers by developing both the technical and managerial capacity of the farmers to practice market-oriented horticultural farming<sup>7</sup>.

### <Continuation Status of Project Effects at the time of Ex-post Evaluation>

Continuation status of the project effects could be verified only qualitatively while the indicator is quantitative; however, it is judged to be “mostly continued” considering the information collected. While the quantitative data on net-income of individual members of the

<sup>5</sup> Follow-up activities with SHEP farmers’ groups, setting up office for SHEP UP and identifying personnel for SHEP UP.

<sup>6</sup> Based on the baseline survey to 154 farmer groups in April 2007 and the end line survey to 122 farmer groups in May 2009, both in the original four target districts.

<sup>7</sup> The SHEP approach offers farmers a series of trainings and a range of activities with a clear focus on market-oriented farming. Source: JICA (2014), “Introduction to the SHEP Approach”

groups supported by the project is not available, the questionnaire survey and interviews with former district agriculture officers and farmer groups revealed that the level of net-income has been maintained and in many cases improved.

Most of the farmers interviewed during the field survey in the former districts of Trans Nzoia, Nyandarua and Bungoma confirmed the continuation of the project effects. During the field survey, out of the 86 (eighty-six) of farmers interviewed by focus group discussions, 80 farmers were satisfied by the performance and effect of the project indicating an improvement in their net income. The other 6 (six) were not sure of the effects of the project. They further indicated their interest to continue using the skills and technology acquired from this project. For example, Perkerra farmer group in the former Trans Nzoia District said it has incomes of members improved evidenced by the acquisition of assets like a generator, a water borehole etc. Other groups visited like Namilama in the former Bungoma District show significant improvement of incomes from various streams including bananas, ground nuts, avocados, training activities etc. Promoting factors include continued training by the SHEP team (through the succeeding projects) and extension officers on better crop husbandry practices, reduced cost of production due to reduced input costs, and targeted/better market practices of horticulture produce. In the former Nyandarua District, the Kitogo Self Help Group (SHG) members continue to use the training materials supplied by this project to train new members and other groups. The Mwendi Kurima SHG continue to utilize the skills acquired from the training under this project to conduct market survey with the latest exercise resulting in new market opportunities for their produce in Kisumu city. Through interactions with other stakeholders using the Farm Business Linkage Stakeholder (FABLIS) approach introduced by this project, the Namirama SHG are sourcing Banana seedlings from Jomo Kenyatta University of Agriculture and Technology and VI-Agroforestry (a NGO) in Maseno.

Farmers satisfaction with project effects, continued effects of project, and the improved livelihoods were acknowledged by the results of questionnaire filled by the sub-county officers (formerly district agriculture officers) for the respective target areas. .

It should be noted that the former Trans Nzoia District is not covered by the succeeding projects but continues training and extension activities for farmer groups with the SHEP approach and using and further updating the training materials developed under the project.

<Status of Achievement for Overall Goal at the time of Ex-post Evaluation>

The achievement of the Overall Goal was partially confirmed in the target year (2012). The livelihoods of smallholder horticulture farmers are assumed to have been improved to a certain extent in the target districts because an increasing number of households in the groups have practiced market-oriented farming promoted by the SHEP approach and, as mentioned above, many groups have increased their net-income after project completion. Also, according to the latest available county statistics, the net income from horticulture at former district level has shown significant improvement (i.e., increase by 15% in Trans Nzoia, 30% in Bungoma between 2013 and 2014; no data available for other original target districts; the data includes the income of large-scale farmer households). However, the contribution of the project on the poverty reduction could not be confirmed at the former district level since the ratio of the households which participate in the groups practicing market-oriented farming promoted by SHEP approach in the original target districts to smallholder horticulture farmers is unavailable (Supplementary information). The status of achievement at the time of ex-post evaluation could not be verified as relevant data is not available

<Other Impacts at the time of Ex-post Evaluation>

The project has not had negative impacts on the natural and social environments. Regarding impacts on gender<sup>8</sup>, the survey conducted by the project found that the difference in the average net-income between male and female farmers was reduced from 31.1% in April 2007 to 14.88% in October 2009 (no data available on the gender gap after project completion).

<Evaluation Result>

In light of the above, through the project, the Project Purpose was achieved at the time of project completion, and the project effect was mostly continued. The Overall Goal was partially achieved (achievement was partially confirmed due to limited data availability) in the target year and achievement status at the time of ex-post evaluation could not be confirmed. Therefore, the effectiveness/impact of the project is fair.

Achievement of Project Purpose and Overall Goal

Aim	Indicators	Results			
(Project Purpose) Developed capacity of the smallholder horticulture farmer groups supported by the project	(Indicator) By the end of the project net-income benefit of individual members (men and women) of the smallholder horticulture groups and the groups supported by the project increased by 14.7 – 20.2 %.  (Note: “smallholder	Status of the Achievement: achieved (mostly continued) (Project Completion) <Increase of average net-income benefit of individual farmers of small holder horticulture groups and the groups supported by the project>			
		Original District	Target	Target	At the time of project completion (Apr. 2007 - Oct. 2009)
		Bungoma		20.2%	195.2%
		Trans-Nzoia		16.2%	120.7%

<sup>8</sup> Under this project, emphasis was made on gender mainstreaming as a means to enhance project effectiveness/impact through measures such as short-term expert on gender issues and ensuring a 50:50 ratio of male and female during training (what was known as the Joint Extension Staff & Farmers Dual Gender (JEF2G) Training). Also, during the evaluation, we established that some activities related to gender mainstreaming being conducted by the farmers include establishment of woodlots for firewood, installation of improved stoves and active role of women in leadership.

	horticulture groups” and “groups” are interpreted as indirect and direct model groups, respectively.)	Kisii	18.0%	161.8%																																																						
		Nyandarua	14.7%	67.4%																																																						
		(Ex-post Evaluation) -Quantitative data is not available. - Eighty out of the 86 interviewed farmers (53 male and 33 female) said they were satisfied with the performance and effect of the project indicating an improvement in their net income. -Former district agriculture officers confirmed that the level of net-income has been maintained and in many cases improved.																																																								
(Overall Goal) Improved livelihoods of the smallholder horticulture farmers	(Indicator) Reduced poverty rate in the target district  (Supplementary information to estimate the degree of the contribution of the project) Ratio of the households which participate in the groups practicing market-oriented farming promoted by SHEP approach in the original target districts.	(Target Year) partially achieved (Ex-post Evaluation) unable to verify as relevant data is not available  <Groups practicing market-oriented farming promoted by SHEP approach in the target districts as of 2012 (Target Year)>																																																								
		<table border="1"> <thead> <tr> <th rowspan="2">Original Target District</th> <th colspan="4">Number of groups which were practicing market-oriented farming promoted by SHEP approach and HH in the groups<sup>(1)</sup></th> </tr> <tr> <th>Unit</th> <th>Groups supported by this project<sup>(2)</sup></th> <th>Additional groups supported by SHEP UP</th> <th>Additional groups supported without JICA assistance<sup>(3)</sup></th> </tr> </thead> <tbody> <tr> <td rowspan="2">Bungoma</td> <td>Group</td> <td>10 or more</td> <td>15</td> <td>n/a</td> </tr> <tr> <td>HH</td> <td>372 or more</td> <td>419</td> <td>n/a</td> </tr> <tr> <td rowspan="2">Trans-Nzoia</td> <td>Group</td> <td>10 or more</td> <td>0</td> <td>n/a</td> </tr> <tr> <td>HH</td> <td>403 or more</td> <td>0</td> <td>n/a</td> </tr> <tr> <td rowspan="2">Kisii</td> <td>Group</td> <td>n/a</td> <td>15</td> <td>n/a</td> </tr> <tr> <td>HH</td> <td>n/a</td> <td>295</td> <td>n/a</td> </tr> <tr> <td rowspan="2">Nyandarua</td> <td>Group</td> <td>11 or more</td> <td>17</td> <td>n/a</td> </tr> <tr> <td>HH</td> <td>416 or more</td> <td>380</td> <td>n/a</td> </tr> <tr> <td rowspan="2">Total</td> <td>Group</td> <td>31 or more</td> <td>47</td> <td>n/a</td> </tr> <tr> <td>HH</td> <td>1,191 or more</td> <td>1,094</td> <td>n/a</td> </tr> </tbody> </table>			Original Target District	Number of groups which were practicing market-oriented farming promoted by SHEP approach and HH in the groups <sup>(1)</sup>				Unit	Groups supported by this project <sup>(2)</sup>	Additional groups supported by SHEP UP	Additional groups supported without JICA assistance <sup>(3)</sup>	Bungoma	Group	10 or more	15	n/a	HH	372 or more	419	n/a	Trans-Nzoia	Group	10 or more	0	n/a	HH	403 or more	0	n/a	Kisii	Group	n/a	15	n/a	HH	n/a	295	n/a	Nyandarua	Group	11 or more	17	n/a	HH	416 or more	380	n/a	Total	Group	31 or more	47	n/a	HH	1,191 or more	1,094	n/a
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		<p>Note: (1) The data on the total number of households in the target districts is not available. For reference, at the time of ex-ante evaluation, the number of farmers in the target groups had accounted for about 1% of the smallholder horticulture farmers in the target districts (262,650 people). (2) The figures are for the direct supported farmer groups as of project completion in 2009. Interviews with agriculture officers in the three original target districts visited confirmed that almost all groups have continued market-oriented farming after project completion. The groups (11 groups with 345 households) supported in the former Kisii District are not counted in the table since the post-project information was not collected. (3) Interviews with agriculture officers in the three original target districts visited confirmed that some groups started market-oriented farming after project completion.</p>																																																								

Source: Report on the last survey conducted by the project in October 2009; Final Report on implementation of devolved government of Kenya (April 2011), interview to 86 farmers and questionnaire survey and interview to sub-county agriculture officers in Bungoma, Trans-Nzoia, and Nyandarua.

### 3 Efficiency

While the project period was within the plan (ratio against the plan: 100%), the project cost slightly exceeded the plan (ratio against the plan: 107%). Therefore, the efficiency of the project is fair.

### 4 Sustainability

#### <Policy Aspect>

Promotion of agriculture development, including smallholder agriculture and horticulture, is an important issue in Vision 2030 (2008-2030), ASDS (2010-2020), and National Agricultural Extension Service Policy (2012).

#### <Institutional Aspect>

Institutional set-up for the promotion of the SHEP approach has been strengthened at the central level. SHEP Unit has been established in MOA (presently MOALF) with the assistance of JICA through the follow-up cooperation of the project and SHEP UP to take charge of information management to further utilize and share information on the SHEP approach. In the meantime, the role of MOALF at the local level, i.e. delivery of extension services, has been transferred to the local administration (i.e. county agriculture departments), which makes independent decisions and prioritizations, since the devolution of the government system in 2013. Accordingly, former district agriculture offices of MOALF have been transferred to under county governments (i.e. county agriculture departments). In the period between July 2013 to October 2014 staff headcount at National level in the Ministry has reduced from 7,493 to 1,178 due to deployment to County level as a result of transfer of functions according to “Joint Capacity Assessment and Rationalisation Report” published in 2015 by MOALF.

While the county agriculture offices do not have written mandate to promote the SHEP approach, the approach seems to have taken root in activities by extension officers as continuous use of it is observed. HCDA was restructured into AFA in 2014 and renamed as HCD. The crops development division of AFA has been revamped focusing more on policy development/review, development of standards, development and promotion of research technologies. HCD keeps its offices at the local level but the responsibility to provide extension

services has gradually shifted to county agriculture offices. The merger of ministries of agriculture, livestock and fisheries into MOALF has created a unified extension. Since the departments are interrelated, service delivery has become more effective because of interdepartmental cooperation<sup>9</sup>. It is noted that the current policy direction is to restructure and reform public extension systems to facilitate multi-stakeholder participation i.e. pluralism involving many players including private sector, NGOs etc. Accordingly, the SHEP approach is being adapted to the devolved government system through SHEP PLUS so that issues associated with the devolution are expected to be addressed by the completion of SHEP PLUS.

As for staffing, 20 officers (10 at National and 10 at County level) are assigned to SHEP Unit of MOALF. It considers that the number of staff of SHEP Unit is sufficient in view of their focused roles after the devolution. With respect to the county agriculture departments responsible for the target districts (former district agriculture offices), information on the number of extension officers and of staff engaged in the SHEP approach is not available as the offices are in the transition process as mentioned above. Some sub-county agriculture officers consider the number of extension officers is not sufficient to promote the SHEP approach beyond the level that has been attained so far.

A project monitoring system is currently being developed. The recommendation is that the monitoring & evaluation function will reside in the Department of Strategy & Information Management of MOALF<sup>10</sup>.

The training institutions in the State Department of Agriculture have been grouped together under the Kenya School of Agriculture, the institutions in the State Department of Livestock have been grouped under the Kenya School of Animal Sciences and the institutions in Fisheries have been grouped under the Kenya School of Fisheries. These institutions will be managed under the Technical and Vocational Education and Training (TVET) Act<sup>11</sup>.

#### <Technical Aspect>

At the central level, the former C/Ps continue to work in MOALF and HCD and engage in promotion of the SHEP approach. They consider that their skill level is sufficient, and the materials developed by the project are utilized to promote the SHEP approach. At the local level, the staff trained by the project continue to work in the respective county agriculture departments or sub-county agriculture offices and local offices of HCD. Those offices visited confirmed that the knowledge and techniques transferred through the project have been shared and utilized by the staff and extension officers, which has ensured and is likely to ensure technical sustainability at least for the time being. In the long term, however, the skill level is not sufficient especially for the new staff, and they feel the need for additional training by MOALF. The groups supported by the project in the three original target districts the ex-post evaluator visited continuously practice market-oriented farming, utilizing the skills and materials developed by the project, including market surveys, crop planting calendars, etc. However, interviews with some county/sub-county agriculture officers revealed that there are emerging problems especially post-harvest among farmers, including storage losses, short shelf-lives, diseases and pests, low/or fluctuating prices, packaging, collective marketing etc., which could be better covered if the SHEP approach is to be further improved.

With devolution also, most services are now offered closer to the people without reference to the national office. There is also better representation of communities in decision making process as provided for in the constitution<sup>12</sup>.

#### <Financial Aspect>

MOALF has secured the funds for promotion of the SHEP approach as the C/P budget of SHEP UP and SHEP PLUS, including the funds for the target counties. An annual budget of 22.5 million Ksh was approved and allocated in 2014 and 2015, and 25 million in 2016. The budget is considered sufficient for the central level and the project sites of those projects, and the similar level of budget is likely to be allocated until the completion of SHEP PLUS in 2020 from the past record. Regarding the budget for field activities in the target areas of this project including those not covered by SHEP UP or SHEP PLUS, it is expected to be secured by the counties, which are responsible for planning and allocation of budget for extension services based on their own priorities under the devolved government system. Budget data of the county agriculture offices in charge of the original target districts is not available since they are still building a system to budget/allocate and disburse funds for extension services efficiently. It is expected that such a system will be in place shortly (although the concrete schedule could not be obtained). As for HCD, information of the amount and sufficiency of the budget was not available. Nevertheless, the following information shows a positive trend in financial conditions of counties in the field of agriculture. According to the “Analysis of public expenditures in support of food and agriculture in Kenya, 2006–2012”, published by FAO on October 2014, there is a higher allocation of funds in the sector from the national treasury to the county governments. This has given the county governments an opportunity to implement its county specific programs that factors in its unique development needs<sup>13</sup>.

<sup>9</sup> Analysis of public expenditures in support of food and agriculture in Kenya, 2006–2012, FAO published on October 2014.

<sup>10</sup> Joint Capacity Assessment and Rationalisation Report, published in 2015 by MOALF.

<sup>11</sup> Joint Capacity Assessment and Rationalisation Report, published in 2015 by MOALF.

<sup>12</sup> Analysis of public expenditures in support of food and agriculture in Kenya, 2006–2012, FAO published on October 2014.

<sup>13</sup> Analysis of public expenditure in support of food and agriculture in Kenya, 2006–2012 conducted by FAO makes the following observations:

- The development policies for the agriculture sector in Kenya are giving a strong emphasize to public private partnership.
- There is a high investment in research, extension services and training. This can bring benefits via improved agricultural productivity and in longer-term contribute significantly to poverty reduction.
- External resources constitute a fairly large proportion of development funds for the Ministry of Agriculture at an average of 65 percent for the whole period of analysis.
- The approved budget for all expenditure in support of food and agriculture sector development grew by 111 percent in nominal terms from 2006 /2007 to 2011/2012 but a decline was registered in relative terms within the same period, from an average of 6 percent to 5 percent. This can be attributed to the high decline of agricultural added growth in 2008 and 2011 which also corresponds to a decrease in the country's GDP.

#### <Evaluation Result>

In view of the above, no major problems have been observed in each of the policy, institutional, technical and financial aspects. Therefore, the sustainability of the effectiveness through the project can be judged as high.

#### 5 Summary of the Evaluation

The project achieved the Project Purpose (i.e. developed the capacity of the smallholder horticulture farmer groups supported by the project.) and the effect of the project is mostly continued, which was however verified only in qualitative terms. The achievement of the Overall Goal (i.e. improved livelihoods of the smallholder horticulture farmers) was partially confirmed in the target year, and its achievement status at the time of ex-post evaluation could not be verified due to lack of information. Regarding the sustainability, no major problems have been observed. As for the efficiency, the project cost exceeded the plan.

Considering all of the above points, this project is evaluated to be satisfactory.

### III. Recommendations & Lessons Learned

#### Recommendations for Implementing Agency:

1. Necessary data to verify the effectiveness of using the SHEP approach was not available from county agriculture departments/sub-county agriculture offices. County agriculture departments are recommended to create a feedback mechanism in the extension service that will allow interaction and information flow between farmers and officers. It is desirable for such a mechanism to be in place during the period covered by the next Medium Term Plan and the County Integrated Development Plans (2018-2022).
2. Providing continuous training is recommended to improve skills/knowledge among staff, especially to newly recruited officers, in view of high staff turnover (as a result of retirement and natural attrition), in the next fiscal year (2018/19).
3. There are emerging challenges especially post-harvest. To address them to improve the SHEP approach, it is recommended that MOALF (national level) and county agriculture departments should take the initiative to create a mechanism for collaborative extension service involving all stakeholders (i.e. policy makers, agriculture officers, the private sector, research institutions, and producers) as soon as possible.

#### Lessons learned for JICA:

1. Future interventions on market-oriented smallholder agriculture need to address emerging challenges especially on post-harvest. In case of projects in Kenya, county agriculture departments should take the initiative.
2. Incorporate explicit market objectives and indicators (e.g., market penetration, product development such as innovative products and value addition, diversification, and market development-new market segments) into the design of future cooperation on market-oriented smallholder agriculture. In this project, the levels or extent of market participation or penetration could not be measured although the ex-post interviews in the former project areas found the active market participation by farmer groups.
3. At the advent of devolution system in Kenya, not only central MOALF, many institutions continued/took up the extension service delivery of the SHEP approach, e.g. county agriculture departments, HCD, civil society and the private sector. In future cooperation in agriculture extension service, support to strengthen coordination mechanism, i.e., support the establishment of a body like SHEP Unit at the local level as a central point to coordinate extension activities by all partners, is necessary. This would include setting up of a monitoring and evaluation mechanism and training of new staff.



An extension officer (trained by the project) assessing the beans farm of a member of a self-help group (farmer group) in the former Bungoma District.



A member of a self-help group (farmer group) in the Banana Ripening Chamber in the former Bungoma District.