

Project Completion Report Validation

Upper Tana Catchment Natural Resource Management Project Kenya

Date of validation by IOE: September 2023

I. Basic project data

			Approval (US\$ m)		Actual (US\$ m)	
Region	East and Southern Africa	Total project costs	87.4		80.6	
Country	Kenya	IFAD initial loan (and per centage of total)	33.3	38.2%	29.9	37.2%
Loan numbers	1000004237 (loan) 2000002597 (additional financing loan)	IFAD additional financing loan	13.6	15.6%	12.8	15.9%
IFAD project ID	1100001544	Spanish Trust Fund	16.7	19.1%	14.5	18.0%
Type of project (subsector)	Agricultural Development	Borrower (Government of Kenya)	13.7	15.6%	13.2	16.3%
Financing type	Loan	Beneficiaries	10.1	11.5%	10.2	12.6%
Lending terms*	Blending terms					
Date of approval	3 Apr 2012					
Date of loan signature	23 May 2012					
Date of effectiveness	23 May 2012					
Loan amendments	Additional financing loan in 2017	Number of beneficiaries	205,000 households (appraisal target) 300,000 households (revised target)		272,481 households	
Loan closure extensions	Extension of 2.5 years (2017)					
Country programme managers	Mariatu Kamala Esther Kasalu-Coffin Samuel Eremie	Loan closing date	30 Jun 2023		<i>Not available at time of PCR production</i>	
Regional director(s)	Sara Mbago-Bhunu (current); Sana Jatta; Perin Saint Ange	Mid-term review			19 Jun 2017	
Project completion report reviewer	Nuri Niyazi	IFAD loan disbursement at project completion (%)			91%	
Project completion report quality control panel	Fabrizio Felloni; Ernst Schaltegger	Date of the project completion report			5 Jul 2023	

Source: Project Completion Report (2023).

* Loans on intermediate terms have a rate of interest per annum equivalent to 50 per cent of the variable reference interest rate and a maturity period of 20 years, including a grace period of five years.

II. Project outline

Country & Project Name	Kenya Upper Tana Catchment Natural Resource Management Project (UTaNRMP)
Project duration	Total project duration: 10.5 years. Board approval: 3 Apr 2012. Loan signing: 23 May 2012. Loan effectiveness: 23 May 2012. Completion: 31 Dec 2022. Loan closure: <i>not indicated in the Project Completion Report (PCR)</i> . Effectiveness lag: one month. Time from entry into force to first disbursement of funds: <i>not indicated in the PCR</i> .
Project goal, objectives and components	The overall goal of UTaNRMP was to contribute to reduction of rural poverty in the Upper Tana River Catchment. The two-fold development objective was: (i) increasing sustainable food production and incomes for poor rural households living in the project area; and (ii) sustainable natural resource management (NRM) for provision of environmental services. The project had four components: Component 1 aimed to empower rural communities for sustainable NRM. Component 2 sought to sustainably improve natural resource-based rural livelihoods. Component 3 was aimed at sustainable management of land, water and forest resources, for the benefit of local people and the wider community. Lastly, Component 4 was to ensure effective and efficient management of the project.
Project area and target group	The project area is located within the Upper Tana River Catchment, which covers six counties and provides over 90 per cent of the water used in Nairobi, as well as being the main source of hydroelectric power in Kenya. Land compartmentalizing because of rapid population growth has reduced land productivity and profitability and caused over-dependence on natural resources for livelihoods. Forest degradation has led to reduced water flow to downstream users, resulting in drought, soil erosion, declining soil fertility and human-wildlife conflict. Serious challenges in protection and conservation of water resources, encroachment of water catchment areas and point source pollution have further aggravated the challenges around the natural resources management and poverty nexus. The project's primary target group were 205,000 poor rural households dependent on natural resource use, including smallholder crop and livestock farmers, agro-pastoralists, fishers, rural traders, and community groups involved in NRM and income generating activities. Women and youth and other vulnerable groups were to be granted special focus through the project (while no targets were set for these vulnerable groups at design).
Project implementation	The project's lead executing agency was the Ministry of Water, Sanitation and Irrigation. The Ministry oversaw the coordination with other government bodies involved in the project, in particular the relevant departments of the national and county governments. ¹ The implementation structure was established as envisaged at the project design, comprised of a multi-stakeholder Project Steering Committee, the Project Coordinating Team, the County Project Coordinating Committees, and the County Project Facilitating Team. At the sub-county level, the project established Sub-County Implementing Teams responsible for overseeing project implementation and supporting community-based institutions. ²
Changes during implementation	The PCR notes that the project was implemented without any changes in the design. Based on the satisfactory results achieved at mid-term, the project was granted a 30-months extension with additional financing to reach out an additional 95,000 households.
Financing	A breakdown of approved and disbursed financing amounts by financier is provided in Table 1. The financiers were IFAD, through two loans, the Spanish Trust Fund, the national government and project beneficiaries. Overall budget disbursement at project closure against the approved budget following the extension and additional financing stands at 92.2 per cent.

¹ Finance and planning, agriculture, cooperatives, fisheries, livestock, interior and national coordination, and social protection; as well as the Kenya Agriculture and Livestock Research Organization, the Water Sector Trust Fund, Kenya Wildlife Services, the Kenya Forest Service, the Water Resources Authority, and the National Environment Management Authority.

² Water Resource Users Associations (WRUAs), Community Forest Associations (CFAs), Focal Development Area Committees, Irrigation Water Users Associations, Water Users Associations and Common Interest Groups.

Table 1
Project costs (US\$ '000)

Funding source	Appraisal	% of appraisal costs	Actual	% of actual costs	% disbursed
IFAD (initial loan)	33 333	38.2%	29 939	37.2%	89.8%
IFAD (additional financing loan)	13 601	15.6%	12 785	15.9%	94%
Spanish Trust Fund	16 667	19.1%	14 467	18.0%	86.8%
Government	13 700	15.6%	13 151	16.3%	96%
Beneficiaries	10 070	11.5%	10 168	12.6%	101%
Total	87 371	100.0%	80 510	100.0%	92.1%

Source: PCR (2023).

Table 2
Component costs (USD '000)

Component	Appraisal	% of appraisal costs	Actual	% of actual costs	% disbursed
Community Empowerment	5 143	5.9%	4 463	5.5%	86.8%
Sustainable Rural Livelihoods	27 959	32.0%	24 394	30.3%	87.2%
Sustainable Water and NRM	40 869	46.8%	36 043	44.7%	88.2%
Coordination and Management	13 398	15.3%	12 837	16.0%	95.8%
Initial Deposit*	-	-	2 832	3.5%	N/A
Total	87 369	100.0%	80 569	100.0%	92.2%

Source: PCR (2023).

Note: the minimal discrepancies in the totals between Table 1 and Table 2 are not explained in the PCR. They may stem from exchange rate variations.

* The PCR does not indicate for which components the 'initial deposit' was used.

III. Review of findings

A. Evaluation criteria

Relevance

1. **Relevance of project objectives.** The PCR describes the Upper Tana Catchment Natural Resource Management Project (UTaNRMP) as aligned with national government policies³ and the County Integrated Development Plans. However, the Report does not specify in what ways the project design aligns with these policies and plans (e.g., with which specific objectives, goals, or aspects of these policies). Further, the PCR considers the design of UTaNRMP to be in line with IFAD's Country Strategic Opportunities Programme for Kenya (2013–2018). This is echoed in IOE's 2019 Country Strategy and Programme Evaluation (CSPE) in Kenya,⁴ highlighting UTaNRMP's alignment with the Country strategic opportunities programme's emphasis on sustainable access to and the maintenance and rehabilitation of natural resources. Lastly, the Report considers that the project addressed the priorities and needs of the target groups by way of its focus on poverty reduction and enhancing the natural resource base through sustainable livelihoods and NRM interventions that build climate change adaptation and resilience.

³ Such as the 2019 National Livestock Policy, the 2016 Forest Conservation and Management Act, the 2015 EMCA, 2015, and Wildlife Conservation and Management Act 2013

⁴ 2019. Independent Office of Evaluation. *Republic of Kenya, Country Strategy and Programme Evaluation*, Rome: IFAD

2. **Adequacy of project design.** This PCRV did not note any important design weaknesses of UTaNRMP, neither did the 2019 CSPE. Likewise, the PCR highlights that the project did not require any design changes throughout its period of implementation.
3. **Targeting strategy.** AFAP's targeting strategy appeared sound. As noted in the 2019 CSPE, UTaNRMP used a two-pronged approach mixing poverty criteria with criteria on the extent and risk of natural resource degradation. The project also included comprehensive targeting mechanisms to reach its respective target groups, specifically the most vulnerable, such as by waiving or varying contributions to access small grants and by using wealth-ranking during beneficiary selection.
4. In view of the above assessments, this PCRV rates the relevance of UTaNRMP as *satisfactory (5)*, in line with both the PCR and CSPE ratings.

Effectiveness

5. **Outreach.** The total number of households reported in the PCR to have been reached during UTaNRMP implementation amounted to 272,481, constituting 132.9 per cent of the appraisal target and 90.8 per cent of the revised target.⁵ These beneficiaries included 56 per cent women and 13 per cent youth overall, although target quotas were not indicated in the PCR.
6. **Objective 1: Community empowerment.** According to the PCR, the activities under this component served to empower communities and households, and to strengthen community structures and institutions. The evidence presented to substantiate this outcome is limited to improvements in the percentage of leadership positions held by women and youth, as well as in household cohesion and joint decision-making around livestock and crop production (see below section on Gender equality and women's empowerment for details). Other outcome evidence, such as a metric or description of the level of functioning of community groups or their achievements, is not presented.
7. **Objective 2: Sustainable rural livelihoods.** The PCR highlights that most output targets under this component were achieved or exceeded,⁶ and that the project conducted training in business development strategies for 502 community groups in an effort to ensure effectiveness of the livelihood improvement interventions. The PCR summarizes the resulting outcomes at farm and household level as follows: firstly, availability and access to quality seeds reportedly increased, while this remains unquantified in the Report. Secondly, crop and livestock productivity increased (for details see below section on Rural poverty impacts – agricultural productivity). Thirdly, beneficiaries were afforded access to lucrative markets through contract farming (without provision of further details to substantiate this reported outcome). Lastly, UTaNRMP constructed and refurbished a tissue culture laboratory; however, the PCR only refers to the laboratory's capacity to produce banana and potato plantlets rather than to actual production figures and the extent to which beneficiaries are supported with this material.
8. **Objective 3: Sustainable water and natural resources management.** The PCR showcases in detail the wide array of project outputs and their resulting outcomes under this objective, most of which have met, nearly met, or exceeded their respective appraisal targets.⁷ Important outcomes on the sustainable management of natural resources included reduced sedimentation, increased base flows, reduced water-related conflicts, improved access to water, enlarged cropping area under irrigation, empowered Community Forest Associations, development and implementation of Participatory Forest Management Plans, established tree nurseries, school greening and tree planting, reduced fuel wood use, introduction of biogas units, improved wildlife control fencing and reduced

⁵ The appraisal target was 205,000 households and the revised target amounted to 300,000 households.

⁶ Key output achievements under this component include the following: establishment of 1,482 on-farm trials (constituting 120 per cent of the target), establishment and support for 885 farmer field schools (99.6 per cent); establishment of 1,190 soil and water conservation demonstrations (97 per cent of the target); support for seed multiplication through 264 contracted farmers producing 734 tonnes of improved seed (102 per cent of the target); and support to 2,378 common interest groups through matching grants to implement various income generating activities (72 per cent of the target).

⁷ The outputs and outcomes achievements rates under Component 3 are too numerous to be extracted in this PCRV; they can be directly gleaned from PCR paragraphs 41 to 46.

wildlife–human conflicts, and hilltop and forest rehabilitation. Notwithstanding these results, the PCR concedes that the project was unable to offset the increasing wastewater pollution in the project area resulting from burgeoning rural market centres and unplanned settlements (see below section on ‘Environment and NRM and climate change adaptation’ for details).

9. **Innovation.** Innovative approaches and technologies introduced by UTaNRMP, according to the PCR, notably include solar-powered wildlife control fencing using a private–public partnership for its development; this innovation was also highlighted by the 2019 CSPE. Secondly, the PCR considers the training of chiefs and assistant chiefs on the Gender Action Learning System (GALS) to be an innovative sustainability measure, recognizing that these administrators have a platform for spurring on change in families and communities particularly regarding gender equity and women’s empowerment geared towards poverty reduction. The third successful innovative approach mentioned in the PCR is the use of milestone funding under community matching grants, which reportedly was effective in ensuring achievement of project objectives and the sustainability of project benefits. Further UTaNRMP innovations listed in the PCR comprise: (i) the Plantation Establishment and Livelihood Improvement Scheme as a two-pronged strategy to concurrently promote sustainable NRM and livelihood development; (ii) the school greening programme to increase tree cover and promote environmental conservation; (iii) provision of schools with bio-plants to address the challenge of solid and human waste in schools and enabling schools to reduce energy costs through use of biogas; and (iv) rock catchment water harvesting techniques for increased access to water for domestic use, livestock and irrigation.
10. **In summary**, on the one hand, overall outreach figures were high, and the positive outcomes achieved under the NRM component were well documented. On the other hand, water quality decreased in the project area and gaps were noted in substantiating outcomes under the community empowerment and sustainable livelihoods components. This PCR therefore rates the effectiveness of UTaNRMP as moderately *satisfactory (4)*, in line with the 2019 CSPE and one point below the PCR self-rating; and the PCR rates innovation as *satisfactory (5)*, in agreement with the PCR rating and one point above the CSPE rating (which arguably was undertaken four years before project closure, when the variety of innovations introduced by UTaNRMP may not have been on full display yet).

Efficiency

11. The overall disbursement rate stood at 92.2 per cent by project-end. Disbursement levels varied by financier but were generally in the same range close to full disbursement: IFAD disbursed 91 per cent of its combined loan; the Spanish Trust Fund disbursed 86.8 per cent of the pledged amount; the government disbursed 96 per cent of the appraisal figure; and beneficiary communities contributed more than anticipated, with a disbursal rate of 101 per cent (see Table 1 on ‘Project costs’ by financier).
12. With regard to disbursements by component (see Table 2 on ‘Component costs’), disbursement levels were even across components (86.8, 87.2 and 88.2 per cent for Components 1, 2 and 3, respectively). The 2019 CSPE notes that, while the ‘effectiveness lag’ (i.e., time between approval and project effectiveness) was short (one month), the time lag between effectiveness and the first disbursement was considerable at one year or 10 per cent of the total project duration. The CSPE points to staffing issues as the principal cause for the delay, specifically recruitment of Project Management Unit staff. The PCR acknowledges that there were challenges in the funding flow processes during the first 18 months of implementation also as a result of erroneous budget allocations within the lead agency, noting that funding flows improved over time.
13. The PCR indicates an economic internal rate of return for UTaNRMP of 27 per cent with a net present value estimated at US\$111 million at project end, which is higher than the estimated economic internal rate of return of 20 per cent at appraisal, with a net present value of US\$95 million. The financial analysis in the PCR appears to be credible, and the PCR thus implies a satisfactory economic rate of return by UTaNRMP.

14. **In summary**, while staffing problems and internal budget misallocation issues caused disbursement delays in the first 18 months of UTaNRMP's implementation period, funding flows improved over time, and overall disbursement levels were high. Furthermore, the economic analysis showed a favourable rate of return (while not constituting robust performance evidence *per se*). This PCRV therefore rates the efficiency of UTaNRMP as *satisfactory (5)*, in line with the PCR self-rating and one point above the 2019 CSPE.

Rural poverty impact

15. **Household incomes and assets.** The PCR considers the poverty-related development objective indicator as exceeded, in view of a reduction in poverty levels in the project area from 34 to 19.6 per cent between baseline and endline⁸ (compared to a national average of 40.1 per cent). The Report summarizes other economic impacts of UTaNRMP as follows: (i) an increase in household incomes by 33 per cent between baseline and endline; (ii) greater ownership of assets such as water tanks and solar panels; (iii) greater access to financial institutions (from 3 to 10.4 per cent between mid- and end-term) as beneficiaries' main source of farming credit; and (iv) a substantive increase in the ownership of household assets, including communication devices, water tanks and solar panels.⁹ Furthermore, the 2019 CSPE highlighted number of beneficiary households living in temporary housing had declined¹⁰ between project's baseline and midline surveys.
16. **Food security and agricultural productivity.** The PCR cites important agricultural productivity impacts for beneficiary farmers. As such, crop productivity increased by 50 to 60 per cent between project start and end,¹¹ and livestock production outputs quadrupled or quintupled.¹² The Report highlights a number of food security impacts as a result of UTaNRMP interventions. Firstly, nutritious foods became more widely available, such as legumes, root crops, fruits and vegetables,¹³ and dairy products¹⁴ were increasingly consumed, thus positively impacting food and nutrition security. Lastly, UTaNRMP-supported schools established kitchen gardens to produce vegetables and other foods that were cooked for students and teachers. It must be noted, however, that the PCR does not provide further data or information to buttress the above food security claims.
17. **Human and social capital and empowerment.** The PCR describes a strong thrust by UTaNRMP in support of human and social capital and empowerment by strengthening the capacity of the individual beneficiaries, households and community groups and institutions in a dedicated project component (Component 1 on community empowerment).¹⁵ As a result, targeted communities were endowed with knowledge and skills towards identification and prioritization of community needs and developing sustainable solutions through community action plans, which enabled communities to contribute towards the development objective of reducing rural poverty through sustainable NRM. The 2019 CSPE assessed that UTaNRMP successfully built capacities of the above grassroots organizations, specifically as related to governance and management of grants.
18. The PCR also highlights the important outcomes of deploying GALS and training community leaders in this methodology, which reportedly resulted in a reduction in group conflicts and cases of family conflicts and gender-based violence in addition to household-level impacts (see below section on Gender equality and women's empowerment). The reduction of

⁸ Income increased from KSH13,750 at baseline to KSH17,996 at endline.

⁹ Ownership of radios increased from 73 to 85 per cent between baseline and endline; television sets from 42 to 70.6 per cent; mobile phones from 82 to 93.9 per cent; water tanks from 41 to 84.3 per cent; and solar panels from 9 to 16.6 per cent.

¹⁰ In specific terms, the proportion of households using corrugated metal as roofing material had increased from 70.1 per cent at baseline to 81.2 per cent.

¹¹ Yields for beans, green grams and cow-peas increased from three to eight bags per acre, three to six bags per acre and five to eight bags per acre, respectively.

¹² Milk production increased from an average 3-5 litres to 15-20 litres per day per cow, and from 0.25 litres to 2 litres per day per goat.

¹³ Cereals included yellow maize; legumes comprised beans and green grams; root crops included sweet potatoes, Irish potatoes, and cassava; fruit trees included avocados and mangoes; and vegetables included tomatoes, carrots, cabbages and kales.

¹⁴ Eggs, milk and meat.

¹⁵ Such as CFAs, Focal Development Area Committees, Water Users Associations and Common Interest Groups.

community conflicts was also documented in the 2019 CSPE.¹⁶ A further successful project activity showcased in the PCR in the context of skills development and community empowerment were the exchange visits specifically for youth involved in dairy farming: some 70.1 per cent of participating youth subsequently shared the acquired knowledge and skills with other beneficiaries, reaching an average of 15-20 other community members. In turn, a reported 97.5 per cent of these farmers trained by their peers adopted the technologies, making effective peer-to-peer learning an important project outcome. Lastly, the PCR also considers the school greening programme a successful intervention towards instilling a culture of environmental conservation, with students 'adopting' a tree that they were to tend to. This approach to increasing tree cover has reportedly been taken up by the government and development partners.

19. **Institutions and policies.** With regard to UTaNRMP's impacts on institutions and policies, the PCR highlights the strengthening of governance, leadership and business development skills of the community-based institutions in managing natural resources sustainably. This support to beneficiary groups included the development of constitutions and by-laws, a critical step in building stronger grassroot institutions to enhance their sustainability and provide a basis for generating income through charging tariffs (such as for water use). Institutional development was a further key focus of the project, through project co-implementation with and capacity support to national agencies (see above section on 'Project implementation' for a list of agencies). The PCR considers that the project provided policy framework support through development of financing frameworks for Community Forest Associations (CFAs) and Water Resource Users Associations (WRUAs) as well as through support towards the school greening programme, which were reportedly all scaled up by national government subsequent to the project. According to the PCR, several UTaNRMP design features were institutionalized in the implementation process, such as partnerships with government agencies and county governments in supporting community groups (see below section 'Sustainability' for details).
20. **In summary**, UTaNRMP achieved important impacts across the four domains of rural poverty impact – household incomes and assets, agricultural productivity, social empowerment, and institutions (while food security outcomes were not sufficiently substantiated). It should be noted, however, that the quantitative results data for UTaNRMP did not include comparisons with 'control' (i.e., 'non-UTaNRMP') communities, limiting the ability to infer attribution of impacts to the project. Notwithstanding, given the magnitude of the changes in the various result areas between baseline and endline for project beneficiaries, this PCR rates the rural poverty impact of UTaNRMP as *satisfactory* (5), at par with the 2019 CSPE and the PCR self-rating.

Sustainability of benefits

21. The PCR indicates social sustainability of UTaNRMP as safeguarded through the approach of capacitated community-based institutions and the development of community action plans, which have reportedly empowered communities to prioritize interventions and projects according to their needs. Further, the Report highlights the development of constitutions and by-laws as an important element to strengthening beneficiary groups and enhancing their sustainability. The PCR also outlines strong institutional and political sustainability prospects, in view of continued support by government agencies and county governments of community groups as a result of the strong partnerships formed during project implementation, using the existing government structures.¹⁷ According to the PCR, environmental sustainability of project interventions was directly underpinned by capacity building of beneficiary groups around bio-plants, forest rehabilitation, water harvesting and irrigation. In addition, the operational manuals developed under UTaNRMP for these

¹⁶ The 2019 CSPE referenced an impact assessment showing that 60 per cent of the respondents did not experience water conflicts in their area after the formation water resource user associations and related interventions; in areas where conflicts emerged, they were mainly resolved through leaders and the user associations.

¹⁷ For instance, the Kenya Forest Service is to carry on with the development and review of Participatory Forest Management Plans as well as support to CFAs. Similarly, the Kenya Wildlife Services is to continue in the maintenance of the wildlife control fence and expansion of the fence to other ecosystems. The Water Resources Authority is to continue with water quality monitoring and provision of water abstraction permits.

groups provide for environmental and social safeguards studies to minimize associated risks. Lastly, financial sustainability measures include the development of financing frameworks for water user groups and forest association to generate income through charging tariffs, subscriptions and fees for resource use.

22. On the other hand, with regard to the social, institutional and financial sustainability of community organizations and beneficiary groups, it should be noted that the PCR does not provide evidence of the level of functioning or financial performance of these groups at project end, which would give an indication of their ability to continue their activities beyond the project duration. According to the 2019 CSPE, the government does not have a financial allocation to support CFAs and WRUAs, wherefore the long-term sustainability of these groups is assessed as dependent on how innovative their members are.
23. **Scaling-up.** The PCR notes that several of UTaNRMP's successful implementation arrangements and policy frameworks were reportedly scaled up by the government and various development partners. As such, the development funding cycle for CFAs is reportedly being rolled out by the government across the country, as well as scaled up by the African Development Bank through the 'Green Zone Phase 2' project. Additional specifics regarding the government programme or policy adopting the funding cycle are not apparent in the Report. Similarly, the PCR reports that the development funding cycle for WRUAs is being scaled up by several development partners engaging with WRUAs in the country. However, the PCR does not provide further details on these scaling-up activities or the entities undertaking them. Lastly, the school greening programme is another initiative of the project that has reportedly been taken up by the national government and is being promoted in other, 'non-UTaNRMP' schools. It is also implemented by IFAD's follow-on 'Upper Tana Nairobi Water Fund Project', while it should be noted that such replication in IFAD-financed projects is not considered scaling up *per se*.
24. In addition, the PCR mentions that the project worked with the State Department for Gender to incorporate the GALS methodology into policies aimed at promoting development and women's empowerment in the country. However, the Report does not indicate whether the project's efforts did indeed result in the methodology being adopted in official policies. A range of other project approaches and strategies are listed in the PCR in the context of their potential to be scaled up, notably without indicating any specific plans or tangible prospects of this materializing.
25. **Environment and natural resources management (ENRM) and climate change adaptation (CCA).** The PCR notes that UTaNRMP implemented a wide range of conservation activities in the catchment area in an effort to minimize land degradation, with community participation increasing from 67 to 92.9 per cent between baseline and endline. As such, communities planted close to 3 million tree seedlings¹⁸ through the school greening programme; managed 177 ha of degraded hilltops including increasing tree cover as per the national goal;¹⁹ and pegged and planted close to 12,000 km of riverine areas with 557,000 water-tolerant trees as a mitigation against riverine encroachment and soil erosion and to contribute to increased forest cover. Quantitative evidence around soil management on UTaNRMP farms is limited to 2,639 beneficiary farmers' perception that soil erosion reduced on their farms in the course of the project. Secondly, waste management reportedly improved through the course of the project as a result of its hygiene interventions, with use of septic tanks and soak pits vs. pit latrines for liquid waste increasing²⁰ and households shifting from using waste pits to compost for organic solids,²¹ adding value to such waste through its use as compost in farming. According to the PCR, UTaNRMP's energy interventions reduced fuel wood use by 50 to 60 per cent, thus also

¹⁸ Fruits, indigenous and exotic trees.

¹⁹ To achieve a minimal national tree cover of ten per cent by 2030.

²⁰ The proportion of households using pit latrines for liquid waste disposal reduced to 41.1 per cent at endline (with no baseline figure given), while the use of septic tanks increased from 3.5 to 15.4 per cent and that of soak pits increased from 3.9 to 8.9 per cent.

²¹ The proportion of households converting organic solids into compost manure increased from 28.8 to 42.6 per cent, while those who used waste pits reduced slightly from 50 to 48.9 per cent.

abating indoor air pollution, through the introduction of energy-saving stoves. Similarly, bio-gas stoves reportedly allowed schools to lower fuel wood use, although no quantitative figures were presented. Lastly, the PCR notes that the 100-km solar powered wildlife fence brought about a 97-per-cent reduction in incidences of human-wildlife conflict.

26. The PCR further reports that UTaNRMP support to WRUAs resulted in a significant reduction of pollution hotspots. However, the evidence cited is limited to one example, namely “Thika Mid” WRUA taking action to stop an industrial effluent from a paper manufacturing company. Furthermore, in its section on ‘Effectiveness’ the PCR concedes that despite NRM efforts the project had no matching capacity to address the increasing wastewater challenges in the project area, foremost the increased level of water turbidity and contamination with faecal coliforms as a result of wastewater runoff from mushrooming rural market centres and unplanned settlements without wastewater management systems.
27. With regard to climate change aspects of UTaNRMP’s interventions, project impacts include carbon sequestration by way of improved forest ecosystems through tree-planting, the solar barrier fence,²² as well as energy-saving stoves and biogas technologies for climate change mitigation through reduced greenhouse gas emissions (see above for impact on reduced fuel wood use). The PCR estimates “*that investments in forest rehabilitation and agroforestry resulted in the reduction [in carbon dioxide] of ca. 48 metric tons*”. This figure and claim, however, are unclear as to their source (not mentioned in the PCR), their precise unit (as references to a time period and area are missing) or its magnitude, as one hectare of forest alone may store 10 metric tons of carbon dioxide per year under tropical conditions;²³ therefore a calculated project total of 48 metric tonnes presumably across the project area and lifespan appears quite small.
28. IOE’s 2023 thematic evaluation on IFAD support on CCA²⁴ showcases UTaNRMP as a successful project in enhancing the capacity of community-based organizations for integrating CCA options and ecosystem services in human-dominated areas and conservation landscapes, proving effective in achieving environmental resilience and ecosystem services in addition to increasing smallholder farmers’ CCA-related outcomes.
29. Climate change adaptation options promoted by the project include water use efficiency technologies for irrigation such as drip irrigation, individual metering of the water use at household level (for both domestic and irrigation use), conservation and protection of water sources (i.e., wetlands and springs) and solar-powered water pumping systems for boreholes and shallow wells. However, the PCR does not enumerate the results achieved with these technologies. Further investments that built climate resilience were small scale rainwater harvesting and storage methods to enable community members to grow various crops, fruits and animal fodder throughout the dry season. Examples include eight community groups in Tharaka Nithi and Embu counties, sourcing water from newly rock water catchments with underground storage tanks, sand dams and small-scale dams for both livestock and domestic use. Boreholes constructed by UTaNRMP’s for underground water exploitation to cushion communities against acute water shortage during prolonged droughts were all functional and productive as determined by the PCR mission.
30. In view of the above assessments, this PCR rates UTaNRMP (i) sustainability and (ii) its performance with regard to scaling up as *moderately satisfactory (4)*, in agreement with the 2019 CSPE ratings and one point lower than the respective PCR self-ratings; and (iii) performance with regard to ENRM and CCA as *satisfactory (5)*, at *par* with the CSPE and PRC ratings, respectively.

²² According to the PCR, the solar barrier fence resulted in an estimated 17 tonnes of carbon being sequestered per hectare per year.

²³ For reference, see for instance [Mapping carbon accumulation potential from global natural forest regrowth | Nature](#), accessed on 20 September 2023.

²⁴ IFAD. 2023. Independent Office of Evaluation. *Thematic evaluation of IFAD’s support for Smallholder Farmers’ Adaptation to Climate Change*, Rome: IFAD.

Gender equality and women's empowerment

31. Women's participation in project activities was considerable, amounting to 56 per cent of project beneficiaries (without an appraisal target having been set), and that of youth stood at 13 per cent (again without target). The PCR describes that gender mainstreaming has been the primary approach used by UTaNRMP in to bring about gender impacts, employing specifically the GALS methodology.
32. With respect to the impact domain of women's health, skills, income and nutritional levels, the PCR highlights the successful training by the project of 84 female 'community training-of-trainer champions' (39 youth) and 29 female chiefs and assistant chiefs, who in turn reached and trained a total of 4,522 women.
33. Positive changes around workload reduction or re-distribution occurred with respect to women's adoption of energy-saving stoves and devices introduced by UTaNRMP, which reportedly led to a halving of cooking effort and time, as well as of energy costs. This, in turn, contributed to workload balance within households and freed women up to assume leadership positions in the community groups and institutions, as well as increased time for leisure activities.²⁵
34. The PCR describes that improvements occurred in gender roles and relations within households, groups and communities in the project area as a result of introduction of the GALS methodology, while more specific information to illustrate these changes are not presented in the Report.
35. Women's influence in decision-making rose markedly in the course of the project, with the proportion of women in leadership positions in UTaNRMP community groups increasing from 38.1 to 53 per cent between baseline and endline (and youth leadership increasing to 12 per cent, without a baseline indicated). Furthermore, the PCR estimates that women's overall participation in decision-making at household, group and community level rose from 12.1 to 17.5 per cent, while the joint control of large stock animals increased from 2 to 56 per cent between baseline and endline.
36. Furthermore, the PCR highlights that UTaNRMP received the IFAD Global Gender Award in 2021 for an outstanding performance in promoting women's empowerment and social inclusion. The 2019 CSPE assesses UTaNRMP's gender strategy very positively, including gender-transformative aspects such as the inclusion of household methodologies.²⁶
37. This PCR therefore rates UTaNRMP performance with regard to gender equality and women's empowerment as *satisfactory (rating 5)*, in agreement with the PCR and CSPE ratings, respectively.

Performance of Partners

38. **IFAD.** IFAD fielded 13 supervision, implementation support and review missions between 2012 until project completion in 2023, and a mid-term review in 2017. The PCR assesses that IFAD provided timely and requisite implementation support, including project supervision, processing of withdrawal applications, 'no objections', constant consultation and communication with the project management and the government, as well as capacity building of the project coordinating team.
39. **Government.** The PCR notes that the Government of Kenya participated in the project design, negotiation of the loan agreement, implementation, supervision, providing implementation support, carrying out annual performance reviews, auditing, and reporting. The government reportedly adhered to most of the loan agreements and covenants, including the provision of counterpart funding to support all project

²⁵ Women's workloads in the household decreased from 16 to 12 hours per day between baseline and endline, translating to an increase in leisure time from 1.2 to 3.5 hours.

²⁶ The 2019 CSPE assesses UTaNRMP's gender strategy to be comprehensive, covering the critical areas of gender analysis, gender-responsive targeting mechanisms and operational measures, and gender-sensitive monitoring and evaluation. In line with IFAD's move from gender mainstreaming to gender-transformative approaches, the CSPE also points to UTaNRMP's inclusion of household methodologies in beneficiary groups, thus aiming to tackle the root causes of inequalities to improve gender relations and promote equal social and economic opportunities between men and women.

components. These counterpart contributions were both in cash and in-kind, such as tax and duty wavers, staff time and office space. The government contributed US\$13.1 million, constituting 96 per cent of the pledged amount. The PCR explains that early support missions had raised concerns over the 'commingling' of loan funds, whereby the government held all funds in the same bank accounts, making traceability of funds cumbersome. However, this was resolved and at the time of the PCR all government funds were paid from a separate bank account. Lastly, the PCR notes that UTaNRMP received strong support from the Project Steering Committee, which was chaired by the Principal Secretary of the lead government agency.

40. The 2019 CSPE draws attention to the impact of the government's devolution process on UTaNRMP implementation, whereby annual budgets were devolved to counties instead of nationally under the Ministry of Environment, Water and Natural Resources. County programme coordinators were reportedly prone to being transferred to different sub-counties or departments within the county, and county ministries of agriculture faced inadequate funding and a shortage of capacity, especially where former counties were subdivided into new smaller counties. However, it can be understood that these issues were temporary and indeed progressively resolved.²⁷
41. **Overall**, this PCR rates both IFAD's and the government's performance on UTaNRMP as *satisfactory (5)*, in agreement with the PCR ratings, respectively.

B. Assessment of PCR quality

Scope

42. The PCR contained all chapters, sections and annexes as per the Guidelines for Project Completion Review (2015) and provided substantive and relevant content. It should be noted, however, that an important set of data was omitted in the main report, namely a breakdown of expenditure by financier. While this information appeared in an appendix to the PCR, it was not presented in the 'Project at a glance' summary table, neither was it featured or discussed in the PCR section on 'Efficiency'. Notwithstanding this oversight, this PCR rates the scope of the PCR as *satisfactory (rating 5)*.

Quality

43. The PCR process was inclusive of a variety of stakeholder groups, in that stakeholder workshops were held in March 2023 to take stock of UTaNRMP's achievements and for participants to voice their observations and assessment of the project's implementation and results, as well as to provide recommendations. The represented stakeholder groups notably included representatives of beneficiary community groups.
44. According to the PCR, the project developed and implemented a functional monitoring and evaluation system which provided reliable information on the project implementation performance and captured programme outputs and outcomes. The project used a variety of tools to support periodic data capturing, conducted annual reviews and periodic impact assessment studies to evaluate project performance. On the other hand, the PCR narrative contains a number of impact claims that are insufficiently detailed or substantiated by data, thereby limiting the evidence-base and affecting the overall quality of the Report.
45. This PCR therefore rates the quality of the PCR as *moderately satisfactory (rating 4)*.

Lessons

46. A set of lessons is indicated in the PCR to have been learned from the performance of AFAP; this PCR deems them adequate, and they were derived from project design and implementation considerations. This PCR rates the lessons criterion for the PCR as *satisfactory (rating 5)*.

²⁷ In its comments on the draft PCR, PMD noted that by project end these issues (of county-level inadequate funding and shortage of capacity) had been entirely resolved and that both national and county-level project governance was strong, with excellent working relationships between the various stakeholders.

Candour

47. The PCR narrative is generally objective and strikes, for the most part, an appropriate balance between showcasing achievements and describing shortfalls. However, it is noted that the level of candour observed in the PCR narrative is not always reflected in its ratings; all assessment criteria were rated *satisfactory (rating 5)*, without exception. This indicates room for more critical judgement in weighing the strengths and weaknesses of the evidence of performance and results of the programme in determining ratings. Indeed, five ratings were thus assessed lower by this PCRV.
48. This PCRV therefore rates the candour criterion for the PCR as *moderately satisfactory (rating 4)*.

Definition and rating of the evaluation criteria used by IOE

Criteria	Definition	Mandatory	To be rated
Relevance	The extent to which: (i) the objectives of the intervention are consistent with beneficiaries' requirements, country needs, institutional priorities and partner and donor policies; (ii) the design of the interventions, the targeting strategies adopted are consistent with the objectives; and (iii) the intervention has been (re-) adapted to address changes in the context.	X	Yes
Effectiveness	The extent to which the intervention/country strategy achieved, or is expected to achieve, its objectives and its results at the time of the evaluation, including any differential results across groups. A specific sub-domain of effectiveness relates to:	X	Yes
• Innovation	Innovation, the extent to which interventions brought a solution (practice, approach/method, process, product, or rule) that is novel, with respect to the specific context, time frame and stakeholders (intended users of the solution), with the purpose of improving performance and/or addressing challenge(s) in relation to rural poverty reduction. ²⁸	X	Yes
Efficiency	The extent to which the intervention or strategy delivers, or is likely to deliver, results in an economic and timely way. "Economic" is the conversion of inputs (e.g., funds, expertise, natural resources, time) into outputs, outcomes and impacts, in the most cost-effective way possible, as compared to feasible alternatives in the context. "Timely" delivery is within the intended timeframe, or a timeframe reasonably adjusted to the demands of the evolving context. This may include assessing operational efficiency (how well the intervention was managed).	X	Yes
Impact	The extent to which an intervention/country strategy has generated or is expected to generate significant positive or negative, intended or unintended, higher-level effects. The criterion includes the following domains: -changes in incomes, assets and productive capacities -changes in social / human capital -changes in household food security and nutrition -changes in institution and policies The analysis of impact will seek to determine whether changes have been transformational, generating changes that can lead societies onto fundamentally different development pathways (e.g., due to the size or distributional effects of changes to poor and marginalized groups)	X NO	Yes NO
Sustainability	The extent to which the net benefits of the intervention or strategy continue and are scaled-up (or are likely to continue and be scaled-up) by government authorities, donor organizations, the private sector and other agencies.	X	Yes
• Environment and natural resources management and climate change adaptation	Note: This entails an examination of the financial, economic, social, environmental, and institutional capacities of the systems needed to sustain net benefits over time. It involves analyses of resilience, risks and potential trade-offs.	X	Yes
• Scaling-up	<u>Specific domain of sustainability:</u> <u>Environment and natural resources management and climate change adaptation.</u> The extent to which the development	X	Yes

²⁸ Conditions that qualify an innovation: newness to the context, to the intended users and the intended purpose of improving performance. Furthermore, the 2020 Corporate-level Evaluation on IFAD's support to Innovation defined transformational innovations as "those that are able to lift poor farmers above a threshold, where they cannot easily fall back after a shock". Those innovations tackle simultaneously multiple challenges faced by smallholder farmers. In IFAD operation contexts, this happens by packaging / bundling together several small innovations. They are most of the time holistic solutions or approaches applied of implemented by IFAD supported operations.

<i>Criteria</i>	<i>Definition</i>	<i>Mandatory</i>	<i>To be rated</i>
	<p>interventions/strategy contribute to enhancing the environmental sustainability and resilience to climate change in small-scale agriculture.</p> <p><u>Scaling-up*</u> takes place when: (i) bi- and multi laterals partners, private sector, communities) adopt and diffuse the solution tested by IFAD; (ii) other stakeholders invested resources to bring the solution at scale; and (iii) the government applies a policy framework to generalize the solution tested by IFAD (from practice to policy).</p> <p>*Note that scaling up does not only relate to innovations</p>		
Gender equality and women's empowerment	<p>The extent to which IFAD interventions have contributed to better gender equality and women's empowerment. For example, in terms of women's access to and ownership of assets, resources and services; participation in decision making; workload balance and impact on women's incomes, nutrition and livelihoods; and in promoting sustainable, inclusive and far-reaching changes in social norms, attitudes, behaviours and beliefs underpinning gender inequality.</p> <p>Evaluations will assess to what extent interventions and strategies have been gender transformational, relative to the context, by: (i) addressing root causes of gender inequality and discrimination; (ii) acting upon gender roles, norms and power relations; (iii) promoting broader processes of social change (beyond the immediate intervention).</p>	X	Yes
Performance of Partners	<p>The extent to which IFAD and the Government (including central and local authorities and executing agencies) supported design, implementation and the achievement of results, conducive policy environment, and impact and the sustainability of the intervention/country programme.</p>	X	Yes
• IFAD			
• Government	<p>The adequacy of the Borrower's assumption of ownership and responsibility during all project phases, including government and implementing agency, in ensuring quality preparation and implementation, compliance with covenants and agreements, supporting a conducive policy environment and establishing the basis for sustainability, and fostering participation by the project's stakeholders.</p>	X	Yes

Rating tables

Ratings of specific evaluation criteria are assigned as whole numbers. The overall project achievement rating is determined as a simple arithmetic average of the key evaluation criteria, using the format in table 2. The PCRV should provide clear justification when it proposes a change in rating (in any direction).

Example of Ratings for a PCRV

Criterion	PCR rating	PCRV Rating	Disconnect (=PCRV rating - PCR rating)
Relevance	5	5	0
Effectiveness	5	4	-1
• <i>Innovation*</i>	5	5	0
Efficiency	5	5	0
Impact ²⁹	5	5	0
Gender	5	5	0
Sustainability of benefits	5	4	-1
• <i>NRM and CCA</i> ³⁰	5	5	0
• <i>Scaling up*</i>	5	4	-1
Overall Project achievement ³¹	5	4.67	-0.33
Partner performance			
IFAD	5	5	0
Government	5	5	0
Average rating disconnect			-3/11=-0.27

*After IFAD12, Management will take a decision on how to rate Innovation and Scaling up

PCRVs also include an assessment of the PCR quality based on its candour, lessons, quality and scope. An example is provided below.

Table 3

Ratings of the project completion report quality

Quality Criterion	IOE PCRV rating
Scope	5
Quality	4
Lessons	5
Candour	4
Overall rating of the project completion report	4.5 (i.e. simple arithmetic averages of the previous four)

²⁹ Note that, in the future, Management may opt to not rate impact.

³⁰ Management may keep ratings for NRM and climate change adaptation separate.

³¹ This is a simple arithmetic average of the above ratings (relevance, effectiveness, efficiency, innovation, impact, sustainability, scaling up, NRM and climate change adaptation, gender equality).

Abbreviations and Acronyms

CCA	Climate change adaptation
CFA	Community Forest Association
CSPE	Country Strategy and Programme Evaluation
ENRM	Environment and natural resources management
GALS	Gender Action Learning System
PCR	Project Completion Report
PCRV	Project Completion Report Validation
NRM	Natural resources management
UTaNRMP	Upper Tana Catchment Natural Resource Management Project
WRUA	Water Resource Users Association

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