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**President's memorandum**  
**Proposed additional financing to**  
**Republic of Zambia**  
**Financial Inclusion for Resilience and Innovation**  
**Project (FIRIP)**

Project ID: 2000004924

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**FOR: APPROVAL**

**Action:** The Executive Board is invited to approve the recommendation for the proposed additional financing contained in paragraph 51.

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**Technical questions:**

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- I. Updated logical framework incorporating the additional financing
- II. Updated summary of the economic and financial analysis

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## Financing summary

<b>Initiating institution:</b>	IFAD
<b>Borrower/recipient:</b>	Republic of Zambia
<b>Executing agency:</b>	Ministry of Finance and National Planning
<b>Total project cost:</b>	US\$49.8 million
<b>Amount of original IFAD loan (performance-based allocation system [PBAS])</b>	US\$8.90 million
<b>Terms of original IFAD loan:</b>	Highly concessional: 40 years, including a grace period of 10 years, with a service charge of 0.75 per cent per annum in United States dollars (adjustments for single-currency loans)
<b>Amount of additional IFAD Debt Sustainability Framework (DSF) grant:</b>	US\$21.1 million
<b>Cofinanciers:</b>	Private sector, strategic partners (to be determined)
<b>Amount of cofinancing:</b>	Private sector: US\$12.3 million Strategic partners: US\$0.3 million
<b>Terms of cofinancing:</b>	Cash, parallel cofinancing in the form of a loan
<b>Contribution of borrower/recipient:</b>	US\$2.2 million
<b>Contribution of project participants:</b>	US\$5 million
<b>Amount of original IFAD climate finance:</b>	US\$3.6 million
<b>Amount of additional IFAD climate finance:</b>	US\$9.4 million (of which US\$0.94 million is a climate top-up)
<b>Cooperating institution:</b>	Directly supervised by IFAD

## **I. Background and project description**

### **A. Background**

1. The Financial Inclusion for Resilience and Innovation Project (FIRIP)<sup>1</sup> was approved by the Executive Board in December 2024 during its 143<sup>rd</sup> session, with a total project cost of US\$49.8 million. The project is designed to improve the resilience and livelihoods of rural populations in the Republic of Zambia by expanding access to inclusive, client-responsive and climate-resilient financial services. It aligns with national priorities and IFAD's strategic objectives of promoting rural financial inclusion, private sector engagement and climate adaptation.
2. The financing structure at approval included an initial allocation of US\$8.9 million under the Twelfth Replenishment of IFAD's Resources (IFAD12), approved as a highly concessional loan. At that time, a financing gap of US\$21.1 million was foreseen and explicitly included in the approved design, with the understanding that it would be financed under the upcoming IFAD13 cycle. The Government of Zambia formally requested the full US\$30 million IFAD support in 2024, with the allocation phased over the IFAD12 and IFAD13 periods.
3. The project entered into force on 17 March 2025, and the original completion and closing dates remain 31 March 2032 and 30 September 2032, respectively. Since the project's entry into force, the Government and IFAD have initiated start-up activities, including the operationalization of the programme management unit (PMU) and the establishment of financial management systems. No disbursements have been made to date, pending the completion of these initial steps.
4. The purpose of this memo is to seek the Executive Board's approval of the additional financing of US\$21.1 million under IFAD13. This additional financing will complete the originally approved financing plan and allow the project to proceed with full implementation as designed. There have been no prior restructurings or changes to the implementation period, and all environmental, social and fiduciary safeguards, such as those related to the Social, Environmental and Climate Assessment Procedures (SECAP) and integrated programme risk management, were fully addressed and cleared at the time of the original design.

### **B. Original project description**

5. The overall goal of the project is to improve rural livelihoods through increased resilience and inclusive sustainable growth. The project development objective is improved access to and use of financial services to strengthen the resilience and green growth of rural production systems, value chains and livelihoods of poor rural men, women and youth.
6. FIRIP was designed to address key structural barriers limiting access to financial services and innovation among rural populations in Zambia, particularly youth, women and smallholder producers. The project supports the transformation of Zambia's rural financial landscape by promoting inclusive, climate-resilient finance and enterprise development. FIRIP aims to enhance the capacity of financial service providers, crowd in private sector actors, and increase the uptake of innovative and adaptive financial products by underserved rural communities.

## **II. Rationale for additional financing**

### **A. Rationale**

7. The rationale for this additional financing is to close the pre-identified financing gap of US\$21.1 million, which was foreseen at the time of the original design and Executive Board approval in December 2024. The project was designed for total

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<sup>1</sup> [EB 2024/143/R.5/Rev.1.](#)

IFAD financing of US\$30 million, with the understanding that US\$8.9 million would be provided under IFAD12 as a highly concessional loan, and the remaining US\$21.1 million would be secured under IFAD13 once Zambia's new performance-based allocation system (PBAS) resources became available.

8. The additional financing will be provided as a grant under the Debt Sustainability Framework (DSF), in line with Zambia's classification under IFAD13. The request by the Government of Zambia dated 5 September 2024 includes a request for IFAD to finance the original US\$8.9 million from IFAD12 funds, and the additional US\$21.1 million when the funds become available.
9. As outlined in the original design, the additional financing to cover the financing gap is required to:
  - Complete the capitalization of the Blended Finance Facility (BFF) and the Innovation and Outreach Facility (IOF), two pillars critical to achieving the project's catalytic impact;
  - Scale up access to digital financial services, green finance products and climate-smart innovations for underserved rural populations; and
  - Fully implement the project's original three-component structure, all of which remain unchanged.
10. Specifically, the additional financing will be allocated as follows:
  - US\$6,745,000 for subcomponent 1.1: Innovative financial products and delivery mechanisms for inclusive rural outreach;
  - US\$9,320,000 for subcomponent 1.2: Increased access to affordable finance for agriculture and green investment;
  - US\$1,511,000 for component 2: Enhanced enabling environment for inclusive rural financial services; and
  - US\$3,524,000 for component 3: Project coordination and implementation, monitoring and evaluation (M&E) and knowledge management.
11. This allocation reflects the project's strategic priorities and ensures full implementation of the originally designed interventions using IFAD13 resources.

**Special aspects relating to IFAD's corporate mainstreaming priorities**

12. In line with IFAD's mainstreaming commitments, the project has been validated as:
  - ☒ Including climate finance
  - ☒ Gender-transformative
  - ☒ Youth-sensitive
  - ☒ Including adaptive capacity

**B. Description of geographical area and target groups**

13. **Programme area.** As per the original design, FIRIP will focus on underserved rural areas nationwide, to be identified through a demand-driven process guided by clear selection criteria and cost-sharing arrangements. The expansion of formal financial access points under the IOF window 1 will focus on financially excluded rural districts to be identified in collaboration with the Bank of Zambia and the Zambia Information and Communications Technology Authority at project start. Client-centric financial services for agriculture, rural micro, small and medium-sized enterprises, greening and climate resilience (IOF windows 2 and 3), and the BFF will be rolled out in poor rural areas with basic financial and economic infrastructure and services in place, and where demand and absorption capacity for financial services exist.

14. **Target groups.** FIRIP's outreach includes 370,110 households through improved access to finance and employment generated, including 315,511 through access to financial services, and 54,599 through job creation (excluding project participants benefiting from both). With an average household size of five, the total number of targeted household members is 1,850,550 (16 per cent of the rural population).
15. FIRIP will use a menu of targeting measures to ensure that investments promote sustainable financial inclusion, resilience, poverty and food insecurity for poor and excluded groups such as smallholders, women, youth, persons with disabilities, persons living with HIV/AIDS and other vulnerable groups.

### **C. Components, outcomes and activities**

16. FIRIP was designed with two technical components and one component for project coordination and knowledge management.
17. **Component 1: Improved availability and uptake of sustainable client-centric rural financial services.** This will be achieved by two mutually reinforcing subcomponents:
18. **Subcomponent 1.1: Innovative financial products and delivery mechanisms for inclusive rural outreach** will be implemented through an IOF, building on the Rural Finance Expansion Programme model with some modifications, such as a stronger focus on: (i) agriculture, green and climate-smart technologies; (ii) youth and women's financial inclusion and empowerment; and (iii) greater cost sharing by implementing partners.
19. **Subcomponent 1.2: Increased access to affordable finance for agriculture and green investment.** This subcomponent will establish a BFF to crowd private capital into agriculture and climate-smart green investments, while reducing the cost of funds for financial service providers and the resulting interest rates for end borrowers. The BFF responds to the problem of very high interest rates in Zambia resulting from macroeconomic instability, high-risk primes for international funding, along with high distribution costs and risk in rural areas. It also provides longer-term funds to enable banks and microfinance institutions (MFIs) to provide more investment loans at lower costs.
20. The BFF will be capitalized initially with concessional funds from IFAD and the Government by way of pricing, tenor and repayments for onlending through participating financial service providers (PFSPs). During implementation, other sources of concessional funding may contribute to the pool. A mechanism for a second-level blending of concessional funds with matching contributions by each PFSP will be established. The blended cost of funds will differ for each PFSP, depending on its average costs of funds and the BFF lending rate. Interest rates chargeable to end borrowers (farmers, etc.) will be based on a negotiated process, balancing the sustainability needs of the PFSP and reasonable returns on investments for borrowers and following the principles of responsible lending.
21. Both the IOF and the BFF will complement the recently launched Sustainable Agriculture Financing Facility (SAFF), which provides crop insurance and partial credit guarantee coverage for loans issued by banks to small and emergent farmers under the scheme. The IOF will help banks and MFIs to design and effectively deliver loans to farmers across various value chains, while the BFF will provide access to lower-cost and longer-term funds. FIRIP will help SAFF to reach smaller farmers and bring MFIs into the scheme. Technical assistance to strengthen SAFF's policies and implementation modalities will be funded under component 2.
22. **Component 2: Enhanced enabling environment for inclusive rural financial services** will address critical bottlenecks for providing client-centric and affordable financial services in rural areas at scale. It will tackle broader policy, legal and regulatory issues; strengthen implementation capacities of key actors; contribute to knowledge management; and help mainstreaming cross-cutting themes in rural

finance such as gender and youth empowerment, environment and social governance, climate change, etc. Longer-term support for developing policies, legal and regulatory instruments and their implementation will be provided through strategic partnerships with macro- and meso-level actors. This will be complemented through specific training, capacity development, knowledge management and technical assistance for various actors at meso and micro level.

23. **Component 3** will deal with project coordination and management, M&E and knowledge management.

## **D. Costs, benefits and financing**

### **Project costs**

24. The overall project cost remains at US\$49.8 million. Table 1 outlines the cost by financier for the original financing and the additional financing. As per table 2, the cost structure is organized around three components: component 1, focused on enhancing access to client-centric financial services and delivery mechanisms, is allocated US\$38.6 million, representing 78 per cent of the total project cost. Component 2, aimed at strengthening the enabling environment for inclusive rural financial services, is allocated US\$3.9 million or 8 per cent. Component 3, which covers project management functions, accounts for US\$7.2 million, representing 14 per cent of the total. Table 3 outlines the costs by expenditure category and financier, highlighting that investment costs total US\$44.4 million (89 per cent of base costs), recurrent costs total US\$5.3 million (11 per cent) and price contingencies total US\$0.636 million. Finally, table 4 outlines the cost by project year.
25. The IFAD financing of US\$30 million is composed of US\$8.9 million under IFAD12 on highly concessional terms and US\$21.1 million under IFAD13 as a DSF grant. The additional financing of US\$21.1 million is intended to close the previously foreseen financing gap and will support the full implementation of activities across all components. It will be allocated proportionally to strengthen access to inclusive rural financial services, promote innovation and outreach to underserved populations, support institutional capacity and policy engagement, and ensure effective project coordination and M&E.
26. Project components 1 and 2 are partially counted as climate finance, particularly where interventions support climate adaptation, such as climate-resilient financial services, digital tools for risk management and enabling policies for climate-smart investment. As per the multilateral development banks' methodologies for tracking climate change adaptation and mitigation finance, the total amount of IFAD climate finance for this project is estimated as US\$13.06 million.
27. The total amount of additional IFAD climate finance for this additional financing proposal is estimated as US\$9.4 million.

Table 1

### **Original and additional financing summary**

(Thousands of United States dollars)

	<i>Original financing</i>	<i>Additional financing</i>	<i>Total</i>
IFAD loan	8 900		8 900
IFAD DSF grant		21 100	21 100
Private sector	12 366		12 366
Strategic partners	300		300
Project participants	5 000		5 000
Borrower/recipient	2 200		2 200
Financing gap	21 100	(21 100)	0
<b>Total</b>	<b>49 866</b>	<b>21 100</b>	<b>49 866</b>

Table 2

**Project costs by component (and subcomponent) and financier**

(Thousands of United States dollars)

<i>Component/subcomponent</i>	<i>IFAD loan</i>		<i>Strategic partners</i>		<i>Private sector</i>		<i>Project participants</i>		<i>Borrower</i>		<i>Additional financing DSF grant</i>		<i>Total</i>	
	<i>Amount</i>	<i>%</i>	<i>Amount</i>	<i>%</i>	<i>Amount</i>	<i>%</i>	<i>Amount</i>	<i>%</i>	<i>Amount</i>	<i>%</i>	<i>Amount</i>	<i>%</i>	<i>Amount</i>	<i>%</i>
<b>1. Improved availability and use of client-centric financial services</b>														
1.1. Innovative financial products and delivery mechanisms for inclusive rural outreach	1 027	9			4 041	34			22	0.2	6 745	57	11 835	24
1.2. Increased access to affordable finance for agriculture and green investment	3 462	13			8 325	31	5 000	19	719	3	9 320	35	26 826	54
<b>2. Enhanced enabling environment for inclusive rural financial services</b>	1 941	49	300	8					235	6	1 511	38	3 987	8
<b>3. Project coordination and implementation, M&amp;E and KM</b>	2 470	34							1 224	17	3 524	49	7 218	15
<b>Total</b>	<b>8 900</b>	<b>18</b>	<b>300</b>	<b>1</b>	<b>12 366</b>	<b>25</b>	<b>5 000</b>	<b>10</b>	<b>2 200</b>	<b>4</b>	<b>21 100</b>	<b>42</b>	<b>49 866</b>	<b>100</b>

Table 3  
**Project costs by expenditure category and financier**  
 (Thousands of United States dollars)

Expenditure category	IFAD loan		Strategic partners		Private sector		Project participants		Borrower		Additional financing DSF grant		Total	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
<b>Investment costs</b>														
1. Technical assistance	2 313	55			450	11			443	11	1 024	24	4 229	9
2. Training	587	77									176	23	763	2
3. Goods, services and inputs	1 551	29	300	6					227	4	3 211	61	5 289	11
4. Equipment and vehicles	426	86							66	13	5	1	497	1
5. IOF grant	391	6			2 691	43					3 128	50	6 210	13
6. Community-based financial institutions grant	360	8			900	20					3 240	72	4 500	9
7. Lines of credit	2 039	9			8 325	36	5 000	22	500	2	7 136	31	23 000	46
<b>Total investment costs</b>	<b>7 667</b>	<b>17</b>	<b>300</b>	<b>1</b>	<b>12 366</b>	<b>28</b>	<b>5 000</b>	<b>11</b>	<b>1 236</b>	<b>3</b>	<b>17 919</b>	<b>40</b>	<b>44 488</b>	<b>89</b>
<b>Recurrent costs</b>														
1. Salaries and allowances	1 018	24							648	15	2 655	61	4 321	9
2. Operating costs	215	20							316	30	526	50	1 057	2
<b>Total recurrent costs</b>	<b>1 233</b>	<b>23</b>							<b>964</b>	<b>18</b>	<b>3 181</b>	<b>59</b>	<b>5 378</b>	<b>11</b>
<b>Total</b>	<b>8 900</b>	<b>18</b>	<b>300</b>	<b>1</b>	<b>12 366</b>	<b>25</b>	<b>5 000</b>	<b>10</b>	<b>2 200</b>	<b>4</b>	<b>21 100</b>	<b>42</b>	<b>49 866</b>	<b>100</b>

Table 4  
**Project costs by component and project year**  
 (Thousands of United States dollars)

Component/subcomponent	2025	2026	2027	2028	2029	2030	2031	Total
	Amount	Amount	Amount	Amount	Amount	Amount	Amount	Amount
<b>1. Improved availability and use of client-centric financial services</b>								
1.1. Innovative financial products and delivery mechanisms for inclusive rural outreach		1 371	2 513	2 500	2 500	1 810	1 140	11 835
1.2. Increased access to affordable finance for agriculture and green investment		5 452	5 648	5 661	5 675	3 688	701	26 826
<b>2. Enhanced enabling environment for inclusive rural financial services</b>		843	1 049	716	589	562	227	3 987
<b>3. Project coordination and implementation, M&amp;E and KM</b>	674	1 284	1 011	1 071	1 049	1 041	1 089	7 218
<b>Total</b>	<b>674</b>	<b>8 951</b>	<b>10 222</b>	<b>9 949</b>	<b>9 812</b>	<b>7 101</b>	<b>3 158</b>	<b>49 866</b>

### **Financing and cofinancing strategy and plan**

28. The total financing for FIRIP remains at US\$49.8 million, with the full IFAD contribution now secured at US\$30 million, accounting for 60 per cent of the total project cost. The project has not undergone any changes to its original financing structure but now benefits from the full funding envelope needed for comprehensive implementation.
29. Cofinancing from domestic stakeholders accounts for the remaining 40 per cent of the project cost. This includes an estimated US\$12.3 million (25 per cent) from private sector actors, primarily financial service providers engaged through the BFF and the IOF. These contributions include both in-kind and financial commitments to complement IFAD's catalytic funding.
30. Additionally, project participants are expected to contribute US\$5 million (10 per cent), particularly through cost-sharing arrangements under the BFF whereby project participants are required to contribute up to 25 per cent of the financing received via partner banks and MFIs. The Government of Zambia's contribution is estimated at US\$2.5 million (5 per cent), comprising US\$2.2 million in cash and in-kind contributions (including duties and taxes), and US\$0.3 million from strategic partners supporting enabling environment activities and oversight.

### **Disbursement**

31. The disbursement of funds will follow IFAD's standard procedures and be aligned with the project's approved annual workplans and budgets. Disbursements will be made into the designated project accounts set up under the Ministry of Finance and National Planning (MoFNP), managed by the PMU. As of now, no disbursements have been made, although the project entered into force on 17 March 2025, and key start-up activities are under way, including the operationalization of bank accounts and recruitment of PMU staff.
32. Disbursements from the additional financing under IFAD13 will commence upon signature of the amendment to the financing agreement and will be aligned with eligible expenditures across all components, particularly for the implementation of matching grants, technical assistance contracts, policy support activities and operational costs.

### **Summary of benefits and economic analysis**

33. FIRIP is expected to generate significant benefits for rural smallholder farmers, micro and small enterprises, and financial service providers by strengthening access to diversified financial services tailored to agricultural and rural livelihoods. The project targets underserved populations, including women and youth, with increased opportunities for entrepreneurship and asset accumulation.
34. Economic analysis conducted during project design demonstrated that the project will result in increased rural incomes and enhanced financial inclusion. Benefits include reduced transaction costs, improved resilience to climate risks, and stronger linkages between financial institutions and rural markets. The economic internal rate of return was estimated at 18 per cent, indicating a sound investment case. The additional financing will allow full realization of these outcomes by closing the financing gap and supporting scaling up across target provinces.

### **Exit strategy and sustainability**

35. FIRIP's sustainability strategy is embedded in its design through a strong focus on institution-building, digital innovation and private sector participation. The exit strategy emphasizes:
  - Strengthening the operational and financial sustainability of supported financial service providers and rural enterprises;
  - Supporting policy frameworks that improve the enabling environment for inclusive rural finance; and

- Building the capacity of public institutions and decentralized structures to support ongoing implementation beyond project closure.
36. Moreover, the project's use of matching grants and innovation windows is designed to catalyse scalable and replicable business models that can be sustained through market forces. Sustainability is further reinforced through cost-sharing arrangements with project participants and private partners, coupled with strategic alignment to national rural finance strategies and the Eighth National Development Plan.

### **III. Risk management**

#### **A. Risks and mitigation measures**

37. The additional financing does not introduce new risks, as foreseen at project design, and aligns fully with the original implementation arrangements. However, given that the project entered into force only in March 2025 and is still in the early stages of implementation, certain operational risks remain. These include potential delays in the recruitment of the PMU, establishment of operational accounts and coordination among implementing partners. These risks are being mitigated through close collaboration between IFAD and the Government of Zambia to expedite PMU recruitment and finalize operational set-up. Financial delivery risks, particularly around uptake and performance of financial service providers, are being addressed through phased implementation, blended finance arrangements that require counterpart contributions, and targeted technical assistance under the IOF. A strong results and risk management framework will guide monitoring and early response to implementation challenges.

#### **B. Environment and social category**

38. The environment and social categorization of the project remains unchanged under the additional financing. FIRIP continues to be rated a moderate operation under SECAP 2021. The nature of activities to be financed, primarily access to financial services, institutional strengthening and technical assistance, does not present significant adverse environmental or social risks. Instead, the project promotes social inclusion by targeting underserved groups, including women and youth, and contributes to environmentally sustainable practices through support for climate-resilient agricultural investments. All safeguard requirements identified during design remain applicable, and no new activities have been introduced under the additional financing that would warrant a change in classification.

#### **C. Climate risk classification**

39. The climate risk classification remains substantial. During design, the required targeted adaptation assessment was conducted to identify and evaluate specific adaptation measures to address climate risks and seize potential opportunities. The additional financing strengthens the project's ability to address climate risks by enabling the full implementation of activities aimed at improving access to climate-resilient financial services. Through facilities such as the IFO and BFF, the project supports investments in climate-smart technologies, weather index insurance and digital financial services tailored for smallholder farmers and rural entrepreneurs. The original climate risk assessment and associated mitigation measures, as cleared during design, remain valid and fully applicable for the full US\$30 million financing envelope.

### **IV. Implementation**

#### **A. Compliance with IFAD policies**

40. The additional financing remains fully compliant with IFAD's policies, procedures and operational guidelines. The original design of FIRIP, which incorporated a financing gap to be filled through subsequent allocations, was prepared and appraised in line with the IFAD SECAP, inclusive rural finance policy and targeting

policy. All safeguards, fiduciary requirements and policy compliance considerations were addressed at the design stage and remain valid for the full financing envelope. The additional financing also aligns with the IFAD13 priorities under the DSF, supporting climate-resilient rural financial inclusion, youth employment and private sector engagement through non-sovereign instruments. No changes to the project's scope, targeting strategy or financing structure have been made that would require additional policy review or reassessment. The operation continues to support the objectives of the IFAD Strategic Framework 2016–2025 and country strategic opportunities programme (COSOP) for Zambia.

## **B. Organizational framework**

### **Management and coordination**

41. The overall management and coordination arrangements for FIRIP remain unchanged under the additional financing. The project is implemented by MoFNP, which serves as the lead executing agency, with strategic guidance from a project steering committee composed of key stakeholders from the Government, the private sector and civil society. A dedicated PMU is being established within MoFNP to oversee day-to-day implementation, fiduciary management and coordination with implementing partners. Recruitment of PMU staff is currently being expedited following project entry into force in March 2025. The additional financing will support the same components and implementation structures as initially designed, including close collaboration with financial service providers, private sector actors and public institutions under the BFF and IOF. These implementation arrangements are designed to ensure strong coordination, accountability and delivery of results across the project's diverse financing and technical support activities.

### **Financial management, procurement and governance**

42. Financial management, procurement and governance arrangements for FIRIP remain consistent with those established at design and are fully applicable to the additional financing. MoFNP, through the PMU, will be responsible for all fiduciary functions, including financial reporting, fund flow management and adherence to IFAD's procurement guidelines. A designated account will be established, and operational accounts opened to support disbursements. Also, an additional designated account will be opened for the additional financing. IFAD will provide close implementation support during the initial phases to strengthen internal controls, ensure timely recruitment and training of financial and procurement staff, and support compliance with the approved procurement plan.
43. The project will follow IFAD's Project Financial Management and Financial Control Handbook and Project Procurement Guidelines, and Zambia's public financial management and audit frameworks. Procurement of goods, services and works will be carried out through competitive and transparent procedures, with prior and post review thresholds clearly defined in the procurement plan. Governance and accountability will be reinforced through internal audits, oversight by the steering committee and periodic supervision missions. No changes are envisaged to the fiduciary framework as a result of the additional financing, which was already foreseen at design and does not introduce new implementation modalities or risk categories.

## **C. Monitoring and evaluation, learning, knowledge management and strategic communication**

44. The M&E, knowledge management and communication arrangements established at design remain valid and applicable to the additional financing. The PMU, once fully operational, will be responsible for implementing the project's M&E system. The system will track project outputs, outcomes and impact, including disaggregated data by gender, age and youth to monitor inclusiveness and alignment with IFAD13 priorities. A baseline survey will be conducted in the first

year of implementation, and periodic outcome surveys and a midterm review will guide adaptive management.

45. Learning and knowledge management will be driven through documentation of results from the IOF and BFF, allowing replication and scaling of successful financial products and delivery models. Strategic communication will support stakeholder engagement, promote visibility of project achievements, and facilitate policy dialogue around inclusive rural finance. The additional financing enables full realization of the project's knowledge generation and learning goals, reinforcing FIRIP's contribution to Zambia's broader rural finance and economic inclusion strategy.

#### **D. Proposed amendments to the financing agreement**

46. The proposed additional financing of US\$21.1 million under IFAD13 will require an amendment to the existing financing agreement between the Republic of Zambia and IFAD to reflect the new financing amount and terms. The original financing agreement on 17 March 2025 included only the US\$8.9 million allocation under IFAD12 on highly concessional terms, while the remaining US\$21.1 million – anticipated at design as a financing gap – was earmarked to be covered under IFAD13 resources.
47. The additional IFAD13 financing will be provided under the DSF as a 100 per cent grant. As such, the amended agreement will update: (i) the total IFAD financing to US\$30 million; (ii) the inclusion of the US\$21.1 million DSF grant allocation; and (iii) any related adjustments to the disbursement schedule and financing percentages by expenditure category. No changes are proposed to the project's development objective, components, implementation arrangements or closing date.

#### **V. Legal instruments and authority**

48. An amendment to the financing agreement between the Republic of Zambia and IFAD will constitute the legal instrument for extending the proposed additional financing to the borrower/recipient. The amendment to the financing agreement will be prepared following approval of the additional financing.
49. The Republic of Zambia is empowered under its laws to receive financing from IFAD.
50. I am satisfied that the proposed additional financing will comply with the Agreement Establishing IFAD and the Policies and Criteria for IFAD Financing.

#### **VI. Recommendation**

51. I recommend that the Executive Board approves the additional financing in terms of the following resolution:

RESOLVED: that the Fund shall provide a Debt Sustainability Framework grant to the Republic of Zambia in an amount of twenty-one million one hundred thousand United States dollars (US\$21,100,000) and upon such terms and conditions as shall be substantially in accordance with the terms and conditions presented herein.

Alvaro Lario  
President

## Updated logical framework incorporating the additional financing<sup>2</sup>

Results Hierarchy	Indicators				Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End	Source	Frequency	Responsibility	
Outreach	<b>1 Persons receiving services promoted or supported by the project</b>				PfIs and CBFI promoters	Quarterly	ME&KM team	<i>outreach assumption:</i> <ul style="list-style-type: none"> <li>• The average household size in rural areas is 5 persons per household.</li> <li>• Each beneficiary comes from a different household (CI 1.a = CI 1). If other data on beneficiaries and households becomes available, this can be adjusted.</li> </ul>
	<i>Total number of persons receiving services (Number of people)</i>	0	148 044	370 110				
	<b>1.a Corresponding number of households reached</b>				PfIs and CBFI promoters	Quarterly	ME&KM team	
	<i>Households</i>	0	148 044	370 110				
Project Goal Improved rural livelihoods through economic growth and increased resilience	<b>1.b Estimated corresponding total number of households members</b>				PfIs and CBFI promoters	Quarterly	ME&KM team	<i>assumptions for sustainability:</i> <ul style="list-style-type: none"> <li>• Positive experiences with financial services will lead to a 'virtuous cycle' of using financial services; economic growth; and improved rural livelihoods.</li> </ul>
	<i>Household members (Number of people)</i>	0	740 220	1 850 550				
	<b>Change in household asset ownership</b>				COI Survey (additional questions for PSIs)	Outcome surveys (3x)	ME&KM team	
	<i>Household asset ownership index (percentage)</i>	49%	53%	60%				
Development <b>Objective</b> Increased use of financial services by poor rural men, women and youths, for growth of rural production systems and value chains, and to strengthen resilience and safety nets.	<b>Rural households reporting an increase in savings</b>							<i>development objective to goal:</i> <ul style="list-style-type: none"> <li>• Economic empowerment of women and joint household decision making contributes to increased income being used to address household needs</li> <li>• Stable political and economic environment.</li> </ul>
	<i>Proportion of rural households (Percentage)</i>	0	28%	70%				
	<b>Persons reporting improved income from economic activities (agriculture/IGAs)</b>				COI Survey (additional questions for PSIs)	Outcome surveys (3x)	ME&KM team	
	<i>Cat 1 beneficiaries with improved income (number)</i>	0	85 273	213 183				
	<i>Cat 2 beneficiaries with improved income (number)</i>	0	32 333	80 832				
	<i>Beneficiaries using financial services in all categories reporting improved income (number)</i>	0	118 435	296 088				
	<b>CI 2.2.1. Beneficiaries with new jobs/employment opportunities</b>				COI Survey	Outcome surveys (3x)	ME&KM team	
	<i>Total number of persons with new jobs/employment opportunities (Number of people)</i>	0	58 172	145 430				
	<b>IE.2.1 Individuals demonstrating an improvement in empowerment</b>				COI Survey	Outcome surveys (3x)	ME&KM team	
	<i>Total persons (number of people)</i>	0	28 129	140 642				
	<b>CI 3.2.2. Households reporting adoption of environmentally sustainable and climate-resilient technologies and practices</b>				COI Survey	Outcome surveys (3x)	ME&KM team	
	<i>Households (Number)</i>	0	33 442	83 604				
Outcome 1 Improved availability of sustainable client-centric rural financial services for specific sectors and groups	<b>SF 2.2 Households reporting they can influence decision-making of local authorities and project-supported service providers</b>				COI Survey	Outcome surveys (3x)	ME&KM team	<i>outcome to development objective:</i> <ul style="list-style-type: none"> <li>• Beneficiaries make good use of financial services, for productive investment, adaptation and green technologies, or to cope with shocks affecting the household.</li> <li>• An enabling policy environment and corresponding incentives are in place, encouraging FSPs to offer financial services and products to rural communities at affordable rates.</li> <li>• Sufficient economic/investment</li> </ul>
	<i>Households (Number)</i>	0	7 402	37 011				
	<b>Number of new financial products, services and delivery mechanisms deployed</b>				IOF recipients	Semi-annual	ME&KM team	
	<i>Financial products and services (Number)</i>	0	12	24				
	<b>Number of access points for formal financial services established</b>				PfIs (banks, MFIs)	Annually	ME&KM team	
	<i>Access points (Number)</i>	0	11 250	22 500				
	<b>CI 1.2.6 Partner financial service providers with PAR ≥ 30 days below 5%</b>							
	<i>Percentage</i>	57%	59%	62%				
	<b>CI 1.2.7 Financial service providers with operational self-sufficiency above 100%</b>							
	<i>Percentage</i>	57%	59%	62%				
	<b>Proportion of non-performing loans in the loan portfolio of banks (agriculture, small and emergent)</b>							
	<i>agriculture - small and emerging farmers (Percentage)</i>	8.7%	< 6.0%	< 5.0%				

<sup>2</sup> Concise two-page version, by shortening some descriptions and removing indicator disaggregation - which will be retained in ORMS and the M&E system.

Results Hierarchy	Indicators				Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End	Source	Frequency	Responsibility	
	<i>MSMEs (Percentage)</i>	13.7%	< 12.3%	< 10.0%				opportunities and capacity of the target group to make use of those opportunities.
<b>Output 1.1</b> Effective mechanism for the development of innovative rural financial products, services and delivery mechanisms	<b>CI 1.1.6 Financial service providers supported in delivering outreach strategies, financial products and services to rural areas</b> <i>Service providers (number)</i>	0	29	57	PMU (contracts, MOUs)	Semi-annual	ME&KM team	<i>output to outcome:</i> • Enough FSPs are willing to develop client-centric rural financial services. • FSPs demonstrate a willingness to participate in capacity-building initiatives.
<b>Outcome 2</b> Increased uptake of more suitable and affordable sources of finance by the target group	<b>CI 1.2.5. Households reporting using financial services</b> <i>Households (Number)</i>	0	97 561	296 088	COI Survey	Outcome surveys (3x)	ME&KM team	<i>outcome to development objective:</i> Beneficiaries make good use of financial services, for productive investment or to increase resilience. Rural communities have capacity to utilise financial services for climate smart and profitable enterprises.
	<i>Households (Percentage)</i>	55.9%	66%	80%				
	<b>SF 2.1 Households satisfied with project-supported services</b> <i>Households (Number)</i>	0	103 631	296 088	COI Survey	Outcome surveys (3x)	ME&KM team	
	<i>Households (Percentage %)</i>	0	70%	80%				
<b>Output 2.1</b> Access to affordable loans and other financial services for agriculture and green investments enhanced	<b>CI 1.1.5 Persons in rural areas accessing financial services</b> <i>Total persons accessing financial services (all services)</i>	0	126 204	315 511	PFIs (banks, MFIs) and CBFi promoters	Quarterly	ME&KM team	<i>output to outcome:</i> • Interest of beneficiaries to invest in climate-smart and green technologies. • Effective cooperation with complementary development initiatives. • A sufficient number of reliable suppliers of green technologies. • Effective promotion of CSA and green technologies, and an increasing interest in these technologies.
	<i>Persons accessing financial services (savings)</i>	0	88 260	220 650				
	<i>Persons accessing financial services (credit)</i>	0	81 661	204 152				
	<i>Persons accessing financial services (insurance)</i>	0	13 812	34 530				
	<i>Persons accessing financial services (digital payment services)</i>	0	67 200	168 000				
	<b>Households accessing green technologies</b> <i>Households (Number)</i>	0	41 802	104 505	IOF partners; PMU	Semi-Annual	ME&KM team	
<b>Output 2.2</b> Capacity of rural men, women, youths and MSMEs to obtain and effectively utilize financial services strengthened	<b>CI 1.1.7 Persons in rural areas trained in financial literacy and/or use of financial products and services</b> <i>Persons in rural areas trained in FL and/or use of FProd and Services (total) (Number of people)</i>	0	60 000	150 000	IOF recipients	Quarterly	ME&KM team	<i>output to outcome:</i> • Interest of beneficiaries to invest in climate-smart and green technologies. • Effective cooperation with complementary development initiatives. • Sufficient numbers of interested people in selected rural areas to justify rollout.
	<b>CI 3.1.1 Groups supported to sustainably manage natural resources and climate-related risks</b> <i>Groups supported (number)</i>	0	1 000	2 500				
<b>Outcome 3</b> Enhanced enabling environment for inclusive rural financial service provision	<b>Change in volume to agriculture lending to smallholders</b> <i>Annual disbursements to agriculture (small and emergent) (million USD)</i>	20.1	23.1	34.2	Bank of Zambia's Credit Market Survey	Semi-Annual	ME&KM team	<i>outcome 3 to outcome 1&amp;2:</i> • Private sector actors (FSPs, MNOs) are willing and able to respond to opportunities offered by a more conducive policy and regulatory framework.
	<b>Formally financially included adults in rural areas</b> <i>Rural adults (Percentage %)</i>	44%	48%	57%	FinsScope; MOFNP	Outcome surveys (3x)	ME&KM team	
<b>Output 3.1</b> Policies, laws, regulations and institutions supported to create an enabling environment for rural finance	<b>Strategic partnerships established to enhance policy review and coordination, and to support implementation</b> <i>Partnerships (Number)</i>	0	6	6	PCU (MOUs)	Semi-Annual	ME&KM team	<i>output to outcome:</i> • Government will prioritize creating an enabling environment for rural finance. • Partners see value in the project and is being part of its implementation. • There is buy-in from stakeholders to participate in multi-stakeholders dialogues
	<b>Policy 1: Policy-relevant knowledge products completed</b> <i>Knowledge products (Number)</i>	0	2	6	PCU	Semi-Annual	ME&KM team	
	<b>Laws, regulations and policies supported by the project</b> <i>Number</i>	0	2	4	National Government	Semi-Annual	ME&KM team	

## Updated summary of the economic and financial analysis

Table A: Financial cash flow models

Project Year	Farm models' net incremental benefits (in ZMW)									
	Tomato Model	Soyabean Model	Maize Model	G.Nuts Model	Cowpeas Model	Livestock - Goats Model	Livestock - Chicken model	Maize Processing	G.Nuts Processing	Laundry Services
PY1	(50,600)	(50,078)	(12,363)	(56,714)	(2,928)	(23,762)	6,017	(43,280)	(43,430)	(28,223)
PY2	9,400	16,990	3,429	7,886	288	3,141	10,441	9,520	3,345	4,537
PY3	16,920	20,524	5,008	14,276	1,079	8,181	12,837	9,520	16,350	12,907
PY4	26,840	24,058	5,008	18,110	1,870	18,543	10,957	9,520	16,350	21,277
PY5	30,400	24,058	5,008	21,944	1,870	19,743	12,837	21,760	16,350	21,277
PY6	31,600	24,058	5,008	21,944	1,870	21,543	12,837	21,760	16,350	21,277
PY7	30,400	24,058	5,008	21,944	1,870	21,543	10,957	21,760	16,350	21,277
PY8	31,600	24,058	5,008	21,944	1,870	21,543	12,837	21,760	16,350	21,277
PY9	30,400	24,058	5,008	21,944	1,870	21,543	12,837	21,760	16,350	21,277
PY10	31,600	24,058	5,008	21,944	1,870	21,543	10,957	21,760	16,350	21,277
PY11	30,400	24,058	5,008	21,944	1,870	21,543	12,837	21,760	16,350	21,277
PY12	31,600	24,058	5,008	21,944	1,870	21,543	12,837	21,760	16,350	21,277
PY13	30,400	24,058	5,008	21,944	1,870	21,543	10,957	21,760	16,350	21,277
PY14	31,600	24,058	5,008	21,944	1,870	21,543	12,837	21,760	16,350	21,277
PY15	30,400	24,058	5,008	21,944	1,870	21,543	12,837	21,760	16,350	21,277
PY16	31,600	24,058	5,008	21,944	1,870	21,543	10,957	21,760	16,350	21,277
PY17	30,400	24,058	5,008	21,944	1,870	21,543	12,837	21,760	16,350	21,277
PY18	31,600	24,058	5,008	21,944	1,870	21,543	12,837	21,760	16,350	21,277
PY19	30,400	24,058	5,008	21,944	1,870	21,543	10,957	21,760	16,350	21,277
PY20	31,600	24,058	5,008	21,944	1,870	21,543	12,837	21,760	16,350	21,277
IRR	42%	42%	37%	29%	42%	47%	Num	34%	30%	49%
NPV (ZMW) @12%	193,589	156,865	31,352	120,040	11,796	138,154	111,678	122,625	92,799	92,705
B/C Ratio	1.54	1.60	1.61	2.30	2.88	2.11	1.3	1.0	1.3	2.2
Return to Family Labour (ZMW)	308.5	1,035.7	261.1	1,303.2	576.4	1,630.9	134	805	945	N/A

Table B: Project/programme costs and logframe targets

PROGRAMME COSTS AND INDICATORS FOR LOGFRAME	
TOTAL PROGRAMME COSTS (in million USD )	
Persons receiving services promoted or supported by the project	370,110
Persons reporting improved income from economic activities (agric./IGA - 80%)	296,088
Households reporting using financial services (80% of the beneficiaries)	296,088
Beneficiaries with new jobs/employment opportunities	145,430
Cost per Household	135
Components and Cost (USD million)	
A. Improved Availability and Use of Client-Centric Financial Services	38.7
B. Enhanced Enabling Environment For Inclusive Rural Financial Services	4.0
C. Project Coordination and Implementation, Monitoring & Evaluation, and Knowledge Management	7.2
<b>Total</b>	<b>49.9</b>

**Table C: Main assumptions and shadow prices**

MAIN ASSUMPTIONS & SHADOW PRICES					
FINANCIAL		Yields (Annually) Kg			
	Model	Unit of measure	WOP	WP	Price (ZMW)
	Tomato Model	Kg	2,000	6,000	15
	Soyabean Model	Kg	800	3,100	12
	Maize Model	Kg	3,000	6,300	6
	G.Nuts Model	Kg	370	2,200	15
	Cowpeas Model	Kg	700	950	18
	Livestock - Goats Model	Head	1	15	1,500
	Livestock - Chicken model	Bird	40	200	250
	Maize Processing	Kg	-	36,000	13
	G.Nuts Processing	Kg	-	2,040	80
Economic	Standard Conversion Factor	0.93	Discount rate for Financial Analysis		8%
	Labour Conversion Factor	0.94	Discount rate for Economic Analysis		25.5%
	Unemployment Rate	5.9%	VAT rate on imports		16%

**Table D: Beneficiary adoption rates and phasing**

Household Phasing	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Total	
No. of Beneficiaries Phased by Year	370,110	4,843	67,791	77,478	74,824	73,800	49,054	22,320	370,110
Cumulative Number of Households	4,843	72,634	150,112	224,936	298,736	347,789	370,110		370,110
Adoption Rate	80%								
Beneficiary Aggregation									
Beneficiaries in Y1	3,874	54,233	61,982	59,859	59,040	39,243	17,856		
Beneficiaries in Y2		3,874	54,233	61,982	59,859	59,040	17,856		
Beneficiaries in Y3			3,874	54,233	61,982	59,859	59,040	39,243	17,856
Beneficiaries in Y4				3,874	54,233	61,982	59,859	59,040	39,243
Beneficiaries in Y5					3,874	54,233	61,982	59,859	59,040
Beneficiaries in Y6						3,874	54,233	61,982	59,859
Beneficiaries in Y7							3,874	54,233	61,982
Beneficiaries in Y8								3,874	54,233
Beneficiaries in Y9									3,874
Total Beneficiaries	3,874	58,107	120,090	179,949	238,989	278,232	296,088	296,088	296,088

Table E: Economic cash flow

Project year	Incr. IOF Econ Benefits				Incr. Blending Facility		Self Employment	Incremental Fam Benefits (ZMW'000)	Economic Project Costs (ZMW'000)				Cash-flow
	IOF Window 1	IOF Window 2	IOF Window 3	CBFIs	MFIs/ SACCOS	Banks			Investment Costs	Recurrent Costs	Addback costs - Line of credit/Transaction costs	Total Economic Costs	
PY1	-	-	-	-	-	-	-	-	8,771	6,847	-	15,618	(15,618)
PY2	-	-	-	-	-	-	-	-	198,438	20,185	100,000	118,623	(118,623)
PY3	4,129	(180,399)	(180,399)	(469,115)	(30,760)	(56,883)	-	(913,427)	229,676	20,185	100,000	149,860	(1,063,287)
PY4	8,257	(325,083)	(325,083)	(871,734)	(25,621)	(46,998)	64,791	(1,521,469)	221,118	20,185	100,000	141,302	(1,662,772)
PY5	8,257	(221,432)	(221,432)	(700,906)	(21,699)	(39,539)	194,373	(1,002,377)	217,815	20,185	100,000	137,999	(1,140,376)
PY6	8,257	(62,807)	(62,807)	(468,910)	(18,704)	(33,909)	323,954	(314,926)	138,010	20,185	50,000	108,194	(423,120)
PY7	4,129	310,208	310,208	266,652	2,336	1,593	453,536	1,348,660	51,797	20,185		71,982	1,276,679
PY8	4,129	485,165	485,165	501,058	22,838	36,054	518,327	2,052,735		3,028		3,028	2,049,708
PY9	4,129	814,584	814,584	1,189,113	24,179	38,481	583,118	3,468,188		3,028		3,028	3,465,161
PY10	4,129	904,605	904,605	1,317,262	25,207	40,316	583,118	3,779,242		3,028		3,028	3,776,214
PY11	4,129	951,165	951,165	1,396,454	25,996	41,704	583,118	3,953,731		3,028		3,028	3,950,703
PY12	4,129	951,165	951,165	1,396,454	25,996	41,704	583,118	3,953,731		3,028		3,028	3,950,703
PY13	4,129	951,165	951,165	1,396,454	25,996	41,704	583,118	3,370,613		3,028		3,028	3,367,586
PY14	4,129	951,165	951,165	1,396,454	25,996	41,704	583,118	3,370,613		3,028		3,028	3,367,586
PY15	4,129	951,165	951,165	1,396,454	25,996	41,704	583,118	3,370,613		3,028		3,028	3,367,586
PY16	4,129	951,165	951,165	1,396,454	25,996	41,704	583,118	3,370,613		3,028		3,028	3,367,586
PY17	4,129	951,165	951,165	1,396,454	25,996	41,704	583,118	3,370,613		3,028		3,028	3,367,586
PY18	4,129	951,165	951,165	1,396,454	25,996	41,704	583,118	3,370,613		3,028		3,028	3,367,586
PY19	4,129	951,165	951,165	1,396,454	25,996	41,704	583,118	3,370,613		3,028		3,028	3,367,586
PY20	4,129	951,165	951,165	1,396,454	25,996	41,704	583,118	3,370,613		3,028		3,028	3,367,586
NPV @ 12% (ZMW'000)													969,234
NPV @ 12% (USD'000)								1,278,761				309,527	38,769
EIRR													34%
BCR													4.13

Table F: Sensitivity analysis

Year	1	2	3	4	5	6	7	8	9	10	11	12	13-20
<b>Incremental Benefits</b>	-	-	913,427	- 1,521,469	- 1,002,377	- 314,926	1,348,660	2,052,735	3,468,188	3,779,242	3,953,731	3,953,731	3,370,613
benefits +10%	-	-	1,004,770	- 1,673,616	- 1,102,615	- 346,418	1,483,526	2,258,009	3,815,007	4,157,166	4,349,104	4,349,104	3,707,675
benefits +20%	-	-	1,096,112	- 1,825,763	- 1,202,852	- 377,911	1,618,392	2,463,282	4,161,826	4,535,090	4,744,477	4,744,477	4,044,736
Mild scenario	-	-	822,084	- 1,369,322	- 902,139	- 283,433	1,213,794	1,847,462	3,121,369	3,401,317	3,558,358	3,558,358	3,033,552
Medium scenario	-	-	730,742	- 1,217,175	- 801,902	- 251,941	1,078,928	1,642,188	2,774,551	3,023,393	3,162,985	3,162,985	2,696,491
High scenario	-	-	639,399	- 1,065,028	- 701,664	- 220,448	944,062	1,436,915	2,427,732	2,645,469	2,767,612	2,767,612	2,359,429
<b>Project Costs</b>	15,618	118,623	149,860	141,302	137,999	108,194	71,982	3,028	3,028	3,028	3,028	3,028	3,028
costs +10%	17,180	130,485	164,846	155,433	151,799	119,014	79,180	3,330	3,330	3,330	3,330	3,330	3,330
costs +20%	18,741	142,347	179,832	169,563	165,599	129,833	86,378	3,633	3,633	3,633	3,633	3,633	3,633
costs +30%	23,427	177,934	224,790	211,954	206,999	140,652	93,576	3,936	3,936	3,936	3,936	3,936	3,936
<b>Net cash flow</b>													
base scenario	(15,618)	(118,623)	(1,063,287)	(1,662,772)	(1,140,376)	(423,120)	1,276,679	2,049,708	3,465,161	3,776,214	3,950,703	3,950,703	3,367,586
costs +10%	(17,180)	(130,485)	(1,078,273)	(1,676,902)	(1,154,176)	(433,939)	1,269,480	2,049,405	3,464,858	3,775,911	3,950,400	3,950,400	3,367,283
costs +20%	(18,741)	(142,347)	(1,093,259)	(1,691,032)	(1,167,976)	(444,759)	1,262,282	2,049,102	3,464,555	3,775,608	3,950,098	3,950,098	3,366,980
costs +30%	(23,427)	(177,934)	(1,138,217)	(1,733,423)	(1,209,376)	(455,578)	1,255,084	2,048,799	3,464,252	3,775,306	3,949,795	3,949,795	3,366,677
benefits +10%	(15,618)	(118,623)	(1,154,630)	(1,814,919)	(1,240,614)	(454,613)	1,411,545	2,254,981	3,811,979	4,154,138	4,346,076	4,346,076	3,704,647
benefits +20%	(15,618)	(118,623)	(1,245,973)	(1,967,065)	(1,340,852)	(486,105)	1,546,411	2,460,255	4,158,798	4,532,062	4,741,449	4,741,449	4,041,708
benefits -10%	(15,618)	(118,623)	(971,944)	(1,510,625)	(1,040,139)	(391,627)	1,141,812	1,844,434	3,118,342	3,398,290	3,555,330	3,555,330	3,030,524
benefits -20%	(15,618)	(118,623)	(880,602)	(1,358,478)	(939,901)	(360,135)	1,006,946	1,639,161	2,771,523	3,020,366	3,159,957	3,159,957	2,693,463
benefits -30%	(15,618)	(118,623)	(789,259)	(1,206,331)	(839,663)	(328,642)	872,080	1,433,887	2,424,704	2,642,441	2,764,584	2,764,584	2,356,402
benefits delayed 1 year	(15,618)	(118,623)	(149,860)	(1,054,729)	(1,659,469)	(1,110,571)	(386,908)	1,345,632	2,049,708	3,465,161	3,776,214	3,950,703	3,950,703
benefits delayed 2 years	(15,618)	(118,623)	(149,860)	(141,302)	(1,051,426)	(1,629,663)	(1,074,359)	(317,954)	1,345,632	2,049,708	3,465,161	3,776,214	3,950,703
benefits delayed 3 years	(15,618)	(118,623)	(149,860)	(141,302)	(137,999)	(1,021,621)	(1,593,451)	(1,005,405)	(317,954)	1,345,632	2,049,708	3,465,161	3,776,214
benefits delayed 4 years	(15,618)	(118,623)	(149,860)	(141,302)	(137,999)	(108,194)	(985,409)	(1,524,497)	(1,005,405)	(317,954)	1,345,632	2,049,708	3,465,161
Adoption rate 90%	(15,618)	(118,623)	(643,111)	(962,896)	(679,283)	(278,254)	656,295	1,105,449	1,869,794	2,037,763	2,131,987	2,131,987	1,817,103
Adoption rate 80%	(15,618)	(118,623)	(588,305)	(871,608)	(619,140)	(259,359)	575,375	982,285	1,661,703	1,811,008	1,894,763	1,894,763	1,614,867
Adoption rate 70%	(15,618)	(118,623)	(533,500)	(780,319)	(558,998)	(240,463)	494,456	859,121	1,453,611	1,584,254	1,657,539	1,657,539	1,412,630
<b>Discount rate</b>	<b>26%</b>												
Sensitivity Analysis	Base case	Costs Increase			Benefits Increase		Decrease of Benefits			Delay of Benefits			
		+10%	+20%	+50%	+10%	+20%	-10%	-20%	- 30%	1 year	2 years	3 years	4 years
IRR (%)	34%	33%	33%	32%	34%	34%	33%	33%	32%	32%	31%	29.3%	27.5%
NPV (MZW '000)	969,234	938,281	907,329	823,404	1,097,110	1,224,986	841,358	713,482	585,606	680,818	451,004	267,885	121,974
NPV (USD '000)	38,769	37,531	36,293	32,936	43,884	48,999	33,654	28,539	23,424	27,233	18,040	10,715	4,879