Republic of Rwanda

Kirehe Community-based Watershed Management Project (KWAMP)

Project performance evaluation

Approach paper
Contents
I. Introduction .............................................................................................................. 1
II. Overview of the project ......................................................................................... 1
III. Evaluation objectives and scope ........................................................................ 6
IV. Key issues for this PPE ....................................................................................... 6
V. Analytical framework and methodology ............................................................. 8
VI. Process and timeline .......................................................................................... 9
VII. Evaluation Team ............................................................................................ 10
VIII. Background Documents .................................................................................. 10

Annexes
I. Evaluation criteria for the PPE
II. Theory of change
Republic of Rwanda

Kirehe Community-based Watershed Management Project (KWAMP)

Project performance evaluation

Approach paper

I. Introduction

1. The Independent Office of Evaluation (IOE) of the International Fund for Agriculture Development (IFAD) will undertake a project performance evaluation (PPE) of the IFAD-financed Kirehe Community-based Watershed Management Project (KWAMP) in Rwanda. The main objectives of the PPE are to: (i) provide an independent assessment of the results achieved by the project; (ii) based on this, generate findings and recommendations for the design and implementation of ongoing and future operations in the country; and (iii) identify issues of corporate, operational or strategic interest that merit further evaluative work.

2. This Approach Paper is the point of departure in the preparation of the PPE. It presents the overall scope and design of the PPE. Further, it outlines the evaluation objectives, methodology, process and timeframe of the PPE. Finally, the project’s theory of change, as prepared by the evaluation team for this project, is presented.

II. Overview of the project

3. National context. According to the UN Rwanda’s Annual Report,1 over the last 26 years, Rwanda’s Human Development Index (HDI) has increased by over 103 per cent from 0.244 to 0.498 and life expectancy has increased by 31.3 years to 64.5 years. This has improved Rwanda’s HDI ranking to 159 out of 188 countries globally and 27th in Africa. The improvement in HDI is attributed to several factors, one of which is the concerted efforts to eliminate gender inequality. The country’s economic performance has remained strong, with a GDP growth rate in 2016 of 5.9 per cent dominated by the service sector (3.3 per cent) closely followed by industry (1.2 per cent) and agriculture (1.1). The Report states that despite efforts to diversify the economy though, Rwanda remains an economy heavily dependent on agriculture in terms of employment opportunities and export revenues. Notwithstanding the sectors difficulties, an emerging large-scaled agro-processing sector is beginning to evolve in Rwanda.

4. Rwanda’s demographic profile is characterised by rapid population growth, youthful age structure, and rapidly growing urban population. Population had doubled from 4.8 million people in 1978 to 10.5 million in 2012. Population stands at 421 persons per square kilometre, the 2nd highest in Africa. This bulge continues to pose huge economic and environmental constraints on the country. The population is heavily youthful with 40.1 per cent being under age 15, 20 per cent between 15 and 24 and 68.7 per cent below age 30.

5. A high economic growth rate combined with stabilizing population growth has contributed to poverty reduction. From 2005-06, the poverty headcount ratio declined from 56.7 per cent to 39.1 per cent in 2013-14. Although poverty declined more in rural areas than in urban areas, the poverty rate stands at 43.8 per cent in rural areas, as compared to an average of 15.7 per cent in urban areas. The contributing factors are a combination of improved agricultural incomes, off-farm job creation, reduction in household sizes, and public and private transfers.2

---

2 Rwanda Poverty Profile Report 2013/14, Results from the Integrated Household Living Conditions Survey (EICV 4), NISR.
6. Rwanda has emerged as a regional and global leader in advancing gender equality. The Mo Ibrahim Index 2016, with a score of 90.3 per cent, ranks Rwanda 1st in Africa in terms of absence of gender discrimination. The 2016 Global Gender Gap Report of the World Economic Forum (WEF) ranks Rwanda 5th in the world and 1st in Africa.

7. The UN Rwanda report remarks that despite the progress registered in innovation to promote climate change resilience, there is still limited awareness and understanding of environmental and climate change issues. Rural households, especially the most vulnerable and those that rely solely on subsistence agriculture continue to be worst affected by climate related impacts such as floods, landslides and droughts, indicating the need for scaling-up of the climate resilience projects implemented and underdevelopment in Rwanda.

8. **Project goal and objectives.** The Kirehe Community-based Watershed Management Project (KWAMP) aimed to promote the market-oriented intensification of agricultural systems built on sound environmental practices in order to assist very poor smallholders to overcome their food insecurity and low agricultural incomes, to arrest land degradation and to restore soil fertility. The **goal** of KWAMP was to reduce rural poverty in Kirehe District, primarily through an improvement in household food and nutrition security, asset ownership and quality of life indicators, particularly amongst vulnerable groups including women-headed households, orphans and those living with HIV/AIDS. Given little prospect for agricultural expansion in Rwanda, agricultural growth and poverty reduction will continue to depend on intensification (mainly though increases in yields) and crop diversification.

9. Thus the immediate **objectives** of the project converged on the development of sustainable profitable small-scale commercial agriculture in Kirehe District. The project was intended to result in:

   - an increased level of marketed production of crops and livestock products, leading to increases in incomes derived from gains in productivity, farming efficiency and cash returns to effort;
   - the operation and maintenance of affordable irrigation facilities made available to a large proportion of the active poor and landless farmers in the District, reducing dependence on increasingly erratic rains and permitting a shift to higher value crops in response to market demand; and
   - a steady improvement in the natural resource base in selected watersheds to enable production in the future, reversing the present negative trends of soil erosion and nutrient depletion coupled with failure to put available water to productive use.

10. **Project area.** In line with Government of Rwanda's (GOR) requests and the recommendations of the IFAD COSOP (2008-2012), the project concentrated its activities in Kirehe District in Eastern Province. The selection of the district was based on the grounds of poverty, high population density, a languishing agricultural sector and a physical environment under stress. Kirehe comprises 55,000 households, of which the overwhelming majority are rural. Just over 86 per cent of households own less than 1 ha of land; 46 per cent own less than 0.5 ha and nearly 13 per cent own no land at all. Some 70-90 per cent of households face periods of food shortages every year.

11. **Project target.** The total number of households in the project target group was around 48,000 corresponding to a total population of about 253,000 people and 87 per cent of the District's population, based on an average of 5.3 persons per household. The project categorised the target audience into three profiles:
i. Farmers with lands of less than 1 ha constituted the primary target group. They may have had access to reclaimed land and irrigation, and benefited from the distribution of livestock and forage trees and from soil and water conservation (SWC) activities. These farmers represented 40,900 heads of household or 74 per cent of all farmers, of which 27.8 per cent are women.

ii. The second category was made up of around 7,000 households (13 per cent of all households) of landless farmers who rented land from others. They were eligible for marshland distribution, not exceeding 0.1 ha. In addition, the project targeted the landless households with agricultural activities that needed no or little land for their development, such as small stock. Adults in this group benefited from employment opportunities generated through WFP-funded food-for-work activities and other possibilities related to the improvement of infrastructure.

iii. The third category to benefit from the same type of activities as the landless included unmarried young people and destitute women. This group was accorded priority in terms of employment opportunities generated by the project.

12. **Project components.** The Kirehe Community-based Watershed Management Project had four components:

   i. **local institutional development** (14 per cent of project base costs) to increase the capacity of government and community institutions to support a rapid and sustained increase in profitable smallholder agriculture in the district and to ensure effective water and land use management;

   ii. **agricultural intensification** (64 per cent), providing the market-led investments in value chain development, crop and livestock intensification, irrigation development and soil and water conservation required to transform agriculture into a business for smallholders;

   iii. **feeder roads** (17 per cent) to provide a fully functional road network to allow trade to pick up in both agricultural inputs and produce;

   iv. **project coordination** (5 per cent), which was to be undertaken by the then existing unit that managed the IFAD-supported project, the Support for the Strategic Plan for the Transformation of Agriculture (PAPSTA)\(^3\).

13. **Project costs and financing.** At design, the KWAMP financing package was estimated at US$ 49.3 million. IFAD was to provide two grants: an initial one of US$ 20.4 million and a second one of US$ 6.3 million. WFP contribution (US$ 8.1 million) was to finance food-for-work activities under the soil and water conservation sub-component. In addition, the German Development Service (DED) would finance US$ 0.52 million, in kind for technical assistance to support farmer organization capacity building. The GoR and beneficiary contribution were estimated at US$ 9.54 million (19.4 per cent) and US$ 3.12 million (6.3 per cent) respectively. The private sector partners were to provide US$ 1.25 through participation in value chain development activities. The financial pledges at design and at closure are shown in Table 1 below.

---

\(^3\) PAPSTA became effective on 31 March 2006 and closed on 30 September 2013.
Table 1
Source of funds committed at appraisal and at closure, and actual disbursements

<table>
<thead>
<tr>
<th>Source of Funds</th>
<th>Commitment at Appraisal (000 USD)</th>
<th>Commitment at Closure (000 USD)</th>
<th>Amount Disbursed (000 USD)</th>
<th>Disbursement (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1) Grants</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IFAD (8020)</td>
<td>20,004</td>
<td>20,004</td>
<td>20,004</td>
<td>100.00</td>
</tr>
<tr>
<td>IFAD (8054)</td>
<td>6,183</td>
<td>7,594</td>
<td>7,571</td>
<td>99.71</td>
</tr>
<tr>
<td>IFAD (8116)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>WFP</td>
<td>8,130</td>
<td>88</td>
<td>88</td>
<td>100.00</td>
</tr>
<tr>
<td>DED</td>
<td>511</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td><strong>2) Loan</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IFAD 897</td>
<td>-</td>
<td>7,594</td>
<td>7,571</td>
<td>99.71</td>
</tr>
<tr>
<td><strong>3) Other Counterpart Funds</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government</td>
<td>9,544</td>
<td>7,017</td>
<td>7,017</td>
<td>100.00</td>
</tr>
<tr>
<td>Beneficiaries</td>
<td>3,123</td>
<td>4,514</td>
<td>4,514</td>
<td>100.00</td>
</tr>
<tr>
<td>Private Sector</td>
<td>1,250</td>
<td>2,735</td>
<td>2,241</td>
<td>81.95</td>
</tr>
<tr>
<td>Total</td>
<td>48,745</td>
<td>55,728</td>
<td>55,190</td>
<td>99.03</td>
</tr>
</tbody>
</table>

14. During project implementation, DED withdrew from financing the project while WFP’s contribution was reduced from US$ 8.123 million to US$ 88,000. However, during the same period, there was supplementary funding from IFAD in the form of grants and a loan. Thus, withdrawals of DED and WFP from the project did not have a significant effect on the budget of the project due to an increase in the IFAD participation and additional contributions from the beneficiaries and the private sector. At closure, the contributions of partners were as follows: IFAD grants US$ 33.78; IFAD loan US$ 7.59 million; WFP US$ 0.088 million, GOR US$ 7.017 million, beneficiaries US$ 4.514 million and the private sector US$ 2.735 million, all totalling US$ 55.77 million. The project financing by component is shown in Table 2.

Table 2
Project financing by component (US$’000)

<table>
<thead>
<tr>
<th>Component</th>
<th>Design</th>
<th>Actual</th>
<th>% (actual)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Component 1: Local Institutional Development</td>
<td>6,468</td>
<td>4,323</td>
<td>7.8</td>
</tr>
<tr>
<td>Component 2: Agricultural Intensification</td>
<td>29,350</td>
<td>42,119</td>
<td>76.3</td>
</tr>
<tr>
<td>Component 3: Feed Roads</td>
<td>7,407</td>
<td>4,295</td>
<td>7.8</td>
</tr>
<tr>
<td>Component 4: Programme Management (incl. contingencies)</td>
<td>6,103</td>
<td>4,490</td>
<td>8.1</td>
</tr>
<tr>
<td>Total</td>
<td>49,328</td>
<td>55,190</td>
<td>100</td>
</tr>
</tbody>
</table>

15. **Time frame.** The project was approved by IFAD’s Executive Board in September 2008. The IFAD loan agreement was signed in November 2008 and became effective in April 2009. As initially scheduled, the project was completed on June 30, 2016, after 7 years of implementation, and closed in December of the same year.

16. **Implementation arrangements.** At design, KWAMP was implemented through the Ministry of Agriculture and Animal Resources (MINAGRI), which had the overall
responsibility for project implementation. In order to deliver extension services to farmers, MINAGRI worked with three parastatals namely: the Rwanda Authority for the Development of Agriculture (RADA) for agriculture, the Rwanda Animal Resources Development Authority (RARDA) for livestock, and the Rwanda Horticulture Development Authority (RHODA) for horticulture. KWAMP collaboration with Rwanda Environmental Authority (REMA) was productive and REMA was engaged by the Project in validation of environmental impact assessments for irrigation development and for the watershed management plans. REMA also provided authorization for supply and installation of flexi-biogas in Kirehe District. In addition, KWAMP worked closely with Ministry of Natural Resources (MINIRENA) and MINIRENA was involved in the capacity building of hydrographic committee members.

17. The day to day management of KWAMP was delegated by MINAGRI to a Project Coordination Unit (PCU). In Kirehe District, within the decentralization process, the District of Kirehe was the main executing agency of KWAMP, being the institution responsible for consultation, including local participatory planning and monitoring and evaluation (M&E), as well as the implementation of the feeder roads component. Project activities and priority sectors were aligned to the District Development Plan (DDP).

18. The project worked closely with district staff to build up their individual and corporate capacities. A District Steering Committee chaired by the Mayor and made up of members representing the farmers, Farmers Organizations and local institutions from the public and private sectors’ participating in the project was put in place. It was responsible for the technical oversight of the implementation of the Annual Work Plan and Budget (AWPB) and the project’s integration into the district structure.

19. The project also worked with Farmer Organizations (FO), which were organized by commodities and national and international Non-Governmental Organisations (NGOs) which brought local experience on community development and technical matters. These NGOs were used as service providers for technical support and advisory services to producers. A Watershed Management Committee (CLGS) was also set up for each selected watershed. These CLGSs worked closely with sector development committees (known as CDCs) and with FOs and various other associations. They were responsible for the implementation of work plans, quality control related to contracted services, and the use of allocated resources. They were the primary decision-makers, as long as their decisions did not conflict with the basic principles, approach and modalities of the project or the district and sector priorities, as set out in the DDP. In the post-MTR period, a single project implementation unit of IFAD funded projects (SPIU) was put in place by the parent ministry (MINAGRI) to manage all IFAD funded projects in Rwanda.

20. Significant changes during project implementation. During project implementation, a number of changes to the original design were made which had implications on the project outcomes.

21. Value Chain Development. The general objective of this subcomponent was to increase incomes and food security of smallholder households through intensification and value addition of their on-farm production for six selected commodities. However, at MTR, the project supported three commodities: maize, rice and milk. This change was done in response to these value chains having demonstrated potential.

22. Livestock Development. In the post-MTR period the project introduced a new strategy for livestock distribution viz., through communal cow sheds. This new model served as Farmer Field School (FFS) to improve disease control, nutrition and reproduction for livestock in the District.
23. **Hilltop Reforestation Initiative (HRI).** HRI was not part of the original project design. This was included in 2009 following recommendations of the IFAD Supervision Mission, to address dramatic deforestation that happened due to rapid expansion of agricultural intensification activities in the District.

24. **Irrigation development.** The design proposal was to implement hillside schemes consisting of "mini-dams, ponds or cisterns that would provide irrigation water for commands of up to approximately 60 ha". Instead, based on the findings of a hydrogeological study carried out on behalf of the GoR it was recommended during project implementation to construct four relatively bigger dams with command areas ranging from 130ha to 441ha. It turned out that the initial report overestimated the available runoff in the Mahama catchment (Mahama dam, which was not serviced by a permanent spring was to be filled up solely from runoff). However, the expected runoff did not materialize.

### III. Evaluation objectives and scope

25. **The objectives of the PPE** are to: (i) assess the results of the project using the standard evaluation criteria; (ii) generate findings and recommendations for the design and implementation of ongoing and future operations in Rwanda; and (iii) by virtue of the assessment, identify issues that require further evaluative work related to the corporate and/or strategic domains.

26. The **scope** of the PPE has been identified based on the following criteria: (i) areas identified through a desk review – the PPE will review additional evidence and propose a complete list of consolidated ratings; (ii) selected issues of strategic importance for IFAD in Rwanda; and (iii) limitations set by the available time and budget – the PPE will be selective in focussing on key issues where value can be added, given the limited time and budget.

27. Analysis in the PPE will be assisted by the theory of change (TOC) (see Annex 2). The TOC shows the causal pathway from project outputs to project impacts and the changes that should take place in the intermediary stage i.e. between project outcomes and impact. External factors which influence change along the major impact pathways i.e. assumptions on which the project has no control are also taken into account. The TOC is reconstructed in that any deviation from the project design, in terms of objectives and/or activities that may have occurred during the course of project implementation are taken into account. These changes were identified on the basis of a desk review. It is likely that the TOC will be modified after consultations with project stakeholders during the country visit.

28. The PPE exercise will be undertaken in accordance with IFAD’s Evaluation Policy⁴ and the IFAD Evaluation Manual (second edition, 2015). The PPE will evaluate the project performance with regard to of the standard evaluation criteria. These criteria are detailed in Annex 1.

### IV. Key issues for this PPE

29. **Project design.** The project was essentially designed as a community-based watershed management and hence encompassed elements of natural resource management. However, the orientation of the project appears to be value chain: production-enhancement, upstream and downstream activities (storage, grading, agro-processing and input market), and market-related infrastructure (collection centres and feeder roads) with a vast majority of project funding going to these activities. The implicit focus on the value chain approach is also lodged in the goal of the project which was to reduce rural poverty through raising incomes from agricultural intensification resulting in increased marketed production of crops and livestock products. The PPE will examine how these twin thrusts played out in the end and whether the project was successful in attaining both. Further, since the project was composed of several diverse interventions with a myriad of agencies involved, the PPE would like to understand: (i) to what extent the multiple
integrated activities may have affected, positively and negatively, project performance; and (ii) if the project managed to keep the necessary synergies between components and activities. Finally, the role of private sector in the project, which is the key for sustaining marketing linkages, will also be explored.

30. **Environmental effect:** In a country like Rwanda which is among the 22 countries most seriously affected by soil degradation, agricultural intensification undertaken under KWAMP, could have further exacerbate the fragile top soil, eventually leading to loss in soil fertility. The project aimed to arrest soil erosion through some of its activities. The PPE will assess whether the natural resource management measures were sufficiently effective. The PPE will explore a variety of methods where possible, as outlined in paragraphs 42 and 43, to assess the issue of soil erosion and fertility.

31. **Capacity building activities.** The project undertook a number of capacity building activities that touched several groups such as farmer cooperatives, Water Users Associations, road brigades (feeder roads), etc. The need to strengthen the capacity of cooperatives was critical since these are central to the ultimate success of all investments in increasing productivity in either crops or livestock. The PPE will investigate the effectiveness of the services delivered, in terms of their usefulness and ease of understanding and applicability by beneficiaries (and also the capacity of service providers).

32. **Hydrographic Basin Committees** (CLGS previously). These were created and tasked to oversee the activities related to the management of each watershed under KWAMP Project. They were responsible for the development and implementation of Annual Work Plan and Budget (AWPB), quality control related to contracted services, and the use of allocated resources. They were the cornerstones of the integrated approach of the project. The PPE will examine how effective were these important committees in dispensing their various responsibilities, including in operationalising watershed management plans and coordinating the different stakeholders.

33. **Sustainability.** The PPE will assess the capacity of community based organizations such as the Hydrographic Basin Committees, Irrigation Water User Associations (IWUAs), and cooperatives to operate independently and to generate enough income to ensure their self-sufficiency and sustainability. Further, sustainability of the project will depend on several institutions together creating an enabling environment and responding to local demand: MINALOC, MINAGRI, RCA, decentralized government as well as community based organizations and other economic actors with which agricultural cooperatives must establish vertical and horizontal linkages. The PPE will assess whether or not, and to what extent, the respective institutional actors were aligned with the objective of strengthening farmers’ organizations and cooperatives as these were central to the success of all investments in increasing productivity in either crops or livestock.

34. **Context of political devolution.** In the current context of decentralization with the overall devolution of political powers to district, sector and cell levels that encompasses the agricultural sector and natural resource management, the sustainability of project impact will depend on several institutions together creating an enabling environment in the territory and responding to local demand (MINALOC, MINAGRI, RCA, decentralized government as well as community based organizations and other economic actors with which agricultural cooperatives must establish vertical and horizontal linkages). The PPE will examine the role of KWAMP in the roll-out of the devolution and how the institutional actors are aligned to the objective of strengthening farmers’ organizations in an integral, coordinated fashion.

---

35. **Rural finance.** Easy availability of rural finance in the desired form is an important aspect in the development of value chains. The project did not include rural credit under the assumption that commercial banks in Rwanda are interested in financing private enterprises. Farmers also borrow from input loans from their cooperatives. The PPE will appraise: a) whether credit was an important need of KWAMP beneficiaries, b) the sources from which project beneficiaries borrowed, and c) whether and how effective was this.

V. **Analytical framework and methodology**

36. **Information and data collection.** The first phase of the PPE is the desk review which will cover a variety of project-related documents, including annual project status reports (along with Project Supervision Ratings), mid-term reviews (MTR), supervision reports, and the PCR prepared at the end of a project jointly with the government, which also includes a set of ratings. The Results and Impact Management System (RIMS) includes a menu of indicators used to measure and report on the performance of IFAD projects – at activity, output and impact level – and these are used for effectiveness and impact criteria. In this regard, M&E data will be important. M&E data are also needed to plan the mission’s visits to project areas, for instance, data on what kind of activities were carried out in different areas, what were the results, etc. The PPE will make use of the baseline and the endline surveys conducted by the project.

37. The PPE will crosscheck findings from the PCR and triangulate data and information from different sources; in order to obtain further information, interviews will be conducted both at IFAD headquarters and in the country. During the in-country work, additional primary and secondary data will be collected in order to reach an independent assessment of performance and results. Data collection methods will mostly include qualitative techniques. The methods deployed will consist of individual and group interviews with project stakeholders, beneficiaries and other key informants and resource persons, and direct observations.

38. The theory of change annexed in this paper has highlighted assumptions that would have been crucial to attaining the desired outputs and outcomes. The PPE will investigate whether these assumptions held, and if not, then what were the impeding factors. This will help the evaluation answer the "why" underpinning the results.

39. **Sampling.** If the budget and time permit, the mission will attempt to visit at least half of the 18 total watershed areas in order to present meaningful and confident findings. Within the sampled watershed areas, the PPE will attempt to cover the gamut of project stakeholders – farmer groups, Local Management and Supervision Committees (CLGSSs), Community Innovation Centers (CCIs), and Water Users Associations and road brigades. An informed decision on areas to be visited will be taken based on: the team’s logistical exigencies, the number of beneficiaries in each area (preference to areas with more beneficiaries) and the need to cover a diverse range of stakeholders.

40. **Rating system.** In line with the practice adopted in many other international financial institutions and UN organizations, IOE uses a six-point rating system to score the project performance on a set of standard criteria, where 6 is the highest score ("highly satisfactory") and 1 is the lowest ("highly unsatisfactory").

41. **Stakeholders’ participation.** In compliance with the IOE Evaluation Policy, the main project stakeholders will be involved throughout the PPE. This will ensure that the key concerns of the stakeholders are taken into account, that the evaluators fully understand the context in which the project was implemented, and that

---

5 These include: relevance, effectiveness, efficiency, rural poverty impact, women’s empowerment and gender equality, sustainability, innovation, scaling up, environment and natural resource management, adaptation to climate change, IFAD and government performance and overall project performance.
opportunities and constraints faced by the implementing institutions are identified. Regular interaction and communication will be established with IFAD and the Government. Formal and informal opportunities will be explored during the process for the purpose of discussing findings, lessons and recommendations.

42. **Remote sensing and other data-gathering methods.** The PPE will also explore the use of geo-spatial analysis based on satellite imagery to ascertain before-after results of some of the project interventions such as irrigation development (some 1819 ha of irrigation was developed - 701 ha of marshland and four hillside irrigation schemes covering about 1,118 ha of hillside - and reforestation on 323 ha of land was undertaken). The geo-spatial analysis will conduct a time-series trend analysis of the intervention areas using the Normalised Difference Vegetation Index (NDVI).

43. Based on their feasibility, remote sensing techniques will also be applied to predict changes in soil fertility in project intervention areas over the project life span. One option to explore will be to spatially predict the soil organic matter content making use of soil spectral reflectance. As a way of ground-truthing, the spatial-based approach will be complemented by a perception-based approach to soil fertility changes. This will be done through the preparation and analysis of drawings by the project beneficiaries themselves with a “before-after representation” of criteria for assessing fertility entirely chosen by the beneficiaries.  

VI. **Process and timeline**

44. Following a desk review of the PCR and other project key project documents, the PPE will undertake following steps:

- **Country work.** The PPE mission is scheduled for 16-26 April 2018. It will interact with representatives from the government and other institutions, beneficiaries and key informants, in Kigali and in the field. At the end of the mission, a wrap-up meeting will be held in Kigali to summarize the preliminary findings and discuss key strategic and operational issues. The IFAD country programme manager for Rwanda is expected to participate in the wrap-up meeting.

- **Report drafting and peer review.** After the field visit, a draft PPE report will be prepared and submitted to IOE internal peer review for quality assurance.

- **Comments by regional division and the Government.** The draft PPE report will be shared simultaneously with the East and Southern Division (ESA) and the Government of Rwanda for review and comments. IOE will finalize the report following receipt of comments by ESA and the Government and prepare the audit trail.

- **IFAD Management response.** A written management response on the final PPE report will be prepared by the Programme Management Department. This will be included in the PPE report, when published.

- **Communication and dissemination.** The final report will be disseminated among key stakeholders and the evaluation report published by IOE, both online and in print.

---

5 If the remote-sensing approach is not found to be feasible, only the perception-based assessment will be attempted.
**VII. Evaluation team**

45. The team will consist of Mr Hansdeep Khaira, IOE Evaluation Officer and lead evaluator for this PPE, and Mr. Ernst Schaltegger, IOE senior consultant, and a local consultant experienced in natural resource management (to be hired). Mr. Schaltegger will prepare the draft evaluation report, with the overall responsibility for the execution and quality of the evaluation resting with Mr. Khaira. Mr. Shaun Ryan, IOE Evaluation Assistant, will provide administrative support.

**VIII. Background documents**

46. The key background documents for the exercise will include the following:

**Project specific documents**
- IFAD President’s Report (2008)
- Medium Term Report (2013)
- Project completion report (2016)

**General and others**
- IOE (2012). Guidelines for the Project Completion Report Validation (PCRV) and Project Performance Assessment.
- Various IFAD Policies and Strategies, in particular, Strategic Framework (2002-2006), Rural Finance, Rural Enterprise, Targeting, Gender Equity and Women's Empowerment

---

**Tentative timetable for the PPE process**

<table>
<thead>
<tr>
<th>Date</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>January-February 2018</td>
<td>Desk review and preparation of approach paper</td>
</tr>
<tr>
<td>16 – 26 April 2018</td>
<td>Mission to Rwanda (tentative dates)</td>
</tr>
<tr>
<td>May 2018</td>
<td>Preparation of draft PPE report</td>
</tr>
<tr>
<td>2nd week of June 2018</td>
<td>Report sent for IOE internal peer review</td>
</tr>
<tr>
<td>4th week of June 2018</td>
<td>Draft PPE report sent to ESA and Government for comments</td>
</tr>
<tr>
<td>2nd week of July 2018</td>
<td>Comments received from ESA and government</td>
</tr>
<tr>
<td>End July 2018</td>
<td>Final report and audit trail sent for IFAD management response</td>
</tr>
<tr>
<td>September 2018</td>
<td>Publication and dissemination</td>
</tr>
</tbody>
</table>
Evaluation criteria for the PPE

(i) **Relevance.** The PPE will assess to what extent was the project relevant to the Government of Rwanda's strategies for the transformation of agriculture and with IFAD's focus in Rwanda as articulated in the Rwanda Country Strategic Opportunities Programme (COSOP) 2008-2012 and 2013-2018.

(ii) **Effectiveness.** The PPE will review the existing evidence base, including the data collected by the M&E system and supervision reports, to establish the results achieved by the project in terms of targets, and conduct further analysis on which parts of the project have been more effective, and how and why project activities have achieved the intended results. The PPE will assess how integrated the watershed management system and process was, as a measure of the project's effectiveness in this regard.

(iii) **Efficiency.** The PPE will examine the process and system that underpinned the disbursement of funds under KWAMP. It will also assess whether the physical and financial resources were adequate for successful execution of project activities. Further, the Internal Rate of Return (IRR) will be checked to identify reasons for the higher-than-estimated rate of KWAMP at its closing.

(iv) **Rural poverty impact.** The PPE will examine the methodology used in the Impact Assessment Study conducted by the project in 2016 and the validity of results; additional evidence will be collected from the field in order to validate these results, where possible.

(v) **Sustainability of benefits.** The PPE mission will visit selected project sites to verify the current situation with regards to the sustainability of benefits and will examine the different aspects of the value chain, for example, feeder roads and the training imparted to farmer groups. It will also assess the watershed management plans with regard to the status of their implementation after project completion.

(vi) **Gender equality and women’s empowerment.** The PPE will examine to what extent have the project's interventions contributed to better gender equality and women's empowerment. With regards to the project's impact on women's incomes, the PPE will examine, for instance, the status of the key gender related activities that were planned to be continued beyond KWAMP through IFAD’s grant with Oxfam Novib.

(vii) **Innovation.** With regard to KWAMP, the PPE will assess, for instance, whether the application of proven agricultural technology options, specifically, hillside irrigation, was truly innovative, and its results.

(viii) **Scaling up.** The PPE will examine project documentation and rely on key informant interviews to assess the extent to which the interventions under KWAMP have been scaled up by government authorities, donor organizations, the private sector and other agencies.

(ix) **Environment and natural resource management.** Watershed management was an important objective of KWAMP. The PPE will examine this criterion with regard to the new agricultural practices and technologies that were proposed and implemented as part of project interventions with regards to soil and water conservation, and the results of implementing watershed management plans. Using remote sensing, if possible, the extent of reforestation cover will be assessed.

(x) **Adaptation to climate change.** Rwanda faces the threat of climate change, particularly so concerning watershed areas. The PPE will consider...
the documented threat of climate change in the country and project areas (if possible) and assess the contribution of the project to increase climate resilience and increase beneficiaries’ capacity to manage short- and long-term climate risks.

(xi) **Overall project achievement.** The PPE will provide an overarching assessment of the intervention, drawing upon the analysis and ratings for all above-mentioned criteria.

(xii) **Performance of partners.** The PPE will assess IFAD’s performance in terms of *inter alia* supervision and disbursement responsibilities. It will also examine the role of government in undertaking the responsibilities towards project management and implementation.
Annex II: KWAMP’s theory of change

Note: Assumptions are in dotted boxes

- Reduced soil erosion leads to increased soil fertility
- Staff and FOs trained in SWC
- Watershed mgt. plans developed
- Reforestation
- SWC infrastructure developed
- Training manuals developed and FFS
- Provision of improved seed variety & planting material
- Development of irrigation-related structures
- Development of food processing units through VCD Fund
- Storage and grading facilities developed
- Feeder roads developed
- Restocking of dairy animals

Increased assets, improved food security and improved natural resource base

Incomes are sustainable

Increased incomes

Prices are remunerative

Demand for new products exists

Increased and higher value marketable surplus sold

- Higher yields
- Higher value crops grown
- Value added products produced
- Improved quality produce / products
- Reduced losses and wastage
- Increased market access
- Dairy products produced

- Reduced soil erosion
- Improved agricultural practices
- More and regular irrigation water
- Affordable water
- Affordable seeds
- Timely and desired quantity
- Regular availability of inputs
- Facilities are of desired quality and affordable
- All weather roads of good quality
- Fodder available; veterinary service exists

Demand for new products exists

Milk collection centres functioning

Incomes are sustainable

Decreased soil erosion leads to increased soil fertility