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OFFICE OF EVALUATION AND INTERNAL OVERSIGHT

INDEPENDENT TERMINAL EVALUATION

Rwanda

JOINT EVALUATION OF THE PROJECT "CAPACITY- BUILDING FOR INDUSTRIAL RESEARCH AND DEVELOPMENT IN RWANDA"

UNIDO PROJECT ID: 150442



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Abbreviations and acronyms

Acronym	Meaning
BDF	Business Development Fund
CfP	Call for Proposals
CIP	Competitive Industrial Performance
CMT	Change Management team
DAC	Development Assistance Committee
EDPRS	Economic Development and Poverty Reduction Strategies
EU	European Union
GIL	Gender Innovation Lab
GDP	Gross Domestic Product
GoR	Government of Rwanda
ISID	Inclusive and sustainable industrial development
ISTR	Institute for Scientific and Technological Research
KOICA	Korea International Cooperation Agency
MDG	Millennium Development Goals
MINECOFIN	Ministry of Finance and Economic Planning
MIFOTRA	Ministry of Public Service and Labour
MINICOM	Ministry of Trade and Industry
M&E	Monitoring and Evaluation
NIRDA	National Industrial Research and Development Agency
NPD	National Project Director
NST	National Strategy for Transformation
PMO	Office of the Prime Minister
PSC	Project Steering Committee
RD	Research Development
SDG	Sustainable Development Goals
SMEs	Small and Medium Enterprises
SoPs	Standard Operation Procedures
SSA	Sub Saharan African countries
TE	Terminal Evaluation
ToC	Theory of Change
ToR	Terms of Reference
UNIDO	United Nations Industrial Development Organisation
UNEG	United Nations Evaluation Guidelines

Glossary of evaluation-related terms

Term	Definition
Baseline	The situation, before an intervention, against which progress can be assessed.
Effect	Intended or unintended change due directly or indirectly to an intervention.
Effectiveness	The extent to which the development intervention's objectives were achieved or are expected to be achieved.
Efficiency	A measure of how resources/inputs (funds, expertise, time, etc.) are converted to results.
Impact	Positive and negative, intended and non-intended, directly and indirectly, long term effects produced by a development intervention.
Indicator	Quantitative or qualitative factors that provide a means to measure the changes caused by an intervention.
Lessons learned	Generalizations based on evaluation experiences that abstract from the specific circumstances to broader situations.
Logframe (logical framework approach)	A management tool used to facilitate the planning, implementation, and evaluation of an intervention. It involves identifying strategic elements (activities, outputs, outcome, impact) and their causal relationships, indicators, and assumptions that may affect success or failure. Based on RBM (results-based management) principles.
Outcome	The likely or achieved (short-term and medium-term) effects of an intervention's outputs.
Outputs	The products, capital goods, and services which result from an intervention; may also include changes resulting from the intervention which are relevant to the achievement of outcomes.
Relevance	The extent to which the objectives of intervention are consistent with beneficiaries' requirements, country needs, global priorities, and partners' and donor's policies.
Risks	Factors, generally outside the scope of an intervention, which may affect the achievement of an intervention's objectives.
Sustainability	The continuation of benefits from an intervention, after the development assistance, has been completed.
Target groups	The specific individuals or organizations for whose benefit an intervention is undertaken.
Theory of Change	A set of hypotheses on how and why an initiative works.

Executive summary

Project title	Capacity-building for industrial research and development in Rwanda
UNIDO project ID	150442
Region	Eastern Africa
Country	Rwanda
Implementation start date	July 2016
Planned implementation end date	December 2017
Actual implementation end date	October 2019
Implementing agency(ies)	UNIDO
Donor(s):	Korea International Cooperation Agency (KOICA)
Total project allotment	USD 2,123,894
Planned terminal evaluation date	July-September 2019

(Source: Project document)

1. Evaluation purpose and methodology

This independent final evaluation's purpose is to independently assess the Capacity-Building for Industrial Research and Development in Rwanda project, to help UNIDO improve its performance and results of ongoing and future programmes and projects. This evaluation has considered the whole implementing period of the project, including two extensions, from July 2016 to October 2019. Overall, the evaluation focused on two specific objectives: i) providing an assessment of the project performance in terms of the DAC criteria (relevance, effectiveness, efficiency, sustainability, and progress to impact (accountability) and ii) developing a series of findings, lessons, and recommendations for enhancing the design of new and implementation of ongoing projects by UNIDO.

The evaluation methodology used a participatory approach, by consulting all relevant stakeholders involved in the project (either as target groups, and/or direct beneficiaries as well as final beneficiaries). The Theory of Change, together with the problem and solution tree diagram and mixed methods of collecting data and information, have been used in the evaluation work. Special attention has been given to the triangulation of the data and documentation received and the information collected during the field mission. The evaluation was a joint UNIDO-KOICA effort and included briefings with UNIDO HQ, desk research, a field mission to Rwanda, debriefing in UNIDO HQ, analysis, synthesis, and reporting.

2. Key findings

Project relevance:

The project has been extremely relevant to the Government of Rwanda (GoR)'s national industrial policy objectives, representing a logical technical solution to support the GoR in carrying out the restructuring of the National Industrial Research and Development Agency (NIRDA) as well as providing much needed capacity to allow NIRDA to become the national agency that supports Rwandan enterprises to acquire and adopt new technology and generate industrial growth.

Project design:

Most aspects of the initial project design were satisfactory, and showed UNIDO's technical skills and experience. However, the design was not without some weaknesses, and in particular a gap

between the project's general and specific objectives that are primarily medium- to long-term objectives and the mainly short-term core implementation focus (centred primarily around building NIRDA's re-visioning, restructuring, and building organisation processes and staff capacities). This gap between the overall objective of increasing Rwanda's industrial sector competitiveness would have been attainable with difficulty, but was made much less attainable by the significant reduction (in half) of the project budget at the outset. A second weakness is to some extent that the project design was slightly overly-centred on NIRDA, and that the core implementation work with companies (Output 5b) might have been more visible as a stand-alone Output and made the critical path of the project clearer for all to see. However, if NIRDA continues having several calls for proposals in relevant sectors and the support to SMEs is carried in a tailored manner with relevant technical support, there is a high potential for achieving the long-term objective of increasing the competitiveness of Rwanda's industrial sector. Notwithstanding the above-mentioned design flaws, the detailed Problem and Solution Tree Diagram used during project design should be acknowledged as a strength of the design process, and can be described as good/better practice.

Efficiency:

The project has had to deal with significant delays, which in at least in part were outside its direct control. Lengthy NIRDA and in particular Government, approval processes and timeframes have led to significant delays – for example approval of the project's work plan, activities and main deliverables has required a lengthy review and approval process at GoR, starting with NIRDA General Director approval, followed by NIRDA Board of Directors, reviews by the Ministry of Trade and Industry (MINICOM) and the Prime minister's office (PMO) and culminating with Presidential Cabinet approval. This approval process generated a delay of at least 12 months in the total implementation period and has represented a significant constraint on the efficiency of the implementation effort. The project has also undergone a series of changes key personnel (within NIRDA, UNIDO and to a lesser degree in KOICA) that has also affected project performance and efficiency.

Regarding collaboration between the partners, the UNIDO team in Rwanda and in UNIDO HQ have experienced varying levels of collaboration and implementation urgency, ranging from non-collaboration to over-collaboration, and from non-advancement to a pressing rush to complete the Pilot Projects, procurement, and recruitment. During the first two years, valuable time was lost due to resistance from NIRDA senior leadership, which deprived the project of valuable time for NIRDA's new strategy and organigramme to "bed down" and to be implemented in the organisation's daily operation. This also contributed to wider resistance to change, and to frustration among staff about poor communication and co-ordination about the changes. Furthermore, NIRDA staff and management have also had to deal with the uncertainty regarding the maintenance of their work on NIRDA or not. Despite having provided different possible contingency measures, and a good risk analysis, there has been a lack of clear communication to ensure the continuation of the project during the first two years.

Progress against results

The evaluation findings show that some outputs required more time than expected and have undergone modifications, even after near completion. Output 1 (NIRDA strategy and action plan) underwent a lengthy process of government review and approval before being approved and ready for implementation, followed by Outputs 2 and 3 that were dependent on the Output 1. While output 4 (capacity development programme for NIRDA's management and staff) was established and implemented following outputs 2 and 3 design and within a limited period. Outputs 5.1 and 5.2 were implemented in a short period of time. It should be mentioned that the training of NIRDA's staff was in parallel to Output 5.2 which given the implemented period did not have time to be consolidated.

Overall, all the Outputs (6 in total) have been completed to a certain degree, and have certainly contributed to building the capacity of NIRDA, in particular the development of NIRDA's strategy and action plan, upgrading of the organisational structure and management operations, together with the operational systems, procedures, and processes. The capacity of NIRDA staff to take on board new roles has been strengthened, as has NIRDA's facilities and capabilities to provide support to enterprises and become an efficient partner (including learning to organise open Calls for Proposals and become more hands-on), thanks to the proactivity and willingness of the UNIDO and NIRDA management teams.

Lessons Learned

The project has generated significant and value lessons learned, as summarised below.

- 1. Significant NIRDA potential to contribute to achievement of Rwanda's industrial policy goals:** NIRDA is showing potential to make a significant contribution to achieving Rwanda's industrial policy goals, which can for example be seen in its increasing capacity to provide real and increasing value to enterprises, and can be an important tool for GoR in its ambitious agenda to aggressively develop Rwanda's industrial and enterprise competitiveness. Continued and appropriate support can further accelerate the path to realising this potential.
- 2. A customised appropriate GoR process for approval and engagement with NIRDA.** NIRDA's business is distinct and not typical of a government ministry, and requires ongoing management and ensuring engagement milestones and actions to support the enterprises it is working with, and to make its best contribution to achieving Rwanda's industrial policy goals. This requires a customised, efficient approval and management practices from government that reflects these needs.
- 3. Organisational change is never easy, and external KOICA-UNIDO support has helped NIRDA navigate this transition:** All organisation change and transition are difficult, and this project's implementation experience has shown that, with the process of organisational transition having been made much more difficult by the delays and initial lack of senior management buy-in at NIRDA. Despite the delays and implementation challenges NIRDA has undergone a process of institutional transformation that would have been difficult to bring about without an external project support.
- 4. NIRDA's value proposition and market reputation is growing, and leveraging other International financing:** The capacity enhancement and work on organisational and staff development and transition at NIRDA has put the organisation on a stronger institutional footing, with the equipping of staff with tools, knowledge, guidance manuals, SOPs in areas such as working with companies, management, production, technology audits, procurement management, value chain development etc. being fundamental to this increased take-up of NIRDA services. An example is UNIDO's work on the Call for Proposals process and the rigorous approach to value chain analysis and evidence-based assessment. This increased solicitation of NIRDA increases its prospects for not just for **institutional sustainability but also financial sustainability**, through new project and other income streams
- 5. Need for continued NIRDA management and institutional capacity development:** Notwithstanding the important progress in building capacity in NIRDA, it remains overly-reliant on management capability at the Director-General level and the next phase needs to place significant focus in building out staff capacity and middle management and operational levels, including greater skills to work with and mentor private sector enterprises and increased entrepreneurial skillsets.
- 6. International Partners can bring more to NIRDA:** There is scope for the international partners to increase the value and synergy of their support to NIRDA. For example, KOICA could reflect

on how Rwanda can benefit from South Korea's own impressive transition and journey over the past 60 years.

7. **NIRDA's potential and leverage can be maximised in part through increased focus on the wider enabling environment, including the private sector financing ecosystem:** Going forward, greater focus also needs to be placed on the wider enabling environment, and in particular the private sector financing ecosystem, with a view to building greater sustainability that can complement and leverage NIRDA and GoR support to Rwanda enterprise.

3. Conclusions and Recommendations

Conclusions

C1: Relevance and Quality of Design: Regarding **relevance**, the project is highly coherent with, and relevant to, national industrial policy implementation, as well as the National Strategy for Transformation (NST), as well as the country's wider needs and development priorities. Regarding **Quality of Design**, while the project design was based on a solid analysis of the needs and constraints of NIRDA there is however a lack of coherence between the long-term goal and the project's objectives, with the overall objective of the action¹ not attainable within this project's implementation period. This design weakness that has been further accentuated by the decision to cut the project implementation period by half and by other factors that reduced the pace of progress (see below).

C2: Effectiveness: The project has partially achieved its objectives - the specific objective of facilitating Rwanda enterprises' access to a range of technology support services to support their technology acquisition, adaptation and commercialisation has at the time of the evaluation only been partially achieved as NIRDA has only implemented one open call and has launched two new open calls. However, it is important to emphasise that this specific objective remains achievable for as long as NIRDA continues implementing open calls for value chains.

C3: Efficiency: The project has been constrained by numerous implementation and management constraints, which has led to the project's efficiency being sub-optimal. Project implementation has been constrained by the reduction of the 36-month implementation timeframe to 18 months, but without any adaptation of the activities to be implemented. During the project's lifespan there had been two extensions², which has meant the final project duration was 40 months, and raised questions as to the rationale, wisdom, and approval of the initial halving of the project timeframe. Another significant efficiency constraint has been the delays of more than 12 months due to slow project approval processes, and slow government decision-making procedures.

C4: Impact: The project has impacted positively through the restructuring of NIRDA and the related behavioural change in NIRDA staff, with the organisation now demand-driven and more aligned with private sector needs and national priorities as elaborated in the National Strategy for Transformation. The project is also showing potential to impact positively on national economic competitiveness, following the two additional Open Calls that NIRDA has been implementing since September 2019 and the recognition of the Rwandan enterprises who thanks to the Garment and Banana Wine grant and training have changed and improved their operations and business management as result of support under the Garment and Banana Wine grant and training delivered by the Business Professionals Network (BPN). Furthermore, the replication and broader adoption of the project is relatively promising, with good visibility of NIRDA's newly acquired capacities in CfP management and in the sector of focus. Furthermore, the creation of baselines as well as

¹ Improve competitiveness of new and existing Rwanda industries in order to increase their export potential and/or their potential to undertake import substitution.

² A first extension of 12 months was approved, along with an increase of USD 100,000 in the total budget, and second extension of 10 months without budget increment.

Standard Operating Procedures offers good potential for dissemination and self-replication alongside Rwandan enterprises, although this is not officially systematized.

Break this up into bullets-

C5: Sustainability: With the completion of NIRDA's new structure, strategy, and action plan, coupled with capacity building of the newly-recruited staff, the project shows some promising prospects for sustainability. NIRDA has also been successfully established in a government-endorsed role and has received capacity development to enable it to carry out its new functions as per the two new Calls for Proposal³ that it has launched and the applied research services that it is providing. However, the long-term financial sustainability of NIRDA will require not only driving technology acquisition and adoption but also supporting the financial capacity and adaptability of supported target enterprises if the objective of increasing Rwanda's Industrial capacity is to be attained. There is also good potential for both environmental safeguarding and social inclusion, both guided by the UNIDO vision of development, with the pilot projects having considered environmental issues, and industrialization offers further potential for future employment and thus social inclusion.

C6: Project impact – A counterfactual perspective: In assessing the ultimate impact (and value) of the project it is worth taking a brief counterfactual perspective – i.e. considering the outcomes of the intervention compared with the outcomes that would have been achieved if the project had not been implemented. It is possible that NIRDA may have revised its approach sufficiently to start some value chain assessment in priority product areas and possibly attract some GoR or development partner funding to implement projects. Even if this had happened (and this is probably a more optimistic assumption) it would not have had the level of change of direction implied in the new strategy, nor a new organisational structure to support this strategy, nor new organisational assets such as the wide range of value chain assessments and the open Calls platform capability.

Moreover, the implementation challenges and delays experienced would suggest that any attempt at change without an external framework of support would have taken longer, created greater frustration levels, and suffered from the lack of external guidance to navigate such profound organisational change. **In this respect, possibly the most important impact of the project is that it happened, and has left NIRDA with a strategy (vision) and maps and tools for navigating its new journey.** Any frustrations with the delays encountered and the impact this has had on the time available for the changes to 'bed in' (e.g. NIRDA staff adoption of changed work practices and use of new capacities, a longer project period to work with the selected companies etc. etc.) should be viewed in this context. Most beginnings (or rebirths) in life, either at the organisational level (e.g. entrepreneurial start-ups) or individual level, rarely adhere fully to a logical work plan, while NIRDA now has the foundation and the tools to start making an accelerating contribution to improving the competitiveness of Rwandan enterprises.

Recommendations

General Recommendations:

R1: Impact, Scaling and Replication: Develop a clear plan to consider and realise the potential for replication and scaling-up of the project results and learning. Despite the design weaknesses, the impact of the initial project funding reduction, and delays, the project has started to build some momentum, and the focus now needs to be on supporting and accelerating this momentum, such that NIRDA can significantly accelerate and scale-up its work with Rwandan enterprises and value

³ The Call for Proposals was a competitive Call for Proposals process (designed by the project experts) to candidate enterprises in the target sector(s) for value chain development and strengthening, and preceded by a rigorous assessment of the sector. Please see the Text Box in Section 2.4 (page 22) which describes the NIRDA Call for Proposals Process.

chains, with the attendant benefits for the country in terms of enterprise growth, increased competitiveness, employment creation and improved livelihoods. The more NIRDA increases its capabilities and the quality of its work with value chains and Rwandan enterprises, the more valuable it will be as a key lever for implementing Government policy, as well as a valuable partner for international development partners and other value chain developers. This could significantly increase the opportunities for new funding streams for NIRDA, as well as increase the opportunities to significantly scale the volume of funding by mixing grant funding with loan funding, for example from EU Development Finance Institutions (DFIs) and/or via one of the EU blending facilities.

R2: Project management and procurement: Going forward, UNIDO should work to ensure that project management is more proactive, with a greater focus on working in partnership with NIRDA to facilitate organisational development change. **Project management and planning** also need to build in some room for manoeuvre (to the extent possible) in case changes need to be made to the strategy and/or the activities⁴, and this requires having clarity on the priorities and an understanding of the national context. Regarding **procurement**, it is also recommended that the procurement unit i) maintains an information flow regarding the acquisition of technology/machinery in order to reassure the beneficiary organisations that are expecting this equipment and enable the enterprises to plan their operations and finances adequately to receive the support, and secondly ii) that the procurement services division, operational support services, policy and programme support (PPS/OSS/PRO) prioritise to the extent possible quality over quantity, with a view to **ensuring optimal operational performance** (and reduced maintenance and after-sales demands for equipment procured) as well as full consideration of grantees' needs and requests.

R3: Strengthened communication at all levels: The project needs to strengthen communication in numerous facets, including: i) strengthened internal project communication, including between the country project team and UNIDO HQ; ii) strengthened communication (and visibility) with the donor and the government, including regular news updates and publicising successes and milestones reached; iii) strengthened communication within NIRDA between management and staff, and between NIRDA and the government and external partners; and iv) strengthened communication between NIRDA and its grantees, including more effort from NIRDA to ensure it is actively listening to grantees and strengthening its understanding of their needs.

Recommendations to NIRDA:

R4: Strengthening NIRDA's Grant Management, and SME Mentoring and Business and Financial Support for Beneficiary SMEs: Going forward, NIRDA needs to develop its competencies on working with, and improving, beneficiary SMEs at all levels, including grant management, SME mentoring and relationship management. Similarly, NIRDA needs to continue to strengthen the business, management and financial support and mentoring for beneficiary SMEs, in order to accelerate their development. Regarding grantee budget negotiation and finalisation, it is recommended that grants are negotiated with each selected enterprise based on the final amount and the equipment that can be procured from these grant amounts, based on the assessed needs and constraints of the selected enterprises, thereby ensuring that the procurement equipment is adapted to those needs and realistically provisioned for in the budget.

R5: An ambitious strategic plan (3-5 years) and detailed business plan (1 year) for NIRDA: In order for NIRDA to maximise its contribution to Rwanda's development through scaling-up (see Recommendation 1) it is strongly recommended that NIRDA works on an updated strategic plan

⁴ At the same time the project team should engage as a matter of urgency with GoR to see how these unnecessarily long approval timeframes can be shortened.

and business plan for the short and medium term, to allow it to develop at an accelerated pace and to ensure it can exploit new opportunities (e.g. possible new funding sources) and maximise its development contribution to helping the Government achieve its ambitious development goals). This work should include a clear organisational and human capital development plan, strengthened management capabilities, and clear processes and quality standards for call core competencies (Call for Proposals promotion, grantee contracting and grant management, enterprise support, mentoring and acceleration etc.) and strong internal systems that can allow NIRDA to grow rapidly.

R6: Develop a market and funding study related to value-chain development: Linked to the above recommendation, NIRDA should carry out (or commission) a short funding study/scan to understand the full range of potential market and funding opportunities. This could include national and regional international funding opportunities, including EU Country and Regional Funding and Calls for Proposals, as well as exploring applications to geographical and thematic EU blending instruments under the EU External Investment Plan. However, it could also be widened cover other areas such as project/intervention models, recommendations to improve its value proposition, partnering development, etc.

Recommendations to the Partners:

R7: For the Government - Efficient government approval processes: The Government needs to eliminate the incidence of delays that have constrained the ensure that efficient and rapid approval and management process are put in place. The delays caused by unnecessarily long approval periods have not only been unacceptable but have involved **significant opportunity costs** for the Government, NIRDA and the beneficiary enterprises and value chains. If the project is to make a full contribution to Rwanda's ambitious development goals, the Government needs to eliminate the incidence of delays and establish a high-level communication and trouble-shooting channel that can quickly alert senior government leaders should any such delays arise again, with a view to ensuring solutions are found rapidly.

R8: For KOICA – Proactive engagement and dialogue: KOICA can increase the value of its support to NIRDA and UNIDO, through more open and proactive engagement with its partners, including greater openness to consider the impacts of its decisions. This includes engaging in discussion around issues where funding changes might need to be made to understand the implications of these, rather than only looking at this from an administrative and funding lens.

R9: For all Partners UNIDO, KOICA and Government of Rwanda – Development collective strategic reflection papers to feed a high-level dialogue process with the Government It is recommended that the partners develop 1-2 discussion papers summarising the experience of a number of countries that have attained middle income status, including some that have passed from middle income status to high-income status and how they have navigated the challenges and 'traps' of middle-income country development to become high-income countries. This should **include work from KOICA to distil Korea's own impressive story and what might the issues that Rwanda should take from the Korean experience**. The combined learning can be further researched and distilled in the light of the wider challenge of sustainable industrial development, including looking at short-term and medium-term implications of the importance of transferring to a low carbon economy, as well as possibly looking at other challenges such as Covid 19 recovery, and can allow UNIDO and KOICA to **generate a new dimension of KOICA-UNIDO added value** in the project.

4. Project ratings

The evaluation ratings for the project are set out below.

#	Evaluation Criteria	Mandatory Rating
A	Impact	Satisfactory
B	Project design	Moderately Unsatisfactory
1	<ul style="list-style-type: none"> Overall design 	Moderately Unsatisfactory
2	<ul style="list-style-type: none"> Logframe 	Moderately Unsatisfactory
C	Project performance	Satisfactory
1	<ul style="list-style-type: none"> Relevance 	Highly Satisfactory
2	<ul style="list-style-type: none"> Effectiveness 	Moderately Satisfactory
3	<ul style="list-style-type: none"> Efficiency 	Unsatisfactory
4	<ul style="list-style-type: none"> Sustainability of benefits 	Satisfactory
D	Cross-cutting performance criteria	Moderately Satisfactory
1	<ul style="list-style-type: none"> Gender mainstreaming 	Moderately Unsatisfactory
2	<ul style="list-style-type: none"> M&E: <ul style="list-style-type: none"> ✓ M&E design ✓ M&E implementation 	Unsatisfactory Moderately Unsatisfactory
3	<ul style="list-style-type: none"> Results-based Management (RBM) 	Moderately Satisfactory
E	Performance of partners	Satisfactory
1	<ul style="list-style-type: none"> UNIDO 	Satisfactory
2	<ul style="list-style-type: none"> National counterparts 	Moderately Satisfactory
3	<ul style="list-style-type: none"> Donor 	Satisfactory
F	Overall assessment	Moderately Satisfactory

1. Introduction

1.1 Overview of the project context

Located in Central Eastern Africa, and with a total area of 26,338 km² and an estimated population of approximately 12 million people, Rwanda has one of the highest population densities in Africa. The population is young and predominantly rural. The agricultural sector has since 2016 registered a robust performance, which has been driving Rwanda's economic growth. While the industrial sector has registered modest growth due to falling grants and aid inflows that have affected donor and government-financed investment projects and subdued mineral prices weigh on mining sector activity⁵. Under Rwanda's Economic Development and Poverty Reduction Strategies (EDPRS) leading up to Vision 2020, the Government of Rwanda (GoR) seeks to change from a low-income agriculture-based economy to a knowledge-based and a service-oriented economy with a middle-income country status by the year 2020. The Capacity-building for Industrial Research and Development in Rwanda project was developed in this context and under the request of the GoR, who has been clear that the diversification of the Rwandan economy is crucial to achieving the goals in Vision 2020, including the target of a 26% share of industry in national GDP. Furthermore, the GoR already acknowledge the need to improve the growth of the Rwandan industrial sector by creating the National Industrial Research and Development Agency (NIRDA) institution.

However, there are some key factors that need to be considered if the industrial sector is to grow and become a driving force of the Rwanda Economy: i) the private sector, which is still largely informal, will be required to play a larger role in ensuring economic growth. ii) the education, which despite the 2015/2016 budget speech and commitment to enhance the education system and increase the skills of the local labour market. The quality and capacity of the education system have not been able to cope with the rising school enrolment rates and labour market demands. Even now, only a reduced percentage of the labour force has been educated up to secondary school or university level, which results in a severe lack of skills in the labour force.

The vision of the GoR has favoured the evolution of NIRDA's roll and its fundamental participation in the development of the expected outcomes. The following table provided not only the Country context at the time the project was initiated but also the current context in 2018, to show the improvement achieved by the GoR.

Table 1.1 Basic Key Indicators for Rwanda

Basic Key Indicators for Rwanda			
Indicators	2010 ⁶	2015 ⁷	2018 ⁸
Population (millions)	10.4	11.37	12.30
Population growth (annual %)	2.6	N/A	2.6
Poverty headcount ratio (% of population)	46.0	N/A	38.2
GNI (Atlas Method, in USD)	5.73	N/A	9.65
GDP (USD billions)	5.78		9.51

⁵ Rwanda Economic Outlook 2016 – The Story Behind the Numbers, Deloitte, June 2016

⁶ World Bank Country Profile – 2010 to 2018

https://databank.worldbank.org/views/reports/reportwidget.aspx?Report_Name=CountryProfile&Id=b450fd57&tbar=y&dd=y&inf=n&zm=n&country=RWA

⁷ Trading – Economics – World Economic Forum - <https://tradingeconomics.com/rwanda/indicators>

⁸ World Bank Country Profile – 2010 to 2018

https://databank.worldbank.org/views/reports/reportwidget.aspx?Report_Name=CountryProfile&Id=b450fd57&tbar=y&dd=y&inf=n&zm=n&country=RWA

Basic Key Indicators for Rwanda			
GDP Growth (annual %)	7.3	4.2	8.7
Inflation, GDP deflator (annual %)	2.9	1.1	-0.8
Unemployment rate (in % of population)	3.4 ⁹	13.2 ¹⁰	15 ¹¹
Agriculture, value added (% of GDP)	28	N/A	29
GDP from Agriculture (RWF million)	310	400	475
Industry, value added (% of GDP)	15	N/A	16
GDP from Industry (Manufacturing + Construction + Mining) (RWF million)	132	217	271
Exports of goods and services (% of GDP)	12	N/A	17
Export (in USD Million)	220	45	50
Import of goods and services (% of GDP)	30	N/A	34
Import (in USD Million)	1000	263	250
Gross capital formation (% of GDP)	23	N/A	24
Time required to start a business (days)	7	N/A	4
Domestic credit provided by financial sector (%GDP)	8.4	N/A	19.6
Merchandise trade (% of GDP)	30	N/A	39
Total debt service (% of exports of goods, services, and primary income)	7.4	N/A	12.5
Net migration (thousands)	-108	N/A	-45
Foreign direct investment, net inflows (millions USD)	251	223	306
Competitiveness Rank ¹²	80	58 ¹³	108
Other Key information			
Main Natural Resources:	Gold, Cassiterite (Tin Ore), Tungsten Ore, Methane.		
Main Industries:	The primary industrial activities involve mainly the processing of coffee, tea, bananas, beans, sorghum, potatoes, and other agricultural commodities. Other smaller scale industrial products include cement, small-scale beverages, soap, furniture, shoes, plastic goods, textiles, and cigarettes. ¹⁴		
UNIDO CIP Rank	(2019 Edition, rank from 2015) ¹⁵ : 141 out of 150 countries		

1.2 Evaluation objectives and scope

The evaluation was guided by the evaluation terms of reference (ToR) contained in Annex 7.7, UNIDO's Evaluation Policy¹⁶, UNIDO Guidelines for the Technical Cooperation Project and Project

⁹ Data from 2013 <https://tradingeconomics.com/rwanda/unemployment-rate>

¹⁰ Data from 2016 <https://tradingeconomics.com/rwanda/unemployment-rate>

¹¹ Data from 2019 <https://tradingeconomics.com/rwanda/unemployment-rate>

¹² Trading Economics – World Economic Forum

¹³ Data from 2016 – World Economic Forum

¹⁴ World Atlas (2019) Article: the biggest industries in Rwanda

¹⁵ https://www.unido.org/sites/default/files/files/2019-05/CIP_Report_2019.pdf

¹⁶ UNIDO (2015) Director general's Bulletin: Evaluation Policy (UNIDO/DGB (M) 98/Rev.1)

Cycle¹⁷, and the UNEG Evaluation Norms and Standards¹⁸. The specific evaluation objectives of the Capacity-building for industrial research and development in Rwanda project are to: i) Assess the built capacity of NIRDA as a driving force and support to fulfil its role of improving the competitiveness of existing Rwandan industries to increase their potential to export and/or to undertake import substitution; and ii) Evaluate the identification process of the “new sub-sector/value chain areas where investment by the private sector would likely lead to export growth and/or import substitution”.

The purpose of this evaluation is to review the implementation of the five outputs identified in the project document and to analyse achievements and challenges faced by the project during implementation in order to draw lessons and recommendations for future design and replication, as appropriate. The period of the project that was evaluated is from July 2016 to October 2019. Regarding the evaluation users, the evaluation is expected to be of interest to concerned UNIDO Staff at the HQ and in the field, UNIDO’s counterparts in Ethiopia and Rwanda.

The ToR included a comprehensive list of specific evaluative questions, which provided the core focus of this evaluation. The evaluation ran from August to November 2019, and the work programme included a briefing conference call with the Evaluation team in Vienna, desk research, a conference call with UNIDO and the KIOCA evaluators prior to the field mission to Rwanda as well as a 5-day field mission for the 4-person evaluation team.

1.3 Project overview

The overview of the Capacity-building for industrial research and development in Rwanda project The overall objective (goal) is to improve the competitiveness of new and existing Rwanda industries, in order to increase their potential to export and undertake import substitution. The specific objective is to provide the Rwanda enterprises access to a range to technology support services to assist with technology acquisition, adaptation, and commercialisation.

- **Output 1:** A strategy and action plan for the operation of NIRDA to achieve its goals of improving the competitiveness of existing industries so as to increase their export potential and/or their potential to undertake import substitution; and (ii) identifying new sub-sector/value chain areas where investment by the private sector would likely lead to export growth and/or import substitution;
- **Output 2:** An upgraded organisational structure for the management and operation of NIRDA appropriate to the implementation of NIRDA’s strategy and action plan;
- **Output 3:** Operational systems, procedures, and processes to maximise the efficient management and operation of NIRDA (including systems to monitor its performance);
- **Output 4:** Capacity development programme for NIRDA’s management and staff to undertake their defined roles within the upgraded organisational structure;
- **Output 5.1:** Investments in NIRDA’s own facilities and equipment to make them fit for purpose and reflect its role as a key modern and efficient partner for Rwandan industries;

¹⁷ UNIDO (2006) Director-General’s Administrative Instruction No. 17/Rev. 1: Guidelines for the Technical Cooperation Programme and Project Cycle (DGAI 17/Rev 1, 24 August 2006)

¹⁸ United Nations Evaluation Group (UNEG), Norms for Evaluations in the UN System, 29 April 2005.

- **Output 5.2:** Pilot projects successfully operated in accordance with the Action Plan to act as (i) an “action learning” training vehicle for NIRDA staff and (ii) demonstrators to the Rwandan industrial community;

These outputs are in line with NIRDA’s two leading roles: i) Improving the competitiveness of existing industries in order to increase their potential in export and in undertaking import substitution, and ii) Identifying new sub-sectors/value chains areas where investment by the private sector would likely lead to export growth and/or import substitution

Table 1.2 – Project Objectives and Target Outputs

Evaluation Criterion	Overview Overall Objective and Specific Objectives and Target Outputs
<p>Overall Objective: Improve competitiveness of new and existing Rwanda industries in order to increase their export potential and/or their potential to undertake import substitution.</p>	<p>Target Outputs:</p> <ol style="list-style-type: none"> 1) A strategy and action plan for the operation of NIRDA to achieve its goals of (i) improving the competitiveness of existing industries so as to increase their export potential and/or their potential to undertake import substitution; and (ii) identifying new sub-sector/value chain areas where investment by the private sector would likely lead to export growth and/or import substitution. 2) An upgraded organisational structure for the management and operation of NIRDA appropriate to the implementation of NIRDA’s strategy and action plan. 3) Operational systems, procedures, and processes to maximise the efficient management and operation of NIRDA (including systems to monitor its performance). 4) Capacity development programme for NIRDA’s management and staff to undertake their defined roles within the upgraded organisational structure. 5) This output comprises two (sub-)outputs: <ol style="list-style-type: none"> 5.1) Investments in NIRDA’s own facilities and equipment to make them fit for purpose and reflects its role as key modern and efficient partner for Rwanda industries. 5.2) Pilot projects successfully operated in accordance with the Action Plan to act as i) action learning training vehicle for NIRDA staff and ii) demonstrator to the Rwanda industrial community.
<p>Specific Objective: Rwandan enterprises have access to a range of technology support services to assist with technology acquisition, adaptation, and commercialisation.</p>	

The project duration was originally designed for 3 years, but due to KOICA administration request, the implementation was reduced to 18 months, starting on July 2016 to December 2017. However, a first extension of 12 months was granted, together with an increase of 100,000 US\$ to the total budget. Thus, the total project budget became US\$ 2.4 million offered by KOICA, and the completion was to be December 2018. Later a second extension on the implementation period of 10 additional months was granted. Overall, the project has been implemented over a period of 40 months.

The principal national partners are: i) The Ministry of Trade and Industry (directly responsible for NIRDA and UNIDO’s overall counterpart) which acts as a national coordinating partner and is responsible for ensuring effective coordination with other agencies and ministries and providing ownership; and ii) NIRDA, which will act as a national implementing partner, is responsible for guarantying the implementation of this project according to the approved document via its national project director (NPD).

1.4 Evaluation methodology

1.4.1 Data collection methods

The evaluation used a range of methods to collect data and information from a range of sources and informants was based on (i) a document review, (ii) interviews with key stakeholders (including intended beneficiary groups) and (iii) data analysis. Therefore, the evaluation was based on a mixed methods approach, collecting the information contained in the available documentation (particularly Quarterly and Annual Reports provided by the project manager), as well as the views and experiences of the key stakeholders and intended key beneficiary groups. In addition, there was also a review of the financial flows data, both to address the cost-benefit (input-to-output) ratios, but also the allocative efficiency, and how the EU funding agreement fits in the larger financing picture. The **Theory of Change** was also used by the evaluation to understand how and why changes desired by the project stakeholders would be expected to come about, working back from the long-term goals of the project, and identifying the necessary conditions (outcomes) required to be in place (and their inter-linkages) for the project goals to be realised.

The **desk and literature review of documents** related to the project, included, but was not limited to: i) The original project document, monitoring reports (such as progress and financial reports, mid-term review report, output reports, end-of-contract report(s) and field progress reports; and ii) Notes from the meetings of committees involved in the project, if available. The evaluation's **stakeholder consultation programme** (see Annex 7.4) was conducted through structured and semi-structured interviews during the field mission and focus groups. Key stakeholders that were interviewed included: i) UNIDO Management and staff involved in the project; ii) NIRDA's staff involved in the project; iii) Rwanda's government officials attached to the project, particularly from the Ministry of Trade and Industry (as the Ministry responsible for NIRDA); and iv) Stakeholders attached to the on-field pilot projects.

1.4.2 Evaluation matrix and indicators

The table below sets out the Evaluation Questions (EQs) for this final evaluation. The Evaluation framework comprises seven (7) evaluation criteria - Relevance, Effectiveness, Efficiency, Impact, Sustainability, UNIDO-KOICA Added Value and Coherence – and the Evaluation Framework comprises one over-arching EQ for each Evaluation Criterion.

Table 1.3 –Evaluation Questions (EQs)

Evaluation Criterion	Evaluation Questions
RELEVANCE	<i>EQ 1: What is the relevance of the project to the country's policies and needs?</i>
EFFECTIVENESS	<i>EQ 2: To what extent has the project achieved its targeted results?</i>
EFFICIENCY	<i>EQ 3: Has the project been efficiently implemented?</i>
IMPACT	<i>EQ 4: What is the overall impact of the project?</i>
SUSTAINABILITY	<i>EQ 5: What are the sustainability prospects of project?</i>
UNIDO-KOICA ADDED VALUE	<i>EQ 6: Is the UNIDO-KOICA support to project bringing additional value?</i>
COHERENCE	<i>EQ 7: Is the UNIDO support to the project coherent with the UN system policy and other donors' policies and support?</i>

1.4.3 Field visit strategy & programme

The Field Visits took place during 9-13th September 2019 and supported triangulating earlier desk work through primary research via interviews with the different stakeholders (relevant government authorities and agencies, project partners, entrepreneurs, and civil society). The field mission focused on visiting NIRDA headquarters and interviewing NIRDA's main staff that was affected by the projects, as well as on visiting the location of pilot projects and the corresponding stakeholders in collaboration with the IEE to consult field project stakeholders, partners, and beneficiaries to verify and complete preliminary evaluation findings from the desk review. The agenda of the field visit programme is contained in Annex 7.5.

1.5 Limitations of the evaluation

This Evaluation was carried out by Dr. Bernardita CARDENAS (Team Leader), Mr. Francesco CUDA (UNIDO Evaluation Consultant), Ms. Jina BYUN (KOICA expert), Ms Seohyeon NAN (KOICA expert), and Mr. Arthur BYABAGAMBI (national evaluation expert). This evaluation was intended to be a Joint Evaluation with the KOICA evaluators during the field phase, although KOICA's involvement was primarily in the field mission and reviewing evaluation reports. The kick-off meeting was a video conference that helped to put in place the guidelines of the Inception Report and setting the Field visits to Rwanda.

A slightly limiting factor was the short duration of the field mission (1 week), but this was significantly offset by the 5-person evaluation team. During the field visit it was only possible to visit two beneficiaries of the Banana Wine sector as the time allocated did not allow for national visits outside the capital, and the Banana Wine factories are located outside the capital. In order to get an objective understanding of the textile sector, several beneficiaries were interviewed, and unstructured interviews were carried out by the evaluation team. A further constraint was ill-health by the team leader in the reporting stage of the evaluation.

1.5.1 Quality of project/programme documentation

The Team Leader received all quarterly reports, which served as a key part of the work to build the evaluation baseline. These documents are listed in the bibliography in Annex 7.3. The documentation has been provided in full, and the quality of this assessment is only limited to the received documents. It should be mentioned that the quarterly reports provided relevant information on the actions and activities carried but did not mention the process and criteria used, nor provided specific details. The information was received in different phases, and during the field visit the UNIDO national project coordinator explained the organisation of the files and logic behind their structure, such that all information was clearly accessible.

1.5.2 Gaps in documentation and other limitations

The main gap in the documentation provided to the evaluation team was that the project progress reports do not include all the activities implemented in order to achieve the target goals. The structure of these reports does not systematically allow reviewers to identify challenges and related solutions, with information on challenges and solutions mostly emerging from the evaluation field visit interviews. Overall, the reporting does not reflect the amount of work carried nor the proactivity of the UNIDO team, in Vienna and particularly in Rwanda to solve the challenges encountered. Similarly, NIRDA staff were professional and collaborated with the UNIDO team and external consultants in the analysis of NIRDA's structure, needs and required training, despite having received limited information on NIRDA's restructuring process.

2. Project quality and performance

2.1 Design

Background: The “Capacity building for industrial research and development in Rwanda” project builds on: the UNIDO “support to industrial policy implementation and special economic zones (SEZ) / industrial parks (IP)”¹⁹ through the UN fund project ID 150166, that assessed the needs and status of NIRDA, which provided the preliminary support in July 2015 for the design of the project; and ii) the request from the government of Rwanda by the Permanent Secretary at the Ministry of Trade and Industry in April 2015, to support the “Capacity Building to the National Industrial Research and Development Agency (NIRDA)”.

The preparatory assistance (PA) and SWOT analysis of NIRDA was carried out during July 2015 by Mr. Simon Armstrong²⁰ for UNIDO. It should be kept in mind that at the time when the preparatory assistance was carried out, NIRDA as an organisation had already been in existence for two years²¹, but there were no changes in the structure and in the staff to fulfil the roles that NIRDA had been assigned. The PA identified that NIRDA was constrained by low-skilled human capital, faced were barriers to accessing finance, as well as weak institutional links for generating and disseminating government research to the private sector. Following on from this, the project document²² identified NIRDA’s needs (for the purpose of the project) as follows:

- (i) A strategy and action plan for providing technological support to selected value chains to increase their competitiveness (which should lead to export growth or import substitution);
- (ii) An organisational structure appropriate to its new mandate and role;
- (iii) A wide range of standardised systems and procedures (including an internal monitoring system);
- (iv) Capacity building of staff based on a thorough training needs analysis;
- (v) Capital investments in facilities and investments to improve the efficiency and efficacy of NIRDA and to pilot opportunities in new value chains.

The Korean International Cooperation Agency (KOICA) learnt about this preparatory assistance analysis and offered to finance the project that UNIDO would develop from this initial assessment. The project was submitted to KOICA and the Government of Rwanda on November 2015. Thus, this project came about through the collaboration between KOICA and UNIDO in supporting Rwanda’s government to strengthen and grow its industrial sector through the capacity building and restructuring of NIRDA in July 2016. However, the significant reduction in the budget contributed significantly to making it near impossible to achieve the project’s objectives within the time frame, while accentuating the above-mentioned design flaw.

Analysis

There is a gap between the focus described in the main objectives and specific objectives and the core implementation thrust of the project. The stated objective is to improve the competitiveness of new and existing Rwandan industries in order to increase their potential to export and undertake import substitution. The specific objective contains three key technology support services such as acquisition, adaptation, and commercialisation of technologies available to Rwandan enterprises. The focus of implementation, however, has been capacity building and restructuring of NIRDA. This is indirectly linked to the increased competitiveness of the overall Rwandan industrial sector. The

¹⁹ United Nations Development Assistance Plan (UNDAP) (2013-2020).

²⁰ UNIDO Senior Adviser, responsible for Coordination and Quality Control.

²¹ NIRDA was founded in 2013

²² From the KOICA UNIDO Project Document Updated 2019, p1

5 stated outputs of the capacity building for industrial research and development in Rwanda project are well aligned with the initial UNIDO assessment of NIRDA and its specific needs.

Thus, the project is a well thought project, but not without weaknesses. The design of each activity has been done with the aim to provide a hands-on opportunity to NIRDA staff and management, beginning with the participation of NIRDA as an implementing partner and the DG of NIRDA having a key decision-making role in the restructuring and capacity building of NIRDA. While the Problem and Solution Tree Diagram is extremely detailed and activities to solve defined problems are well chosen and logical to achieve the outputs and outcomes, there is however a gap between the outcomes and the objectives and goals as these are mostly achievable as long-term results, and this is key flaw in the design. Another weakness is to some extent that the project design was slightly overly-centred on NIRDA, and that the core implementation work with companies (Output 5b) might have been better as a stand-alone Output, which would have made it more visible as well as help reminding NIRDA that this was the mission-core work (of supporting companies to improve competitiveness).

The Logical Framework is consistent with the Problem and Solution Tree Diagram and provides the baseline at the time of the project design, and the indicators are quantifiable according to the outputs' requirements. The design of the project and the implementation process are well defined and presented, with a clear identification of impact and potential results, outputs, and outcomes. For example, the design included: i) Clear scope of all activities and tasks, including tools to mitigate possible risk such as the Change management Team (CMT); ii) The realisation of "Training of trainers"; iii) Learning by doing approach that involved the staff and required ownership and leadership from them; and iv) The collaboration with the private sector was encouraged in order to establish a long-term mutual trust between NIRDA and Local private sector. These four aspects are consistent with the need for a stronger NIRDA, and demonstrate that this aspect of design was well thought-through and relevant.

Furthermore, the risk management plan clearly foresaw several possible risks, it seems that there was an underestimated assessment of their likelihood of occurrence, and overconfidence in the stated mitigating factors. For instance, though there is a high level of political commitment to the EDPRS2, the administrative delays arising from the government's decision-making process were never anticipated by the project. Even when the project's proposals regarding NIRDA's strategy and action plan and the value chain and recruitment requests were finally accepted, the project experienced an overall delay of 12 months²³.

The Work Plan and Timetable overall are logical and well considered, although in hindsight it is worth asking whether some activities should have been brought forward, as they could have provided the basis to generate stronger impact and generated early reassurance around the restructuring process among the NIRDA Staff such as activity 3.1. (Selection of Value-Change Sectors) which might for example have been launched earlier in Q4 2016. In this respect, there could have been more strategic thinking and management among all key parties, UNIDO, KOICA and NIRDA, in terms of generating momentum, early results and impact and showcasing the story for the need – and value – change, and this is linked to the project's governance and decision-making between the key stakeholders.

²³ It should be emphasised that those engaged in the project design could hardly have foreseen this level of delay, although it is unlikely also that this is a complete outlier, and a learning point may be to try to anticipate government turnarounds in the future at the time of design by asking beneficiary counterparts about time requirements for decisions and/or approval milestones.

Originally designed and submitted to be implemented over 3 years by UNIDO, the original project underwent several modifications in November 2015²⁴, the most important being the reduction of the implementation period from 36 months to only 18 months²⁵. While it was agreed between KOICA and UNIDO that an extension to the project implementation could be granted under request later, the immediate effect was that the implementation period was reduced by 50%, yet the design of the project and the number of activities were not adapted to the much-reduced timeframe.

2.2 Relevance

The project is highly relevant not only to the national industrial policy implementation of the Government of Rwanda and the National Strategy for Transformation (NST), but also to the country's needs and context which is presented in section 1.1 of this report and further developed in Annex 7.9. The project is consistent with the provisions of the following national policies: "Made in Rwanda Policy (2016)", the Vision 2020 and 2050, the Ministerial Instruction No. 01/19.23 Restructuring of public services institutions, the "Rwanda Competition and Consumer Protection Policy", the "National Industrial Policy", the "Rwanda National Export Policy", the "Special Economic Zone policy", and the "Small and Medium Enterprises (SMEs) Development Policy".

The industrial sector has been taking a more important role in the economy of Rwanda, with a 16.1% contribution to the GDP in 2013, which raised up to a 17.6% in 2016, and back to 16% in 2018²⁶. The growth performance is expected to be driven by the agriculture and the industry sector in 2019/2020 with a projection to grow by 7.8%²⁷. However, already the Rwanda economy performed well growing by 8.6% in 2018 against a target of 7.2%. It should be mentioned that this growth is attributed to a good performance of the manufacturing, agriculture, and services sectors, which have grown at a rate of 10%, 6% and 9% respectively²⁸.

The action is relevant to the main donor KOICA, particularly with its Mid-term Sectoral Strategy (2016-2020) aiming to build the foundations of a results-based management framework in line with the post-2015 global agenda for sustainable development, and the Government of the Republic of Korea's country partnership strategy (CPS) established for the period 2016-2020. This project is aligned with Korea's development experience to work on applicable models for partner countries, particularly in policy making and capacity building. The Korean government focuses on 8 sectors: economy, health, education, public administration and ICT, agriculture, fishery, and forestry. Thus, *the Capacity building for industrial research and development in Rwanda* project is in line with the mentioned sectors and the objectives of the article 3 of the Framework Act on International Development Cooperation (Framework Act) particularly with point i) alleviate poverty and improve the quality of life of people in developing countries, ii) support partner country's development and improve the system and conditions for such development, as well as v) other matters deemed necessary for realising the basic principles. The project has provided useful technical development of NIRDA into an effective agent supporting Rwandan enterprises and driving technology acquisition/adoption.

The project's long-term objectives are still relevant today. A consolidation of the achieved capacity development of NIRDA staff and support to complete advance and complex assessment is

²⁴ The modifications were carried during the negotiation period between UNIDO and KOICA, from November 2015 to July 2016.

²⁵ This reduction of time was requested by the donor KOICA due to legal constraints on the allocation of the financing

²⁶ Annual Economic Report 2017/2018, MINECOFIN, 2019

²⁷ Rwanda national Budget 2018-2019: focused on economic transformation, PwC Rwanda's Budget Bulletin, www.pwc.com/rw

²⁸ Budget Brief 2019 Rwanda, KPMG, June 2019, kpmg.com/eastafrica.

advisable, as the core technical expertise²⁹ is not part of in-house knowledge and organisational culture. Furthermore, the adoption and mastering of the different tools and monitoring and evaluation process by the NIRDA staff will further enhance support consolidating and adapting them to different situations.

2.3 Efficiency

Overall, the efficiency of the project implementation effort has been significantly sub-optimal, due to several factors. A first key constraint on efficiency was the significant reduction in the project's implementation timeframe mentioned above, which took little account of the volume and complexity of the activities foreseen, the time to generate results, nor what factors might constraint implementation (e.g. government processes, beneficiary staff capacity levels etc.). Not only was the implementation period halved, but the design of the project and the number of activities were not adapted to the much-reduced timeframe. Furthermore, even when the project commenced in July 2016, the progress reports indicate that the implementation of most activities only started in May 2017 and only gained real momentum after December 2017.

In addition, the 5-step approval process³⁰ (affecting implementation of NIRDA's Strategy, Action Plan, Value Chains, Recruitment and Salaries), the confirmation led to a cumulative delay in implementation of 22 months. This had a significant impact on the project's efficiency as the project design did not (understandably) allocate extra time for such a protracted approval process³¹. These delays led to two extensions, the first one for 12 months in November 2017 and the second one for 8 months in January 2019 which has eventually made possible to maintain the quality and the performance of the project's activities, particularly during the first two years of implementation.

Two other factors that have had a negative effect on the efficiency of the project's implementation include i) poor or limited communication between UNIDO Headquarters, UNIDO Rwanda National Office, NIRDA, KOICA and GoR, and ii) the transition periods and related transition costs between replacement of key people involved in the implementation of the actions³². While these transitions were not exceptionally long per se, they did involve transition-related costs such as work disruption and loss of continuity, the time required for new staff to get up to speed, and different work styles etc. This has also constrained efficient operations, and the implications for the continuity and different style of work can be seen in the outcomes, some of which have been only achieved at the very last minute, such as the pilot projects, with the technology (machinery) procured only being received in September 2019 during this evaluation.

In addition, the needs assessment at the project design focused on the organisation's needs and not on those of its staff³³. Thus, the capacity building programme, later needed adaptation to meet NIRDA's staff needs to achieve the organisational capacity required. In line with staff capacity, a training needs assessment (TNA) was conducted and completed by the project in December 2018, and was the basis for the change management training organised in April 2019 and most of the follow-up staff trainings conducted in the lead up to the evaluation and after.

Furthermore, in the case of the pilot projects, the time constraint following the shortened project duration and implementation delays provided little room for negotiation and verification of various things such as costs, technical specifications and quality of equipment supplied, monitoring of

²⁹ Technical knowledge on the different value chain audit and open calls

³⁰ Each one had to be approved by the NIRDA General Director, the NIRDA Board of directors, MINICOM, and the Prime Minister's Office (PMO) and the Cabinet.

³¹ As per organisational structure

³² All key stakeholders: KOICA, NIRDA and UNIDO have had to replace key people due to either contract time expiration, private reasons, and legal issues.

³³ During this period, the original NIRDA's personnel was being replaced with new staff that would suit better the needs of the organisation and its new role.

installation of supplied equipment, enterprise satisfaction with the quality of equipment and reconciliation of enterprise operations with the new equipment versus contractual targets. This was also generated by the UNIDO procurement process that was lengthy and lacked an adequate and regular communication flow to project stakeholders, regarding the likely timing of delivery of the equipment under procurement.

In the end, the project has had an extension of 22 months from the initially signed agreement with KOICA (18 months), thus given a final project duration of 40 months, compared with the original project design of a 36-month duration. The extension has allowed UNIDO to successfully realise of the designed activities and consolidate key outcomes to the capacity building of NIRDA. National staff has been extremely proactive and flexible by providing support to each challenge, such as in the case of the change management and induction of new NIRDA staff, while UNIDO also recruited a change management expert to provide both change management training for NIRDA staff that was retained and the new staff that was being recruited. Another example has been the continuous training needs analysis that was provided throughout the whole period of recruitment. Another example of adaptive management and the team’s effort to be efficient have been leveraging the training delivered to the grantee enterprises from the 1st Open Call (garments and banana wine value chains) to also provide this capacity building to NIRDA staff.

2.4 Sustainability

Progress and strengthened sustainability prospects

Regarding **policy-level sustainability**, another positive factor is the government’s willingness to fund industrial technology research and development, and its allocation of dedicated funding to finance value chain audits and pilot projects through a call for proposals. In terms of **institutional sustainability** of the project’s support to NIRDA, the outputs and results achieved in this project have been institutionalised through the newly created infrastructure and organisational structure of NIRDA, as well as the increased solicitation of NIRDA by the government and other donors to implement new calls such as “Fruits and Vegetables value chain”, “Wood Processors value chain”, and the “Cow in the Car value chain”.

The text box below provides an overview of the Call for Proposal process. An important contribution to sustainability has been pre-phase preparation work, in particular the rigorous approach to value chain assessment and which was developed by the UNIDO team with NIRDA. This has further contributed to fostering a culture of evidence-based research and preparation to assess the potential in specific sectors. *Moreover, this pre-phase process seems to have been kept in the following calls financed by other donors, and it seems to be a pre-requisite for launching a call for proposal by NIRDA, which provides credibility and adds value to the overall process of the Call for proposal*

Overview NIRDA Call for Proposals Process
<p>The Call for Proposals was initiated by the value chain selection, which comprised several activities, such as the selection of main sectors from MINICOM’s priority sector list, analysis of the pre-selected value chain activities and performances, combined with the identification of the pre-selected value chain constraints and development opportunities.</p> <p>Once the value chains have been selected and approved by the GoR, the Call for proposal was initiated by developing of the guidelines for the Concept Note application and for the Full application phase, after which the official Call for proposals was launched in the NIRDA website on the 2nd July 2018 and closed on 20th July 2018. The Concept Note phase is an open call to all relevant enterprises, that was accompanied by four (4) workshops implemented between the 2nd and 12th of July 2018. This initial Call was carried by NIRDA existing staff at the time, supported by four UNIDO additional consultants and partnered with Rwanda Business Development Fund (BDF). The open Call for proposals received 136 application (61 from Banana Wine and 75 from Garments value chains</p>

Overview NIRDA Call for Proposals Process

respectively), of which 21 applications from the Banana Wine and 14 from the Garments were recommended to the Full application phase by the project selection committee³⁴. The Full application consisted of 2 parts, the first part focus on the business diagnosis (current state of the business) and the second part on the project application (design of the project and action plan). This second phase was closed on 31st August 2018.

The project selection committee met on 20th September 2018 and selected 6 Banana Wine and 6 Garment applications that were recommended to the NIRDA Board of Directors, which met on 8th October 2018 and ratified the Project selection committee's recommendations. The final steps of the Call for Proposals were the diagnosis and due diligence of the selected projects, including results chains and baseline data, and NIRDA contracts drafted and signed with the selected companies.

The capacity enhancement and work on organisational and staff development and transition at NIRDA has put the organisation on a stronger institutional footing, with the equipping of staff with tools, knowledge, guidance manuals, SOPs in areas such as working with companies, management, production, technology audits, procurement management, value chain development etc. being fundamental to this increased take-up of NIRDA services. This increased solicitation of NIRDA increases its prospects for not just for **institutional sustainability but also financial sustainability**, through new project and other income streams (e.g. government and donor contracts), as well as improving NIRDA's market reputation and presence. For example, the relatively good visibility obtained by NIRDA with the 2018 Open Call for Banana Wine and Garments under this project³⁵ has led in part to a new request to carry out technology audits for the Fruit and Vegetables sector, which has in turn led to the launching of another Open Call for the Fruits and Vegetables value chain (30th October 2019- 30th November 2019) followed by the selection of the projects to submit the full project. In parallel, NIRDA is currently running the open call for proposals "Cow in the Car value chain" which has shown some promising initial sustained impact, or at least knock-on impact, of the KOICA-UNIDO project.

Another positive development regarding the financial and institutional sustainability of NIRDA is the addition to a separate R&D department to NIRDA's Structure and Action Plan, fully funded by the Rwanda Government. This will further increase alignment between NIRDA and Rwanda's national priorities, with the government willing to fund live industrial technology research and development and funding allocated for financing Value Chain Audits and pilot projects through a call for proposals. NIRDA's technology audit and the open calls for proposals in the different industrial value chains are two tools that are likely to attract further donors while dynamizing Rwanda's R&D. It is understood that KOICA is also exploring the possibility of further funding to help the consolidation and sustainability of project results.

Similarly, the development of NIRDA staff capacities and tools around M&E systems and contractual performance targets and regular and grant management will help NIRDA ensure sustained positive impact from the support it provides to beneficiary SMEs, and this should allow for **some sustained impact at national policy level**, through the increased capability of NIRDA to deliver scaled-up delivery of support to companies, value chain development and innovation and entrepreneurship support, thereby providing the government of Rwanda with an increased national public 'asset' and mechanism to delivery on the country's public policy goals.

Constraints and risks to NIRDA's sustainability

Notwithstanding the above progress there are, however, several **constraints and risks to NIRDA's sustainability** that need to be managed or addressed. Firstly, NIRDA lacks a sufficiently detailed development strategy and business plan that will allow it to maximise the opportunities that are

³⁴ The Project selection committee was composed of the NIRDA management and the Project Team.

³⁵ The open call for proposal (June to July 2018) provided the selected winners on 11th October 2018.

unfolding to build a best-of-class organisation in its field, and one that will allow it to maximise its development contribution potential to attaining Rwanda's development policy goals. This includes a plan to continue to develop the organisation's internal capabilities and senior leadership and management to help it move faster to translate this potential into results, and also navigate the challenges of developing a more private business-service delivery culture in what was previously a public sector organisation a staff body of civil/public servants with little to no business or management training, not to mention experience.

Specifically, this includes practical challenges such as how to build a high-performance organisation which currently operates within the public sector salary structure, or to develop a governance and management framework, including the Government-NIRDA governance framework and relationship, that does not leave NIRDA dealing with the scale of delays that have constrained this UNIDO-KOICA project. Even at present, NIRDA is already having difficulty hiring the expertise required, mainly because the cost of the required people is not in the GoR salary structure. This inflexible design, as a public institution, presents a risk to the sustenance of the growth and capacity of NIRDA as an organisation mandated to lead the industrialization of Rwanda's economy.

Another risk to NIRDA's long-term sustainability is its approach that is overly centred on technology acquisition and an inadequate focus on business, financial, management, operations, market, and strategic issues. NIRDA appears to engage with enterprises from a standpoint that they already have all the necessary capabilities to be viable because they already exist. Furthermore, the evaluation team considers that the additional equipment and companies' expectations evidenced that the contractual KPIs would require different levels of extra inputs, especially in the form of working capital. There is insufficient evidence to suggest that all the enterprises possess the necessary working capital, or capacity to mobilize the requisite capital, to increase their production to the target levels, which is assessed as a potential risk to sustaining improved grantee companies' performance. At the very least, the working capital needs of the companies needs to be thoroughly assessed by NIRDA.

Much as the new technology provided to the enterprises intends to increase their levels of production among many other objectives, there are still market challenges that have not been addressed by the project and do not necessarily fall within the mandate of NIRDA. For example, in the garments sector, the availability of raw materials, specifically fabrics, remains a challenge despite government incentives to lower the cost of production. Similarly, the uptake of locally produced garments is gradually increasing, but the quantity of production is likely to exceed the demand, which could affect garment companies' overall sales and performance. This is not a significant risk but is also identified as a risk to support performance.

However, for sustainability prospects to be optimised, it is vital that there is a i) realistic medium-term vision and development plan for NIRDA, as well as ii) a clear focus on how it can maximise its capacity to bring sustained impact and contribution to helping the country achieve key national development goals. An example of one element of this would be a clear market and financing analysis of possible funding sources for innovation and value chain development and a business development (sub)strategy and plan to position NIRDA as a partner and implementation platform of preference for national agencies and international funding institutions active in areas such as the financing of value chain development. Furthermore, it is likely that NIRDA will need continued international support, in areas such as capacity development, mentoring and coaching, if it is to register a larger impact on enterprise support and development and value chain development and a correspondingly bigger contribution to national policy development goals. This will need to include for example exploring how NIRDA can strengthen partnerships with complementary actors, for example exploring the value of forging partnerships with local financing institutions to strengthen the ecosystem for sustainable financing support for local companies, such that for example obtaining loan financing for working capital needs or development and expansion becomes easier.

Regarding environmental sustainability and sustainable industrial development, it is worth asking if NIRDA can do more here. There may be scope to increase focus on green economy issues and the sustainable use of natural resources such as water, while at the same time contributing to increased innovation at the level of beneficiary companies and increased financial savings. Some of the demonstration projects carried out under the EU's Switch Africa Green Programme, for example in neighbouring Kenya and Uganda, might offer some inspiration in this regard.

To summarise, the project has achieved a relatively good level of sustainability on several fronts, in particular in terms of institutional and financial sustainability. This includes i) strengthened institutional sustainability as a result of NIRDA management and staff's newly acquired competencies and the organisational restructuring; ii) strengthened financial sustainability through the increased business demand for NIRDA from government and other development partners to support value chains; iii) and the increased visibility and profile of NIRDA. Despite the more promising sustainability prospects, there is no room for complacency and there are a number of constraints, or in some cases risks, to NIRDA's medium-term sustainability. These include the lack of a more detailed strategic plan and business plan to accelerate NIRDA's short-term and medium-term plan; the need to work out how the organisation can attract and retain talented professionals and developing a business-oriented and results-oriented culture within some of the constraints of being a public organisation. Other constraints include a need to further develop its competencies in advising and mentoring enterprises on business, management, and financial issues, to further balance – and leverage – the technology-related support being provided. There may also be scope to increase the focus on environmental sustainability and MNIRDA should explore this, for example considering if green economy experience can help contribute to increased innovation at the level of beneficiary companies and increased financial savings. Overall sustainability can also be strengthened by the project and NIRDA exploring how NIRDA can strengthen partnerships with complementary actors, for example exploring the value of forging partnerships with local financing institutions in order to strengthen the ecosystem for sustainable financing support for local beneficiary companies.

2.5 Gender mainstreaming

It should be noted that Rwanda has in general a top-down approach, with gender-sensitive policy frameworks promoting women participation, such as for example the number of women in power. However, it needs to be remembered that the society in Rwanda is still a patriarchal one, and behavioural changes and accepting new role models for women takes time.

The project's focus on gender mainstreaming appears to have been mixed. In terms of setting guidance, for the Value Chain assessment work, UNIDO management and NIRDA counterparts considered ILO's work on Women's Entrepreneurship Development and Gender Equality (for example experience and guidance in ensuring that women and men have equal access to entrepreneurship opportunities). However, there is scope to strengthen gender mainstreaming in the project, and in any future support. While inclusiveness and respect for gender and minorities are listed in the core competencies in NIRDA's new job description template, there is no mention of gender or women participation in some of the project reports, and this is further exacerbated by the weak project monitoring. This reflects a wider lack of focus on gender, as can be seen for example by any search on NIRDA's website yielding no reference to gender, or the 2017 Garment Value Chain report making almost no mention of the gender profile in the sector.

The project's specific operational context, where the industrial research sector and most counterpart companies that NIRDA engages with are staffed predominantly by men, should of course be kept in mind. Notwithstanding this however, there are thus likely to be opportunities to promote women participation, and in sectors such as garments and textiles, and a more systematic reflection should be carried out by NIRDA on where and how the gender dimension can be strengthened. The news article profile of the Garment industry Call for proposals, and in particular

Ms Joy Kasangire and her business Promota Creations³⁶, is an example of where more could be done to increase the gender dimension to NIRDA's work – in addition to mainstreaming gender into the work across value chains creating a communications and media profiling of examples of women workers and entrepreneurs in the garments industry could allow NIRDA to foster a powerful gender message to the wider public. In this case, also, this enterprise (and others) has been making face masks to sell to the population during the Covid 19 pandemic crisis, and it is likely that NIRDA can also leverage this positive contribution to meeting the Covid 19 challenge as an example of the value of developing sustainable industrial capacity in Rwanda.

³⁶ See Article on NIRDA website “NIRDA’s open calls support boosts garment industry performance”
https://www.nirda.gov.rw/pressroom/pressroom-detail/news/nirda-s-open-calls-support-boosts-garment-industryperformance/?tx_news_pi1%5Bcontroller%5D=News&tx_news_pi1%5Baction%5D=detail&cHash=f3ddcd58c719c66d32477891d0597de.

3. Project’s contribution to development results – effectiveness and impact

Background

To understand the project’s contribution to development results, it is necessary to provide the internal context regarding NIRDA’s organisation and structure. NIRDA was founded in 2013 to replace the former Institute of Science and Technological Research (IRST) and to support the industrial growth and diversification of the country’s economy. The transition from a purely research-oriented institution to an organisation directly dealing with the private sector in a much more hands-on approach, while also providing applied research for the different industrial sectors, required a fundamental restructuring and dramatic change in the corporate culture of the organisation. This transformation was necessary to become the driving force to achieve the national industrial priorities set out in Rwanda’s Vision 2020 and Vision 2050 of Rwanda.

It was in this context that the Government of Rwanda (GoR) requested UNIDO and KOICA to assist in repositioning NIRDA within the existing national industrial landscape with a demand-driven approach to support Rwanda’s industrial development. This request came after the organisation had already two years of existence, and no significant change had taken place. Within the transformation period of NIRDA, it is important also to mention the replacement of key staff and the abolishment of the position National Project Director at NIRDA implementing the project and the impact that these changes in the top management personnel had generated into the effectiveness of the project.

3.1 Changes of key personnel positions on the Capacity-building for industrial research and development in Rwanda project

Position	2016	2017	2018	2019
Director-General of NIRDA:	Dr. Joseph MUNGARULIRE	Dr. Joseph MUNGARULIRE until August 2017 / Ms Pichette KAMPETA SAYINZOGA Sept. 2017	Ms. Pichette KAMPETA SAYINZOGA	Ms. Pichette KAMPETA SAYINZOGA
NIRDA National Project Director:	Dr. George NYOMBAIRE	Dr George NYOMBAIRE until November 2017/ Ms Pichette KAMPETA SAYINZOGA Dec. 2017	Ms. KAMPETA SAYINZOGA	Ms. KAMPETA SAYINZOGA
UNIDO Project Manager:	Mr. Juergen REINHARD	Mr. Juergen REINHARD	Mr. Juergen REINHARD	Mr. Juergen REINHARD
UNIDO Senior Adviser, Coordination and Quality Control:	Mr Simon ARMSTRONG	Mr Simon ARMSTRONG	Mr. Simon WHITE	Mr. Simon WHITE
UNIDO National Project Coordinator:	Mr Canisius KARURANGA	Ms. Betty TUSHABE	Ms. Betty TUSHABE	Ms. Betty TUSHABE

The UNIDO-KOICA-NIRDA project began operations in July 2016. As **can be seen** in the table above, there have been several changes in key personnel positions of the project: while this is not unusual in a 4-years project, this had an impact on the efficiency and effectiveness of the results delivery, particularly on Outputs 2 and 3. Output 1 “A strategy and action plan for the operation of NIRDA to achieve its goal” was the milestone for the implementation of this project, initiated and

formulated by UNIDO personnel, with a specific orientation and vision as defined during the project's inception phase in Q3 2016.

3.2 Project's achieved results and overall effectiveness

It is important to emphasise that the project reporting system, and the frequency of this reporting, has constrained the effectiveness of the implementation. Several of the progress reports lack consistency regarding the type of information provided and the completeness of this information. For example, progress reports refer to replacement of staff within UNIDO or NIRDA but do not provide staff names or details, while project activities are mentioned to be completed but are not reported in a detailed manner. Moreover, the frequency of this reporting (quarterly, biannual, and yearly reporting) was excessive and created an overload on the UNIDO team. This aspect could have been strengthened by integrating it into a systematic and continuous monitoring process, however it was not used to the full extent of the capacity within the project and instead led to numerous but imprecise reports.

Furthermore, it is important to note that the 40 months' project was marked by considerable instability, variation and change in the management personnel, be it for UNIDO, KOICA and NIRDA, and these personnel changes impacted the continuity of the project process and implementation and created further difficulty in the internal communication, decision-making as well as reporting.

The detailed analysis of the 5 outputs is presented in the framework of the EQ 2 "to what extent has the RD project achieved its targeted results?"

- a. **Output 1: A strategy and action plan for the operation of NIRDA to achieve its goals:** The strategy and action plan were developed (and approved by the PSC and the Cabinet) during an 18-month period during July 2016 - December 2017, with the pace of progress impacted by the lack of support from NIRDA senior leadership. Notwithstanding this, the UNIDO team working with the collaboration of the NIRDA staff and external experts carried out the institutional assessment and need analysis, together with design and establishment of the first institution strategy and action plan. This output had significant impact on the direction and focus of the project's wider work, as an important part of this output was the identification of new subsectors/value chain areas from a screening of 32³⁷ possible value chains from which eight were selected for technological audit, to finally develop only 2 for the Open Call for Proposals, these being the Garment and the Banana Wine value chains.³⁸
- b. **Output 2: An upgraded organisational structure for the management and operation of NIRDA appropriate to the implementation of NIRDA's strategy and action plan:** NIRDA's organisational structure was modified to provide for increased support to SMEs and/or Micro Enterprises, and in April 2018 the organisational structure for NIRDA was completed and approved by the NIRDA Board, and then by the Government (Minister of Public Service and Labour - MIFOTRA). However, the delayed approval from the Cabinet created further project delay, with the Cabinet approval only forthcoming in July 2018. As with Output 1, Output 2 has made an important contribution to the project, by delivering an organisation structure for NIRDA that is more fit for purpose and endorsed at the highest government level, and with a

³⁷ Apple, Avocado, Banana, Cassava, Ceramics, Cut Flowers, Dairy, Essential oils, Fertilizer, Fish, Hides & Skins, Honey, Irish Potatoes, Leather, Macadamia nuts, Maize, Meat, Oil Palm, P. Packaging, Passion fruit, Pineapples, Precious stones, Rice, Silk, Soya beans, Sugar, Sunflower, Textile & Garments, Tomatoes, Vaccines, Wheat, Wood.

³⁸ It should be mentioned that some of the value chains selected for audit were somehow delayed such as the ceramic value chain that was only completed by December 2018.

mandate for increased support to SMEs and/or Micro Enterprises fundamental for effective support to value chain innovation and development.

- c. **Output 3: Operational systems, procedures and processes to maximise the efficient management and operation of NIRDA** (including systems to monitor its performance): The Standards Operations Procedures Manual and the NIRDA Human Resource Manual, were completed and approved by NIRDA Board in April 2018, with most operational systems (&E System and Manual) and procedures completed by September 2018. In tandem, the NIRDA website was redesigned, to include open call for proposal applications functionalities, as well as a management portal and user manuals. This work has been key in order to move from the preparatory value chain assessment work into the implementation phase of launching the Open Calls for the value chains selected, as it provides the manuals and standard operating procedures to guide NIRDA in its new role, as well as the tools and mechanism for NIRDA to engage with its target market of companies in the selected value chains. As an example, NIRDA's revamped website allows it a platform to market and communicate new opportunities as open Calls are launched, and to allow applying enterprises to apply over the website. Similarly, NIRDA is equipped with a theory of change and results chain, along with key indicators for measuring progress, results, and management operations in the M&E Manual, which will allow NIRDA to monitor its performance and the result of its support to value chains, in other words to 'keep score'.
- d. **Output 4: Capacity development programme for NIRDA's management and staff to undertake their defined roles within the upgraded organisational structure:** The new staffing structure along with a full set of NIRDA job descriptions and revised salary structure were completed and approved by the NIRDA Board and MIFOTRA in April 2018, with Government Cabinet approval only coming July 2018, representing a delay of approx. 6 months against the revised planning. In order to mitigate some of the delay, the UNIDO project team fast-track recruitment process to prioritize recruitment of staff required for the Open Calls, although further delays in MIFOTRA approval meant that the new staff hires were only onboard in November 2018, with the result that not all of the capacity development could be implemented. Notwithstanding the delays, Output 4 has been key in translating the new organisation structuring into operational guidance as to specific staff roles and responsibilities, and thereby provide the basis for recruitment of new staff. The delays however have meant that the project team could not deliver the full contribution to the capacity development of NIRDA management and staff that was foreseen, and much of this will have to be carried out in the post-project period.
- e. **Output 5: Investments in NIRDA's own facilities/equipment and in pilot projects:** Output 5 was divided into two outputs – Output 5.1 (Investment into NIRDA's own facilities and equipment) and Output 5.2 (Pilot Projects). **Output 5.1** in turn was divided into two main areas, these being i) administration and office equipment and ii) production and research facilities at their location in HUYE. As of September 2018, both activities were broadly on track, with the refurbishment of the HUYE administration offices on schedule to be completed by the project end. The investment into NIRDA's own facilities and equipment included the renovation of NIRDA Administration offices and workspaces (i.e., the Energy Building in HUYE) and the installation of office furniture, equipment, and signage. A contract for renovation works was signed in June 2018 between UNIDO and the architecture firm LCL Projects, with this work almost fully achieved at the time of the evaluation field mission and on schedule to be completed by the end of the project implementation period.

Regarding the **Pilot Projects (Output 5.2)**, the baseline and choice of sector for this output was under the Activity 1: ... "selection of sub sectors/value chain...development of NIRDA support programme for each sub sectors, design of NIRDA pilot project for each subsector. Based on a

long list of 20 SME product clusters identified and prioritised by the Rwanda government³⁹, detailed value chains technology audits were carried out on four value chains (Banana wine, Phytomedicine, Textiles and Garments, and Leather). Three value chain reports were completed, and quality controlled, by NIRDA and UNIDO in April 2018, with the value chain technology audit report for leather being completed later.

The technology audits indicated that only two of the original six value chains selected by the Minister have potential to undergo an Open Call process, underlining the importance of selecting value chains based on their technological merit and not on political directives. Investment support can only occur following the Open Calls foreseen in the workflow process and after the technology audits have all been completed. Beyond the significant delays and time lost during the initial two years of the project, the pilot projects were further delayed in 2018 due to the delay in cabinet approval to start NIRDA's recruitment process for new staff (see above). To support the open calls application process despite the recruitment delay UNIDO contracted four additional consultants and partnered with the Rwanda Business Development Fund (BDF) to support NIRDA with the Open Calls. Following the two-stage application process six firms from each of the banana wine and garments value chains were selected by the PSC for support in the pilot projects, with the selection approved by NIRDA's Board on 8 October 2018.

Output 5.2 has been fundamental to achieving the project's target results, as this is centred around the preparatory process of assessing value chain potential across the target product areas, and the launching of the Open Calls to select the firms from the target value chains for pilot project support. The Open Calls part of this process has also benefitted significantly from the work under output 5.1, which has as mentioned provided an open-access platform for firms to apply, as well as bringing new practices/standards of open communication with key target markets of NIRDA.

Where Output 5.2's effectiveness has been constrained, along with its contribution to the overall project objectives, is the reduced time to organise the Calls, provide internal capacity building for NIRDA staff, and time to support the beneficiary firms. Overall, the project has showed a relatively solid capacity to complete the target outputs, with under-completion or non-completion being linked to delays that were in significant part outside of the project team's direct control.

3.3 Progress towards impact

As mentioned earlier, the rationale for NIRDA's re-orientation and restructuring was to allow it to be able to effectively pursue its new government mandate of supporting the industrial growth and diversification of the country's economy, and within this transitioning itself from a purely research-oriented institution to an organisation directly dealing with the private sector in a much more hands-on approach. The improved operational capacity of NIRDA resulting from the project's support is thus intended to lead to Rwandan enterprises investing in and utilizing technology to improve their competitiveness, leading in turn over time to increased production and growth, increased exports and decreasing imports through import substitution.

The project has achieved partial, albeit delayed, progress towards achieving its target outcomes and registering the impact expected from the project. With regards to the project logframe, the project can be seen to have made considerable progress to achieving the overall project objective of *'Rwanda enterprises have access to a range of technology support services to assist with technology acquisition, adaptation and commercialisation'*. NIRDA has been through a significant

³⁹ 20 SME product clusters, which are: horticulture, fish, milk, meat, honey, cassava, wheat, maize, Irish potatoes, macadamia, spices, wood, essential oil, fashion and tailoring, ceramic and pottery, mineral, precious stones, gem and jewelleryes, and ICT (PSF, 2004; RoR, 2009).

restructuring and re-orientation, making a significant transition from a research organisation to a mix of applied research organisation and enterprise support agency, and the difficult of such organisational restructuring should not be underestimated – in particular given the significance in the level of change of NIRDA’s mandate from its predecessor. The experience of organisational restructurings and transition, both in the public and private sectors, shows the difficult of this work, with failure more common than success, with a significant body of research putting the failure rate at more than 70% - for example some of McKinsey and Company more recent survey work has suggested that 70% of all organisational transformations fail⁴⁰, although it should be noted that distinguishing between relative or partial success and failure can be sometimes difficult and that statistics are more readily available for private sector organisations. Beyond success and failure, one also needs to take into considering that most organisational change initiatives take longer, prove more disruptive and challenging to implement and can end up costing more than foreseen, in direct costs and indirect (e.g. costs of business disruption, the opportunity cost of management attention, etc.) costs.

However, from the standpoint of the Theory of Change and the target outcomes of improved capacity of NIRDA to improve the competitiveness of existing Rwandan industries; and ii) identify new sectors where investment by the private sector would likely lead to export growth, there is some progress to impact but much more needs to be done. An important reason is that the delays in project implementation mean that it is too early to demonstrate improved competitiveness.

However, as mentioned elsewhere in this report, it is likely that more focus will need to be placed on the non-technological aspects of enterprise development support and competitiveness improvement, specifically on company-level business, management and financial development and performance improvement, if NIRDA is to achieve its objective. Linked to this, it is also not clear that the monitoring and impact assessment framework for NIRDA is sufficiently focussed on company-level business, management and financial performance targets that will be required as key inputs to monitoring competitiveness.

3.3.1 Behavioural change

The project has played an important role in inducing and facilitating behavioural change at NIRDA, after a slow start. During the first two years, valuable time was lost due to resistance from NIRDA senior leadership, which deprived the project of valuable time for NIRDA’s new strategy and organigramme to “bed down’ and to be implemented in the organisation’s daily operation. This also contributed to wider resistance to change, and to frustration among staff about poor communication and co-ordination about the changes.

Despite these constraints, the change in leadership at NIRDA allow the organisation to move from an organisation primarily focused on scientific research to one with a much more applied research focus and with a strong emphasis on supporting the take-up up of new technologies among companies and support the development of firms in value chains. In this respect the project supported change through several entry points. Previously, the modus operandi in Rwanda was often top-down directives from the Government and private sector firms work to comply with such directives, whereas the situation has been evolving to one where the private sector communicates to public institutions what it needs and the public and private work together to address issues.

An example of how NIRDA’s organisation processes have changed to reflect and accommodate these new behaviours is its open-access platform, where any (eligible) company could apply to the Call for Proposals relevant to its sector of activity. In this respect, the project has made an important contribution, through facilitating the restructuring and the specification of the new organisational

⁴⁰ <https://www.mckinsey.com/business-functions/organization/our-insights/how-to-beat-the-transformation-odds>.

structure and management and staff roles.

Another example of changed behaviour is the structuring of division manager sector and value chain teams in project matrix team structures, which is helping to slowly foster a more results-oriented, flexible and project-based/demand-driven working culture, and should also over time also increase NIRDA's agility and reactivity as an organisation. However, this will require ongoing post-project support and it would be both optimistic and naïve to believe that the new strategy and organigramme on their own will be sufficient to drive continued organisational culture transition and new behaviours necessary for NIRDA to 'live' its new mandate and fulfil its potential.

There has been **some changed behaviour at the level of the target/beneficiary firms**, with firms engaging in an open-application process. An example of changed behaviour can be seen from some of the companies visited during the onsite visits part of the evaluation field visit programme. Most of these changes in both attitude and operations is attributed to lessons learned from the business skills training received under the project from the firm BPN. Some reported for example how the training made them realize the importance of reinvesting business income in growing their businesses, while all firms visited described how they had increased (or started) investment in advertising and marketing to increase sales, and how they had seen this investment starting to pay off. NIRDA will however need to continue to foster changed behaviour among beneficiary firms, including i) creating a more open and trusting engagement with these firms; ii) changing firms reluctance to share information on key business parameters such as revenue, profitability etc; and iii) creating more open cultures and structured management teams that can extract maximum benefit from business services support, training and coaching.

A counterfactual perspective

In assessing the ultimate impact (and value) of the project it is worth taking a brief counterfactual perspective – i.e. considering the outcomes of the intervention compared with the outcomes that would have been achieved if the project had not been implemented. It is possible that NIRDA may have revised its approach sufficiently to start some value chain assessment in priority product areas and possibly attract some GoR or development partner funding to implement projects. Even if this had happened (and this is probably a more optimistic assumption) it would not have had the level of change of direction implied in the new strategy, nor a new organisational structure to support this strategy, nor new organisational assets such as the wide range of value chain assessments and the open Calls platform capability. Moreover, the initial lack of cooperation from NIRDA senior leadership with the KOICA-UNDIO project, allied to the earlier observations on the difficulties and challenges of organisational change, suggest that any attempt at change would have taken longer, engendered greater frustration and suffered from the lack of external guidance to navigate such profound organisational change. Added to this should be the perceived credibility of UNIDO and KOICA at NIRDA with respect to experience in sustainable industrial development, and being a more "neutral" outside partner compared with how a national partner implementing such change might be perceived. **In this respect, possibly the most important impact of the project is that it happened, and has left NIRDA with a strategy (vision) and maps and tools for navigating its new journey.** Any frustrations with the delays encountered and the impact this has had on the time available for the changes to 'bed in' (e.g. NIRDA staff adoption of changed work practices and use of new capacities, a longer project period to work with the selected companies etc. etc.) should be viewed in this context. Most beginnings (or rebirths) in life, either at the organisational level (e.g. entrepreneurial start-ups) or individual level, tend to be at least somewhat messy and confused and history tends to show the importance of starting something.

"Without this UNIDO project I do not see any way in which NIRDA would have been reorganized. The previous management was not willing to see the restructuring, as it would imply loss of power for some. Therefore, it was useful to have an external driver to achieve the restructuring"

"The project partnership provided a means of "re-engineering" the functions of NIRDA, for example

we needed a restructuring but did not know how to match it with the strategic plan, without the technical expertise of the partnership we would not have been able to know how exactly to proceed with the matching”.

Feedback NIRDA management representatives

The new strategy set out a clear picture of where NIRDA needs to go as an organisation in alignment with the GoR Vision as opposed to old management that seemed to lack the capacity and understanding of the national vision as reiterated by two senior respondents:

Going forward, it will be important to ensure that the monitoring and impact assessment are fully aligned with NIRDA’s vision and the national policy vision, including with regards to maximising the learning from the support to value chains and understanding to what extent this is contributing to increased competitiveness. This is discussed further in Section 2.3.2 below.

3.3.2 Economically competitive – advancing economic competitiveness

From a policy- and strategy-level perspective, the project has contributed to a significant increase in the knowledge base and intelligence of NIRDA (and its partners), with NIRDA further adding to the number of priority products where value chain analysis has been carried out. This has in turn been filtered through a prioritisation process to determine the most promising sectors and products to focus on, which in principle should improve NIRDA’s chance of eliminating some of the risks in supporting specific sectors and product mixes.

For the most part, it is however too early to assess whether the project has already contributed to increased economic competitiveness, given the much-reduced project timeframe from the time the Open Calls were closed, and equipment procurement and delivery completed to beneficiary firms. It is likely that some performance improvements have started to manifest themselves, most likely improved productivity in the case of at least some individual firms, which may lead in turn to sales and turnover growth and possibly improved financial margins and improved working capital. As mentioned earlier, the field visit programme showed that some changed behaviour from beneficiary firms is leading to improved performance, and most likely in some cases to some initial, modest competitiveness gains, such as in the case of firms that have seen their customer bases grow as a result of increased investment in advertising and marketing. Another example of emerging impact is the case of Apparel Manufacturing Group (AMG)⁴¹, was developed as a result of NIRDA’s support was able to start importing input fabric in larger quantities by combing orders with other companies, by creating an entity for import-export activity with other Rwandan companies with which it is importing fabric together. This has allowed AMG and other companies to obtain better prices for these larger-volume orders (at the time of the evaluation the joint entity had already ordered 2 containers of fabric for a value of approx. USD 100,000) as part of AMG’s downsizing of its orders of second-hand textiles from China in favour of import substitution production of finished products in Rwanda.

However, it is important that **a rigorous and comprehensive monitoring and impact assessment framework is now put in place** to monitor the impact of NIRDA support to value chains. This requires for example data collation (including possible formalisations support on record-keeping) at the time of commencement of support in order to create a baseline, and then regular monitoring (e.g. quarterly, monthly, or bi-monthly). NIRDA has placed an important emphasis on knowledge management and monitoring and evaluation in its new strategy and organisation structure, and it is important that monitoring is fully used to develop a performance-based and learning culture both within NIRDA and among beneficiary companies. This will require i) regular monitoring on

⁴¹ AMG’s shareholders (approx. 40) are mostly small and medium enterprises who were brought together under the same Company.

both technology and business key performance Indicators; ii) headline impact targets at the NIRDA Call/VC Programme level and possible at the wider (VC) sector level. A likely important question here also will be to what extent equipment procurement raises performance and competitiveness, and thus the related RoI (Return on Investment) and RoA (Return on Assets). Finding answers will likely require NIRDA also providing support to other companies that do not receive equipment, and comparing the trajectory with those that receive business and management support and mentoring and those that receive business and management support and mentoring and equipment compared with value chain firms that receive no support at all.

3.3.3 Environmentally sound – safeguarding environment

The project reporting does not tend to address environmental sustainability, although many key project activities (e.g. NIRDA organizational restructuring) do not directly have any environmental impact. The value chain analyses generally give some consideration to environmental considerations, for example the garments value chain report considers waste and waste management and how certain waste materials could be recycled. However, there is likely some to be scope in at least some of the value chain analysis for rational use of natural resources (e.g. water) and/or increase consideration of green economy dimensions to be strengthened.

Furthermore, it is important to note that NIRDA's strategic plan does emphasize its planned contribution to SDG-9 around promoting inclusive and sustainable industrialization and upgrading infrastructure and retrofitting industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes. Furthermore, the PESTLE analysis considers the environmental sphere, concluding that new opportunities and challenges for industry through Water Management: the use of environmentally sound technologies and environmental practices to improve water productivity in industry, as well as prevent discharge of industrial effluents into international waters (rivers, lakes, wetlands and coastal areas).

Amongst the targets of SDG-9 that NIRDA expects to contribute to are: (i) Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries; (ii) By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities; (iii) Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending; (iv) Support domestic technology development, research and innovation in developing countries, including by ensuring a conducive policy environment for, inter alia, industrial diversification and value addition to commodities.

Regarding the value chain selection and support, it is likely that NIRDA may be able to do much more here in terms of emphasizing the sustainability of industrialization support. An example may be exploring how to bring a more explicitly focus on green economy issues and the sustainable use of natural resources such as water, while at the same time contributing to increased innovation at the level of beneficiary companies and increased financial savings. Some of the demonstration projects carried out under the EU's Switch Africa Green Programme, for example in neighboring Kenya and Uganda, might offer some inspiration in this regard. For example, more rational (and sustainable) use of water resources in some agri-food value chains could further allow the post-

project work to align with national policy goals around sustainable development and UNIDO's own vision of inclusive and sustainable industrial development.⁴²

3.3.4 Socially inclusive – creating shared prosperity

It should be emphasised that the project (and NIRDA's) focus is not primarily on promoting social inclusive development, insofar as the selection of companies from the Open Calls is predicated in part on selecting the most promising and solid companies that can become high-performers in their respective sector. However, that said, it should also be emphasised that the NIRDA's new strategy is promoting a more demand-driven organisation that listens to the companies in the value chains that it is working in, as well as creating organisational tools and processes – such as the online access to its Calls = that allows for a more inclusive approach to the markets it is targeting.

Similarly, NIRDA's new organisation structure emphasizes the important of human capital in making the organisation a success, and the importance of having staff that are included and feel valued, all the more as it moves to an increasing knowledge-driven and learning-centred organisation where for example staff are a key engagement channel with companies and where their work in supporting and advising target companies will influence the latter's perception of NIRDA. Moreover, over time, as beneficiary companies that work with NIRDA see the benefits of training, advisory support, and mentoring, they are likely to become more inclusive with respect to their own managers and staff. Furthermore, in addition to working with value chain companies more as partners in a joint development effort, NIRDA also seeks to develop its own partnerships with other national agencies and actors and has put partnership development as a key element in its new strategy.

3.3.5 Broader adoption

At the level of NIRDA, as the government-mandated first-mover in driving the effort for sustainable industrialisation and increased competitiveness, an important enabler for making replication and scaling-up possible was developed under the development of operational systems, procedures and processes to maximise the efficient management and operation of NIRDA (Output 3). This has created the systematisation of the Standards Operations Procedures (SOP) Manual, the Theory of Change, the M&E System, including the set-up of the results value chain measurement plan; establishment of baselines and targets for the Pilot Projects that will facilitate its replication. The long-term goal is the global adoption of standards by the industrial operators, and while it is already visible that some of the standards have being adopted and implemented by some part of the industry, however this is not yet systematised. It is important to mention that the technological transfer, the success of the strategy in achieving impact at scale will depend on several factors, including the replication of the initial success of the on-going pilot projects. Even if monitoring and evaluation arrangements are fully set up, a fully-fledged replication and scaling plan would need to be developed and implemented, and the value of this also required a fully operational monitoring and impact assess framework. It is understood that the DFID-funded International Growth Center (IGC) has expressed interest to NIRDA in funding an impact evaluation study for the Open Call Process to track impact on targeted firms over a longer period of time and document systematically the successes and lessons for future replication, and this a priori could be a valuable opportunity for NIRDA for giving further impetus to the monitoring and impact assessment process.

There is significant potential for replication and scaling-up of the project results and learning, particularly thanks to the capacity building realised. "Cow in the Car value chain". This show that the project has started a process that did not stop at the end of the project and is self-replicating.

⁴² See for example the UNIDO Lima Declaration of 2012, when all UNIDO Member States agreed in the Lima Declaration of 2013: Inclusive and sustainable industrial development must become an important part of the long-term development agenda (beyond 2015), or the UNDO publication "Inclusive and Sustainable Industrial Development: Creating shared prosperity | Safeguarding the environment", 2014.

The Cow in the Car is an interesting is a new NIRDA programme to add more value to cow products by supporting innovators to use science and technology to produce diverse products from parts of the cow that would otherwise be thrown away, thereby reducing animal waste generation and in particular increasing productivity and added value in the cow value chain. Implemented by NIRDA with support from Eastern and Southern Africa Trade and Development Bank (TDB), and the OCP Group, a Moroccan fertiliser manufacturing company. The selected proposals from the Open Call will benefit from interest-free loans to acquire upgraded equipment to implement their innovative projects, while NIRDA will also provide free technical and commercial advisory services. For example, cow hides can be used to produce car seats, while cow body parts can be processed to produce medical insulin while cows' pancreas can provide insulin (medication) for people with diabetes, in a country (and region) where there is a shortage of insulin around the world. What is particularly encouraging about this Call is the use of interest-free loans to support enterprises, and increased mixing of funding is one particularly important impact lever that can be further developed, explored, and refined by NIRDA.

NIRDA is however not yet fully ready to systematically operate at significant scale yet: If good processes have been engaged, it had not yet achieved the polytechnic range needed to cover wide-ranging customer needs of Rwanda's industrial economy. For now, NIRDA has neither sufficient skills nor capabilities to cover multiple open calls for proposal at the same time. There is important risk for team-saturation if other projects are added to the current subjects of Textile, Banana Wine, Garments and now Cow in the Car Value Chain. One way to solve the issue could be a potential delegation and partnership with other relevant ministries such as the ministry of Agriculture; however, this would imply further training and capacity building.

3.3.6 Theory of change

3.3.6.1 Theory of change: concepts and consistency with impact assessment

The theory of change is a method that explains how a given intervention or set of interventions are expected to lead to a specific change in development through an analysis of cause-and-effect links based on existing evidence. A theory of change also helps to identify the implementation process and intervention logic that were used to ensure that the chosen approach will contribute to the desired change. As stated in Section 1.4, part of the evaluation approach has been reviewing the theory of change developed for the project, and provide comments and analysis on same, with a view to reconstructing.

3.3.6.2 Theory of change: use in the case of the final evaluation of the Capacity building for industrial research and development in Rwanda project

Ideally, theory of changes will be built *a priori* of a project, as a helpful planning tool that will help to identify needed preconditions, expected processes, etc. However, it is also rather useful to use a theory of change *posteriori of a project*, in order to analyse the project's strategy and gather a detailed understanding of their process. Indeed, by identifying the processes that led to the outcome and analysing the actual impacts vs the original goal will also enable the evaluator to provide a set of recommendations and solutions for the sustainability of the project, identifying potential avoidance mechanism for negative factors or replication tips for the most positive factors.

By re-creating a Theory of Change for the project *Capacity building for industrial research and development in Rwanda*, the evaluator was able to provide several preliminary comments with regards to the project. Firstly, there is a good connection and coherence between the Strategy, the realisation of same and the Products. They indeed appear to obey to a hierarchical construction and logical connections. There is, however, no clear link between the project's strategy and activities, on the one hand and its specific objective "Rwanda enterprises have access to a range of

technology support services to assist with technology acquisition, adaptation and commercialisation” and overall objective “Improved competitiveness of new and existing Rwandan industries so as to increase their export potential and/or their potential to undertake import substitution”. Both are essentially long-term impacts and appear to focus on the *enterprises’ capacities* to realise their export potential and import substitution **potential**. {Yet, by looking at the Theory of Change, a connection is missing between the expected outcomes and this long term impact and end goals: the project will almost entirely focus on NIRDA capacity building and programme development, and even the A5 Pilot project will act as action learning for NIRDA staff and demonstrators for the Industrial community.} It can be argued that the project would partially fill its specific long-term objective, as though NIRDA’s capacity building will eventually support national enterprises. However, the project did not directly engage in improving the competitiveness of the industry and support the enterprises.

This is directly visible thanks to the ToC graph: the long-term impact and end goals do not appear as direct results of the outcomes. To achieve the expected impact, a new programme would need to be created with distinct preconditions (stability and strength of the market and trade standards, eagerness of Rwandese enterprises to engage in training/capacity building/TA support) as well as new activities that would directly target the enterprises, define their needs, and give a solution via NIRDA’s support.

Interestingly, this gap is presented in the project⁴³. Under 2.3.4 Impact (p34), it mentions that *“The planned support to NIRDA is expected to lead to increased exports and reduced imports: it is to achieve these goals that the Government of Rwanda established NIRDA”*. Similarly, under 2.3.4 Impact (p34), it is described *“The planned support to NIRDA is expected to lead to increased exports and reduced imports: it is to achieve these goals that the Government of Rwanda established NIRDA”*. Further under the section 3 *Project Description* (p35), it is said that *“The project is designed to ensure that NIRDA has the strategy, skills, structure, staff, style, systems and shared values that it needs in order to be able to make the necessary contribution to the industrial development goals of Rwanda’s Vision 2020.”* However, it does not make a direct mention to improving industrial competitiveness. It should be bear in mind that the expected impact is a long term one, and that it would not be the result of the direct implementation of the “Capacity building for industrial research and development in Rwanda” project.

The extended implemented period of this project seems to confirm that the pre-requirements as national market context, trade standards are much needed to achieve industrial competitiveness. Even when there has been country policy relevance and alignment, the specific conditions need to be in place as well as to acknowledge time constrains that it might have not been initially considered when setting the implementing time.

Annex 7 presents a diagram showing the ToC of this project as per information provided in the “project document”. The provided graphic intends to give an overview of the different elements identified in the elaboration of the ToC (Theory of Change).

⁴³Final project document 24 June 2016 document, subsection 2.3 *Feasibility of the Project* and Section 3 *Project Description* (pp.34-35)

4. Performance of partners

4.1 UNIDO

This project has required a significant effort from UNIDO given the context and technical requirements. The project implementation context, where NIRDA was not only being restructured to improve performance but was being repurposed for a new mandate, needs to be taken into contact in assessing partners' performance during the project implementation period. Not surprisingly, the level of change and re-orientation and the uncertainties created made this a challenging project management task, further exacerbated by initial NIRDA senior leadership resistance, insufficient communication to NIRDA staff, and delays in government approval.

In this context, the project team has done well in progressing the outputs and to keep things moving forward. Some good adaptive management was also shown by the UNIDO team (and NIRDA) in trying work around the challenges created by delays. One example is having NIRDA staff participate in the training provided to the beneficiary companies selected under the initial Calls.

One shortcoming in UNIDO's management is that UNIDO did not react sufficiently clearly and decisively to the initial delays, and along with KOICA look to exert pressure on NIRDA leadership and raising its concerns with the government, and this has been due in part to different communication practices and confusion within UNDO and KOICA, an issue acknowledged by both sides. At the same time, it should be acknowledged that the context was politically sensitive and UNIDO should in this respect be acknowledged for not having unduly created additional tension that might have created ill will or soured working relationships.

4.2 National counterparts

The Ministry of Trade and Industry and the Cabinet of the GoR were the main decision-making counterparts. Though the project counted on the support of the GoR, the governmental decision-making process generated some delays, which considerably delayed project implementation.

The evaluation noted that the limited inclusion of other ministries and agencies such the Ministry of Agriculture and the Ministry of Education, which could have facilitated access to the different existing value chains in the country, particularly the sectors targeted during the call for proposals. However, in a pragmatic sense, the biggest shortcoming has been the lack of an effective governance mechanism to provide rapid feedback on NIRDA and project outputs from the Government's side, and this mechanism needs to be put in place as a matter of urgency if NIRDA and future project support (from any national funding source or IFI) is to be fully leveraged in allowing NIRDA to pursue the Governments sustainable industrialisation's goals with the urgency and ambition they deserve.

4.3 Donor

KOICA has provided the necessary financial support to UNIDO, and its local branch was closely monitoring the evolution of the project and maintained a close communication with UNIDO and the GoR. A significant constraint from the outset has been the unilateral reduction in the funding budget for the project at the outset, which weakened what was for the most part a relatively robust and well-considered project design and rendered some of the assumptions unrealistic – for example, even in the best case scenario of a no-delays project implementation experience – extremely optimistic given the project context where the beneficiary would be undergoing profound reinvention and change – and to some extent this reflected a shortcoming in the depth of communication between KOICA and UNIDO, which both can learn from. UNIDO should have

been more vociferous in explaining the implications of this funding reduction, and proposing a scaled down project concept or looked to find alternative delivery solutions for some project components, while KOICA should have been more open in understanding who the funding reduction would impact on the overall (medium-term) goal of improved competitiveness for Rwandan enterprises. It is likely that KOICA's not having a technical staff member in Rwanda might also have been missed here (at least in providing an 'on-the-ground' understanding of the organisational re-orientation challenge that would be involved), although this likely more a factor during project implementation. At the same time, even if the communication on both sides left room for improvement, the value of KOICA's intervention and communication to close the project in re-igniting project momentum also needs to be acknowledged. However, from a learning perspective, a stronger higher/strategic-level dialogue around the project could also have helped KOICA and UNIDO explore how they could bring further value to the working relationship, not least in looking at South Korea's experience in its own industrialisation journey and its navigating successfully the "challenging waters" of middle-income country status.

5. Factors facilitating or limiting the achievement of results

5.1 Monitoring and evaluation

NIRDA's Monitoring and Evaluation (M&E) system is designed with the following objectives in mind:

- **Accountability:** NIRDA is accountable for the things that happen in its implementation duties, thus needs a legal and an explanatory framework within which to evaluate its practice. Accountability is an important element of good governance, showing transparency by NIRDA's openness about its activities, thus would accurately inform NIRDA BOD, GOR and other funding organizations of its implemented activities and assessment of its outputs. Working in an equitable and unbiased manner and thus delivering fairness in NIRDA procedures. As well as showing consistency between what is said and what is done, that would in time develop trust between NIRDA staff and the SMEs and NIRDA and the general public.
- **Knowledge Management:** Knowledge that support to make decisions on managing projects and on selecting new projects.
- **Influencing:** to use evidence to support adoption of technology
- **Sharing:** to provide other stakeholders and agencies with information

The Operational Monitoring division is responsible for ensuring that M&E is carried out in a robust manner and provides an accurate reflection of NIRDA's projects. Each project will be assigned an Operational Monitoring Specialist who will be responsible for ensuring that proper monitoring and assessment of projects is carried out. This means s/he is responsible for making sure that all necessary information is available in a timely manner and is collected using good research practices. Nevertheless, it should be clarified that the information may be collected by members of the project team, other NIRDA staff or through consultants.

This flexibility will require that the person in charge would have to be proactive in following the information gathering to verify that the quality of the information is maintained and that the deadlines are respected. Monitoring activities will thus be carried out by all members of the Project Matrix Teams and the Operational Monitoring Specialist will ensure quality of the monitoring data and will compile the data to present progress on each project to support decision making.

5.2 Result-based management

Overall, it is recognised that reasonable efforts have been made in the design and implementation of a result-based management approach for the UNIDO-KOICA project. This is visible both in the project design, as well as through the monitoring and reporting of the project. The evaluation team considers that the efforts realized are commendable, but that an extra-step could have been added to achieve stellar result-based management of the current project.

The project has the particularity to possess both "Problem and solution Tree Diagram" and a Logframe.

The **Problem and Solution Tree Diagram** is a specialized tool, very similar to a Theory of Change: it describes the "problems to be solved" by the project, and thus allow the identification of causes, causal consequences, activities to solve the defined problems, outputs, outcomes, Objectives and finally an end goal. This allows creating logical linkage between the activities and the identified problem, thus creating a coherent intervention logic. Furthermore, this tool provides an added logical link, which is not visible in the project design and Logframe: the connection between NIRDA's increased capacity, and the end goal of improved competitiveness of new and existing

Rwanda industries, through a new objective “Rwanda enterprises have access to a range of tech support services [...]”. This is a positive element, as it brings to the project design a medium/long-term impact dimension and comforts the notion of result-based vision of the project.

Despite these good elements, a nuance can be provided to this previous aspect, as if clear efforts were made to design a result-based project, this was not used to the full extent of its capacity. Indeed, the Logframe, Budget and overall action design does not directly consider and/or monitor this logical link between NIRDA’s capacity and its impact on Rwanda’s enterprises.

Firstly, the budget is not result-based in the way it was presented in the different documents. Indeed, it is usually presented per activity/Output but in their broad sense: for example, for Output 1B/A 1B “Support programme, new opportunities, pilot design”, the budget is sub-divided into 3 categories – Staff& Intern Consultants costs, Nat. Consultants/staff costs and Other Direct Costs. This does not allow for a transparent vision of the exact objective and use of the budget under the Output 1B, and ultimately it is impossible to have a clear result-based vision of the UNIDO-KOICA budget based on the existing documents.

Secondly, the Logframe can be assessed as being of good quality, with a clear presentation of the Outputs and their sub-activities with corresponding baseline, targets, means of verification, source of data and the responsible party for the implementation. The targets could have been more precise under some Outputs (i.e. Outputs 1.2 the target is “new organizational structure”, this could have been broken down more precisely), but overall, the quality is good and allows to appreciate the coherence of the Action Design. Still, there are no indicators and/or measuring results beyond activities and outputs: there is no formal consideration of the outcomes and impact of the project within the Logframe, which shows that this was not a priority within the implementation of the project.

As previously mentioned, even when positive impacts and self-replication are observable and identified by projects’ stakeholders, this is not formally identified within the reporting. For example, there is no formal measuring of the evolution of Rwandan enterprises’ capacity before and after the project. One can argue that only one output is directly targeting enterprises through call of proposal may have been insufficient, at least in terms of internal visibility, apart from it being too early to measure many of the results, and especially impact, at the time of project end.

The Evaluation Team considers that some efforts could still be made in valorising the potential/early impacts. Like the main reporting does not even considers the number of enterprises involved in the Call for Proposals (CfP), the number of enterprises that applied, the type/sector of enterprises that applied/were selected to the CfP. This shows that the project was more inward-focused toward NIRDA and that despite good identification of long-term results within the Solution Tree Diagram, a step is missing to realize a full-fledged result-based management/monitoring.

5.3 Overall assessment and rating table

The table below sets out the evaluation rating table for the project:

#	Evaluation Criteria	Mandatory Rating
A	Impact	Satisfactory
B	Project design	Moderately Unsatisfactory
1	• Overall design	Moderately Unsatisfactory
2	• Logframe	Moderately Unsatisfactory

#	<u>Evaluation Criteria</u>	<u>Mandatory Rating</u>
C	Project performance	Satisfactory
1	<ul style="list-style-type: none"> • Relevance 	Highly Satisfactory
2	<ul style="list-style-type: none"> • Effectiveness 	Moderately Satisfactory
3	<ul style="list-style-type: none"> • Efficiency 	Unsatisfactory
4	<ul style="list-style-type: none"> • Sustainability of benefits 	Satisfactory
D	Cross-cutting performance criteria	Moderately Satisfactory
1	<ul style="list-style-type: none"> • Gender mainstreaming 	Moderately Unsatisfactory
2	<ul style="list-style-type: none"> • M&E: <ul style="list-style-type: none"> ✓ M&E design ✓ M&E implementation 	<p>Unsatisfactory</p> <p>Moderately Unsatisfactory</p>
3	<ul style="list-style-type: none"> • Results-based Management (RBM) 	Moderately Satisfactory
E	Performance of partners	Satisfactory
1	<ul style="list-style-type: none"> • UNIDO 	Satisfactory
2	<ul style="list-style-type: none"> • National counterparts 	Moderately Satisfactory
3	<ul style="list-style-type: none"> • Donor 	Satisfactory
F	Overall assessment	Moderately Satisfactory

6. Conclusions, Recommendations and Lessons Learned

6.1 Conclusions

Relevance:

The project is highly coherent with, and relevant to, both national industrial policy and the National Strategy for Transformation (NST) as well as the country's needs and development context. The action has been the logical technical solution to support the government of Rwanda in achieving the transformation and development of NIRDA into an effective agent supporting Rwandan enterprises and driving the technology acquisition/ adoption that is much needed.

Project design:

While most aspects of the initial project design were satisfactory, there were nonetheless some weaknesses, of which the most important was a gap between the project's general and specific objectives that are primarily medium- to long-term objectives and the mainly short-term core implementation focus (centred primarily around building NIRDA's re-visioning, restructuring, and building organisation processes and staff capacities). This gap between the overall objective of increasing Rwanda's industrial sector competitiveness would have been attainable with difficulty, but was made much less attainable by the significant reduction (in half) of the project budget at the outset. A further weakness (at least to some extent) was a project design that was slightly overly-centred on NIRDA, and that the core implementation work with companies (Output 5b) might have been more visible as a stand-alone Output and made the critical path of the project clearer for all to see. Notwithstanding the above-mentioned design flaws, the detailed Problem and Solution Tree Diagram used during project design should be acknowledged as a strength of the design process, and can be described as good practice.

Efficiency:

Several implementation and management constraints have led to a challenging project implementation experience, which has led to sub-optimal efficiency. Firstly, project implementation has been constrained by the reduction of the 36-month implementation timeframe to 18 months, but without any corresponding adaptation of the activities to be implemented. There had been two extensions over the course of the project's duration⁴⁴, which has meant the final project duration was 40 months, and this has further raised questions as to the rationale of the initial halving of the project timeframe. Another significant efficiency constraint has been the delays of more than 12 months due to slow project approval processes, and slow government decision-making procedures. The project also experienced significant delays at the outset, which deprived it of much-needed momentum - during the first two years, valuable time was lost due to resistance from NIRDA senior leadership, which deprived the project of valuable time for NIRDA's new strategy and organigramme to "bed down" and to be implemented in the organisation's daily operation. This also contributed to wider resistance to change, and to frustration among staff about poor communication and co-ordination about the changes.

Effectiveness:

The project has registered partial achievement of its objectives - the specific objective of facilitating Rwanda enterprises' access to a range of technology support services to support their technology acquisition, adaptation and commercialisation had at the time of the evaluation only been partially achieved as NIRDA had only implemented one open call and has launched two new open calls. However, it is important to emphasise that if NIRDA continues implementing open calls for value chains, and continues and strengthens its capacity to deliver customised support to SMEs then the prospects are good for achieving the long-term objective of increasing the competitiveness of Rwanda's industrial sector.

Impact:

⁴⁴ A first extension of 12 months was approved, along with an increase of USD 100,000 in the total budget, and second extension of 10 months without budget increment.

The project has impacted positively through the restructuring of NIRDA and the related behavioural change in NIRDA staff, with the organisation now more demand-driven and more aligned with private sector needs and national priorities as elaborated in the National Strategy for Transformation. The project is also showing potential to impact positively on national economic competitiveness, following the two additional Open Calls that NIRDA has been implementing since September 2019 and the recognition of the Rwandan enterprises who thanks to the Garment and Banana Wine grant and training have changed and improved their operations and business management as result of support under the Garment and Banana Wine grant and training delivered by the Business Professionals Network (BPN). Furthermore, the replication and broader adoption of the project is relatively promising, with good visibility of NIRDA's newly acquired capacities in CfP management and in the sectors of focus. Furthermore, the creation of baselines as well as Standard Operating Procedures offers good potential for dissemination and self-replication alongside Rwandan enterprises, although this is not officially systematized.

Sustainability:

With the completion of NIRDA's new structure, strategy, and action plan, coupled with capacity building of the newly-recruited staff, the project shows some promising prospects for sustainability:

- *Institutional sustainability:* NIRDA has also been successfully established in a government-endorsed role and has received capacity development to enable it to carry out its new functions as per the two new Calls for Proposal that it has launched and the applied research services that it is providing.
- *Financial sustainability:* The long-term financial sustainability of NIRDA will however require not only driving technology acquisition and adoption but will also require supporting the financial capacity and adaptability of supported target enterprises if the objective of increasing Rwanda's Industrial capacity is to be attained.
- *Environmental Sustainability:* There is also good potential for both environmental safeguarding and social inclusion, both guided by the UNIDO vision of development, with the pilot projects having considered environmental issues, and industrialization offers further potential for future employment and thus social inclusion.

6.2 Recommendations

General Recommendations:

R1: Impact, Scaling and Replication: Develop a clear plan to consider and realise the potential for replication and scaling-up of the project results and learning. Despite the design weaknesses, the impact of the initial project funding reduction, and delays, the project has started to build some momentum, and the focus now needs to be on supporting and accelerating this momentum, such that NIRDA can significantly accelerate and scale-up its work with Rwandan enterprises and value chains, with the attendant benefits for the country in terms of enterprise growth, increased competitiveness, employment creation and improved livelihoods. The more NIRDA increases its capabilities and the quality of its work with value chains and Rwandan enterprises, the more valuable it will be as a key lever for implementing Government policy, as well as a valuable partner for international development partners and other value chain developers. This could significantly increase the opportunities for new funding streams for NIRDA, as well as increase the opportunities to significantly scale the volume of funding by mixing grant funding with loan funding, for example from EU Development Finance Institutions (DFIs) and/or via one of the EU blending facilities.

R2: Project management and procurement: Going forward, UNIDO should work to ensure that project management is more proactive, with a greater focus on working in partnership with NIRDA to facilitate organisational development change. **Project management and planning** also need to build in some room for manoeuvre (to the extent possible) in case changes need to be made to the strategy and/or the activities⁴⁵, and this requires having clarity on the priorities and an understanding of the national context. Regarding **procurement**, it is also recommended that the procurement unit i) maintains an information flow regarding the acquisition of technology/machinery in order to reassure the beneficiary organisations that are expecting this equipment and enable the enterprises to plan their operations and finances adequately to receive the support,

⁴⁵ At the same time the project team should engage as a matter of urgency with GoR to see how these unnecessarily long approval timeframes can be shortened.

and secondly ii) that the procurement services division, operational support services, policy and programme support (PPS/OSS/PRO) prioritise to the extent possible quality over quantity, with a view to **ensuring optimal operational performance** (and reduced maintenance and after-sales demands for equipment procured) as well as full consideration of grantees' needs and requests.

R3: Strengthened communication at all levels: The project needs to strengthen communication in numerous facets, including: i) strengthened internal project communication, including between the country project team and UNIDO HQ; ii) strengthened communication (and visibility) with the donor and the government, including regular news updates and publicising successes and milestones reached; iii) strengthened communication within NIRDA between management and staff, and between NIRDA and the government and external partners; and iv) strengthened communication between NIRDA and its grantees, including more effort from NIRDA to ensure it is actively listening to grantees and strengthening its understanding of their needs.

Recommendations to NIRDA:

R4: Strengthening NIRDA's Grant Management, and SME Mentoring and Business and Financial Support for Beneficiary SMEs: Going forward, NIRDA needs to develop its competencies on working with, and improving, beneficiary SMEs at all levels, including grant management, SME mentoring and relationship management. Similarly, NIRDA needs to continue to strengthen the business, management and financial support and mentoring for beneficiary SMEs, in order to accelerate their development. Regarding grantee budget negotiation and finalisation, it is recommended that grants are negotiated with each selected enterprise based on the final amount and the equipment that can be procured from these grant amounts, based on the assessed needs and constraints of the selected enterprises, thereby ensuring that the procurement equipment is adapted to those needs and realistically provisioned for in the budget.

R5: An ambitious strategic plan (3-5 years) and detailed business plan (1 year) for NIRDA: In order for NIRDA to maximise its contribution to Rwanda's development through scaling-up (see Recommendation 1) it is strongly recommended that NIRDA works on an updated strategic plan and business plan for the short and medium term, to allow it to develop at an accelerated pace and to ensure it can exploit new opportunities (e.g. possible new funding sources) and maximise its development contribution to helping the Government achieve its ambitious development goals). This work should include a clear organisational and human capital development plan, strengthened management capabilities, and clear processes and quality standards for call core competencies (Call for Proposals promotion, grantee contracting and grant management, enterprise support, mentoring and acceleration etc.) and strong internal systems that can allow NIRDA to grow rapidly.

R6: Develop a market and funding study related to value-chain development: Linked to the above recommendation, NIRDA should carry out (or commission) a short funding study/scan to understand the full range of potential market and funding opportunities. This could include national and regional international funding opportunities, including EU Country and Regional Funding and Calls for Proposals, as well as exploring applications to geographical and thematic EU blending instruments under the EU External Investment Plan. However, it could also be widened cover other areas such as project/intervention models, recommendations to improve its value proposition, partnering development, etc.

Recommendations to the Partners:

R7: For the Government - Efficient government approval processes: The Government needs to eliminate the incidence of delays that have constrained the ensure that efficient and rapid approval and management process are put in place. The delays caused by unnecessarily long approval periods have not only been unacceptable but have involved **significant opportunity costs** for the Government, NIRDA and the beneficiary enterprises and value chains. If the project is to make a full contribution to Rwanda's ambitious development goals, the Government needs to eliminate the incidence of delays and establish a high-level communication and trouble-shooting channel that can quickly alert senior government leaders should any such delays arise again, with a view to ensuring solutions are found rapidly.

R8: For KOICA – Proactive engagement and dialogue: KOICA can increase the value of its support to NIRDA and UNIDO, through more open and proactive engagement with its partners, including greater openness to consider the impacts of its decisions. This includes engaging in discussion around issues where funding changes might need to be made to understand the implications of these, rather than only looking at this from an administrative and funding lens.

R9: For all Partners UNIDO, KOICA and Government of Rwanda – Development collective strategic reflection papers to feed a high-level dialogue process with the Government It is recommended that the partners develop 1-2 discussion papers summarising the experience of a number of countries that have attained middle income status, including some that have passed from middle income status to high-income status and how they have navigated the challenges and ‘traps’ of middle-income country development to become high-income countries. This should **include work from KOICA to distil Korea’s own impressive story and what might the issues that Rwanda should take from the Korean experience.** The combined learning can be further researched and distilled in the light of the wider challenge of sustainable industrial development, including looking at short-term and medium-term implications of the importance of transferring to a low carbon economy, as well as possibly looking at other challenges such as Covid 19 recovery, and can allow UNIDO and KOICA to **generate a new dimension of KOICA-UNIDO added value** in the project.

6.3 Lessons learned

The project has generated significant and value lessons learned, as summarised below.

8. **Significant NIRDA potential to contribute to achievement of Rwanda’s industrial policy goals:** NIRDA is showing potential to make a significant contribution to achieving Rwanda’s industrial policy goals, which can for example be seen in its increasing capacity to provide real and increasing value to enterprises, and can be an important tool for GoR in its ambitious agenda to aggressively develop Rwanda’s industrial and enterprise competitiveness. Continued and appropriate support can further accelerate the path to realising this potential.
9. **A customised appropriate GoR process for approval and engagement with NIRDA.** NIRDA’s business is distinct and not typical of a government ministry, and requires ongoing management and ensuring engagement milestones and actions to support the enterprises it is working with, and to make its best contribution to achieving Rwanda’s industrial policy goals. This requires a customised, efficient approval and management practices from government that reflects these needs.
10. **Organisational change is never easy, and external KOICA-UNIDO support has helped NIRDA navigate this transition:** All organisation change and transition are difficult, and this project’s implementation experience has shown that, with the process of organisational transition having been made much more difficult by the delays and initial lack of senior management buy-in at NIRDDA. Despite the delays and implementation challenges NIRDA has undergone a process of institutional transformation that would have been difficult to bring about without an external project support.
11. **NIRDA’s value proposition and market reputation is growing, and leveraging other International financing:** The capacity enhancement and work on organisational and staff development and transition at NIRDA has put the organisation on a stronger institutional footing, with the equipping of staff with tools, knowledge, guidance manuals, SOPs in areas such as working with companies, management, production, technology audits, procurement management, value chain development etc. being fundamental to this increased take-up of NIRDA services. An example is UNIDO’s work on the Call for Proposals process and the rigorous approach to value chain analysis and evidence-based assessment. This increased solicitation of NIRDA increases its prospects for not just for **institutional sustainability but also financial sustainability**, through new project and other income streams
12. **Need for continued NIRDA management and institutional capacity development:** Notwithstanding the important progress in building capacity in NIRDA, it remains overly-reliant on management capability at the Director-General level and the next phase needs to place significant focus in building out staff capacity and middle management and operational levels, including greater skills to work with and mentor private sector enterprises and increased entrepreneurial skillsets.

13. **International Partners can bring more to NIRDA:** There is scope for the international partners to increase the value and synergy of their support to NIRDA. For example, KOICA could reflect on how Rwanda can benefit from South Korea's own impressive transition and journey over the past 60 years.
14. **NIRDA's potential and leverage can be maximised in part through increased focus on the wider enabling environment, including the private sector financing ecosystem:** Going forward, greater focus also needs to be placed on the wider enabling environment, and in particular the private sector financing ecosystem, with a view to building greater sustainability that can complement and leverage NIRDA and GoR support to Rwanda enterprise.

ANNEXES

Annex 1: Evaluation framework

Evaluation Question & Criteria	JC & Indicator No	Judgement Criteria and Indicators	Main Evidence Sources
<p><i>EQ 1: What is the relevance of Rwanda Capacity Building Industry RD project to country Policies and Needs?</i></p> <p>Evaluation Criterion: RELEVANCE</p>	JC1.1:	<i>Rwanda Capacity Building Industry RD project shows good alignment with country policies and needs</i>	
	I.1.1.1:	Rwanda Capacity Building Industry RD project relevance to country policies	Desk Research, Field Interviews
	I.1.1.2:	Rwanda Capacity Building Industry RD project relevance to country needs	Desk Research, Field Interviews
	JC1.2:	<i>Rwanda Capacity Building Industry RD project is relevant to UNIDO and KOICA policies and initiatives, and to those of other key donors</i>	
	I.1.2.1:	Rwanda Capacity Building Industry RD project relevance to UNIDO policies and strategies	Desk Research, Field Interviews
	I.1.2.2:	Rwanda Capacity Building Industry RD project relevance to KOICA policies and strategies	Desk Research, Field Interviews
	JC1.3:	<i>Rwanda Capacity Building Industry RD project is relevant to NIRDA's needs and role</i>	
	I.1.3.1:	Rwanda Capacity Building Industry RD project relevance to NIRDA's needs as institution	Desk Research, Field Interviews
<p><i>EQ 2: To what extent has the Rwanda Capacity Building Industry RD project achieved its targeted results?</i></p> <p>Evaluation Criterion: EFFECTIVENESS</p>	JC2.1:	<i>Rwanda Capacity Building Industry RD project has reached its specific objectives and contribute to the overall improvement of competitiveness of new and existing Rwandan industries.</i>	
	I.2.1.1:	Identification of new and existing value chains in Rwanda	Desk Research, Field Interviews
	I.2.1.2:	Verification of the export growth and import substitution of the selected value chains sectors	Desk Research, Field Interviews
	I.2.1.4:	NIRDA Structure modification and approach to support SMEs and or Micro Enterprises	Desk Research, Field Interviews
	JC2.2:	<i>Rwanda Capacity Building Industry RD project has been implemented in a cost-effective manner</i>	
	I.2.2.1:	The budget was adapted and coherent with the scale and duration of the activities, and economies of scale were used when possible/useful.	Desk Research, Field Interviews
	I.7.1.2:	Degree of coherence & synergy with other International donors working in the Value Chain sector in Rwanda	Desk Research, Field Interviews
<p><i>EQ 3: Has the Rwanda Capacity Building Industry RD project been efficiently implemented?</i></p>	JC3.1:	<i>Rwanda Capacity Building Industry RD project was managed satisfactorily, allowing its optimal prospects to achieve its objectives</i>	
	I.3.1.1:	Quality of Project Management (work planning, troubleshooting, adaptability to change, etc.)	Desk Research, Field Interviews
	I.3.1.2:	Quality of Programme reporting (use of SMART indicators, clear monitoring of the process)	Desk Research, Field Interviews
	I.3.1.3:	Quality of Programme monitoring & evaluation (including on cross-cutting issues)	Desk Research, Field Interviews

Evaluation Question & Criteria	JC & Indicator No	Judgement Criteria and Indicators	Main Evidence Sources
Evaluation Criterion: EFFECIENCY	JC3.2:	<i>Rwanda Capacity Building Industry RD project provided and supported an optimal organisational structure modification of NIRDA's and comparable to best practices for similar structures.</i>	
	I.3.2.1:	NIRDA capacity building of management and staff (operational systems, procedures, and processes)	Desk Research, Field Interviews
	I.3.2.2:	Investment in NIRDA's own facilities and equipment	Desk Research, Field Interviews
<i>EQ 3: Has the Rwanda Capacity Building Industry RD project been efficiently implemented?</i> Evaluation Criterion: EFFECIENCY	JC3.3:	<i>Rwanda Capacity Building Industry RD project implementation was efficient</i>	
	I.3.3.1:	Efficiency in the realisation /implementation of the activities	Desk Research, Field Interviews
	I.3.3.2:	Efficiency in pilot awarding and pilot management	Desk Research, Field Interviews
	I.3.3.3:	Management of external advisory service providers	Desk Research, Field Interviews
	I.3.3.4:	Efficient communication with the main actors and beneficiaries of the project	Desk Research, Field Interviews
<i>EQ 4: What is the overall impact of the Rwanda Capacity Building Industry RD project?</i> Evaluation Criterion: IMPACT	JC4.1:	<i>Rwanda Capacity Building Industry RD project has reached its planed impact of building capacity of the NIRDAS institution and personnel</i>	
	I.4.1.1:	Facilitated and strengthened NIRDA's institution	Desk Research, Field Interviews
	I.4.1.2:	Impact of the project on NIRDA's capacity to support the Rwandan Industry	Desk Research, Field Interviews
	I.4.1.3:	Impact of the project on NIRDA's support to PMEs and relevant organisations	Desk Research, Field Interviews
	I.4.1.4:	Contribution to the Sustainable Development Goals	Desk Research, Field Interviews
	I.4.1.5:	Impact on the coverage at National Level of NIRDAS support (including rural areas)	Desk Research, Field Interviews
<i>EQ 5: What are the sustainability prospects of the Rwanda Capacity Building Industry RD project?</i> Evaluation Criterion: SUSTAINABILITY	JC5.1:	<i>Rwanda Capacity Building Industry RD project results and impact are disseminated and visible for maximum impact and success of NIRDA's supporting the Rwandan Industry.</i>	
	I.5.1.1:	Project results are disseminated and made visible through a solid, multi-level communication strategy to project stakeholders	Desk Research, Field Interviews
	I.5.1.2:	Project results are disseminated and made visible through a solid, multi-level communication strategy to pilot implementations and target groups (SMEs)	Desk Research, Field Interviews
	I.5.1.3:	Project results are disseminated and made visible through a solid, multi-level communication strategy to the wider public	Desk Research, Field Interviews
	JC5.2:	<i>Rwanda Capacity Building Industry RD project results and impact will sustain beyond the implementation period of the project</i>	
	I.5.2.1:	The project included a sustainability model allowing the NIRDA to be self-reliant after the end of the project	Desk Research, Field Interviews
<i>EQ 6: Is the UNIDO-KOICA support to Rwanda Capacity Building Industry</i>	JC6.1:	<i>The support to the Rwanda Capacity Building Industry RD project provided by UNIDO-KOICA has brought additional value</i>	
	I.6.1.1:	Extent to which UNIDO Support to NIRDA had brought additional benefits to what would have resulted from other international organisations	Desk Research, Field Interviews

Evaluation Question & Criteria	JC & Indicator No	Judgement Criteria and Indicators	Main Evidence Sources
<p><i>RD project bringing additional value?</i></p> <p><i>Evaluation Criterion:</i> UNIDO-KOICA ADDED VALUE</p>	I.6.1.2	Extent to which KOICA Support to NIRDA had brought additional benefits to what would have resulted from other international organisations	Desk Research, Field Interviews
<p><i>EQ 7: Is the UNIDO support to the Rwanda Capacity Building Industry RD project coherent with the UNIDO Policy and other donors' policies and support?</i></p> <p><i>Evaluation Criterion:</i> COHERENT</p>	JC7.1:	<i>The UNIDO support for the Rwanda Capacity Building Industry RD project has been coherent with the UNIDO Policy, KOICA Policy and other donors' policies and support.</i>	
	I.7.1.1	Degree of coherence with UNIDO Strategy and policies in infrastructure of NIRDA	Desk Research, Field Interviews
	I.7.1.2	Degree of coherence & synergy with other International donors working in the Value Chain sector in Rwanda	Desk Research, Field Interviews

Annex 2: List of documentation reviewed (updated 10/2019)

No.	Source	Title	Date of Publication
01	Quarterly Reports		
1.1	UNIDO	Quarterly Progress Report Q3 2016	Oct 2016
1.2	UNIDO	Quarterly Progress Report Q4 2016	
1.3	UNIDO	Quarterly Progress Report Q1 2017	July 17
1.4	UNIDO	Quarterly Progress Report Q2 2017	
1.5	UNIDO	Quarterly Progress Report Q3 July September 2017	Sep 2017
1.6	UNIDO	Quarterly Progress Report Q4 2017	
1.7	UNIDO	Quarterly Progress Report Q1 2018	Apr 2018
1.8	UNIDO	Quarterly Progress Report Q2 2018	
1.9	UNIDO	Quarterly Progress Report Q3 July September 2018	Oct 2018
1.10	UNIDO	Quarterly Progress Report Q4 2018	
1.11	UNIDO	Quarterly Progress Report Q1 2019	
1.12	UNIDO	Quarterly Progress Report Q2 2019	
02	Annual Reports		
2.1	UNIDO	ANNUAL REPORT: JULY 2016 – JUNE 2017	Oct 2017
2.2	UNIDO	ANNUAL REPORT: JULY 2017 – JUNE 2018	
03	Biannual Reports		
3.1	UNIDO	BIANNUAL PROGRESS REPORT: JANUARY 2017– JUNE 2017	July 2017
3.2	UNIDO	BIANNUAL PROGRESS REPORT: JULY 2017 – DECEMBER 2017	January 2018
3.3	UNIDO	BIANNUAL PROGRESS REPORT: JULY 2018 – DECEMBER 2018	January 2019
04	Weekly Reports		
4.1	UNIDO	ACTIVITIES REPORT (12TH – 24TH) August 2016	August 2016
4.2	UNIDO	REPORT ON ACTIVITIES FROM (26TH - 31 ST) AUGUST 2016	August 2016
4.3	UNIDO	REPORT ON ACTIVITIES FROM (1ST - 7th) SEPTEMBER 2016	September 2016
4.4	UNIDO	WEEKLY REPORT FOR THE 4TH WEEK OF SEPTEMBER 2016 (26th – 30th) SEPTEMBER 2016	September 2016
4.5	UNIDO	WEEKLY REPORT FOR THE 1st WEEK (3rd – 7th) OCTOBER 2016	October 2016

No.	Source	Title	Date of Publication
4.6	UNIDO	WEEKLY REPORT FOR THE 2nd and 3rd WEEKS (10th – 21st) OCTOBER 2016	October 2016
4.7	UNIDO	WEEKLY REPORT FOR THE 4th WEEK (24th – 28th) OCTOBER 2016	October 2016
05	Programme Framework		
5.1	UNIDO	Project Document June 2016 (Updated Jan 2019)	2016/2019
5.2	UNIDO	Medium term programme framework for the period 2018 – 2021	June 2017
5.3	UNIDO	Updated medium term programme framework for the period 2018 2021	2017
06	Context Documents		
6.1	Rep of Korea	The Republic of Korea's Country Partnership Strategy for the Republic of Rwanda 2016-2020	March 2017
6.2	Rep of Rwanda	Rwanda Vision 2020	2000
6.3	Rep of Rwanda	Rwanda Vision 2020 – Revised 2012	2012
6.4	IGC	Review of industrial policy in Rwanda - Data review, comparative assessment, and discussion points	2018
6.5	Rep of Rwanda	Rwanda Competition and Consumer Protection Policy	2010
6.6	Rep of Rwanda	Rwanda National Industrial Policy	2011
6.7	Rep of Rwanda	Rwanda National Export Strategy (NES)	2011
6.8	Rep of Rwanda	Small and Medium Enterprises (SMEs) Development Policy	2010
6.9	NIRDA	Strategic Plan 2018-2022	2017
07	Project Steering Committee		
7.1	UNIDO	PSC Meeting 07 September 2016 (minutes & material)	Sep 2016
7.2	UNIDO	PSC Meeting 07 December 2016 (minutes & material)	Dec 2016
7.3	UNIDO	PSC Meeting 26 April 2017 (minutes & material)	Apr 2017
7.4	UNIDO	PSC Meeting 24 April 2018 (minutes & material)	Apr 2018
7.5	UNIDO	PSC Meeting 07 December 2018 (minutes & material)	Dec 2018
7.6	UNIDO	Letter JR-DG NIRDA Nomination UNIDO Rep to PSC	Aug 2016
7.7	UNIDO	Letter to CEO for Cooperation with PSF	Oct 2016

No.	Source	Title	Date of Publication
7.8	UNIDO	Letter to Juergen Reinhardt UNIDO KOICA Project (Rwanda)	Jul 2016
7.9	UNIDO	Nomination Letter Chairman PSC 05-12-2016	Dec 2016
7.10	UNIDO	Nomination Letter New Chairman PSC 16-10-2017	Oct 2017
7.11	UNIDO	Proposal for cooperation with PSF Final	
08	Final Submission to Minister Industry 22 Dec 2017		
8.1	UNIDO	Concept note on the reorganisation and restructuring of NIRDA	Dec 2017
8.2	UNIDO	Final Concept Note NIRDA	Dec 2017
8.3	UNIDO	Letter to Minister on Reorganisation and restructuring of NIRDA	Dec 2017
8.4	UNIDO	Letter to Minister MINICOM on Reorganisation and restructuring of NIRDA	Dec 2017
8.5	UNIDO	NIRDA Summary of Job Description 2017	Dec 2017
8.6	UNIDO	NIRDA Organigram	Dec 2017
8.7	UNIDO	NIRDA Salary Structure	Dec 2017
8.8	UNIDO	NIRDA Strategic Plan 2018-2022 (Revised 12/2017)	Dec 2017
8.9	UNIDO	NIRDA Workflow Process	Dec 2017
8.10	UNIDO	Proposed New Salary Structure for NIRDA	Dec 2017
09	Project Outputs		
9.1	UNIDO	Output 1 – Strategy and Value Chain	
9.2	UNIDO	Output 2 – Organisational Development	
9.3	UNIDO	Output 3 – Systems Development	
9.4	UNIDO	Output 4 – Capacity Development	
9.5	UNIDO	Output 5 – Investments	
9.6	UNIDO	Project Management and Coordination	
10	Technology Audit		
10.1	UNIDO	Official Requests and Introduction Letters	
10.2	UNIDO	Ceramics	
10.3	UNIDO	Leather	
10.4	UNIDO	Banana	
10.5	UNIDO	Phytomedicine	
10.6	UNIDO	Technology Audit Reports	
10.7	UNIDO	Textiles and Garments	

No.	Source	Title	Date of Publication
11	Project Presentations		
11.1	UNIDO	CB for Industrial R&D in Rwanda v2	
11.2	UNIDO	CB for Industrial R&D in Rwanda v3	
11.3	UNIDO	CB for Industrial R&D in Rwanda Barry	
11.4	UNIDO	CB for Industrial R&D in Rwanda Board Meeting July 2017	
11.5	UNIDO	CB for Industrial R&D in Rwanda CMT Huye Final	
11.6	UNIDO	CB for Industrial R&D in Rwanda Org Dev 30/11/2016	
11.7	UNIDO	CB for Industrial R&D in Rwanda PPT Monitoring System	
11.8	UNIDO	CB for Industrial R&D in Rwanda PSC April 2017	
11.9	UNIDO	CB for Industrial R&D in Rwanda SPSC April 2017	
11.10	UNIDO	CB for Industrial R&D in Rwanda Strategy Board of Directors	
11.11	UNIDO	CB for Industrial R&D in Rwanda Strategy Brainstorm follow on	
11.12	UNIDO	CB for Industrial R&D in Rwanda Strategy Brainstorm	
11.13	UNIDO	CB for Industrial R&D in Rwanda HRD	
11.14	UNIDO	Matrix Teams Example	
11.15	UNIDO	CB for Industrial R&D in Rwanda – DK	
11.16	UNIDO	Validation workshop Barry	
11.17	UNIDO	Validation workshop TOC	

Annex 3: List of stakeholders consulted

No.	Name	Institution and title
1	Mr. Andre Habimana	UNIDO Country Representative
2	Ms. Linda Sibomana	NIRDA Administration Assistant
3	Mr. Tony Choi Keun Myung	KOICA Deputy Country Director
4	Ms. Sayinzoga Kampeta	NIRDA General Director
5	Ms. Betty Tushabe	NIRDA National project Coordinator
6	Mr. Jonas Munyurangabo	MINICOM Head of Planning
7	Mr. Canisius Karuranga	UNIDO Former National Project Coordinator
8	Mr. Christian Twahirwa	NIRDA Operational Division Manager
9	Mr. Jean de Dieu Bikorimana	NIRDA Planning M & E Officer
10	Ms. Anita Akaliza	NIRDA Industrial Property Specialist
11	Ms. Anita Mutesi	NIRDA Program Development Advisor
12	Mr Kamal Abdul	Textile-Support Open Call Consultant
13	Ms. Joy Kansangire	PROMOTA, Textile Proprietor
14	Ms. Aurore Kayitesire	WEYA CREATIONS, Textile Proprietor
15	Mr. Georges Niyongabo	AFRICA SEWING CLUB, Textile Proprietor
16	Mr. Issa Josue Nzabonimana	GASHIGURACUMU LTD, Wine Production manager
17	Mr. Tuyishimire PLACIDE	CETRAF LTS, Wine Equipment Plant Manager
18	Mr. Andrew Kanyonya	New Kigali Designers, Textile Proprietor
19	Ms. Alice Nkulikiyinka	BPN Country Director
20	Mr. Steven Mutabazi	NIRDA Board Chairman
21	Mr. Benjamin Manzi	NIRDA Board Members
22	Ms. Felly Kalisa	NIRDA Board Members
23	Mr. John Nyakahuma	Senior Adviser HRM and Change Management
24	Ms. Denise Umunyana	National Expert/Training needs analysis

Annex 4: Agenda of field mission

Time	Name and Title	Location (address)	Email
MONDAY 09/09/2019			
08:00 -9:00 Entire Team	Mr. Andre HABIMANA <i>UNIDO Country Representative</i>	UNIDO Office	a.habimana@unido.org
9:15-10:30 (Group A)	Linda SIBOMANA <i>NIRDA Admin. Assistant</i>	NIRDA Office	b.tushabe@unido.org t.sibomana@unido.org
9:15- 10:30 (Group B)	Focus Group Meeting <ul style="list-style-type: none"> ▪ Mr. Christian TWAHIRWA, <i>Operational Division Manager</i> ▪ Mr. Jean de Dieu BIKORIMANA, <i>Planning M & E Officer</i> ▪ Ms. Anita AKALIZA, <i>Industrial Property Specialist</i> ▪ Ms. Anita MUTESI, <i>Program Development Advisor</i> 	NIRDA Office	Christian.twahirwa@nirda.gov.rw Jado.bikorimana@nirda.gov.rw Anita.akaliza@nirda.gov.rw Anita.mutesi@nirda.gov.rw
11:00-12:30 Entire Team	Mr. TONY CHOI KEUN MYUNG <i>KOICA Deputy Country Director</i>	KOICA Office	Tonz@koica.go.kr
	LUNCH BREAK		
14:00-15:30 Entire Team	Ms. `Pichette SAYINZOGA KAMPETA, <i>Director General NIRDA</i>	NIRDA Office	skampeta@nirda.gov.rw
15:15-16:00	Mr Kamal Abdul	UNIDO	
16:30-17:30	Mr. Jonas MUNYURANGABO/ Head of Planning	MINICOM Office	
17:45	WRAP UP Meeting	MINICOM	
Time	Name and Title	Location (address)	Email
TUESDAY 10/09/2019			
8:30-9:30	Ms. Betty TUSHABE, <i>UNIDO National Project Coordinator</i>	UNIDO Office	

Time	Name and Title	Location (address)	Email
10:00 -11:00	Ms. Joy KANSANGIRE, <i>Promota</i>	PROMOTA Office Tel.0788307047	NIRDA PILOT COMPAGNIES/ENTREPRENEURS
11:00 -12:00	Ms. Aurore KAYITESIRE, <i>Weya Creations</i>	WEYA CREATIONS Office Tel : 0788309794	NIRDA PILOT COMPAGNIES/ENTREPRENEURS:
12:00 -13:00	Mr. Georges NIYONGABO, <i>Africa Sewing Club</i>	AFRICA SEWING CLUB Office Tel.:0788307783	NIRDA PILOT COMPAGNIES/ENTREPRENEURS
15:00-15:45	Mr. Canisius KARURANGA/Former National Project Coordinator	UNIDO OFFICE	karurang@gmail.com b.tushabe@unido.org
16:00-17:00	Ms. Alice NKULIKIYINKA, <i>Business Professionals Network (BPN) Country Director</i>	BPN Office	Alice.nkulikiyinka@bpn.ch http://bpn.ch/ueber-bpn/organisation/?lang=en
17:30	WRAP UP meeting of the join evaluation team	UNIDO Office	
WEDNESDAY 11/09/2019			
9:00-9:45	Mr. Canisius KARURANGA, <i>Former UNIDO National Project Coordinator</i>	UNIDO Office	
10:am	NIRDA BOARD MEMBERS Mr. Steven Mutabazi Dr. Laetitia Nyinawamwiza Mr. Benjamin Manzi Dr. Pierre Claver Kayumba Ms. Mary Asimwe Ms. Felly Kalisa Ms. Germaine Mukabalisa	NIRDA Office	stevenmutabazi@gmail.com nyinawamwiza@yahoo.fr benz142002@yahoo.com p.claver.kayumba@gmail.com mary.asimwe67@gmail.com felly.kalisa@gmail.com gmukabalisa@gmail.com
15:00	Focus Group Meeting - Ms. Joan MAZIMHAKA, <i>NIRDA Launch Media / Communication support</i> - Ms. Denise UMUNYANA, <i>National Expert/Training needs analysis</i> - Mr. Shema MURANGIRA, <i>National expert HR Development and change management</i> - Mr. Simon KARIMBA, <i>Renovation of Energy Building HUYE</i>	UNIDO Office UNIDO Office UNIDO Office NIRDA	joan@illume-cs.com denise@rightseat.rw shemamurangira@gmail.com skavenya@gmail.com
16:30	NIRDA Board President	NIRDA Office	

Time	Name and Title	Location (address)	Email
THURSDAY 12/09/2019			
8:30-10:30	Ms. Betty TUSHABE, <i>UNIDO National project Coordinator</i>	NIRDA Office	
12:00-13:00	Meeting Joint evaluation team	Restaurant	
14:00-15:00	Ms. Janet NKUBANA, <i>Gahaya Links</i>	GAHAYA LINKS KICUKIRO OFFICE Tel 0788306300	NIRDA PILOT COMPAGNIES/ENTREPRENEURS
15:30-16:30	Mr. Andrew KANYONYA, <i>New Kigali Designers</i>	GISOZI OFFICE 0788309551	NIRDA PILOT COMPAGNIES/ENTREPRENEURS
16:30-18:00	- Prof. BIKORO/ CFRDTA LTD) - GASHINGURACUMU LTD (BANAN WINE INDUSTRY)	RUGENDE Office tel.:0788305481	NIRDA PILOT COMPAGNIES/ENTREPRENEURS
FRIDAY 13/09/2019			
9:00-10:30	- Mr. Christian TWAHIRWA, <i>Operational Division Manager</i>	NIRDA Office	Christian.twahirwa@nirda.gov.rw
11:00-13:00	- Mr. Andre HABIMANA <i>UNIDO Country Representative</i>	UNIDO Office	a.habimana@unido.org
	End field mission		

Annex 5: Project logframe

Objectives		<i>Rwanda enterprises have access to a range of technology support services to assist with technology acquisition, adaptation and commercialisation.</i>									
Outcome 1	Indicator 1.1	Baseline	Target	Means of Verification	Source of data	Frequency of data collection	Activities				
Increased capacity of NIRDA ³⁹	No. of enterprises supported to increase their competitiveness	0	To be defined in the inception phase	Project monitoring report	NIRDA monitoring system	Continuous					
	No. of new sub-sector/value chain investment opportunities identified	0	3	Value chain analysis reports	Project records	Continuous					
	Number of pilot projects established and operated for 12 months	0	3	Launch of pilot projects	Project records	Continuous					
Output 1.1	Indicator 1.1.1	Baseline	Target	Means of Verification	Source of data	Frequency of data collection	Activity 1.1.1	Responsible Party	Planned Target (2016-2017)	Planned Target (2016)	
A strategy and action plan for the operation of NIRDA to achieve its goals	An approved unified strategy and action plan document	Does not exist	Strategy and Action plan approved	Minutes of NIRDA's Board of Directors approving the strategy	Minutes of NIRDA's Board meetings	Once	Establishment of a strategic planning team within NIRDA	NIRDA/UNIDO	Established	Established	
							Drawing together of different VC programmes into a unified strategy	UNIDO/NIRDA	Draft Strategy and action plan	Draft Strategy and action plan	
	Consultation and approval process	NIRDA/UNIDO	Approved strategy and action plan	Approved strategy and action plan							
	Indicator 1.1.2	Baseline	Target	Means of Verification	Source of data	Frequency of data collection	Activity 1.1.2	Responsible Party	Planned Target (2016-2017)	Planned Target (2016)	
	3 value chains	0	3	Physical	VC reports	As	Value chains	NIRDA/UNIDO	3 value chains	3 value chains analysed	

	analysed (existing)			evidence		completed	selection Value chain analysis, taking gender impacts into consideration Development of a NIRDA support programme for each selected sub-sector/value chain	UNIDO/NIRDA UNIDO/NIRDA	analysed and support programmes designed, taking into full consideration gender equality and empowerment of women considerations	and support programmes designed	
	Indicator 1.1.3	Baseline	Target	Means of Verification	Source of data	Frequency of data collection	Activity 1.1.3	Responsible Party	Planned Target (2016-2017)	Planned Target (2016)	
	3 value chains analysed (new)	0	3	Physical evidence	VC reports	As completed	Value chain selection Value chain analysis, taking gender impacts into consideration Development of a NIRDA pilot project for each selected sub-sector/value chain	NIRDA/UNIDO UNIDO/NIRDA UNIDO/NIRDA	3 value chains analysed and support programmes designed, taking into full consideration gender equality and empowerment of women considerations	3 value chains analysed and support programmes designed	
Output 1.2	Indicator 1.2.1	Baseline	Target	Means of Verification	Source of data	Frequency of data collection	Activity 1.2.1	Responsible Party	Planned Target (2016-2017)	Planned Target (2016)	
An upgraded organisational structure for the management and operation of NIRDA	New organisational structure approved and implemented	Existing organisational structure	New organisational structure	Minutes of Board of Directors meeting approving new structure	Minutes of NIRDA Directors meetings	Once	Review of existing organisational structure	UNIDO/NIRDA	Review completed	Review completed	
				Physical evidence that new structure has been implemented			Physical inspection	Activity 1.2.2	Responsible Party	Planned Target (2016-2017)	Planned Target (2016)
				Definition of an organisational structure appropriate to the implementation of NIRDA's mandate			UNIDO/NIRDA	New organisational structure defined	New organisational structure defined		
				Activity 1.2.3			Responsible Party	Planned Target (2016-2017)	Planned Target (2017)		
				Organisational structure presented to			NIRDA/UNIDO	Approved new organisational structure	New organisational structure fully implemented		

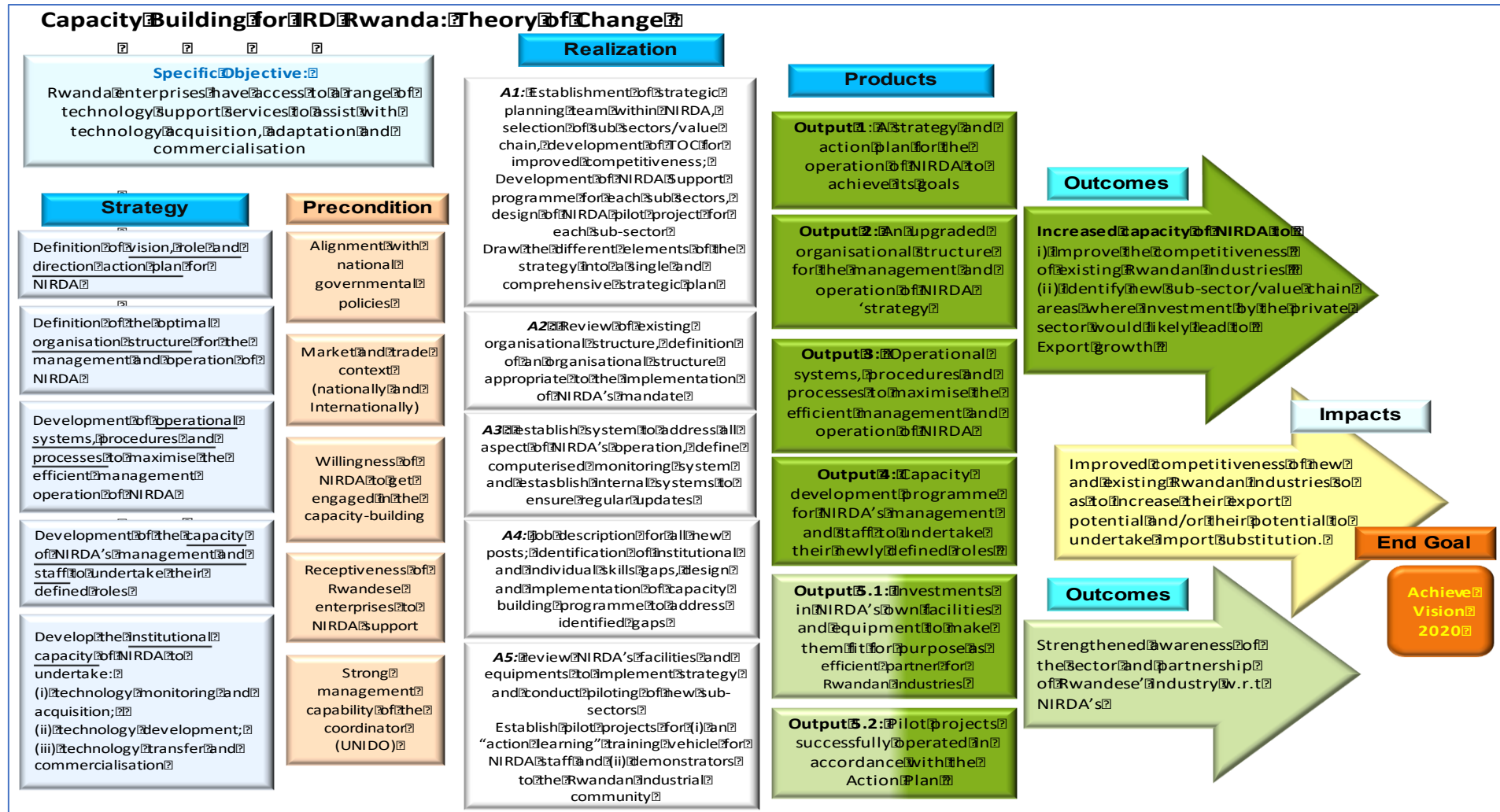
Output 1.3	Indicator 1.3.1	Baseline	Target	Means of Verification	Source of data	Frequency of data collection	Activity 1.3.1	Responsible Party	Planned Target (2016-2018)	Planned Target (2017)
Operational systems, procedures and processes to maximise the efficient management and operation of NIRDA (including systems to monitor its performance)							Government and other key stakeholders for consideration			
	Full range of systems and procedure operational within NIRDA	Very limited procedures in place (see situation analysis)	All systems as defined in Project Document operational by end 2017	Physical inspection	Physical evidence	Quarterly progress reports	Establishing systems and defining procedures to address all aspects of NIRDA's operations on a prioritised basis Establish internal systems for ensuring systems and procedures are regularly updated by NIRDA staff	UNIDO/NIRDA	All systems and procedures fully operational	50% of systems and procedures fully operational by end 2016
	Indicator 1.3.2	Baseline	Target	Means of Verification	Source of data	Frequency of data collection	Activity 1.3.2	Responsible Party	Planned Target (2016-2018)	Planned Target (mid-2018)
	M&E system fully operational	No M&E system in place	Fully operational M&E system by end 2016	Physical inspection	Physical evidence	Quarterly progress reports	Define and establish an effective computerised monitoring system for NIRDA to allow its Board of Directors to assess progress in achievement of agreed goals	UNIDO/NIRDA	Operational M&E system	Operational M&E System
Output 1.4	Indicator 1.4.1	Baseline	Target	Means of Verification	Source of data	Frequency of data collection	Activity 1.4.1	Responsible Party	Planned Target (2016-2017)	Planned Target (2017)
Capacity development programme for NIRDA's management and staff to undertake their defined roles within the organisational structure	All staff have job descriptions that reflect their role	Existing job descriptions do not reflect new mandate	All staff have updated job descriptions that reflect new mandate	Job descriptions	Physical inspection	Quarterly progress reports	Preparation of job descriptions for all posts defined in the new organisational structure	UNIDO/NIRDA	All job descriptions updated	All job descriptions updated
	Indicator 1.4.2	Baseline	Target	Means of Verification	Source of data	Frequency of data collection	Activity 1.4.2	Responsible Party	Planned Target (2016-2018)	Planned Target (March 2018)

	Training needs analysis undertaken involving all staff	No TNA exists	TNA completed involving all NIRDA staff	TNA report	Physical inspection	Quarterly progress reports	Identification of institutional and individual skills gaps through a comparison of existing capability with required capability (training needs analysis)	UNIDO/NIRDA	TNA completed on all staff	TNA completed on all staff
	Indicator 1.4.3	Baseline	Target	Means of Verification	Source of data	Frequency of data collection	Activity 1.4.3	Responsible Party	Planned Target (2016-2018)	Planned Target (2017)
	Internal and external training plan implemented	No formal training plan exists	Formal training plan approved and implemented, with equal chances provided to qualified female employees	Training plan Training reports	Physical inspection	Quarterly progress reports	Design and implement a capacity building programme to address identified skills gaps (including study tours where appropriate)	UNIDO/NIRDA	Approved training plan implemented in full	Initial training to address priority needs (10% of expected total) implemented
Output 1.5	Indicator 1.5.1	Baseline	Target	Means of Verification	Source of data	Frequency of data collection	Activity 1.5.1	Responsible Party	Planned Target (2016-2018)	Planned Target (Q2/2018)
Output 1.5.1: Improvements in NIRDA's own facilities and equipment to make them fit for purpose and reflect its role as a key modern and efficient partner for Rwandan industries Output 1.5.2: Pilot projects successfully operated in accordance with the Action Plan to act as (i) an "action learning"	Improvements in NIRDA's own infrastructure as foreseen in the action plan undertaken	Existing state of facilities (will be reviewed)	Improvements foreseen in action plan undertaken and fully operational	Physical inspection	Physical evidence/ NIRDA asset register	Quarterly progress report	Review of NIRDA's own facilities and equipment Specification of necessary investment (equipment procurement and facility improvement) for NIRDA to be able to implement the strategy Procurement of the necessary supplies and works	UNIDO/NIRDA	All investments completed by project end date	70% on investments undertaken by end Q2/2018
	Indicator 1.5.2	Baseline	Target	Means of Verification	Source of data	Frequency of data collection	Activity 1.5.2	Responsible Party	Planned Target (2016-2018)	Planned Target (Q3/2018)

	Training needs analysis undertaken involving all staff	No TNA exists	TNA completed involving all NIRDA staff	TNA report	Physical inspection	Quarterly progress reports	Identification of institutional and individual skills gaps through a comparison of existing capability with required capability (training needs analysis)	UNIDO/NIRDA	TNA completed on all staff	TNA completed on all staff
	Indicator 1.4.3	Baseline	Target	Means of Verification	Source of data	Frequency of data collection	Activity 1.4.3	Responsible Party	Planned Target (2016-2018)	Planned Target (2017)
	Internal and external training plan implemented	No formal training plan exists	Formal training plan approved and implemented, with equal chances provided to qualified female employees	Training plan Training reports	Physical inspection	Quarterly progress reports	Design and implement a capacity building programme to address identified skills gaps (including study tours where appropriate)	UNIDO/NIRDA	Approved training plan implemented in full	Initial training to address priority needs (10% of expected total) implemented
Output 1.5	Indicator 1.5.1	Baseline	Target	Means of Verification	Source of data	Frequency of data collection	Activity 1.5.1	Responsible Party	Planned Target (2016-2018)	Planned Target (Q2/2018)
Output 1.5.1: Improvements in NIRDA's own facilities and equipment to make them fit for purpose and reflect its role as a key modern and efficient partner for Rwandan industries Output 1.5.2: Pilot projects successfully operated in accordance with the Action Plan to act as (i) an "action learning"	Improvements in NIRDA's own infrastructure as foreseen in the action plan undertaken	Existing state of facilities (will be reviewed)	Improvements foreseen in action plan undertaken and fully operational	Physical inspection	Physical evidence/ NIRDA asset register	Quarterly progress report	Review of NIRDA's own facilities and equipment Specification of necessary investment (equipment procurement and facility improvement) for NIRDA to be able to implement the strategy Procurement of the necessary supplies and works	UNIDO/NIRDA	All investments completed by project end date	70% on investments undertaken by end Q2/2018
	Indicator 1.5.2	Baseline	Target	Means of Verification	Source of data	Frequency of data collection	Activity 1.5.2	Responsible Party	Planned Target (2016-2018)	Planned Target (Q3/2018)

training vehicle for NIRDA staff and (ii) demonstrators to the Rwandan industrial community.	Indicators for each pilot project must be specified in the action plan and must be approved as part of the overall approval process for pilot projects.	Zero: all pilot projects will be new	To be specified in the Action Plan and approved in advance by the PSC	NIRDA M&E system	NIRDA M&E system	Quarterly progress report	Identification and specification of the investment needs (equipment procurement and facility improvement) necessary for pilot projects Procurement of the necessary supplies and works Operation of the pilot project for a period of 12 months.	UNIDO/NIRDA	All investments completed by project end date Successful operation of the pilot projects for 4 months	80% on investments undertaken by end-Q3/2018
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Annex 6: Theory of change



Annex 7: Evaluation Terms of Reference

I. PROJECT BACKGROUND AND CONTEXT

1. Project factsheet⁴⁶

Project title	Capacity-building for industrial research and development in Rwanda
UNIDO project ID	150442
Region	Eastern Africa
Country	Rwanda
Implementation start date	July 2016
Planned implementation end date	December 2017
Actual implementation end date	October 2019
Implementing agency(ies)	UNIDO
Donor(s):	Korea International Cooperation Agency (KOICA)
Total project allotment	USD 2,123,894
Planned terminal evaluation date	July-September 2019

(Source: Project document)

2. Project context

Rwanda is a small landlocked country with a population of over 12 million people. The country's economy is primarily subsistence based, with industry and services generating about 15% and 53% of GDP, respectively. Despite the remarkable efforts the country undertook after the end of the 1994 war to boost its industrial processes and its exports, the country faces many challenging issues such as a narrow domestic market, inadequate/low human resource skills, inadequate energy infrastructure, low value addition and lack of quality and standards infrastructure.

In particular, the industrial sector is quite small and lags behind the levels reached by agriculture sector; between 2008 and 2012 the sector grew at an average rate of 9.8% per year largely driven by a rapid expansion of the construction sub sector which currently constitutes 52% of the industrial sector and contributes 7% to GDP. The construction industry is largely composed of building, transport infrastructure, and civil engineering activities.

Rwanda's long-term development goals are embedded in a strategy entitled Vision 2020, which seeks to transform Rwanda from a low-income agriculture-based economy to a knowledge-based, service-oriented economy with a middle-income country status by 2020.

The diversification of the Rwandan economy is essential for meeting the goals in Vision 2020, including the target of a 26% share of industry with regard to the GDP. Achieving this transformation requires a dynamic and coherent industrial policy for Rwanda. An industrial transformation is also required in order to achieve the employment targets of Vision 2020 - non-farm employment is expected to reach 1.4 million against industry's current employment of just 4 per cent of the workforce or 170,000 people. In order to achieve the long-term development goals formulated in Vision 2020, the Government of Rwanda has formulated the second Economic Development and Poverty Reduction Strategy (EDPRS II).

Additionally, the private sector, which is still largely informal, has to play a larger role in ensuring economic growth. The Government has recognized this challenge and has converted the former

⁴⁶ Data to be validated by the Evaluator

Institute for Scientific and Technological Research (ISTR) into the National Industrial Research and Development Agency (NIRDA). This reflects a global trend for Governments to reduce funding on pure research and switch to applied research aimed at increasing the competitiveness of a nation's enterprises. NIRDA's mission, as defined in its establishing law is extremely broad and there is a clear need to focus on "spearheading accelerated adoption of new technology by the industrial sector" in order to increase exports and/or reduce imports.

3. Project objective and expected outcomes

To achieve the three main objectives of Rwanda's Industrial Policy it is necessary to strengthen NIRDA's role. The three main targets of this strategy are: (i) increased domestic production for local consumption; (ii) improved Rwanda's export competitiveness and (iii) an enabling environment for Rwanda's industrialization.

In this regard, UNIDO has been requested by the Permanent Secretary at the Ministry of Industry and Trade to support the "Capacity Building to the National Industrial Research and Development Agency (NIRDA)". Despite the very significant improvements to the enabling environment for industrial growth made by the Government of Rwanda to date, the growth of the Rwandan industrial sector is behind schedule. Therefore, there is an urgent need to take steps to more actively promote the growth of the industrial sector and reduce the nation's current dependence on the export of primary products and to increase the sophistication and competitiveness of Rwanda's processed products if the goals of Vision 2020 are to be realized.

It is within this framework that the Government of Rwanda established NIRDA to accelerate industrial transformation and to act as a spearhead in that process. The Government recognized that NIRDA would need significant technical assistance and training to be able to achieve its mandate and made a formal request for such support from UNIDO. NIRDA has now been established for a year and there is a high level of urgency to start significant delivery of its mandate.

UNIDO is expected to support NIRDA mainly by: a) establishing a pilot dairy project (Burera Community Processing Center); b) providing technical assistance and training to the pilot to improve milk production and collection while establishing new policies improving production, processing and marketing; c) supporting the development of industrial intelligence capacities; d) performing sub-levels competitiveness analysis; e) improving industrial energy efficiency.

Expected Outcomes:

- ✓ A strategy and action plan for the operation of NIRDA to achieve its goals;
- ✓ An upgraded organizational structure for the management and operation of NIRDA;
- ✓ Operational systems, procedures and processes to maximise the efficient management and operation of NIRDA (including systems to monitor its performance);
- ✓ Capacity development programme for NIRDA's management and staff to undertake their defined roles within the organizational structure;
- ✓ a) Improvements in NIRDA's own facilities and equipment; b) pilot projects successfully operated in accordance with the Action Plan.
- ✓

4. Project implementation arrangements

UNIDO, through its Business, Investment and Technology Services (BIT) branch is the Implementing Agency for the Project.

The **UNIDO Project Manager** has the overall responsibility for the implementation of the project and the achievement of its targets in a timely manner.

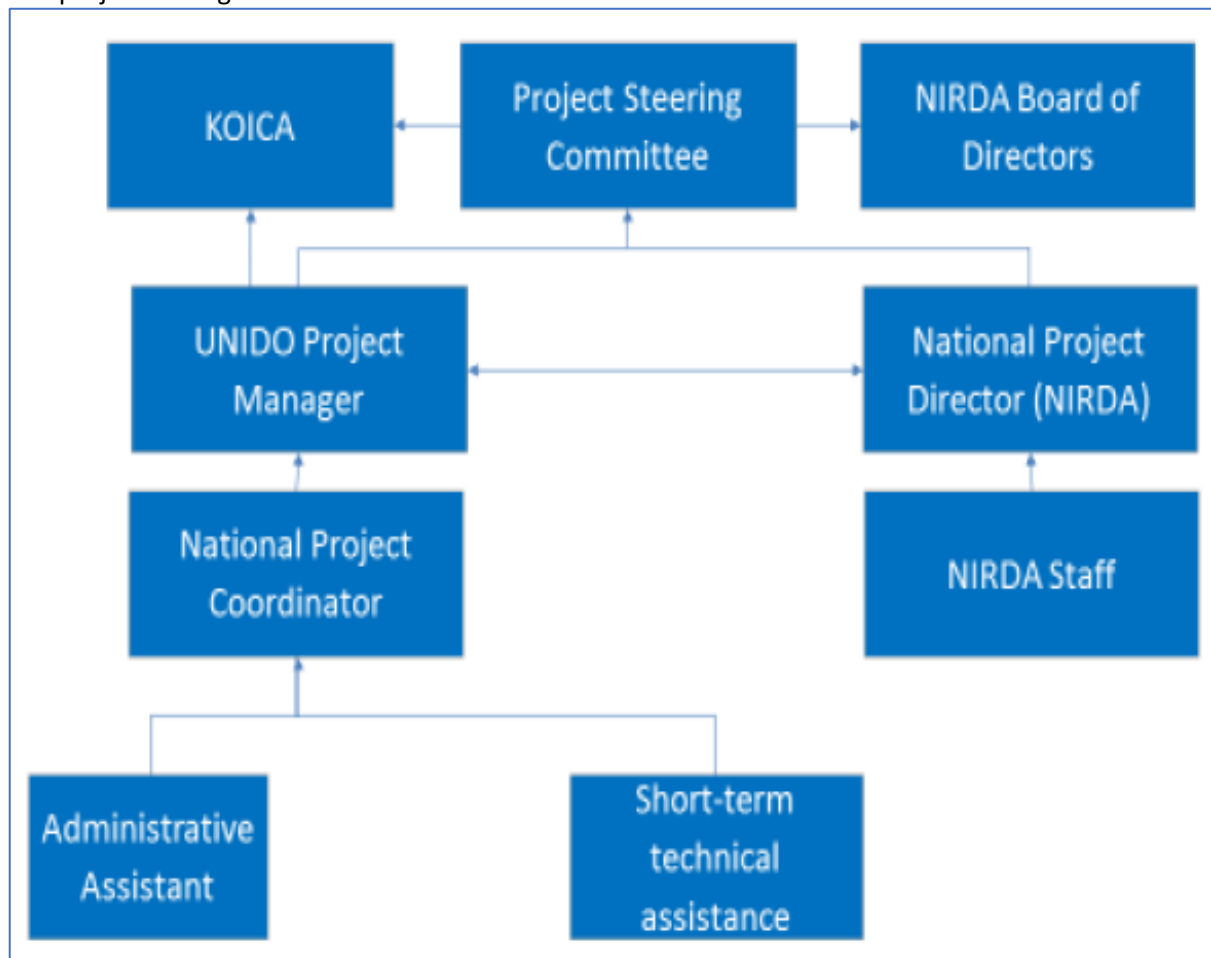
UNIDO has two main partners in the implementation of the project:

- The **Ministry of Trade and Industry** (as the Ministry responsible for NIRDA and UNIDO’s overall counterpart for its actions in Rwanda) acts as National Coordinating Partner with responsibility for ensuring effective interactions with other agencies and ministries and that the project remains aligned to national priorities thus ensuring national ownership.

- NIRDA acts as National Implementing Partner with responsibility for ensuring that the project is implemented in accordance with the approved project document with respect to Rwandan inputs and actions. NIRDA also appointed a **National Project Director (NPD)** to manage all aspects of NIRDA’s involvement in the project. The NPD is appointed at Director-level or above and is ex-officio member of the PSC.

Project Steering Committee (PSC) shall meet at least once annually, and may be convened as necessary at the call of the National Project Coordinator or National Project Director in consultation with the UNIDO Project Manager. The PSC shall be chaired by NIRDA. Initially it will be comprised of six members, including a representative from: • NIRDA (Chair): the chair is expected to be nominated and appointed by NIRDA’s Board of Directors (when established). Until such time as the Board of Directors of NIRDA is established, it is expected that the chair will be the Director-General of NIRDA (or his appointee). • UNIDO • KOICA • Ministry of Trade and Industry • National Project Director, NIRDA • Rwanda Private Sector Federation

The project management structure.



Main findings of the Mid-term review (MTR)

5. Budget information

Table 1. Financing plan summary - Outcome breakdown⁴⁷

Project outcomes	Donor (in USD)
1. Strategy and action plan for NIRDA	208,630
2. NIRDA organizational review/design	40,926
3. NIRDA systems and procedures	338,997
4. Capacity building training	506,652
5. Investment in pilot projects	815,891
Project Management	178,431
Independent Terminal Evaluation	34,398
Total (in USD)	2,123,925

Source: Project document / progress report

Table 2. UNIDO budget execution (Grant 2000003436)

Items of Expenditure	2016	2017	2018	2019	Total Exp.	%/total
Contractual Services		57,233.1	226,147	5,704.9	289,085	15,5%
Equipment		16,370.99	-61,80	217,437.26	233,827.25	12,5%
International Meetings						
Local travel						
Natl. Consult./Staff	20,991.13	118,814.32	130,454.25	62,754.7	333,014.4	17,9%
Intl. Consult./Staff						
Other Direct Costs	4,031	8,330.61	8,082.7	4,292.9	24,737.21	1,4%
Premises						
Staff and Intern	159,560	459,886.84	195,656.42	48,927.5	864,030.76	46,5%
Staff Travel		9,317.83	3,591.96		12,909.79	0,7%
Train/Fellowship/Study	8,231.16	41,347	36,026.8	16,282.3	101,887.26	5,5%
Grand Total	192,813.29	713,317.69	601,996.13	357,418.56	1,859,491.67	100%

Source: UNIDO Project Management database as of 26th April 2019

II. Scope and purpose of the evaluation

The purpose of the evaluation is to independently assess the project to help UNIDO improve performance and results of ongoing and future programmes and projects. The terminal evaluation (TE) will cover the whole duration of the project from its starting date in July 2016 to the estimated completion date in October 2019.

The evaluation has two main specific objectives:

- I. Assess the project performance in terms of relevance, effectiveness, efficiency, sustainability and progress to impact (accountability); and
- II. Develop a series of findings, lessons and recommendations for enhancing the design of new and implementation of ongoing projects by UNIDO (learning).

⁴⁷ Source: Project document.

III. Evaluation approach and methodology

The TE will be conducted in accordance with the UNIDO Evaluation Policy⁴⁸ and the UNIDO Guidelines for the Technical Cooperation Project and Project Cycle⁴⁹. UNEG Norms and Standards for evaluation shall also be observed.

The evaluation will be carried out as an independent in-depth evaluation using a participatory approach whereby all key parties associated with the project will be informed and consulted throughout the evaluation. The evaluation team leader will liaise with the UNIDO Independent Evaluation Division (ODG/EIO/IED) on the conduct of the evaluation and methodological issues.

The evaluation will use a theory of change approach and mixed methods to collect data and information from a range of sources and informants. It will pay attention to triangulating the data and information collected before forming its assessment. This is essential to ensure an evidence-based and credible evaluation, with robust analytical underpinning.

The theory of change will identify causal and transformational pathways from the project outputs to outcomes and longer-term impacts, and drivers as well as barriers to achieve them. The learning from this analysis will be useful to feed into the design of the future projects so that the management team can effectively manage them based on results.

1. Data collection methods

Following are the main instruments for data collection:

- (a) **Desk and literature review** of documents related to the project, including but not limited to:
 - The original project document, monitoring reports (such as progress and financial reports, mid-term review report, output reports, back-to-office mission report(s), end-of-contract report(s) and relevant correspondence.
 - Notes from the meetings of committees involved in the project.
- (b) **Stakeholder consultations** will be conducted through structured and semi-structured interviews and focus group discussion. Key stakeholders to be interviewed include:
 - UNIDO Management and staff involved in the project; and
 - Representatives of donors, counterparts and stakeholders.
- (c) **Field visit** to project sites in Rwanda.

2. Evaluation key questions and criteria

The key evaluation questions are the following:

- I. What are the key drivers and barriers to achieve the long term objectives? To what extent has the project helped put in place the conditions likely to address the drivers, overcome barriers and contribute to the long-term objectives?
- II. How well has the project performed? Has the project done the right things? Has the project done things right, with good value for money?
- III. What have been the project's key results (outputs, outcome and impact)? To what extent have the expected results been achieved or are likely to be achieved? To what extent the achieved results will sustain after the completion of the project?
- IV. What lessons can be drawn from the successful and unsuccessful practices in designing, implementing and managing the project?

The evaluation will assess the likelihood of sustainability of the project results after the project completion. The assessment will identify key risks (e.g. in terms of financial, socio-political,

⁴⁸ UNIDO. (2015). Director General's Bulletin: Evaluation Policy (UNIDO/DGB/(M).98/Rev.1)

⁴⁹ UNIDO. (2006). Director-General's Administrative Instruction No. 17/Rev.1: Guidelines for the Technical Cooperation Programme and Project Cycle (DGA1.17/Rev.1, 24 August 2006)

institutional and environmental risks) and explain how these risks may affect the continuation of results after the project ends. The Table below provides the key evaluation criteria to be assessed by the evaluation. The details questions to assess each evaluation criterion are in annex 2.

Table 3. Project evaluation criteria

#	Evaluation criteria	Mandatory rating
A	Impact	Yes
B	Project design	Yes
1	• Overall design	Yes
2	• Logframe	Yes
C	Project performance	Yes
1	• Relevance	Yes
2	• Effectiveness	Yes
3	• Efficiency	Yes
4	• Sustainability of benefits	Yes
D	Cross-cutting performance criteria	
1	• Gender mainstreaming	Yes
2	• M&E: ✓ M&E design ✓ M&E implementation	Yes
3	• Results-based Management (RBM)	Yes
E	Performance of partners	
1	• UNIDO	Yes
2	• National counterparts	Yes
3	• Donor	Yes
F	Overall assessment	Yes

Performance of partners

The assessment of performance of partners will **include** the quality of implementation and execution of done by project executing entities (EAs) in discharging their roles and responsibilities. The assessment will take into account the following:

- Quality of Implementation, e.g. the extent to which the agency delivered effectively, with focus on elements that were controllable from the perspective of the project executing entities (EAs), assessing how well risks were identified and managed.
- Quality of Execution, e.g. the appropriate use of funds, procurement and contracting of goods and services.

3. Rating system

In line with the practice adopted by many development agencies, the UNIDO Independent Evaluation Division uses a six-point rating system, where 6 is the highest score (highly satisfactory) and 1 is the lowest (highly unsatisfactory) as per **Error! Reference source not found.**

Table 4. Project rating criteria

Score		Definition*	Category
6	Highly satisfactory	Level of achievement presents no shortcomings (90% - 100% achievement rate of planned expectations and targets).	SATISFACTORY
5	Satisfactory	Level of achievement presents minor shortcomings (70% - 89% achievement rate of planned expectations and targets).	
4	Moderately satisfactory	Level of achievement presents moderate shortcomings (50% - 69% achievement rate of planned expectations and targets).	
3	Moderately unsatisfactory	Level of achievement presents some significant shortcomings (30% - 49% achievement rate of planned expectations and targets).	UNSATISFACTORY
2	Unsatisfactory	Level of achievement presents major shortcomings (10% - 29% achievement rate of planned expectations and targets).	
1	Highly unsatisfactory	Level of achievement presents severe shortcomings (0% - 9% achievement rate of planned expectations and targets).	

Evaluation process

The evaluation will be conducted from July to September 2019. The evaluation will be implemented in five phases which are not strictly sequential, but in many cases iterative, conducted in parallel and partly overlapping:

- i. Inception phase: The evaluation team will prepare the inception report providing details on the methodology for the evaluation and include an evaluation matrix with specific issues for the evaluation; the specific site visits will be determined during the inception phase, taking into consideration the findings and recommendations of the mid-term review.
- ii. Desk review and data analysis;
- iii. Interviews, survey and literature review;
- iv. Country visits;
- v. Data analysis and report writing.

IV. Time schedule and deliverables

The evaluation is scheduled to take place from August to October/November 2019. The evaluation field mission is tentatively planned for September 2019. At the end of the field mission, there will be a presentation of the preliminary findings for all stakeholders involved in this project. The tentative timelines are provided in Table 5 below.

After the evaluation field mission, the evaluation team leader will visit UNIDO HQ for debriefing and presentation of the preliminary findings of the terminal evaluation. The draft TE report will be submitted 4 to 6 weeks after the end of the mission. The draft TE report is to be shared with the UNIDO PM, UNIDO Independent Evaluation Division, and other stakeholders for comments. The ET leader is expected to revise the draft TE report based on the comments received, edit the language and form and submit the final version of the TE report in accordance with UNIDO's evaluation policy.

Table 5. Tentative timelines

Timelines	Tasks
Mid-August 2019	Desk review and writing of inception report
End of August 2019	Briefing with UNIDO project manager and the project team based in Vienna through Skype
Mid-September 2019	Field visit to Rwanda
End of September 2019	Debriefing in Vienna Preparation of first draft evaluation report
October-November 2019	Internal peer review of the report by UNIDO's Independent Evaluation Division and other stakeholder comments to draft evaluation report
Early December 2019	Final evaluation report

V. Evaluation team composition

The evaluation team will be composed of a total of four evaluators from both UNIDO and KOICA: two consultants (one of whom would be the Team Leader) will be hired and contracted by UNIDO and two consultants by KOICA. Respective organizations will hire the evaluators in accordance with their own procurement rules and regulations and relevant guidelines. The evaluation team members will possess relevant strong experience and skills on evaluation management and conduct together with expertise and experience in industrial development policies.

The tasks of each team member are specified in the job descriptions annexed to these terms of reference.

The UNIDO Evaluation Policy requires that members of the evaluation team must not have been directly involved in the design and/or implementation of the project under evaluation.

The UNIDO Project Manager and the project team in Rwanda will support the evaluation team.

An evaluation manager from UNIDO Independent Evaluation Division will provide technical backstopping to the evaluation team and ensure the quality of the evaluation. The UNIDO Project Manager and national project teams will act as resource persons and provide support to the evaluation team and the evaluation manager.

Expertise	Description	Requirements	Responsible organization
Development effectiveness	Conduct evaluation in accordance with OECD/DAC Evaluation Criteria. Evaluate project outputs and outcomes based upon the available PDM (general). Assess whether the project met its objectives in accordance with the initial design.	Experiences in evaluating development cooperation projects Have relevant qualification and expertise in development effectiveness	KOICA
Industrial development	Conduct evaluation in accordance with OECD/DAC Evaluation Criteria. Assess the project's results and provide lessons learned from the industrial point of view. Assess the potential impact of the project on Rwanda's industries.	Experiences in evaluating development cooperation projects Have relevant qualification and expertise in industrial policy or industrial development.	UNIDO

Expertise	Description	Requirements	Responsible organization
Organizational effectiveness	Conduct evaluation in accordance with OECD/DAC Evaluation Criteria. Assess how well NIRDA as an organization performs its functions effectively. Assess whether NIRDA has well-structured systems, guidelines, and other important pillars that would help	Experiences in evaluating development cooperation projects Have relevant qualification and expertise in organization	UNIDO
Junior evaluation manager	Provide support to evaluation activities. Record evaluation activities, such as preparing minutes of meetings. Provide any assistance during the course of evaluation.	Have relevant qualification and expertise in development and administration	KOICA

VI. Reporting

Inception report

These Terms of Reference (ToR) provide some information on the evaluation methodology, but this is not exhaustive. After reviewing the project documentation and initial interviews with the project manager, the Team Leader will prepare, in collaboration with the industrial policy specialist and the national consultant, a short inception report that will operationalize the ToR. The inception report should specify in more detail/focus, the evaluation questions and provide information on the type of evidence to be collected as well as how that will be done (methodology). The responsible UNIDO Evaluation Manager will finalise and approve the TOR in consultation with partners.

The Inception Report will focus on:

- An adjusted project theory model(s);
- A detailed evaluation methodology including quantitative and qualitative approaches through an evaluation framework (“evaluation matrix”);
- The division of work between the members of the evaluation team, including national consultants;
- A mission plan, including places to be visited, people to be interviewed and possible surveys to be conducted
- A debriefing and reporting timetable⁵⁰.

Evaluation report format and review procedures

The draft report will be delivered to UNIDO’s Independent Evaluation Division (the suggested report outline is in Annex 4) and circulated to UNIDO staff and national stakeholders associated with the project for factual validation and comments. Any comments or responses, or feedback on any errors of fact to the draft report provided by the stakeholders will be sent to UNIDO’s Independent Evaluation Division for collation and onward transmission to the project evaluation team who will be advised of any necessary revisions. On the basis of this feedback, and taking into consideration the

⁵⁰ The evaluator will be provided with a Guide on how to prepare an evaluation inception report prepared by the UNIDO ODG/EVQ/IEV.

comments received, the evaluation team will prepare the final version of the terminal evaluation report.

The ET will present its preliminary findings to the local stakeholders at the end of the field visit and take into account their feed-back in preparing the evaluation report. A presentation of preliminary findings will take place at UNIDO HQ after the field mission.

The TE report should be brief, to the point and easy to understand. It must explain the purpose of the evaluation, exactly what was evaluated, and the methods used. The report must highlight any methodological limitations, identify key concerns and present evidence-based findings, consequent conclusions, recommendations and lessons. The report should provide information on when the evaluation took place, the places visited, who was involved and be presented in a way that makes the information accessible and comprehensible. The report should include an executive summary that encapsulates the essence of the information contained in the report to facilitate dissemination and distillation of lessons.

Findings, conclusions and recommendations should be presented in a complete, logical and balanced manner. The evaluation report shall be written in English and follow the outline given in annex 4.

VII. Quality assurance

All UNIDO evaluations are subject to quality assessments by UNIDO Independent Evaluation Division. Quality assurance and control is exercised in different ways throughout the evaluation process (briefing of consultants on methodology and process of UNIDO Independent Evaluation Division, providing inputs regarding findings, lessons learned and recommendations from other UNIDO evaluations, review of inception report and evaluation report by UNIDO's Independent Evaluation Division).

The quality of the evaluation report will be assessed and rated against the criteria set forth in the Checklist on evaluation report quality, attached as Annex 5. The applied evaluation quality assessment criteria are used as a tool to provide structured feedback. UNIDO Independent Evaluation Division should ensure that the evaluation report is useful for UNIDO in terms of organizational learning (recommendations and lessons learned) and is compliant with UNIDO's evaluation policy and these terms of reference. The draft and final evaluation report are reviewed by UNIDO Independent Evaluation Division, which will submit the final report to the GEF Evaluation Office and circulate it within UNIDO together with a management response sheet.

TOR: Annex 1: Project Logical Framework

Objectives		<i>Rwanda enterprises have access to a range of technology support services to assist with technology acquisition, adaptation and commercialisation.</i>								
Outcome 1	Indicator 1.1	Baseline	Target	Means of Verification	Source of data	Frequency of data collection	Activities			
Increased capacity of NIRDA ³⁹	No. of enterprises supported to increase their competitiveness	0	To be defined in the inception phase	Project monitoring report	NIRDA monitoring system	Continuous				
	No. of new sub-sector/value chain investment opportunities identified	0	3	Value chain analysis reports	Project records	Continuous				
	Number of pilot projects established and operated for 12 months	0	3	Launch of pilot projects	Project records	Continuous				
Output 1.1	Indicator 1.1.1	Baseline	Target	Means of Verification	Source of data	Frequency of data collection	Activity 1.1.1	Responsible Party	Planned Target (2016-2017)	Planned Target (2016)
A strategy and action plan for the operation of NIRDA to achieve its goals	An approved unified strategy and action plan document	Does not exist	Strategy and Action plan approved	Minutes of NIRDA's Board of Directors approving the strategy	Minutes of NIRDA's Board meetings	Once	Establishment of a strategic planning team within NIRDA	NIRDA/UNIDO	Established	Established
							Drawing together of different VC programmes into a unified strategy	UNIDO/NIRDA	Draft Strategy and action plan	Draft Strategy and action plan
	Consultation and approval process	NIRDA/UNIDO	Approved strategy and action plan	Approved strategy and action plan						
	Indicator 1.1.2	Baseline	Target	Means of Verification	Source of data	Frequency of data collection	Activity 1.1.2	Responsible Party	Planned Target (2016-2017)	Planned Target (2016)
	3 value chains	0	3	Physical	VC reports	As	Value chains	NIRDA/UNIDO	3 value chains	3 value chains analysed

	analysed (existing)			evidence		completed	selection Value chain analysis, taking gender impacts into consideration Development of a NIRDA support programme for each selected sub-sector/value chain	UNIDO/NIRDA UNIDO/NIRDA	analysed and support programmes designed, taking into full consideration gender equality and empowerment of women considerations	and support programmes designed
	Indicator 1.1.3	Baseline	Target	Means of Verification	Source of data	Frequency of data collection	Activity 1.1.3	Responsible Party	Planned Target (2016-2017)	Planned Target (2016)
	3 value chains analysed (new)	0	3	Physical evidence	VC reports	As completed	Value chain selection Value chain analysis, taking gender impacts into consideration Development of a NIRDA pilot project for each selected sub-sector/value chain	NIRDA/UNIDO UNIDO/NIRDA UNIDO/NIRDA	3 value chains analysed and support programmes designed, taking into full consideration gender equality and empowerment of women considerations	3 value chains analysed and support programmes designed
Output 1.2	Indicator 1.2.1	Baseline	Target	Means of Verification	Source of data	Frequency of data collection	Activity 1.2.1	Responsible Party	Planned Target (2016-2017)	Planned Target (2016)
An upgraded organisational structure for the management and operation of NIRDA	New organisational structure approved and implemented	Existing organisational structure	New organisational structure	Minutes of Board of Directors meeting approving new structure Physical evidence that new structure has been implemented	Minutes of NIRDA Directors meetings Physical inspection	Once	Review of existing organisational structure	UNIDO/NIRDA	Review completed	Review completed
							Activity 1.2.2	Responsible Party	Planned Target (2016-2017)	Planned Target (2016)
							Definition of an organisational structure appropriate to the implementation of NIRDA's mandate	UNIDO/NIRDA	New organisational structure defined	New organisational structure defined
							Activity 1.2.3	Responsible Party	Planned Target (2016-2017)	Planned Target (2017)
							Organisational structure presented to	NIRDA/UNIDO	Approved new organisational structure	New organisational structure fully implemented

							Government and other key stakeholders for consideration			
Output 1.3	Indicator 1.3.1	Baseline	Target	Means of Verification	Source of data	Frequency of data collection	Activity 1.3.1	Responsible Party	Planned Target (2016-2018)	Planned Target (2017)
Operational systems, procedures and processes to maximise the efficient management and operation of NIRDA (including systems to monitor its performance)	Full range of systems and procedure operational within NIRDA	Very limited procedures in place (see situation analysis)	All systems as defined in Project Document operational by end 2017	Physical inspection	Physical evidence	Quarterly progress reports	Establishing systems and defining procedures to address all aspects of NIRDA's operations on a prioritised basis Establish internal systems for ensuring systems and procedures are regularly updated by NIRDA staff	UNIDO/NIRDA	All systems and procedures fully operational	50% of systems and procedures fully operational by end 2016
	Indicator 1.3.2	Baseline	Target	Means of Verification	Source of data	Frequency of data collection	Activity 1.3.2	Responsible Party	Planned Target (2016-2018)	Planned Target (mid-2018)
	M&E system fully operational	No M&E system in place	Fully operational M&E system by end 2016	Physical inspection	Physical evidence	Quarterly progress reports	Define and establish an effective computerised monitoring system for NIRDA to allow its Board of Directors to assess progress in achievement of agreed goals	UNIDO/NIRDA	Operational M&E system	Operational M&E System
Output 1.4	Indicator 1.4.1	Baseline	Target	Means of Verification	Source of data	Frequency of data collection	Activity 1.4.1	Responsible Party	Planned Target (2016-2017)	Planned Target (2017)
Capacity development programme for NIRDA's management and staff to undertake their defined roles within the organisational structure	All staff have job descriptions that reflect their role	Existing job descriptions do not reflect new mandate	All staff have updated job descriptions that reflect new mandate	Job descriptions	Physical inspection	Quarterly progress reports	Preparation of job descriptions for all posts defined in the new organisational structure	UNIDO/NIRDA	All job descriptions updated	All job descriptions updated
	Indicator 1.4.2	Baseline	Target	Means of Verification	Source of data	Frequency of data collection	Activity 1.4.2	Responsible Party	Planned Target (2016-2018)	Planned Target (March 2018)

	Training needs analysis undertaken involving all staff	No TNA exists	TNA completed involving all NIRDA staff	TNA report	Physical inspection	Quarterly progress reports	Identification of institutional and individual skills gaps through a comparison of existing capability with required capability (training needs analysis)	UNIDO/NIRDA	TNA completed on all staff	TNA completed on all staff
	Indicator 1.4.3	Baseline	Target	Means of Verification	Source of data	Frequency of data collection	Activity 1.4.3	Responsible Party	Planned Target (2016-2018)	Planned Target (2017)
	Internal and external training plan implemented	No formal training plan exists	Formal training plan approved and implemented, with equal chances provided to qualified female employees	Training plan Training reports	Physical inspection	Quarterly progress reports	Design and implement a capacity building programme to address identified skills gaps (including study tours where appropriate)	UNIDO/NIRDA	Approved training plan implemented in full	Initial training to address priority needs (10% of expected total) implemented
Output 1.5	Indicator 1.5.1	Baseline	Target	Means of Verification	Source of data	Frequency of data collection	Activity 1.5.1	Responsible Party	Planned Target (2016-2018)	Planned Target (Q2/2018)
Output 1.5.1: Improvements in NIRDA's own facilities and equipment to make them fit for purpose and reflect its role as a key modern and efficient partner for Rwandan industries Output 1.5.2: Pilot projects successfully operated in accordance with the Action Plan to act as (i) an "action learning"	Improvements in NIRDA's own infrastructure as foreseen in the action plan undertaken	Existing state of facilities (will be reviewed)	Improvements foreseen in action plan undertaken and fully operational	Physical inspection	Physical evidence/ NIRDA asset register	Quarterly progress report	Review of NIRDA's own facilities and equipment Specification of necessary investment (equipment procurement and facility improvement) for NIRDA to be able to implement the strategy Procurement of the necessary supplies and works	UNIDO/NIRDA	All investments completed by project end date	70% on investments undertaken by end Q2/2018
	Indicator 1.5.2	Baseline	Target	Means of Verification	Source of data	Frequency of data collection	Activity 1.5.2	Responsible Party	Planned Target (2016-2018)	Planned Target (Q3/2018)

training vehicle for NIRDA staff and (ii) demonstrators to the Rwandan industrial community.	Indicators for each pilot project must be specified in the action plan and must be approved as part of the overall approval process for pilot projects.	Zero: all pilot projects will be new	To be specified in the Action Plan and approved in advance by the PSC	NIRDA M&E system	NIRDA M&E system	Quarterly progress report	Identification and specification of the investment needs (equipment procurement and facility improvement) necessary for pilot projects Procurement of the necessary supplies and works Operation of the pilot project for a period of 12 months.	UNIDO/NIRDA	All investments completed by project end date Successful operation of the pilot projects for 4 months	80% on investments undertaken by end-Q3/2018
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Annex 2: Detailed questions to assess evaluation criteria: See Annex 2 of the UNIDO Evaluation Manual <https://www.unido.org/resources-evaluation/evaluation-resources>

Annex 3: Job descriptions



UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

TERMS OF REFERENCE FOR PERSONNEL UNDER INDIVIDUAL SERVICE AGREEMENT (ISA)

Title:	International evaluation consultant, team leader
Main Duty Station and Location:	Home-based
Missions:	Missions to Vienna, Austria and Rwanda
Start of Contract (EOD):	01/08/2019
End of Contract (COB):	30/10/2019
Number of Working Days:	38 working days spread over the above mentioned period

1. ORGANIZATIONAL CONTEXT

The UNIDO Independent Evaluation Division (ODG/EIO/IED) is responsible for the independent evaluation function of UNIDO. It supports learning, continuous improvement and accountability, and provides factual information about result and practices that feed into the programmatic and strategic decision-making processes. Independent evaluations provide evidence-based information that is credible, reliable and useful, enabling the timely incorporation of findings, recommendations and lessons learned into the decision-making processes at organization-wide, programme and project level. ODG/EIO/IED is guided by the UNIDO Evaluation Policy, which is aligned to the norms and standards for evaluation in the UN system.

2. PROJECT CONTEXT

Detailed background information of the project can be found the terms of reference (TOR) for the terminal evaluation.

• MAIN DUTIES	Concrete/ Measurable Outputs to be achieved	Working Days	Location
1. Prepare an evaluation plan, including draft list of stakeholders to be interviewed, design the evaluation questions, determine key data to collect in the field and adjust the key data collection instruments accordingly (if needed) based a desk review of project documentation.	<ul style="list-style-type: none"> • Division of assignments (evaluation team) • Adjusted table of evaluation questions, depending on country specific context; • Draft list of stakeholders for interview in the field. 	5 days	Home-based
Inception report 2. Prepare an inception report which streamlines the specific questions to address the key issues in the TOR, specific methods that will be used and data to collect in the field visits, confirm the evaluation methodology,	<ul style="list-style-type: none"> • Draft theory of change and Evaluation framework to submit to the Evaluation Manager for clearance. • In consultation with the second international 	5 days	Home based

• MAIN DUTIES	Concrete/ Measurable Outputs to be achieved	Working Days	Location
<p>draft theory of change, and tentative agenda for field work.</p> <p>Provide guidance to the national evaluator to prepare initial draft of output analysis and review technical inputs prepared by national evaluator, prior to field mission.</p>	<p>evaluator, ensure focus on industrial policy topics</p> <ul style="list-style-type: none"> Guidance to the national evaluator to prepare output analysis and technical reports 		
<p>Briefing mission</p> <p>3. Briefing the UNIDO Independent Evaluation Division, project managers and other key stakeholders at UNIDO HQ.</p>	<ul style="list-style-type: none"> Detailed evaluation schedule with tentative mission agenda (incl. list of stakeholders to interview and site visits); mission planning; Division of evaluation tasks with the National Consultant. 	2 days	Vienna, Austria
<p>Field mission</p> <p>4. Undertake evaluation field missions⁵¹, in collaboration with the IEE to consult field project stakeholders, partners and beneficiaries to verify and complete preliminary evaluation findings from desk review and assess partners.</p>	<ul style="list-style-type: none"> Field work conducted. Evaluation debriefing to present the evaluation's preliminary findings, conclusions and recommendations to stakeholders in the country. 	14 days	Rwanda (specific project site to be identified at inception phase)
<p>Debriefing at HQ after field missions</p> <p>5. Present preliminary findings. Lessons learned, and recommendations to the stakeholders at UNIDO HQ. Hold additional meetings with and obtain additional data from evaluation/project manager and other stakeholders as required. Done with a PowerPoint presentation.</p>	<ul style="list-style-type: none"> Power point presentation Feedback from stakeholders obtained and discussed Additional meetings held as required. 	2 days	Vienna, Austria
<p>Draft evaluation report</p> <p>6. Prepare the draft evaluation report, with inputs from the evaluation team; Submit draft evaluation report to the evaluation manager for feedback and comments.</p>	<ul style="list-style-type: none"> Draft evaluation report. 	10 days	Home-based

⁵¹ The exact mission dates will be decided in agreement with the Consultant, UNIDO HQ, and partners (PE, and/or country level).

• MAIN DUTIES	Concrete/ Measurable Outputs to be achieved	Working Days	Location
Final evaluation report and summary take-away message 1. Revise the draft project evaluation report based on comments from UNIDO Independent Evaluation Division and stakeholders and edit the language and form of the final version according to UNIDO standards. 2. Prepare a two-page summary of take-way messages	<ul style="list-style-type: none"> Final evaluation report. Two-page take-away summary 	5 days	Home-based
	• TOTAL	38 days	

REQUIRED COMPETENCIES

Core values:

1. Integrity
2. Professionalism
3. Respect for diversity

Core competencies:

1. Results orientation and accountability
2. Planning and organizing
3. Communication and trust
4. Team orientation
5. Client orientation
6. Organizational development and innovation

Managerial competencies (as applicable):

1. Strategy and direction
2. Managing people and performance
3. Judgement and decision making
4. Conflict resolution

MINIMUM ORGANIZATIONAL REQUIREMENTS

Education: Advanced degree in industrial development studies or related areas.

Technical and functional experience:

- Minimum of 15 years' experience in evaluation of development projects and programmes.
- Sound experience in capacity building and industrial development.
- Good working knowledge with international developmental organizations.
- Experience in project evaluation and knowledge of UNIDO activities an asset.
- Knowledge about multilateral technical cooperation and the UN, international development priorities and frameworks.
- Working experience in developing countries.

Languages:

Fluency in written and spoken English is required.

All reports and related documents must be in English and presented in electronic format.

Absence of conflict of interest:

According to UNIDO rules, the consultant must not have been involved in the design and/or implementation, supervision and coordination of and/or have benefited from the programme/project (or theme) under evaluation. The consultant will be requested to sign a declaration that none of the above situations exists and that the consultants will not seek assignments with the manager/s in charge of the project before the completion of her/his contract with the UNIDO Independent Evaluation Division.



**UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION
TERMS OF REFERENCE FOR PERSONNEL UNDER INDIVIDUAL SERVICE AGREEMENT (ISA)**

Title:	International Industrial Policy Specialist
Main Duty Station and Location:	Home-based
Mission/s to:	Inception/briefing mission to Vienna, Austria and a mission to Rwanda
Start of Contract:	01/07/2019
End of Contract:	30/09/2019
Number of Working Days:	38 work-days spread over 3 months

1. ORGANIZATIONAL CONTEXT

The UNIDO Independent Evaluation Division (ODG/EIO/IED) is responsible for the independent evaluation function of UNIDO. It supports learning, continuous improvement and accountability, and provides factual information about result and practices that feed into the programmatic and strategic decision-making processes. Evaluation is an assessment, as systematic and impartial as possible, of a programme, a project or a theme. Independent evaluations provide evidence-based information that is credible, reliable and useful, enabling the timely incorporation of findings, recommendations and lessons learned into the decision-making processes at organization-wide, programme and project level. The UNIDO Independent Evaluation Division is guided by the UNIDO Evaluation Policy, which is aligned to the norms and standards for evaluation in the UN system

2. PROJECT CONTEXT

Detailed background information of the project can be found the terms of reference (TOR) for the terminal evaluation.

MAIN DUTIES	Concrete/ Measurable Outputs to be achieved	Working Days	Location
1. Focusing on the technical aspects of industrial policy formulation and implementation, review and analyze project documentation (incl. gender and environmental issues,) and relevant country background information; in cooperation with the Team Leader, determine key data to be collected in the field and prepare the required instruments (questionnaires, theory of change, logic models, etc.)	A list of evaluation questions; questionnaires/interview guide; logic models A list of key data to be collected Input to inception report	5 days	Home-based
Inception report 2. Contribute inputs to the preparation of the inception report and suggest the technical evaluation questions as well as the related methods and data required. Contribute, in this way to preparation of the detailed evaluation methodology, draft theory of change, and tentative agenda for field work, in close collaboration with the Team Leader	• Inception report submitted to the evaluation manager	5 days	Home based

MAIN DUTIES	Concrete/ Measurable Outputs to be achieved	Working Days	Location
Briefing mission 3. Briefing the UNIDO Independent Evaluation Division, project managers and other key stakeholders at UNIDO HQ.	<ul style="list-style-type: none"> Detailed evaluation schedule with tentative mission agenda (incl. list of stakeholders to interview and site visits); mission planning; Division of evaluation tasks with the National Consultant. 	2 days	Vienna, Austria
Field mission 4. Undertake evaluation field missions ⁵² , in collaboration with the Team Leader to consult field project stakeholders, partners and beneficiaries to verify and complete preliminary evaluation findings from desk review and assess partners and prepare input towards the preliminary conclusions and lessons learned.	<ul style="list-style-type: none"> Field work conducted. Evaluation debriefing to present the evaluation's preliminary findings, conclusions and recommendations to stakeholders in the country. 	14 days	Rwanda (specific project site to be identified at inception phase)
Debriefing at HQ after field missions 5. Present preliminary findings. Lessons learned, and recommendations to the stakeholders at UNIDO HQ. Hold additional meetings with and obtain additional data from evaluation/project manager and other stakeholders as required. Done with a PowerPoint presentation.	<ul style="list-style-type: none"> Power point presentation Feedback from stakeholders obtained and discussed Additional meetings held as required. 	2 days	Vienna, Austria
Draft evaluation report 6. Contribute to the draft evaluation report, for submission to the evaluation manager for feedback and comments.	<ul style="list-style-type: none"> Draft evaluation report. 	10 days	Home-based
Final evaluation report and summary take-away message 3. Revise the draft project evaluation report based on comments from UNIDO Independent Evaluation Division and stakeholders and edit the language and form of the final version according to UNIDO standards. 4. Prepare a two-page summary of take-way messages	<ul style="list-style-type: none"> Inputs provided for the Final evaluation report; and the Two-page take-away summary 	5 days	Home-based
	TOTAL	38 days	

⁵² The exact mission dates will be decided in agreement with the Consultant, UNIDO HQ, and partners (PE, and/or country level).

REQUIRED COMPETENCIES

Core values:

1. Integrity
2. Professionalism
3. Respect for diversity

Core competencies:

1. Results orientation and accountability
2. Planning and organizing
3. Communication and trust
4. Team orientation
5. Client orientation
6. Organizational development and innovation

Managerial competencies (as applicable):

1. Strategy and direction
2. Managing people and performance
3. Judgement and decision making
4. Conflict resolution

MINIMUM ORGANIZATIONAL REQUIREMENTS

Education: Advanced degree in industrial development studies or related areas.

Technical and functional experience:

- Minimum of 15 years' experience in evaluation of development projects and programmes.
- Sound experience in capacity building and industrial development.
- Good working knowledge with international developmental organizations.
- Experience in project evaluation and knowledge of UNIDO activities an asset.
- Knowledge about multilateral technical cooperation and the UN, international development priorities and frameworks.
- Working experience in developing countries.

Languages:

Fluency in written and spoken English is required.

All reports and related documents must be in English and presented in electronic format.

Absence of conflict of interest:

According to UNIDO rules, the consultant must not have been involved in the design and/or implementation, supervision and coordination of and/or have benefited from the programme/project (or theme) under evaluation. The consultant will be requested to sign a declaration that none of the above situations exists and that the consultants will not seek assignments with the manager/s in charge of the project before the completion of her/his contract with the UNIDO Independent Evaluation Division.



UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

TERMS OF REFERENCE FOR PERSONNEL UNDER INDIVIDUAL SERVICE AGREEMENT (ISA)

Title:	National evaluation consultant
Main Duty Station and Location:	Home-based
Mission/s to:	Travel to potential sites within Rwanda
Start of Contract:	01/07/2019
End of Contract:	30/09/2019
Number of Working Days:	32 days spread over the above-mentioned period

ORGANIZATIONAL CONTEXT

The UNIDO Independent Evaluation Division (ODG/EIO/IED) is responsible for the independent evaluation function of UNIDO. It supports learning, continuous improvement and accountability, and provides factual information about result and practices that feed into the programmatic and strategic decision-making processes. Independent evaluations provide evidence-based information that is credible, reliable and useful, enabling the timely incorporation of findings, recommendations and lessons learned into the decision-making processes at organization-wide, programme and project level. ODG/EIO/IED is guided by the UNIDO Evaluation Policy, which is aligned to the norms and standards for evaluation in the UN system.

PROJECT CONTEXT

The national evaluation consultant will evaluate the project according to the terms of reference (TOR) under the guidance of the Team Leader (international evaluation consultant) and in collaboration with the Industrial Policy Specialist. S/he will perform the following tasks:

MAIN DUTIES	Concrete/measurable outputs to be achieved	Expected duration	Location
<p>Desk review</p> <p>Review and analyze project documentation and relevant country background information; in cooperation with the team leader, determine key data to collect in the field and prepare key instruments in English (questionnaires, logic models);</p> <p>If need be, recommend adjustments to the evaluation framework and Theory of Change in order to ensure their understanding in the local context.</p>	<p>Evaluation questions, questionnaires/interview guide, logic models adjusted to ensure understanding in the national context;</p> <p>A stakeholder mapping, in coordination with the project team.</p>	4 days	Home-based
<p>Carry out preliminary analysis of technical issues determined with the Team Leader and the Industrial Policy Specialist.</p> <p>In close coordination with the project team, verify the extent of achievement of project outputs prior to field visits.</p> <p>Develop a brief analysis of key contextual conditions relevant to the project</p>	<ul style="list-style-type: none"> • Report addressing technical issues and question previously identified with the Team leader • Tables that present extent of achievement of project outputs 	6 days	Home-based

MAIN DUTIES	Concrete/measurable outputs to be achieved	Expected duration	Location
	<ul style="list-style-type: none"> Brief analysis of conditions relevant to the project 		
Coordinate the evaluation mission agenda, ensuring and setting up the required meetings with project partners and government counterparts, and organize and lead site visits, in close cooperation with project staff in the field.	<ul style="list-style-type: none"> Detailed evaluation schedule. List of stakeholders to interview during the field missions. 	2 days	Home-based
<p>Coordinate and conduct the field mission with the team leader in cooperation with the Project Management Unit, where required;</p> <p>Consult with the Team Leader on the structure and content of the evaluation report and the distribution of writing tasks.</p> <p>Conduct (or help arrange for) the translation for the Team Leader, if and when needed.</p>	<ul style="list-style-type: none"> Presentations of the evaluation's initial findings, draft conclusions and recommendations to stakeholders in the country at the end of the mission. Agreement with the Team Leader on the structure and content of the evaluation report and the distribution of writing tasks. 	12 days (including travel days)	In Rwanda
<p>Follow up with stakeholders regarding additional information promised during interviews</p> <p>Prepare inputs to help fill in information and analysis gaps (mostly related to technical issues) and to prepare of tables to be included in the evaluation report as agreed with the Team Leader.</p> <p>Revise the draft project evaluation report based on comments from UNIDO Independent Evaluation Division and stakeholders and proof read the final version.</p>	<ul style="list-style-type: none"> Part of draft evaluation report prepared. 	8 days	Home-based
TOTAL		32 days	

REQUIRED COMPETENCIES

Core values:

1. Integrity
2. Professionalism
3. Respect for diversity

Core competencies:

1. Results orientation and accountability
2. Planning and organizing
3. Communication and trust

Managerial competencies (as applicable):

1. Strategy and direction
2. Managing people and performance
3. Judgement and decision making
4. Conflict resolution

4. Team orientation
5. Client orientation
6. Organizational development and innovation

MINIMUM ORGANIZATIONAL REQUIREMENTS

Education: Advanced university degree in environmental science, engineering or other relevant discipline like developmental studies.

Technical and functional experience:

- Excellent knowledge and competency in the field of trade capacity building and industrial development.
- Evaluation experience, including evaluation of development cooperation in developing countries is an asset.
- Exposure to the needs, conditions and problems in developing countries.
- Familiarity with the institutional context of the project is desirable.

Languages: Fluency in written and spoken English and Kinyarwanda is required.

Absence of conflict of interest:

According to UNIDO rules, the consultant must not have been involved in the design and/or implementation, supervision and coordination of and/or have benefited from the programme/project (or theme) under evaluation. The consultant will be requested to sign a declaration that none of the above situations exists and that the consultants will not seek assignments with the manager/s in charge of the project before the completion of her/his contract with the UNIDO Independent Evaluation Division.

Annex 4: Outline of an in-depth project evaluation report

Executive summary (maximum 5 pages)

Evaluation purpose and methodology

Key findings

Conclusions and recommendations

Project ratings

Tabular overview of key findings – conclusions – recommendations

1. Introduction

1.1. Evaluation objectives and scope

1.2. Overview of the Project Context

1.3. Overview of the Project

1.4. Theory of Change

1.5. Evaluation Methodology

1.6. Limitations of the Evaluation

2. Project's contribution to Development Results - Effectiveness and Impact

2.1. Project's achieved results and overall effectiveness

2.2. Progress towards impact

2.2.1. Behavioral change

2.2.1.1. Economically competitive - Advancing economic competitiveness

2.2.1.2. Environmentally sound – Safeguarding environment

2.2.1.3. Socially inclusive – Creating shared prosperity

2.2.2. Broader adoption

2.2.2.1. Mainstreaming

2.2.2.2. Replication

2.2.2.3. Scaling-up

3. Project's quality and performance

3.1. Design

3.2. Relevance

3.3. Efficiency

3.4. Sustainability

3.5. Gender mainstreaming

4. Performance of Partners

4.1. UNIDO

4.2. National counterparts

4.3. Donor

5. Factors facilitating or limiting the achievement of results

5.1. Monitoring & evaluation

5.2. Results-Based Management

5.3. Other factors

5.4. Overarching assessment and rating table

6. Conclusions, recommendations and lessons learned

6.1. Conclusions

6.2. Recommendations

6.3. Lessons learned

6.4. Good practices

Annexes (to be put online separately later)

- Evaluation Terms of Reference
- Evaluation framework
- List of documentation reviewed
- List of stakeholders consulted
- Project logframe/Theory of Change

- Primary data collection instruments: evaluation survey/questionnaire
- Statistical data from evaluation survey/questionnaire analysis

Annex 5: Checklist on evaluation report quality

Project Title:

UNIDO ID:

Evaluation team:

Quality review done by:

Date:

Report quality criteria	UNIDO IEV assessment notes	Rating
a. Was the report well-structured and properly written? (Clear language, correct grammar, clear and logical structure)		
b. Was the evaluation objective clearly stated and the methodology appropriately defined?		
c. Did the report present an assessment of relevant outcomes and achievement of project objectives?		
d. Was the report consistent with the ToR and was the evidence complete and convincing?		
e. Did the report present a sound assessment of sustainability of outcomes or did it explain why this is not (yet) possible? (Including assessment of assumptions, risks and impact drivers)		
f. Did the evidence presented support the lessons and recommendations? Are these directly based on findings?		
g. Did the report include the actual project costs (total, per activity, per source)?		
h. Did the report include an assessment of the quality of both the M&E plan at entry and the system used during the implementation? Was the M&E sufficiently budgeted for during preparation and properly funded during implementation?		
i. Quality of the lessons: were lessons readily applicable in other contexts? Did they suggest prescriptive action?		
j. Quality of the recommendations: did recommendations specify the actions necessary to correct existing conditions or improve operations ('who?' 'what?' 'where?' 'when?'). Can these be immediately implemented with current resources?		
k. Are the main cross-cutting issues, such as gender, human rights and environment, appropriately covered?		
l. Was the report delivered in a timely manner? (Observance of deadlines)		

Rating system for quality of evaluation reports

A rating scale of 1-6 is used for each criterion: Highly satisfactory = 6, Satisfactory = 5, Moderately satisfactory = 4, Moderately unsatisfactory = 3, Unsatisfactory = 2, Highly unsatisfactory = 1, and unable to assess = 0.

Annex 6: Guidance on integrating gender in evaluations of UNIDO projects and Projects

A. Introduction

Gender equality is internationally recognized as a goal of development and is fundamental to sustainable growth and poverty reduction. The UNIDO Policy on gender equality and the empowerment of women and its addendum, issued respectively in April 2009 and May 2010 (UNIDO/DGB(M).110 and UNIDO/DGB(M).110/Add.1), provides the overall guidelines for establishing a gender mainstreaming strategy and action plans to guide the process of addressing gender issues in the Organization's industrial development interventions.

According to the UNIDO Policy on gender equality and the empowerment of women:

Gender equality refers to the equal rights, responsibilities and opportunities of women and men and girls and boys. Equality does not suggest that women and men become 'the same' but that women's and men's rights, responsibilities and opportunities do not depend on whether they are born male or female. Gender equality implies that the interests, needs and priorities of both women and men are taken into consideration, recognizing the diversity of different groups of women and men. It is therefore not a 'women's issues'. On the contrary, it concerns and should fully engage both men and women and is a precondition for, and an indicator of sustainable people-centered development.

Empowerment of women signifies women gaining power and control over their own lives. It involves awareness-raising, building of self-confidence, expansion of choices, increased access to and control over resources and actions to transform the structures and institutions which reinforce and perpetuate gender discriminations and inequality.

Gender parity signifies equal numbers of men and women at all levels of an institution or organization, particularly at senior and decision-making levels.

The UNIDO projects/projects can be divided into two categories: 1) those where promotion of gender equality is one of the key aspects of the project/project; and 2) those where there is limited or no attempted integration of gender. Evaluation managers/evaluators should select relevant questions depending on the type of interventions.

B. Gender responsive evaluation questions

The questions below will help evaluation managers/evaluators to mainstream gender issues in their evaluations.

B.1. Design

- Is the project/project in line with the UNIDO and national policies on gender equality and the empowerment of women?
- Were gender issues identified at the design stage?
- Did the project/project design adequately consider the gender dimensions in its interventions? If so, how?
- Were adequate resources (e.g., funds, staff time, methodology, experts) allocated to address gender concerns?
- To what extent were the needs and priorities of women, girls, boys and men reflected in the design?
- Was a gender analysis included in a baseline study or needs assessment (if any)?
- If the project/project is people-centered, were target beneficiaries clearly identified and disaggregated by sex, age, race, ethnicity and socio-economic group?
- If the project/project promotes gender equality and/or women's empowerment, was gender equality reflected in its objective/s? To what extent are output/outcome indicators gender disaggregated?

B.2. Implementation management

- Did project monitoring and self-evaluation collect and analyse gender disaggregated data?

- Were decisions and recommendations based on the analyses? If so, how?
- Were gender concerns reflected in the criteria to select beneficiaries? If so, how?
- How gender-balanced was the composition of the project management team, the Steering Committee, experts and consultants and the beneficiaries?
- If the project/project promotes gender equality and/or women's empowerment, did the project/project monitor, assess and report on its gender related objective/s?

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B.3. Results

- Have women and men benefited equally from the project's interventions? Do the results affect women and men differently? If so, why and how? How are the results likely to affect gender relations (e.g., division of labour, decision making authority)?
- In the case of a project/project with gender related objective/s, to what extent has the project/project achieved the objective/s? To what extent has the project/project reduced gender disparities and enhanced women's empowerment?